



OECD Review of Agricultural Policies

# KAZAKHSTAN





# **OECD Review of Agricultural Policies: Kazakhstan 2013**

This work is published on the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the OECD or of the governments of its member countries or those of the European Union.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

**Please cite this publication as:**

OECD (2013), *OECD Review of Agricultural Policies: Kazakhstan 2013*, OECD Publishing.  
<http://dx.doi.org/10.1787/9789264191761-en>

ISBN 978-92-64-19175-4 (print)  
ISBN 978-92-64-19176-1 (PDF)

Series: OECD Review of Agricultural Policies  
ISSN 1990-0058 (print)  
ISSN 1990-004X (online)

European Union:  
Catalogue number: KZ-32-13-282-EN-C (print)  
Catalogue number: KZ-32-13-282-EN-N (PDF)

ISBN 978-92-9238-118-9 (print)  
ISBN 978-92-9238-117-2 (PDF)

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

**Photo credits:** Cover illustration

© Shutterstock/Arman Zhenikeyev

© Shutterstock/fdenb

© Analytical Centre for Economic Policy in the Agricultural Sector, Astana, Kazakhstan.

Corrigenda to OECD publications may be found on line at: [www.oecd.org/publishing/corrigenda](http://www.oecd.org/publishing/corrigenda).

© OECD 2013

---

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgement of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to [rights@oecd.org](mailto:rights@oecd.org). Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at [info@copyright.com](mailto:info@copyright.com) or the Centre français d'exploitation du droit de copie (CFC) at [contact@cfcopies.com](mailto:contact@cfcopies.com).

---

## Foreword

**T**he Review of Agricultural Policies: Kazakhstan is part of a series of reviews of national agricultural policies undertaken on behalf of the OECD's Committee for Agriculture. It was undertaken in partnership with the OECD Directorate for Financial and Enterprise Affairs and with funding from the OECD Eurasia Competitiveness Programme, which is co-financed by the European Union.

The Review was initiated in response to a request by the government of Kazakhstan, and was conducted in close co-operation with the Ministry of Agriculture. Mr. Marat Tolibayev, Vice Minister of Agriculture, provided support at all stages, and many experts from the Ministry and KazAgro Holding provided essential data and information on the functioning of agricultural programmes, as well as numerous comments on the draft report. Detailed comments on statistical data presented in the study were received from Kazakhstan's Statistics Agency. The Centre for Trade Policy Development of the Ministry of Economic Development provided comments on the trade policy section. This project also owes much to the initiative and enthusiasm of Fadi Farra and Antonio Somma of the OECD Eurasia Competitiveness Programme.

This study was carried out by the Policies in Trade and Agriculture Division of the OECD Trade and Agriculture Directorate (TAD). Olga Melyukhina co-ordinated the project and did the final drafting. Substantive contributions were made by Richard Pomfret from Adelaide University (Australia), Piret Hein (Estonia), and Arnault Pretet (OECD, Directorate for Financial and Enterprise Affairs). Analysts from the Analytical Centre for Economic Policy in the Agricultural Sector (ACEPAS) in Kazakhstan provided comprehensive background reports and valuable expertise, including Dauren Oshakbayev, Kairat Sadvakassov, Guzal Islamshina, and Vladimir Pak who were assisted by many other ACEPAS colleagues. Research and statistical support was provided by Laetitia Reille and Florence Bossard with assistance from Christine Le Thi and Frano Ilicic. Anita Lari, Elisabetta Da Prati, and Renata Helliot Tavares provided administrative and secretarial assistance. Michèle Patterson provided editorial and publication support. Ken Ash, Carmel Cahill, Frank van Tongeren, Jesús Antón, Andrzej Kwieciński, Arnault Pretet, and other colleagues in the OECD Secretariat furnished valuable comments on earlier drafts of the report. Useful feedback was also received from David Sedik (FAO), and Martin Petrick from IAMO (Germany).

The Review examines the policy context and performance of agriculture in Kazakhstan since independence, provides a comprehensive overview of the country's agricultural policies and evaluates these on the basis of OECD indicators of agricultural support. This evaluation employs the same method used for monitoring agricultural policies in OECD countries as well as in a growing number of emerging economies, including Brazil, China, Russia, South Africa, Ukraine and Indonesia. A special chapter examines the constraints to agricultural incomes in Kazakhstan beyond the farm gate.

The initial draft was discussed at the Round Table in Astana on 26 June 2012 with the participation of the Ministry of Agriculture and KazAgro implementing agencies, representatives from the President's administration, the Prime Minister's Cabinet, the Centre for Trade Policy Development of the Ministry of Economic Development and Trade, the Agency for Management of Land Resources, the Statistics Agency, the Research Institute for Economy of Agro-Industrial

*Complex and Development of Rural Territories and the leading producer and agribusiness associations. The draft report was subsequently presented for peer review at the OECD Committee for Agriculture in November 2012 and benefitted from a fruitful discussion between the Kazakhstan delegation and representatives of OECD member countries. We are grateful to Christian Derlagen (FAO), Brad Gilmour (Agriculture and Agri-Food Canada), and Henk Riphagen (Ministry of Economic Affairs of the Netherlands) for their role as lead discussants during this peer review.*

## Table of contents

<b>Acronyms</b> .....	11
<b>Executive summary</b> .....	13
<b>Highlights and policy recommendations</b> .....	15
<b>Synthèse et recommandations pour l'action publique</b> .....	37
<b>Chapter 1. The policy context</b> .....	61
1. General aspects .....	62
2. Agricultural situation .....	69
3. Structural change in the agricultural sector .....	87
Notes .....	97
References .....	99
Annex 1.A. Statistical annex .....	102
<b>Chapter 2. Policy trends and evaluation</b> .....	111
1. Agricultural policy framework .....	112
2. Domestic policies .....	123
3. Agro-food trade policies .....	166
4. Evaluation of support to agriculture .....	180
Notes .....	197
References .....	198
<b>Chapter 3. Constraints to agricultural incomes beyond the farm gate:</b>	
<b>A focus on wheat, dairy and beef sub-sectors</b> .....	205
1. Introduction .....	206
2. Wheat chain .....	207
3. Dairy chain .....	216
4. Beef chain .....	228
5. Conclusions .....	237
Notes .....	237
References .....	238
Annex 3.A. Case studies of grain producers .....	240
Annex 3.B. Costs of milk production .....	242
<b>Tables</b>	
0.1. Contextual indicators, 1990, 1995 and 2011 .....	17
0.1. Indicateurs contextuels, 1990, 1995 et 2011 .....	39
1.1. Income, poverty and inequality in Kazakhstan and selected economies .....	68
1.2. Selected indicators of Kazakhstan's agro-food trade, 1995-2010 .....	81

1.3. Number of operating farms by type, end of year, 1990-2011 . . . . .	88
1.4. Manufacturing of agricultural machinery in Kazakhstan, 2006-10 . . . . .	95
1.5. Production, import and export of seeds, 2010 . . . . .	95
1.6. Agricultural food processing enterprises by type of ownership, 2001-11 . . . . .	96
1.A.1. Producer prices received for agricultural commodities, 1994-2011 . . . . .	102
1.A.2. Investments in fixed capital in agriculture, 1995-2011. . . . .	103
1.A.3. Capital investments in agriculture, 2010 . . . . .	103
1.A.4. End-year stock of agricultural machinery in agricultural enterprises, 1990-2011 . .	104
1.A.5. Area planted to main agricultural crops, 1990-2012 . . . . .	104
1.A.6. Output of main agricultural crops, 1990-2011 . . . . .	105
1.A.7. Production of livestock products, 1990-2011 . . . . .	106
1.A.8. Water consumption, 1990-2011 . . . . .	106
1.A.9. Composition of Kazakhstan's land by types, 1995-2011. . . . .	107
1.A.10. Average size of land in agricultural enterprises by regions, 2000-09 . . . . .	107
1.A.11. Average size of land in individual farms by regions, 1990-2009 . . . . .	108
1.A.12. Land designated for agricultural use by legal form of use, as of 1 November 2011.	108
1.A.13. Main domestic producers of fertilisers . . . . .	109
1.A.14. Leasing of agricultural machinery by regions, 2010 . . . . .	109
1.A.15. Elevators by oblast as of 1 January 2011 . . . . .	110
2.1. Agricultural policy objectives in government programming documents . . . . .	115
2.2. Classification of strategic and planning policy documents. . . . .	116
2.3. State grain resources: Types, use and sources of financing. . . . .	124
2.4. Output payments for livestock products, 2006-11. . . . .	128
2.5. Budgetary outlays on livestock output subsidies, 2007-11. . . . .	128
2.6. Components of seed and perennial fruit plants programme . . . . .	129
2.7. Composition of outlays on seed and perennial fruit plants programme, 2000-12 .	130
2.8. Components of pedigree livestock programme. . . . .	131
2.9. Subsidies for fertilisers, chemicals and fuel, 2001-11. . . . .	132
2.10. Maximum and minimum insurance premiums for mandatory crop insurance, 2012 . . . . .	134
2.11. Penetration of compulsory crop insurance, 2005-12. . . . .	134
2.12. Per hectare payment rates for priority crops, 2010 . . . . .	135
2.13. Outlays on per hectare payments for priority crops, 2008-11 . . . . .	137
2.14. Concessional credit provided through the Agrarian Credit Corporation (ACC), 2001-11. . . . .	143
2.15. Concessional credit through the Fund for Financial Support of Agriculture (FFSA), 2005-11. . . . .	144
2.16. Concessional credit for sowing and harvesting works, 2001-11 . . . . .	145
2.17. Concessional leasing and credit provided through KazAgroFinance (KAF), 2000-11. . . . .	146
2.18. Cost of publicly co-financed investment projects with completion years between 2007 and 2016 . . . . .	151
2.19. Principal taxes for commercial agricultural producers and taxation regimes	152
2.20. Total budget and components of the 2004-10 Programme for Development of Rural Territories . . . . .	161
2.21. Distribution of rural settlements by economic and social potential, 2004 and 2010 . . . . .	162



2.22. Selected indicators of infrastructural development of rural settlements . . . . .	162
2.23. Environmental priorities in strategic programming documents . . . . .	165
2.24. Changes in Kazakhstan's effective tariff rates. . . . .	169
2.25. Kazakhstan's import quotas for white sugar, 2008-10 . . . . .	171
2.26. Kazakhstan's tariff rate quotas for meat imports under the Customs Union, 2011 . . . . .	172
2.27. Key laws in Kazakhstan related to SPS and TBT issues . . . . .	173
2.28. Technical Regulations of the Customs Union related to the agro-food area. . .	174
2.29. Temporary export bans of agro-food products imposed by Kazakhstan between 2007 and 2012 . . . . .	175
2.30. Bilateral Free Trade Agreements within the CIS . . . . .	179
2.31. Estimates of support to agriculture in Kazakhstan, KZT million . . . . .	183
2.32. Estimates of support to agriculture in Kazakhstan, USD million . . . . .	184
2.33. Producer Single Commodity Transfers (SCTs) in Kazakhstan . . . . .	192
2.A.1. Kazakhstan's applied MFN tariff rates on key agro-food products, 1995-June 2010. . . . .	202
2.A.2. Customs Union applied MFN import tariffs. . . . .	203
3.1. Typical marketing channels and arrangements in the grain chain . . . . .	209
3.2. Estimated costs between the farm gate and elevator, December 2011 . . . . .	209
3.3. Exporter costs between internal elevator and export exit point, early 2012. . .	212
3.4. Exporter transactions costs for deliveries bound to the north Kazakhstan border, 2012. . . . .	212
3.5. Transportation costs between internal export point and external market, 2011 . .	213
3.6. Trading risks beyond the farm gate and estimated implicit costs . . . . .	214
3.7. Number and capacity of milk processing plants, 2008. . . . .	220
3.8. Cost of processing pasteurised milk in six dairies, 2008 . . . . .	223
3.9. Costs and gross margins of milk collectors, 2012 . . . . .	226
3.10. Short and long value chains for beef meat . . . . .	234
3.B.1. Costs of milk production in different farm types, 2008 . . . . .	243

## Figures

0.1. Main macroeconomic indicators, 1991-2011. . . . .	17
0.2. Agro-food trade, 1995-2010. . . . .	17
0.3. Changes in the shares of different farm types in production factors agricultural output. . . . .	18
0.4. Evolution of agricultural output, 1990-2011 . . . . .	20
0.1. Principaux indicateurs macroéconomiques, 1991-2011. . . . .	39
0.2. Échanges agroalimentaires, 1995-2010. . . . .	39
0.3. Évolution de la distribution des facteurs de production et de la production agricole entre les différents types d'exploitation . . . . .	40
0.4. Évolution de la production agricole, 1990-2011 . . . . .	43
1.1. Key macroeconomic indicators, 1991-2011 . . . . .	64
1.2. Kazakhstan's production of crude oil, 1985-2011 . . . . .	65
1.3. Share of population below subsistence income in Kazakhstan, 1997-2011 . . . . .	69
1.4. Agriculture's share in GDP and total employment, 1990-2011 . . . . .	70
1.5. Change in agriculture's share in GDP and total employment between 2001 and 2009 . . . . .	70

1.6. Evolution of terms of trade in agriculture, 1992-2011. ....	71
1.7. Real prices for key agricultural commodities, 1994-2011. ....	72
1.8. Investment in agriculture, 1995-2011. ....	73
1.9. Composition of fixed capital investment in agriculture, 2011. ....	73
1.10. End-year stock of agricultural machinery in agricultural enterprises, 1990-2011 .	73
1.11. Purchase of new agricultural machinery, 2001-11. ....	74
1.12. Use of mineral fertiliser in agricultural enterprises, 1990-2011. ....	74
1.13. Evolution of crop yields, 1990-2011. ....	75
1.14. Crop yields in Kazakhstan and selected countries, 2009-10 average. ....	75
1.15. Regional specialisation of agriculture, 2008-10 average. ....	76
1.16. Contribution of regions to total agricultural output, 2009-11 average. ....	76
1.17. Evolution of agricultural output, 1990-2011. ....	77
1.18. Area planted with agricultural crops, 1990-2012. ....	78
1.19. Total grain production, 1990-2011. ....	79
1.20. Production of principal livestock products, 1990-2011. ....	79
1.21. Evolution of Kazakhstan's agro-food trade, 1995-2010. ....	80
1.22. Evolution of commodity structure of agro-food exports, 2000-09. ....	81
1.23. Kazakhstan's agro-food exports by principal destinations, 2008-10 average. .	82
1.24. Changes in export shares of Kazakhstan's top 10 export destinations, 1995-97 to 2008-10. ....	82
1.25. Evolution of commodity structure of agro-food imports, 2000-10. ....	83
1.26. Kazakhstan's agro-food imports by region of origin, 2008-10 average. ....	83
1.27. Changes in import shares of Kazakhstan's 10 top importers, 1995-97 to 2008-10 .	84
1.28. Composition of Kazakhstan's land by types of lands, 2011. ....	85
1.29. Structure of agricultural lands according to factors affecting land fertility, 2010 .	86
1.30. Water consumption in agriculture, 1990-2011. ....	86
1.31. Sales of state agricultural land, 2004-10. ....	89
1.32. Changes in the allocation of production factors across different farm type. ....	91
1.33. Average land sizes of agricultural enterprises and individual farms by regions, 2009. ....	92
1.34. Shares of different farm types in total value of agricultural production, 1991-2011. ....	92
1.35. Shares of different farm types in total production of agricultural products, 2011	93
1.36. Land use by type of farm, 2010. ....	94
2.1. Ministry of Agriculture and its subordinates. ....	118
2.2. Structure of KazAgro assets by subsidiaries, as of 1 January 2011. ....	119
2.3. Flows of financial resources in support of agriculture. ....	122
2.4. FCC's grain purchases and sales, 1998-2011. ....	125
2.5. FCC's export sales, 1998-2011. ....	125
2.6. FCC's expenditures on grain purchases, 2000-11. ....	126
2.7. KAP expenditures on livestock product purchases, 2001-11. ....	127
2.8. Budgetary outlays on seed and perennial fruit plants programme, 2000-11. .	130
2.9. Budgetary outlays on pedigree livestock programme, 1995-2011. ....	132
2.10. Prices for diesel fuel to agricultural producers and other buyers, 2003-12. ....	133
2.11. Establishment of the concessional agricultural credit system in Kazakhstan. .	139
2.12. Concessional and commercial credit to agriculture. ....	139

2.13. Annual allocations of concessional credit to agriculture and the processing sector, 2001-11 .....	140
2.14. Concessional credit lines provided by KazAgro agencies. ....	141
2.15. Quality of agricultural credit portfolio, 2009-12. ....	149
2.16. Cost structure of publicly supported investment projects implemented since 2007, by sector .....	150
2.17. Outlays on irrigation systems, land amelioration and water management, 1995-2011. ....	154
2.18. Outlays on applied agricultural research and development, 1995-2011 .....	156
2.19. Changes in Kazakhstan's tariffs for key agro-food imports during the period preceding the Customs Union .....	167
2.20. Estimated changes in the Customs Union MFN tariff rates for agro-food products following from to Russia's WTO commitments between 2011 and 2020 .	170
2.21. Timeline of the Eurasian integration .....	178
2.22. Producer Support Estimate in Kazakhstan and selected countries, 2008-10 .....	185
2.23. Level and composition of Producer Support Estimate in Kazakhstan, 1995-2011. .	185
2.24. Level and composition of Market Price Support in Kazakhstan, 1995-2011 .....	186
2.25. Level and composition of budgetary transfers in Kazakhstan, 1995-2011 ...	189
2.26. Producer SCTs for crop products in Kazakhstan, 1995-97 and 2009-11 .....	190
2.27. Producer SCTs for livestock products in Kazakhstan, 1995-97 and 2009-11 ...	191
2.28. Consumer Support Estimate in Kazakhstan and selected countries, 2008-10 average .....	193
2.29. Level and composition of General Services Support Estimate in Kazakhstan, 1995-2011. ....	194
2.30. Level and composition of Total Support Estimate in Kazakhstan, 1995-2011. .	195
2.31. Total Support Estimate in Kazakhstan and selected countries, 2008-10 .....	196
3.1. Distribution of area planted to wheat by farm size in Kazakhstan, 2009 .....	207
3.2. Export of wheat and flour by country of destination .....	211
3.3. FCC purchase prices and market prices for wheat .....	214
3.4. Relationship between post-farm costs and producer price. ....	215
3.5. Shares of different types of producers in total milk production, 2008-10 average	217
3.6. Distribution of milk production in agricultural enterprises and individual farms by farm size, 1998-99 and 2008-09 averages .....	218
3.7. Dairy value chains .....	218
3.8. Sources of cow milk supply in Kazakhstan, 2006-10 .....	220
3.9. Milk value chain for a household producer, Akmola oblast. ....	224
3.10. Total beef production and self-sufficiency ratio, 1990-2012. ....	229
3.11. Shares of different types of producers in total meat production, 2008-10 average.	230
3.12. Distribution of beef production in agricultural enterprises and individual farms by farm size, 1998-99 and 2008-09 averages .....	230
3.13. Principal supply chains for beef. ....	232

**This book has...**



**StatLinks** 

**A service that delivers Excel® files  
from the printed page!**

Look for the *StatLinks* at the bottom right-hand corner of the tables or graphs in this book. To download the matching Excel® spreadsheet, just type the link into your Internet browser, starting with the <http://dx.doi.org> prefix.

If you're reading the PDF e-book edition, and your PC is connected to the Internet, simply click on the link. You'll find *StatLinks* appearing in more OECD books.

## Acronyms

<b>ACC</b>	Agrarian Credit Corporation
<b>ACEPAS</b>	Analytical Centre for Economic Policy in the Agricultural Sector
<b>CES</b>	Common Economic Space
<b>CIF</b>	Cost, Insurance and Freight
<b>CIS</b>	Commonwealth of Independent States
<b>CP</b>	Credit Partnerships
<b>CSE</b>	Consumer Support Estimate
<b>CU</b>	Customs Union (of Belarus, Kazakhstan and Russia)
<b>DAP</b>	Delivery at Port
<b>EBRD</b>	European Bank for Reconstruction and Development
<b>EurAsEC</b>	Eurasian Economic Community
<b>FCC</b>	Food Contract Corporation
<b>FFSA</b>	Fund for Financial Support of Agriculture
<b>FOB</b>	Free on board
<b>GDP</b>	Gross Domestic Product
<b>GSSE</b>	General Services Support Estimate
<b>ILO</b>	International Labour Organisation
<b>IMF</b>	International Monetary Fund
<b>KAF</b>	KazAgroFinance
<b>KAG</b>	KazAgroGarant
<b>KAM</b>	KazAgroMarketing
<b>KAP</b>	KazAgroProduct
<b>KZT</b>	Kazakh tenge
<b>LG</b>	Local governments
<b>MFN</b>	Most Favoured Nation (tariff)
<b>MCO</b>	Micro Credit Organisation
<b>NF</b>	National Fund
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PSE</b>	Producer Support Estimate
<b>RFCA</b>	Regional Financial Centre, Almaty
<b>SBC</b>	Social and Business Corporation
<b>SCT</b>	Single Commodity Transfers
<b>SLT</b>	Single Land Tax
<b>SMEs</b>	Small and medium enterprises
<b>SCC</b>	Service Collection Centre
<b>TSE</b>	Total Support Estimate
<b>WTO</b>	World Trade Organisation



## Executive summary

**K**azakhstan became an independent country in 1991 after the dissolution of the USSR. It has the ninth largest area in the world, and with 16.7 million inhabitants is one of the least densely populated countries. Kazakhstan is abundantly endowed with mineral, oil and natural gas resources. The availability of arable land per inhabitant (1.5 hectares) is the second highest in the world and Kazakhstan ranks among the world's top ten wheat exporters (sixth in 2011/12).

The economy was plagued by hyperinflation and deep recession in the first half of the 1990s, but the country's economic fortunes rapidly improved as the oil boom began. GDP grew at 10% per year between 2000 and 2007. Growth slowed down considerably in 2008 and 2009, when the economy was hit by the local banking crisis and then by the global financial crisis, but high growth resumed in 2010-11. The government has used energy revenues to save for the future, invest in human capital, and diversify the structure of production. Living standards followed the macroeconomic pattern – after a significant decline in the first decade of independence, incomes improved and the share of those living below the subsistence income level fell considerably.

Agriculture experienced a difficult transition from a planned to a market economy, with a considerable deterioration of terms of trade in agriculture and a collapse of the previous agricultural support system. The agricultural sector went into profound debt crisis in the second half of the 1990s and considerable resources were withdrawn from production. The transition also involved land and farm ownership reforms which led to significant transformation of the farm structure. Large-scale agricultural enterprises, producing almost two-thirds of total agricultural output in 1990 accounted for less than one-third in 2011, while the share of the small-scale sector reversed accordingly. Private ownership of agricultural land was introduced, but 49-year leases from the state remain the dominant form of land use.

The sector began its gradual recovery in the early 2000s, but the decline has still not been fully reversed. With the rapid growth of the energy sector, agriculture's share of GDP fell from 34% in 1990 to 5% in 2011. Kazakhstan's total trade in agro-food products began to rise in the second half of the 2000s. Imports increased more rapidly than exports with the result that Kazakhstan has become a net importer of agro-food products since the mid-2000s.

Kazakhstan's Producer Support Estimate (the PSE) averaged USD 1.36 billion in 2009-11. Agriculture support policies generate somewhat more than one tenth of gross receipts of agricultural producers. Market price support, payments based on output, and payments based on variable input use account for 82% of total PSE, indicating that producer support in Kazakhstan is predominantly based on instruments that are most production and trade distorting and least efficient in increasing producer incomes.

The principal objective of Kazakhstan's government is to boost the agricultural sector as part of the strategy for economic diversification. However, the country faces a challenge to achieve this without exhausting natural resources while tackling important factor and structural constraints. The country is well endowed with land, but it suffers environmental handicaps. Water availability and harsh climate are inherent constraints. There are also structural challenges, such as the domination of subsistence-oriented producers in key product sectors, the weak integration of domestic food chains, and difficult access to external markets. Qualified labour is scarce, commercial credit markets are narrow, and much of the credit resources, especially for long-term investment, depend on state provision.

To achieve its agricultural growth objective and overcome resource and structural constraints, Kazakhstan needs to strengthen policies that support the long-term competitiveness of the agricultural sector. Public resources should be shifted to remove significant deficiencies in transport infrastructure, water and land management, plant and animal health and food safety systems, information, research, education, and knowledge dissemination. Policy reform should not only include a stronger emphasis on the provision of public goods, but would also require developing new policies to manage risks in agriculture and promoting sustainable use of agricultural resources. The government's efforts to develop modern large-scale production should be complemented by the efforts to integrate small-scale producers into agricultural markets as well as to diversify rural incomes.

Reforming the system of state agencies in agriculture is also a challenge. Large state agencies operate on the grain, machinery leasing, and agricultural credit markets. Their primary function is to implement support programmes, but they are also empowered to undertake commercial operations and as such enjoy substantial market power. The domination of state agencies crowds out private business and inhibits the development of competitive markets. Their operation will need to be assessed with a view to streamline their functions and increase reliance on private provision of services to agriculture.

Governance of agricultural policy could be improved by strengthening the evaluation and monitoring of policies, increasing stakeholder involvement in policy review and monitoring, and a better communication to stakeholders and a broader society of government's intentions to reform policies.



## Highlights and policy recommendations

---

*Kazakhstan is richly endowed with natural resources but also faces constraints*

---

Kazakhstan has the ninth largest area in the world, but with 16.7 million inhabitants it is one of the least densely populated countries. A peculiar geographic feature is Kazakhstan's land-locked position – the only maritime connection is in the west through Aktau and Atyrau ports on the Caspian Sea. Large parts of the national border in the south with Uzbekistan and Turkmenistan and east with China pass through an inhospitable desert or mountain ranges. The longest border with no significant physical barriers is in the north and north-east with Russia.

The country is abundantly endowed with mineral and fossil fuel resources, which include the world's 11th largest proven reserves of both oil and natural gas. In 1990, the Gorbachev government signed the largest foreign investment deal in Soviet history to develop the Tengiz oilfield in Kazakhstan's portion of the Caspian Sea. Although exploitation suffered delays and exports were hampered by limited pipeline options, by the early 2000s oil was flowing in large quantities, just as world prices began to soar and new pipelines were opened to the Black and Mediterranean Seas.

Kazakhstan is abundantly endowed with land. Over 80% of the country's total area is classified as agricultural land, including almost 70% occupied by pasture. Arable land constitutes less than 10% of the country's total land area, but its availability per inhabitant (1.5 hectares) is the second highest in the world after Australia (2.1 hectares). Agricultural lands were adversely affected by Soviet era programmes and a lack of investment in the post-independence period. The Virgin Lands programme (1954-60) sought to increase wheat production by expanding cultivation as far as the southern steppes of Kazakhstan, which are characterised by low precipitation and strong winds that make crop production unsustainable. Part of the land brought into grain production during this programme was abandoned in the 1990s. Only 19% of total agricultural lands are at present estimated to be with no negative characteristics, the rest suffering salinisation, wind erosion, excess of sodium, etc. Considerable humus losses in the soil have occurred since the 1960s, the major grain producing regions suffering particularly strong humus losses over the past three decades.

Water resources are limited, fluctuate by season and by year, and are unevenly distributed across the country. Agriculture is the main water consumer, with the largest share used for irrigation, mostly in the southern parts of the country. The climate in the

northern parts of the country is strongly continental with significant seasonal temperature variations and unreliable rainfall, while the centre is arid.

The country experienced high emigration during the 1990s, which included many skilled workers and administrators; the exodus slowed substantially with the Russian crisis in 1998, but even in 2000 annual net emigration was still over 100 000, and only began to drop substantially with the post-2000 economic boom.

---

*After severe hardship in the first decade of independence the oil boom triggered rapid growth*

---

The economy was plagued by hyperinflation and deep recession until the mid-1990s, but as the oil boom began the country's economic fortunes rapidly improved (Figure 0.1). GDP grew at 10% per year between 2000 and 2007. Growth slowed down considerably in 2008 and 2009, when the economy was hit by a local banking crisis and then by the global financial crisis, but high growth resumed in 2010-11. Living standards followed the macroeconomic pattern – after a considerable fall in living standards in the first decade of independence incomes improved and the share of those living below the subsistence income level fell from its 2001 peak (59% in rural areas and 36% in urban areas) to 8.8% in rural areas and 2.4% in urban areas in 2011.

In the early 2000s, the government began more active public policy to promote economic development, in particular, by using resources of the National Fund, a Sovereign Wealth Fund which accumulated part of the oil revenues. In 2006, President Nazarbayev articulated his aim of transforming Kazakhstan into one of the “50 most competitive, dynamically developing countries in the world” within a decade. The government has used energy revenues to save for the future, invest in human capital, and diversify the structure of production. However, while the government appears committed to structural reforms, such as privatisation, these reforms have progressed slowly and unevenly, often with the situation on the ground lagging behind legislation. There has been a countervailing tendency to increase the state's role in the economy, especially since the mid-2000s.

---

*Agriculture experienced a difficult transition...*

---

The terms of trade in agriculture considerably deteriorated in the first half of the 1990s, when rises in input prices far outpaced rises in output prices. These sharp price adjustments occurred at a time when the previous support system was collapsing. The agricultural sector went into a profound debt crisis in the second half of the 1990s and resources were withdrawn massively from production. By the early 2000s, about 19 million hectares on which crops had been grown a decade earlier were no longer used, and livestock inventories in the former collective farm sector fell to 20% of their level in 1990. Agricultural output more than halved during the 1990s, a decline that has still not been fully reversed, even though it bottomed out at the end of that decade.

Box 0.1. **Kazakhstan: Contextual information**Table 0.1. **Contextual indicators, 1990, 1995 and 2011**

	1990	1995	2011
<b>Economic context</b>			
GDP (current USD billion)	27	21	186
Population (million)	16.3	15.8	16.7
Land area (thousand km <sup>2</sup> )	2 725 <sup>1</sup>	2 725	2 725
Population density (habitants/km <sup>2</sup> )	6.1	5.9	6.1
GDP per capita, PPP (current USD)	5 120	3 661	13 189
<b>Agriculture in the economy</b>			
Agriculture in GDP (%)	34	12	5
Agriculture share in employment (%)	.. <sup>2</sup>	.. <sup>2</sup>	26
Agro-food exports (% of total exports)	..	13	3 <sup>3</sup>
Agro-food imports (% of total imports)	..	11	10 <sup>3</sup>
<b>Characteristics of the agricultural sector</b>			
Agro-food trade balance (USD million)	..	251	-362 <sup>3</sup>
Crop in total agricultural production (%)	59	54	58
Livestock in total agricultural production (%)	41	46	41
Agricultural area (AA) (million ha)	221 <sup>1</sup>	214	222
Share of arable land in AA (%)	16 <sup>1</sup>	15	11
Share of agriculture in water consumption (%)	60	70	49

.. Not available.

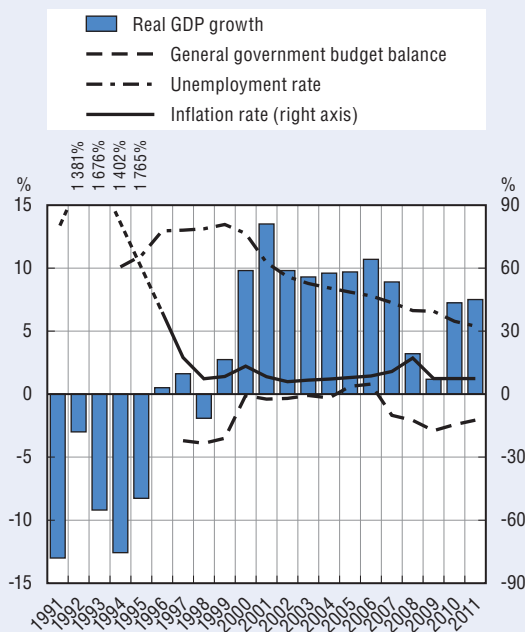
1. 1992.

2. Employment figures before and after 2001 are not comparable due to a change in the definition of employment.

3. 2010.

Source: OECD Statistical Databases; WB WDI; Statistical Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932781672>

Figure 0.1. **Main macroeconomic indicators, 1991-2011**

Source: International Monetary Fund; Ministry of Finance of the Republic Kazakhstan; Statistics Agency of the Republic of Kazakhstan.


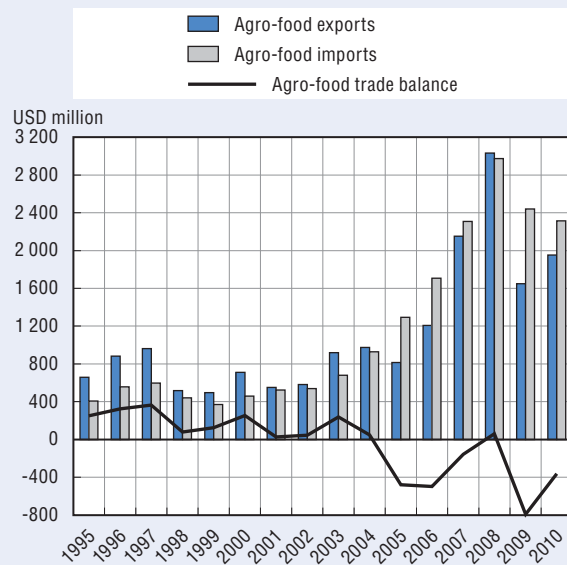

StatLink  <http://dx.doi.org/10.1787/888932780285>

Figure 0.2. **Agro-food trade, 1995-2010**

Source: UN COMTRADE Database.

StatLink  <http://dx.doi.org/10.1787/888932780304>

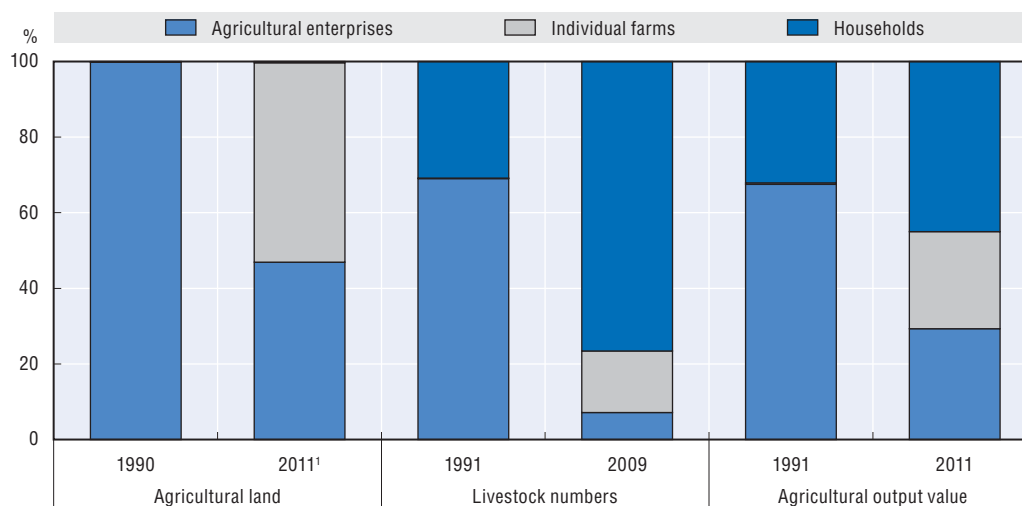
... which involved fundamental reforms of land ownership and farm structure,...

Land reform and farm privatisation began in 1991 and progressed unevenly. These reforms accelerated in the next decade after a large-scale financial rehabilitation that also included bankruptcies of a large number of former state farms. A new Land Code was adopted which clarified ownership and lease rights to agricultural land. The structural reforms in agriculture led to significant transformation of the farm structure.

The number of active agricultural operations that emerged from the former collective farms increased from under 5 000 in 1990 to 188 616 in 2012, of which 6 197 were units which maintained their collective organisation in various legal forms, called “agricultural enterprises” (average size just over 8 000 hectares), and 182 419 newly emerged individual farms (average size of 270 hectares) Alongside agricultural enterprises and individual farms, over 2 million rural households “farm” an average plot of around 0.13 hectare.

There has been substantial re-allocation of land to individual farms, whose share in its total area increased from 0.6% in 1990-92 on average to 52% in 2009-11 (Figure 0.3). However, the most drastic shift in the factor allocation concerned livestock inventories, which fell to very low levels in the agricultural enterprises during the 1990s, leaving rural households the dominant agricultural units that kept livestock. The transformation of the farm structure reversed the roles of the large-scale and small-scale production. Agricultural enterprises, producing almost two-thirds of total agricultural output in 1990 accounted for less than one-third in 2011, while the shares of individual farms and household plots reversed accordingly.

Figure 0.3. **Changes in the shares of different farm types in production factors agricultural output**



1. Households officially accounted for only 0.33% of utilised agricultural land in 2011.

Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932780323>

---

*... and led to the emergence of distinct regional agricultural systems*

---

The transformation of what was previously a universal collective farm structure led to the emergence of two distinct regional agricultural systems. In the north and the north east large-scale farms dominate. These are specialised in grain and oilseed production and characterised by more capital intensive techniques. The rationale for breaking up large farms with substantial machinery and other equipment was less obvious in these regions, and the existing managers were well placed to maintain operations. Large grain producers in these regions often have direct contracts with buyers overseas – either foreign traders or mills. Many large production units belong to so-called “agroholdings”, vertically integrated structures which incorporate farms, silos and processing plants and sometimes sea terminals. The south and south-east of the country is dominated by small-scale farming with mixed agriculture. This is where most of the country’s horticultural production is concentrated, and all of the country’s cultivation of cotton and rice.

---

*Agriculture’s share in GDP is declining, while the employment trend is mixed*

---

With the rapid growth of the energy sector, agriculture’s share of GDP fell from 34% in 1990 to 5% in 2011. The long-term trend in employment is less clear due to a change in the definition of employment which has substantially increased the number of employed in agriculture since the 2000s. Comparing within the periods when the series were consistent, the trends in shares of agriculture in employment and in GDP were diverging in the 1990s, while in the 2000s these shares moved in the same direction. Indeed, there were strong labour adjustments throughout the post-independence period when people moved in the 1990s to the countryside as a coping mechanism, but the onset of economic growth in the 2000s brought on rural-urban migration. However, agriculture continues to be the largest sector in terms of employment (26% in 2011) and there is a considerable gap between labour productivity in this sector and the rest of the economy.

---

*Agro-food trade is expanding...*

---

Kazakhstan’s total trade in agro-food products began to rise in the second half of the 2000s (Figure 0.2). On the export side, the increases in trade were driven principally by wheat exports, for which the annual volume almost doubled and annual value more than tripled between 1995-97 and 2008-10. Kazakhstan ranks today among the world’s top ten wheat exporters (sixth in 2011/12). On the import side, trade growth was underpinned by the improvements in incomes and the strengthening of the national currency. Imports are dominated by dairy products, sugar, and processed foods. Imports were increasing more rapidly than exports with the result that Kazakhstan has become a net importer of agro-food products since the mid-2000s.

There has been a distinct shift of Kazakhstan’s exports away from the Russian market towards the Central Asian region, Azerbaijan, Turkey, Iran and North Africa. On the import side, an opposite shift has occurred, with increases in the shares of Belarus, Russia, and

Ukraine as Kazakhstan's suppliers of agro-food products – a trend that may be expected to strengthen with the functioning of the Customs Union between Belarus, Kazakhstan and Russia.

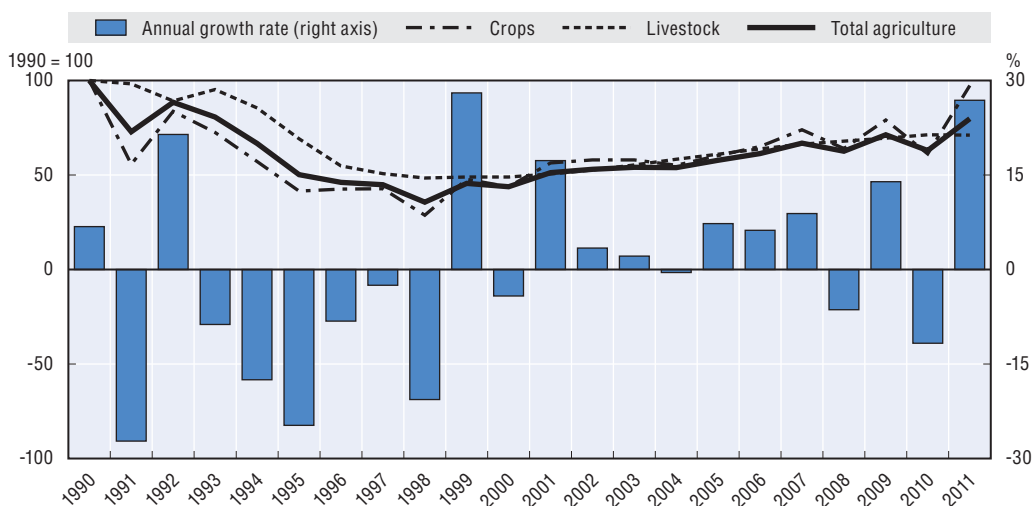
*... but more slowly than trade in other sectors*

As energy dominated Kazakhstan's exports, the share of agro-food products in total exports declined from 14% in 1995-97 to less than 4% in 2008-10. The importance of agro-food items in total imports also fell – from 13% in 1995-97 to 9% in 2008-10.

*Agriculture has regained growth since the early 2000s, but is currently facing a debt problem...*

The sector began its gradual recovery in the early 2000s (Figure 0.4). Annual growth has been highly volatile, largely following the strong fluctuations in grain output. Wheat crop varied within the range of 9 million tonnes (in 2000/01) and 23 million tonnes (in 2011/12). Livestock production is increasing moderately, with the growth rates somewhat decelerating in the past two years.

Figure 0.4. **Evolution of agricultural output, 1990-2011**



Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932780342>

The financial and economic crisis of the late 2000s has led to a deterioration of the farm debt situation; an impact which was compounded by other unfavourable developments. A depreciation of the *tenge* in 2009 sharply increased the cost of debt servicing on loans taken in foreign currency. The grain sector, the largest agricultural sector in Kazakhstan, incurred losses due to a ban on grain exports in 2008 imposed in reaction to international food price hikes. In 2009, the grain sector faced low prices following the bumper crop in the CIS region, while in 2010 it suffered drought. The share of bad loans in the agricultural credit portfolio of commercial banks and state KazAgro credit agencies rose sharply by 2010. This led the government to consider a USD 2 billion debt relief package for agriculture.

---

... as well as infrastructure deficiencies  
and weak supply chains

---

Case studies of wheat, milk and meat supply chains undertaken as a special feature of this Review highlight weaknesses in supply chains as an impediment to agricultural development in Kazakhstan. In the grain chain, critical infrastructure bottlenecks and poor rural roads add directly to transactions costs. Additional costs arise from information deficiencies, loss of time in marketing operations, e.g. due to shortages of elevator and transport capacities, or impeded access to port facilities. Paradoxically, some of these risks are related to the activity of the state agent on the grain market which is crowding out private traders due to its market intervention and prior claims on elevator space and transportation. High transactions costs are passed down the chain and grain producers ultimately bear the burden of supply chain inefficiencies by facing lower prices than would be the case if market organisation was more efficient. At the same time, wheat producers have received input subsidies, and most recently subsidies to transport exported grain. Part of this support is absorbed by the inefficiencies in the marketing of grain.

Large-scale livestock operations in the former collective farm sector virtually collapsed in the early 1990s. At present, around 76% of meat and 88% of milk in the country are produced by households, primarily for their own consumption. If marketed, these products are typically delivered to local bazaars or local processors by primitive means and with uneven quality. Modern cold supply chains that allow good quality products to be sold beyond the local market are rare. The processing sector operates in a situation of uncertain supply of local raw materials and excess capacities, and processors have tended to switch to imported raw materials.

---

Agricultural policy formulation is part  
of the national strategic planning process

---

The current overarching strategic policy document is the President's national development *Strategy 2030* (succeeded by *Strategy 2050* articulated in December 2012). Strategic plans are developed for each decade in implementation of the *Strategy 2030* and are further spelled-out in sequential five-year development programmes. One of them, the *Enhanced Industrial and Innovative Development of the Republic of Kazakhstan for 2010-14* (PEIID) aims to transform the heavily oil-dependent industrial structure into a more diversified one by promoting competitive and export-oriented activities. The agro-food sector is identified as one of the eight priority sectors for diversification. Sectoral programmes were developed to implement the PEIID, including the current programme for *Development of the Agro-Industrial Complex for 2010-14*, which was succeeded by the next one for 2013-20. In the short-term, strategic plans of state bodies are adjusted to priorities set out in the President's Annual Address. There is thus a distinct top-down hierarchy in the policy formulation process from the President's national development *Strategy* to the nation-wide development and sectoral programmes, with a high degree of centralisation in setting policy objectives.

---

### *The scope of agricultural policy objectives has been broadening as the economy grew*

---

Agricultural policies during the first decade of independence focussed on tackling the difficult food security situation and on the transformation of state agriculture into a private system. In the 2000s, successive multi-year agricultural programmes were introduced in which policy objectives were formulated more explicitly. These included food security, efficiency, and competitiveness of the agro-industrial complex. These three objectives were restated in all successive framework policy documents.

The scope of objectives was broadened with the adoption of the 2005 Agricultural Law to cover the environmental and social dimensions of agriculture. This Law included the objective of sustainable development of agriculture and rural areas, as well as the improvement of social and technical infrastructure and living conditions in rural territories. Towards the late 2000s, the international dimension emerged among Kazakhstan's agricultural policy objectives. WTO accession negotiations were progressing, which led the government to formulate the objective of adapting agriculture to a more open market in view of its accession, while most recently livestock export enhancement was added as a new priority.

---

### *... and agricultural policies went through three phases*

---

In the late Soviet era, agriculture was supported by high administered prices and considerable input and output price subsidies, in addition to policies that were not agriculture-specific (such as cheap energy and transport).

Agricultural policies during the independence period went through three phases:

- 1992-97 – *initial structural reforms and emergence of new policy institutions*: the principal policies during this period were land reform and the privatisation of collective farms. As the government was focussed on more pressing priorities, such as macroeconomic stabilisation and the creation of a basic legal framework for a market economy, other areas of agricultural policy remained largely neglected. A few measures directly supported producers, focussing on subsidising inputs for sowing and harvesting and covering losses in livestock production. Trade policy was driven predominantly by concerns to ensure domestic food supplies and to restrain food price inflation and a fairly liberal import regime was combined with restrictive export measures.
- 1998-2002 – *stabilisation and agricultural debt restructuring*: following the Russian economic crisis in 1998, the government's attention again focussed on macroeconomic stabilisation and overcoming the consequences of the crisis on the national economy. The scope of support measures continued to be limited, although activities were emerging to later become the principal components of agricultural support in Kazakhstan, such as preferential machinery leasing and a new system of agricultural and rural credit. Momentum was re-gained in restructuring of agricultural enterprises following financial rehabilitation initiated in 1995-97. Although the recession bottomed out, producers had a depreciated capital stock, lacked access to alternative market channels, faced limited financing options and operated in an unstable regulatory environment. Rural areas continued to suffer demographic, economic and social decline.



- *2003-to the present – promoting agriculture as part of economic diversification:* the oil boom made available more revenues for public support, but also raised concerns about the lack of economic diversification. This marked the turn to an active policy to promote agricultural growth. Incentives were provided through a substantial expansion of preferential credit, machinery leasing, fertiliser and fuel subsidies, and considerable tax concessions. Rural development and social issues have become more prominent on the policy agenda. In the late 2000s, instability of global economy increased government's concerns about the resilience of the agro-food sector and the ability of private business to respond to the stated agricultural development goals. State-supported large-scale investment projects were initiated and support was re-focussed from the crop to the livestock sector. Concerns about food security were also revived resulting in new measures to control food prices at the local level. On the trade front, protectionist tendencies strengthened, in particular for meat products. Steps towards Eurasian integration were taken through launch in 2010 of a Customs Union with Belarus and Russia and a Common Economic Space in 2012. WTO accession negotiations that were stalled amid uncertainties related to the implementation of the Customs Union regained momentum in 2010-12.

---

*Centralised structure of state agencies is the institutional approach to policy implementation*

---

*KazAgroHolding* is the institution unifying under its top management seven state agencies that operate in various fields of agricultural policy. The Food Contract Corporation (FCC) and KazAgroProduct (KAP) are state purchase agencies functioning on the grain/oilseeds and livestock markets respectively. The Agricultural Credit Corporation (ACC) and the Fund for Financial Support of Agriculture (FFSA) implement concessional credit programmes, serving agricultural borrowers of different sizes. KazAgroFinance (KAF) is the operator of the state machinery leasing programme. KazAgroMarketing (KAM) provides price information, marketing and consultancy services, and KazAgroGarant (KAG) operates a guarantee fund for grain and cotton warehouse receipts.

---

*... with some agencies having dominant positions in specific output and input markets*

---

Total assets of KazAgro equalled USD 2.5 billion at the beginning of 2011, of which around 90% were concentrated in only three companies, FCC, KAF and ACC. These agencies are either large or the dominant players on their markets. A feature of KazAgro companies is that besides acting as government agencies that implement support programmes, they also perform commercial operations. For example, in 2003-11 the FCC purchased annually between 10% and 30% of total domestically produced grain, of which approximately three-quarters represented commercial purchases. The KAF is the largest leasing operator in Kazakhstan, both in terms of new leasing provided annually and overall leasing portfolio, and the ACC is the principal lender of credit for medium and small-scale agricultural borrowers.

### *The spectrum of policy instruments was broadening*

In the first decade of independence the principal domestic policy instruments were state purchases and limited number of input subsidies. These instruments were coupled with non-tariff trade regulation (export restrictions, and export and import licensing). During the 2000s, the scope of policy instruments was broadened (Box 0.2). Thus, a special tax regime for agriculture emerged. As the country became a net importer of livestock products in the mid-2000s, per tonne payments were introduced and rapidly increased in size and product coverage. Per hectare payments were introduced in 2007 with the intention to diversify crop production. Concessional credit expanded in terms of its scale and scope, becoming available to more types of borrowers and financing more areas, while the forthcoming 2013-20 agricultural programme includes new credit support instruments, such as interest rate subsidies and credit guarantees.

#### Box 0.2. **Kazakhstan's main agricultural policy instruments**

##### **Domestic policy instruments**

- *Market price interventions* are focussed on the grain market and are carried out by the Food Contract Corporation (FCC). Producers with a grain area over 250 hectares, are obliged “to participate in the establishment of state grain resources” through priority sales of grain to the FCC. Purchase quantities and prices are set annually by the government on the proposals of local administrations and the FCC. Since the late 2000s, grain producers were supported by high purchase prices and export transportation subsidies.
- *Per tonne payments for livestock products* were initially introduced for poultry only, but their coverage was gradually extended to virtually all livestock products, including poultry, beef, pigmeat, sheep, milk, eggs, wool.
- *Per hectare payments for “priority crops”* are set on the basis of estimated costs to produce these crops; subsidy rates are differentiated by crop and increased rates are available if producers apply moisture saving technologies. Priority crops include grains, oilseeds, sugar beet, forage crops, horticultural crops, cotton and potatoes.
- *Fertiliser and chemicals subsidies* compensate part of the cost to purchase these inputs.
- *Diesel price control* consists of administratively fixed limits on prices for diesel fuel sold to agricultural producers; total volumes to be supplied at these prices during the sowing and harvesting periods are also determined.
- *Concessional credit* is one of the most important forms of support; it is provided by the KazAgro credit agencies at fixed interest rates. They vary depending on the term and purpose of the loan, as well as the origin of credit resources (i.e. different interest rates are set for loans sourced from budgetary funds, own capital of KazAgro agencies, and funds borrowed from commercial sources). In 2011 short-term loans for sowing and harvesting were provided at interest rates varying from 4% to 12% per annum, which compares with a commercial interest of 12.3%. Longer term loans for 3 to 7 years are typically given at interest rates that range between 4% and 9.5% with a commercial interest rate at 10.5-11.5%. Since 2009, resources for concessional credit were substantially reoriented towards crediting of state-supported investment projects.
- *Concessional financial machinery leasing* provides for a reduced leasing fee (4% or 9% per annum compared to the average leasing fee charged by commercial leasing companies of 22-25%). Financial leasing is additionally exempt from VAT payment.
- *Tax concessions*: Agricultural enterprises and individual farms benefit from special tax regimes with substantial concessions on key business taxes.

### Box 0.2. Kazakhstan's main agricultural policy instruments (cont.)

#### General services provided to the agricultural sector as a whole

- *Infrastructure* financing includes water management and land reclamation; several publicly financed projects to upgrade irrigation systems and improve water management in several regions of the country were also implemented.
- *Research and development* is supported through financing of state holding KazAgroInnovation which unifies research institutions, experimental stations, innovation and extension centres.
- *Agricultural education* is financed mainly through the Ministry of Education and Science.
- *Marketing and promotion* is focused on financing of agricultural market information system, developing agro-food processing and a guarantee system for a warehouse receipt system.
- *Inspection services*: The outlays to support this area saw important increases, for example within the investment programme on construction and equipment of veterinary laboratories.

#### Trade policy instruments and agreements

Kazakhstan's trade policy instruments are in large part formed within the framework of the Customs Union between Belarus, Kazakhstan and Russia (see below).

- *Import tariffs*: Both ad valorem, specific and combined tariffs are applied; ad valorem rates are set at 0% for non-carded cotton and raw cane sugar; 5% for wheat; 15% for eggs; and 20% for dry milk; white sugar is imposed a specific tariff of USD 340 per tonne, while meat imports are subject to a TRQ regime.
- *Tariff Rate Quotas (TRQ)* are applied for meat imports outside the CIS region and cover beef, pigmeat and poultry.
- *Temporary export bans* are periodically imposed with the aim of stabilising domestic food prices, typically for oilseeds and vegetable oil.
- *Export subsidies*: Grain exporters received transportation subsidies for grain forwarded through Russian and Chinese territories between 2009 and mid-2012.
- *Regional trade agreements*: The most important regional economic integration framework is the Eurasian Economic Community (EurAsEC) whose members are Belarus, Kazakhstan, the Kyrgyz Republic, Russia and Tajikistan. The EurAsEC aims to develop the Common Economic Space between its members, with the free movement of goods and services, harmonised legal base, common infrastructure and co-ordinated tax, monetary and currency policies. The principal pillar of the EurAsEC is the Customs Union, currently including Belarus, Kazakhstan and Russia.
- *WTO process*: Kazakhstan applied to join the World Trade Organisation (WTO) in January 1996, and is currently at the advanced stage of negotiations; important issues, such as Kazakhstan's domestic support commitments in agriculture and integration of bilateral market access agreements into the country's schedule of commitments remain to be finalised.

#### *The level of support to producers varies without revealing any distinct long-term trend*

Kazakhstan's Producer Support Estimate (the PSE) averaged KZT 200 billion (USD 1.36 billion) in 2009-11. Expressed in *per cent* of producer gross receipts, it equalled 11%, meaning that agricultural support policies generate somewhat more than one tenth of gross receipts of agricultural producers. Producer support was slightly lower at 8% in 1995-97. Compared to other economies, Kazakhstan ranks among those with relatively moderate aggregate levels of support. Its PSE in 2008-10 was close to that of Ukraine (7%) and Indonesia

(9%), the United States (9%), and less than half the Russian level (22%) and the OECD average level (21%).

Variations in the level of producer support were driven mainly by sharp fluctuations of the market price support component, with budgetary transfers having a stronger impact on changes in support only in the most recent years. The share of budgetary transfers in the total PSE rose from 13% on average in 1995-2005 to 49% in 2006-11.

---

#### *Price policies tax some products and support others*

---

The moderate level of overall market price support disguises taxation of exported commodities (crops) and support to imported ones (livestock). The result is that an aggregate market price support estimate masks much higher policy distortions, with negative price transfers in one sector and positive transfers in others. Price policies in the crop sector are dominated by measures directed to the wheat sector, which since the mid-1990s have been alternating between restraining and supporting producer prices. Since 2009, wheat prices have been supported above the external market levels through transportation subsidies and domestic market interventions. Price policies in the livestock sector have been increasingly protective as border protection increased and additional per tonne payments were introduced. However, with prices of wheat supported above the world levels in recent years, livestock producers are facing higher feed costs than would otherwise be the case.

---

#### *Estimated market price support also captures imperfect integration of producers with markets*

---

Price policy interacts with other factors that contribute to the gap between domestic and international prices, and thus are captured in the estimated market price support. In emerging economies like Kazakhstan, beyond the factors of agricultural policy, the gaps between domestic and international prices are created by deficiencies in physical infrastructure, inadequate information and weak market institutions. This is particularly visible in the crop markets when temporary deficits or excess supplies due to weather conditions produce sharp domestic price reactions which are arbitrated away with large inertia. In addition, some products are weakly integrated into markets because rural households are their main producers (e.g. milk and meat). Household producers participate in markets mainly to sell quantities that exceed their own consumption, and are less guided by market signals than commercial producers. Thus, the estimated MPS for all commodities in Kazakhstan results from policy operations on markets with weak infrastructure and organisation, and the effects of both these factors on prices are significant.

---

#### *The majority of producer support is provided in highly distorting forms...*

---

Altogether, market price support, payments based on output, and payments based on variable input use with no constraints accounted for 82% of total PSE in Kazakhstan in

2009-11 (95% in 1995-97). This indicates that producer support in Kazakhstan is based predominantly on forms of support that are production distorting and least efficient in increasing producer incomes. This situation in Kazakhstan fits into a broader picture observed across emerging economies.

---

*There has been a shift towards support to general services, but total support continues to be dominated by transfers to producers individually*

---

Expenditures on general services for agriculture (the GSSE) in Kazakhstan have increased steadily since the beginning of the 2000s, albeit from a very low base in the 1990s when the funding for these areas was dwarfed. The GSSE rose from KZT 1.8 billion (USD 26 million) per year in 1995-97 to KZT 49.8 billion (USD 339 million) in 2009-11. The most important increases concerned the financing of inspection services (phytosanitary and veterinary systems). Another rapidly growing GSSE expenditure was marketing and promotion, an area which did not exist under the planned economy. Funding for research and development also increased, in particular in the late 2000s. Infrastructure expenditures varied, with the highest spending taking place between 2001 and 2003 when a large project to improve irrigation and drainage systems was implemented. Towards the end of the 2000s, the funds directed for infrastructure improvement decreased substantially. Overall, the share of general services in total support increased from 11% in 1995-97 to 21% in 2009-11, however transfers to producers individually continue to be the major component of agricultural support in Kazakhstan.

---

*Total support to agriculture is small relative to the overall economy*

---

Kazakhstan's TSE averaged KZT 250.2 billion (USD 1.7 billion) per year in 2009-11, or 1.17% of total GDP. The %TSE in Kazakhstan is comparable to that in the European Union and the United States, and much smaller than in Ukraine and Russia, countries moving on a similar economic path as Kazakhstan.

## Directions for further policy reform

An overarching objective of Kazakhstan's government is to boost the agricultural sector. This is driven by several considerations. First, there is a desire to compensate for the decline the agricultural sector experienced during the early transition period. Second, development of agriculture is part of the overall strategy for economic diversification to reduce dependency on energy income. Third, agricultural output growth has been viewed as a key factor of food security, a view that has strengthened since the onset of the high food price volatility in 2008.

Kazakhstan's aim to boost its agricultural sector needs to be achieved without exhausting its natural resources while at the same time tackling important factor constraints. The country is well endowed with land, but it suffers environmental handicaps. Water availability and a harsh climate are inherent constraints. There are also structural challenges, such as the domination of subsistence-oriented producers in key product sectors, as well as a lack of developed food chains and difficult access to external markets. Qualified labour is scarce. Commercial credit for agriculture is narrow and most of the credit for long-term investment depends on state provision.

Over the past two decades agricultural growth around the world was predominantly supported by productivity increases and less by the use of additional resources.\* The role of productivity improvements is expected to progressively increase given the tightening of resource constraints for agriculture. Productivity growth is a prerequisite for sustained competitiveness and is thus critical for agricultural development. These relationships are recognised by the government of Kazakhstan; the essential task is to develop a set of policies to deliver the desired outcomes.

The proposals below draw on a considerable body of OECD's agricultural policy analysis. They are not exhaustive but outline how Kazakhstan's policies could be re-oriented to achieve its agricultural growth objective more effectively and efficiently. These proposals are meant for consideration by Kazakhstan's government in its future policy formulation and design of relevant policy instruments.

---

### 1. Re-focus policy efforts on strategic investments to support sustainable agricultural development

---

This Review has highlighted the considerable under-provision of public goods for the agro-food sector. Deficiencies concern critical transport infrastructure, water and land management, plant and animal health and food safety systems, education, research, information, and knowledge dissemination. Redressing these deficiencies is the single most important recommendation from this Review. Without adequate investment in these areas it is extremely difficult to improve productivity, competitiveness and ensure the sustainable development of agriculture. Investment in public goods is also essential to ease downstream constraints on farm development. While more resources have been directed to these areas in recent years, much more remains to be done:

- *Improve transport infrastructure, in particular in rural areas.* Significant spatial dispersion of agriculture in Kazakhstan *a priori* imposes increased costs which are further

\* Fuglie (2012) estimates that increases in total factor productivity accounted for three-quarters of global output growth in 2001-09.

exaggerated by insufficient transportation infrastructure. Over the past two decades, the government made important efforts to develop major transport routes. However, the local transportation network, which is critical in the supply chain of goods from farm to market, continues to require major improvements. A national rural development programme that, among other areas, supported the development of local rural infrastructure expired in 2010 and was modest in scale. Local infrastructure issues are now included in the framework of territorial development programmes. It is important to ensure that the new territorial policy maintains concerted action on rural areas and the momentum created by the previous rural development programme is not lost.

- *Increase investments in plant and animal health and food safety systems.* To allow for improvements in these areas, the regulations have been modified to comply with international standards. Budgetary funds were allocated and progress has been made, for example through investments in construction and equipment of veterinary laboratories or support to introduction of modern quality control systems in the processing sector. However, modern phytosanitary and veterinary and food safety systems still need to be fully developed. Increased investment in these areas is necessary to support efficient agro-food supply chains, to reduce producer and consumer risks, and to ensure that Kazakhstan can become an important agricultural exporter.
- *Strengthen human capital and agricultural innovation system.* An acute shortage of qualified labour permeates the agro-food system, from farm enterprises to public and private institutions providing services to agriculture. This concerns skills that require higher education, such as veterinarians and agronomists, as well as skills that require technical training, such as tractor drivers, mechanics, and laboratory assistants. The attractiveness of *agricultural education and training* will be fundamentally driven by rises in the levels of agricultural income relative to other sectors. However, policies still can play a role in strengthening agricultural education through increased funding for agricultural curricula, institutional public-private partnerships to better match skills supply with demand, better information about available programmes (including education abroad), and enhancement of the existing programmes for settlement of specialists in rural areas. *Research and development (R&D)* are inherently dependent on public investment as they are capital intensive with long-time horizons and uncertain outcomes. Although private investment is typically prevalent in more applied R&D, which becomes an important driver of innovation, this is not yet the case in Kazakhstan. There is, therefore, a challenge to create incentives for private investments in R&D. Benefits could also be reaped from a systematic effort to adapt technologies developed elsewhere to local conditions, complemented by targeted R&D activities that address needs specific to Kazakhstan. An *extension system* is just beginning to develop in Kazakhstan. Well-coordinated education, R&D, and extension systems can contribute to strong productivity growth and the widespread adoption of sustainable farming practices. There is an additional rationale in Kazakhstan for a strong extension system in that, as a result of the transition period, several key commodity sectors in Kazakhstan are dominated today by either household producers or recent individual farmers. They typically lack sufficient technology and the business background and thus targeted extension services would help them integrate into agricultural markets.

- *Carefully assess the economic and financial feasibility of publically supported investment projects.* There is a case for public investment in public goods, such as those outlined above. However, in recent years the government has substantially credited investment projects related to storage, wholesaling, processing, and large-scale milk and meat production facilities. Investment credit is provided at a much reduced cost posing the risk that such investments become supply-driven and result in excessive debt exposure of the agro-food sector. These risks strengthen in the context of the current agricultural debt situation. A broader strategy with respect to the development of private goods, such as production, processing, storage and wholesaling facilities, should include the creation of enabling framework conditions for private investment in agriculture.

---

## *2. Increase efforts to integrate small-scale producers into agricultural markets and to diversify/improve rural incomes*

---

Subsistence-oriented households are the dominant producers of meat, milk, potatoes and vegetables in Kazakhstan, products that form the country's food basket. This is seen by the government as a structural handicap and current policy is to stimulate the emergence of modern commercial units. Efforts to develop large-scale agriculture should be complemented by helping small farms integrate into local supply chains. There is also a need to strengthen the capacity of rural households to find earning opportunities outside of agriculture.

- *Improve the provision of general services to small-scale producers* (as described above). In this case, extension and advisory services are particularly important.
- *Facilitate increases in farm operations.* Small-scale production in Kazakhstan is typically associated with increased unit costs to collect and transport products, high food safety risks, and uneven product quality, factors that reduce the incentive for processors to integrate with small producers. Increases in farm size can be facilitated if rural people are given better access to land by removing obstacles to land mobility and lowering regulatory and administrative barriers to acquire agricultural land.
- *Strengthen credit programmes for small producers.* Important efforts were made in Kazakhstan to establish a credit system targeted to small borrowers, and special credit institutions were created. Nevertheless, the system is currently characterised by limited uptake of some types of loans and a lack of financial robustness of institutions ensuring its local outreach (micro-credit organisations and Credit Partnerships). A comprehensive diagnosis of existing weaknesses of the small credit system could help to improve access to credit by small-scale producers. The review of the Credit Partnerships system and the actions already foreseen to rehabilitate it are a welcome step in this direction.
- *Promote vertical arrangements between processors and small farmers.* A more pro-active behaviour of processors towards small-scale suppliers can be effective. This can take simple forms such as renting transport equipment, providing cash advances to village collectors, supplying household producers with technical and financial assistance, and renting on-farm cooling equipment. More advanced arrangements, such as the establishment of quality assurance systems and forward contracting (e.g. covering price, quantity, quality, input and money advances, etc.), are also possible. These private



efforts to improve integration within the product chain are outside the government's remit. The government could play a role by easing regulatory barriers to such forms of vertical integration and strengthening the contract security system. The government could also engage, together with producer and industry associations, to improve information about practices in other countries to integrate smallholders within the food industry.

### *3. Adopt a broader vision of food security and rely on a wider range of policies to pursue it*

Food security is typically seen from the supply side and equated with food self-sufficiency. This reinforces the approach of linking support to specific commodities, and providing it predominantly through output and input subsidies, price interventions, and by restricting imports. However, economic analysis shows that such measures are inefficient in increasing producer income or stimulating competitiveness, while agricultural price support also increases the cost of food.

The demand side of food security in Kazakhstan today concerns the issue of food price instability that abruptly changes food affordability, rather than the continual lack of access to food. To deal with food price instability, Kazakhstan has used export restrictions and limited food prices administratively. While providing an immediate effect of capping food prices, such policies act as a disincentive for domestic producers and, as such, they are incoherent with the objective of agricultural growth. At the same time, it is important to address sources of price instability, if for example weak market institutions impede domestic markets to absorb price shocks, it would be appropriate to focus on improvements of these institutions. A longer-term response to food price instability would be for policies to raise real incomes and combat poverty, including the enhancement of the existing food aid programmes and the safety nets for vulnerable social groups.

In sum, food security would be more effectively tackled through a diversified policy approach: to increase output based on sustainable productivity growth; to develop rural areas and reduce poverty more generally, including through private and public investments; to expand exports, where income opportunities exist for competitive producers; and to allow imports, which help to ensure that consumers have access to food supplies at international prices.

### *4. Improve the economic incentives for sustainable resource management and incorporate environmental concerns into agricultural policies*

Virtually all farmed land in Kazakhstan is leased on a long-term basis from the state. The low state-fixed rental payments weaken the incentive to buy-out or to cede leased land to potential buyers, even when the leased land is not utilised and prone to degradation. Land transfer is further impeded by complicated administrative procedures, and some potential buyers may lack the confidence that land ownership rights are secure. All these factors weaken private incentives to maintain the land in good condition and invest in its amelioration. Establishing secure property rights, therefore, is key to creating private incentives for sustainable land use. The improvement of the current land valuation system and simplification of procedures for land acquisition would be the necessary steps

in this direction. Beyond the establishment of secure property rights, specific policy action is needed to address negative environmental externalities from farming activity. Disincentives need to be created for harmful agricultural practices by developing and enforcing environmental regulations and standards and by applying the “polluter pays” principle. State programmes for the development of agriculture need to take into account the environmental impact of proposed growth targets and the underlying support measures, which is potentially significant for some of the measures (e.g. current fertiliser and pesticides subsidies; per tonne subsidies for livestock and poultry; investment projects supporting construction of milk and meat complexes; and irrigation water subsidies).

---

#### *5. Develop policies and tools for risk management in agriculture*

---

Kazakhstan’s producers face significant risks related to climate, animal health, and pests and diseases. They are also exposed to high price and financial risks, which in recent period are enhanced by instability of global commodity and financial markets. Risks affect the potential of the sector to generate income, attract credit, and investment. Risk management in agriculture is not yet an apparent policy focus for Kazakhstan’s government. The effort to develop a risk management system needs to go far beyond the current policy to stabilise grain prices or subsidise crop insurance. Producers in Kazakhstan need a variety of tools to manage different types of risks. The government’s role is to ensure that the relevant information and necessary risk management tools are available to them (OECD, 2011c).

For the management of normal risks, producers in Kazakhstan need to have adequate information about weather, product and input, and finance markets. This implies broadening the scope of information services beyond the basic price and market information currently provided and the development of systems that allow easy on-farm access to this information. In addition, general tax and social security provisions could be developed to support the management of normal risks by producers; for example, tax incentives to save in good years and spend in bad years. Risks related to natural events or disease outbreaks are beyond the capacity of producers to manage and require specific government action. A traditional policy response to deal with catastrophic risks has been to introduce publicly supported catastrophic risk insurance. However, the current crop insurance scheme in Kazakhstan requires an assessment to improve its performance. Furthermore, this scheme covers only a specific set of risks and for a specific sector, and there may be a need for a complementary emergency assistance framework to deal more broadly with natural disasters. The management of animal disease outbreaks can be helped by creating special public-private funds to provide compensation for direct losses from emergency actions, thus increasing the incentive for producers to report a disease outbreak. Catastrophic risks in Kazakhstan also require government efforts to create sound systems for biosecurity and for the prevention and control of natural disasters. There are risks which fall between normal and catastrophic risks and for which risk-sharing arrangements can be developed, such as commercial insurance, forward contracting, or co-operative supply management and pricing schemes. The role of the government would be to encourage the private risk management arrangements through appropriate regulations and surveillance.

## 6. Clarify the role of state agencies in agriculture

A state holding company, KazAgro, unifies principal state agencies whose key mandate is to implement agricultural policy. Some of these agencies are empowered to undertake commercial operations, and since they benefit from public financing, they enjoy substantial market power.

- *Consider actions to enhance competition in the grain market.* Ensure the effective delineation between activities of the Food Credit Corporation (FCC) as an agent operating state grain resources and a commercial grain trading agent. In particular, examine compliance of FCC's commercial operations with principles of fair competition in access to grain storage, transport and port facilities.
- *Introduce more explicit framework for state activity on the grain market,* including explicit limits to obligatory deliveries by grain producers and transparent criteria to set the volume, purchase and sale prices for grain state resources; *formulate a strategy for grain market interventions* and specify the explicit conditions under which they would be triggered. The absence of such a framework for state intervention means that grain producers face higher market risks.
- *Reduce reliance on state provision of agricultural credit and employ market-based tools to support credit.* Approximately 60% of the total agricultural credit portfolio is concentrated in KazAgro lending agencies. The current system emerged in the early transition period amidst fundamental impediments to commercial lending for agriculture. Kazakhstan's approach was to put in place a fully administered system based on the provision of public funds at administratively fixed interest rates, with state agencies the sole providers of such credit. Although intended to address the failure of the credit market, such a system distorts the allocation of credit and crowds out private lenders. The incentives to develop appropriate credit products by private lenders are limited as are the incentives for agricultural borrowers to turn to them. This system needs to be reformed by opening access of private lenders to state credit resources and by introducing more market-based instruments to reduce the cost of credit to producers (i.e. replacing fixed interest rates by variable interest rate subsidies and credit guarantees). A move in this direction was signalled in the new agricultural programme for 2013-20. However, these efforts are only likely to succeed if the current agricultural debt is carefully managed. In the longer run, a deeper liberalisation of the state credit system should be pursued, with a phasing-out of interest rate subsidies and down-scaling provision of public resources for credit. This would require addressing the core issues of why agricultural credit markets malfunction: the high risks in agriculture, the limited collateral opportunities, information asymmetries, and the increased transactions costs in agricultural lending (OECD, 2012c).
- *Streamline the functions of state agencies.* There has been an apparent multiplication of the functions of KazAgro agencies in recent years. This is evidenced by the involvement of the FCC grain purchasing agency in crediting investment projects (with some of them unrelated to the grain sector). Financing of investment projects has been included in the portfolio of the Agrarian Credit Corporation, whose key mandate is to support the system of local credit institutions. The KazAgroFinance, a state leasing company, is by far the largest crediting agency for publicly supported investment projects, while this has become a new activity for KazAgroProduct agency whose key mandate is to act as a

livestock purchasing agency. The involvement of KazAgro agencies in activities which do not constitute their core mandates deserves re-consideration.

### 7. Improve governance of agricultural policy

- *Strengthen the evaluation and monitoring stages of the policy cycle.* A policy cycle normally begins with the formulation of policy objectives, followed by the evaluation of current policies, the establishment of characteristics of a new policy set, the implementation of new policies, and concludes with the monitoring and evaluation of policies. The policy cycle in Kazakhstan could be improved by strengthening the evaluation and monitoring of current and new policies. This implies building the relevant information systems and employing analytical tools, including surveys and economic models to analyse policies.
- *Increase stakeholder involvement in policy review and monitoring.* A consultative policy-making process is most likely to result in policies that reflect the balance of interests of different groups. Although there is a requirement in Kazakhstan to involve non-government organisations in the policy review process, this has been limited to the final stages of the preparation of policy documents. The lack of stakeholder involvement in the policy process is also due to the absence of a more pro-active behaviour on the part of stakeholders, who do not yet appreciate the benefits of collective action and are reluctant to contribute towards its costs. A Business Council was recently created as a platform for interaction between the government and private stakeholders. It would be important to ensure that all stakeholders are represented and involved at all stages of the policy cycle, including identifying the issues of policy concern, the formulation of policy objectives, and making new policy proposals. Non-government organisations should also become instrumental in the monitoring and evaluation of the policy measures.
- *Ensure that policy adjustments do not create policy instability.* Programmes for the development of the agro-industrial complex represent the main mid-term agricultural policy framework in Kazakhstan. The succession of agricultural programmes since the beginning of the 2000s shows that this process has largely been driven by changes in ministerial leadership. Policy adjustments are necessary to respond to evolving situations both within and outside the agricultural sector, but this should not create undue policy instability. The government's intentions should be made transparent and communicated to stakeholders in a timely way. This, once again, underscores the importance of close interaction between policy makers and stakeholders at all stages of the policy process.

### **References**

- FAOSTAT (2012), *FAOSTAT Database*, <http://faostat.fao.org/>.
- Fuglie, K.O. (2012), "Productivity growth and technology capital in the global agricultural economy", in Fuglie, Keith O., Sun Ling Wang and V. Eldon Ball (eds.), *Productivity Growth in Agriculture: An International Perspective*, CAB International, Oxfordshire, UK.
- OECD (2012a), *Agricultural Policies for Poverty Reduction*, OECD Publishing, Paris.
- OECD (2012b), *Agricultural Policy Monitoring and Evaluation 2012: OECD Countries*, OECD Publishing, Paris.

- OECD (2012c), *Enhancing Access to Finance to Strengthen Agri-Business Competitiveness in Kazakhstan, Private Sector Development Policy Handbook*, OECD Eurasia Competitiveness Programme, OECD Publishing, Paris.
- OECD (2012d), *Evaluation of Agri-Environmental Policies: Selected Methodological Issues and Case Studies: OECD Countries*, OECD Publishing, Paris.
- OECD (2011a), *Agricultural Policy Monitoring and Evaluation 2011: OECD Countries and Emerging Economies*, OECD Publishing, Paris.
- OECD (2011b), *Fostering Productivity and Competitiveness in Agriculture*, OECD Publishing, Paris.
- OECD (2011c), *Managing Risk in Agriculture: Policy Assessment and Design*, OECD Publishing, Paris.
- OECD (2008), *Agricultural Policy Design and Implementation. A Synthesis*, OECD Publishing, Paris.
- OECD (2003a), *Agricultural Policy Reform in OECD Countries. A Positive Reform Agenda*, OECD Publishing, Paris.
- OECD (2003b), *Farm Household Income: Issues and Policy Responses*, OECD Publishing, Paris.
- Statistics Agency of the Republic Kazakhstan (2012), "Kazakhstan in Figures", On-line Database, [www.stat.kz](http://www.stat.kz).
- UN (2011), UN Comtrade Database, <http://comtrade.un.org>.
- WB WDI (2012), *World Development Indicators Database*, <http://data.worldbank.org/data-catalog/world-development-indicators>.



## Synthèse et recommandations pour l'action publique

*Le Kazakhstan possède d'importantes richesses naturelles mais est également soumis à des contraintes*

Le Kazakhstan se situe au neuvième rang des pays du monde en termes de superficie, et compte 16.7 millions d'habitants, ce qui fait de lui l'un des pays les moins densément peuplés de la planète. La situation géographique du Kazakhstan est assez particulière puisque le pays est enclavé, avec un seul accès maritime à l'ouest par les ports d'Aktau et d'Atyrau sur la mer Caspienne. Une grande partie des frontières nationales méridionales avec l'Ouzbékistan et le Turkménistan et orientales avec la Chine traversent des régions désertiques ou montagneuses inhospitalières. Au nord et au nord-est, la frontière avec la Russie s'étend sur plusieurs milliers de kilomètres et n'est marquée par aucune véritable barrière physique.

Le pays possède d'abondantes ressources de minerais et de combustibles fossiles et se situe au 11<sup>e</sup> rang pour ses réserves prouvées de pétrole et de gaz naturel. En 1990, le gouvernement Gorbatchev a signé le plus gros contrat d'investissement de l'histoire soviétique en vue de développer le gisement pétrolier de Tengiz, dans la zone de la mer Caspienne. En dépit des retards de la mise en exploitation et des possibilités limitées d'acheminement par oléoducs des exportations, le pétrole coulait à flot dès le début des années 2000, alors que les prix mondiaux commençaient de s'envoler et que de nouveaux oléoducs étaient ouverts vers la mer Noire et la Méditerranée.

Le Kazakhstan possède d'importantes ressources en terre : près des quatre cinquièmes de sa superficie totale sont occupés par des pâturages permanents. La superficie de terres arables par habitant (2.1 hectares) est la plus élevée du monde après l'Australie (5.5 hectares). Les terres agricoles ont souffert des programmes de l'ère soviétique et de l'absence d'investissements pendant la période qui a suivi l'indépendance. Le Programme de conquête des terres vierges (1954-60) visait à accroître la production de blé en étendant les cultures jusqu'aux steppes méridionales du Kazakhstan exposées à des vents forts et de faibles niveaux de précipitations excluant toute possibilité de production végétale durable. Une partie des terres emblavées dans le cadre de ce programme ont été abandonnées dans les années 90. Selon les estimations, 19 % seulement du territoire agricole échappent actuellement aux conséquences négatives de la salinisation, l'érosion éolienne, l'excès de sodium, etc. La couche d'humus s'est considérablement appauvrie depuis les années 60, la dégradation s'étant accentuée depuis trente ans dans les principales régions céréalières.

Les ressources en eau sont limitées, varient selon les saisons et les années, et sont inégalement réparties. L'agriculture est le principal secteur consommateur d'eau, utilisée en grande partie pour l'irrigation dans le sud du pays principalement. Le climat des zones

septentrionales est extrêmement continental et se caractérise par de fortes variations de températures saisonnières et des pluies aléatoires, tandis que le sud et le centre du pays sont arides.

Le pays a connu dans les années 90 une importante émigration qui l'a privé notamment de nombreux cadres et travailleurs qualifiés ; l'exode s'est considérablement ralenti sous l'effet de la crise russe en 1998, mais en 2000 le nombre net d'émigrés dépassait toujours 100 000 par an, et n'a commencé de réellement diminuer qu'après 2000, à la faveur du redressement spectaculaire de l'économie.

---

*Les graves difficultés rencontrées durant les dix premières années de l'indépendance ont été suivies d'une croissance rapide déclenchée par le boum pétrolier*

---

L'économie a gravement souffert de l'hyperinflation et de la forte récession durant la première moitié des années 90, mais elle s'est ensuite rapidement redressée à la faveur du boum pétrolier (graphique 0.1). Le PIB a progressé de 10 % par an entre 2000 et 2007. La croissance a connu un net ralentissement entre 2008 et 2009 sous l'effet de la crise du secteur bancaire local qui a frappé l'économie nationale, puis de la crise financière mondiale, mais elle est repartie de plus belle en 2010-11. L'évolution du niveau de vie a suivi celle de la situation macroéconomique : après une forte dégradation durant les dix premières années qui ont suivi l'indépendance, les revenus ont augmenté et la proportion de la population percevant des revenus inférieurs au niveau de subsistance qui avait culminé en 2001 (59 % dans les zones rurales et 36 % dans les zones urbaines) est tombée à 8.8 % dans les zones rurales et 2.4 % dans les villes en 2011.

Au début des années 2000, le gouvernement a commencé d'intensifier son action à l'appui du développement économique, en puisant notamment dans le Fonds national, un fonds souverain constitué d'une partie des revenus pétroliers. En 2006, le président Nazarbaïev a déclaré qu'il se donnait dix ans pour faire du Kazakhstan l'un des « 50 pays les plus compétitifs et dynamiques du monde ». Le gouvernement a décidé d'utiliser les revenus énergétiques pour constituer des réserves, investir dans le capital humain et diversifier la structure de la production. Cependant, bien que les autorités semblent décidées à mener des réformes structurelles, en faveur notamment de la privatisation, l'avancée de ces réformes reste lente et sporadique, et la situation sur le terrain est souvent en retard par rapport à la législation. Un mouvement inverse semble toutefois se dessiner, en particulier depuis le milieu des années 2000, l'État ayant tendance à intervenir davantage dans l'économie.

---

*L'agriculture a traversé une difficile période de transition...*

---

La première moitié des années 90 a été marquée par une nette détérioration des termes de l'échange pour les produits agricoles, les prix des intrants ayant augmenté beaucoup plus vite que ceux de la production. Ce brutal ajustement de prix est intervenu alors que l'ancien dispositif de soutien s'effondrait. Le secteur agricole est entré dans une profonde crise de l'endettement dans la seconde moitié des années 90 et des ressources considérables ont été retirées de la production. Au début des années 2000, environ 19 millions d'hectares qui étaient cultivés dix ans auparavant n'étaient plus exploités, et



Encadré 0.1. **Kazakhstan : informations contextuelles**Tableau 0.1. **Indicateurs contextuels, 1990, 1995 et 2011**

	1990	1995	2011
<b>Contexte économique</b>			
PIB (milliards USD)	27	21	186
Population (millions)	16.3	15.8	16.7
Superficie (milliers km <sup>2</sup> )	2 725 <sup>1</sup>	2 725	2 725
Densité démographique (habitants/km <sup>2</sup> )	6.1	5.9	6.1
PIB par habitant, PPA (USD)	5 120	3 661	13 189
<b>L'agriculture dans l'économie</b>			
Part de l'agriculture dans le PIB (%)	34	12	5
Part de l'emploi agricole (%)	.. <sup>2</sup>	.. <sup>2</sup>	26
Exportations agroalimentaires (% exportations totales)	..	13	3 <sup>3</sup>
Importations agroalimentaires (% importations totales)	..	11	10 <sup>3</sup>
<b>Caractéristiques du secteur agricole</b>			
Balance des échanges agroalimentaires (millions USD)	..	251	-362 <sup>3</sup>
Production végétale (% production agricole totale)	59	54	58
Production animale (% production agricole totale)	41	46	41
Superficie agricole (SA) (millions ha)	221 <sup>1</sup>	214	222
Terres arables (% de la SA)	16 <sup>1</sup>	15	11
Consommation d'eau de l'agriculture (% consommation totale)	60	70	49


.. Non disponible.

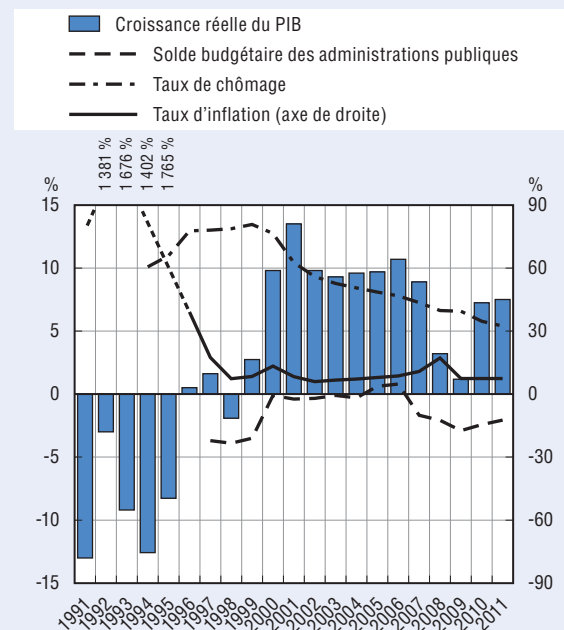
1. 1992.

2. Les données de l'emploi avant et après 2001 ne sont pas comparables dues à un changement de définition.


3. 2010.

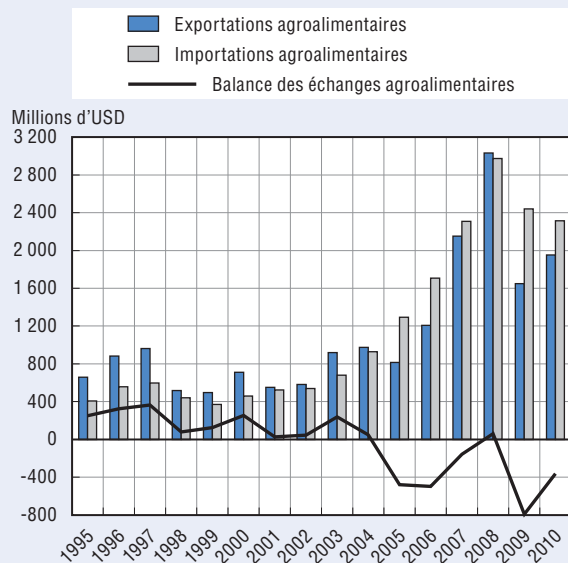
Source : Bases de données statistiques de l'OCDE ; BM ; Agence statistique de la République du Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932796739>


Graphique 0.1. **Principaux indicateurs macroéconomiques, 1991-2011**

Source : FMI ; ministère des Finances de la République du Kazakhstan ; Office statistique de la République du Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932796663>

Graphique 0.2. **Échanges agroalimentaires, 1995-2010**

Source : Base de données Comtrade de l'ONU, 2011.

StatLink  <http://dx.doi.org/10.1787/888932796682>

les effectifs de bétail des anciennes fermes collectives avaient chuté de 20 % par rapport aux niveaux de 1990. Au cours des années 90, la production agricole a été divisée par plus de deux, et la tendance ne s'est pas encore totalement inversée, en dépit de la reprise amorcée à la fin de la décennie.

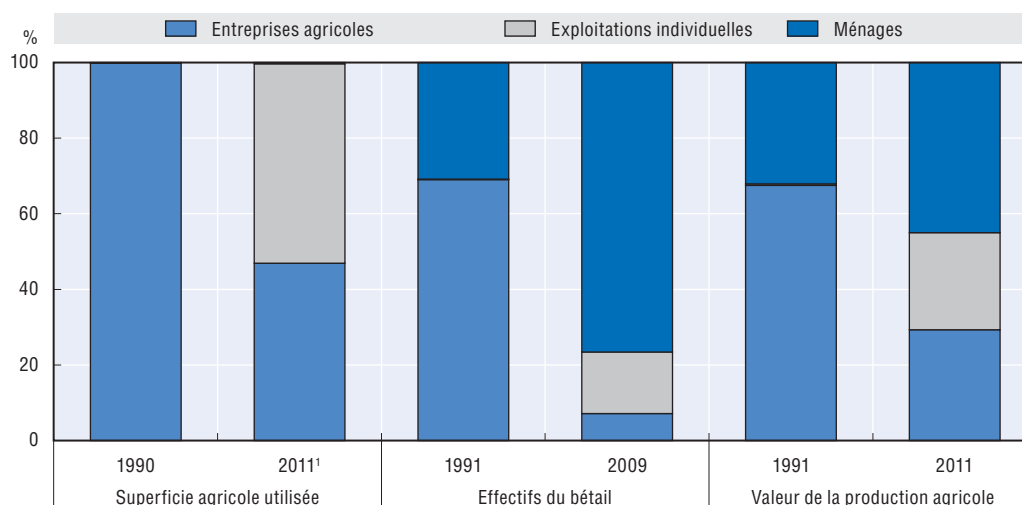
*... marquée par des réformes fondamentales de la propriété foncière et des structures agricoles,...*

La réforme foncière et la privatisation des exploitations agricoles lancées en 1991 ont progressé de façon irrégulière. Les réformes se sont accélérées au cours de la décennie suivante dans le prolongement de l'effort massif d'assainissement financier qui a entraîné la faillite de nombreuses fermes d'État. Un nouveau Code foncier a été adopté, lequel a permis de préciser les droits de propriété et de location à bail des terres agricoles. Les réformes structurelles menées dans le secteur agricole ont profondément transformé la structure des exploitations.

Le nombre d'exploitations agricoles qui était de 5 000 en 1990 est passé à 193 540 en 2009 ; 8 796 d'entre-elles, devenues « entreprises agricoles » (superficie moyenne de 12 000 hectares) avaient opté pour des formes juridiques leur permettant de conserver leur organisation collective, et les 184 744 autres étaient de nouvelles exploitations individuelles (superficie moyenne de 248 hectares). Outre ces entreprises agricoles et ces exploitations individuelles, plus de 2 millions de ménages ruraux « exploitent » des parcelles d'environ 0.15 hectare.

La superficie de terres a été massivement redistribuée entre les exploitations individuelles, qui occupaient 52 % de la superficie totale en 2009-11, contre 0.6 % en moyenne en 1990-92 (graphique 0.3). Toutefois, la réallocation des facteurs a été encore plus drastique dans le cas du bétail, dont les effectifs sont tombés à des niveaux très bas dans les entreprises agricoles au cours des années 90, faisant des ménages ruraux les principales unités pratiquant l'élevage. La transformation de la structure des exploitations a inversé les rôles des

**Graphique 0.3. Évolution de la distribution des facteurs de production et de la production agricole entre les différents types d'exploitation**



1. Les ménages n'exploitaient officiellement que 0.33 % de terres agricoles en 2011.

Source : Office statistique de la République du Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932796701>

exploitations de production à petite et à grande échelles. Les entreprises agricoles, qui assuraient près des deux-tiers de la production agricole totale en 1990 comptaient pour moins d'un tiers en 2011, la part revenant aux exploitations individuelles et aux parcelles des ménages suivant l'évolution inverse.

---

*... qui ont donné naissance à des systèmes agricoles régionaux distincts*

---

La transformation de la structure d'exploitation collective qui était le modèle unique auparavant a donné naissance à deux systèmes agricoles régionaux distincts. Le nord et le nord-est du pays sont dominés par de grandes exploitations spécialisées dans la production céréalière et oléagineuse nécessitant des techniques à plus forte intensité capitalistique. Dans ces régions, il est apparu moins nécessaire de démanteler les grandes exploitations fortement mécanisées, et leurs responsables son apparus bien placés pour les maintenir en activité. Les grands producteurs céréalières de ces régions ont souvent des contrats directs avec des acheteurs étrangers (négociants ou minotiers). Beaucoup de grandes unités de production appartiennent à des « agrohholdings », qui sont des structures à intégration verticale comprenant des exploitations, des silos et des installations de transformation et même dans certains cas des terminaux portuaires. Le sud et le sud-est du pays sont plutôt orientés vers la polyculture majoritairement pratiquée par de petits exploitants. Une grande partie de la production horticole du pays et toute sa production de coton et de riz se concentrent dans ces régions.

---

*L'agriculture pèse de moins en moins lourd dans le PIB et l'évolution de l'emploi reste mitigée*

---

Sous l'effet de la croissance rapide du secteur de l'énergie, la part de l'agriculture, qui représentait 34 % du PIB en 1990 est tombée à 5 % en 2011. Il est difficile d'évaluer l'évolution à long terme de l'emploi dans le secteur sachant que la définition de l'emploi a changé, ce qui a considérablement augmenté les chiffres depuis les années 2000. En utilisant des séries cohérentes sur certaines périodes, on observe que les tendances des parts de l'agriculture et de l'emploi dans le PIB divergeaient dans les années 90 alors qu'elles vont de pair depuis les années 2000. En effet, d'importants ajustements de la main-d'œuvre sont intervenus au cours de la période postindépendance quand la population s'est tout d'abord repliée vers les campagnes pour survivre, après quoi la reprise économique a suscité un mouvement inverse des campagnes vers les villes. Cependant, l'agriculture continue d'être le plus important secteur en terme d'emploi (26 % en 2011) et on observe un écart considérable entre la productivité de la main-d'œuvre de ce secteur et du reste de l'économie.

---

*Les échanges agroalimentaires se développent...*

---

Globalement, les échanges de produits alimentaires du Kazakhstan ont commencé à augmenter dans la seconde moitié des années 2000 (graphique 0.2). S'agissant des exportations, l'augmentation est principalement à mettre au compte des exportations de blé, dont le volume annuel a presque doublé et la valeur annuelle a plus que triplé entre les périodes 1995-97 et 2008-10. Le Kazakhstan fait aujourd'hui partie des dix premiers

exportateurs de blé (il était sixième en 2011/12). S'agissant des importations, l'augmentation des échanges ont été stimulés par la hausse des revenus et l'appréciation de la monnaie nationale. Le pays importe majoritairement des produits laitiers, du sucre, et des produits alimentaires transformés. Les importations ont progressé plus rapidement que les exportations c'est pourquoi le Kazakhstan est devenu importateur net de produits agroalimentaires depuis le milieu des années 2000.

Les exportations du Kazakhstan se sont nettement détournées du marché russe pour se réorienter vers l'Asie centrale, l'Azerbaïdjan, la Turquie, l'Iran et l'Afrique du Nord. Les importations ont connu une évolution inverse, le Bélarus, la Russie, et l'Ukraine gagnant du terrain dans les importations agroalimentaires du Kazakhstan, et cette tendance pourrait être renforcée par le fonctionnement de l'Union douanière entre le Bélarus, le Kazakhstan et la Russie.

---

#### *... mais plus lentement que dans les autres secteurs*

---

L'énergie ayant représenté le gros des exportations du Kazakhstan, les produits agroalimentaires qui représentaient 14 % des exportations totales en 1995-97 ne comptaient plus que pour 4 % en 2008-10. Ils représentaient également un plus faible pourcentage des importations totales : 9 % en 2008-10 contre 13 % en 1995-97.

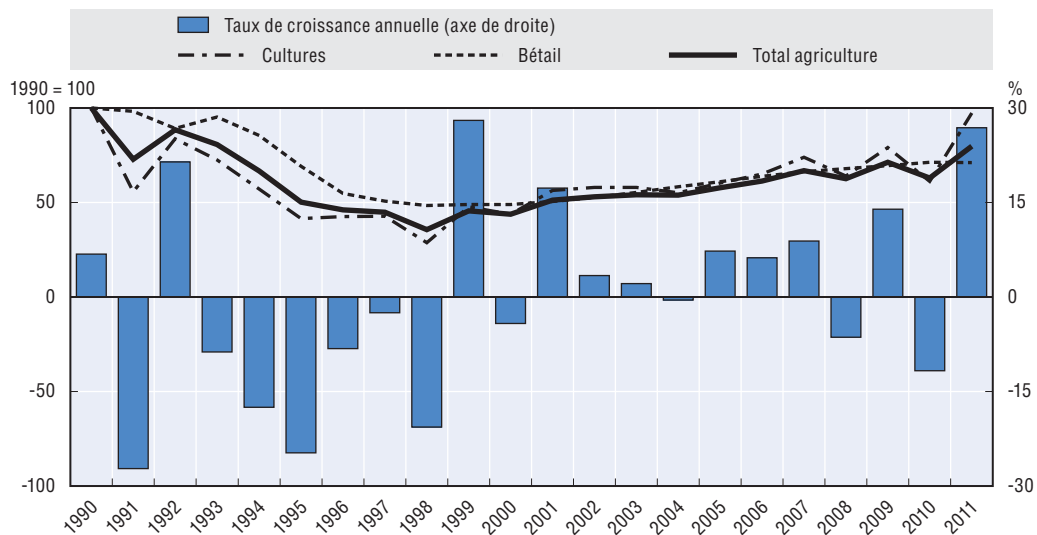
---

#### *L'agriculture a renoué avec la croissance depuis le début des années 2000, mais elle doit actuellement faire face au problème de l'endettement ...*


---

Le secteur a commencé de se redresser progressivement à partir des années 2000 (graphique 0.4). La croissance annuelle a été extrêmement volatile sous l'effet des fortes fluctuations de la production céréalière. La production de blé a oscillé entre 9 millions de tonnes (en 2000/01) et 23 millions de tonnes (en 2011/12). La production animale connaît une croissance modérée, et un certain ralentissement a été observé au cours des deux dernières années.

La crise financière et économique de la fin des années 2000 a aggravé la situation de la dette agricole ; d'autres évolutions défavorables ont accentué cette dégradation. La dépréciation du *Tenge* en 2009 a fait considérablement augmenter le coût du service de la dette pour les emprunts en devises étrangères. Le secteur céréalière, qui est le principal producteur agricole du Kazakhstan, a accusé des pertes suite à l'interdiction des exportations de blé en 2008 en réponse à la hausse des prix alimentaires sur le marché international. Après avoir subi le contrecoup de la baisse des prix céréalières en 2009 qui a suivi la récolte exceptionnelle dans les pays de la CEI, le secteur a pâti de la sécheresse en 2010. La part des créances douteuses dans les portefeuilles de prêts des banques commerciales et des organismes de financement d'État de KazAgro s'est envolée en 2010. Ceci a conduit le gouvernement à étudier un allègement de dette de 2 milliards d'USD pour l'agriculture.

Graphique 0.4. **Évolution de la production agricole, 1990-2011**

Source : Office statistique de la République du Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932796720>

#### *... au manque d'infrastructures et de filières d'approvisionnement appropriées*

Les études de cas consacrées aux filières du blé, du lait et de la viande qui ont été entreprises dans le cadre de cet Examen montrent que les insuffisances dont elles souffrent nuisent au développement agricole du Kazakhstan. Dans la filière céréalière les carences des infrastructures essentielles et du réseau routier rural font directement augmenter les coûts de transactions. Les lacunes de l'information, les délais de commercialisation dus par exemple au manque de silos-élévateurs et de capacités de transport, ou les difficultés d'accès aux installations portuaires font également augmenter les coûts. Paradoxalement, certains de ces risques sont liés aux activités de l'organisme d'État sur le marché céréalier, qui évince les négociants privés en intervenant sur les marchés et en bénéficiant d'un accès prioritaire aux capacités de stockage et de transport. Les coûts de transactions élevés sont répercutés tout au long de la filière et ce sont, en fin de compte, les producteurs de céréales qui pâtissent de son manque d'efficacité car ils perçoivent des prix moins élevés que si le marché fonctionnait plus rationnellement. Dans le même temps, les producteurs de blé ont reçu des aides aux intrants, et plus récemment des aides pour le transport des céréales destinées à l'exportation. Une partie de ce soutien sert à compenser les dysfonctionnements du système de commercialisation des céréales.

Les grands élevages des anciennes fermes collectives se sont pratiquement tous effondrés au début des années 90. A l'heure actuelle, environ 76 % de la production de viande du pays et 88 % de celle de lait sont à mettre au compte des ménages, qui la destinent principalement à leur propre consommation. Lorsqu'ils sont commercialisés, ces produits sont généralement écoulés sur les marchés locaux ou vendus à des transformateurs locaux ; ils sont acheminés par des moyens rudimentaires et sont de qualité très irrégulière. Les installations frigorifiques modernes de la chaîne du froid nécessaires pour garantir la qualité des produits destinés à la vente au-delà des marchés locaux sont rares. L'industrie agroalimentaire doit faire face à des approvisionnements

incertains en matières premières locales et à des problèmes de capacités excédentaires, c'est pourquoi les entreprises de transformation ont eu tendance à se tourner vers des matières premières importées.

---

*L'élaboration des politiques agricoles entre  
dans le cadre du processus de planification  
stratégique nationale*

---

La Stratégie nationale de développement du président à l'horizon 2030 constitue le principal document de stratégie générale (suivra *Stratégie 2050* exposée en décembre 2012). Des plans stratégiques décennaux sont élaborés pour mettre en œuvre la Stratégie à l'horizon 2030 et détaillés par la suite dans des programmes de développement quinquennaux. L'un d'entre eux, *l'Intensification du développement industriel et de l'innovation de la République du Kazakhstan pour 2010-14 (PIDII)* a pour but de transformer la structure industrielle fortement dépendante du pétrole en une structure plus diversifiée grâce au développement d'activités compétitives tournées vers l'exportation. Le secteur agroalimentaire fait partie des huit secteurs prioritaires désignés pour opérer cette diversification. Des programmes sectoriels ont été élaborés pour mettre en œuvre le PIDII, dont l'actuel programme de *Développement du complexe agro-industriel pour 2010-14*, qui a été remplacé par le programme suivant couvrant la période 2013-20. Les plans stratégiques des organes d'État sont revus à court terme en fonction des priorités énoncées dans le Discours annuel du président. Les politiques sont donc élaborées dans le cadre d'une approche descendante, de la stratégie nationale de développement du président aux programmes de développement national puis sectoriels, et l'établissement des objectifs demeure fortement centralisé.

---

*Les objectifs de la politique agricole ont été élargis  
à mesure de la croissance économique*

---

Durant les dix premières années de l'indépendance, les politiques agricoles ont été principalement axées sur les problèmes de sécurité alimentaire et sur la privatisation de l'agriculture d'État. Dans les années 2000, plusieurs programmes agricoles pluriannuels énonçant des objectifs plus détaillés se sont succédé. Ceux-ci concernaient la sécurité alimentaire, l'efficacité et la compétitivité du complexe agro-industriel. Ces trois objectifs ont été repris dans tous les documents-cadres adoptés successivement par le gouvernement.

La portée des objectifs a été élargie avec l'adoption de la loi agricole de 2005 qui couvre les dimensions environnementale et sociale de l'agriculture. L'objectif de développement durable de l'agriculture et des zones rurales, et l'amélioration des infrastructures sociales et techniques et des conditions de vie dans les campagnes sont mentionnés dans cette loi. Vers la fin des années 2000, la dimension internationale de l'agriculture a fait son apparition dans les objectifs d'action du Kazakhstan. Les négociations en vue de l'entrée du pays à l'OMC ayant progressé, le gouvernement a cherché à adapter son agriculture à un marché plus ouvert dans l'optique de l'adhésion, et il s'est plus récemment donné pour nouvelle priorité d'accroître ses exportations de bétail.

---

... et les politiques agricoles ont connu  
une évolution en trois phases

---

À la fin de l'ère soviétique, l'agriculture bénéficiait non seulement du niveau élevé des prix administrés et des fortes subventions en faveur de la production et des intrants, mais également d'autres mesures non spécifiques au secteur agricole (énergie et transport peu coûteux, notamment).

Après l'indépendance, les politiques agricoles ont connu trois phases :

- 1992-97 : *réformes structurelles initiales et émergence de nouvelles institutions*. Durant cette période, les efforts ont principalement porté sur la réforme foncière et la privatisation des fermes collectives. Le gouvernement s'est concentré sur les priorités les plus pressantes, notamment la stabilisation macroéconomique et la création du cadre juridique nécessaire au développement d'une économie de marché, laissant de côté la plupart des autres aspects de la politique agricole. Quelques mesures de soutien direct des producteurs ont été prises, notamment des mesures d'aide aux intrants pour les semis et la récolte et de compensation des pertes subies par les éleveurs. L'objectif premier de la politique commerciale a été d'assurer l'approvisionnement du pays en produits alimentaires et de limiter l'inflation des prix alimentaires en appliquant un régime d'importation assez libéral conjugué à des mesures de restriction des exportations.
- 1998-2002 : *stabilisation et restructuration de la dette agricole*. Au lendemain de la crise économique russe de 1998, le gouvernement s'est à nouveau concentré sur la stabilisation macroéconomique et l'élimination des conséquences de la crise pour l'économie nationales. Les mesures de soutien sont restées de portée limitée, mais certaines activités ont été lancées, qui devaient par la suite occuper une place centrale dans le soutien agricole du Kazakhstan (location de machines à des conditions préférentielles et nouveau dispositif de crédit agricole et rural). La restructuration des entreprises agricoles s'est accélérée après l'effort d'assainissement financier engagé en 1995-97. Bien que le pays soit sorti de la récession, plusieurs facteurs ont conditionné l'activité des producteurs : dépréciation du stock de capital, difficultés d'accès aux autres circuits de commercialisation, possibilités de financement limitées et instabilité de l'environnement réglementaire. Les zones rurales ont continué de pâtir du déclin démographique, économique et social.
- Depuis 2003 : *promotion de l'agriculture dans la cadre de la diversification économique*. Le boom pétrolier a permis de dégager davantage de revenus pour financer les aides publiques, mais également suscité des craintes concernant le manque de diversification de l'économie. Le gouvernement a alors décidé d'agir résolument en faveur de la croissance agricole. Différentes incitations ont été mises en place : développement massif du crédit à des conditions préférentielles, location de machines, aides aux engrais et aux carburants et avantages fiscaux considérables. Les questions de développement rural et social ont pris de l'importance dans les programmes publics. À la fin des années 2000, face à l'instabilité de l'économie mondiale, le gouvernement a pris conscience qu'il était important de veiller à la résilience du secteur agroalimentaire et de faire en sorte que les entreprises privées puissent répondre aux objectifs de développement agricoles fixés. Des grands projets d'investissement ont été lancés avec l'aide de l'État, et le soutien a été réorienté du secteur des cultures vers celui de la production animale. Le retour des

préoccupations de sécurité alimentaire a donné lieu à de nouvelles mesures de contrôle des prix alimentaires au niveau local. Sur le front des échanges, les tendances protectionnistes se sont confirmées, en particulier pour les produits à base de viande. Des efforts ont été déployés vers une intégration eurasiennne à travers le lancement en 2010 d'une Union douanière avec le Bélarus et la Russie et d'un Espace économique commun en 2012. Les négociations en vue de l'adhésion à l'OMC qui piétinaient en raison des incertitudes relatives à la mise en œuvre de l'Union douanière, ont été relancées en 2010-12.

---

*La structure centralisée des organismes d'État détermine le cadre institutionnel de la mise en œuvre des politiques*

---

KazAgroHolding est l'institution qui chapeaute les sept agences d'État chargées des différents volets de la politique agricole. La Centrale d'achats alimentaires (FCC) et KazAgroProduct (KAP) interviennent respectivement sur les marchés des céréales/oléagineux et du bétail. La Société de crédit agricole (AKK) et le Fonds de soutien financier à l'agriculture se chargent de la mise en œuvre des programmes de prêts bonifiés dont peuvent bénéficier les emprunteurs agricoles opérant à différentes échelles. KazAgroFinance (KAF) gère le programme national de location de matériel agricole. KazAgroMarketing (KAM) diffuse des informations sur les prix et dispense des services de marketing et de conseil, et KazAgroGarant (KAG) gère un fonds de garantie pour les récépissés d'entrepôt concernant les céréales et le coton.

---

*... certains de ces organismes occupent des positions dominantes sur certains marchés des produits et intrants*

---

Les actifs de KazAgro représentaient au début de 2011 un total de 2.5 milliards USD, dont 90 % se répartissaient entre trois sociétés, FCC, KAF et AKK. Ces organismes occupent une place importante ou dominante sur leurs marchés respectifs. Les entreprises de KazAgro ont ceci de particulier qu'elles exercent, outre leurs fonctions d'agences gouvernementales chargées de l'application des programmes de soutien, des activités commerciales. Par exemple, pendant la période allant de 2003 à 2011, la FCC a acheté chaque année entre 10 % et 30 % de la production totale de céréales du pays, dont près des trois-quarts dans le cadre de contrats commerciaux. KAF est le premier organisme de crédit-bail/location de matériel du Kazakhstan, en termes de nouveaux contrats signés chaque année et de portefeuille locatif, et AKK est le principal organisme de crédit consentant des prêts aux exploitations agricoles petites et moyennes.

---

*L'éventail de moyens d'action s'est élargi*

---

Durant les dix années qui ont suivi l'indépendance, les principaux instruments de politique agricole ont été les achats d'État et un petit nombre de subventions aux intrants. Ces instruments ont été couplés à des mesures non tarifaires de régulation des échanges (restrictions des exportations et licences d'importation et d'exportation). Au cours des années 2000, l'éventail de moyens d'action s'est élargi (Encadré 0.2). Un régime fiscal



## Encadré 0.2. Principaux instruments de politique agricole de Kazakhstan

### Instruments de la politique interne

- Les interventions sur les prix sont axées sur le marché des céréales et sont conduites par la Centrale d'achats alimentaires (FCC). Les producteurs qui cultivent plus de 250 hectares de céréales sont tenus de « participer à l'établissement des ressources de l'État en céréales », moyennant des ventes prioritaires à la FCC. Les tonnages achetés et les prix sont fixés annuellement par les pouvoirs publics, sur proposition des administrations locales et de la FCC. Depuis la fin des années 2000, les céréaliers bénéficient de prix d'achat élevés et de subventions des transports des céréales exportées.
- Les paiements par tonne de produits animaux ont d'abord été appliqués uniquement à la volaille, puis ils ont été étendus peu à peu à pratiquement tous les autres produits animaux, dont la viande bovine, la viande porcine, la viande ovine, le lait, les œufs et la laine.
- Des paiements par hectare au titre des « cultures prioritaires » sont fixés en fonction des coûts de production estimés de ces cultures. Leur montant n'est pas le même pour tous les produits et il peut être majoré si le producteur recourt à des techniques qui économisent l'eau. Les cultures prioritaires comprennent les céréales, les graines oléagineuses, la betterave à sucre, les cultures fourragères, les cultures horticoles et la pomme de terre.
- Des subventions aux engrais et aux produits chimiques compensent en partie le coût d'achat de ces produits.
- Encadré, le prix du gazole vendu aux agriculteurs ne peut pas dépasser un plafond prédéterminé. Le volume total vendu à ce prix pendant la saison des semis et celle des récoltes est lui aussi fixé à l'avance.
- Le crédit bonifié est l'une des formes de soutien les plus importantes. Les prêts qui en relèvent sont accordés par les établissements de crédit de KazAgro, moyennant des taux d'intérêt fixes plus ou moins élevés en fonction de la durée et de l'objet du crédit et de l'origine des fonds (ils diffèrent selon que le prêt est financé par le budget, sur les fonds propres des agences de KazAgro ou par des fonds eux-mêmes empruntés sur le marché). En 2011, les prêts à court terme accordés pour les semis et les récoltes ont été assortis de taux allant de 4 % à 12 % par an, contre 12,3 % sur le marché. Les prêts sur 3 à 7 ans sont généralement accordés à un taux compris entre 4 % et 9,5 %, au lieu de 10,5-11,5 % sur le marché. Depuis 2009, les ressources du crédit bonifié ont été réorientées en grande partie vers le financement des projets d'investissement soutenus par l'État.
- La bonification de la location de machines en crédit-bail se traduit par des taux réduits (4 % ou 9 % par an au lieu des 22-25 % demandés en moyenne par les entreprises commerciales de crédit-bail). Le crédit-bail est en outre exempté de TVA.
- Allègements d'impôts : les entreprises agricoles et les exploitants individuels bénéficient de régimes fiscaux spéciaux qui leur accordent des réductions notables des impôts sur les sociétés.

### Services généraux fournis au secteur agricole dans son ensemble

- Le financement des infrastructures vise la gestion de l'eau et la mise en valeur des terres ; plusieurs projets financés par les fonds publics pour moderniser les réseaux d'irrigation et améliorer la gestion de l'eau dans différentes régions du pays ont aussi été mis en œuvre.
- La recherche-développement est soutenue grâce au financement de la société holding d'État KazAgroInnovation, qui réunit des organismes de recherche, des stations expérimentales, et des centres d'innovation et de vulgarisation.
- L'enseignement agricole est financé au premier chef par le ministère de l'Éducation et de la Science.
- Les activités de commercialisation et de promotion mettent l'accent sur le financement d'un système d'information sur les marchés agricoles, le développement de la transformation des produits agroalimentaires et un mécanisme de garantie pour un système de récépissés d'entrepôt.
- Services d'inspection. Les dépenses destinées à soutenir ce domaine ont fortement augmenté, par exemple dans le cadre du programme d'investissements visant la construction et l'équipement de laboratoires vétérinaires.

## Encadré 0.2. Principaux instruments de politique agricole de Kazakhstan (suite)

### Instruments et accords commerciaux

Les instruments de la politique commerciale du Kazakhstan trouvent en grande partie leur origine dans l'Union douanière que forment le Bélarus, le Kazakhstan et la Russie (voir plus loin).

- *Droits d'importation* : les droits en vigueur sont *ad valorem*, spécifiques ou mixtes ; les droits *ad valorem* sont fixés à 0 % pour le coton non cardé et la canne à sucre brute ; à 5 % pour le blé ; à 15 % pour les œufs ; et à 20 % pour le lait en poudre ; le sucre blanc fait l'objet d'un droit spécifique de 340 USD par tonne et les importations de viande sont soumises à un régime de contingents tarifaires.
- *Des contingents tarifaires* sont appliqués aux importations de viande bovine, de viande porcine et de volaille en provenance de pays extérieurs à la CEI.
- Périodiquement, *les exportations sont temporairement interdites* dans l'optique de stabiliser les prix intérieurs de produits alimentaires, notamment ceux des graines oléagineuses et des huiles végétales.
- *Subventions à l'exportation* : les exportateurs de céréales ont perçu des subventions au titre du transport lorsque les produits transitaient par les territoires russe et chinois entre 2009 et mi-2012.
- *Accords commerciaux régionaux* : le cadre d'intégration économique régionale le plus important est la Communauté économique eurasiennne (EurAsEC), dont les membres sont le Bélarus, le Kazakhstan, le Kirghizistan, la Russie et le Tadjikistan. L'EurAsEC vise à développer l'espace économique commun qui associe ses membres, moyennant la libre circulation des biens et des services, l'harmonisation du droit, des infrastructures communes, et la coordination de la politique fiscale, de la politique monétaire et de la politique de change. Le principal pilier de l'EurAsEC est l'Union douanière, qui regroupe actuellement le Bélarus, le Kazakhstan et la Russie.
- *Processus d'adhésion à l'OMC* : le Kazakhstan s'est porté candidat à l'adhésion à l'Organisation mondiale du commerce (OMC) en janvier 1996, et les négociations ont beaucoup avancé. Des points importants restent pour l'instant en suspens, comme les engagements du Kazakhstan en matière de soutien interne dans l'agriculture et l'intégration des accords bilatéraux d'accès aux marchés à la Liste de concessions et d'engagements du pays.

spécial a ainsi été mis en place pour l'agriculture. Le pays étant devenu importateur net de produits animaux vers le milieu des années 2000, des paiements par tonne ont été offerts, dont le montant a ensuite rapidement augmenté, la liste des produits couverts ayant également été élargie. Des paiements par hectare ont été introduits en 2007 dans l'intention de diversifier la production végétale. Les crédits à taux préférentiel ont été développés, en volume et en diversité, et peuvent être obtenus par un plus large éventail d'emprunteurs pour une plus large gamme d'activités tandis que le programme agricole à venir pour 2013-20 comprend de nouveaux instruments de soutien du crédit comme les bonifications d'intérêts et les garanties aux crédits.

*Le niveau de soutien aux producteurs varie sans révéler de tendance distincte à long terme*

L'estimation du soutien aux producteurs (ESP) du Kazakhstan s'est élevée en moyenne à KZT 200 milliards (1.36 milliard USD) en 2009-11. Exprimée en pourcentage des recettes agricoles brutes, elle a atteint 11 %, ce qui signifie que les politiques de soutien à l'agriculture génèrent plus d'un dixième des recettes brutes des producteurs. Le soutien aux producteurs était légèrement inférieur (8 %) en 1995-97. Par rapport à d'autres

économies, le Kazakhstan se classe parmi celles dont le niveau global de soutien est relativement modéré. En 2008-10, son ESP était proche de celle de l'Ukraine (7 %), de l'Indonésie (9 %) et des États-Unis (9 %), et égale à la moitié de celle de la Russie (22 %) et de la moyenne de l'OCDE (21 %).

Les variations du niveau de soutien aux producteurs s'expliquent surtout par les fluctuations marquées du soutien des prix du marché, les transferts budgétaires n'ayant davantage fait sentir leurs effets que ces dernières années. La part des transferts budgétaires dans l'ESP totale est passée de 13 % en moyenne en 1995-2005 à 49 % en 2006-11.

---

#### *La politique de prix profite à certains produits et en défavorise d'autres*

---

Le niveau modéré du soutien des prix du marché (SPM) dans son ensemble masque une taxation des produits exportés (productions végétales) et un soutien aux produits importés (productions animales). Il en résulte que l'estimation globale du SPM occulte des distorsions beaucoup plus importantes provoquées par la politique menée, avec des transferts de prix négatifs dans un secteur et positifs dans d'autres. Dans le secteur de la production végétale, cette politique de prix consiste principalement en des mesures visant le secteur du blé, qui, depuis le milieu des années 90, alternent limitation et soutien des prix à la production. Depuis 2009, les prix du blé ont été soutenus au-delà des niveaux du marché extérieurs par le biais de subventions au transport et d'interventions sur le marché intérieur. Dans le secteur de la production animale, la politique de prix est d'inspiration de plus en plus protectionniste, avec le renforcement de la protection douanière et l'introduction de nouveaux paiements par tonne. Toutefois, les prix du blé ayant bénéficié ces dernières années d'un soutien qui les hisse au-dessus des cours mondiaux, les éleveurs sont confrontés à des coûts d'alimentation animale supérieurs à ce qu'ils devraient être.

---

#### *L'estimation du soutien des prix du marché reflète aussi l'intégration imparfaite des producteurs aux marchés*

---

La politique de prix interagit avec d'autres facteurs qui contribuent à créer un écart entre les prix intérieurs et les prix internationaux, et qui sont donc reflétés dans l'estimation du soutien des prix du marché. Dans les économies émergentes comme le Kazakhstan, les écarts entre prix intérieurs et prix internationaux résultent, non seulement de facteurs liés à la politique agricole, mais aussi de lacunes dans les infrastructures matérielles, de déficits d'information et d'une faiblesse des institutions de marché. Ce constat vaut particulièrement pour les marchés des productions végétales où les déficits ou les excédents temporaires liés à des conditions météorologiques défavorables provoquent des réactions très marquées des prix intérieurs, auxquelles il n'est remédié qu'avec retard. De plus, certains produits sont peu intégrés aux marchés car leurs principaux producteurs sont des ménages ruraux (pour ce qui est du lait et de la viande, par exemple). Les ménages sont présents sur les marchés essentiellement pour vendre le surplus de leur consommation personnelle, et ils sont moins influencés par les signaux du marché que les producteurs commerciaux. Ainsi, au Kazakhstan, l'estimation du soutien des prix du marché pour l'ensemble des produits est le résultat de l'insuffisance

de l'infrastructure et de l'organisation des marchés, deux facteurs ayant des effets substantiels sur les prix.

---

*Le soutien aux producteurs prend des formes qui causent beaucoup de distorsions...*

---

Dans l'ensemble, le soutien des prix du marché, les paiements au titre de la production et les paiements au titre de l'utilisation d'intrants variables sans contraintes ont représenté 82 % de l'ESP totale au Kazakhstan en 2009-11 (95 % en 1995-97). Il en ressort que le soutien aux producteurs, pour l'essentiel, y prend des formes qui faussent la production et s'appuie sur les mesures les moins à même d'accroître les revenus des agriculteurs. Ce schéma cadre avec celui que l'on observe plus généralement dans les économies émergentes.

---

*Le soutien aux services d'intérêt général gagne du terrain, mais les transferts individuels restent prépondérants dans le soutien total*

---

Au Kazakhstan, les dépenses au titre des services d'intérêt général (ESSG) dans l'agriculture augmentent régulièrement depuis le début des années 2000, mais elles étaient dérisoires dans les années 90. L'ESSG est ainsi passée de 1.8 milliard KZT (26 millions USD) par an en 1995-97 à 49.8 milliards KZT (339 millions USD) en 2009-11. Les plus fortes hausses concernent le financement des services d'inspection (systèmes phytosanitaire et vétérinaire). L'aide à la commercialisation et la promotion, domaines qui n'existaient pas à l'époque de l'économie planifiée, a elle aussi bénéficié d'un accroissement rapide des dépenses relevant de l'ESSG. Le financement de la recherche-développement a également augmenté, en particulier à la fin des années 2000. Fluctuantes, les dépenses d'infrastructures ont culminé entre 2001 et 2003, sous l'effet de grands chantiers d'amélioration des réseaux d'irrigation et de drainage. Vers la fin des années 2000, les fonds destinés aux infrastructures ont beaucoup diminué. Globalement, la part des services d'intérêt général dans le soutien total est passée de 11 % en 1995-97 à 21 % en 2009-11, mais les transferts dont les producteurs bénéficient à titre individuel restent le principal élément du soutien agricole au Kazakhstan.

---

*Le soutien total à l'agriculture est modeste à l'échelle de l'économie toute entière*

---

L'EST du Kazakhstan s'est montée en moyenne à 250.2 milliards KZT (1.7 milliard USD) par an sur la période 2009-11, soit 1.17 % du PIB total. L'EST en % est comparable à celle de l'Union européenne et des États-Unis, et nettement plus basse qu'en Ukraine et en Russie, pays qui sont sur la même voie du point de vue économique.

## Orientations pour la poursuite de la réforme des politiques

Le gouvernement kazakh s'est fixé pour objectif prioritaire la relance du secteur agricole, et ce pour plusieurs raisons. Tout d'abord, il entend compenser ainsi le fléchissement de l'activité agricole observé au début de la période de transition. Ensuite, le développement de l'agriculture s'inscrit dans sa stratégie globale de diversification économique visant à réduire la dépendance du pays à l'égard des revenus énergétiques. Enfin, il voit dans la croissance de la production agricole un facteur clé de la sécurité alimentaire, ce que l'apparition d'une forte volatilité des prix alimentaires en 2008 est venue corroborer.

Le Kazakhstan doit atteindre son objectif de relance du secteur agricole sans épuiser ses ressources naturelles et tout en faisant face à d'importantes contraintes sur les facteurs de production. Le pays est riche en terres, mais souffre de handicaps environnementaux. La disponibilité des ressources en eau et la rigueur du climat font partie des contraintes intrinsèques qu'il lui faut surmonter. Mais il existe par ailleurs des problèmes structurels, tels que la place prédominante qu'occupent les producteurs pratiquant l'agriculture de subsistance dans certains secteurs de production essentiels, un manque de filières agroalimentaires développées, et la difficulté d'accès aux marchés extérieurs. La main-d'œuvre qualifiée est rare. Le marché du crédit commercial pour l'agriculture est étroit, et la plupart des crédits, notamment pour les investissements à long terme, proviennent de l'État.

Depuis deux décennies, la croissance agricole dans le monde résulte davantage d'une augmentation de la productivité que de l'utilisation de ressources supplémentaires\*. Ce rôle de l'amélioration de la productivité devrait progressivement s'intensifier avec le durcissement des contraintes de ressources dans le secteur agricole. La croissance de la productivité est indispensable à une compétitivité durable et donc au développement de l'agriculture. Le gouvernement du Kazakhstan a bien conscience de la relation entre ces facteurs : l'essentiel est désormais d'élaborer un ensemble de mesures permettant d'obtenir les résultats attendus.

Les propositions formulées ci-après s'inspirent d'un important corpus d'analyses des politiques agricoles menées par l'OCDE. Elles ne sont pas exhaustives mais esquissent des pistes pour une réorientation des politiques qui permettrait au Kazakhstan d'atteindre son objectif de croissance agricole avec davantage d'efficacité et d'efficacités. Ces propositions devraient être prises en considération par les autorités du Kazakhstan pour élaborer les politiques et les instruments les mieux adaptés.

---

### 1. Recentrer l'action publique sur les investissements stratégiques en faveur d'un développement durable de l'agriculture

---

Cet Examen a fait apparaître l'insuffisance notable de biens collectifs dans le secteur agroalimentaire. Les carences se font sentir dans les infrastructures de transport essentielles, la gestion des ressources en eau et en terres, les systèmes de surveillance vétérinaire et phytosanitaire, ainsi que le dispositif de sécurité des aliments, l'éducation, la

\* D'après Fuglie (2012), l'augmentation de la productivité totale des facteurs a contribué aux trois quarts de la croissance de la production mondiale sur la période 2001-09.

recherche, l'information, et la diffusion des connaissances. Remédier à ces lacunes est la recommandation prioritaire de cet *Examen*. Faute d'investissements appropriés dans ces domaines, il est extrêmement difficile d'améliorer la productivité et la compétitivité, et d'assurer un développement durable de l'agriculture. L'investissement dans les biens collectifs est également indispensable pour alléger les contraintes qui pèsent en aval sur le développement du secteur. Si davantage de moyens ont été affectés à ces domaines ces dernières années, beaucoup reste à faire cependant.

- *Améliorer les infrastructures de transport, en particulier dans les zones rurales.* La dispersion géographique très marquée des activités agricoles au Kazakhstan impose a priori des coûts plus élevés qui sont encore alourdis par l'insuffisance des infrastructures de transport. Ces deux dernières décennies, le gouvernement a mené des efforts importants pour créer de grands axes de communication. Toutefois, le réseau de transport local, maillon essentiel de la chaîne d'approvisionnement alimentaire qui relie les exploitations aux marchés, a encore besoin d'être considérablement amélioré. Un programme national de développement rural de faible ampleur a, entre autres, soutenu le développement des infrastructures rurales locales et est parvenu à échéance en 2010. Les questions d'infrastructures locales sont désormais intégrées aux programmes de développement territorial. Il importe de veiller à ce que la nouvelle politique territoriale continue de donner lieu à une action concertée dans les zones rurales et maintienne la dynamique créée par le précédent programme de développement rural.
- *Accroître les investissements dans les systèmes de surveillance vétérinaire et phytosanitaire, et de sécurité des aliments.* Dans cette optique, les réglementations ont été modifiées pour les rendre conformes aux normes internationales. Des crédits budgétaires ont été alloués et des progrès ont été réalisés, par exemple, par le biais d'investissements dans la construction et l'équipement de laboratoires vétérinaires, ou d'aides à l'introduction de systèmes modernes de contrôle qualité dans le secteur de la transformation. Toutefois, il reste nécessaire de véritablement mettre en place des systèmes modernes de surveillance vétérinaire et phytosanitaire, ainsi que de sécurité des aliments. Des investissements accrus dans ces secteurs sont indispensables pour soutenir les filières agroalimentaires efficaces et réduire les risques des producteurs et des consommateurs et assurer que le Kazakhstan puisse devenir un important exportateur agricole.
- *Renforcer le capital humain et le système d'innovation agricole.* On constate une grave pénurie de main-d'œuvre qualifiée dans l'ensemble du système agroalimentaire, des entreprises agricoles aux prestataires publics et privés de services au secteur. Elle concerne tant les métiers nécessitant des études supérieures, tels que vétérinaires et agronomes, que les compétences requérant une formation technique, comme celles des conducteurs de tracteurs, des mécaniciens et des assistants de laboratoire. Pour que l'enseignement et la formation agricoles gagnent en attractivité, il faut surtout relever le niveau du revenu agricole par rapport à celui d'autres secteurs. Néanmoins, les politiques menées ont encore un rôle à jouer : elles peuvent renforcer l'enseignement agricole par un financement accru des programmes, par des partenariats institutionnels public-privé permettant d'assurer une meilleure adéquation entre l'offre et la demande de compétences, par une meilleure information sur les programmes en place (notamment les formations à l'étranger), et par un renforcement des programmes existants en faveur de l'installation de spécialistes dans les zones rurales. La *recherche-développement (R-D)* est par nature tributaire de l'investissement public car c'est un secteur à forte intensité de capital, qui porte sur des horizons temporels à long terme et dont les résultats sont

incertains. Si, en règle générale, les investissements privés jouent un rôle prépondérant dans la R-D appliquée, devenue un moteur important de l'innovation, il n'en va cependant pas encore ainsi au Kazakhstan. Il importe donc de créer des incitations à l'investissement privé dans la R-D. Il pourrait aussi être bénéfique de chercher systématiquement à adapter des technologies mises au point ailleurs aux conditions locales, et de compléter cet effort par des activités de R-D ciblées répondant aux besoins spécifiques du pays. Un *système de vulgarisation agricole* commence juste à se développer au Kazakhstan. Une coordination étroite entre ce système et les dispositifs de formation et de R-D est de nature à favoriser une forte croissance de la productivité et l'adoption généralisée de pratiques agricoles durables. Il existe une raison supplémentaire pour mettre en place un système solide de vulgarisation agricole. En effet, en raison de la transition, plusieurs secteurs de production agricole essentiels sont actuellement dominés soit par les ménages soit par les exploitants individuels récents. En règle générale, ces producteurs manquent d'expérience technique et commerciale ; des services de vulgarisation ciblés les aideraient aussi à s'intégrer dans les marchés agricoles.

- *Évaluer soigneusement la faisabilité économique et financière des projets d'équipement à financement public.* Il conviendrait sans doute de procéder à des investissements publics dans les biens collectifs, tels que ceux évoqués précédemment. Ces dernières années, le gouvernement a affecté des fonds importants à des projets d'investissement concernant le stockage, le commerce de gros, la transformation, et les grandes unités de production de lait et de viande. Les crédits d'équipement étant fournis à un coût beaucoup plus réduit, ces investissements risquent d'être déterminés par l'offre et de donner lieu à un endettement excessif du secteur agroalimentaire. Ce risque est renforcé compte tenu de l'endettement actuel du secteur agricole. Une stratégie plus vaste visant à développer les biens privés tels que la production, la transformation, le stockage et les activités de gros nécessiterait de mettre en place des conditions-cadres favorables aux investissements privés dans ces secteurs.

## 2. Renforcer les actions visant à faire entrer les petits producteurs sur les marchés agricoles et à diversifier/améliorer les revenus ruraux

Les ménages pratiquant l'agriculture de subsistance sont les principaux producteurs de viande, de lait, de pommes de terre et de légumes, produits alimentaires constituant le panier de base au Kazakhstan. Comme le gouvernement voit dans cette situation un handicap structurel, sa politique actuelle consiste à favoriser la création d'unités commerciales modernes. Les efforts pour développer les grandes exploitations agricoles devraient être complétés par des mesures visant à aider les petites exploitations à intégrer les filières d'approvisionnement locales. Il faut aussi renforcer la capacité des ménages ruraux à trouver des sources de revenu en dehors du secteur agricole.

- *Améliorer la fourniture de services publics aux petits producteurs* (comme évoqué précédemment). Les services de vulgarisation et de conseil agricoles revêtent dans ce cas une importance particulière.
- *Faciliter l'accroissement de la taille économique des exploitations.* La petite agriculture kazakhe va généralement de pair avec une hausse des coûts unitaires de collecte et de transport,

des risques élevés en termes de sécurité des aliments, et une qualité inégale, autant de facteurs qui n'incitent guère les transformateurs à travailler avec les petits producteurs. Pour aider à accroître la taille des exploitations, l'accès des populations rurales aux terres peut être amélioré en levant les obstacles à la mobilité foncière et en supprimant les barrières réglementaires et administratives qui freinent l'acquisition des terres agricoles.

- *Renforcer les programmes de crédit pour les petits producteurs.* Des efforts importants ont été réalisés au Kazakhstan pour mettre en place un système de crédit destiné aux petits emprunteurs et la création d'établissements spéciaux de crédit. Néanmoins, le système se caractérise actuellement par une utilisation limitée de certains types de prêts et par un manque de solidité financière des établissements menant des opérations à l'échelon local (organismes de microcrédit et partenariats de crédit). Un diagnostic complet des lacunes du système de petit crédit permettrait d'en améliorer l'accès pour les petits producteurs. L'examen du système de partenariats de crédit et les mesures déjà prévues pour le rénover constituent une étape positive dans cette direction.
- *Promouvoir l'intégration verticale entre transformateurs et petits exploitants.* Un comportement plus volontariste des transformateurs envers les petits fournisseurs pourrait être utile à cet égard. Il pourrait consister simplement à louer du matériel de transport, à donner des avances en espèces aux agents chargés de la collecte dans les villages, à proposer aux ménages producteurs une aide technique et financière, et à louer à leur usage des équipements de réfrigération. Il pourrait aussi prendre des formes plus complexes et donner lieu par exemple à la mise en place de systèmes d'assurance qualité et de contrats à terme (portant sur le prix, la quantité, la qualité, les intrants, les avances en espèces, etc.). Ces efforts privés visant à améliorer l'intégration au sein de la filière de production ne sont pas du ressort du gouvernement. Ce dernier peut en revanche jouer un rôle en allégeant les obstacles réglementaires à ces formes d'intégration verticale et en renforçant le système de sécurité contractuelle. Le gouvernement peut aussi s'employer, avec les associations professionnelles, à améliorer l'information sur les pratiques des autres pays en matière d'intégration des petits exploitants dans l'industrie alimentaire.

### 3. Adopter une vision plus large de la sécurité alimentaire et tableur sur une panoplie plus diversifiée de mesures pour la mettre en œuvre

La sécurité alimentaire est généralement vue du côté de l'offre et est assimilée d'une manière générale à l'autosuffisance alimentaire, ce qui renforce l'approche consistant à lier le soutien à des produits particuliers et à l'assurer par le biais de subventions aux intrants et à la production, d'interventions sur les prix, et de restrictions à l'importation. Toutefois, l'analyse économique montre que de telles mesures sont inefficaces pour accroître le revenu des producteurs ou stimuler la compétitivité, et que le soutien des prix agricoles fait aussi grimper le coût des produits alimentaires.

Aujourd'hui, du côté de la demande, la sécurité alimentaire se pose au Kazakhstan en termes, non pas de manque d'accès physique aux produits alimentaires, mais d'instabilité des prix qui modifie brusquement leur accessibilité financière. Pour faire face à cette instabilité des prix alimentaires, le Kazakhstan a recouru aux restrictions à l'exportation et



a limité les prix par la voie administrative. Si elles entraînent un plafonnement immédiat des prix alimentaires, ces mesures découragent toutefois les producteurs nationaux et, à ce titre, ne sont pas en cohérence avec l'objectif de croissance agricole. Il importe aussi de comprendre les sources de cette instabilité des prix, par exemple si la faiblesse des institutions de marché empêche les marchés intérieurs de faire face à la flambée des prix, il faudrait plutôt s'employer à améliorer ces institutions. Une action à plus long terme face à l'instabilité des prix alimentaires consisterait à augmenter le revenu réel et à combattre la pauvreté, notamment en renforçant les programmes d'aide alimentaire en place et les systèmes de protection des groupes sociaux vulnérables.

En résumé, la sécurité alimentaire sera mieux prise en charge dans le cadre d'une stratégie diversifiée : accroître la production dans le cadre d'une croissance durable de la productivité ; développer les zones rurales et réduire plus généralement la pauvreté, notamment par l'investissement public et privé ; intensifier les exportations dans les secteurs où existent des perspectives de revenus pour des producteurs compétitifs ; et autoriser les importations pour permettre aux consommateurs d'accéder aux produits alimentaires à des prix internationaux.

---

#### *4. Améliorer les incitations pour une gestion durable des ressources et incorporer les préoccupations environnementales dans les politiques agricoles*

---

La grande majorité des terres agricoles du Kazakhstan reste encore sous forme de locations étatiques à long terme. Les faibles taux de loyer fixes génèrent peu d'incitations au rachat ou à la cession des terres en location à de potentiels acheteurs alors qu'une partie des terres en location demeure non cultivée et en proie à la dégradation. Les transferts de terres sont en outre entravés par des procédures administratives compliquées. Certains acheteurs potentiels ne font pas confiance à la garantie du droit de propriété des terres. Tous ces facteurs affaiblissent l'initiative privée à maintenir la terre dans de bonnes conditions et à investir dans son amélioration. Il est primordial d'établir des droits de propriété garantis afin d'inciter les acteurs privés à une utilisation durable des terres. Pour cela, il serait nécessaire d'améliorer le système actuel de valorisation des terres ainsi que simplifier les procédures d'acquisition de terre. Par delà l'établissement de droits de propriété garantis, l'action des politiques reste nécessaire pour prendre en compte les externalités environnementales de l'activité agricole. Il faudrait mettre un frein aux pratiques agricoles dommageables pour l'environnement par le biais du développement et de la mise en application de réglementations environnementales, de normes agricoles ainsi que l'application du principe du pollueur-payeur. Les programmes de développement de l'agriculture doivent prendre en considération l'impact environnemental des objectifs de croissance et des mesures de soutien sous-jacentes car certaines ont un effet non négligeable sur l'environnement (i.e. les subventions actuelles au titre des pesticides et des engrais, les subventions par tonne au titre du bétail ou de la volaille ; les projets d'investissement pour la construction de parcs d'engraissement et de complexes pour la production laitière ; les subventions à l'irrigation).

## 5. *Élaborer des mesures et des outils de gestion des risques dans le secteur agricole*

Les producteurs du Kazakhstan sont confrontés à des risques importants liés au climat, à la santé animale, aux ravageurs et aux maladies. Ils sont soumis aussi à des prix élevés et à des risques financiers qui, ces dernières années, sont aggravés par l'instabilité des marchés mondiaux des capitaux et des produits. Les risques ont une incidence sur la capacité du secteur à générer des revenus, et à attirer le crédit et l'investissement. La gestion des risques en agriculture n'est pas encore une priorité d'action affichée du gouvernement kazakh. L'effort pour mettre en place un système de gestion des risques doit aller beaucoup plus loin que les mesures actuelles de stabilisation des prix des céréales ou de subvention à l'assurance récolte. Les producteurs du Kazakhstan ont besoin d'une pluralité d'outils qui leur permettent de gérer les différents types de risques. Il appartient au gouvernement de faire en sorte qu'ils disposent des informations pertinentes et des outils de gestion des risques adaptés (OCDE, 2011c).

Pour la gestion des risques normaux, les producteurs kazakhs ont besoin d'avoir accès aux informations appropriées concernant les conditions météorologiques, les intrants, la production et les marchés financiers. Il faut pour cela élargir le champ couvert par les services d'information pour aller au-delà de l'information de base sur les prix et les marchés, qui est actuellement fournie, et mettre en place des systèmes qui assurent, au niveau de l'exploitation, un accès facile à cette information. De plus, la gestion des risques normaux par les producteurs pourrait être appuyée par des dispositions de fiscalité générale et de protection sociale, telles que des incitations fiscales à épargner pendant les bonnes années et à dépenser quand la conjoncture est défavorable. S'agissant des risques liés aux phénomènes naturels ou aux poussées épizootiques, les producteurs n'ont pas les moyens de les gérer, et ils relèvent donc de mesures publiques spécifiques. Une des mesures prises en matière de risques de catastrophe a consisté à introduire un dispositif d'assurance bénéficiant d'un soutien public. Toutefois, l'actuel dispositif kazakh d'assurance récolte nécessite d'être évalué pour en améliorer les performances. De plus, il ne couvre qu'un ensemble spécifique de risques, dans un secteur spécifique, et il pourrait être nécessaire de le compléter par un cadre d'aide d'urgence permettant de prendre en charge plus largement les catastrophes naturelles. La gestion des poussées épizootiques peut être facilitée par la création de fonds spéciaux public-privé destinés à indemniser les pertes directes liées aux mesures d'urgence, ce qui inciterait aussi les producteurs à déclarer l'épizootie. Les risques de catastrophe au Kazakhstan exigent aussi que le gouvernement s'emploie à mettre en place des systèmes sûrs de biosécurité, ainsi que de prévention et de lutte contre les catastrophes naturelles. Pour les risques qui se situent entre risques normaux et risques de catastrophe, des mécanismes de partage du risque peuvent être mis en place, tels que les assurances commerciales, les contrats à terme, ou les mécanismes coopératifs de régulation de l'offre et de fixation des prix. Il incombe au gouvernement d'encourager les dispositifs privés de gestion des risques en instaurant des réglementations et une surveillance appropriées.

## 6. Préciser le rôle des organismes d'État dans le secteur agricole

Une société holding d'État, KazAgro, réunit les principaux organismes d'État essentiellement chargés de mettre en œuvre la politique agricole. Certains de ces organismes sont autorisés à effectuer des opérations commerciales et, comme elles bénéficient de financements publics, elles détiennent un pouvoir de marché considérable.

- *Envisager des actions permettant d'intensifier la concurrence sur le marché des céréales.* Veiller à dissocier clairement les activités de la Centrale d'achats alimentaires (FCC) en tant qu'agent gérant les ressources céréalières de l'État et ses activités en tant que négociant de céréales. En particulier, étudier la conformité des opérations commerciales de la FCC avec les principes de la concurrence loyale concernant l'accès des céréaliers aux capacités de stockage, de transport et aux installations portuaires.
- *Instaurer un cadre plus explicite pour l'activité de l'État sur le marché des céréales,* notamment des limites explicites concernant les livraisons obligatoires des producteurs de céréales, et des critères transparents pour fixer le volume, ainsi que les prix d'achat et de vente des ressources céréalières de l'État ; *élaborer une stratégie pour les interventions sur le marché des céréales* et préciser clairement les conditions de leur déclenchement. L'absence d'un tel cadre d'intervention de l'État accroît les risques de marché pour les céréaliers.
- *Réduire la forte dépendance du secteur agricole vis-à-vis des crédits de l'État et recourir en la matière aux instruments de marché.* Environ 60 % du portefeuille total de crédits agricoles est concentré dans les organismes de prêt de KazAgro. Le système actuel a fait son apparition au début de la période de transition face aux obstacles majeurs auxquels se heurtaient les prêts à des conditions commerciales dans le secteur agricole. La démarche du Kazakhstan a consisté à mettre en place un système entièrement administré, basé sur l'attribution de financements publics à des taux d'intérêts fixes fixés par voie administrative, les organismes d'État constituant les uniques fournisseurs de ce type de crédit. Bien que censé pallier la défaillance du marché du crédit, un tel système fausse l'attribution de crédits et évince les prêteurs privés. Ces derniers ne sont guère incités à développer des produits de crédit appropriés, et les exploitants agricoles n'ont guère de raisons de se tourner vers eux pour emprunter. Le système a besoin d'être réformé en ouvrant l'accès des prêteurs privés aux ressources de crédit de l'État et en introduisant des instruments davantage fondés sur le marché pour réduire le coût du crédit aux producteurs (c'est-à-dire en remplaçant les taux d'intérêt fixes par des bonifications d'intérêts et des garanties de crédits). Il est fait état d'une orientation dans ce sens dans le nouveau programme 2013-20 pour l'agriculture. Toutefois, ces efforts ne sont susceptibles de porter leurs fruits que si l'endettement actuel du secteur agricole est géré avec soin. À plus long terme, une libéralisation plus poussée du système de crédit d'État devrait être poursuivie et s'accompagner d'une suppression progressive des bonifications d'intérêts et d'une réduction de l'octroi de ressources de crédit publiques. Pour ce faire, il faudrait s'attaquer au problème essentiel que constituent les causes du mauvais fonctionnement des marchés du crédit agricole : les risques élevés auxquels est confronté le secteur agricole, le manque de garanties, les asymétries d'information, et les coûts de transaction accrus pour les prêts accordés au secteur agricole (OCDE, 2012c).
- *Rationaliser les fonctions des organismes d'État.* Ces dernières années, on a assisté à une multiplication des fonctions assumées par les instances de KazAgro. En témoigne

l'implication de l'organisme d'achat de céréales dans l'attribution de crédits à des projets d'investissement (dont certains ne concernent pas le secteur céréalier). Le financement de projets d'investissement a été intégré au portefeuille de la Société de crédit agricole (AKK), dont la mission essentielle est d'apporter son appui aux établissements de crédit locaux. KazAgroFinance, société de crédit-bail d'État, est de loin le plus grand établissement de crédit pour des projets d'équipement à financements publics, mais c'est devenu une nouvelle activité pour KazAgroProduct dont la principale mission est de servir d'organisme d'achat de produits animaux. L'engagement des organismes de KazAgro dans des activités qui ne constituent pas leur mission de base mérite d'être reconsidéré.

### 7. Améliorer la gouvernance de la politique agricole

- *Renforcer les phases de suivi et d'évaluation du cycle des politiques publiques.* Le cycle des politiques publiques commence normalement par la formulation des objectifs d'action, se poursuit par l'évaluation de la politique en vigueur, la définition des caractéristiques d'un nouvel ensemble de mesures et la mise en œuvre de ces nouvelles mesures, et se conclut par leur suivi et leur évaluation. Au Kazakhstan, ce cycle pourrait être amélioré en renforçant le suivi et l'évaluation des mesures actuelles et nouvelles, ce qui suppose de créer les systèmes d'information appropriés et de recourir à des outils d'analyse, tels qu'enquêtes et modèles économiques.
- *Accroître l'implication des acteurs concernés dans l'examen et le suivi des politiques.* Un processus concerté d'élaboration des politiques a toutes les chances de se traduire par des mesures qui reflètent l'équilibre des intérêts des différents groupes. Alors qu'au Kazakhstan, il est nécessaire de faire participer les organisations non gouvernementales au processus d'examen des politiques, cette participation a été limitée aux étapes finales de l'élaboration des textes de politique publique. L'absence d'implication des acteurs concernés dans le processus d'élaboration des politiques est due aussi à leur attitude insuffisamment volontariste, résultant du fait qu'ils ne sont pas encore conscients des avantages de l'action collective et sont peu enclins à contribuer aux coûts y afférents. Un conseil des entreprises a été créé récemment pour servir de plateforme de coordination entre autorités publiques et acteurs privés. Il importerait de veiller à ce que tous les acteurs concernés soient représentés et impliqués à tous les stades du cycle des politiques, notamment pour l'identification des sujets de préoccupation publique, la définition des objectifs d'action, et la formulation de nouvelles propositions. Les organisations non gouvernementales doivent aussi concourir au suivi et à l'évaluation des mesures publiques.
- *Veiller à ce que les ajustements des politiques ne soient pas source d'instabilité de l'action publique.* Les programmes de développement du complexe agro-industriel représentent le principal cadre de la politique agricole kazakhe à moyen terme. La succession des programmes agricoles depuis le début des années 2000 montre que ce processus a été en grande partie déterminé par les changements d'équipes ministérielles. Face aux évolutions qui interviennent tant à l'intérieur qu'à l'extérieur du secteur agricole, des ajustements des politiques sont nécessaires mais ils ne doivent pas créer une trop grande instabilité de l'action publique. Le gouvernement doit assurer la transparence de ses intentions et les communiquer aux acteurs concernés en temps utile. D'où

l'importance, une fois de plus, d'une étroite interaction entre les responsables de l'élaboration des politiques et les acteurs concernés, à tous les stades du processus de l'action publique.

### **Bibliographie**

- BM IDM (2012), *Base de données des indicateurs du développement dans le monde*, <http://data.worldbank.org/data-catalog/world-development-indicators>.
- FAOSTAT (2012), *Base de données FAOSTAT*, <http://faostat.fao.org/>.
- Fuglie, K.O. (2012), « Productivity growth and technology capital in the global agricultural economy », Fuglie, Keith O., Sun Ling Wang et V. Eldon Ball (éd.), *Productivity Growth in Agriculture: An International Perspective*, CAB International, Oxfordshire, Royaume-Uni.
- OCDE (2012a), *Agricultural Policies for Poverty Reduction*, Éditions OCDE.
- OCDE (2012b), *Politiques agricoles: suivi et évaluation 2012 – Pays de l'OCDE*, Éditions OCDE.
- OCDE (2012c), *Enhancing Access to Finance to Strengthen Agri-Business Competitiveness in Kazakhstan, Private Sector Development Policy Handbook*, Programme de l'OCDE sur la compétitivité de l'Eurasie, OCDE.
- OCDE (2012d), *Evaluation of Agri-Environmental Policies: Selected Methodological Issues and Case Studies: OECD Countries*, Éditions OCDE.
- OCDE (2011a), *Politiques agricoles: suivi et évaluation 2011 : Pays de l'OCDE et économies émergentes*, Éditions OCDE.
- OCDE (2011b), *Renforcer la productivité et la compétitivité dans le secteur agricole*, Éditions OCDE.
- OCDE (2011c), *Gestion des risques en agriculture : évaluation et conception des politiques*, Éditions OCDE.
- OCDE (2008), *Élaboration et mise en oeuvre des politiques agricoles : une synthèse*, Éditions OCDE.
- OCDE (2003a), *Politiques agricoles des pays de l'OCDE : un programme de réforme constructif*, Éditions OCDE.
- OCDE (2003b), *Le revenu des ménages agricoles : problèmes et réponses*, Éditions OCDE.
- Office statistique de la République du Kazakhstan (2012), « Kazakhstan in Figures », Base de données en ligne, [www.stat.kz](http://www.stat.kz).
- ONU (2011), *Base de données Comtrade de l'ONU*, <http://comtrade.un.org>.



## Chapter 1

# The policy context

*This chapter outlines the overall context within which the agricultural sector in Kazakhstan functions. The geographic, demographic, political and economic characteristics of the country are presented, as are the key trends in agriculture since 1990. Kazakhstan's economy was plagued by hyperinflation and deep recession until the mid-1990s, but with the onset of the oil boom the country's economic situation rapidly improved. Agriculture began its gradual recovery in the early 2000s, but annual growth has been highly volatile, largely following the strong fluctuations in grain output. Today, the country ranks among the world's top ten wheat exporters, but overall it is a net agro-food importer, in particular of livestock products. The land reform and privatisation of state farms reversed the roles of large-scale and small-scale production and led to the emergence of distinct regional agricultural systems in the north and south. Low agricultural land mobility, environmental pressures, difficult access to external markets, and the dominance of subsistence-oriented producers in key product sectors are currently among the key constraints to agricultural development.*

## 1. General aspects

### **Geography, demographic and political characteristics**

Kazakhstan became an independent country in December 1991 following the dissolution of the USSR. Its political system is characterised by a strong presidency, an elected Parliament, and appointed regional governors (*akims*). President Nazarbayev has won all presidential elections, has the support of Parliament, and faces limited extra-parliamentary opposition. The country is divided into fourteen administrative regions (*oblasts*) and the cities of Almaty and Astana, the former and present capitals.

With a land area of 2 724 902 square kilometres, Kazakhstan is the ninth largest country in the world, but one of the least densely populated (six people per square kilometre). Its population of 16.7 million (as of beginning 2012) is unevenly spread throughout the country, with the centre and west occupied by large areas of arid steppe or desert.

Kazakhstan's longest border, which runs from north to northwest with the Russian Federation, has no significant physical barriers and the country's inherited transport network is directed towards Russia. Similarly, the borders with Uzbekistan and the Kyrgyz Republic in the south are not defined by physical barriers, and the cities of Almaty and Shymkent have strong historical links and are easily connected to, respectively, Bishkek, the capital of the Kyrgyz Republic, and Tashkent, the capital of Uzbekistan. To the west lies the Caspian Sea, where Aktau and Atyrau are important ports for oil and grain exports. To the southwest, between the Caspian and Aral seas, the national borders with Turkmenistan and Uzbekistan lie within an inhospitable desert. Kazakhstan's eastern border is with China where the Tienshan and other mountain ranges are major physical barriers. However, further north there is an international rail crossing which provides the fastest potential link from China to western Russia and Europe and which has become a major border crossing point for road transport, and for oil and gas pipelines.

Kazakhstan is geographically diverse. Deserts and steppes account for over four-fifths of the land area. The central area consists of a sandy plateau, which historically supported migratory livestock and in the Soviet era, mining activity. The major settled areas were in the rain-fed regions of the east and southeast in the foothills of the mountains, and along the Syrdarya River; the former being settled by Slavs and other groups from within the Russian empire and the latter being geographically similar to Central Asia. In the South Kazakhstan oblast, there is a large Uzbek population. The northern regions are geographically similar to Siberia, with relatively good soils and a variable climate. The Virgin Land programme of the 1950s and 1960s brought close to 25 million hectares into cultivation in the oblasts of Kostanay, North Kazakhstan, and Akmola.

The regions differ markedly in their economic characteristics. Oil and gas production is concentrated in the western oblasts (Atyrau, Mangistau, Aktobe and West Kazakhstan), crops in the north (wheat in North Kazakhstan, Akmola and Kostanay), east (oilseeds in Pavlodar) and south (cotton in South Kazakhstan), while the centre is host to mining and



extensive livestock farming. The southeast Almaty oblast and East Kazakhstan have mixed farming.

Kazakhstan experienced high emigration during the 1990s, and its population fell from over 16 million at the time of independence to less than 15 million a decade later. According to the last Soviet census in 1989, the population was roughly two-fifths Kazakhs, two-fifths Russians with other ethnic groups composing the remaining one-fifth. The Russians, who had been the largest group up to the 1980s, were concentrated in the then capital city, Almaty, and in northern and eastern regions bordering the Russian Federation. Among the “other” groups were large contingents of ethnic Germans and Koreans who had been shipped to Kazakhstan during World War II. About a million Russians and 700 000 Germans left Kazakhstan during the 1990s; the exodus slowed substantially with the Russian crisis in 1998, but even in 2000 annual net emigration was still over 100 000, and only began to drop substantially with the post-2000 boom. In contrast, there was little emigration by Uzbeks from South Kazakhstan, and by 2000 they had become the fourth largest ethnic group.

### **Macroeconomic trends and economic policy**

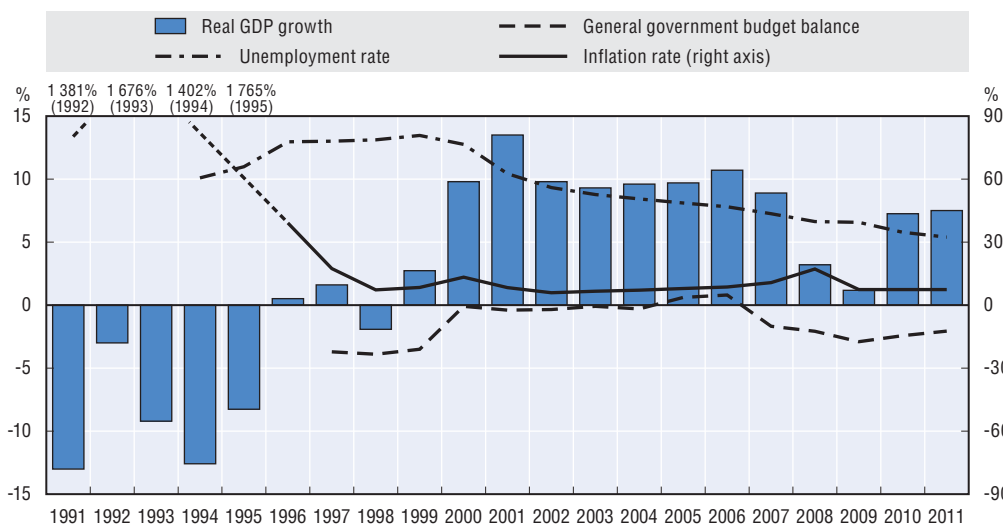
Kazakhstan was a producer of raw materials in the Soviet economy, especially of minerals, grain, wool and cotton. There was little manufacturing other than metal-processing, and this was severely disrupted by the collapse of supply chains after 1991. With the exception of Almaty, which had a population of around one million, other towns were either regional centres or single-activity “company towns”. Kazakhstan was not a significant producer of oil and gas, although in 1990 the Gorbachev government signed the largest foreign investment deal in Soviet history to develop the Tengiz oilfield in Kazakhstan’s portion of the Caspian Sea, but its exploitation suffered delays and oil exports were hampered by limited pipeline options. Kazakhstan’s economic development has had two distinct phases since independence.

#### **1992-99: Deep transitional recession and initial structural reforms**

The years 1992-99 were ones of severe hardship as the economy was hit by three shocks – the end of central planning, the dissolution of the Soviet Union, and hyperinflation. The mechanisms of central planning had been dismantled in the final years of the Soviet Union, but there was little economic reform in Kazakhstan until January 1992 when all countries using the ruble were obliged to follow Russia’s price liberalisation. Kazakhstan’s economy had been closely integrated into the Soviet Union economy, and dissolution of the Union saw the breakdown of supply chains that created shortages of inputs and loss of markets for many enterprises. Especially hard hit were the 20-30 single enterprise “company towns”, usually centred on mining or smelting. The country continued to use the ruble as its currency, but in 1993, the ruble zone collapsed amidst hyperinflation. Kazakhstan was one of the last ruble-zone members to issue its own national currency, the *tenge* (KZT), in November 1993. During the first year, the KZT-USD exchange rate depreciated from the initial 5 to 56, and it was not until 1996 that inflation was brought below 50% (Figure 1.1).<sup>1</sup>

This massive economic disruption continued until the mid-1990s. The economy contracted every year from 1991 to 1995, and during these same years real GDP dropped by two-fifths. A large number of emigrants included many skilled workers and administrators. Kazakhstan had been expected to benefit from its energy resources, but

Figure 1.1. Key macroeconomic indicators, 1991-2011



Source: International Monetary Fund; Ministry of Finance of the Republic of Kazakhstan; Statistics Agency of the Republic of Kazakhstan.

To download the data corresponding to this graph, refer to Figure 0.1. Main macroeconomic indicators, 1991-2011.

the price of oil stagnated at less than USD 20 a barrel. The economy slowly began to turn around in 1996-97. During this period the policy focus was on nation-building, the transition from central planning, and securing foreign participation in developing the country's rich energy reserves. The agricultural sector played an important role as many families remained in or moved back to the rural sector to cope with increasing inequality and poverty. In 1997, the Presidential Address "*Prosperity, Safety and Welfare Improvement of all Kazakhs*" defined strategic priorities of development up to 2030, but the programme was temporarily derailed when the Kazakh economy was hit by the 1998 Russian crisis. GDP in 1999 fell by over a third from its 1989 level, reflecting the failure to strengthen the economy and diversify the country's external economic relations from its historic partner. As the economy recovered after 1999, diversification of trading partners became an important policy goal.

There were, however, important steps in the 1990s towards ownership reforms associated with the transition to a market-based economy. Small-scale privatisation of enterprises was essentially completed and large-scale privatisation was substantial, although Kazakhstan made less progress in enterprise restructuring. In agriculture, land reform began in 1991, but progressed unevenly. Despite several stops and starts, the Tengiz oilfield was coming on-stream and offshore exploration in the Caspian Sea had revealed the massive Kashagan field.

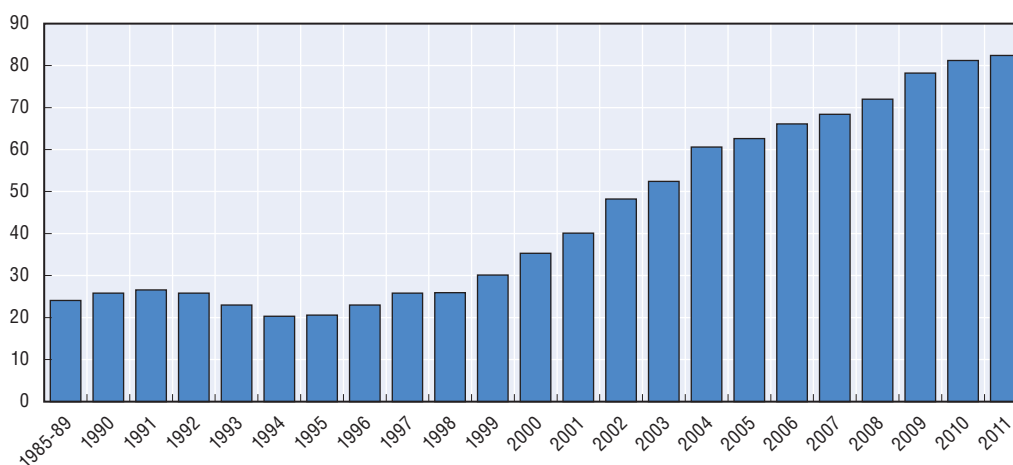
Trade policy was liberalised and the currency made convertible for current account transactions. Macroeconomic management improved. The currency's value gradually stabilised and the average exchange rate during 1995 was KZT 61 per US dollar. The currency continued to depreciate gradually, until it dropped sharply following the Russian crisis of 1998 to KZT 81 per US dollar. In April 1999, Kazakhstan authorities introduced a floating exchange rate, and by end of September 1999 the tenge had depreciated by more than one-third and continued to depreciate through the first half of the 2000s.

### Post-1999: Robust growth led by the energy sector

The turn of the century saw a dramatic improvement in the country's economic fortunes. By the early 2000s transit routes improved with the first private pipeline to the Black Sea in 2001, followed by the Baku-Tbilisi-Ceyhan pipeline to the Mediterranean which broke Kazakhstan's dependence on Transneft's Russian pipeline. Oil began flowing in large quantities just as world prices soared (Figure 1.2). The large exchange rate depreciation in 1999 which coincided with the start of the oil exports boom kick-started economic growth. Revenues from the energy boom translated into an increased state budget. The National Fund of the Republic of Kazakhstan was created as a vehicle to save a portion of the revenues from the resource boom for future generations.

Figure 1.2. **Kazakhstan's production of crude oil, 1985-2011**

Million barrels



Source: BP, 2011.

StatLink  <http://dx.doi.org/10.1787/888932780380>

As the economy recovered and energy revenues surged, the government became more actively involved in achieving the 2030 goals, as well as interim targets.<sup>2</sup> The government has used energy revenues to save for the future, invest in human capital, and diversify the structure of production. In the early 2000s, the government adopted a billion-dollar *Agriculture and Food Program for 2003-05* and the *Innovative Industrial Development Strategy for 2003-15*, signalling a more active use of public policy to promote economic development. In 2006, President Nazarbayev articulated his aim of transforming Kazakhstan into one of the “50 most competitive, dynamically developing countries in the world” within a decade. Three new institutions, the Samruk state-holding company, the Kazyna sustainable development fund, and the Regional Financial Centre, Almaty (RFCA) were established in 2006 to promote this goal (the first two were later merged into a single state holding, the National Welfare Fund Samruk-Kazyna). In sum, a more proactive development strategy since the turn of the century has been accompanied by a steady increase in state involvement in the productive economy.

The boom drove increases in average living standards and in economic inequality. The government moved actively to improve social programmes, promote investment in human capital, and diversify the economy. In the private sector, a real estate bubble burst in 2007 leaving the country with a banking crisis. The government responded by using the National

Fund to bail-out the distressed banks and to finance a stimulus package. The anti-crisis plan launched in late 2008 pledged USD 10 billion, or 9.5% of GDP, largely funded from the National Fund and channelled through Samruk-Kazyna.<sup>3</sup> This was successful in limiting the decline in economic growth without stimulating inflation or accumulating public debt. This achievement was remarkable given that oil prices fell dramatically in 2008-09 from a peak of USD 145 per barrel in July 2008 to under USD 40 by the end of the year, before recovering to USD 80 at the end of 2009 and USD 100 in January 2011.

The move to a more active economic policy since the 1990s has nevertheless introduced policy uncertainty. While the government has showed flexibility in redirecting economic strategies when weaknesses have emerged, the decision-making process has been highly centralised, policy reviews were not consistently evidence-based, and frequent policy shifts have impeded implementation.

One instrument of increased state control over the economy has been the consolidation of state-owned companies. The national energy company, Kazmunaigas, was created in 2002 with the goal of representing the country's interests in production-sharing agreements with foreign partners. As mentioned above, Samruk-Kazyna, a holding company of which the state is the sole shareholder, was created in October 2008 with the goal to enhance the competitiveness and sustainability of the national economy and to prevent negative impact of changes in the world markets on the country's economic growth. Samruk-Kazyna unifies 29 subsidiaries, including Kazmunaigas, the uranium company Kazatomprom, Air Astana, the national rail and postal service, and numerous financial groups. The assets of all Samruk-Kazyna subsidiaries were estimated to amount to 57% of Kazakhstan's GDP in 2010. In the agricultural sector, the counterpart of this trend towards amalgamating public agencies into a large state-controlled enterprise was the creation of KazAgro Holding in December 2006 which consolidated seven government agencies providing support and services to agriculture. Another state holding KazAgroInnovation united the agricultural research structures.

The European Bank for Reconstruction and Development gives Kazakhstan high marks for progress in small-scale privatisation, price liberalisation and trade and forex systems, slightly lower scores for large-scale privatisation and competition policy, and low marks on its financial sector, infrastructure (with water supply and roads the poorest part), and, especially, enterprise restructuring.<sup>4</sup> Progress on Kazakhstan's World Trade Organisation (WTO) application has been uneven, and has lost momentum since the Working Party's report in 2005 and the establishment of a customs union with Russia and Belarus. However, Russia's official WTO accession in 2012 is likely to be the catalyst for Kazakhstan to take the final steps necessary for membership.

After an uncertain start in the 1990s, macroeconomic management has been good since the turn of the century. The dynamic growth of the oil and gas sector inevitably reduces the shares of other sectors in GDP, and potentially their absolute size. The government has been proactive in combating these trends, investing the National Fund revenues overseas to limit exchange rate appreciation and consequent Dutch Disease effects and promoting economic diversification by a variety of well-funded policies. One expectation is that non-traded goods sectors will expand, and this was apparent in the construction boom and real estate bubble, which burst in 2007. Dutch Disease effects on producers of non-oil exports or import-competing activities have been less apparent, in large part because of policies to limit nominal exchange rate appreciation while keeping

inflation under control. The tenge strengthened until 2009 when following the global crisis it depreciated from KZT 120 per to KZT 147 per US dollar, but since then stabilised at that level.

It is important to highlight the evolving nature of economic policy. While the government appears committed to structural reforms, such as privatisation, these reforms have progressed slowly and unevenly, often with the situation on the ground lagging behind legislation. There has been a countervailing tendency to increase the state's role in the economy, especially since the mid-2000, in the name of promoting more rapid development and diversifying the economy. The government has pursued a series of policies to promote specific economic activities in both industry and agriculture, but has also made investments in human capital, such as the generous Bolashak fellowships for many Kazakhstan students to study abroad. A feature of the policies aimed to promote diversification is that they have been frequently fine-tuned or even discarded. This shows a degree of flexibility, but frequent policy changes have costs.

In sum, Kazakhstan has responded to the challenges of transition from central planning and creating a national economy. Although the economic and social situation deteriorated severely in the 1990s, the government implemented economic reforms that allowed the country to benefit from the energy boom without suffering from the resource curse that has struck many low-income oil exporters. Since 1998, Kazakhstan has benefitted from abundant revenues from energy exports, and policy makers have been managing the boom through macroeconomic policies. The challenge will be to match the success in changing the economic system and in managing the oil boom with policies that promote diversified economy and equitable long-term development. At present, these policies are in a state of flux with conflicting signs of whether entrepreneurship will flourish or be stifled by a too heavy government hand.

### **Social situation**

Following the macroeconomic pattern, the social situation changed dramatically between the two decades since independence. During the first half of the 1990s living standards fell drastically. Unemployment soared as enterprises shut down; many people sought to make ends meet in the unofficial economy, and there was substantial emigration and internal migration as people moved to the countryside as a coping mechanism. People in the unofficial economy and those who returned to their villages were in a twilight zone between being employed and unemployed. The complexity of the labour situation is not adequately captured in employment data. With the onset of the oil boom at the end of the 1990s, social indicators improved, although the benefits were inevitably not equally spread. The very large income gains in the two main cities, Almaty and Astana, and in the oil cities of Atyrau and Aktau, led to significant rural-urban migration, especially from the northern and eastern regions.<sup>5</sup> Out-migration from the relatively densely populated southern oblasts was more limited – indeed they received substantial temporary immigration from Uzbekistan, especially during the cotton-harvesting season – and living standards remained lower in the south.

Inequality and poverty increased sharply with the end of central planning. In the most comprehensive review of the data on inequality and poverty in eighteen economies in transition, Kazakhstan stands out for its increase in poverty. Having been in the middle in 1987-89 with 5% of the population living on less than USD 120 per month, in 1993-95 Kazakhstan had one of the highest poverty rates, with 65% of the population living below

the same benchmark income (Milanovic, 1998).<sup>6</sup> Income inequality also increased; Milanovic (2008) calculated a Gini coefficient of 0.26 in 1987-89 and 0.33 in 1993-95. Controlling for education, household composition and other demographic variables, rural households' income was higher than that of urban households in 1996, although there were also large locational differences with higher living standards in the north compared to the south.<sup>7</sup>

The social situation improved considerably after 1999. Rapid growth in output resulted in increased average incomes and reduced poverty. In 2011, US-dollar per capita GDP in Kazakhstan was by far higher than that of most of its Central Asian neighbours and was comparable to that in China (Table 1.1). However, it was somewhat more than half that in Brazil, two-thirds that in South Africa, and about 16% below the Russian level. As measured by the Gini co-efficient, the income inequality in Kazakhstan is one of the lowest among the emerging economies and CIS countries presented in Table 1.1. Extreme poverty, by the World Bank standard of USD 1.25 per day at purchasing power parity, had virtually disappeared.

Table 1.1. **Income, poverty and inequality in Kazakhstan and selected economies**

	GDP per capita 2011, constant 2000 USD	GDP annual average growth rate 1999-2011, constant 2000 USD	Poverty headcount ratio (PPP) 2009 <sup>1</sup>		Gini <sup>2</sup>
			At USD 1.25 per day	At USD 2 per day	2009
<b>Kazakhstan</b>	<b>2 630</b>	<b>8.3</b>	<b>0.1</b>	<b>1.1</b>	<b>0.3</b>
Russia	3 052	5.2	0.0	0.1	0.4
Ukraine	1 094	4.5	0.1	0.2	0.3
Kyrgyzstan	395	4.4	6.2	21.7	0.4
Turkmenistan	2 238	13.7	..	..	..
Uzbekistan	993	6.8	..	..	0.4
Tajikistan	295	8.3	6.6	27.6	0.3
Brazil	4 803	3.6	6.1	10.8	0.5
China	2 640	10.2	13.1	29.8	0.4
Indonesia	1 207	5.3	18.1	46.1	0.3
South Africa	3 825	3.5	13.8	31.3	0.6
OECD average	24 785	1.7	Less than 1	Less than 1	..

..: Not available.

1. 2008 for China and 2010 for Indonesia.

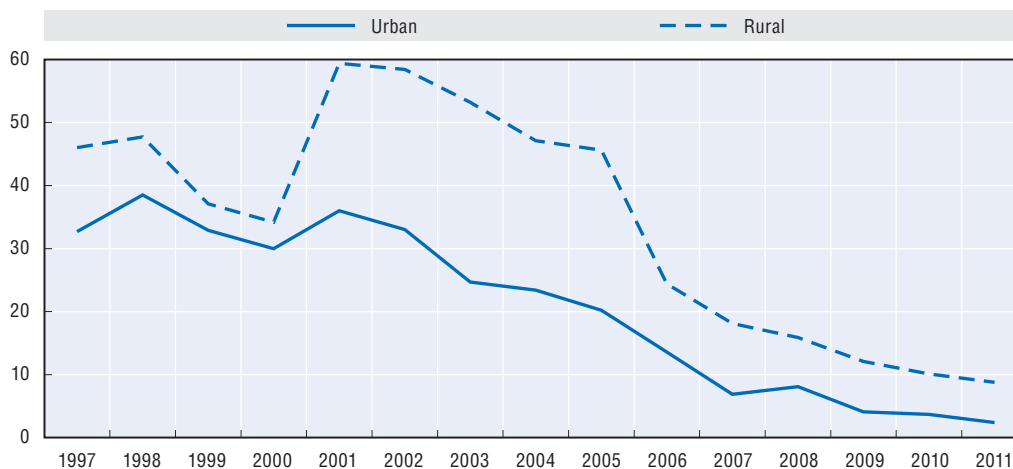
2. 2003 for Uzbekistan; 2005 for China and Indonesia.

Source: World Bank WDI Database.

StatLink  <http://dx.doi.org/10.1787/888932782033>

Figure 1.3 reports poverty rates from 1997 to 2011 using the national poverty line. The share of the population living below the subsistence income level fell from its 2001 peak (59% in rural areas and 36% in urban areas) to 8.8% in rural areas and 2.4% in urban areas in 2011. The pattern of a sharp increase in poverty in the 1990s followed by a rapid decline after 2001 is clear, even though the two poverty lines differ. A wide rural-urban poverty gap opened up in 2001. Although both rural and urban poverty declined substantially between 2001 and 2011, rural poverty remains much higher than urban poverty.

Figure 1.3. **Share of population below subsistence income in Kazakhstan, 1997-2011**  
Per cent



Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932780399>

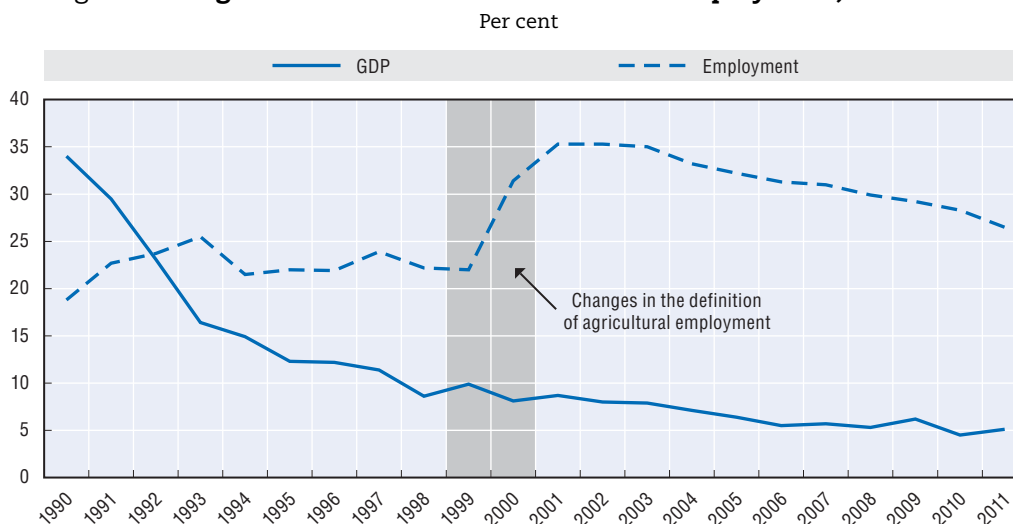
## 2. Agricultural situation

### **Agriculture's role in national economy**

Agriculture has been the historic backbone of Kazakhstan's economy. The Kazakhs were nomads, and production of wool and other livestock products remained important at the time of independence. After the 1860s, when Central Asia was incorporated into the Russian Empire, cotton became the key crop in the irrigated regions of the Syrdarya Valley in southern Kazakhstan. The rain-fed areas in the southeast supported mixed farming. Grain farming was established in the steppe land of northern Kazakhstan in the Virgin Lands programme of the 1950s and 1960s. However, and similar to the situation in neighbouring Siberia, variable climate led to volatile harvests and the soils in some of the new lands were unsuited to long-term cultivation – about 30%, according to the World Bank (1992). Other regionally important crops include sunflower seeds and oil crops in the northeast and rice in Kyzylorda.

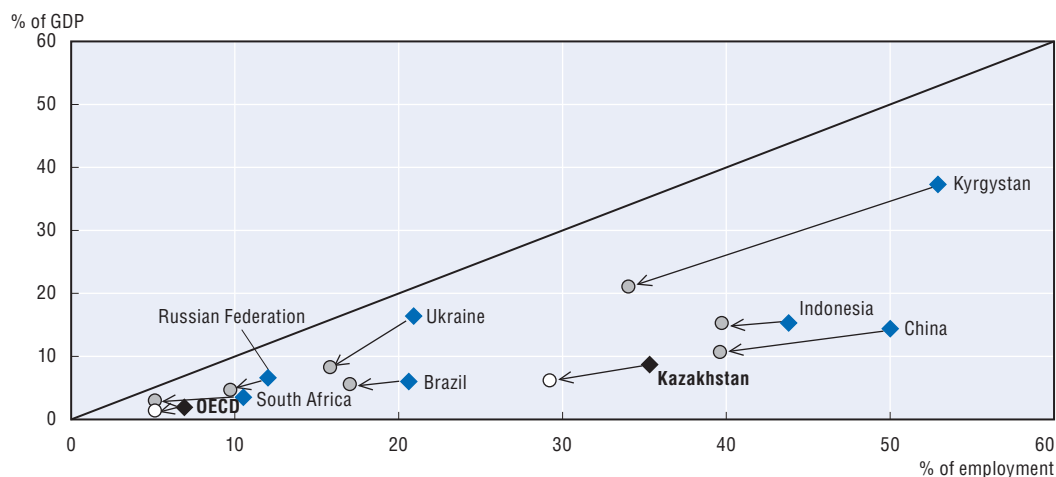
During the final decades of the Soviet era, agriculture in Kazakhstan benefited from favourable relative prices for grain and cotton and a campaign to increase meat consumption. Figure 1.4 illustrates the trends in agriculture's share of output and of employment. With the rapid growth of oil output, agriculture's share of GDP declined from 34% in 1990 to 5% in 2011. The long-term trend in employment is less clear due to a change in the definition of employment which has substantially increased the number of employed in agriculture since the 2000s.<sup>8</sup> Comparing within the periods when the series were consistent, the trends in shares of agriculture in employment and in GDP were diverging in the 1990s, while in the 2000s these shares moved in the same direction. Indeed, there were strong labour adjustments throughout the post-independence period when people moved in the 1990s to the countryside as a coping mechanism, but the onset of economic growth in the 2000s brought on rural-urban migration.

The declining share of agriculture both in GDP and employment observed in Kazakhstan in the 2000s was common to other emerging and OECD economies (Figure 1.5). However, agriculture in Kazakhstan continues to be the largest sector in terms of employment (26% of the total) and there is a considerable gap between labour productivity in this sector and the rest of the economy.

Figure 1.4. **Agriculture's share in GDP and total employment, 1990-2011**

Source: Statistics Agency of the Republic of Kazakhstan.

StatLink <http://dx.doi.org/10.1787/888932780418>

Figure 1.5. **Change in agriculture's share in GDP and total employment between 2001 and 2009**

Source: Statistics Agency of the Republic of Kazakhstan; World Bank WDI Database.

StatLink <http://dx.doi.org/10.1787/888932780437>

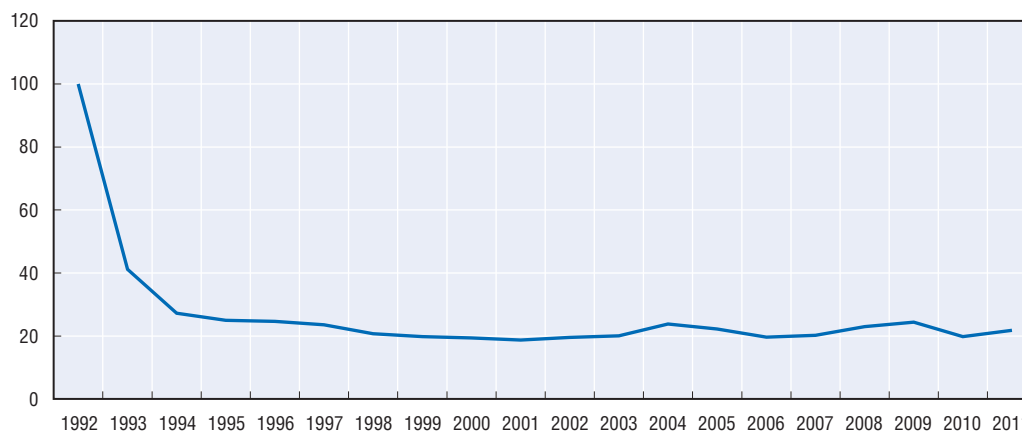
### Evolution of market conditions and trends in investment and input use

The end of central planning and the chaotic fiscal situation of the early 1990s meant that farmers lost the benefit of receiving key inputs at below world prices. During the 1992-94 hyperinflation, agricultural input prices increased by almost twice as much as output prices resulting in substantial fall in the agricultural terms of trade (Figure 1.6).<sup>9</sup> Due to the relative price changes in the first half of the 1990s agricultural enterprises accumulated a large debt burden and the debt crisis dominated the agricultural sector in the second half of the 1990s.




Figure 1.6. **Evolution of terms of trade in agriculture,<sup>1</sup> 1992-2011**

Index, 1992 = 100



1. Terms of trade index is estimated by dividing the index of agricultural prices received by the index of prices for inputs and services paid by agricultural producers.

Source: Statistics Agency of the Republic Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932780456>

During the 1990s, prices of major crops declined sharply, before flattening out in the 2000s, while livestock prices were increasing (Figure 1.7). Baydildina et al. (2000) and de Broeck and Kostial (1998) report official statistics suggesting that the only profitable crops in 1995 were potatoes and sunflowers; grains, vegetables and eggs made small losses, while sugar beet losses were 19% and the average loss for all animal products was 40%. After 1998, input and output prices have moved closer and agricultural terms of trade stabilised.

The more favourable market conditions are reflected in increased investments in agriculture after 2000 (Figure 1.8). Nevertheless, investment in agriculture remains small relative to total investment in the economy, which goes overwhelmingly to the energy sector (Annex Table 1.A.2). Within agriculture, over two-thirds of fixed capital investments in 2011 went to crop production and were concentrated in the northern wheat region (Figure 1.9 and Annex Table 1.A.3).

Over the 1990s the number of key machines used in agriculture decreased by almost one half, but the trend reversed in the 2000s when machinery park began increasing gradually, partly helped by the state machinery leasing programme (Figure 1.10, Figure 1.11 and Annex Table 1.A.4). However, the annual rate of renewal of tractors is now 1%, 2.2% for harvesters, and 0.1% for tillage tools, which is far below the normal replacement rate for agricultural machinery of 5-8%. It should be noted that, for example in the northern region old machinery is being replaced by far more productive ones, which allows less machinery to be used on same land. Smaller machines are being replaced by larger ones which are better suited to the vast areas of the northern wheat region, and the old machinery is being moved from the north to the south.

In the planned economy, fertilisers were used to increase output in order to meet plan targets regardless of any serious cost-benefit analysis. Fertiliser use declined dramatically in the 1990s, partly as a reaction to over-use of such inputs in the planned economy. In some cases, especially in the northern grain region, fertiliser use could mask the basic unsuitability for cultivation of some marginal land. When producers had to pay commercial prices for fertilisers, their use dropped dramatically (Figure 1.12). Many small


Figure 1.7. **Real prices for key agricultural commodities,<sup>1</sup> 1994-2011**

Tenge per tonne



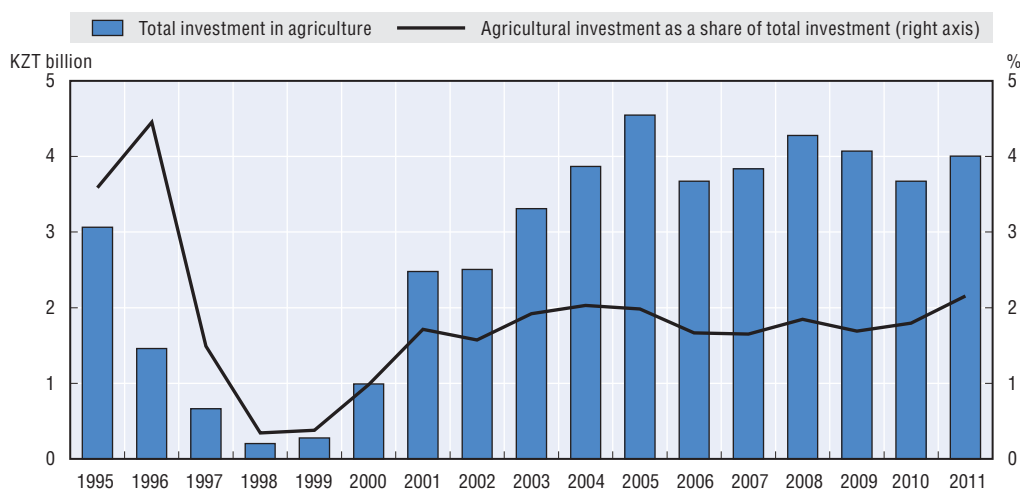
1. In constant 1994 prices based on CPI deflator.

Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932780475>

grain producers in the northern wheat region currently apply low-intensive cultivation without the use of fertilisers. The much reduced application of fertilisers also reflects the decrease in total plantings, especially to fodder, associated with the huge decline in animal stocks (Figure 1.30). Similarly, use of herbicides and toxic chemicals in agriculture has fallen dramatically and now covers a small share of farming, which may have environmental benefits compensating for reduced output.

Despite some recovery in fertiliser use during the 2000s, the area treated with fertilisers was far lower in 2010 than in 1990. The quantity of mineral fertilisers used on agricultural lands fell from 672 100 tonnes in 1990 to 87 400 tonnes in 2011 in nutrient equivalent. This evolution is illustrated in Figure 1.12 which shows the use of mineral fertilisers in agricultural enterprises (fertiliser use in individual farms and rural households is not included). In the leading grain regions of Akmola and Kostanay, mineral fertilisers in 2011 were used on 2.5% and 6% of arable land respectively; these two oblasts

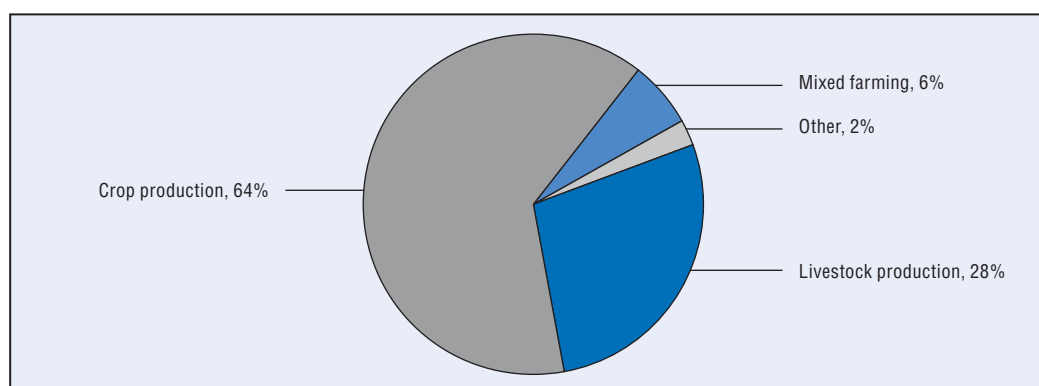
Figure 1.8. Investment in agriculture,<sup>1</sup> 1995-2011

1. In constant 1994 prices based on GDP deflator.

Source: Calculation based on Statistics Agency of the Republic of Kazakhstan data.

StatLink <http://dx.doi.org/10.1787/888932780494>

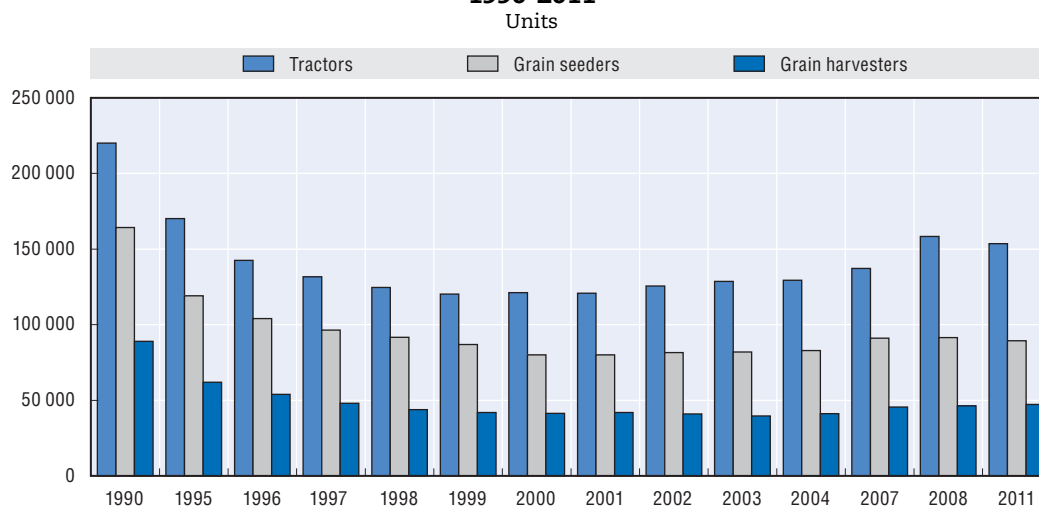
Figure 1.9. Composition of fixed capital investment in agriculture, 2011



Source: Statistics Agency of the Republic of Kazakhstan.

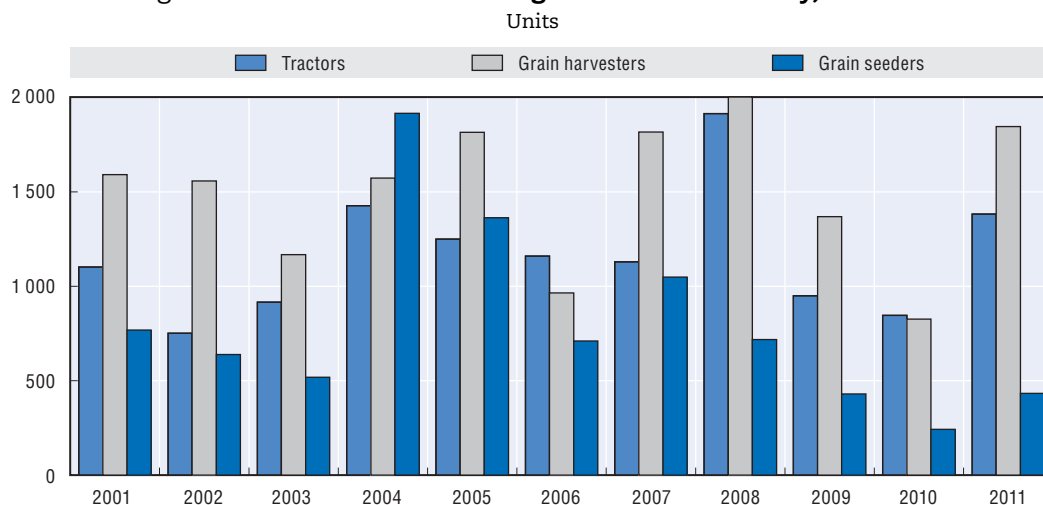
StatLink <http://dx.doi.org/10.1787/888932780513>

Figure 1.10. End-year stock of agricultural machinery in agricultural enterprises, 1990-2011

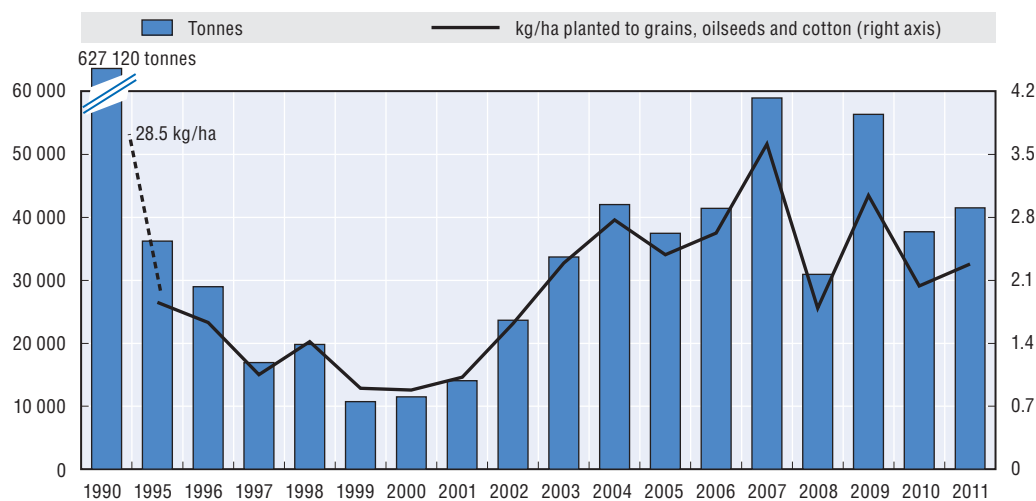


Source: Ministry of Agriculture of the Republic of Kazakhstan. StatLink <http://dx.doi.org/10.1787/888932780532>

Figure 1.11. Purchase of new agricultural machinery, 2001-11



Source: Statistics Agency of the Republic of Kazakhstan. StatLink <http://dx.doi.org/10.1787/888932780551>

Figure 1.12. Use of mineral fertiliser in agricultural enterprises,<sup>1</sup> 1990-2011

1. Quantity corresponds to 100% nutrient basis.

Source: Statistics Agency of the Republic of Kazakhstan for total fertiliser use; and own calculation for per hectare use.

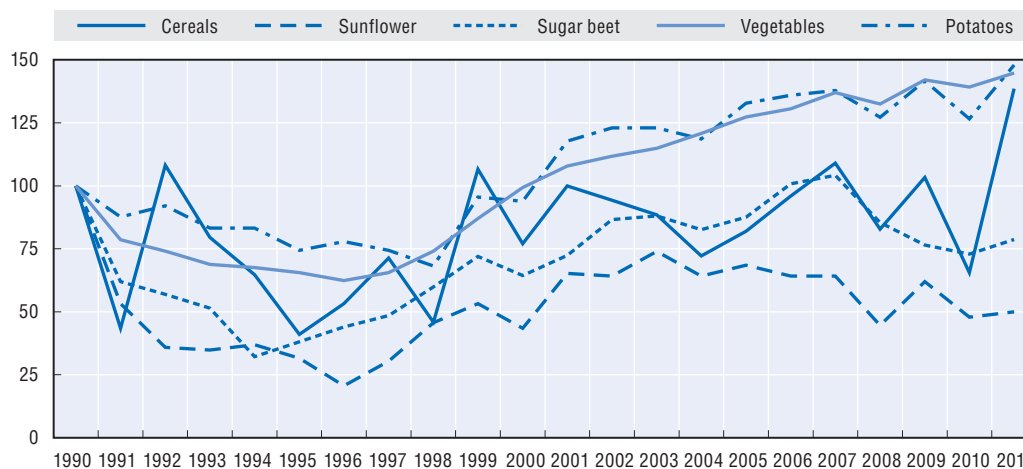
StatLink <http://dx.doi.org/10.1787/888932780570>

accounted for 17% of total fertilisers applied in the country. In the southern oblast of Kyzylorda 32% of arable lands received mineral fertilisers and 3% in South Kazakhstan. These two oblasts accounted for 40% of the total mineral fertilisers applied. Application of organic fertilisers reduced even more dramatically, from a country total of 22.3 million tonnes in 1990 to 0.14 million tonnes in 2011.

Productivity outcomes are mixed. Labour productivity has large regional variations. For example, between the northern wheat region where labour shortages are reported and the southern cotton region where harvesting is largely done by low-wage migrants from Uzbekistan. Yields per hectare do not show a clear pattern; potato and vegetable yields have improved substantially after declining in the 1990s, while grain and sugar beet yields are volatile (Figure 1.13). On an international scale, Kazakhstan's yields of key crops are relatively low (Figure 1.14, panels A and B).

Figure 1.13. **Evolution of crop yields, 1990-2011**

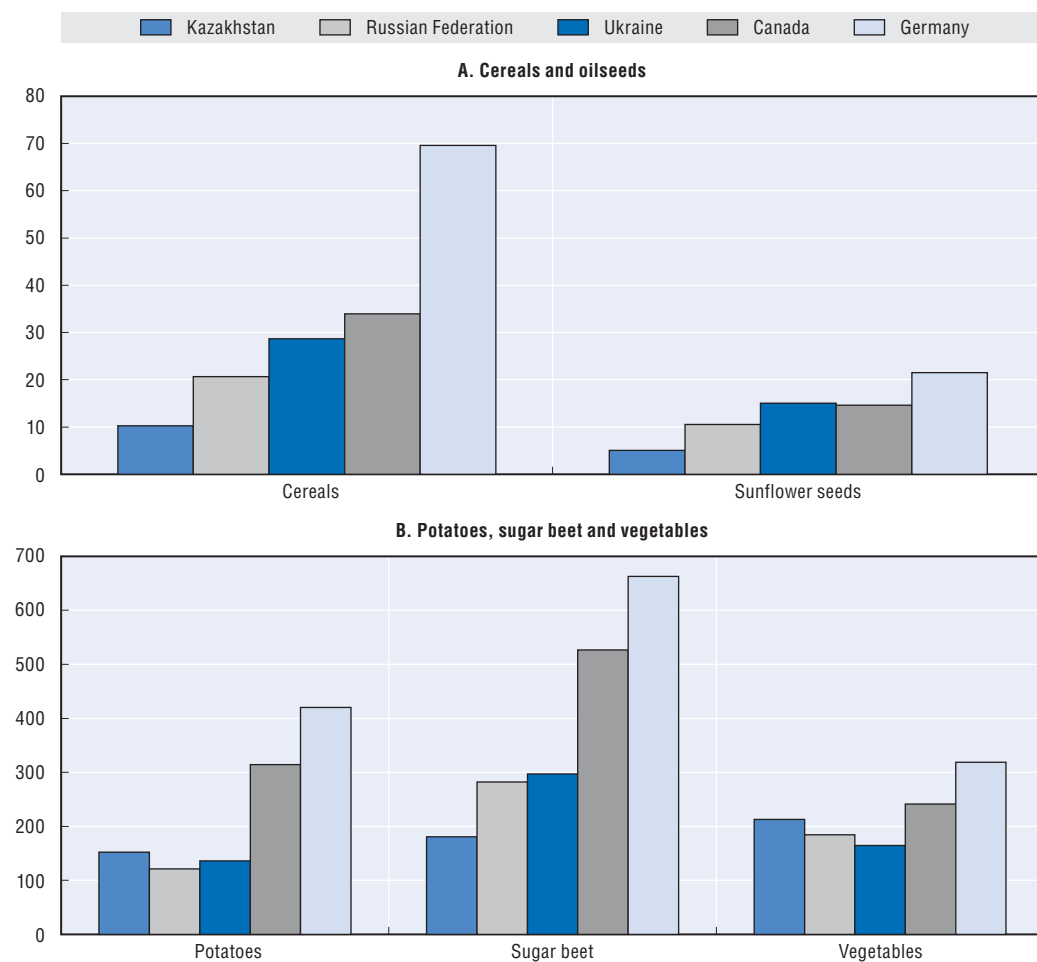
Index, 1990 = 100




Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932780589>Figure 1.14. **Crop yields in Kazakhstan and selected countries, 2009-10 average**

Hundredweight/ha



Source: Statistics Agency of the Republic of Kazakhstan; FAOSTAT.

StatLink  <http://dx.doi.org/10.1787/888932780608>

### Agricultural output

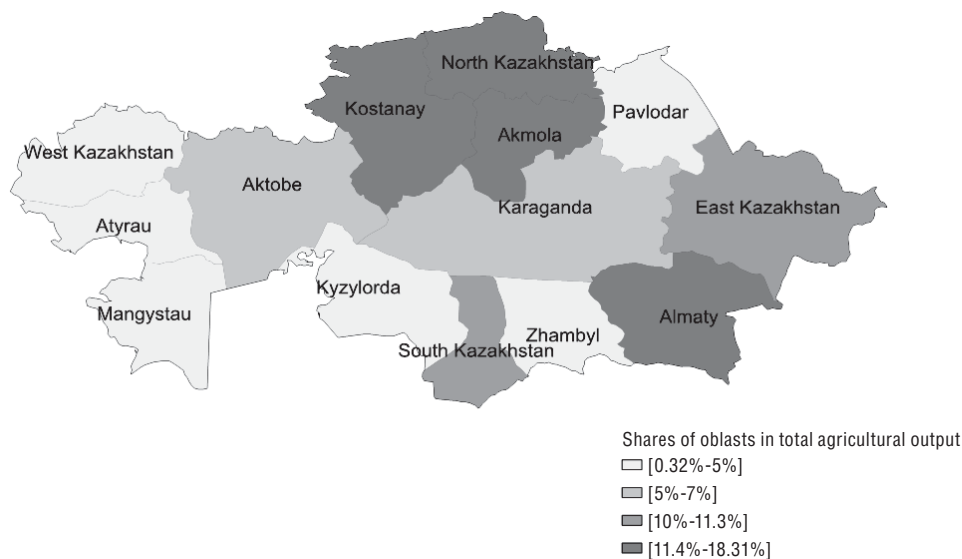
The structure of agricultural output in Kazakhstan has major regional variations (Figure 1.15). The three northern oblasts (North Kazakhstan, Kostanay and Akmola) specialise in grain, producing much of the country's farm output by value (Figure 1.16). The eastern oblasts (Pavlodar, East Kazakhstan and Almaty) produce most of the oilseeds. Cotton is cultivated in South Kazakhstan and rice in Kyzylorda, both of which depend on irrigation systems based on the Syrdarya River. Almaty oblast has mixed farming with both irrigated agriculture in the south and rain-fed agriculture in the eastern foothills. Even

Figure 1.15. **Regional specialisation of agriculture, 2008-10 average**



Source: Based on the data of the Statistics Agency of the Republic of Kazakhstan.

Figure 1.16. **Contribution of regions to total agricultural output, 2009-11 average**

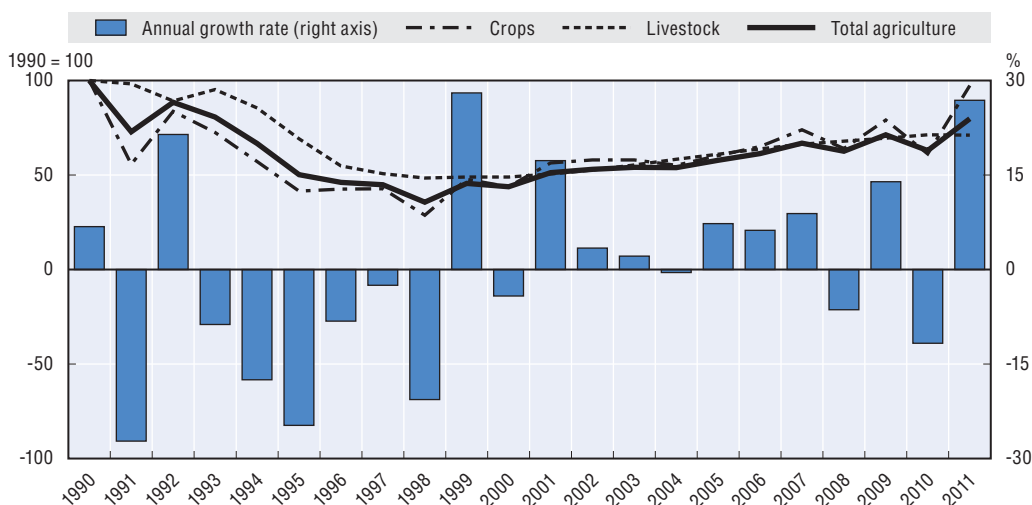


Source: Based on the data of the Statistics Agency of the Republic of Kazakhstan.

within oblasts, there are substantial differences in local conditions. For example, wheat yields vary strongly within the northern grain region; in the parts of North Kazakhstan and Kostanay adjacent to the Russian border, with more reliable rainfall and better soils, wheat yields are two to three times greater than in the southern part of Kostanay oblast or in Akmola oblast.

Total agricultural output was more than halved during the 1990s, reflecting the severe impact of the transition (Figure 1.17). From 1993 to 1998, there was a pronounced downward trend in both crop and livestock output. The only years when positive growth occurred were the good grain harvest years of 1992 and 1999. The agricultural sector began its gradual recovery in the early 2000s. However, annual growth is highly volatile and largely follows the fluctuations in grain output (Figure 1.8).

Figure 1.17. **Evolution of agricultural output, 1990-2011**



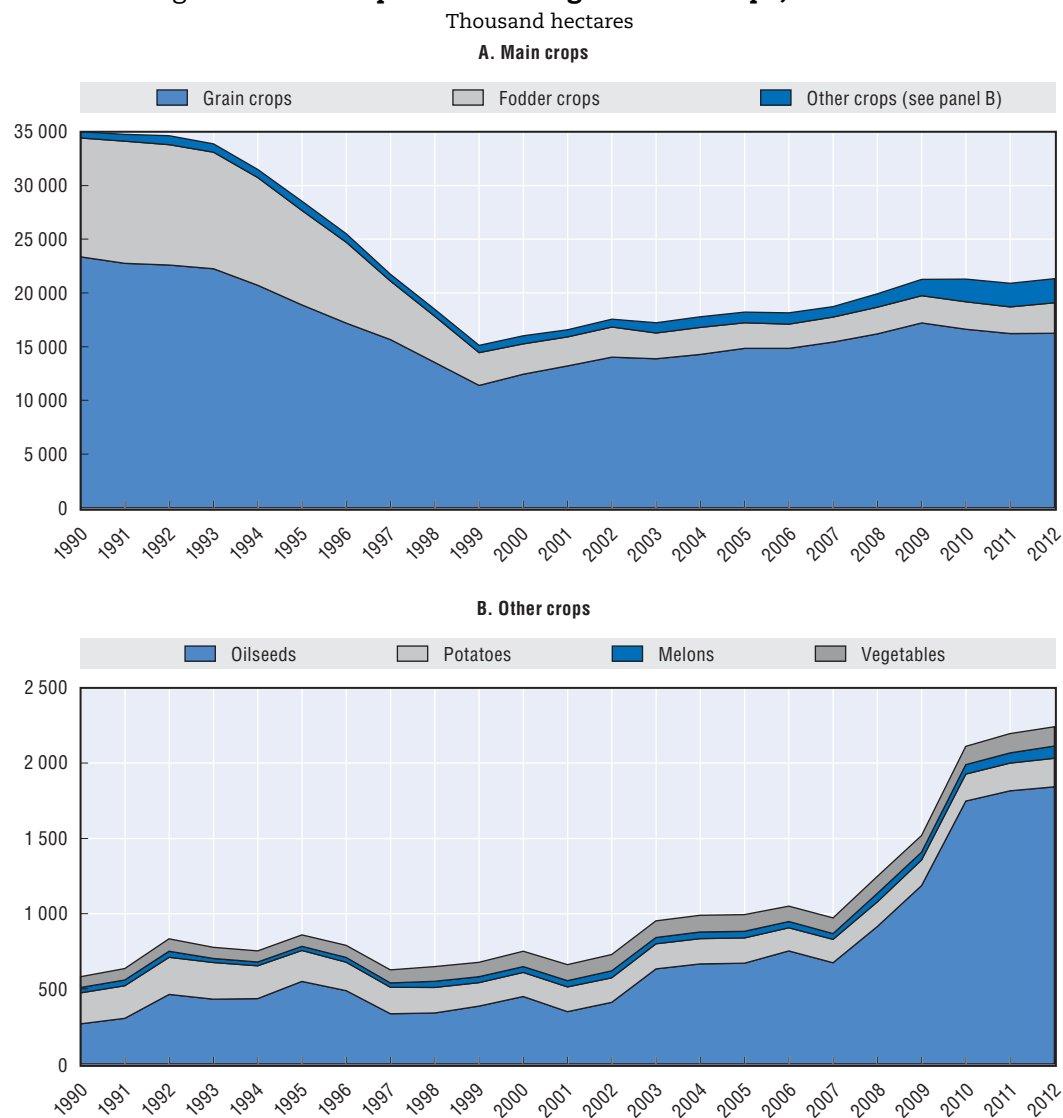
Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932780627>

A dramatic reduction of total crop area between 1991 and 1999 was followed by a gradual increase. In 2012, crop plantings covered 21 million hectares, 6 million hectares more than in 1999, but still 14 million hectares less than in 1991 (Figure 1.18 and Annex Table 1.5). Thus, the crop area decreased by about the amount that the World Bank estimated had been overplanted before 1990. The land withdrawn from agriculture was primarily growing low quality grains used for animal feed, and the reduction of feed crop production was associated with the significant decline in livestock numbers. Nevertheless, grain and fodder remain by far the most important crops although the land allocated to other crops has been increasing, with an expansion of oilseed and vegetable plantings. Sugar beet and, to a lesser extent, potato areas have declined, while cotton and tobacco plantings have been volatile.

With the exception of sugar beet, production of all crops began to recover after 1998, with oilseeds and melons far exceeding their 1990 output (Annex Table 1.A.6). Grain output is highly volatile, reflecting the harsh conditions with unreliable rainfall in the northern

Figure 1.18. Area planted with agricultural crops, 1990-2012



Source: Statistics Agency of the Republic of Kazakhstan.

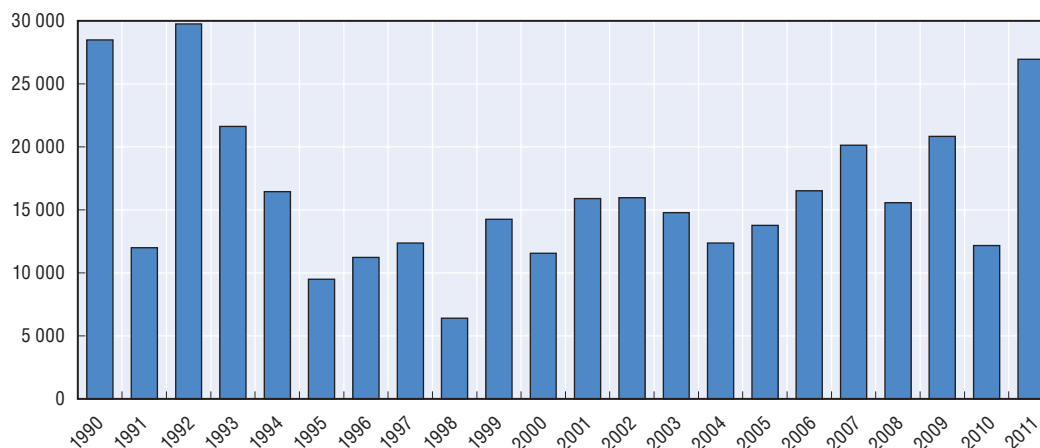
StatLink  <http://dx.doi.org/10.1787/888932780646>

regions (Figure 1.19; further discussion of the wheat sector is in Chapter 3). Cotton output grew rapidly, almost tripling between 1998 and 2003, but it then went into rapid decline as both acreage and yields fell sharply between 2007 and 2011.

Traditional livestock farming in Kazakhstan is sheep rearing, camel husbandry, and horse and cattle breeding. In the 1990s, large-scale livestock farming almost disappeared and animal stocks were concentrated on small household plots, and meat, milk and eggs became essentially non-traded commodities. Output of wool and karakul, significant export items before independence, fell most dramatically during the 1990s, and has since remained at low levels. In the late 1990s, production of eggs and milk began to recover. Egg production more than doubled between 1998 and 2011. Milk output increased by almost 50% over the same period. Meat output turned around later, and increased by about 44% between 2001 and 2010 (Figure 1.19 and Annex Table 1.A.7). The trends in largest livestock sub-sectors, beef and milk, are discussed in greater detail in Chapter 3.



Figure 1.19. **Total grain production, 1990-2011**  
Thousand tonnes




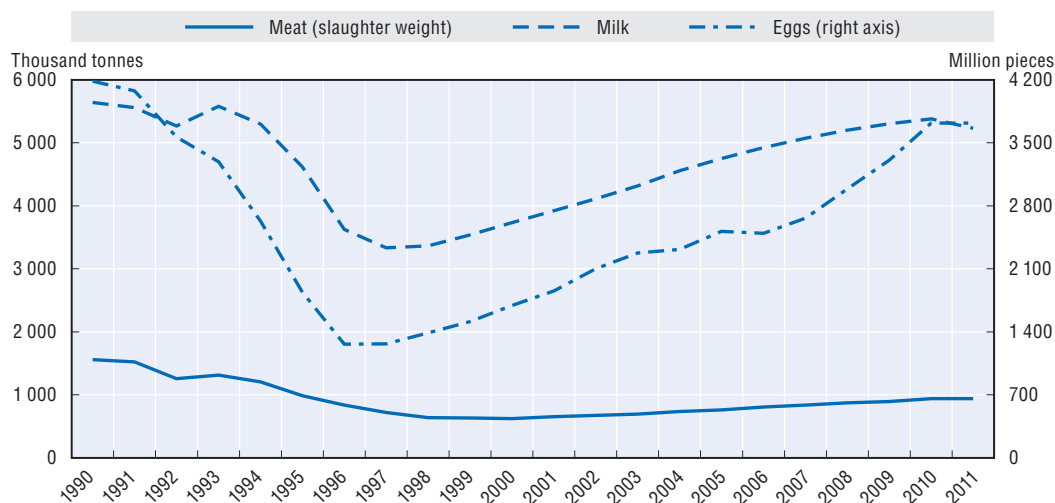
Source: Statistics Agency of the Republic of Kazakhstan. StatLink  <http://dx.doi.org/10.1787/888932780665>

Figure 1.20. **Production of principal livestock products, 1990-2011**



Source: Statistics Agency of the Republic of Kazakhstan. StatLink  <http://dx.doi.org/10.1787/888932781976>

### **Agricultural and rural incomes**

Agricultural enterprises were unprofitable up to the late 1990s before the country's economic development began to revive. As input price increases outpaced output price rises and farmers had limited freedom to change their behaviour, many farms simply went into debt, but the government continued to provide credits (Gray, 2000). By 1996, three-quarters of agricultural enterprises were unprofitable and many workers were paid in-kind (e.g. engineers received farm equipment in lieu of wages). Between 1998 and 2003, reforms of farm ownership were in part targeted at writing off debts and allowing farms to re-start with a clean sheet. The share of profitable farms increased and by 2003 exceeded the share of unprofitable farms.

Rural incomes, wages and agricultural employment have improved since the early 2000s. However, aggregate figures disguise differences across the country, with the rural population less well off in the south, which has higher population density and has seen

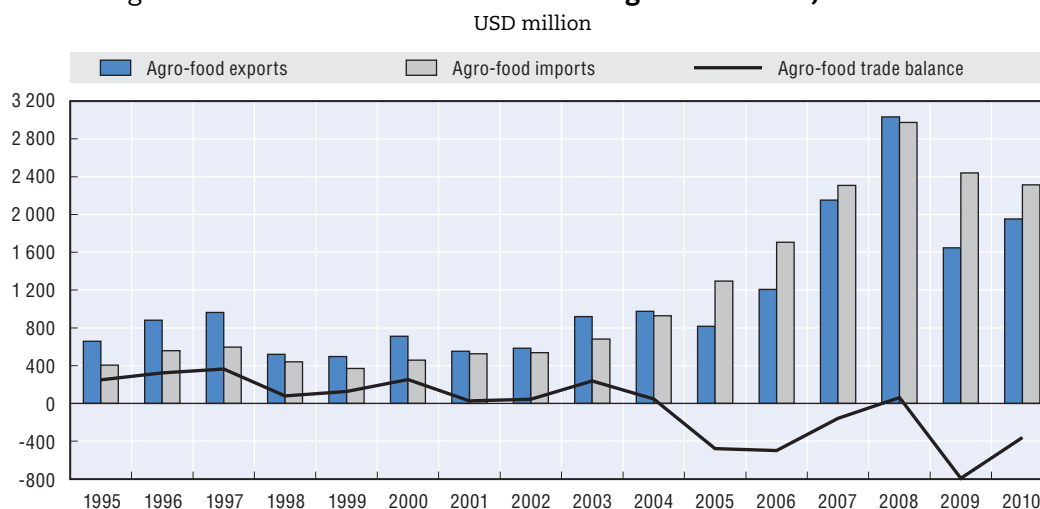
little out-migration. The average nominal per capita income for rural areas was KZT 217 183 (USD 1 474) in 2010, but varied between KZT 280 672 (USD 1 905) in Mangystau oblast and KZT 173 331 (USD 1 176) in South Kazakhstan. Based on data from the northern wheat region (Kostanay, North Kazakhstan and Akmola oblasts), Petrick et al. calculate that real rural consumption more than doubled between 2003 and 2011. Nominal farm wages increased almost five times between 2003 and 2011, with the increase accelerating after 2003 (Petrick et al., 2011 and 2012). Rural households also received dividends from land shares in agricultural enterprises, income from goods produced by their household or from other activities (e.g. running small shops), and from state pensions or other rights based on past employment.<sup>10</sup> Petrick links the wage increase in the north during the 1990s to large-scale emigration from the region, which led to a shortage of skilled labour in the farm sector. Recently, however, increased agricultural wages are largely due to the overall economic recovery.

### Agro-food trade flows

In 1990, Kazakhstan supplied about 3 million tonnes of grain, as well as 342 000 tonnes of meat, and 145 million eggs to other Soviet republics. Cotton was Kazakhstan's biggest agricultural export to markets outside the Soviet Union. Grain remains a major export, although output is volatile. Export of many other agricultural products dropped dramatically in the first half of the 1990s.

Kazakhstan's total trade in agricultural products began to rise in the second half of the 2000s. On the export side, the increases in trade were driven principally by wheat exports, whose annual volume almost doubled and annual value more than tripled between 1995-97 and 2008-10. On the import side, improvements in incomes and the strengthening of the national currency underpinned trade growth (Figure 1.21 and Table 1.2). Imports were increasing more rapidly than exports with the result that Kazakhstan has become a net agro-food importer since the mid-2000s.

Figure 1.21. **Evolution of Kazakhstan's agro-food trade, 1995-2010**



Source: UN COMTRADE Database.

To download the data corresponding to this graph, refer to Figure 0.2. Agro-food trade, 1995-2010.

Nevertheless, agro-food trade is relatively small part of total trade whose share has tended to decrease since the mid-late 1990s, as energy exports dominated Kazakhstan's exports (Table 1.2). Agro-food items accounted for less than 4% and 9% of total country's exports and imports respectively in 2008-10.

Table 1.2. **Selected indicators of Kazakhstan's agro-food trade, 1995-2010**

	USD million												
	1995-97	2008-10	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Agro-food export, f.o.b.	833	2 211	711	552	583	920	976	815	1 208	2 151	3 033	1 648	1 951
Agro-food import, c.i.f.	520	2 576	459	525	538	681	929	1 294	1 706	2 309	2 973	2 441	2 314
Agro-food trade balance	313	-365	253	27	45	239	47	-479	-498	-158	61	-792	-362
Coverage rate of agro-food import by export, %	160.1	85.8	155.1	105.2	108.4	135.1	105.0	63.0	70.8	93.2	102.0	67.5	84.3
Share of agro-food trade in total trade, %													
Export, f.o.b.	14.2	3.9	8.2	6.5	6.0	7.1	4.9	2.9	3.2	4.5	4.3	3.8	3.4
Import, c.i.f.	12.7	8.6	9.3	8.4	8.2	8.1	7.3	7.5	7.2	7.1	7.9	8.6	9.6

Source: UN COMTRADE Database.


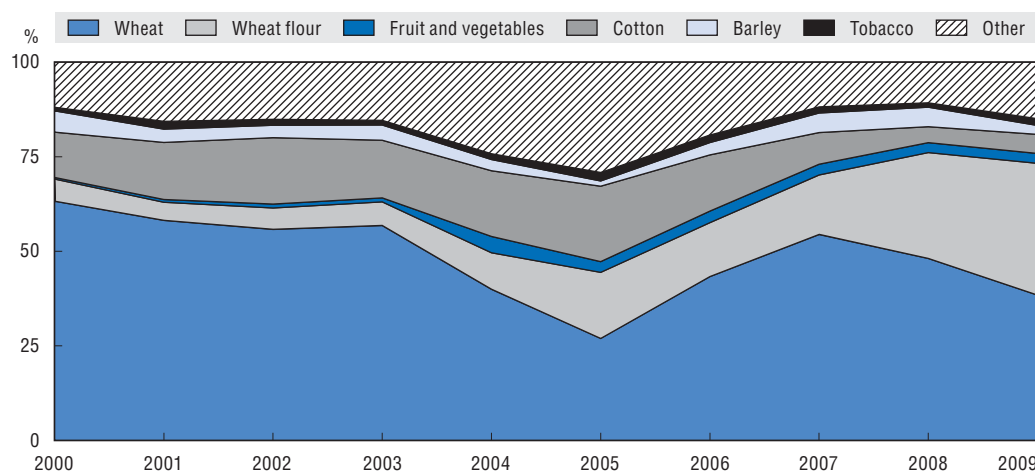

StatLink  <http://dx.doi.org/10.1787/888932782052>

Figure 1.22 illustrates the product composition of agro-food exports. Although the share fluctuates due to output volatility, exports are dominated by wheat and flour, which together account for between half and three-quarters of agricultural exports. In 2011, Kazakhstan was the world's sixth largest wheat exporter, after the United States, Russia, Australia, Canada and the European Union (for more details on grain trade see also Chapter 3). Cotton exports increased in 2003-05, but fell between 2005 and 2010.<sup>11</sup> Exports of other agricultural products have shrunk dramatically. Exports of meat, eggs and potatoes collapsed during the 1990s, and Kazakhstan has become a net importer of potatoes, eggs, meat and dairy products.

Figure 1.22. **Evolution of commodity structure of agro-food exports, 2000-09**



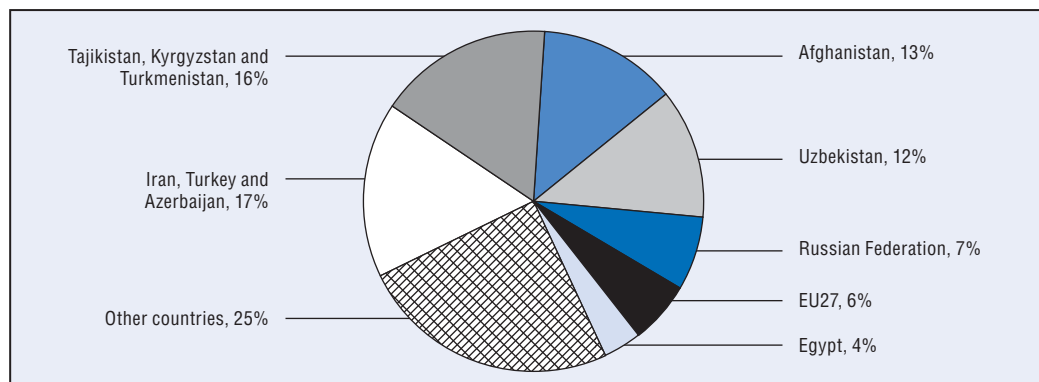
Source: UN COMTRADE Database.

StatLink  <http://dx.doi.org/10.1787/888932782014>

The direction of trade in agro-food products changed significantly over the period 1995 to 2010 (Figure 1.23). The Russian Federation, which had taken over half of exports in 1995-97, accounted for only 7% in 2008-10. Agro-food exports have been reoriented to countries in

Central and West Asia, with Afghanistan, Azerbaijan, Iran, the Kyrgyz Republic, Tajikistan, Turkey, Turkmenistan and Uzbekistan all increasing their shares and together purchasing 58% of Kazakhstan's agro-food exports in 2008-10 (Figure 1.24).

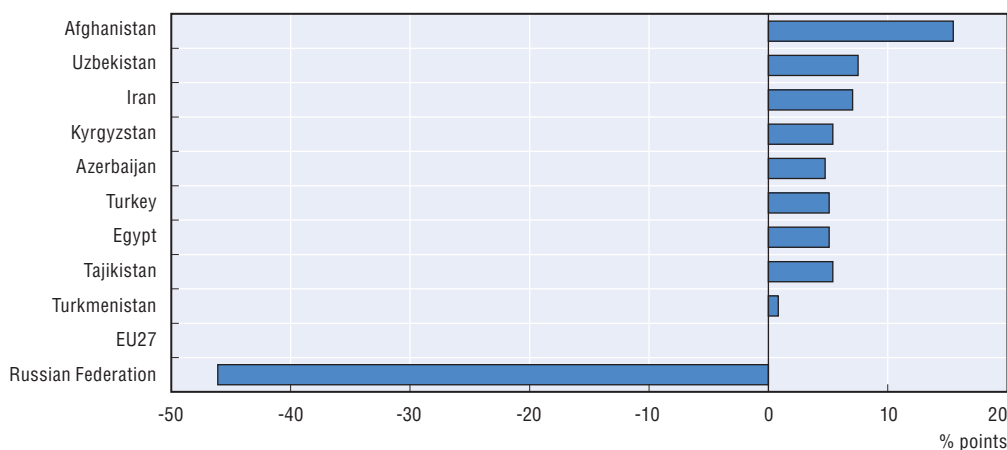
Figure 1.23. **Kazakhstan's agro-food exports by principal destinations, 2008-10 average**



Source: UN COMTRADE Database.

StatLink <http://dx.doi.org/10.1787/888932780684>

Figure 1.24. **Changes in export shares of Kazakhstan's top 10 export destinations, 1995-97 to 2008-10**

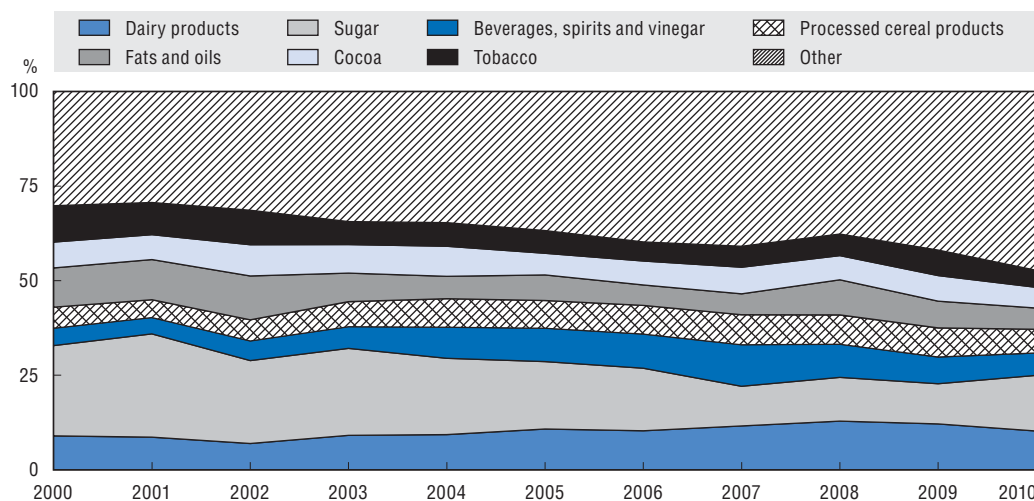


Source: UN COMTRADE Database.

StatLink <http://dx.doi.org/10.1787/888932780703>

Agro-food imports are more diversified (Figure 1.25). Compared to Kazakhstan's export-mix, the picture is one of more processed goods being imported, in particular dairy products, sugar, beverages, processed cereal products, fats and oils, cocoa and tobacco.

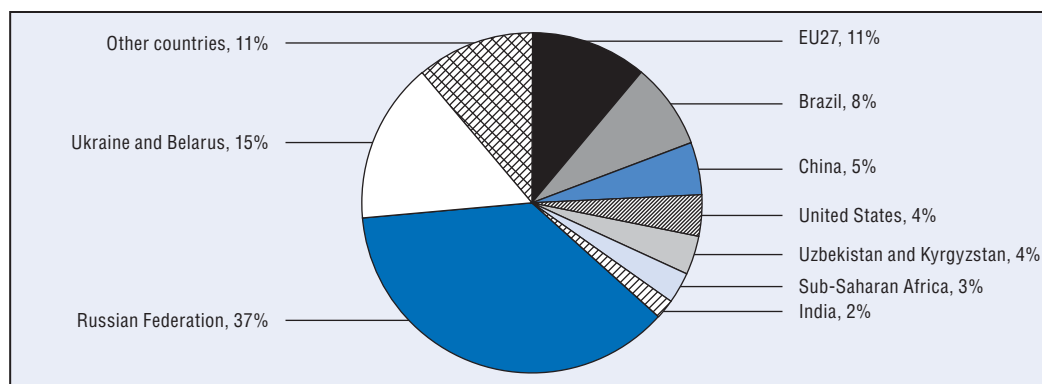
The main exporters of agricultural products to Kazakhstan are CIS countries, with Russia Ukraine and Belarus together accounting for 52% of agro-food imports in 2008-10 (Figure 1.26). Meat imports primarily consist of poultry from the United States. In 2010, the United States exported to Kazakhstan 108 115 tonnes of meat and edible meat offal, worth USD 88 million, while Russia supplied 1 757 tonnes worth USD 3 million. In 1996, Kazakhstan imported 56% of milk and dairy products from Russia, but in 2010 the main exporter of these products to Kazakhstan was the Kyrgyz Republic with 41%, followed by

Figure 1.25. **Evolution of commodity structure of agro-food imports, 2000-10**

Source: UN COMTRADE Database.

StatLink <http://dx.doi.org/10.1787/888932780722>

Russia with 33%. Kazakhstan is a leading importer of fruits from China; in 2010 the import volume of fruits from China was 96 994 tonnes, worth USD 42 million, a fourteen-time increase in volume from 2005.

Figure 1.26. **Kazakhstan's agro-food imports by region of origin, 2008-10 average**

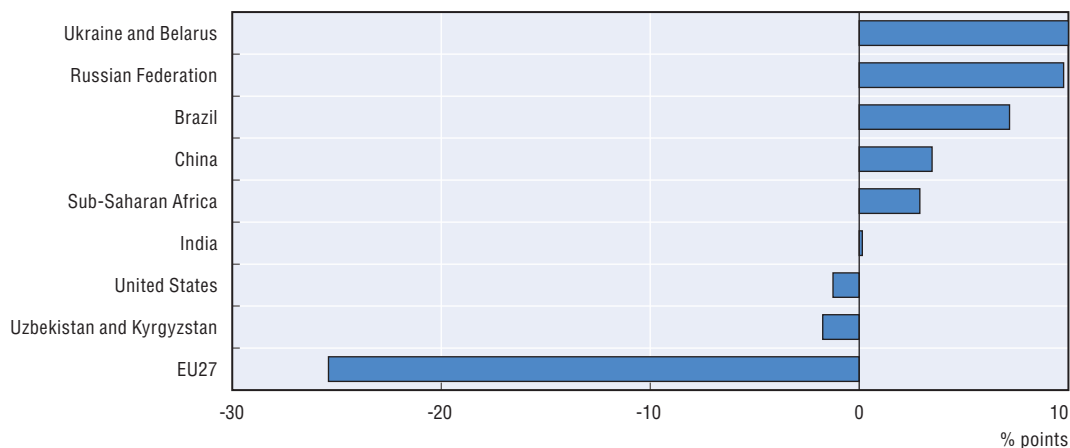
Source: UN COMTRADE Database.

StatLink <http://dx.doi.org/10.1787/888932780741>

The changing pattern of import sources from the mid-1990s to the late 2000s is striking, with the EU share falling by over 25 percentage points, and Russia, Ukraine, Belarus and Brazil increasing their combined share in almost equal measures (Figure 1.27). This reflects a change in the source of processed food products from the European Union, which in the 1990s offered quality processed food and beverages that had been unavailable in the planned economy, to more competitive suppliers. The increased imports from Russia, Belarus and Ukraine suggest that those CIS economies were more successful in creating competitive agro-food processing activities than was Kazakhstan, where food

processing declined severely and was lagged in development as a modern sector. Thus, most domestic agro-food products were sold unprocessed, and higher quality processed foods were imported (Weber, 2003; Pomfret, 2008a).

Figure 1.27. **Changes in import shares of Kazakhstan's 10 top importers, 1995-97 to 2008-10**



Source: UN COMTRADE Database.

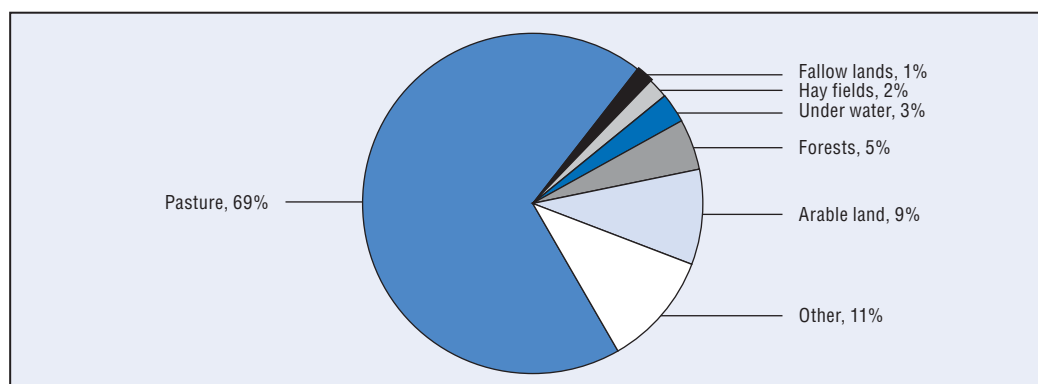
StatLink  <http://dx.doi.org/10.1787/888932780760>

### **Agri-environmental situation in agriculture**

Environmental problems related to agricultural activity include: 1) soil depletion and degradation due to failed past government programmes, erosion, secondary salinisation, and water logging; 2) water shortages; 3) pastureland degradation caused by overgrazing and under-utilisation/abandonment of more distant pastures; 4) chemical soil pollution; and 5) reduced biodiversity, e.g. aquatic biodiversity in the Aral Sea. Most of these problems were inherited from the Soviet period. Some have become worse due a lack of investment, inappropriate regulation and poor enforcement and poverty in the 1990s (e.g. cutting trees for fuel). However, the large decline in acreage under crops and even larger decline in the use of fertilisers, as well as the diminished size of the herds, have reduced pressure on the environment. However, as agricultural output continues to grow, these problems may again become more acute.

Kazakhstan is abundantly endowed with land. Over 80% of the country's total area is classified as agricultural land, including almost 70% occupied by pasture (Figure 1.28 and Annex Table 1.A.9). Arable land constitutes less than 10% of the country's total land area, but its availability per inhabitant (1.5 hectares) is the second highest in the world after Australia (2.1 hectares).

Kazakhstan's agricultural lands were adversely affected by programmes of the Soviet era. The Virgin Lands programme (1954-60) sought to increase wheat production by expanding cultivation as far as the southern steppes of Kazakhstan, which are characterised by low precipitation and strong winds that make crop production unsustainable. Part of the land brought into grain production during the Virgin Lands programme was abandoned in the 1990s, especially in Aktyubinsk, Kostanay, and North Kazakhstan oblasts. For the whole of Kazakhstan, about 19 million hectares on which crops had been grown in 1990 were no longer used as of 2000. Abandoned farmlands are

Figure 1.28. **Composition of Kazakhstan's land by types of lands, 2011**

Source: Agency on Management of Land Resources of the Republic Kazakhstan.

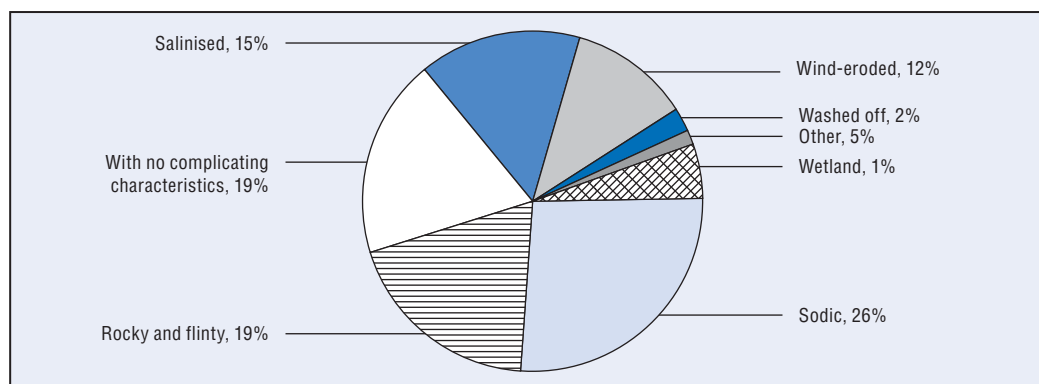
StatLink  <http://dx.doi.org/10.1787/888932780779>

not only at risk from wind erosion, salinisation, or weed invasion, but can also become breeding grounds for locusts. Some abandoned lands were recovered by seeding them with grasses and perennials. Soil degradation continued during the independence period due to a lack of investment and inadequate cultivation practices. According to the Ministry of Agriculture, the average humus content in soils across the country decreased by 18% between 1989 and 2011, with the most important declines observed in the grain region including Akmola oblast (by 25%), North Kazakhstan (by 24%), and Kostanay oblast (by 21%).

The Soviet policy of the 1960s and 1970s to increase meat consumption promoted livestock production and created large livestock operations that resulted in overgrazing and rapid land deterioration (Jungbluth and Schillhorn-Van Veen, 2004; Schillhorn-Van Veen et al., 2005; Liefert and Liefert, 2012). Other activities, such as nuclear testing, oil exploration, and mining and metallurgical operations, as well as use of outdated production processes, left chemical pollutants in the soil. Deficient agricultural practices (e.g. use of deteriorated irrigation systems, inefficient water use, and inadequate drainage) led to waterlogging and secondary salinisation of land and water resources. Salinisation is a primary cause of land degradation in irrigated lands. Abandoned farmlands are also prone to salinisation because salts are no longer leached out by irrigation and drainage. The biggest share of the agricultural land is taken by sodic soils, followed by rocky and flinty soils and much land is salinised or wind-eroded; only 19% of lands are estimated to have no complicating characteristics (Figure 1.29).

Kazakhstan has limited water resources, which fluctuate by season and by year and are unevenly distributed across the country.<sup>12</sup> Agriculture is the main water consumer (Figure 1.30 and Annex Table 1.A.8), and over 90% of water is used for irrigation (97% in 2010), mostly in the southern oblasts. Irrigation places the greatest pressure on water resources and significant water losses are a big concern to an already water-deficient country; only 50-70% of the water withdrawn for irrigation is actually delivered to crops (UNCCD 2006).<sup>13</sup> Deterioration of the irrigation network and seepage in unlined canals has led to water losses, water logging, and soil salinisation. Nevertheless, the overall impact on water consumption has been dominated by decreasing irrigated crop land. As water consumption for irrigation purposes decreased from 21.7 km<sup>3</sup>/year to 9.4 km<sup>3</sup>/year

Figure 1.29. **Structure of agricultural lands according to factors affecting land fertility, 2010**

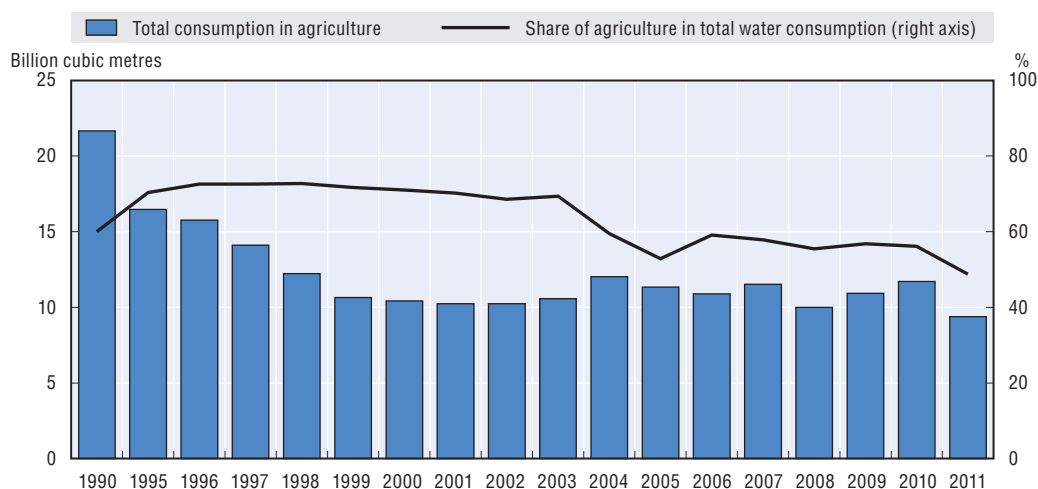


Source: Agency on Management of Land Resources of the Republic Kazakhstan.

StatLink <http://dx.doi.org/10.1787/888932780798>

between 1991 and 2011, the share of the agriculture sector in total water withdrawal fell from 60% to 49% over this period. Such trends reduce dependence on water flows from neighbouring countries.

Figure 1.30. **Water consumption in agriculture, 1990-2011**



Source: Committee on Water Resources of the Ministry of Agriculture of the Republic of Kazakhstan.

StatLink <http://dx.doi.org/10.1787/888932780817>

Air pollution is a significant environmental problem in Kazakhstan. Acid rain damages the environment within the country and affects neighbouring countries. Although there was a general downward trend of pollution emissions during the 1990s, the 2009 level of pollutant emissions from stationary sources was almost the same as that of 1999. In 2009, the agricultural sector emitted a total of 23 500 tonnes air pollutants, which included 12 000 tonnes of solid and 11 500 tonnes of gaseous and liquid substances, while the overall amount of emitted gaseous and liquid substances in Kazakhstan was 1 681 thousand tonnes. In sum, agriculture accounts for a small share of the most widespread stationary air pollutants emitted by economic activities of Kazakhstan.



The country's predominant steppe ecosystem is unique, serving as a gene pool storage for local flora and fauna. Land degradation due to inappropriate land use and abandonment has reduced biodiversity, because it prevents the re-establishment of indigenous grassland vegetation and deteriorates the natural habitats of native endangered species.

Kazakhstan is a forest-poor country, with forest coverage of only 5%. The generally dry climate of Kazakhstan makes forest (and rangeland) ecosystems particularly susceptible, which leads to the destruction of trees and shrubs, and aggravates desertification. In southern Kazakhstan large areas of flood-plain forests were converted to agriculture during the Soviet era, and most of those remaining after independence were cut and cultivated or used for grazing. Impoverishment of the rural population in the steppe and desert regions and the lack of alternative fuel sources contributed to the increasing cutting of trees and shrubs for heating and cooking. In north-eastern Kazakhstan, primarily along the border with China and Russia, illegal logging has been widespread (World Bank, 2007). However, according to most recent official information, after the creation of the state forest reserve "Semey Ormany", illegal logging in north-eastern Kazakhstan has decreased substantially. Overall, a total of 67 000 hectares were reforested between 2002 and 2012 in the country.

The number of protected natural areas has increased from eight in 1990 to 26 in 2009. Since the protection of unique Kazakhstan fauna has been given more attention, hunting areas have been strictly defined. In 2010, these areas comprised 234.4 million hectares, on which 690 hunting units operated, and 34 species of mammals and 59 species of birds could be hunted.

### 3. Structural change in the agricultural sector

#### **Reforms of land ownership and farm structure**

The existing farm classification distinguishes three types of producers: i) agricultural enterprises, the successors of the former collective and state farms; ii) household plots, tiny land parcels in rural areas used by families which existed also throughout the soviet period; iii) individual ("peasant") farms emerging since the early 1990s as a result of policy to develop family-type farming.

Agrarian reforms were started in 1991, but progressed unevenly. Reforms were temporarily suspended in 1992-93, restarted in 1994-95, and decelerated in 1996-97, before real far-reaching changes and financial restructuring of farms began at the end of the 1990s.

#### **1990-93: First land and farm restructuring legislation**

The first stage of land reforms in 1990-93 followed the adoption of the *Law on Peasant Farming* (1990), the *Land Code of the Republic of Kazakhstan* (1991), the *Law on Land Reforms in the Republic of Kazakhstan* (1991), and the *law on Land Taxes* (1991). This legislation transferred the management of lands to local governments. State ownership was declared for all lands, and the right to life tenure was given for land plots used by "peasant" (individual) farms and rural households, as well as lands occupied by "dachas" or allocated for their construction.<sup>14</sup>

The second stage of land reforms in 1994-95 was marked by a set of presidential decrees which allowed for the buying and selling of land tenure rights, thus making

possible transactions with land. The assets of the former collective farms were divided, with certificates and rights on conditional land shares issued to the farm workers and other rural groups (local teachers, medical workers, pensioners, etc.). Through this process, some people voluntarily joined into production co-operatives, joint-stock companies or different partnerships, or created independent individual farms (Table 1.3).

**Table 1.3. Number of operating farms by type, end of year, 1990-2011**

	Total <sup>1</sup>	Agricultural enterprises		Individual farms	Household plots (thousands)
		State	Non-state		
1990	4 918	2 223	2 371	324	2 094
1991	9 274	2 229	3 712	3 333	1 949
1992	14 920	2 136	3 522	9 262	2 016
1993	23 296	2 137	4 876	16 283	2 159
1994	30 168	2 182	5 465	22 521	2 193
1995	36 285	1 405	4 095	30 785	2 175
1996	52 481	451	7 694	44 336	2 150
1997	55 393	274	5 328	49 791	2 057
1998	68 864	86	6 303	62 475	2 108
1999	73 172	57	4 962	68 153	2 202
2000	81 078	74	4 631	76 373	2 181
2001	100 402	79	4 863	95 460	2 172
2002	116 054	82	4 538	111 434	2 155
2003	126 212	87	4 403	121 722	2 135
2004	152 527	82	4 434	148 011	2 134
2005	161 962	65	4 919	156 978	2 133
2006	173 132	65	5 224	167 843	2 194
2007	174 608	79	5 203	169 326	2 207
2008	174 651	25	5 145	169 481	2 232
2009	175 636	35	5 408	170 193	2 248
2010	176 822		6 493 <sup>2</sup>	170 329	..
2011	188 616		6 197 <sup>2</sup>	182 419	..

..: Not available.

1. Excluding household plots.

2. The figure includes state and non-state enterprises.

Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932782071>

### **1995 Presidential Decree: Introduction of private land ownership**

The Presidential Decree on Land of 22 December 1995 officially recognised private land ownership in Kazakhstan. Citizens could privatise land plots in rural households, as well as land used for dacha gardens, and the construction of dachas and year-round houses. It also became possible to transfer ownership rights to private legal persons, including foreign ones. However, private ownership rights did not apply to agricultural and some other lands.<sup>15</sup> The Decree set out the principles of state ownership of agricultural land with private use rights under 99-year leases and of division of the lands of restructured agricultural enterprises among workers, including those employed in the social sphere in rural areas (e.g. teachers and medical workers), and pensioners. By 1997, 2 270 000 shares covering 118 million hectares had been allocated, and by 2002 the share owners had exercised their rights as follows: 1) 18%, largely belonging to managers, specialists and their families, were used to form corporate farms; 2) 29% were used to form individual

farms; 3) 4% were sold to commercial farms; 4) 3% were transferred to other people; 5) 18% were unclaimed or returned to the state; and 6) 28%, mainly those of pensioners, workers in the social sphere, and people employed in other businesses, were sub-leased (Dudwick, et al., 2007).

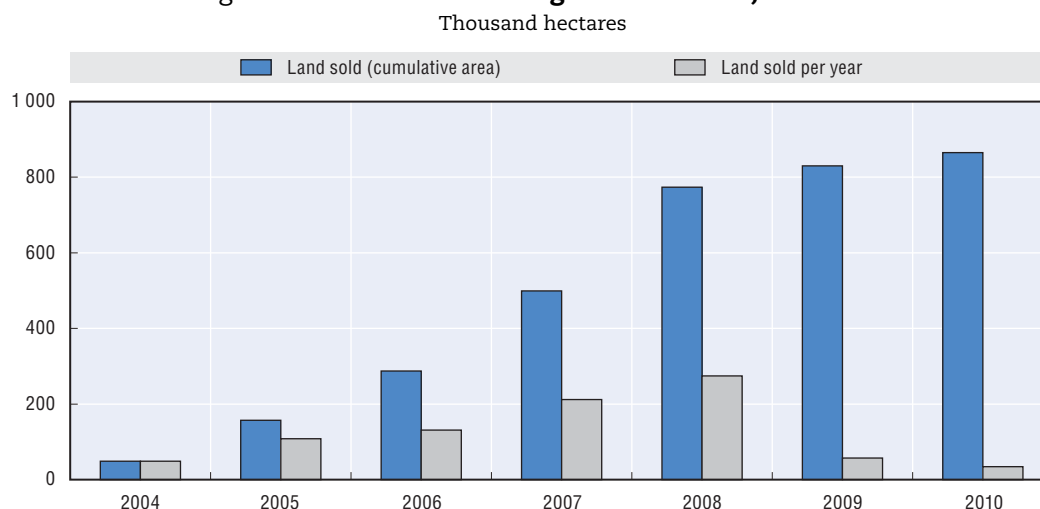
### 1998-2003: Acceleration of land and structural reforms

Starting from 1998, the process of financial rehabilitation of collective agricultural enterprises in default began, and as part of this process bankruptcies of large number of indebted enterprises were implemented.<sup>16</sup> A 2001 *Law On Land in the Republic of Kazakhstan* shortened the length of long-term land lease from 99 to 49 years, while mixed signals from the state about the desirability of sub-leasing created confusion about land rights, until a new Land Code was enacted in 2003.

The 2003 Land Code, which was implemented in 2005, allowed private ownership with full property rights, including the sale and purchase of land.<sup>17</sup> This led to further structural change as land could now be used as collateral and individual farms could expand.<sup>18</sup> Sub-leasing of land shares was formally banned as the state promoted the principle that owners should cultivate the land. Many subleases were converted into shares of agricultural enterprises, with shareholders now receiving dividends based on enterprise profitability rather than a share of output or a rental payment.

With the implementation of the 2003 Land Code, a market in agricultural land emerged. From 2004 to 2010, a total of 864.5 thousand hectares of state agricultural land was purchased. The rate of purchase, however, fell sharply after 2008, possibly as a consequence of the overall economic slow-down (Figure 1.31).

Figure 1.31. **Sales of state agricultural land, 2004-10**



Source: Agency on Management of Land Resources of the Republic Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932780836>

The mobility of agricultural land in Kazakhstan remains low, resulting from a combination of an inactive land market and a lack of flexibility in land leasing. According to the Agency on the Management of Land Resources of the Republic Kazakhstan, only 1% of total land classified as “land designated for agricultural use”<sup>19</sup> was privately owned,

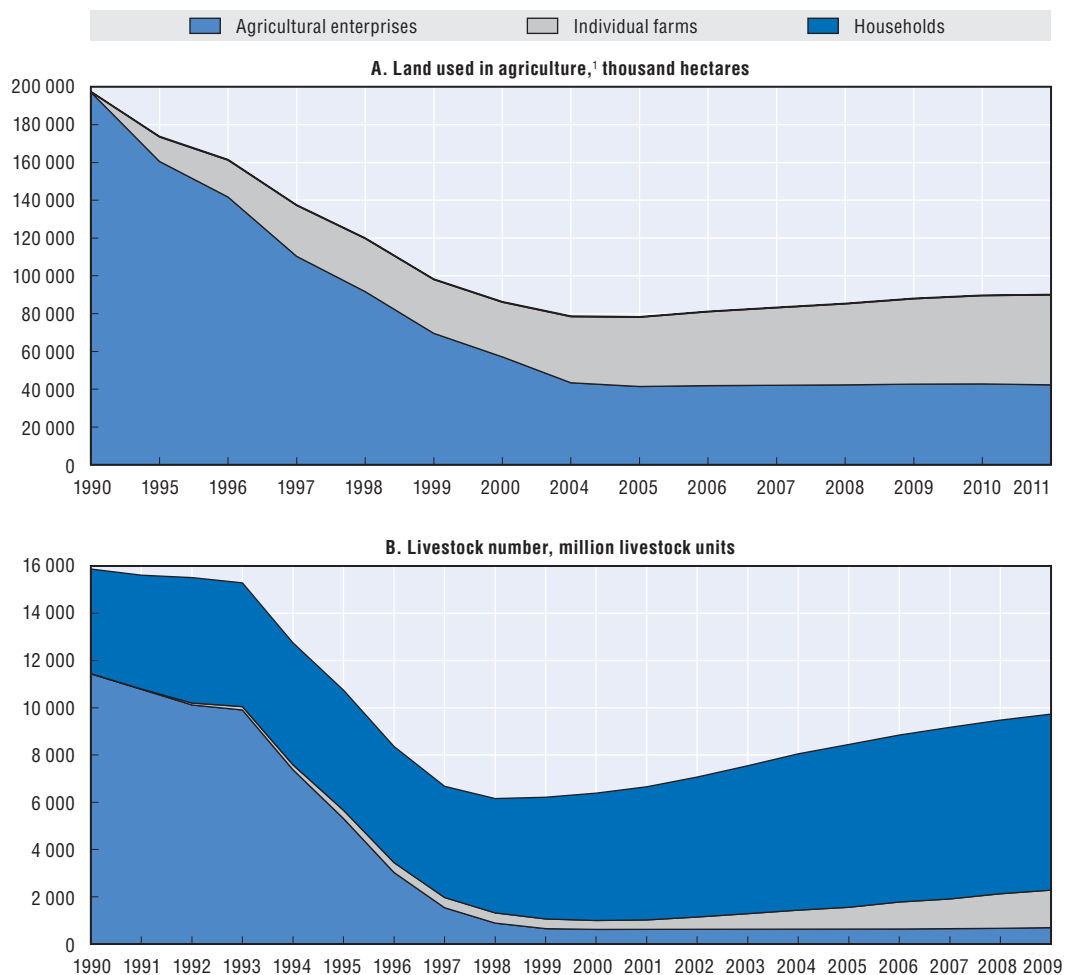
with the remaining land leased from the state (Table 1.A.12). The tax regime makes the rental of state lands more attractive. The rental payment is determined on the basis of a land tax, which is most likely undervalued (see section on tax concessions in Chapter 1). Furthermore, the tax regime allows individual farmers to pay a Single Land Tax of 0.1%-0.5% of the cadastral value of land with no further rental charges, i.e. a minimal price for land use which is guaranteed for 49 years. Agricultural enterprises also benefit from substantial concessions on land payments. Petrick et al. (2011) explain this situation by the fact that the state is not seeking to maximise its revenues (hence the low rents). The result is that the incentive to buy-out state land or cede it to other users is weak, to the extent that part of the leased land remains non-utilised. The attractiveness of land purchase is further reduced by complicated formal procedures, in addition that, due to the instability of previous land reforms, some producers lack confidence that property rights are secure. Apart from the weak incentives for land transfer through land market, the prohibition to sub-lease land makes short- and medium-term adjustments in land use outside the land market difficult (Petrick et al., 2012), although in practice some informal subleasing continues. The low mobility of agricultural land is an important impediment to re-allocating agricultural land to more efficient users.

Land reform and ownership restructuring of the former collective farm sector brought significant transformation of the farm structure. The number of active operations<sup>20</sup> that emerged from the former collective farms increased from under 5 000 in 1990 to 188 616 in 2012, of which 6 197 were units which maintained their collective organisation in various legal forms, called “agricultural enterprises” (average size just over 8 000 hectares), and 182 419 newly emerged individual farms (average size of 270 hectares).<sup>21</sup> The remaining 35 state farms were experimental stations. Alongside agricultural enterprises and individual farms, over 2 million rural households of 0.13 hectare on average are currently in operation, also an increase from the early 1990s (Table 1.2).

The reform of the farm structure was associated with a significant reduction in the factors employed in production, such as agricultural land and livestock, as well as substantial re-location of these factors across different types of farm (Figure 1.32). As far as agricultural land is concerned, little change occurred in the share occupied by households, which remains marginal, although its total area increased from 261 thousand hectares in 1990 to 301 thousand hectares in 2010. At the same time, a considerable reallocation took place between agricultural enterprises and individual farms. The share of the latter in total agricultural land utilised increased from 0.6% in 1990-92 on average to 52% in 2009-11. The most drastic shift in the factors concerned livestock inventories, which fell to marginal levels in the agricultural enterprises during the 1990s, leaving rural households the principal agricultural units that kept livestock. If in 1990-92 households kept slightly less than one-third of the total livestock inventory, this share rose to 80% in 2007-09. However, starting from the first half of the 2000s, a rapid increase in livestock numbers was observed in the individual farm sector, which began to gradually increase its share of the total livestock inventory.

The average farm size by region differs considerably (Figure 1.33). While the country average size of an agricultural enterprise in 2009 was 8 356 hectares, in Mangistau oblast it was 359 100 hectares. Although less extreme, other western and central regions had average sizes of agricultural enterprises above the national average (Atyrau, Aktobe, Karaganda and Kyzylorda) as did the northern wheat region (Kostanay, Akmola and

Figure 1.32. **Changes in the allocation of production factors across different farm type**



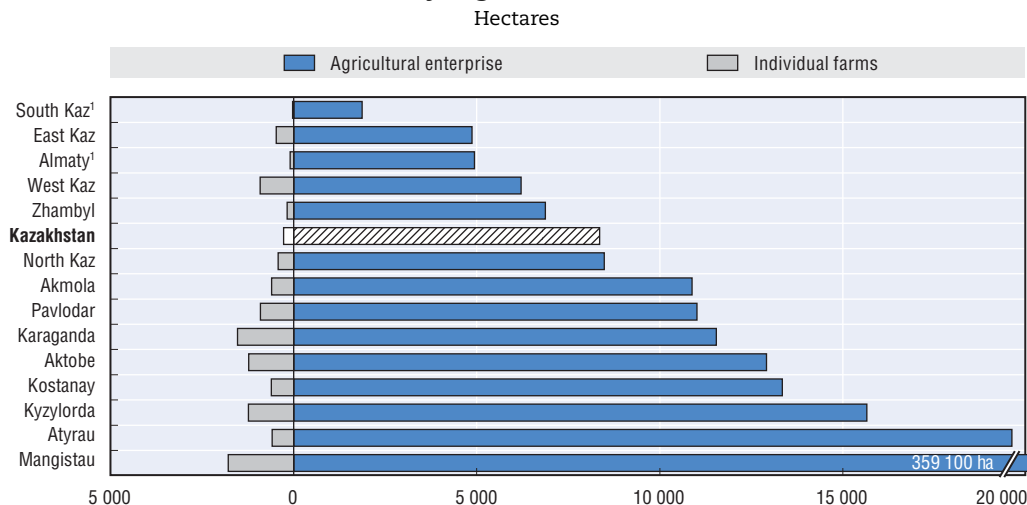
1. All land, including arable land, pasture, kay land and other land.

Source: Statistics Agency of the Republic Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932780855>

North Kazakhstan). At the other extreme are Zhambyl oblast (with an average agricultural enterprise of 6 878 hectares), Almaty (4 938 hectares), East Kazakhstan (4 872 hectares) and South Kazakhstan (1 869 hectares). Individual farms also have large regional variations in size, from 1 782 hectares in Mangistau to 29 hectares in South Kazakhstan and 95 hectares in Almaty oblast. In sum, the regional variations indicate that where economies of scale are more pronounced, farms are larger and agricultural enterprises more prevalent. Where economies of scale are less strong, e.g. in cotton and in the mixed farming of the southeast, individual farms have become the norm (Annex Table 1.A.10 and 1.A.11).

Figure 1.33. **Average land sizes of agricultural enterprises and individual farms by regions, 2009**



1. In 2009, average size of individual farm in South Kazakhstan was 29 hectares; 95 hectares in Almaty oblast; 1 500 hectares in Astana city area; and 29 hectares in Almaty city area.

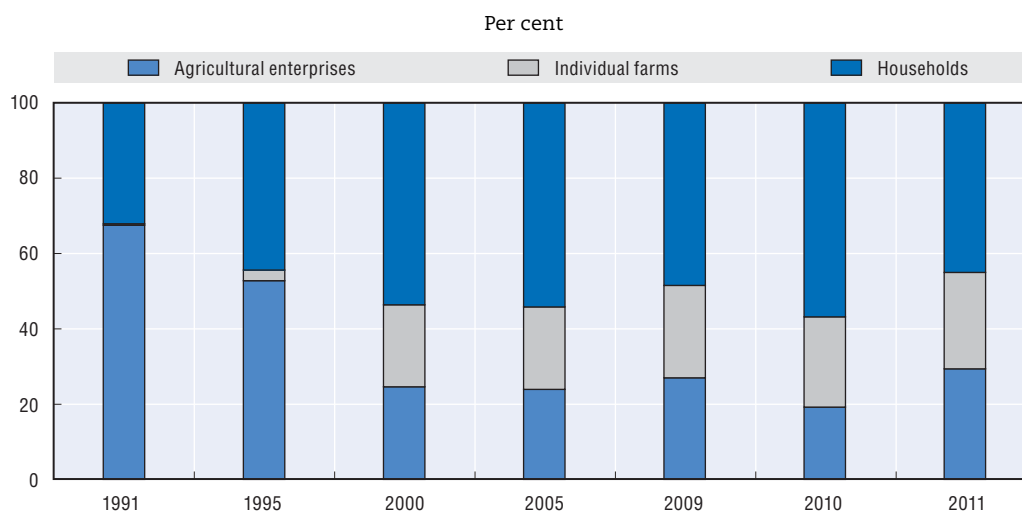
Source: Statistics Agency of the Republic Kazakhstan.

StatLink <http://dx.doi.org/10.1787/888932780874>

### Production structure by farm type

The transformation of the farm structure and relocation of production factors has reversed the relative importance of large-scale and small-scale production. Agricultural enterprises, producing almost two-thirds of total agricultural output in 1990 accounted for less than one-third in 2011, while the shares of the small-scale sector (individual farms and household plots) accordingly reversed from one-third to over two-thirds of total agricultural output between 1990 and 2009 (Figure 1.34).

Figure 1.34. **Shares of different farm types in total value of agricultural production, 1991-2011**

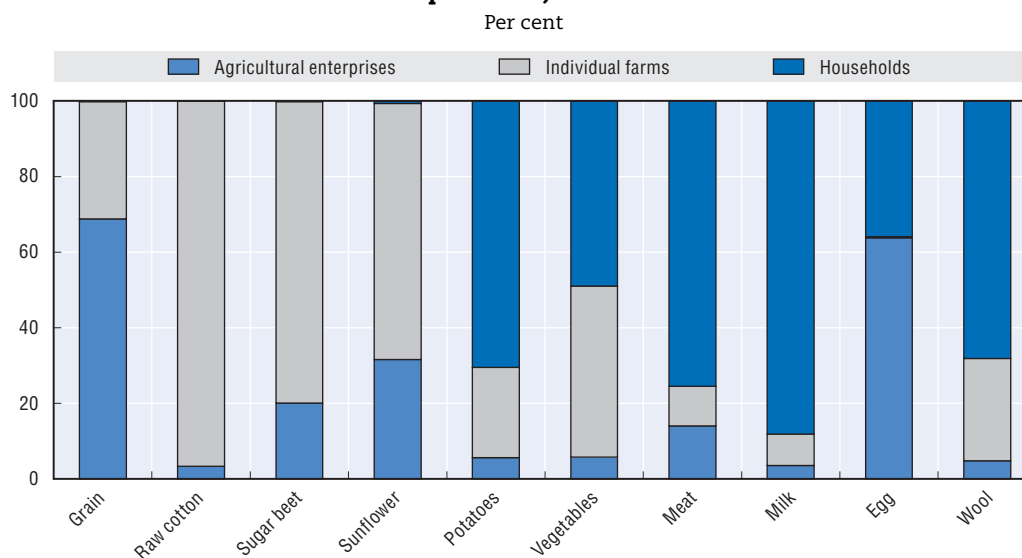


Source: Statistics Agency of the Republic of Kazakhstan.

StatLink <http://dx.doi.org/10.1787/888932780893>

The shares in total production above disguise significant variations in the contribution of different farm types to the output of specific products. As can be seen from Figure 1.35, agricultural enterprises are the dominant producers of grain (69% in 2011) and eggs (64%), while individual farms dominate in cotton (97%), sunflower seeds (68%) and sugar beet (80%). The remaining part of agriculture, i.e. livestock and horticulture, is concentrated in rural households. In 2011, they produced 88% of milk, 76% of meat, 71% of potatoes, 68% of wool, and 49% of vegetables.

Figure 1.35. **Shares of different farm types in total production of agricultural products, 2011**



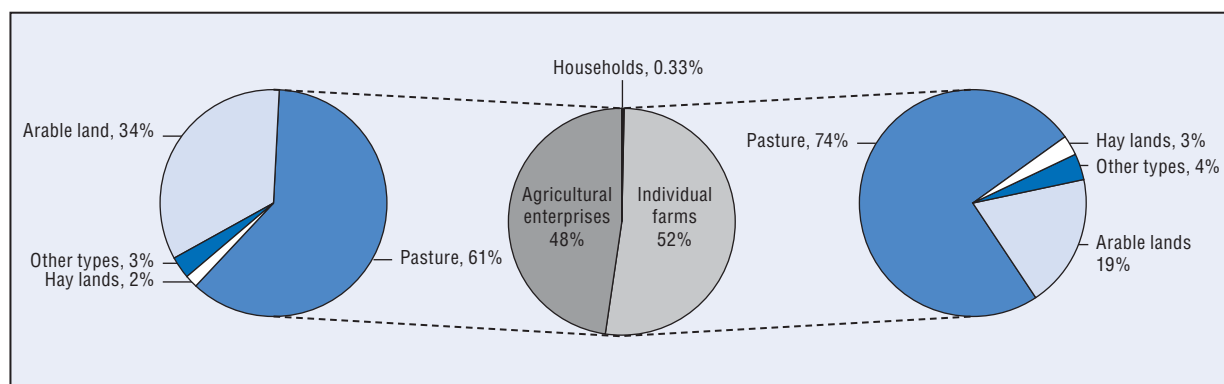
Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932780912>


There is a correlation between type of farm, land structure, and output mix. The breakdown of land use between pasture and arable land in agricultural enterprises and individual farms (Figure 1.36) illustrates this connection. Agricultural enterprises have a larger share of their total land classified as arable compared to individual farms and they exploit little of the available pasture, which is in part used by rural households through formal or informal arrangements. Individual farms dispose of smaller portions of arable land, with pastureland constituting almost three-quarters of their lands. This partly explains a relatively important and increasing contribution of individual farms to wool, milk and meat production (Chapter 3).

The production patterns can be better understood by recognising regional differences in production structure. Small-scale farming is concentrated in the south and south-east of the country. For example, Almaty, South Kazakhstan and Kyzylorda oblasts have distinctive agrarian sectors: Almaty oblast has mixed agriculture including substantial fruit and vegetable production for the country's largest city, Almaty, while South Kazakhstan specialises in cotton and Kyzylorda in rice. In contrast, the grain and the large livestock farms of the north and the oilseed farms of the northeast are characterised by more capital intensive techniques and stronger economies of scale. The rationale for

Figure 1.36. Land use by type of farm, 2010



Source: Agency on Management of Land Resources of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932780931>

breaking up large grain farms with substantial machinery and other equipment was less obvious in these regions, and the existing managers were best placed to maintain operations.

### **Trends in upstream and downstream sectors**

#### **Input sectors**

One of the biggest immediate consequences of the end of central planning, exacerbated by the dissolution of the Soviet Union, was the disruption of supply chains. This has often been invoked as the main cause for the deep transitional recession in the Soviet successor states during the 1990s.<sup>22</sup> Agricultural input industries, also felt the effects of a collapse of the previous support system which provided large transfers to these sectors, in particular to agricultural machinery and fertiliser industries. As supply chains and marketing channels were established during the transition to a market-based economy, several previous patterns returned but others not, and new supply chains and production and marketing practices emerged. For farmers in Kazakhstan, the major disruption in supplies were fertilisers and machinery, and to a lesser extent, seeds.

Kazakhstan is a substantial net importer of fertilisers, although a large share of domestic production is exported (between 39% and 78% in 2006-10). The main exporters of mineral fertilisers to Kazakhstan are Uzbekistan, Ukraine and Russia. Fertiliser consumption is supported by government subsidies. There are eight major domestic producers of mineral fertilisers, mainly situated in the south and south-east part of the country (Annex Table 1.A.13).

The equipment used in the agricultural sector is mostly imported. The share of domestically-produced agricultural machinery is about 1% (Table 1.4), and the few companies producing agricultural machinery are mainly joint ventures with Belorussia, Russia or China.


The agricultural sector is a major customer of leasing companies, which include Kazakh and foreign enterprises (Annex Table 1.A.14). In 2010, the value of tractors leased by agricultural producers was KZT 9 674 million (USD 65 million); machinery leasing was concentrated in the grain and oilseed oblasts of Akmola region (32.8%), East-Kazakhstan (30.8%), and Kostanay (13.8%). The total value of leased grain combine harvesters was



Table 1.4. **Manufacturing of agricultural machinery in Kazakhstan, 2006-10**

	Units				
	2006	2007	2008	2009	2010
Tractors	51	118	244	477	657
Seeders	3	0	0	11	150
Harvesting platforms	222	259	367	188	79
Mowers for tractors	0	0	0	0	2

Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932782090>


KZT 18 889 million (USD 128 million), with the north grain region accounting for over 80% of this value. In the late 1990s, the government introduced a state leasing programme which offers preferential leasing and taxation terms for producers (Chapter 2).

Kazakhstan is self-sufficient in seeds for most crops, and an exporter of commercial rice, sunflower, rape and flax seeds (Table 1.5). Production and use of high quality seeds is supported by a number of government subsidies (Chapter 2).

Table 1.5. **Production, import and export of seeds, 2010**

	Thousand tonnes							
	Potatoes	Maize	Rice	Sunflower	Soybeans	Sugar beet	Rapeseed	Flax
Production	2 554.6	462.0	373.1	328.9	113.9	152.0	109.2	94.6
Import	133.7	2.1	17.4	11.4	0.1	0.0	1.7	0.9
Export	1.2	6.5	42.6	19.0	2.3	0.0	30.7	26.7

Source: Statistics Agency of the Republic of Kazakhstan; Ministry of Agriculture.

StatLink  <http://dx.doi.org/10.1787/888932782109>

### Processing sector

At independence Kazakhstan had limited food processing capacity because much of its food output had been processed in other Soviet republics. Output volume of the food processing industry fell in every year from 1990 until 1999, except 1997. From 2000 to 2008, the annual average growth in processing of food products, including beverages and tobacco products, was 9.5%, and the value of production in 2008 was KZT 734 billion (USD 6 billion). The share of food processing, including beverages and tobacco products, in industrial output in 2008 was 7.2%. Despite a decrease in the number of processing enterprises between 2001 and 2010, the variety of products diversified.

Most branches of food-processing experienced a decline between 1990 and 1995, and recovery in the 2000s. Production of beverages, especially mineral water, fruit and vegetable juices and other non-alcoholic beverages, as well as cognac and beer, was expanding particularly fast. However, production volume of some foodstuffs in 2009 fell in comparison with 1990 and 1995, including previously important meat, dairy and grain products. Leather and wool production collapsed between 1990 and 2000 but have been recovering since then. Cotton ginning has been extremely volatile, falling from 99 297 tonnes in 1990 to 68 968 in 1995, peaking at 143 091 tonnes in 2005 and falling back to 97 062 tonnes in 2009.

Foreign investments in the agro-food sector of Kazakhstan have focused on the food processing industry. However, the number of active foreign-owned and joint-venture food-


processing enterprises decreased between 2001 and 2011 (Table 1.6). About 80% of foreign food processing entities are small enterprises; however, the share of medium and larger foreign enterprises has increased since 2001.

Table 1.6. **Agricultural food processing enterprises by type of ownership, 2001-11**  
Number

	Registered	Active enterprises			Private	Of which:	
		Total	State	Foreign		With state participation (no foreign participation)	Joint enterprises (with foreign participation)
2001	3 908	2 951	11	129	2 811	49	172
2002	4 125	2 945	11	143	2 791	36	172
2003	4 231	2 853	13	131	2 709	25	178
2004	4 279	2 843	11	140	2 692	19	179
2005	4 285	2 866	7	155	2 704	12	190
2006	4 306	2 496	6	123	2 367	8	156
2007	..	..	..	..	..	..	..
2008	4 404	2 310	3	130	2 177	7	138
2009	4 495	2 179	3	128	2 048	6	118
2010	4 109	2 136	2	129	2 005	3	112
2011	4 119	2 008	2	118	1 888	3	107

..: Not available.

Source: Statistical Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932782128>

### Wholesale and retail enterprises

The wholesale turnover of the main agricultural commodities in Kazakhstan has grown continuously since 1995. No complete official data exist on the total number of wholesale enterprises, as not all of them are registered. Among the registered wholesale enterprises, the largest number is engaged in purchase and sales of grain, sunflower, and vegetables.

On 1 January 2011, there were 258 granaries with a storage capacity of 14 771 thousand tonnes, including 229 licensed elevators with a storage capacity of 14 128 thousand tonnes (Annex Table 1.A.15) The majority of flour mills are concentrated in the northern wheat region (40%), in Karaganda and South Kazakhstan oblasts where another 25% are located. Despite the significant potential for flour milling, only 35-40% of available capacity is used.

Many producers supply their output to a nearby storage or processor facility, such as grain elevators, abattoirs, oil processing plant or gins, which is often the only marketing channel, especially given the poor condition of the local roads and transport. A recurring issue in post-independence Kazakhstan has been the degree of monopsony power exercised by the purchasers of agricultural products. At the same time, intermediaries often provide multiple functions, playing an important role in compensating for incomplete markets, e.g. for credit or for seeds, and other inputs. In some cases, traders act as intermediaries to reduce the dependence of grain or cotton farmers on a monopsonist elevator or gin owner, or to help identify options such as direct sale of grain to flour mills depending on the state of the export market (see Chapter 3).

Direct links from modern retail enterprises to farmers remain limited, with bazaars and local shops still dominating. The Turkish chain Ramstore and Russian Vester entered

the market in 1999 and 2008 respectively, and the German chain Metro set up wholesale operations in 2009, while locally-owned supermarkets have expanded substantially, although such operations remain restricted to the main cities (Nuttall, 2010). The Almaty supermarkets have set up some supply chains, especially with dairy producers in nearby regions of the Kyrgyz Republic, and play a role in ensuring quality control and guaranteed purchases from contracted suppliers.<sup>23</sup> Such patterns can be expected to become increasingly important for farmers in Kazakhstan as local and foreign supermarkets expand their operations.<sup>24</sup>

## Notes

1. It should be emphasised that with hyperinflation and rapid change in the product mix, all macroeconomic data up to 1995 must be treated with caution.
2. The targets for 2015 include the following: 80% of construction materials to be provided by building materials produced in Kazakhstan; domestic oil refineries will satisfy the country's fuel requirements; exports of metallurgical goods will double; and production of chemical goods will triple from 2009 levels. It is expected that real gross domestic product (GDP) in 2020 will have increased by not less than a third compared to 2009, the unemployment rate will not exceed 5%, and that inflation up to 2020 will be in the range of 5-8%. By 2020 all children in both urban and rural areas will be provided with pre-school education, vocational and technical education will be based on professional standards and linked to the needs of employers, infant and maternal mortality rates will be halved, and the overall mortality rate will decrease by 30%. Tuberculosis will be cut by a fifth, and life expectancy will increase from 68 to 72 years.
3. At the end of 2009, Samruk-Kazyna reported it had received KZT 1 087.5 billion from the National Fund in order to safeguard the economy, of which KZT 486 billion were directed towards stabilising the financial sector, KZT 360 billion the real estate market, KZT 120 billion to support of small and medium enterprises, and KZT 121.5 billion towards the implementation of innovative industrial and infrastructure projects (IMF, 2009).
4. The EBRD Transition Indicators are on a scale from 1 (little change from the centrally planned economy) to 4+ (standards and performance typical of advanced industrial economies) in nine categories. The 2010 indicators for Kazakhstan are: small-scale privatisation 4, price liberalisation 4, trade and forex system 4-, large-scale privatisation 3, competition policy 3, banking and interest rates 3-, non-bank financial intermediaries 3-, infrastructure 3-, and enterprise restructuring 2 (EBRD, 2010).
5. This was already visible in the 2002 household survey data analysed in Najman et al. (2008). Pensioners were protected in the 1990s by the state pension. This was replaced in 1997 by individual accounts, which is creating some inequities, as people in marginal or unofficial work are not accumulating adequate funds.
6. Milanovic's estimates are based on Household Budget Survey income measures. Although there are some differences in timing of the 1993-95 data, the surveys are mostly based on a common Soviet era methodology. The poverty line is 120 international dollars per capita per month, i.e. in constant units at purchasing power parity. Only Moldova (66%) and the Kyrgyz Republic (88%) ranked below Kazakhstan in 1993-95 (Milanovic, 1998).
7. This analysis (by Anderson and Pomfret, 2003) draws on the 1996 Living Standards Measurement Study household survey, which was the only high quality household survey of the 1990s. The big losers from transition were households with small children and whose heads had not completed secondary school or had vocational training, whereas the biggest beneficiaries included households with college-educated women. These correlates of household expenditure meant that poverty was highest in the south where families were larger and education levels lower.
8. Agricultural employment figures were first revised in 1999 in connection with the introduction of the new classification of the economic sectors. Another change followed in 2001; in accordance with the the ILO methodology, persons involved in agricultural activity within rural households were included in the self-employed category.
9. According to the Statistics Agency of Kazakhstan, prices of inputs used in agriculture increased 18 times in 1992, while output prices rose 10 times; 18 times and 8 times respectively in 1993, and 29 times and 19 times respectively in 1994. Green and Vokes (1997) report ADB estimates that a

tractor cost 76 tonnes of wheat in 1990 and 310 tonnes in 1995, while the cost of a combine harvester went from 50 to 580 tonnes of wheat, and the relative price of fuel tripled over the same period.

10. In a survey of 160 rural households in Akmola oblast, Dudwick et al. (2007) found that about half of their income came from wage and salary payments, a fifth from pensions, 15% from their household plot, and the remaining 15% from a variety of other sources.
11. Data on the cotton sector should be interpreted with care due to extensive smuggling from Uzbekistan and, to a lesser extent, Turkmenistan where the regulated farm-gate prices are much lower than in Kazakhstan. Sadler (2006) reports estimates that smuggled cotton from Uzbekistan accounted for between a quarter and a half of Kazakhstan's reported cotton output in the early 2000s, which implies that a substantial share of reported cotton exports were re-exports.
12. Up to 90% of water flow occurs in spring. Surface water resources are more abundant in the east (34.5%) and southeast (24.1%), less abundant in the south (21.2%), which relies on irrigated agriculture, and the west (13.4%), and least in the arid areas of the north (4.2%) and centre (2.6%).
13. Operation and maintenance of on-farm irrigation, formerly handled by collective farms, has been neglected due to lack of funds, and inter-farm systems also experience difficulties due to staff cuts and inadequate funding. Much of the agricultural drainage is no longer functioning properly due to deficiencies in design, construction, and maintenance.
14. "Dacha" is the term for seasonal or year-round second homes of urban dwellers, typically located in city exurbs.
15. Lands used for defense purposes, lands of forest and water funds, protected natural areas, lands with natural objects that have special ecological, scientific, historic, and cultural value, health and recreation localities, as well as public-access lands in the centres of population.
16. When farms went bankrupt during the second half of the 1990s, farmers, mechanics and others in the rural economy received land or equipment in lieu of wages. Gray (2000) and Petrick et al. (2011) describe the bankruptcy process.
17. USAID (2005) describes and analyses the 2003 Land Code. Csaki et al. (2006) provide a comparative analysis of agrarian reform in formerly centrally planned economies, in which they include Kazakhstan among the "moderate reformers".
18. A group of some fifteen very large grain holdings had also emerged by the mid-2000s, which account for a significant part of grain exports from Kazakhstan, but exact share is difficult to estimate. Three agroholdings (KazExportAsty, Atameken-Agro and Alibi) became public companies and issued bonds to finance their operations. Exact data on the sizes of agroholdings are not available, however some estimates indicate that the biggest agroholding controls more than 1 million hectares and at least 10 agroholdings operate arable land of more than 100 000 hectares each.
19. It is important to note that the category "land designated for agricultural use" differs from the category "total agricultural land". Thus, as of 1 November 2011, Kazakhstan's total agricultural land was 222 million hectares, whereas "land designated for agricultural use" was 94 million hectares. A large part of agricultural land, predominantly pastureland, was located in the Land Reserve, Forest and Water Reserves, in special protected areas, urban and rural settlements, and industrial and transport entities.
20. Official statistics distinguish between "registered" and "active" agricultural entities. As of the end of 2011, the number of registered agricultural enterprises and individual farms totalled 214 008, of which 188 616 were active entities.
21. According to the Ministry of Agriculture, the rapid increase in the number of individual farms can be explained by the tax incentives which led to a large number of agricultural enterprises to re-register as individual farms.
22. The most influential statement of this hypothesis was by Olivier Blanchard (1998), and Blanchard and Kremer (1997).
23. The company Ordabasy Kus produces turkey meat and processed products from turkey meat. Every month Ordabasy Kus sells about 30 tonnes of turkey meat to Metro Cash and Carry and to supermarkets in Almaty and Astana.
24. Metro opened stores in Almaty, Shymkent and Karaganda in 2010 and 2011 and announced plans to invest EUR 300 million in opening 10-15 stores in Kazakhstan. In late 2010 the government announced that it planned to increase the share of large chain stores in retail revenue from a

current 10-15% to 50% by 2014. See Metro Opens Second Store in Kazakhstan, *Silk Road Intelligencer*, 30 September 2010 – available at <http://silkroadintelligencer.com/2010/09/30/metro-opens-second-store-in-kazakhstan/>.

## References

- Anderson, K. and R. Pomfret (2003), *Consequences of Creating a Market Economy: Evidence from Household Surveys in Central Asia*, Edward Elgar, Cheltenham, UK.
- Baydildina, A., A. Alishinbay and M. Bayetova (2000), “Policy reforms in Kazakhstan and their implications for policy research needs”, in S. Babu and A. Tashmatov (eds.), *Food Policy Reforms in Central Asia*, International Food Policy Research Institute, Washington, DC, pp. 177-92.
- Blanchard, O. (1998), *The Economics of Post-Communist Transition*, Clarendon Press, Oxford.
- Blanchard, O. and M. Kremer (1997), Disorganization, *The Quarterly Journal of Economics* 112(4), pp. 1091-1126.
- BP (2011), *Statistical Review of World Energy 2011*, [www.bp.com](http://www.bp.com).
- Csaki, C., H. Kray and S. Zorya (2006), “The agrarian economies of Central-Eastern Europe and the Commonwealth of Independent State: An update on status and progress in 2005”, *ECSSD Environmentally and Socially Sustainable Development Working Paper No. 46*, World Bank, Washington, DC.
- de Broeck, M. and K. Kostial (1998), *Output Decline in Transition: The Case of Kazakhstan*, *IMF Working Paper WP/98/45*, International Monetary Fund, Washington, DC.
- Dudwick, N., K. Fock and D. Sedik (2007), “Land reform and farm restructuring in transition countries: The experience of Bulgaria, Moldova, Azerbaijan, and Kazakhstan”, *World Bank Working Paper # 104*, [www.wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/06/11/000090341\\_20070611133815/Rendered/PDF/399770ECA0Land101OfficialUseOnly1.pdf](http://www.wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/06/11/000090341_20070611133815/Rendered/PDF/399770ECA0Land101OfficialUseOnly1.pdf).
- Dudwick, N., K. Fock and D. Sedik (2005), “A stocktaking of land reform and farm restructuring in Bulgaria, Moldova, Azerbaijan and Kazakhstan”, paper prepared for the Environmentally and Socially Sustainable Development section, Europe and Central Asia Region, World Bank, Washington, DC, [www.wds.worldbank.org/servlet/WDSContentServer/IW3P/IB/2006/10/27/000310607\\_20061027111851/Rendered/INDEX/378460ECA0Stocktaking0June2005.txt](http://www.wds.worldbank.org/servlet/WDSContentServer/IW3P/IB/2006/10/27/000310607_20061027111851/Rendered/INDEX/378460ECA0Stocktaking0June2005.txt).
- EBRD (2010), *EBRD Transition Indicators*, [www.ebrd.com/pages/research/economics/data/macro.shtml](http://www.ebrd.com/pages/research/economics/data/macro.shtml).
- Government of Kazakhstan (2002), *The State Agricultural and Food Programme of the Republic of Kazakhstan for 2003-2005*, Astana.
- Gray, J. (2000), “Kazakhstan: A review of farm restructuring”, *World Bank Technical Paper No. 458*, World Bank, Washington, DC.
- Heidelberg, O. and R. Bokusheva (2009), “Crop insurance market development in a transition economy: The case of Kazakhstan”, paper presented at the International Association of Agricultural Economists Conference, Beijing, 16-22 August, [http://ageconsearch.umn.edu/bitstream/51614/2/iaae09\\_heidelberg\\_bokusheva.pdf](http://ageconsearch.umn.edu/bitstream/51614/2/iaae09_heidelberg_bokusheva.pdf).
- IMF (2009), “Republic of Kazakhstan”, *IMF Staff Report for the 2009 Article IV Consultation*, 18 June 2009.
- JERP (2006), “Kazakhstan – Agricultural policy assessment”, *Joint Economic Research Program*, The World Bank and the Government of Kazakhstan in Collaboration with USAID and FAO.
- Jungbluth, F. and T. Schillhorn Van-Veen (2004), “Kazakhstan’s livestock sector supporting its revival”, *World Bank Working Paper*, Report prepared under the Joint Economic Research Program of the World Bank and the Republic of Kazakhstan, Washington, DC, The World Bank.
- Lerman, Z. and D. Sedik (2009), *Agricultural Recovery and Individual Land Tenure: Lessons from Central Asia*, FAO Regional Office for Europe and Central Asia, Policy Studies on Rural Transition No. 2009-3, Food and Agriculture Organisation, Rome.
- Lerman, Z., C. Csaki and G. Feder (2004), *Agriculture in Transition: Land Policies and Evolving Farm Structures in Post-Soviet Economies*, Lexington Books, Lanham MD.
- Liefert, W. and O. Liefert (2012), “Russian agriculture during transition: Performance, global impact, and output”, *Applied Economic Perspectives and Policy* 34(1) (forthcoming).
- Liefert, W. et al. (2011), “Former Soviet Union region to play larger role in meeting world wheat needs”, USDA.

- Melyukhina, O. (2003), "Policy and non-policy sources of agricultural price distortions: Evidence from the measurement of support in selected transition economies", in *Agricultural Trade and Poverty: Making Policy Analysis Count*, OECD, Paris, pp. 119-39.
- Milanovic, B. (1998), *Income, Inequality, and Poverty during the Transition from Planned to Market Economy*, World Bank, Washington, DC.
- Ministry of Finance of the Republic Kazakhstan, [www.minfin.kz](http://www.minfin.kz).
- Najman, B., R. Pomfret and G. Raballand (2008), *The Economics and Politics of Oil in the Caspian Basin: The Redistribution of Oil Revenues in Azerbaijan and Central Asia*, Routledge, London.
- Nuttall, C. (2010), "Kazakh supermarkets stake their claims, silk road intelligencer", 6 May, <http://silkroadintelligencer.com/2010/05/06/kazakh-supermarket-chains-stake-their-claims/>.
- OECD (2011a), *Agricultural Policy Monitoring and Evaluation 2011: OECD Countries and Emerging Economies*, OECD Publishing, Paris.
- OECD (2011b), *Agricultural Policy: Monitoring and Evaluation*, OECD Publishing, Paris.
- OECD (2011c), *PSE/CSE Database*, OECD Publishing, Paris.
- Petrick, M., J. Wandel and K. Karsten (2012), "Rediscovering the Virgin Lands: Agricultural investment and rural livelihoods in a Eurasian frontier area", *World Development*, forthcoming.
- Petrick, M., J. Wandel and K. Karsten (2011), "Farm restructuring and agricultural recovery in Kazakhstan's grain region: An update", *IAMO Discussion Paper No. 137*, Leibniz Institute of Agricultural Development in Central and Eastern Europe, Halle, Germany.
- Pomfret, R. (2008a), "Kazakhstan", in K. Anderson and J. Swinnen (eds.), *Distortions to Agricultural Incentives in Europe's Transition Economies*, World Bank, Washington, DC, pp. 219-63.
- Pomfret, R. (2008b), "Tajikistan, Turkmenistan and Uzbekistan", in K. Anderson and J. Swinnen (eds.), *Distortions to Agricultural Incentives in Europe's Transition Economies*, World Bank, Washington, DC, pp. 297-338.
- Pomfret, R. (2006), *The Central Asian Economies since Independence*, Princeton University Press, Princeton, NJ.
- Pomfret, R. (2002), "State-directed diffusion of technology: The mechanization of cotton-harvesting in Soviet Central Asia", *Journal of Economic History*, 62(1), pp. 170-88.
- Sadler, M. (2006), "Vertical coordination in the cotton supply chains in Central Asia", in J. Swinnen (ed.), *The Dynamics of Vertical Coordination in Agrifood Chains in Eastern Europe and Central Asia – Environmentally and Socially Sustainable Development, Europe and Central Asia Region*, Working Paper No. 42, World Bank, Washington, DC, pp. 73-114.
- Sarsenbekov, T. and S. Ahmetov, "Report on the regional water partnership (Republic of Kazakhstan)", <http://gwp-cacena.org/en/pdf/kazakhstan.pdf>.
- Schillhorn van Veen, T., I. Alimaev and B. Utkelov (2005), "Kazakhstan: Rangelands in transition: The resource, the users and sustainable use", *Technical Paper No. 31384*, Europe and Central Asia Environmentally and Socially Sustainable Development Series, World Bank, Washington, DC.
- Serova, E. (2004), "Overview of the food and agricultural policy in the Republic of Kazakhstan", unpublished report prepared for the World Bank, Washington, DC.
- Statistics Agency of the Republic Kazakhstan (2011), *Kazakhstan in Figures*, On-line database, [www.stat.kz](http://www.stat.kz).
- Statistics Agency of the Republic Kazakhstan (2009), *Environment Protection and Sustainable Development of Kazakhstan*, 2009, p. 54.
- Swinnen, J. and L. Vranken (2005), "The development of rural land markets in transition countries", Katholieke Universiteit Leuven, <https://lirias.kuleuven.be/bitstream/123456789/118891/1/swinnen.pdf>.
- UN COMTRADE Database, <http://comtrade.un.org/db/default.aspx>.
- UNCCD (2006), *Central Asian Countries Initiative for Land Management: National Programming Framework for the Republic of Kazakhstan (United Nations Convention to Combat Desertification)*, [www.adb.org/Projects/CACILM/kazakhstan.pdf](http://www.adb.org/Projects/CACILM/kazakhstan.pdf).
- USAID (2005), "Assessment of the implementation of the interim provisions, land code", Final report, United States Agency for International Development, Kazakhstan.
- Van Engelen, A. (2011), *Dairy Development in Kazakhstan*, Food and Agricultural Organisation, Rome.

- Wandel, J. (2009), "Agroholdings and clusters in Kazakhstan's agro-food sector", *IAMO Discussion Paper* No. 126, Leibniz Institute of Agricultural Development in Central and Eastern Europe, Halle, Germany.
- Weber, G. (2003), "Russia's and Kazakhstan's agro-food sectors under liberalised agricultural trade: A case for national product differentiation", *Economic Systems* 27, pp. 391-413.
- World Bank (2011), *World Development Indicators Database*, <http://databank.worldbank.org/ddp/home.do?Step=1&id=4>.
- World Bank (2009), *Kazakhstan: Public Expenditure and Institutional Review for the Agricultural Sector*, World Bank, Washington, DC, International Monetary Fund, *World Economic Outlook Database*, September 2011, [www.imf.org/external/pubs/ft/weo/2011/02/weodata/index.aspx](http://www.imf.org/external/pubs/ft/weo/2011/02/weodata/index.aspx).
- World Bank (2007), "Integrating environment into agriculture and forestry progress and prospects in Eastern Europe and Central Asia", Volume II, *Kazakhstan Country Review*, November. [www.worldbank.org/eca/pubs/envint/Volume%20II/English/Review%20KAZ-final.pdf](http://www.worldbank.org/eca/pubs/envint/Volume%20II/English/Review%20KAZ-final.pdf).
- World Bank (1992), "Kazakhstan, country economic memorandum", Report No. 10976-KK, Vol. I and II, Washington, DC, World Bank, November.

## ANNEX 1.A

*Statistical annex*

Table 1.A.1. **Producer prices received for agricultural commodities, 1994-2011**  
KZT per tonne

	Wheat	Sunflower seeds	Potatoes	Cattle	Milk	Eggs <sup>1</sup>
1994	2 013	4 261	7 062	7 792	2 134	1 099
1995	4 504	11 315	12 467	22 817	8 672	3 364
1996	7 859	13 877	17 512	35 003	12 242	5 480
1997	7 244	13 998	15 649	44 207	15 586	5 482
1998	5 653	16 395	13 668	50 797	17 635	5 534
1999	6 039	18 696	15 488	67 852	17 935	4 678
2000	9 812	16 789	18 419	73 769	18 532	5 316
2001	11 322	18 933	16 481	91 642	19 592	5 780
2002	9 678	25 773	15 712	103 603	19 565	5 532
2003	12 068	24 060	20 879	111 349	19 754	5 956
2004	14 565	25 123	20 985	122 034	22 344	7 113
2005	12 896	26 211	21 938	140 709	24 642	8 335
2006	12 252	27 359	26 831	158 606	26 674	8 926
2007	16 778	29 266	34 541	172 816	30 984	10 201
2008	26 983	40 504	44 524	212 564	41 256	12 576
2009	25 665	42 369	46 310	253 817	42 703	11 302
2010	21 830	43 599	45 059	276 294	47 555	11 293
2011	28 995	66 685	60 450	327 427	63 180	11 864

1. Price per thousand pieces.

Source: Statistics Agency of the Republic of Kazakhstan.


StatLink  <http://dx.doi.org/10.1787/888932781691>



Table 1.A.2. **Investments in fixed capital in agriculture, 1995-2011**  
KZT billion in current prices

	Total investment	Of which: In agriculture
1995	223.0	8.0
1996	119.0	5.3
1997	187.5	2.8
1998	264.2	0.9
1999	369.1	1.4
2000	595.7	5.9
2001	943.4	16.2
2002	1 100.0	17.3
2003	1 327.9	25.5
2004	1 703.7	34.6
2005	2 420.9	48.0
2006	2 824.5	47.1
2007	3 392.1	56.0
2008	4 210.9	77.8
2009	4 585.3	77.5
2010	4 653.5	83.6
2011	4 985.9	107.4

Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932781710>

Table 1.A.3. **Capital investments in agriculture, 2010**  
KZT million

	Fixed capital investment in agriculture	Of which: Financed by				
		Republican budget	Regional budget	Equity capital	Foreign investment	Borrowed capital
Agriculture, forestry and fishery	107 416	936	1 087	80 786	1 879	22 728
Seasonal crops	66 572	589	537	57 201	-	8 246
Perennial crops	64	-	9	30	-	26
Food production for nurseries	161	-	113	47	-	-
Livestock farming	29 241	182	8	16 040	-	13 011
General agricultural farming	6 630	-	-	5 481	-	1 150
Supporting activities for agricultural crops	2 579	24	395	1 876	-	284
Hunting and catching	1 962	-	-	82	1 879	-
Forestry and logging operations	21	-	-	11	-	10
Fisheries and aquaculture	186	142	25	18	-	1

-: Absolute zero.

Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932781729>

Table 1.A.4. **End-year stock of agricultural machinery in agricultural enterprises, 1990-2011**

	Units													
	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2007	2008	2011
Tractors without installed machinery	220 087	170 185	142 383	131 620	124 562	120 104	121 086	120 724	125 463	128 490	129 411	137 213	158 230	153 485
Tractors with installed machinery	23 246	14 058	11 064	7 605	3 864	2 895	..	..	..	..	..	..	..	..
Harvesting platforms	41 949	28 626	24 112	17 855	17 212	16 727	16 684	15 521	15 436	15 315	15 180	15 378	14 738	15 048
Tractor ploughs	48 747	39 513	31 557	31 403	31 245	30 960	26 391	24 273	21 102	22 400	22 570	25 167	25 215	25 157
Cultivators	56 561	34 833	28 990	21 122	20 964	20 876	18 522	18 461	17 627	18 200	18 465	19 408	19 495	19 411
Grain seeders	164 101	119 058	103 959	96 411	91 620	86 916	80 030	79 920	81 430	81 983	82 919	91 056	91 340	89 260
Corn seeders	12 837	7 901	6 341	4 216	2 295	1 454	..	..	..	..	..	..	..	..
Grain harvesters	88 981	61 868	53 918	48 062	43 863	41 834	41 305	41 812	40 960	39 678	41 093	45 454	46 354	47 197
Corn harvesters	2 069	1 590	1 185	851	703	531	373	360	364	257	221	..	99	137
Forage harvesters	15 609	11 896	10 414	7 342	3 898	2 416	2 125	1 581	1 388	1 255	1 151	..	712	..
Potato harvesters	747	948	681	514	338	212	203	180	185	168	144	..	131	286

... Not available.


Source: Ministry of Agriculture of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932781748>

Table 1.A.5. **Area planted to main agricultural crops, 1990-2012**

	Thousand hectares										
Total	Cereal crops (including rice) and bean crops	Oil plants	Including sunflower	Raw cotton	Potatoes	Field vegetables	Food melons	Sugar beet	Tobacco	Forage crops	
1990	35 182.1	23 355.9	266.5	136.9	119.7	205.9	70.8	35.8	43.6	11 065.5	
1991	34 935.5	22 752.5	303.2	189.5	116.6	216.8	75.1	38.1	45.6	3.0	11 371.9
1992	34 839.9	22 595.8	462.1	297.9	112.2	246.9	83.3	39.8	85.1	2.6	11 203.1
1993	34 060.4	22 250.4	430.4	270.8	110.5	243.9	74.0	26.3	68.6	2.9	10 847.2
1994	31 662.4	20 710.3	434.2	281.8	110.9	218.3	73.4	24.8	56.2	2.6	10 026.1
1995	28 679.6	18 877.7	548.6	346.2	109.7	205.9	76.1	27.7	40.8	1.9	8 788.9
1996	25 644.1	17 187.6	487.2	335.8	106.0	189.4	79.8	31.6	32.4	1.5	7 526.0
1997	21 843.7	15 651.4	333.5	293.9	103.6	176.3	87.1	28.9	13.5	1.4	5 445.7
1998	18 610.4	13 526.7	338.6	224.7	118.0	169.9	96.5	41.5	17.6	5.1	4 294.1
1999	15 285.3	11 392.5	384.2	262.6	141.3	156.3	96.1	38.8	19.0	4.7	3 050.8
2000	16 195.3	12 438.2	448.2	313.9	151.8	160.3	102.6	38.8	22.5	7.3	2 823.7
2001	16 785.2	13 208.7	347.5	253.5	184.9	164.6	107.7	41.4	19.9	8.0	2 701.7
2002	17 756.3	14 022.7	409.6	321.2	170.9	163.0	108.7	47.0	19.8	7.4	2 805.5
2003	17 454.2	13 872.6	631.9	446.0	199.9	166.9	110.2	42.2	22.2	7.4	2 399.3
2004	18 036.4	14 278.0	665.0	457.6	223.7	168.2	111.3	43.6	22.3	6.8	2 515.8
2005	18 445.2	14 841.9	669.7	454.5	204.2	168.2	110.8	43.4	17.5	7.6	2 380.6
2006	18 369.1	14 839.8	751.4	492.6	200.1	153.9	103.0	42.0	14.4	6.9	2 255.6
2007	18 954.5	15 427.9	672.8	365.7	206.1	155.5	104.2	38.8	13.7	4.9	2 329.0
2008	20 119.2	16 190.1	913.7	579.7	178.6	163.7	112.9	55.9	13.1	4.2	2 486.2
2009	21 424.9	17 206.9	1 186.1	723.0	139.8	170.3	110.6	52.4	10.6	4.0	2 535.8
2010	21 438.7	16 619.1	1 748.1	869.3	137.2	179.5	120.3	63.3	11.2	1.6	2 555.6
2011	21 083.0	16 219.4	1 816.2	954.5	160.6	184.4	128.7	67.7	18.2	1.2	2 484.3
2012	21 494.8	16 244.0	1 842.7	791.2	147.8	189.8	128.0	81.7	19.1	1.3	2 840.3

Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932781767>

**Table 1.A.6. Output of main agricultural crops, 1990-2011**  
 Thousand tonnes

	Grain (including rice and pulses), Bunker weight	Oil crops	Sunflower	Sugar beet	Potatoes	Vegetables	Food melons
1990	28 487.7	229.8	126.3	1 043.7	2 324.3	1 136.4	301.5
1991	11 991.9	154.8	93.4	673.8	2 143.2	954.9	302.7
1992	29 771.7	235.4	98.5	1 160.1	2 569.7	985.1	288.3
1993	21 631.0	172.0	85.5	842.7	2 296.3	808.0	182.3
1994	16 454.1	183.5	96.8	432.7	2 040.2	781.2	146.1
1995	9 505.5	162.0	98.7	371.0	1 719.7	779.7	162.3
1996	11 237.3	110.5	64.3	340.7	1 656.5	778.0	181.8
1997	12 378.0	101.5	54.5	127.9	1 472.2	879.7	181.1
1998	6 395.5	132.0	83.2	224.9	1 262.9	1 079.2	305.6
1999	14 264.3	159.3	104.3	293.9	1 694.7	1 287.1	369.6
2000	11 565.0	140.1	104.6	272.7	1 692.6	1 543.6	421.6
2001	15 896.9	187.1	149.1	282.4	2 184.8	1 782.0	519.2
2002	15 959.9	257.1	189.8	372.2	2 268.8	1 857.0	628.8
2003	14 777.4	436.3	292.6	423.6	2 308.3	1 938.3	603.8
2004	12 374.2	395.8	265.6	397.9	2 260.7	2 059.3	667.0
2005	13 781.4	439.7	267.3	310.8	2 520.8	2 168.7	683.8
2006	16 511.5	458.9	268.0	339.0	2 361.6	2 059.2	697.4
2007	20 137.8	459.4	205.8	309.4	2 414.8	2 196.4	661.8
2008	15 578.2	414.0	185.8	130.2	2 354.4	2 280.0	869.7
2009	20 830.5	703.6	367.9	181.3	2 755.6	2 457.2	852.3
2010	12 185.2	775.4	328.9	152.0	2 554.6	2 576.9	1 118.2
2011	26 960.5	1 141.9	409.1	200.4	3 076.1	2 877.7	1 248.0

Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932781786>

Table 1.A.7. **Production of livestock products, 1990-2011**

	Meat (slaughter weight)	Milk	Wool (gross weight)	Eggs	Karakul
	Thousand tonnes	Thousand tonnes	Thousand tonnes	Million	Thousand pieces
1990	1 559.6	5 641.6	107.9	4 185.1	1 821.4
1991	1 524.4	5 556.9	104.4	4 075.3	1 821.4
1992	1 257.5	5 265.1	96.4	3 564.7	1 994.5
1993	1 311.5	5 576.5	94.6	3 288.2	1 879.3
1994	1 206.7	5 296.0	75.3	2 629.3	1 950.9
1995	984.8	4 619.1	58.3	1 840.8	1 145.2
1996	836.7	3 627.1	42.2	1 262.4	1 033.4
1997	717.4	3 334.5	34.6	1 265.8	361.2
1998	636.3	3 364.3	25.2	1 388.4	214.3
1999	634.9	3 535.2	22.3	1 512.4	152.3
2000	622.6	3 730.2	22.9	1 692.2	129.9
2001	654.5	3 922.9	23.6	1 855.3	124.4
2002	672.6	4 109.8	24.8	2 102.1	127.6
2003	693.2	4 316.7	26.8	2 276.7	164.5
2004	737.1	4 556.8	28.5	2 316.8	145.6
2005	762.2	4 749.2	30.4	2 514.0	191.9
2006	808.6	4 926.0	32.4	2 494.7	129.3
2007	838.7	5 073.2	34.2	2 664.2	90.6
2008	874.2	5 198.0	35.2	2 989.1	115.0
2009	896.3	5 303.9	36.4	3 306.4	78.8
2010	937.4	5 381.2	37.6	3 720.3	49.4
2011	939.4	5 232.5	38.5	3 718.5	42.0

Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932781805>

Table 1.A.8. **Water consumption, 1990-2011**

Million cubic metres

	Total consumption	Agricultural consumption	Industrial consumption	Household consumption
1990	30 286	21 666	7 206	1 361
1995	23 434	16 478	5 642	1 242
1996	21 698	15 755	4 694	1 131
1997	19 447	14 108	4 344	826
1998	16 805	12 219	3 765	738
1999	14 865	10 652	3 513	650
2000	14 678	10 425	3 588	624
2001	14 580	10 235	3 698	602
2002	14 930	10 590	3 710	599
2003	15 242	10 573	3 983	601
2004	20 204	12 020	4 390	621
2005	21 422	11 329	4 062	694
2006	18 442	10 897	4 419	698
2007	19 906	11 512	5 133	709
2008	18 034	10 002	5 199	735
2009	19 259	10 932	4 809	742
2010	20 856	11 703	5 357	751
2011	19 232	9 373	5 173	790

Source: Statistics Agency of the Republic of Kazakhstan. Environment Protection and Sustainable Development of Kazakhstan, 2004, 2008, 2010. Ecological Statistics, 2001.

StatLink  <http://dx.doi.org/10.1787/888932781824>


Table 1.A.9. **Composition of Kazakhstan's land by types, 1995-2011**

Thousand hectares

	Total land area	Of which:								
		Arable land	Permanent crops	Fallow lands	Hay fields	Pasture	Forests	Bogs	Under water	Other
1995	272 490.2	31 902.5	..	2 814.3	..	182 650.5	10 930.2	..	..	862.8
1996	272 490.2	29 137.1	..	3 870.5	..	184 311.2	11 795.2	..	..	1 088.6
1997	272 490.2	26 610.7	..	5 941.1	5 033.4	184 754.6	19 522.3	..	..	1 103.9
1998	272 490.2	24 081.3	..	8 073.5	5 034.1	185 232.0	20 046.7	..	..	1 087.3
1999	272 490.2	21 791.6	..	10 264.7	5 021.6	185 187.8	20 971.9	..	..	1 224.4
2000	272 490.2	21 399.9	135.8	8 759.4	5 015.5	187 081.8	12 955.5	1 105.5	7 716.3	28 320.5
2001	272 490.2	22 270.6	125.9	7 089.1	5 037.6	187 902.2	12 952.0	1 107.0	7 716.2	28 289.6
2002	272 490.2	22 800.3	123.0	5 545.6	5 048.2	189 017.4	12 953.8	1 105.1	7 713.4	28 100.7
2003	272 490.2	22 656.9	121.8	5 686.7	5 047.5	189 034.2	12 957.3	1 101.5	7 714.3	28 170.0
2004	272 490.2	23 230.4	119.7	5 248.4	5 045.1	188 902.6	12 941.8	1 104.7	7 711.3	28 186.2
2005	272 490.2	23 397.6	115.7	5 164.7	5 024.7	188 844.7	12 952.5	1 104.7	7 710.9	28 174.7
2006	272 490.2	23 249.3	115.5	5 366.7	5 024.3	188 769.5	12 954.3	1 105.9	7 711.3	28 193.4
2007	272 490.2	23 145.3	114.4	5 495.9	5 022.7	188 642.8	12 998.2	1 104.7	7 712.4	28 253.8
2008	272 490.2	23 495.0	115.0	5 024.7	5 022.6	188 758.9	13 009.1	1 104.1	7 710.4	28 250.4
2009	272 490.2	24 073.0	117.4	4 545.1	5 036.7	188 590.0	13 020.0	1 105.2	7 770.4	28 298.8
2010	272 490.2	24 169.2	116.3	4 514.6	5 174.2	188 361.7	13 022.7	1 104.1	7 703.5	28 323.9
2011	272 490.2	24 632.9	117.2	4 547.7	5 189.9	187 690.7	13 170.2	1 102.6	7 704.3	28 334.7

... Not available.

Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932781843>Table 1.A.10. **Average size of land in agricultural enterprises by regions, 2000-09**

Hectares

	Kazakhstan	Akmola	Aktobe	Almaty	Atyrau	East Kazakhstan	Zhambyl	West Kazakhstan	Karaganda	Kostanai	Kyzylorda	Mangistau	Pavlodar	North Kazakhstan	South Kazakhstan	Astana (city)	Almaty (city)
2000	12 142	14 073	19 053	10 870	24 283	10 383	21 454	9 054	23 742	9 302	24 539	266 846	3 148	7 884	6 908	1 960	32
2001	11 021	13 163	15 836	10 870	27 398	9 761	20 976	7 051	16 575	8 610	23 416	183 360	7 116	5 404	4 663	593	24
2002	10 691	13 877	14 017	9 762	25 920	8 013	19 606	5 872	13 981	9 405	18 277	148 386	6 395	8 388	3 460	227	31
2003	10 304	14 295	11 564	7 960	24 828	7 767	17 896	6 346	11 492	10 336	16 922	198 475	6 959	9 239	3 182	195	27
2004	9 615	13 615	11 565	6 865	23 572	6 903	11 738	5 985	11 785	10 448	17 613	222 929	7 676	9 588	2 733	247	100
2005	8 314	11 454	11 146	5 361	22 674	3 797	11 904	6 153	9 267	10 100	13 009	236 713	7 024	6 866	2 631	310	90
2006	8 519	10 726	12 788	4 598	23 762	3 875	11 611	7 259	11 675	11 410	18 938	273 593	8 321	7 262	2 351	3 400	43
2007	8 501	11 022	13 237	4 523	21 500	4 104	9 485	6 447	11 025	11 609	13 021	283 038	9 074	7 712	2 374	3 400	89
2008	8 728	10 958	12 759	4 869	17 949	4 841	9 059	6 727	11 536	13 467	17 685	317 391	10 438	8 592	2 256	1 857	56
2009	8 356	10 878	12 912	4 938	19 613	4 872	6 878	6 209	11 542	13 346	15 653	359 100	11 015	8 483	1 869	2 429	59

Source: Statistics Agency of the Republic of Kazakhstan.



StatLink  <http://dx.doi.org/10.1787/888932781862>

Table 1.A.11. **Average size of land in individual farms by regions, 1990-2009**

	Hectares																
	Kazakhstan	Akmola	Aktobe	Almaty	Atyrau	East Kazakhstan	Zhambyl	West Kazakhstan	Karaganda	Kostanai	Kyzylorda	Mangistau	Pavlodar	North Kazakhstan	South Kazakhstan	Astana (city)	Almaty (city)
1990	498	546	913	155	991	46	36	1361	1783	485	0	0	563	196	0	0	0
1995	412	460	587	117	350	370	58	447	3043	335	60	965	323	123	20	0	0
1996	452	430	597	122	1480	1153	53	529	2291	306	57	3668	315	180	21	0	0
1997	434	490	1444	96	1324	825	64	1078	2010	344	647	1874	492	221	16	0	0
1998	386	465	1286	84	700	517	160	921	1800	328	550	1321	484	226	16	0	0
1999	398	453	1349	75	644	475	223	912	1868	311	762	1515	619	379	30	0	0
2000	386	816	1 721	81	848	539	232	1 030	2 200	607	1 401	1 934	812	503	31	0	3
2001	260	613	835	67	596	306	179	885	1 558	415	3 113	1 175	573	498	18	250	6
2002	283	882	1 138	85	677	308	184	797	1 588	773	1 749	1 685	678	469	17	1225	13
2003	269	825	1 012	88	725	298	199	771	1 629	694	1 152	1 785	693	413	19	800	22
2004	236	813	971	86	682	319	189	800	1 498	589	1 107	2 013	749	398	17	740	7
2005	238	638	1 050	98	642	327	179	770	1 441	505	1 090	1 998	744	366	20	1133	15
2006	238	635	1 105	86	579	352	168	759	1 428	507	1 198	1 959	758	390	24	1 000	17
2007	247	644	1 141	91	543	369	182	790	1 475	528	1 195	1 923	820	378	24	1 000	10
2008	258	611	1 211	92	543	429	176	842	1 490	573	1 209	1 847	872	409	25	667	20
2009	271	602	1 224	95	589	476	174	911	1 536	609	1 235	1 782	908	422	29	1 500	29

Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932781881>Table 1.A.12. **Land designated for agricultural use by legal form of use, as of 1 November 2011**

	Number of land parcels, Thousand	Area <sup>1</sup>	
		Thousand hectares	%
Total area for agricultural use	761	93 388	100
<i>Of which:</i>			
Privately owned	561	930	1
Leased	200	92 458	99
<i>Of which:</i>			
In temporary lease	198	90 950	97
In permanent lease	1	1 508	2

1. Land designated for agricultural use does not include agricultural land in the Land Reserve, Forest, and Water Reserves, in special protected areas, agricultural land of urban and rural settlements, and industrial and transport entities.

Source: Land Resources Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932781900>

Table 1.A.13. **Main domestic producers of fertilisers**

Company name	Fertiliser group	Fertiliser by type	Production capacity thousand tonnes/yr
KazPhosphat	Phosphoric and nitrogenic	Ammophos	240
		Superphosphate	200
		Ammonium-phosphate-sulphate	50
KazAzot	Nitrogenic	Ammonium saltpetre	300
ArcelorMittal Temirtau	Nitrogenic	Ammonia sulphate	30
KosAgroCommerce Ltd.	Potassic	Potassium chloride	5
		Potassium sulfate	5
Hazrat Ali Akbar	Phosphoric	Micro-biofertilisers	200 <sup>1</sup>
		Compound mixed bio-fertilisers	
		With microelements	100 <sup>1</sup>
		Mineral fertilisers with vitamins	10
	Nitrogenic	Ammonia sulphate enriched	..
		Carbamide enriched	..
	Potassic	Nitrate fertiliser enriched	..
		Ammonia sulphate enriched	..
	Kainar (Agrophos-Young)	Phosphoric	Phosphate – “C”
Phosphate – “B”			
Temir Service	Phosphoric	Ground phosphate	280
Axem Invest	Phosphoric	Phosphate enriched	35

..: Not available.

1. Thousand litres per year.

Source: Ministry of Agriculture of the Republic of Kazakhstan.


StatLink  <http://dx.doi.org/10.1787/888932781919>

Table 1.A.14. **Leasing of agricultural machinery by regions, 2010**

	Grain combine harvesters		Tractors	
	Units	Value: Million tenge	Units	Value: Million tenge
Kazakhstan	949	18 889	673	9 674
Akmola	381	8 156	162	3 170
Aktobe	13	398	21	475
Almaty	4	16	10	20
Atyrau	0	0	1	3
West Kazakhstan	12	187	9	98
Zhambyl	6	11	33	236
Karagandy	15	177	5	58
Kostanai	131	2 564	75	1 333
Kyzylorda	66	776	128	559
Mangystau	0	0	3	5
South Kazakhstan	21	263	42	220
Pavlodar	47	625	21	318
North Kazakhstan	221	5 192	136	2 976
East Kazakhstan	32	523	27	205
City of Astana	0	0	0	0
City of Almaty	0	0	0	0

Source: Statistics Agency of the Republic of Kazakhstan. Statistical data on farm machinery and equipment for agricultural food processing. Statistical Data Bulletin, 2011.



StatLink  <http://dx.doi.org/10.1787/888932781938>

Table 1.A.15. **Elevators by oblast as of 1 January 2011**

	Number	Capacity		Level of storage capacity in % of total oblast grain production
		Thousand tonnes	Share of country total (%)	
Akmola	54	3 738.5	26	85
Kostanai	40	3 618.2	26	78
North Kazakhstan	49	3 107.1	22	64
Aktyubinsk	11	791.9	6	241
West Kazakhstan	12	780.6	6	618
East Kazakhstan	15	484.4	3	77
Almaty	11	402.3	3	95
Pavlodar	7	354.5	3	55
Karaganda	12	328.6	2	69
Zhambyl	10	271.4	2	109
Kyzylorda	5	198.3	1	2 132
South Kazakhstan	2	30.0	0	10
Mangistau	1	22.0	0	0
Total	229	14 127.8	100	83

Source: KazAgroInnovation.

StatLink  <http://dx.doi.org/10.1787/888932781957>



## Chapter 2

### Policy trends and evaluation

*This chapter examines agricultural policy and the support provided to agricultural producers in Kazakhstan since 1990. The driving force of agricultural policies during the last period was the oil boom which made revenues available for public programmes but also raised concerns about the lack of economic diversification. Agriculture has become a priority sector for diversification. This marked a turn to an active policy to promote agricultural growth. The recent years featured a rise in subsidies and state support to investments in agriculture and downstream industries. The volatility of world agricultural markets revived concerns about the affordability of food and a deterioration of the social environment. New measures were introduced to control food prices. The growing agricultural debt led the government to adopt a USD 2 billion financial relief package in 2013. At the same time, protectionist tendencies in trade policies strengthened. The recent period is also marked by the Eurasian integration, with the Customs Union of Belarus, Kazakhstan and Russia coming into effect in 2010 and Common Economic Space in 2012. WTO accession negotiations are at an advanced stage, although important issues such as Kazakhstan's domestic support commitments in agriculture and integration of bilateral market access agreements into the country's schedule of commitments are not yet finalised. The level of producer support in Kazakhstan, as measured by the % PSE, was variable during 1995-2011, and in 2009-11 equalled 11%, indicating that more than one-tenth of gross receipts of agricultural producers were generated by support policies. Compared to other economies, Kazakhstan ranks among those with relatively moderate aggregate levels of support. However, an aggregate level of producer support disguises taxation of exported commodities (crops) and support to imported ones (livestock). Policies in the crop sector are dominated by wheat price interventions and trade measures which alter between supporting and restraining producer prices. Since 2009, wheat price support through a transportation subsidy and domestic market interventions is observed. Price policies in the livestock sector have been increasingly protective as border protection has increased and additional per tonne payments introduced. However, with prices of wheat supported above world levels in recent years, livestock producers face higher feed costs than would otherwise be the case. The total value of transfers arising from support to agriculture was equivalent to 1.17% of GDP in 2009-11.*

## 1. Agricultural policy framework

### ***Main stages of agricultural policy reform***

In the late Soviet era, agriculture was supported by high administered prices and considerable input and output price subsidies, in addition to policies that were not agriculture-specific (such as cheap energy and transport). OECD producer support estimates for Russia and Ukraine were highly positive up to 1991, and then fell dramatically in the first half of the 1990s to negative values. A similar picture almost certainly applies to Kazakhstan as price liberalisation removed the benefit of receiving output prices at above and key inputs at below world levels.

Agricultural policies during the independence period can be divided into three phases: i) 1992-97 – initial structural reforms and emergence of new policy institutions; ii) 1998-2002 – stabilisation and agricultural debt restructuring; and iii) 2003 to the present – promoting agriculture as part of economy diversification.

### ***1992-97: Initial structural reforms and emergence of new policy institutions***

The principal policies in the 1990s were land reform and the privatisation of collective farms which formally divided the assets among workers, although in practice this did not change the way these entities functioned. As the government was focussed on more pressing priorities, such as macroeconomic stabilisation and the creation of a basic legal framework for a market economy, other areas of agricultural policy remained largely neglected.

Partial liberalisation of input markets led to rapidly increasing input prices in the early 1990s. During the hyperinflation period of 1992-94, agricultural input prices increased by at least twice as much as output prices. However, the state order system remained in place until 1994, at which time it was replaced by a more flexible system of purchases for the state's needs. The Food Contract Corporation (FCC) was established in 1995 as a state grain purchasing agency. State purchases continued to dominate marketing channels, but as procurement prices remained low, most agricultural enterprises became insolvent. This necessitated a large-scale financial restructuring of agricultural enterprises between 1995 and 1997.

Only a few programmes directly supported producers, and have been administered since 1994 by the then newly created Fund for Financial Support of Agriculture. Low-cost credit was provided, both in monetary and in-kind forms (fuel and fertilisers), to support field works, as well as subsidies to compensate operating expenses, and losses in livestock production.

Trade policy in the early 1990s was driven predominantly by concerns to ensure domestic food supplies and to restrain food price inflation. A fairly liberal import regime was combined with restrictive export measures. Export licensing and export quotas were actively applied up to the mid-1990s, while the key agro-food items were imported at zero

tariffs and faced few non-tariff barriers. In 1996, these policies began to be reversed – import tariffs were imposed on a number of key imports, while export restrictions were relaxed. Since the mid-1990s, the government has begun signing bilateral and regional trade agreements within the CIS.

### ***1998-2002: Stabilisation and agricultural debt restructuring***

Following the Russian economic crisis in 1998, the government's attention again focussed on macroeconomic stabilisation and overcoming the consequences of the crisis on the national economy. The government implemented tighter monetary and fiscal policies. Economic growth observed during the two preceding years was interrupted in 1998, while agricultural output hit its lowest point since 1990.

Policy support to the agricultural sector continued to be limited, although a number of activities were emerging to later become the principal components of agricultural support in Kazakhstan. Emphasis was placed on improving the technical base of agriculture through preferential leasing of machinery and equipment. A state agency, KazAgroFinance, was created in 1999 to implement this programme. This period was also marked by efforts to create a new system of agricultural and rural credit. The Agrarian Credit Corporation was created in 2001 with the objective to develop a nation-wide network of Credit Partnerships and to act as a wholesale lender to these associations. Another feature was the regained momentum in restructuring agricultural enterprises following financial rehabilitation and bankruptcy procedures initiated in 1995-97.

The decline in production was reversed in 1999. However, agricultural producers continued to operate a depreciated capital stock, lacked access to alternative market channels, and faced limited financing options and unstable regulatory environment. Rural areas continued to suffer demographic, economic and social decline.

### ***2003- to the present: Promoting agriculture as part of economy diversification***

The turning point in agricultural policy dates from the *Agriculture and Food Program for 2003-05*. The driving force was the oil boom which made available more revenues for public support, as well as raising concerns about lack of economic diversification. This marked the turn to an active policy to promote agricultural growth. The Ministry of Agriculture's share of the total national budget went from 2.5% in 2001 to 6.5% in 2005. Incentives were provided through a substantial expansion of preferential credit schemes, machinery leasing, and fertiliser and fuel subsidies. The budget allocated for state purchases increased considerably. The annual spending of the Food Contract Corporation on grain purchases rose from KZT 7.7 billion (USD 51 million) per year in 2000-02 to KZT 30.7 billion (USD 217 million) in 2003-05, and the annual volume of wheat purchases more than doubled during the latter triennium. A special tax regime introduced for agricultural enterprises and individual farms granted them considerable tax concessions.

In 2003, the new Land Code was adopted and removed uncertainties about agricultural land property rights. Private ownership of agricultural land was introduced with full ownership rights as an alternative to the 49-year land lease from the state in vigour at the time. Land could be used as collateral, but sub-leasing of land shares was formally prohibited.

Another important development was the adoption of the *Law on State Regulation of Development of Agriculture and Rural Territories* in 2005. It became the first framework law on

agricultural policy that set out the principles and key definitions related to agricultural policy, defined competencies and the division of responsibilities between the state authorities at different levels in policy formulation and implementation, and identified key support mechanisms and instruments. This law remains today the basic legal document guiding the formulation and administration of agricultural policy in Kazakhstan.

Rural development and social issues have become more prominent on the policy agenda. For the first time since independence, a special budget was allocated to the *Programme for Development of Rural Territories for 2004-10*. This support was directed towards the improvement of rural settlements, the reconstruction and renovation of rural infrastructure, and the development of economic activity in rural areas. With this programme, monitoring of the socio-economic situation in rural areas also began and the re-settlement of rural residents in areas with more favourable economic and environmental conditions.

Instability in the global economy in 2008-11, including exceptional volatility of world energy and agricultural markets, increased the government's concerns about the resilience of the agricultural sector. These years featured a rise in state-supported investment projects in agriculture, in response to the stated agricultural development goals. In addition to infrastructure, these projects also concerned large agricultural production and processing facilities. Efforts to activate public-supported investments at the local level through regional public-private partnerships (Social and Business Corporations) were also made.

The volatility of world agricultural markets revived concerns about affordability of food for the population and the deterioration of the social situation. The government moved to introduce new measures to control food prices. Local authorities were empowered to tighten administrative control over food prices and to form local food stabilisation funds.

Protectionist tendencies in trade policies continued. Tariff protection for meat products was further tightened in 2007 and ad hoc non-tariff measures to protect domestic producers became more frequent. This period is also marked by steps towards Eurasian integration when an agreement on the creation of a Customs Union with Belarus and Russia was signed in 2007. This entailed intense harmonisation of the trade-related regulatory base and preparations for a common customs regime. The Customs Union came into effect in 2010. For Kazakhstan, this involved an increase in tariff levels on agro-food products which were largely aligned with those applied by Russia, including the introduction of tariff rate quotas on meat. Further EurAsEC developments included the introduction of a Common Economic Space (CES) in January 2012 which, beyond the free movement of goods and services, foresees the development of a harmonised legal base, a common infrastructure, and co-ordination on tax, monetary, currency and other policies. It is in this context that preparations for an agreement on a co-ordinated CES agro-industrial policy have begun. WTO accession negotiations, stalled in 2009 amid uncertainties related to the implementation of the Customs Union, have re-gained momentum and are presently at an advanced stage.

### ***Agricultural policy objectives***

Agricultural policy objectives during the first decade after independence concerned a fundamental transition to a market-based system which included land reform, farm

restructuring, and reform of agricultural finance and support systems. The government also had to confront an aggravated food security situation as the living standards of the population deteriorated after the collapse of the Soviet Union.

In the 2000s, successive multi-year agricultural programmes were introduced in which agricultural policy objectives were more explicitly formulated (Table 2.1). The first such document, *Agricultural Development Programme for 2000-02*, sought to stabilise agricultural production as the government's priority by identifying and stimulating the competitive sectors in agriculture ("growth points"). Next, the *State Agricultural and Food Programme for 2003-05* formulated the objectives of food security, efficiency and competitiveness of the agro-industrial complex. These three objectives were then restated in all successive framework policy documents. Food security was largely seen through the lens of increased self-sufficiency in agro-food products, which entailed another objective of modernising the agricultural and food industry.

Table 2.1. **Agricultural policy objectives in government programming documents**

	Agricultural Development Programme 2000-02	Agricultural and Food Programme 2003-05.	Agricultural Law 2005 <sup>1</sup>	Sustainable Development of the Agro-Industrial Complex 2006-08 <sup>2</sup>	Sustainable Development of the Agro-Industrial Complex 2009-11 <sup>3</sup>	Programme for Development of the Agro-industrial Complex 2010-14	Programme for Development of the Agro-industrial Complex 2013-20 (Draft)
Food security		x	x	x	x	x	
Stabilisation of production level	x						
Efficiency and competitiveness	x	x	x	x	x	x	x
Sustainable development			x	x	x		
Export enhancement						x	
Development of social and technical infrastructure for agriculture and rural areas			x				
Adaptation of agriculture to WTO accession					x		

1. *Law on State Regulation of Development of Rural Areas*, 2005.

2. The full name of the document is *Priority Measures for 2006-08 to Implement the Concept of Sustainable Development of the Agro-Industrial Complex of the Republic of Kazakhstan in 2006-10*.

3. The full name of the document is *Complex of Measures for Sustainable Development of the Agro-Industrial Complex of the Republic of Kazakhstan in 2009-11*.

The scope of agricultural policy objectives was broadened with the adoption of the 2005 Agricultural Law to cover the environmental and social dimensions. This Law incorporated the objective of sustainable development of agriculture and rural areas, as well as the improvement of social and technical infrastructures and living conditions in rural territories.

Towards the late 2000s, an international dimension to Kazakhstan's agricultural policy objectives emerged. WTO accession negotiations were progressing, which led the government to formulate the objective of adaptation of agriculture to a more open market, while the current *Development Programme of Agro-Industrial Complex for 2010-14* added export enhancement as a new policy priority. The Presidential Address in 2011 further emphasised export expansion by boosting the potential of the livestock sector to supply external markets.

### Policy formulation as part of the strategic planning process

Agricultural policy formulation in Kazakhstan is framed within the national strategic planning process (Table 2.2). The current overarching strategic document is the national development strategy *Kazakhstan 2030: Prosperity, Security and Improvement of Welfare of the Citizens of Kazakhstan (Strategy 2030)*. It was adopted in 1997 and identified eight long-term national development priorities, one of them being economic growth on the basis of an open economy.<sup>1</sup>

The implementation of the *Strategy 2030* is divided into three ten-year periods and is currently in its second planning decade to 2020. National strategic plans are developed for each decade for a phased execution of broad targets. These plans are transformed into sequential five-year development programmes. One of them is the *Enhanced Industrial and Innovative Development of the Republic of Kazakhstan for 2010-14 (PEIID)* that aims to reduce the heavily oil-dependent industrial structure and transform it into a more diversified one by promoting competitive and export-oriented goods and services. The agro-food sector was identified as one of the eight priority sectors for diversification. Twenty-three sectoral programmes were developed to implement the PEIID, including the current programme for *Development of the Agro-Industrial Complex for 2010-14*. Finally, to implement sectoral programmes, the strategic plans of state bodies (ministries) are developed that contain detailed measures and budgeting.

Table 2.2. **Classification of strategic and planning policy documents**

	Level	Type of document	Approved by	Name
Long term	National	National Development Strategy	President	Kazakhstan 2030: Prosperity, Security and Improvement of Welfare of the Citizens of Kazakhstan (adopted in 1997)
	National	10-year strategic plans	President	Strategic development plan for 2010-20 (adopted in 2010)
Mid-term	National	5-year programme	President	State Programme on Enhanced Industrial and Innovative Development of the Republic of Kazakhstan for 2010-14 (adopted in 2010)
	Sector	5-year programme	Government	Development of Agro-Industrial Complex for 2010-14 (adopted in 2010)
	Sector	5-year programme	Government	State body (ministerial) strategic plan for 2011-25 (adopted in 2010)

Thus, there is a distinct top-down hierarchy in the policy formulation process from the *Strategy 2030* to the nation-wide development and sectoral programmes. This system is meant to produce a set of planning and implementation frameworks that are coherent and without overlap. However, this policy formulation process tends to omit appropriate cost-benefit analysis of individual programmes and projects, but involves onerous planning and reporting procedures.

In the short-term, strategic plans of state bodies are adjusted to priorities set out in the annual Presidential Address. For example, in 2011 these included the improvement of agricultural productivity, and increasing meat output and high-quality water supply for the rural population. As a result, important adjustments were made in the agricultural budget to fund these priorities. Furthermore, the succession of agricultural programmes since the beginning of the 2000s shows this process has been largely driven by changes in ministerial leadership with underlying policy measures also changing. Thus, the actual policy formulation process, although framed within a formal strategic planning process, incorporates an important element of changeability.

In December 2012, Mr. Nazarbayev presented a new *Strategy 2050* in his Presidential Address. It cites the “threat to global food security” and the “depletion of natural resources” among the key global challenges of the 21st century, and announces an “all-embracing economic pragmatism based on profitability, returns on investments, and competitiveness” as the basis of Kazakhstan’s new economic policy. The modernisation of agriculture and the development of individual farms and SMEs in agro-food marketing are among the nine key areas of this new economic strategy.

### **Agricultural development programmes**

The *Programme for Development of the Agro-Industrial Complex for 2010-14* made food security a central policy objective and set the target of 80% self-sufficiency in basic foodstuffs. Other programme objectives included the improvement of labour productivity in agriculture and the enhancement of agricultural exports. Eight sub-sectors for priority development were identified: meat, milk, oilseeds, cereals, fine-wool sheep breeding, poultry, horticulture and sugar. Thus, the principal orientation of the programme was to boost production and processing of these products. With regard to the crop sector, growing concerns on the sustainable use of arable land led the government to set goals for the diversification of crop production and to increase the use of water and moisture saving technologies. The main incentive instrument was a per hectare subsidy differentiated by crop and the cultivation technology applied. The 2010-14 programme also prioritised the development of the grain export infrastructure and supported investment in large-scale grain storage and milling facilities. Following the Presidential Address in 2011, the priorities have been considerably re-focussed on the development of the meat sector; funding was considerably increased to support investments in large-scale livestock facilities and feed plants, import of pedigree cattle, and financing of livestock breeding centres, as well as subsidies for the purchase of pedigree cattle by producers.

In 2012, the new Ministry leadership initiated a new programme to begin in 2013 and to run up to 2020. The preparation of this document ahead of the expiration of the previous agricultural programme was explained by a need to better respond to emerging challenges, as well as to adapt the agricultural policy framework to the country’s future WTO requirements. A *Programme for Development of Agro-Industrial Complex in the Republic of Kazakhstan in 2013-20: Agribusiness 2020* was approved in February 2013.

This new programme formulates one policy objective, that is, to enhance the competitiveness of agri-business. In contrast to the 2010-14 programme, no reaching self-sufficiency targets is included in the current draft. In this respect, the new policy document represents a notable change in objective-setting: from the previous orientation to attain specific physical parameters of production to the present goal of improving conditions for agribusiness. However, the change in the policy objective formulation has not been associated with a re-focussing of support measures: the principal subsidies and mechanisms are carried over to the new programme. Probably the most important new programme block is a series of measures for the financial rehabilitation of the sector, and proposals on the reform of the state-supported credit system. Other critical objectives associated with agricultural development, such as the sustainable use of resources and rural development, are not mentioned in the new programme.

It is planned to allocate an aggregate of KZT 3.1 trillion (USD 21 billion) over the eight years of the programme, of which 80% will be provided from the national-level budget, 7% from local budgets, 10% through the emission of government securities, and 3% from the

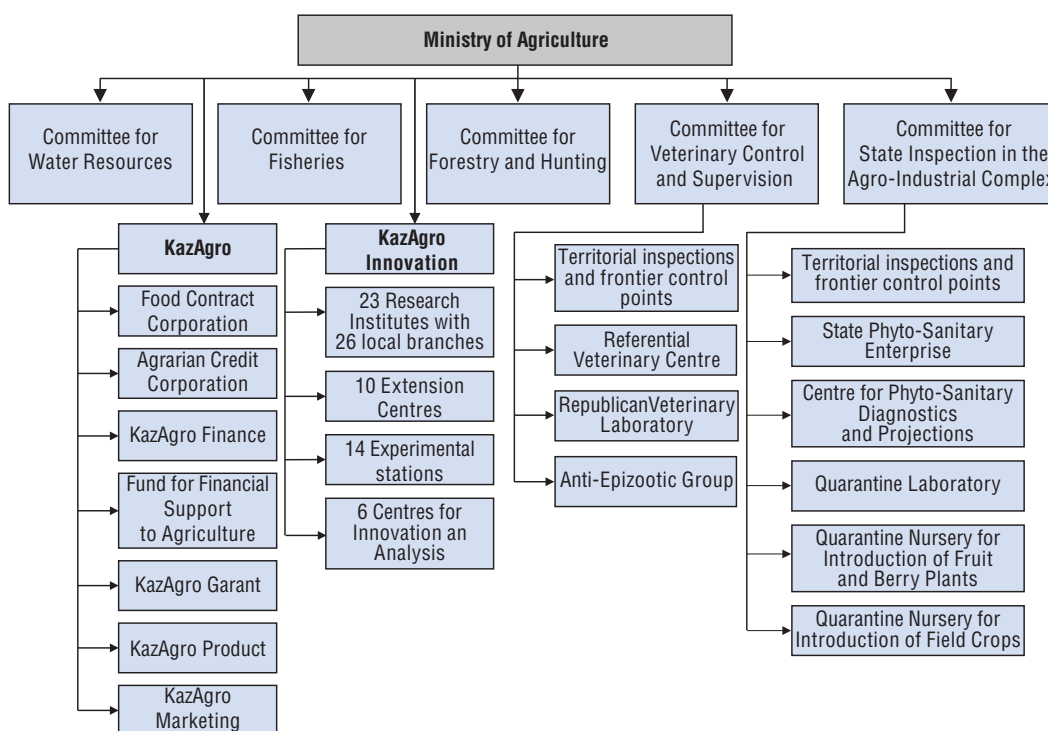
state KazAgroHolding and its daughter company Food Credit Corporation. Over 40% of the total programme's budget is to be spent on output and input subsidies, and product-specific area payments, i.e. forms of assistance that represent distortive support.

### **Institutional arrangements for administering agricultural policy**

#### **National level**

The Ministry of Agriculture is the principal government body responsible for the administration of agricultural policy. It has five subordinate committees: State Inspection of the Agro-industrial Complex, Veterinary Control, Water Resources, Fisheries Management and Forestry Management (Figure 2.1).

Figure 2.1. **Ministry of Agriculture and its subordinates**



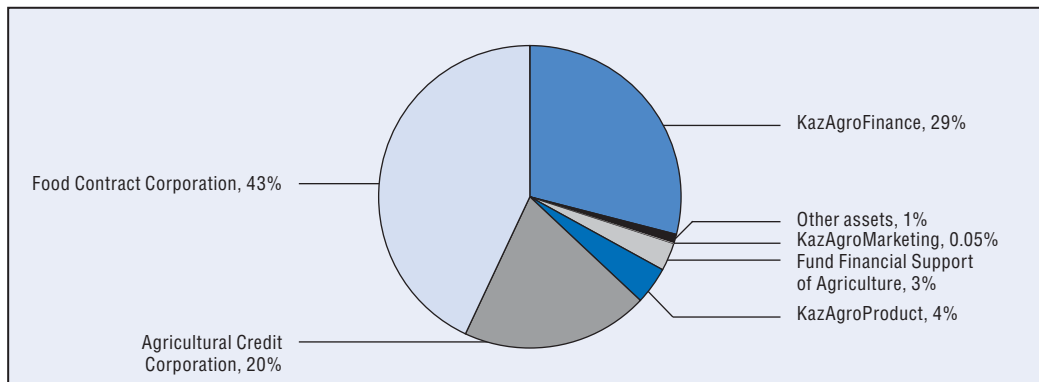
Source: Ministry of Agriculture, KazAgro, KazAgroInnovation.

*KazAgroHolding* is the main institution implementing public support programmes. It has the status of a stock company fully owned by the state. The holding was established at the end of 2006 through a merger of seven state agencies, which became KazAgro's daughter companies. These are the Food Contract Corporation (FCC), KazAgroProduct (KAP), the Agrarian Credit Corporation (ACC), the Fund for Financial Support of Agriculture (FFSA), KazAgroFinance (KAF), KazAgroMarketing (KAM), and KazAgroGarant (KAG). The first two companies are state purchase agencies operating on the grain/oilseeds and livestock markets respectively. The next two agencies implement concessional credit programmes, serving groups of agricultural borrowers of different sizes. KazAgroFinance is the operator of the state machinery leasing programme. KazAgroMarketing provides price information, marketing and consultancy services, and KazAgroGarant operates a guarantee fund for



grain and cotton warehouse receipts. Total assets of KazAgro equalled USD 2.5 billion at the beginning of 2011, of which around 90% were concentrated in only three companies, FCC, KAF and ACC (Figure 2.2). KazAgro companies, besides acting as government agencies that implement support programmes, also perform commercial operations. Thus, of total wheat purchases carried out by the FCC between 1998 and 2011, three-quarters represented commercial purchases. Similarly, in addition to preferential lending, KAF and ACC run credit schemes based on commercial terms. These three companies are themselves large borrowers of commercial credit.

Figure 2.2. **Structure of KazAgro assets by subsidiaries, as of 1 January 2011**



Source: KazAgro.

StatLink  <http://dx.doi.org/10.1787/888932780950>

*KazAgroInnovation* unites institutions performing research and development activities; knowledge and technology transfer; promotion and implementation of innovative investments in agribusiness, and other related activities. *KazAgroInnovation* system includes: 23 research institutions with 26 branches across the country, 14 experimental stations, ten extension centres, and six innovation and analytical centres. *Agro-Technical University* had been in the past subordinated to Ministry of Agriculture, but is now subordinated to the Ministry of Education and Science.

The national phytosanitary and veterinary system comprises the agencies subordinate to the Committee for State Inspection in the Agro-industrial Complex, and Committee for Veterinary Control. Most of these agencies represent diversified territorial networks. A state agency, *KazAgrEx*, is responsible for the quality certification of traded agro-food commodities.

According to the *Law on Private Entrepreneurship* (2006), every business-related regulation should go through a review process by accredited NGO's. Six NGOs are currently accredited with the Ministry of Agriculture: Farmers Union, National Economic Chamber "Atameken Union", Kazakhstan's Cotton Association, Republican Association of Ore and Metal Ore Mining Enterprises, and the Union of Food Processing Industries of Kazakhstan (Box 2.1).

### **Local (oblast) government and local development agencies**

Oblast governments (*akimats*) draw up their own development plans based on national guidelines and have the right to introduce oblast-specific subsidies. In practice, the oblasts implement central government policies and to a small extent may complement republican

### Box 2.1. **Producer and industry organisations in the agro-food sector of Kazakhstan**

The *Grain Union of Kazakhstan* was formed in 1997 on the basis of the Association of Grain Exporters and is a non-profit organisation consisting of grain companies. Its aim is to protect the interests of its members, in particular, in the development and implementation of state agricultural programmes, laws and regulations. Its mandate is also to develop the grain market. It provides regular training and issues reviews of the grain market. The Union provides members with inputs and machinery, and markets grain on the domestic and export markets.

The *Union of Poultry Farmers* was created in 1999. It represents 56 poultry farms and companies. Its aim is to prepare and submit proposals to state bodies on the development of the poultry industry including state support measures and legislation, and on the development of poultry breeding. The Union also provides information services to its members.

The *Farmers' Union* is an association of individual farmers established in 2003. Its primary aim is to consolidate individual farmers to protect their rights and interests, promote programmes for the development, and to support entrepreneurship in agriculture. The Union has more than 6 000 members from all regions of Kazakhstan. It is well organised, with funding from members and their insurance company.

The *Meat Union* was registered in 2009 as a non-profit organisation which unites enterprises in the meat production and processing. It co-ordinates the activities of enterprises engaged in the meat business, and presents and protects their common interests.

The *Kazakh Cotton Association* was established in 2004 as a co-ordinating and advocacy body for the cotton industry.

The *Union of Food Processing Industries* was founded in 1997, unifying the leading agro-food processing enterprises. Its aim is to protect the interest of domestic producers and to promote the development of the food business.

The *Union of Millers and Bakers* was created in 2001 following the reorganisation of the Millers of Kazakhstan Association established in 2000. It includes about 30 companies which represent vertical structures that integrate bakers and millers. Its main aim is to represent the member's interests vis-à-vis the executive and legislative branches of government.

All these organisations participate in agricultural policy formulation, but only at the review stage of policy documents when it is difficult to make a significant contribution. In general, despite the declared lobbying function, the producer organisations are not actively involved in the policy-making process because their members do not yet appreciate the benefits of collective action and are reluctant to contribute towards its costs.

The most recent initiative to involve stakeholders in the policy formulation process is the organisation of a Business Council based on the Consulting Council of the Ministry of Agriculture. It will incorporate the working groups on particular sub-sectors and segments of the agro-industry. Each working group will assess legal acts, prepare proposals, and provide expert evaluation of the documents. They will also monitor the implementation of the decisions adopted and the investment projects under implementation.

budget funds for some types of support, but typically their opportunities for policy variation are limited.

Since 2007, *akimats* are responsible for administering several large national direct payments: area payments; fertiliser and fuel subsidies; seed subsidies; per tonne livestock payments; and payments for pedigree livestock. *Akimats* determine the list of producers who will receive these payments and allocate subsidies to individual beneficiaries within the budgetary limits. They also control compliance with payment conditions (e.g. area payment is conditional on prior control of actual plantings; in the case where a subsidy is differentiated according to the technology applied, compliance with technology criteria is also controlled). *Akimats* thus have influence over farmers' decisions and dispose of a degree of discretion in the allocation of payments. In addition to the administration of payments, *akimats* are co-responsible at the local level with the Food Contract Corporation for the formation of state grain reserves and may sometimes exert informal pressure on producers to deliver in excess of stated obligatory targets.

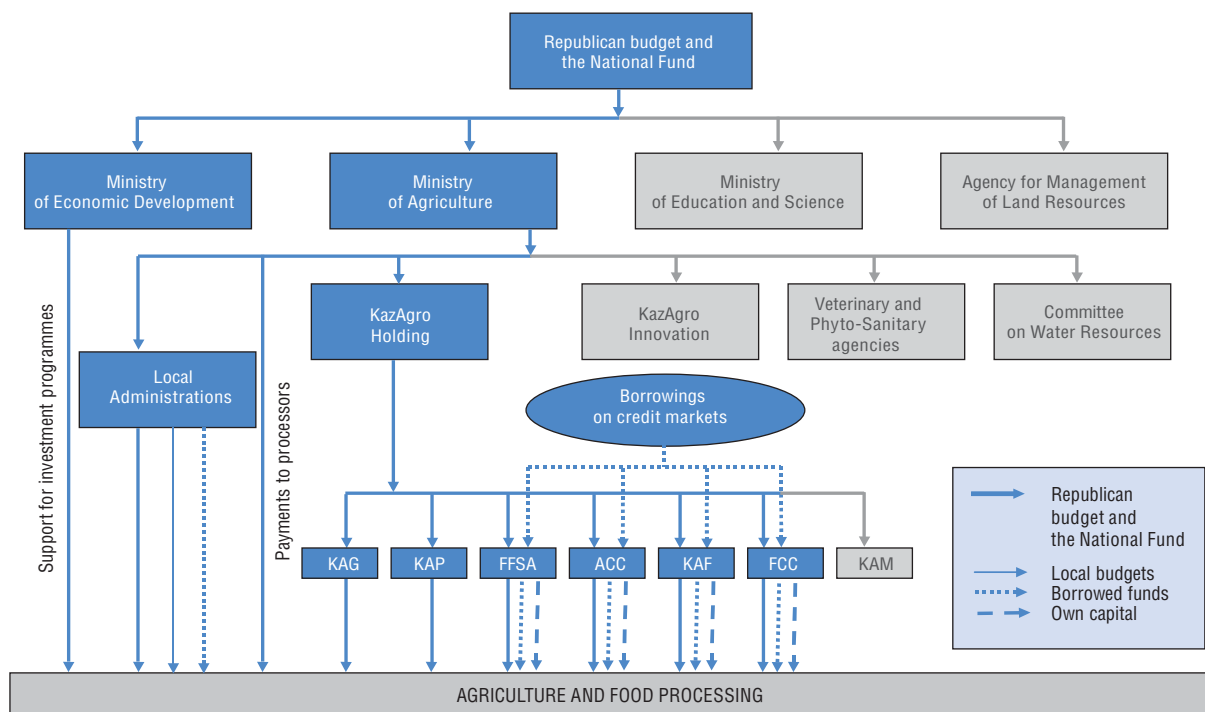
In 2007, Social and Business Corporations (SBC) were set up as local public-private partnerships, typically with the majority stake held by local authorities. Initially, SBCs were established in seven "macroregions", and then in 2011 they were reorganised, with some of them split into two or three. Currently, 16 SBCs operate in each region. The principal mandate of SBCs is to stimulate local development through investments in various social and economic projects. Since their creation, many SBCs have engaged in investment projects related to agriculture and agro-food processing. In 2011, SBCs were made responsible for the management of the local food stabilisation funds created to constrain food prices on local markets. In addition, according to the new proposal by the Ministry, SBCs may become part of a new mechanism for credit guarantees.

### **Financial arrangements for administering agricultural policy**

The financial flows on which implementation of agricultural policy is based originate from different sources and at different administrative levels. They are represented in Figure 2.3, which does not pretend to be all-inclusive but is intended to illustrate the complexity of the financial arrangements in support of the agro-food sector in Kazakhstan. The dimmed parts of the figure do not concern actual monetary transfers to the policy beneficiaries, but correspond to financial flows that support the provision of general services, such as research, education, information, land and water management, and SPS services. The highlighted parts of the figure indicate the actual monetary flows directed to the beneficiaries of agricultural policy, and are discussed below.

At the national level, republican<sup>2</sup> budget funds are allocated to the Ministries and agencies responsible for various areas of the agro-food sector. The republican budget also includes annual "guaranteed" and ad hoc (targeted) transfers from the National Fund.<sup>3</sup> The purpose of targeted transfers is determined by the President based on the government's proposals; the targeted use of these funds is strictly controlled.

The principal recipient of republican funds is the Ministry of Agriculture, from which they are channelled to local administrations, to the Ministry's subordinate agencies (KazAgro Holding, KazAgroInnovation, etc.), and to food processors (there are several types of payments for processors). Local administrations and KazAgro agencies are the main channels through which actual money transfers reach agricultural producers. As noted above, local administrations implement several important national direct payments and

Figure 2.3. **Flows of financial resources in support of agriculture**

Note: Acronyms: KAG – KazAgroGarant; KAP – KazAgroProdukt; FFSA – Fund for Financial Support of Agriculture; ACC – Agrarian Credit Corporation; KAF – KazAgroFinance; KAM – KazAgroMarketing.

receive republican funds for that purpose. Flows of republican funds through KazAgro Holding are non-trivial. The republican funds are provided to the holding as transfers to its charter capital, which the holding and its subordinate agencies use for statutory activities and re-invest any returns on these activities into future operations. Beyond that, KazAgro is also empowered to borrow on domestic and international credit markets. Thus, the KazAgro system not just transfers budgetary funds to end beneficiaries, but also generates additional resources for the implementation of agricultural programmes. As a result, there is a substantial difference between the annual financing from the republican budget into the KazAgro system and the outward flow from this system to the final recipients of support.

Actual monetary transfers also flow to the beneficiaries in the agro-food sector from the Ministry of Economic Development and Trade. These flows underlie a number of nation-wide investment programmes financing cross-sectoral and territorial development activities, such as *Business Roadmap 2020* and *Development of Regions*. Among other sectors, these programmes incorporate support for investment projects in the agro-food sector (in the form of interest subsidies), although the share of such spending in the overall investment projects supported through the Ministry of Economic Development and Trade is relatively small.

Local administrations not only administer several national direct payments, but also finance strictly regional activities to support the agro-food sector. In this case, local administrations employ resources from local budgets and may also borrow funds. Funds from local administrations are typically used to top up republican subsidies, finance certain general services, and may also be directed to finance local investment programmes and for purchases of agro-food products for local food stabilisation funds (described in the previous sub-section).

## 2. Domestic policies

### **Producer price support measures**

General price liberalisation was introduced in 1992. However, administered pricing and state orders in the agricultural sector were abolished only in 1994. At this time, a concept of state needs was also introduced providing more flexibility for pricing and marketing of agricultural products. Procurement arrangements were relaxed for livestock products and non-grain crops, but the grain sector remained under tight state control.

Domestic price support policies in Kazakhstan continue to focus on the grain sector and represent an entirely centrally managed system. The current policy system is set out in the *Grain Law* (2001), which introduced a concept of “state grain resources”. The Food Contract Corporation performs the function of the government agent responsible for the establishment, renewal and disposal of these resources. Key decisions related to the overall size, disposal or relocation of grain between regions, as well as prices at which grain is purchased are the competence of the republican government. Local authorities (*akimats*) also perform important functions as they make the initial proposals on the amount of state resources they will require for their regions and are responsible for fulfilling regional procurement quotas once the overall volume of purchases are set by the government.

According to the *Grain Law*, state grain resources are formed through:

- purchase of grain from domestic producers with a grain area of 250 hectares or more; these producers are obliged “to participate in the establishment of state grain resources” through priority sales of grain to the FCC (no later than 15 October in a crop season);
- crop sharing arrangements whereby the FCC provides grain producers with money and input advances in return for a share of the produced crop;
- spot purchases of grain from producers; and
- purchase of grain from grain exporters; this is implemented based on the government’s decisions and on the proposal of the FCC if state grain resources cannot be fully met from the above three sources.

State resources are composed of five types of grain stocks: food grain reserve, forage resources, seed resources, disposable grain resources and stabilisation (ad hoc local) resources (Table 2.3). The total volume at which the food grain reserve is currently maintained is set at 500 thousand tonnes and consists almost entirely of soft varieties of food wheat.

The *Grain Law* contains rather general formulations on the decision-making process that governs the establishment and disposal of grain reserves. Provisions concerning the procedures to manage state grain resources, are detailed in the government’s *Rules*.<sup>4</sup> However, neither document defines the limits of obligatory deliveries by grain producers, the principles to determine the volumes, purchase and sale prices for grain state resources,

Table 2.3. **State grain resources: Types, use and sources of financing**

Types of resources	Use	Source of financing related to the use of the resources
Food grain reserve	Strategic reserve for mobilisation needs and ensuring food security of Kazakhstan.	Budget funds
Forage grain resources	Meeting needs of the livestock sector in feeds; provided to livestock producers as credit-in-kind ("forage loan"), or sold to them.	Other sources determined by the government
Seed resources	Disaster assistance to grain producers, ensuring stable national seed supplies, seed renewal and replacement, and fulfilling international agreements; provided to grain producers as credit-in-kind ("seed loan") or sold to them.	Other sources determined by the government
Disposable grain resources	Market interventions, grain exports, sales at domestic market, humanitarian aid, and renewal of state food grain, feed and seed resources.	Other sources determined by the government
Ad hoc local stabilisation grain resources	Ensuring food security and for market stabilisation. Formed only on the requests of local governments. Sold between 1 January and 1 July.	Budget funds

Source: Law on Grain (2001); Annex to the Government's Decree N140 of 14 September 2010.

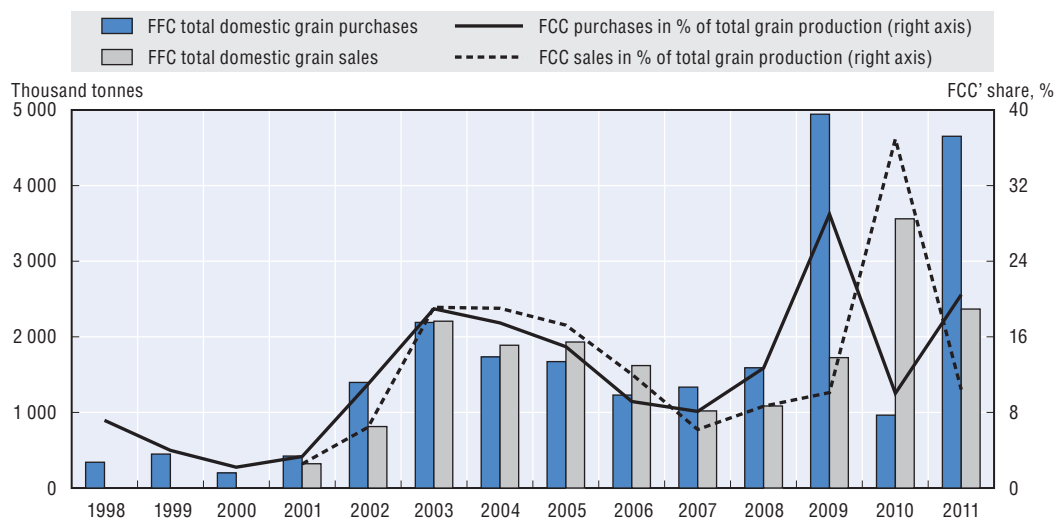
or the precise targets for market interventions and explicit conditions under which they would be triggered. The management of state grain resources and grain interventions are thus the processes based on ad hoc annual government's decisions.

The FCC's mandate initially included only the management of state grain resources, but since 2002 the company also undertakes commercial grain trading. Between 2002 and 2011, the commercial share of total grain purchases by FCC varied between 6% and 47% and the commercial share of total grain sales between 9% and 41%. The majority of FCC's purchases are made in the spring and fall. Grain purchased during the fall season goes directly to the elevators, while spring season purchases are made under forward contracts. This provides producers with financial resources at the time of sowing as under forward contracts advance payments are made (risks are shared with commercial banks and Social and Business Corporations because the producer needs to provide a bank guarantee to receive payment). In 2011, around 24% of all wheat purchased by the FCC was under spring forward contracts, and the rest was purchased in the fall. Besides advance payments under forward contracts, the FCC provides substantial concessional loans for sowing and harvesting works through commercial banks, as well as loans to cover other operational expenses of grain producers (sub-section on credit support).

As an operator of grain resources and commercial grain purchaser, the FCC is a price leader on the domestic grain market. Since the price hike in world food markets, a counter-cyclical approach to stabilise grain prices prevailed (Figure 2.4). In 2009 and 2011, when grain crops were abundant, the FCC withdrew from the market around one-quarter of the harvest, with FCC's purchases considerably exceeding its sales. In the 2010 drought year, the operations were reversed: the FCC released additional volumes of grain onto the market that equalled nearly 40% of that year's crop. In addition to domestic operations, the FCC is involved in international grain trading. As an operator of state grain resources and commercial trader, the company uses its own funds to purchase grain for exports. Export sales are closely linked with its domestic operations and more likely represent an activity to balance the company's grain stocks than a regular trading business. Thus, FCC exports have been extremely variable, ranging in 2001-11 from 1 000 tonnes (2005) to 835 000 tonnes (in 2003), as was their importance relative to FCC's domestic sales and Kazakhstan's total grain exports (Figure 2.5).

The FCC's financial resources are derived from annual budgetary transfers to the company; in 2009-11, the FCC received additional transfers from the National Fund during

Figure 2.4. FCC's grain purchases and sales, 1998-2011



Source: FCC.


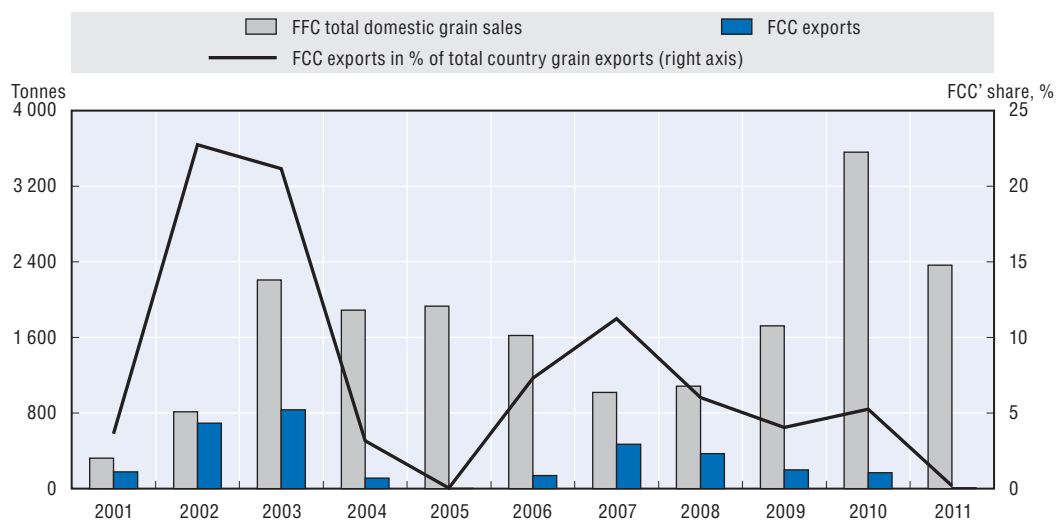
StatLink  <http://dx.doi.org/10.1787/888932780969>

Figure 2.5. FCC's export sales, 1998-2011

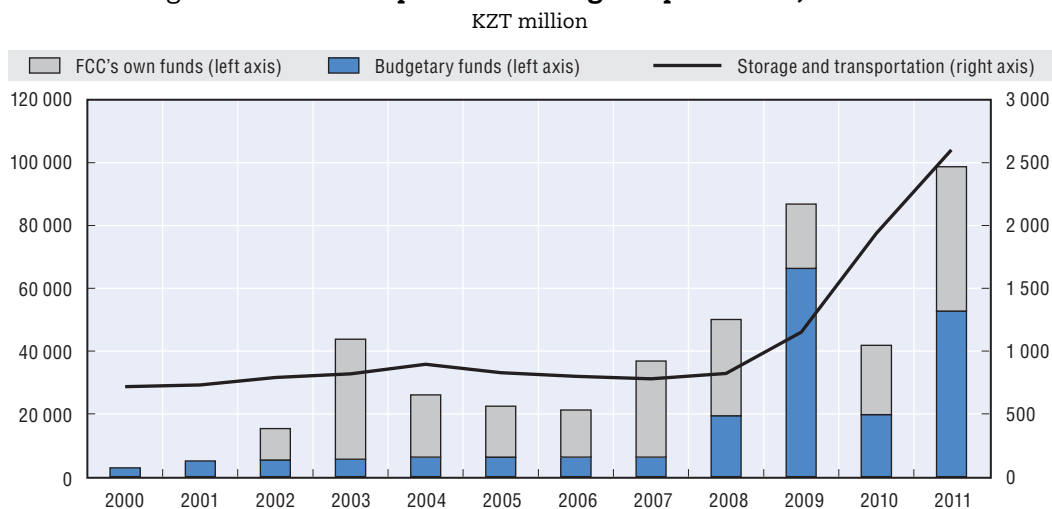


Source: FCC.

StatLink  <http://dx.doi.org/10.1787/888932780988>

the highly unstable situation on domestic and external grain markets. These public transfers are complemented by FCC's own funds generated from its commercial operations, revenue from selling state resources (FCC receives a 3% commission), as well as domestic and external borrowings in the banking system. FCC's spending on grain purchases increased substantially in 2009-11 when large market interventions were carried out (Figure 2.6). Average annual spending on grain purchases during this period reached KZT 76 billion (USD 490 million), with over one-third representing FCC's own funds. Substantial budgetary funds are also spent yearly on storage of grain reserves and transporting grain from the northern to the southern regions to provide space in the elevators for the next season.

Figure 2.6. FCC's expenditures on grain purchases, 2000-11



Source: KAP.

StatLink  <http://dx.doi.org/10.1787/888932781007>

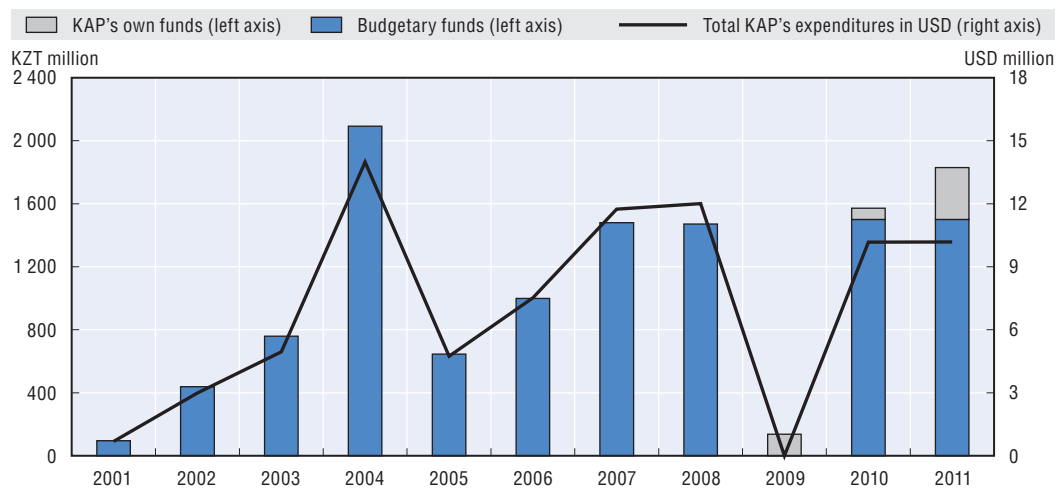
There seems to be no effective delineation between FCC's functions as a market intervention agency and a profit-making grain trader. This suggests that the company's behaviour is driven by potentially conflicting incentives. The FCC also has substantial market power on domestic market given the scale of its operations and priority access to storage and transport services related to its function as an agent operating state grain resources (this is further discussed in Chapter 3).

Government involvement in agricultural markets beyond the grain sector includes the activities of KazAgroProduct, another subsidiary of KazAgro Holding. This company purchases meat and sells it to processors. According to the company's management, these supplies are supposed to cover processors' seasonal deficits of raw meat and eliminate middlemen from the livestock supply chain to lower consumer prices (rather than to support prices for producers). KAP also purchases leather and wool and sells knitted fabrics and other consumer goods produced from wool and leather, which are not socially important goods. Since the beginning of its operations in 2001, KAP's total expenditures on purchases of livestock products have not exceeded USD 20 million, averaging around KZT 1.2 billion (USD 8 million) in 2009-11 (Figure 2.7). Thus, the activity of KAP as a state buyer of livestock products is limited and unlikely to have a significant impact on producer prices.


Interventions in meat and milk markets are in principle included in KAP's mandate, but such interventions have been few. In 2007, KAP made intervention purchases of meat, for which KZT 1 billion (USD 8 million) were allocated, and in 2008 it spent KZT 795 million (USD 7 million) on imports of milk powder to supply milk plants. This was undertaken to limit consumer prices during the exceptional increase in 2008 of world milk prices.

The most recent policy development that may have some implications for producer prices for a range of agricultural products is the new policy of food price stabilisation. It was introduced in 2008 in response to recent price volatility on world agricultural markets. This includes the creation of regional stabilisation funds whereby local authorities purchase agricultural products and supply these to processors and retailers as a mechanism to avoid sharp increases in food prices (see sub-section on consumer policies).



Figure 2.7. **KAP expenditures on livestock product purchases, 2001-11**

Source: FCC.

StatLink  <http://dx.doi.org/10.1787/888932781026>

Evidence is lacking on the impact of this activity on market prices, but most likely it increased administrative intervention in agro-food pricing at the local level.

### **Support based on units of output**

Payments for livestock products are the only important support based on output. This measure is relatively recent; it was introduced in 2006 with the objective to stimulate livestock production. This subsidy was initially introduced for poultry only, but its coverage was gradually extended, so that by 2011 virtually all livestock products were eligible, including poultry, beef, pigmeat, sheep, milk, eggs, wool and traditional local products such as horsemeat and drinks from camel and horse milk.

Payments are made per unit of output sold on the domestic market, with payment rates determined on the basis of the cost of feed. The subsidy rates for beef, milk, poultry and eggs are differentiated by the various feeding systems and other technological criteria, with more technologically advanced production eligible for higher rates (Table 2.4).

The subsidy rates estimated as a percentage of the average producer price indicate a relatively high level of support provided, varying from around 50% of the beef price to 13% of the egg price.

Payment eligibility involves complex administration procedures. The *akimats* are responsible for developing and approving lists of eligible producers. Producers submit monthly information on the volumes sold and must provide documents to show proof of sales. These are then forwarded to the Regional Commission of the *akimats* to organise and monitor payments.<sup>5</sup>

Total outlays on livestock output payments have increased considerably (Table 2.5). In 2009-11, they reached KZT 14 billion (USD 93 million) per year on average and were the largest category of direct support to agricultural producers in Kazakhstan.

No other regular programmes providing support based on output are implemented, although in 2010, 30% of per hectare payments for oilseeds and sugar beet (discussed below) were used to provide payments based on the output of these crops. The eligibility condition was that the products be delivered for processing. This was related to the fact

Table 2.4. **Output payments for livestock products, 2006-11**  
KZT per 1 kilogram of slaughter weight

	2006	2007	2008	2009	2010	2011
Beef	x	90	138	x	x	x
Grade I combined feed	x	x	x	175	175	200
Grade II combined feed	x	x	x	138	150	150
Grade II concentrated feed	x	x	x	90	120	120
Grade III combined feed	x	x	x	100	100	100
Grade III concentrated feed	x	x	x	80	80	80
Pigmeat	x	88	98	98	98	98
Poultry	47	47	66	66	x	x
Grade I	x	x	x	x	35	66
Grade II	x	x	x	x	20	60
Eggs	x	x	x	2.6	x	x
Grade I	x	x	x	x	2.0	2.6
Grade II	x	x	x	x	1	2
Sheep	x	x	36	x	50	50
Wool	x	x	x	162	105	105
Milk Grade I	x	x	8	20	25	25
Grade II	x	x	5	11	15	25
Grade III	x	x	x	5	10	10

x: Not applicable.

Source: Government Resolutions.



StatLink  <http://dx.doi.org/10.1787/888932782147>

Table 2.5. **Budgetary outlays on livestock output subsidies, 2007-11**

	2007	2008	2009	2010	2011
Total per tonne subsidies, in KZT million	2 540	9 855	11 667	13 130	17 747
in USD mln.	21	82	79	89	120
<i>Of which in KZT million:</i>					
Milk	x	1 107	1 871	2 500	3 481
Beef	859	1 663	1 712	2 219	2 018
Pigmeat	428	992	1 014	990	934
Sheep	x	155	0	200	215
Poultry	1 252	2 589	2 996	3 240	5 306
Eggs	x	3 349	3 800	3 613	5 187
Other products	x	x	272	368	606

x: Not applicable.

Source: Ministry of Agriculture of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932782166>

that high per hectare subsidies for these crops created a situation where producers lost the incentive to harvest and market crops after planting. These output payments were budgeted and paid for one year only, and ceased thereafter.

### Reduction of input costs

#### Support for seed production and perennial fruit plants

This programme supports producers and buyers of seeds and young plants of perennial fruit crops, and is thus effectively a mechanism that reduces the cost of inputs of crop growers. The programme dates back to the 1990s and is one of the few types of direct support that has been in place since the early period of independence. Initially it concerned only elite seeds, but then incorporated new components in the first half of the

2000s (Table 2.6). The programme covers a wide range of crops, including cereals and pulses, soybeans, sunflower, other oilseeds, potatoes, perennial grasses, annual grasses, sugar beet, cotton, fruits and grapes.

Table 2.6. **Components of seed and perennial fruit plants programme**

Year of introduction	Beneficiaries	Basis of support	Payment rate
1990s	Super elite seed producers.	Costs of producing or purchasing seeds based on the rates set per tonne.	40% of costs are compensated per tonne of seeds, provided that selling price does not exceed market price level.
	Elite seed producers and users.	Costs of seeds purchased based on the rates set per tonne produced.	40% of costs are compensated per tonne, provided that selling price does not exceed market price level.
1997	Certified seed originators.	Costs of producing certified seeds	Partial compensation of production costs based on the rates set per tonne.
2003	Producers of young plants of fruits, berries and grapes.	Costs of growing young plants.	40% of growing costs are compensated per young plant sold; selling price of young plants subjected to upper limit.
2005	Growers of mother stock plantations of perennial fruits.	Costs of establishing and maintaining mother stock plantations of perennial fruits.	100% of estimated costs per hectare are covered.

Subsidies for super elite seeds are provided to specialised seed farms, while for elite seeds, also to regular crop producers. The subsidy is set for each crop covering about 40% of estimated costs to produce seeds. Support is provided within the overall payment limits set for each oblast. Beneficiaries are eligible for support on the condition that they sell or purchase their seeds at a price that does not exceed market price.

Production of original certified seeds in agricultural research facilities is supported since 1997. Under this scheme, research and development costs for breeder and foundation seed are partially compensated in accordance with the established norms per tonne.

Two other components of the seed programme were introduced when a priority was set to develop fruit and grape production in Kazakhstan. Since 2003, growers of young plants of fruit, berries and grape receive a production cost subsidy. It is set at up to 40% of estimated production costs per seedling unit. The subsidy is paid for young plants sold to fruit growers, with the selling price subjected to limits. Another component of the programme related to the fruit sector is the compensation of costs to establish and maintain mother stock plantations of perennial fruits and grapes. The specialised growers of mother stock receive compensation of their production costs based on estimated costs per hectare – in this case 100% of these costs are compensated. In addition to subsidies for breeders of perennial fruit plants, support is provided to fruit growers for the establishment of fruit plantations (see section on support based on area).

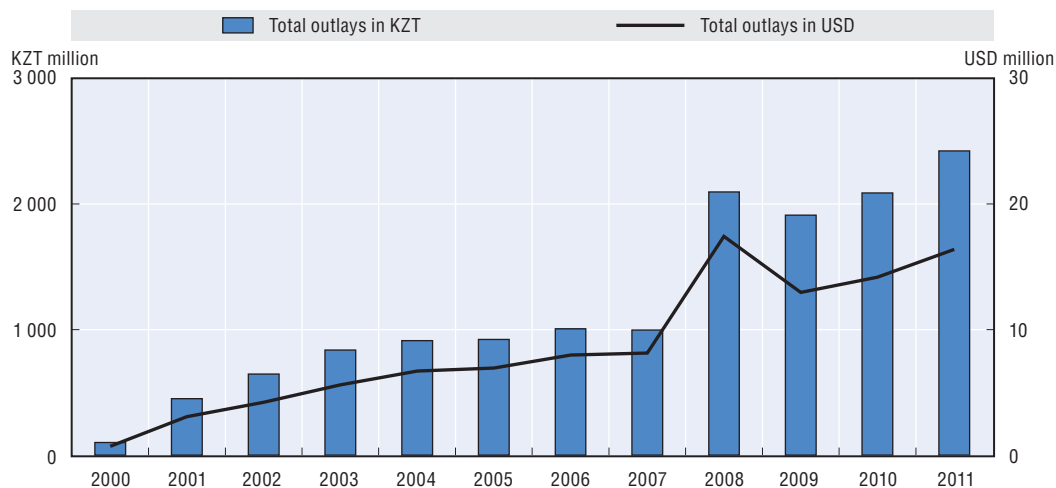
The overall expenditures for this programme have grown substantially since the early 2000s, from KZT 389 million (USD 2.7 million) in 2000-02 to KZT 2.3 billion (USD 16 million) in 2009-11 (Table 2.7 and Figure 2.8). Elite seed subsidies remain the dominant component, amounting to 87% of the aggregate programme spending in 2000-11. The programme has likely had important effect on the improvements in crop productivity and quality. According to the Ministry of Agriculture, the share of certified seeds in total seed use in Kazakhstan increased from 53% in 2001 to 99.8% in 2009.

Table 2.7. **Composition of outlays on seed and perennial fruit plants programme, 2000-12**


	Total spending		Of which									
			Elite seed subsidy		Production cost subsidy for original seeds		Subsidy for establishment of perennial fruit plantations and vineyards		Subsidy for maintenance of mother stock plantations of perennial fruit crops		Subsidy for young plants	
	KZT 1 000	USD 1 000	KZT 1 000	Quantities subsidised, tonnes	KZT 1 000	Quantities subsidised, tonnes	KZT 1 000	Area, hectares	KZT 1 000	Area, hectares	KZT 1 000	Number of plants subsidised
2000	100 000	704	100 000	53 300	x	x	x	x	x	x	x	x
2001	450 000	3 067	450 000	47 100	x	x	x	x	x	x	x	x
2002	645 185	4 209	645 185	49 393	x	x	x	x	x	x	x	x
2003	837 223	5 597	770 327	58 040	64 800	3 762	x	x	x	x	2 096	43 669
2004	910 992	6 697	841 703	57 663	66 889	5 064	x	x	x	x	2 400	50 000
2005	920 764	6 929	842 643	55 948	67 214	4 918	6 106	5	x	x	4 800	60 000
2006	1 005 179	7 972	833 532	56 505	101 151	6 146	2 260	2.5	3 846	5	4 800	60 000
2007	995 927	8 127	842 067	55 077	124 821	7 435	14 521	17.2	5 769	7.5	8 750	109 372
2008	2 096 273	17 425	1 610 633	70 387	257 266	9 327	36 085	27.3	22 183	19.7	170 106	1 539 418
2009	1 911 124	12 957	1 406 163	61 625	255 955	9 922	7 744	5.9	34 384	44.5	206 878	1 784 131
2010	2 087 532	14 167	1 501 445	80 562	277 897	8 125	17 976	13.6	36 574	32.5	253 639	2 222 967
2011	2 422 386	16 379	1 760 703	73 806	324 100	9 748	27 269	20.6	21 879	19.4	288 435	2 476 322
2012	2 451 448	16 343	2 104 119	84 895	0	0	10 881	8.22	38 300	34	298 148	2 820 836

x: Not applicable.

Source: Ministry of Agriculture of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932782185>Figure 2.8. **Budgetary outlays on seed and perennial fruit plants programme, 2000-11**

Source: Ministry of Agriculture of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932781045>

### Pedigree livestock programme

The pedigree livestock programme has also been in place since the 1990s. Its objective is to improve the quality of national herds by increasing the share of pedigree livestock. The programme is heterogeneous, incorporating support to various types of beneficiaries

and items that relate to variable and capital costs (Table 2.8). Participation in the programme is voluntary, with eligible beneficiaries including the Republican Centre for Livestock Breeding, Kostanay oblast breeding farms, pedigree poultry production units and other agricultural enterprises.

Table 2.8. **Components of pedigree livestock programme**

Beneficiaries	Basis of support	Payment rate
Livestock producers and livestock breeding farms	Cost of purchased pedigree livestock	Up to 50% cost compensation
	Cost of semen of pedigree bulls	
Poultry producers	Cost of purchased day-old chicks	Up to 50% cost compensation
Poultry breeding farms	Cost of purchase of pedigree poultry	100% cost compensation
Horse breeders	Cost of purchase of purchase, keeping and training of pedigree horses	100% cost compensation
	Laboratory and special agricultural equipment	100% cost compensation
Republican Centre for Livestock Breeding	Cost of purchased pedigree bulls	100% cost compensation
	Cost of imported semen	
	Cost of keeping of pedigree bulls	

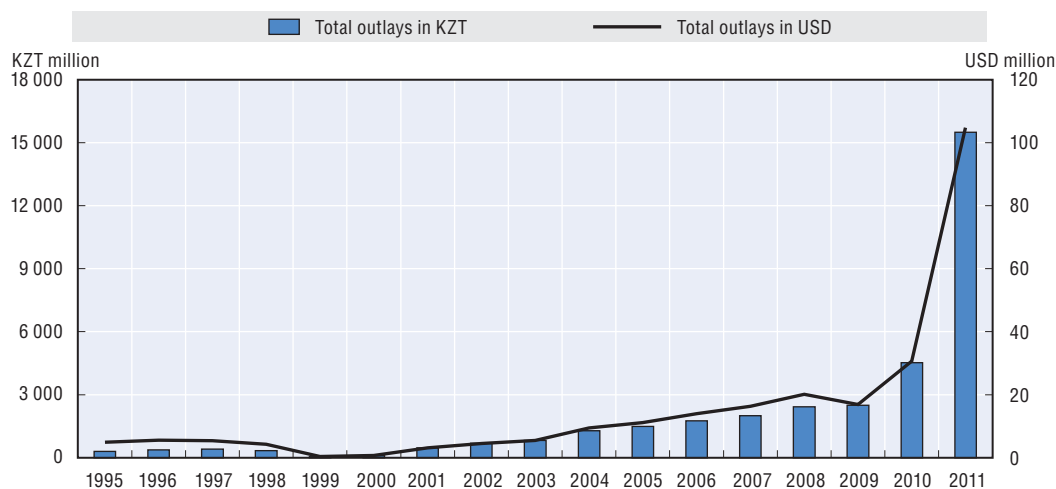
A special commission exists in *akimats* to administer the parts of the programme that relate to livestock producers and breeder farms. The latter submit requests to *akimats* on the number of pedigree livestock they intend to acquire. If the applications exceed the available budget, the commission develops the list of priority applicants (those with larger share of pedigree livestock, or members of agricultural co-operatives), which is then approved by *akim*. The approved beneficiaries have to provide evidence of purchase of pedigree livestock to the commission (copies of sales-purchase contract, invoices, etc.). If these meet the requirements, the commission determines the subsidies within the upper limits of subsidy rates set.

The budgetary outlays of this programme have been rising continuously, from a modest level in the mid-1990s until 2010 when they rose sharply following the adoption of the programme to increase exports of livestock products. Annual spending reached KZT 15.5 billion (USD 105 million) in 2011, compared to KZT 2.5 billion (USD 17 million) in 2009 (Figure 2.9). An important share of pedigree animals supplied within the programme is imported. Since 2010, imports have reached 20 000 heads per year, in addition to imports of semen from elite bulls for artificial insemination.

### **Fertiliser, chemicals and fuel subsidies**

The support scheme to reduce prices of mineral fertilisers, chemicals for seed treatment and herbicides began in 2001 (Table 2.9). It was introduced as part of the policy to stimulate agricultural production set out in the agricultural development programmes of the early 2000s. The stated aim of this measure was to increase productivity of agricultural crops, improve soil fertility and quality of agricultural products.

According to the initial rules, the cost of locally-produced mineral fertilisers was partially reimbursed to the manufacturers of mineral fertilisers. The reimbursement rate was 40% of the selling prices for the fertilisers sold on the domestic market to farmers. The same terms were used for locally produced chemicals. However, most chemicals were imported and were not eligible. *Akimats* were responsible for the distribution of subsidised inputs among the farmers.

Figure 2.9. **Budgetary outlays on pedigree livestock programme, 1995-2011**

Source: Ministry of Agriculture of the Republic of Kazakhstan.

StatLink <http://dx.doi.org/10.1787/888932781064>

Table 2.9. **Subsidies for fertilisers, chemicals and fuel, 2001-11**

KZT million

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Total fertiliser and chemicals subsidies:</b>											
in KZT million	155	238	800	999	1 200	1 815	0	0	2 929	3 215	5 970
in USD million	1	2	5	7	9	14	0	0	20	22	32
<i>allocated for:</i>											
Fertilisers	yes	yes	yes	yes	yes	yes	x	x	yes	yes	yes
Chemicals	x	x	yes	yes	yes	yes	x	x	x	yes	yes
<i>paid to:</i>	manuf.	manuf.	manuf.	suppliers	suppliers	suppliers	x	x	manuf.	manuf. <sup>1</sup>	..
Fuel	x	x	x	x	x	7 000	x	x	x	x	x
<i>paid to:</i>	x	x	x	x	x	producers	x	x	x	x	x
Per hectare subsidies	x	x	x	x	x	x	12 805	20 930	16 418	12 851	18 096
<i>paid to:</i>	x	x	x	x	x	x	producers	producers	producers	producers	producers

x: Not applicable; ..: Not available.

1. In 2010, subsidies for chemicals were also paid to producers.

Source: Government resolutions; Ministry of Agriculture of the Republic of Kazakhstan.

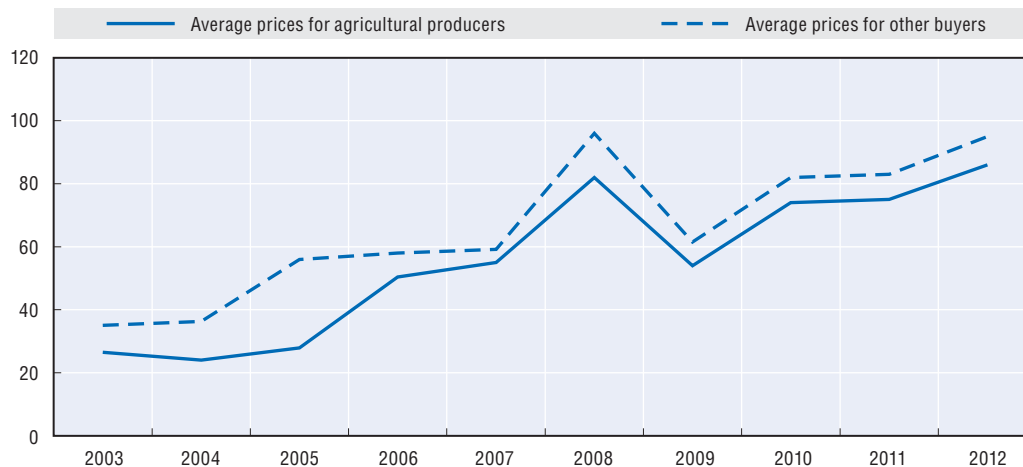
StatLink <http://dx.doi.org/10.1787/888932782204>

In 2007, the fertiliser and chemicals subsidies were replaced by a per hectare payment scheme, whereby the payment rate was established on the basis of the estimated use of these inputs (see sub-section on support based on area). Although the payment formula has remained tied to the estimated use of fertilisers and chemicals, the payment was de-linked from the actual consumption of these inputs. Nevertheless, ad hoc subsidies for fertilisers were provided in the late 2000s in addition to regular per hectare payments. This was done in 2009 in the context of the difficulties related to the financial and economic crisis and the 2010 drought. In the new 2013-20 agricultural programme, this support will once again be a regular measure and receive 14% of the aggregate eight-year allocation (KZT 376 billion, or USD 3 billion).


Temporary export bans on fuel are imposed during the sowing or harvesting periods to ensure fuel provision to crop producers. In addition, since 2003, limits on prices for

diesel fuel sold to agricultural producers are set, together with the total volumes to be supplied at these prices during the sowing and harvesting periods (Figure 2.10). According to the estimates of the Ministry of Agriculture, in 2010-12 this resulted in approximately 10% discount for agricultural producers on the average market price of diesel fuel (this discount was between 24% and 50% in 2003-05). The amount of implicit subsidy arising from reduced diesel prices is estimated at KZT 6 billion (USD 40 million per year in 2010-11), which effectively represents a 40% top-up to the total annual spending on per hectare subsidies.

Figure 2.10. **Prices for diesel fuel to agricultural producers and other buyers, 2003-12**  
Thousand KZT per tonne



Source: Ministry of Agriculture of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932781083>

### ***Subsidy for delivery of water for irrigation***

Since 2003, agricultural producers are compensated for the costs of water delivery. The subsidy rate is defined as a share of delivery cost per cubic meter of water and is paid for the actual amount of water delivered. Prior to 2007, a single subsidy rate of 40% was applied, later differentiated between 25% and 90% depending on the type of water consumer and the irrigation system used. In addition to this policy, a range of measures is implemented to improve the irrigation systems and irrigation technologies (see sub-section on infrastructure).

### ***Subsidised mandatory crop insurance scheme***

In the early 1990s, insurance services for the agricultural sector were provided by private insurance companies and no compulsory insurance schemes existed. Insurance companies were oriented to large-scale producers. In 1997, mandatory agricultural insurance was introduced through a special provision in the *Law on Insurance*. The government established KazAgroPolis as a public supplier of crop insurance, but producers were not very interested in insuring crops. The company went out of business several years later. Between 1998 and 2000, the number of companies offering agricultural insurance decreased from 13 to 7, and reportedly continues to decline. Premium rates can be as high as 20% of the insured value (Mahul and Stutley, 2010).

The *Law on Mandatory Crop Insurance* adopted in 2004 (amended in 2011) introduced mandatory subsidised crop insurance for grains, oilseeds, sugar beet and cotton. The scheme covers a wide range of adverse events, such as drought, frost, low temperatures, excess moisture, floods, hail, torrents, tornadoes, and heavy showers. Insured is the estimated crop income loss. The latter is defined as the difference between the estimated revenue from the crop and the cost of production per hectare of the destroyed crop, multiplied by the area affected by the natural disaster. The Law sets the maximum and minimum limits for insurance premiums, differentiated by crops, and for grains, also by regions (Table 2.10).

Table 2.10. **Maximum and minimum insurance premiums for mandatory crop insurance, 2012**

As % of insured value

Crop/region	Minimum rate	Maximum rate
Grains: Akmola, Almaty, East Kazakhstan, Zhambyl, Kostanay, North Kazakhstan	1.78	3.48
Karaganda, Kyzylorda, Pavlodar, South Kazakhstan	3.17	5.83
Aktobe, West Kazakhstan	5.21	9.15
Oilseeds (all regions)	2.01	3.44
Sugar beets (all regions)	5.76	8.39
Cotton (all regions)	0.92	1.33

Source: Law on Mandatory Crop Insurance, 2011 amended version.

The mandatory crop insurance scheme is supported by the government, which compensates insurers 50% of the value of indemnities paid, as well as the cost of their services. The administration of the budgetary funds to support mandatory crop insurance has been the responsibility of the Fund for Financial Support of Agriculture (FFSA), but in 2012 this function was transferred to KazAgroMarketing for the reason that the latter has more extensive local networks. Three private insurance companies and 39 mutual insurance companies participate in the scheme. The number of policies steadily increased up to 2009, but has declined since then, possibly because of difficulties producers face when settling indemnities with insurance companies (Table 2.11). Insurance penetration is higher in regions with a bigger share of large-scale enterprises and better infrastructure, such as Akmola, Kostanay, East and North Kazakhstan oblasts. In 2011, the FFSA transferred KZT 1.1 billion (USD 8 million) of subsidies to insurers; the level of outlays was substantially increased in that year following the 2010 drought.

Table 2.11. **Penetration of compulsory crop insurance, 2005-12**

	Number of policies	Insured area (million hectares)	Percentage of crop area insured
2005	19 008	10.5	..
2006	13 619	9.1	59
2007	25 446	12.1	78
2008	33 957	14.5	84
2009	32 165	15.0	82
2010	17 389	12.7	68
2011	15 768	13.6	75
2012 <sup>1</sup>	9 869	11.2	61

..: Not available.

1. As of July 2012.

Source: FFSA.



## Support based on area

### Per hectare payments for priority crops

In 2007, support to reduce the cost of fertilisers, chemicals and fuel was replaced by per hectare payments (discussed above). They are provided for “priority crops” approved by the government, with the list of such crops determined for each region by the *akimats*. The priority list is determined with the view to diversify crop production into crops in which Kazakhstan is not self-sufficient, such as oilseeds and horticultural crops. One reason for the introduction of per hectare payments was to ensure that support is actually going to the priority crops – in this case plantings serve as straightforward evidence. Another reason was the concern that the current crop growing practices lead to soil depletion and water over-use. Per hectare payments were supposed to stimulate better cultivation practices.

The payment is differentiated by the priority crops, and for some, further varies depending on cultivation technology (Table 2.12). Producers applying drip irrigation, and, in the case of grain, complying with “scientific” requirements, are eligible for higher payment rates (Box 2.2).<sup>6</sup> The payment rates for each crop are the same across the country. The amount of payment is calculated on the basis of estimated use of fertilisers, chemicals and fuel per hectare of plantings, with the compensation set at 50% of the respective cost for fertilisers and chemicals and 40% for the fuel.

Table 2.12. **Per hectare payment rates for priority crops, 2010**

Priority crops	Subsidy rate		
	KZT per ha	USD per ha	In % of per ha production cost
Cereals (traditional technology)	350	2.4	2
Cereals (compliance with scientific criteria)	670	4.5	3
Maize for grain	2 500	17.0	10
Maize and sunflower for silage	650	4.4	..
Forage crops	450	3.1	4
Oilseeds	2 282	15.5	12
Sugar beet	24 500	166.3	34
Sugar beet (with industrial drip irrigation)	50 000	339.3	..
Rice	14 000	95.0	13
Vegetables and melons	9 000	61.1	6
Vegetables and melons (with industrial drip irrigation)	24 000	162.9	..
Vegetables in greenhouses	1 300 000	8 822.5	..
Fruits and berries	2 000	13.6	..
Cotton	9 000	61.1	11
Cotton (with industrial drip irrigation)	24 000	162.9	..
Vineyards	2 000	13.6	..
Potatoes	2 420	19.7	5

..: Not available.

Source: Government Resolution No. 123 of February 25, 2010; estimates of the Ministry of Agriculture of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932782223>

**Box 2.2. Moisture and water saving technologies for priority crops**

Moisture-saving technology, or reduced tillage, typically implies the elimination of mouldboard ploughing and increased reliance on chemical weed control. The reduced tillage preserves soil moisture and diminishes the risk of yield loss in case of drought. Adoption of a reduced-tillage regime also enables grain producers to eliminate the fallow year from the typical four-year crop rotation and plant crop every year, which substantially increases the productivity of the field. Reduced-tillage technology lowers fuel costs by eliminating one or more field operations, but increases herbicide costs because cultivation is replaced by chemical weed control. For enterprises with old machinery, the adoption of a reduced-tillage system typically requires the replacement of outdated seeders with newer units designed to accommodate the technology; this can be prohibitively expensive for small enterprises or family farms (USDA, 2010a). Moisture-saving technologies were applied on 11.7 million hectares sown to grains in 2011, or 72% of the total. This compares to 1.1 million hectares and 8% in 2003. The Ministry of Agriculture has set a goal to have up to 80% of planted area under reduced tillage by 2014.

The drip irrigation system was used on 20 970 hectares in 2011, compared to 713 hectares in 2007. Drip irrigation systems saves from two to three times more water as compared to the common furrow irrigation, and prevents salinisation, swamp formation and erosion of the irrigated lands. The main advantage of drip irrigation is continuous control of the best moisture level in the root layer. Another advantage is the considerable saving of irrigation water that moistens the root layer only, thus excluding deep penetration and evaporation as well as surface flow and water windage. Almost all water is used for plant transpiration. The extent of irrigation water saving is determined by the climatic conditions; in dryer regions the effectiveness of drip irrigation tends to be higher.

Total outlays on per hectare payments have been variable over the duration of the programme, and reached on average KZT 17.3 billion (USD 125.2 million) per year between 2008 and 2011 (Table 2.13). This type of payment was the second largest direct payment after per tonne subsidies for livestock products. Around 45% of total spending in 2008-11 was directed to grains and 25% to oilseeds; rice and cotton also received relatively significant financing (7% of total outlays for each), as did vegetables and melons (5%).

The administration of per hectare payments is a complex process. It begins by the *akimats* developing requests for payment based on prospective plantings for the next season. The budget allocation for each region is approved by the government based on the request submitted by the Ministry of Agriculture. The approved overall budget is then allocated to the regions, and within the regions to individual beneficiaries. The latter is the responsibility of *akimats*, which are also responsible for the verification of actual plantings when local commissions visit the fields and approves the producer's eligibility to receive the payment. This process takes time and payments are typically made a few months after the sowing has been completed. Eligibility for higher payments rates is established on the basis of a document confirming that the quality of seeds used corresponds to formal requirements, and by a crop location map showing that the size of the fallow land is in accordance with the compliance criteria.


This complicated process weakens farmer incentives. Delays in the transfer of payments mean that producers make production decisions largely without factoring in the availability of payment at the time of planting, while the additional requirements to prove

Table 2.13. **Outlays on per hectare payments for priority crops, 2008-11**

	2008	2009	2010	2011
Total outlays, KZT million	20 930.0	16 418.0	13 728.1	18 096.0
USD million	174.0	111.3	93.2	122.4
<i>Of which in KZT million:</i>				
Grains, traditional technology	10 428.3	6 623.0	x	x
Grains, moisture retention technology	x	1 381.0	x	x
Grains in compliance with scientific criteria	x	x	824.4	750.0
Grains, basic subsidy rates	x	x	4 825.4	6 090.1
Maize for grain	228.3	241.7	38.4	196.0
Millet	x	x	0.3	x
Maize and sunflower for silage	x	x	31.8	63.2
Feed crops	1 466.3	350.0	134.3	291.5
Oilseeds	4 150.6	3 901.0	3 595.3	5 395.4
Sugar beet	1 015.0	481.0	246.2	633.3
Sugar beet with industrial drip irrigation	x	x	x	5.2
Rice	1 488.0	1 173.2	1 123.4	1 374.3
Vegetables and melons	933.6	820.1	862.6	789.1
Vegetables and melons with industrial drip irrigation	x	x	21.0	44.2
Vegetables in greenhouses	x	x	197.9	316.2
Fruits and berries	80.0	80.4	15.0	14.0
Cotton	991.2	1 173.2	1 169.1	1 720.7
Cotton with industrial drip irrigation	x	x	9.7	7.0
Vinyards	48.0	39.6	11.4	13.3
Potatoes	100.7	153.8	86.9	392.5

x: Not applicable.

Source: Government resolutions; Ministry of Agriculture of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932782242>

eligibility for higher payment rates discourages potential beneficiaries. One interviewed grain grower noted that because this process is cumbersome, he prefers not to apply for the higher payment. A lack of effectiveness of the programme is confirmed by the Ministry of Agriculture's own assessment which noted that the programme did not yield the expected outcomes in terms of crop diversification. A proposal to terminate or limit per hectare payments and to re-direct the funds to other measures was discussed during the preparation of the new agricultural programme for 2013-20. However, no changes have been included in the final text and it is foreseen that a total KZT 240 billion (USD 1.6 billion) for per hectare payments will be allocated. This amounts to around 7% of the overall eight-year programme funding.

### **Establishment of perennial orchards**

The support programme for perennial orchards began in 2007 as part of the strategy to diversify crop production and increase self-sufficiency in horticultural products. The purpose is to stimulate the production of fruits, berries and grapes with the target to increase the area producing grapes to 13.1 thousand hectares and orchards to 43 thousand hectares by 2014. The share of fresh fruit self-supply should increase to 54.6% and grapes to 67%. Since 2011, oblast governments have been responsible for the implementation of this programme. Support is provided per hectare of the plantations established. Budgetary expenditures increased from KZT 0.8 billion in 2007 (USD 6.5 million) to KZT 1.5 billion (USD 10.4 million) in 2011.

## Credit support

### Establishment of concessional credit system

Concessional credit is one of the most important forms of support to agriculture in Kazakhstan, which was introduced soon after independence. The agricultural sector was going through a deep transition recession at the beginning of the 1990s. The general price liberalisation resulted in a considerable cost-price squeeze for agriculture, making the majority of agricultural enterprises *de facto* insolvent. A lack of working capital, obsolete machinery and equipment, and unavailability of microcredit to rural households had become systemic problems. They could not be resolved through commercial lending due to the inability of the sector to generate sufficient income for debt financing and high risks for the lenders. Because the reforms were at an early stage, regulatory and ownership systems functioned poorly, creating additional impediments, such as a lack of collateral and the banking infrastructure poorly adapted to the changing agricultural structure. At the time, immediate government objective was to ensure access to credit for agricultural enterprises and the food industry to keep them afloat.

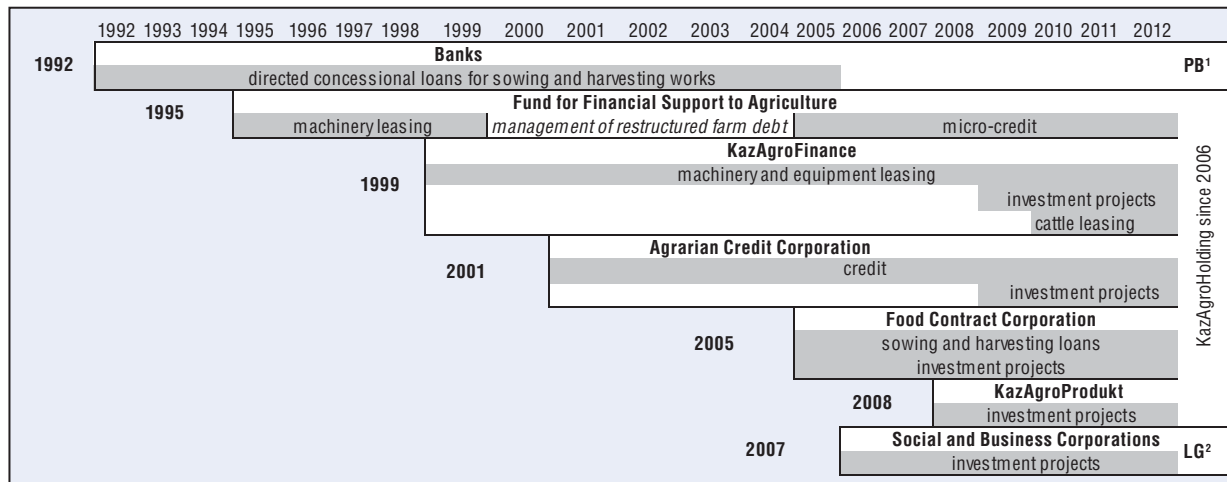
At the initial stage, between 1992 and 1994, the government provided budgetary funds to banks for on-lending to agricultural enterprises at low interest rates. From 1994, directed loans were disbursed through the state-owned Development Bank. As the recession continued, however, agricultural debt continued to build up, leading the government to implement large-scale financial restructuring of agricultural enterprises between 1995 and 1997.

The Fund for Financial Support to Agriculture (FFSA) was created in 1994 to transfer support funds, including through a nascent concessional programme of machinery leasing. By 1998, the development of a credit system for the agricultural sector became a priority of agricultural policy. In 1999, KazAgroFinance was created and took over the implementation of the machinery leasing programme from the FFSA. Two years later, the Agrarian Credit Corporation (ACC) was established with a mandate to develop a nation-wide network of Credit Partnerships. Between 2000 and 2004, the FFSA was responsible for the management of restructured farm debt and for a certain period was not involved in lending activity. However, in 2005 it began to develop a network of rural micro-credit organisations and at present it remains the state agency responsible for support of the country's rural micro-credit system. Sowing and harvesting campaigns continued to be supported, although concessional loans were allocated through local authorities and later through the Food Contract Corporation and the ACC. In 2006-07, all state credit institutions were consolidated into KazAgroHolding. In 2006, Social and Business Corporations were established in the regions. These became regional-level financial institutions participating in the concessional credit system.

In sum, since the early 1990s, a system of concessional credit institutions has emerged in Kazakhstan (Figure 2.11). Substantial initial injections of public funds were made to establish these institutions. At present, each of these institutions continues to receive periodically transfers from the state budget for capitalisation.

In terms of the annual flow of new credit to agriculture, commercial lending represents the dominant source of credit, accounting in 2010-11 for around three-quarters of the total amount of new loans issued (Figure 2.12, Panel A). The share of concessional credit in new annual lending was substantially increased in 2009 amidst the economic crisis, when commercial lending contracted by more than 40%. However, with a relatively

Figure 2.11. **Establishment of the concessional agricultural credit system in Kazakhstan**

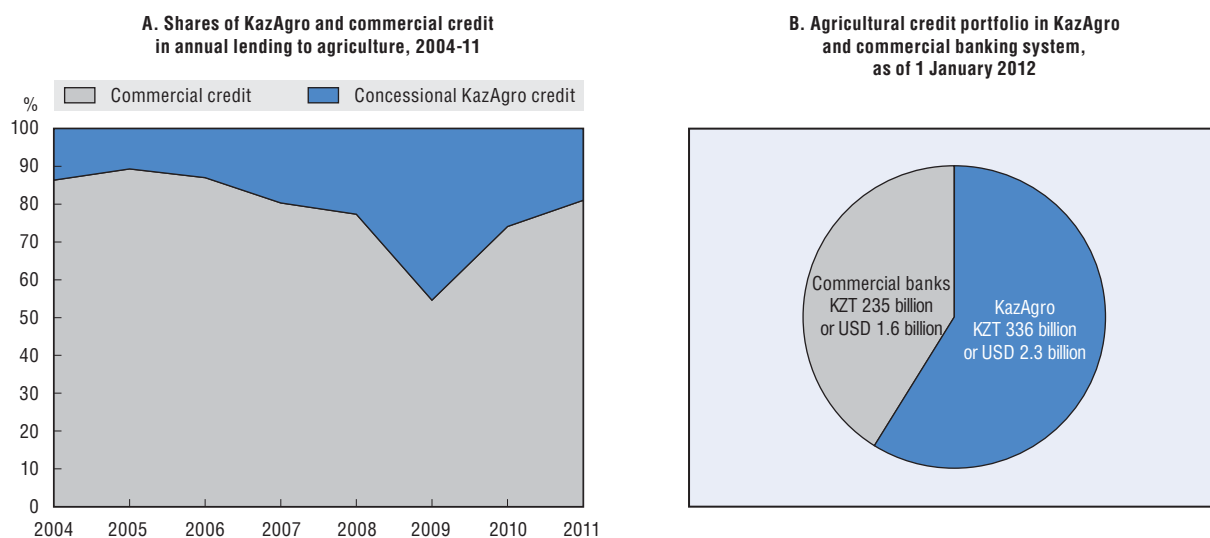


1. Private banking system.
2. Local governments.

StatLink <http://dx.doi.org/10.1787/888932781102>

modest share in the annual new lending, KazAgro agencies account for almost 60% of the total agricultural credit portfolio, as they remain the principal long-term lenders to agriculture (Figure 2.12, Panel B). Commercial credit is predominantly taken by large-scale borrowers that are profitable and able to provide adequate collateral, while the concessional credit system is oriented to small and medium borrowers. The latter accounted for 96% of total KazAgro credit issued in 2011.

Figure 2.12. **Concessional and commercial credit to agriculture**

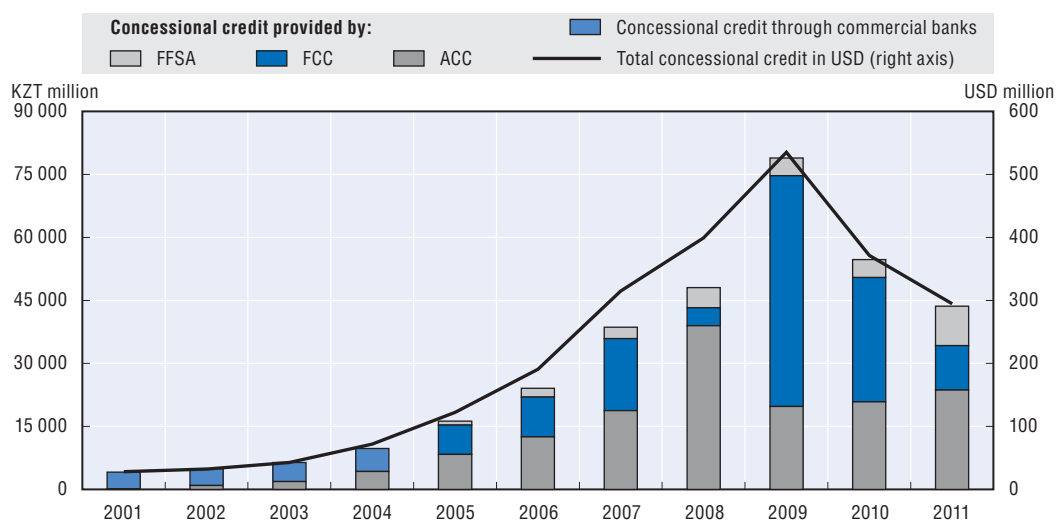


Source: KazAgro; National Bank.

StatLink <http://dx.doi.org/10.1787/888932781121>

The overall annual amounts of concessional loans issued by KazAgro credit institutions have been rapidly expanding since the mid-2000s, and amounted to KZT 59 billion (USD 400 million) per year for 2009-11 (excluding leasing operations of the KAF). Over this period, the FCC and the ACC accounted for 90% of total KazAgro credit allocations (Figure 2.13).

Figure 2.13. **Annual allocations of concessional credit to agriculture and the processing sector, 2001-11**

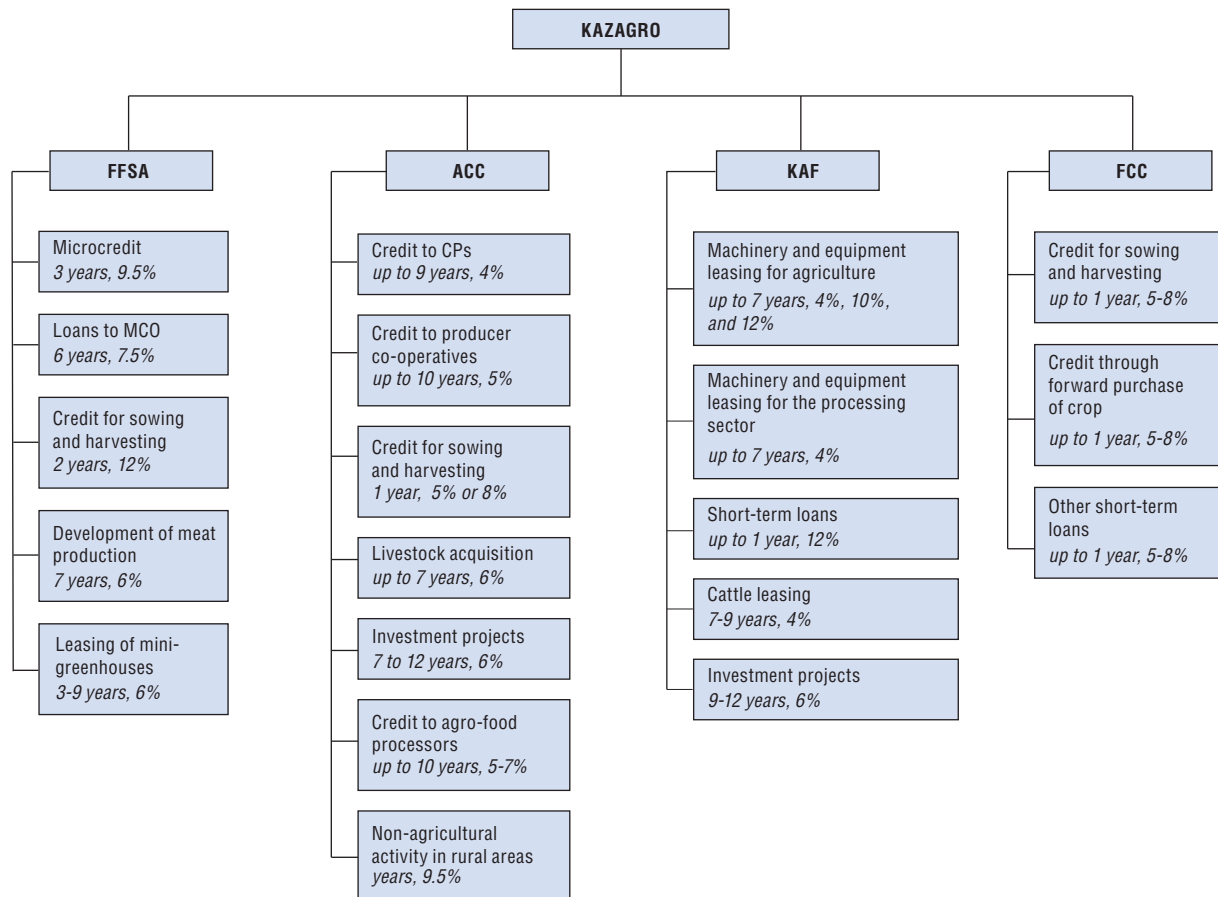


Source: KazAgro.

StatLink  <http://dx.doi.org/10.1787/888932781140>

At present, KazAgro credit institutions offer various lines of credit to various types of borrowers, including agricultural producers, processors and the rural population in general. Some of these programmes are relatively long-standing, while others are new and were launched in response to recently formulated policy priorities, such as the horticultural sector development, the export enhancement of the livestock sector, and new investments projects.

As illustrated in Figure 2.14, concessional credit lines include both short-term (up to one year) and long-term loans (typically, between three and ten years, but credit for investment projects and machinery leasing may be issued for up to 9 or 12 years). Interest rates vary depending on the term and purpose of the loan and also on the origin of credit resources (i.e. different interest rates are set for loans provided from budgetary funds, own capital of KazAgro agencies, and funds borrowed from commercial sources). For example, in 2011 short-term loans for sowing and harvesting were provided at 4%, 5%, 6%, 8% and 12% interest rates per annum, which compares with a commercial interest of 12.3% for loans of up to one year. Longer term loans for 3 to 7 years are typically given at interest rates varying from 4% to 9.5% with a commercial interest rate in 2011 at 10.5% (for the loans between 1 and 5 years) and 11.5% (for the loans over 5 years). In addition to reduced interest rates, concessional loans may incorporate grace periods, early repayment clause, and be free from commission fees (as, for example, loans provided by the FCC for sowing and harvesting works). A brief description of the institutions providing concessional credit and their concessional credit schemes follows.

Figure 2.14. **Concessional credit lines provided by KazAgro agencies**

Source: FFSA, ACC, KAF, FCC.

### ***Agrarian Credit Corporation and Credit Partnerships***

The Agrarian Credit Corporation (ACC) was created to develop a country network of Credit Partnerships (CPs), which at the time was seen as a “radical solution” to ensure the flow of credit to agricultural producers. The task of the ACC was to provide start-up capital for the newly formed CPs on the basis that once CPs have accumulated sufficient own funds for operations, the ACC would terminate its participation in authorised capital by selling its stakes to current or entering CP members. At present, 161 CPs operate nationwide, covering 89% of administrative micro-regions in the country. However, it is evaluated that only one-third is in stable financial condition. The main factors are considered to be insufficient skills of CP management, as well as excessive centralisation of decision-making at the level of the ACC. This situation led the ACC to develop a set of measures to rehabilitate the CP system (Box 2.3).

Up to 2005, the ACC provided credit to the CPs for on-lending to individual borrowers, but by 2009-10 the share of funds directed to CPs fell to less than 20% of the company’s credit portfolio (Table 2.14). A new type of ACC credit was created in the mid-2000s that went to rural associations to support the development of co-operative processing, storage, transportation, and input supplies. At approximately the same time, credit was opened to

### Box 2.3. Improving access to finance for agribusiness SMEs by strengthening Credit Partnerships

Improving access to finance for agribusiness firms is a priority of the Ministry of Agriculture of Kazakhstan within the framework of the project *Diversifying and Strengthening Kazakhstan's FDI and Sector Competitiveness*, an initiative supported by the OECD Eurasia Competitiveness Programme and co-financed by the European Union.

Creating effective and viable rural co-operatives would enable greater access to finance for agribusiness SMEs and small farmers. Local proximity, social links and pressure between their members would help minimise transaction costs, increase information about borrowers, and reduce risk.

The existing network of 161 Credit Partnerships (CPs) has a total of 7 211 members and is spread through the 13 oblasts. Almost 82% of the total membership is represented by individual farms. Over 40% of the CPs are located in four southern oblasts, South Kazakhstan, Almaty, Zhambyl and Kyzylorda. However, three northern oblasts of Almaty, Kostanay and North Kazakhstan account for over 40% of the overall portfolio of the CPs, which as of January 2012 was KZT 18 billion (USD 122 million). The rate of participation in the CPs is low in all regions. Thus, in South Kazakhstan and Almaty oblasts where there is the largest CP membership (1 500 and 950 participants respectively in December 2011), this represents less than 2% of the more than 60 000 agricultural entities in these two oblasts.

Only one-third of CPs are estimated to be in stable financial condition, with the majority suffering from poor local management and a lack of skills of managers, as well as an excessively centralised decision-making process at the ACC. It was decided to strengthen the CP model, as recommended by the Project, to revitalise CPs and improve the provision of credit to rural areas. The new model, revised by the ACC in May 2011, aims to strengthen the legal framework and structure of CPs, change the interaction between ACC and CPs towards more decentralisation in the decision-making process, but at the same time strengthen ACC control on the financial stability of CPs. Thus, CPs and local ACC branches will be able to make independent decisions on issuance of loans (up to a certain limit). CPs can also decide independently on inclusion of new members that have the status of agricultural enterprises. The proposed changes are expected to simplify and shorten the process of loan provision, and increase the financial robustness of the system by expanding its membership to larger agricultural producers. As a complementary effort to improve the CP model, it is intended to develop education, training and advisory services as provided by the ACC. Thus, the overall orientation is to ensure that CPs are managed by their members, with the ACC having a more limited supervisory and support role.

Source: OECD, 2012b; ACC.

non-agricultural activities in rural areas, such as agro-tourism, road service, rural points of sale, food processing, and fisheries. However, these schemes rapidly diminished in importance, and in 2009-11 accounted for only 2% and 1% of total ACC loans issued in these years respectively. Since 2009, ACC's largest credit allocations were for sowing and harvesting works, accounting for around 40% of the total amount of loans issued in 2009-11. Another type of credit opened recently consisted of concessional loans for government-supported investment projects (see below), as well as loans to livestock producers for the acquisition of cattle. Altogether, credit for sowing and harvesting, for government investment projects,




Table 2.14. **Concessional credit provided through the Agrarian Credit Corporation (ACC), 2001-11**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Total ACC credit allocations:</b>											
In KZT million, current prices	132	929	1 884	4 264	8 334	12 488	18 175	39 041	35 504	37 820	41 922
In USD million, current prices	1	6	13	31	63	99	148	325	241	257	286
<i>Composition of total ACC credit by use:</i>											
Credit provided through CPs – long-term loans	40%	46%	30%	45%	35%	29%	31%	18%	13%	7%	7%
Credit provided through CPs – short-term loans <sup>1, 3</sup>	60%	54%	70%	55%	65%	48%	47%	22%	19%	13%	13%
Credit to producer co-operatives <sup>2</sup>	x	x	x	x	x	22%	12%	6%	2%	3%	2%
Credit for non-agricultural activities in rural areas	x	x	x	x	x	x	4%	3%	1%	1%	1%
Credit for investment projects	x	x	x	x	x	x	x	x	18%	21%	16%
Credit for sowing and harvesting works <sup>3</sup>	x	x	x	x	x	x	x	x	43%	34%	45%
Credit to agro-food processors	x	x	x	x	x	x	x	x	x	10%	4%
Credit for pedigree cattle	x	x	x	x	x	x	x	x	x	x	12%
Loans provided at market terms	x	x	x	x	x	x	0%	49%	4%	11%	0%
Other activities	x	x	x	x	x	x	7%	3%	0%	0%	0%
<i>Composition of total ACC credit by source:</i>											
Republican budget	100%	100%	100%	100%	65%	65%	49%	26%	6%	64%	62%
National Fund	x	x	x	x	x	x	x	x	61%	21%	16%
ACC's own funds	x	x	x	x	35%	35%	44%	22%	31%	17%	19%
Borrowed funds	x	x	x	x	x	x	7%	52%	2%	1%	7%

x: Not applicable.

1. Short-term loans provided by the CPs are used mainly for sowing and harvesting works.
  2. Credit for processing, storage, transportation, and input supplies.
  3. Aggregated information on sowing and harvesting loans provided by all KazAgro agencies is also presented in Table 2.16.
- Source: ACC.

StatLink  <http://dx.doi.org/10.1787/888932782261>

and purchase of cattle accounted for 72% of total loans issued by the ACC in 2009-11. This indicates that in recent years the ACC has been re-oriented towards financing investment and export-enhancement programmes, and away from its initial mandate to support small-scale rural activities and their diversification.

### **Fund for Financial Support of Agriculture: Rural micro-credit**

The FFSA provides micro-loans to rural borrowers directly or through independent microcredit organisations (MCO) created through FFSA's investment in their authorised capital (Table 2.15). Microcredit organisations are oriented at low-income rural people, providing financial resources for those who do not have access to finance elsewhere. In 2006-08, 51 microcredit organisations (MCO) were created with FFSA investment in their charter capital (up to 49%). At present, the system is not sustainable without government financing.

Microloans are issued for three years with a one-year grace period. Between 2005 and 2011, 63 000 such loans were allocated, with a maximum amount per borrower of KZT 400 000 (USD 2 715) in 2010, and KZT 1 million (USD 6 800) in 2011. About 91% of the loans were taken out for livestock production, 5% for crop growing, and the rest for other business activities. Up to 2010, crediting of micro borrowers, directly or through the provision of credit resources to MCOs, constituted the majority of FFSA's credit portfolio. However, credit was significantly shifted in 2011 to new programmes that were developing livestock production.

Table 2.15. **Concessional credit through the Fund for Financial Support of Agriculture (FFSA), 2005-11**

	2005	2006	2007	2008	2009	2010	2011
<b>Total FFSA credit allocations:</b>							
in KZT million, current prices	926	2 079	2 684	4 789	4 264	4 271	9 375
in USD million, current prices	7	16	22	40	29	29	64
<i>Composition of total FFSA credit by use:</i>							
Micro-credit to individual borrowers	100%	97%	84%	60%	42%	47%	31%
Credit to micro-credit organisations	x	3%	16%	37%	23%	16%	6%
Credit for development of greenhouse horticulture <sup>1</sup>	x	x	x	2%	1%	1%	8%
Credit for field works <sup>2</sup>	x	x	x	x	x	12%	8%
Credit for development of livestock production <sup>3</sup>	x	x	x	x	x	10%	44%
Credit for small business (from local budget resources)	x	x	x	x	32%	13%	1%
Other micro-credit	x	x	x	x	1%	1%	2%
<i>Composition of total FFSA credit by source:</i>							
Republican budget	100%	88%	57%	58%	24%	47%	43%
National Fund	x	x	x	x	x	x	x
FFSA's own funds	x	12%	43%	41%	43%	40%	44%
Borrowed funds	x	x	x	x	33%	13%	13%

x: Not applicable.

1. Leasing of greenhouses and micro-credit for construction of greenhouses.
2. Credit for small individual farmers for field works "Eginzhai". Aggregated information on sowing and harvesting loans provided by all KazAgro agencies is also presented in Table 2.16.
3. Purchase of breeding stock and feeds under programme "Mal Azyk" and other credit for development of livestock production.

Source: FFSA.

StatLink  <http://dx.doi.org/10.1787/888932782280>

### Concessional loans for sowing and harvesting

Easy credit for seasonal field works was the traditional policy during the Soviet period. This continued during the early transition period and remains a key credit support policy. During the economic disruption of the early transition period, crediting field works took the form of various money-free schemes, under which fuel and fertilisers were supplied to producers in-kind and repaid with grain or other crop products. Following economic stabilisation, these arrangements lost their importance and were progressively replaced by conventional money credit. Up until the mid-2000s, concessional credit for sowing and harvesting was implemented through republican budget transfers to local authorities, which then allocated these funds to crop producers as low or zero-interest loans using the banking system. Since the mid-2000s, seasonal loans for agriculture are provided through the ACC, the FFSA and the FCC (Table 2.16).

As described in the section on price support, grain producers can also finance their sowing through advances on forward grain purchases by the FCC and, starting from 2011, through loans issued by credit institutions on guarantees by Social and Business Corporations (SBC).

Table 2.16. **Concessional credit for sowing and harvesting works, 2001-11**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Total concessional credit for sowing and harvesting:</b>											
in KZT million, current prices	4 079	4 502	5 819	7 845	12 417	15 504	26 214	12 969	77 098	47 854	35 749
in USD million, current prices	28	29	39	58	93	123	214	108	523	325	244
<i>Of which provided through:</i>											
Private banks	98%	89%	77%	70%	x	x	x	x	x	x	x
FCC	x	x	x	x	56%	61%	66%	33%	71%	62%	30%
ACC <sup>1</sup>	2%	11%	23%	30%	44%	39%	34%	67%	29%	37%	68%
FFSA	x	x	x	x	x	x	x	x	x	1%	2%
<i>Composition of total concessional credit by source:</i>											
Republican budget	98%	89%	77%	70%	0%	0%	0%	16%	1%	89%	83%
National Fund	x	x	x	x	x	x	x	x	89%	x	x
FCC's and ACC's own funds	2%	11%	23%	30%	100%	100%	74%	84%	9%	10%	15%
Borrowed funds	x	x	x	x	x	x	26%	x	x	1%	2%

x: Not applicable.

1. Including short-term loans provided through Credit Partnerships.

Source: FCC; ACC; FFSA.

StatLink  <http://dx.doi.org/10.1787/888932782299>

### Grain and cotton warehouse receipts

Warehouse receipts were introduced in Kazakhstan in 2001 with the assistance of the European Bank for Reconstruction and Development. A legal basis for the system is contained in the *Law on Grain* (Article 16) which formulates the obligation of the “grain receiving enterprises” to fulfil the guarantees provided by the grain warehouse receipts. The latter have become liquid financial instruments and facilitate access to credit for grain producers. Commercial banks accept grain receipts as collateral. Average interest rates for loans issued against grain receipts varied between 10% and 11% per annum in 2003-06, while the average interest rate elsewhere was between 12.5% and 14.5% during that period. The amount of the loans issued against warehouse receipts increased from KZT 2.4 billion (USD 16 million) in 2003 to KZT 225.9 billion (USD 1.5 billion) in 2011. Over 30% of the loans issued to agriculture were guaranteed by grain receipts in 2010. Non-paper grain receipts were to be introduced in 2012, in order to reduce the cost of operating the system and improving access to information for market participants.

In 2010, there were 222 licensed “grain receiving enterprises” (grain elevators), of which 51 participated in the state guarantee system for grain receipts. It is operated by KazAgroGarant, which guarantees funds for the grain receipt system. A total amount of KZT 2.2 billion (USD 148 million) was transferred between 2003 and 2011 to this fund from the state budget, and additional money comes from annual contributions of participants to the guarantee scheme. The guarantee is triggered if the elevator loses the grain and/or if the quality of grain deteriorates during storage. The quantity of grain covered by the guarantee programme increased from 0.6 million tonnes in 2008 to 1.6 million tonnes in 2011. Since the beginning of the programme, no guarantee payments have been triggered. The grain-receiving enterprises which do not participate in the guarantee system must be insured against civil risks.

Following the success of grain warehouse receipts, a similar system was launched for cotton in 2008. To this end, KZT 500 million (USD 4 million) were transferred to the KazAgroGarant. However, cotton receipts have not been successful. One reason is that cotton producers do not store cotton and prefer to receive cash on the spot. Most cotton factories do not comply with the criteria to provide storage guarantees to potential warehouse receipt holders, while banks are not willing to lend against cotton receipts.

### Machinery and equipment leasing

The leasing programme was introduced in 1995 to accelerate the replacement of the obsolete agricultural machinery park. It was initially operated by the FFSA, but in 1999 was taken over by the newly created state company KazAgroFinance. The company receives state budgetary funds and also uses own and borrowed funds to purchase machinery and equipment, predominantly from foreign manufacturers. Among the key suppliers are the leading agricultural machinery manufacturers from Canada, Germany, Russia, Ukraine, and the United States. Since the mid-2000s, the KAF also provides machinery and equipment leasing to agro-food processors. Leasing contracts may be complemented by monetary loans for installation works and to cover other variable costs of the lessees. Since 2007, the KAF also credits government investment projects (see below). Cattle leasing programmes emerged among KAF's activities in 2010. Under this programme, the KAF imports purebred cattle and leases them out (Table 2.17).

Table 2.17. **Concessional leasing and credit provided through KazAgroFinance (KAF), 2000-11**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Total KAF's financing:</b>												
In KZT million, current prices	6 557	2 483	1 597	6 277	7 802	13 150	17 800	30 316	44 740	34 169	29 925	36 632
In USD million, current prices	46	17	10	42	57	99	141	247	372	232	203	250
<i>Composition of total KAF's financing by use:</i>												
Leasing of ag. machinery and equipment	100%	100%	100%	84%	100%	77%	85%	66%	58%	62%	49%	49%
Short-term loans	x	x	x	x	x	x	3%	27%	22%	3%	7%	7%
Credit for investment projects	x	x	x	x	x	x		2%	11%	33%	39%	31%
Credit for pedigree cattle	x	x	x	x	x	x	x	x	x	x	x	12%
Machinery and equipment leasing to processors	x	x	x	x	x	8%	12%	4%	9%	2%	5%	1%
Setting-up machinery stations	x	x	x	16%	x	15%	x	x	x	x	x	x
<i>Composition of total KAF's financing by source:</i>												
Republican budget	100%	100%	100%	100%	74%	68%	39%	23%	31%	4%	20%	28%
National Fund	x	x	x	x	26%	29%	23%	22%	34%	34%	33%	32%
KAF's own funds	x	x	x	x	x	3%	37%	55%	34%	29%	8%	8%
Borrowed funds	x	x	x	x	x	x	x	x	x	33%	39%	31%

x: Not applicable.

Source: KAF.

StatLink  <http://dx.doi.org/10.1787/888932782318>

Leasing conditions typically foresee that a lessee makes a down payment of 15-25% of the leasing value, and must obtain insurance for the leased object. The leasing value per lessee is limited by law to prevent concentration of support on larger lessees. A leasing contract is given for 5-7 years. In 2011, the leasing fee for machinery purchased with budgetary funds was set at 4% per annum, while for those financed from KAF's own and borrowed funds, the rate was set at 9%. Compared to the average leasing fee charged by commercial leasing companies of 22-25%, the state leasing programme offers substantial concession to borrowers. Financial leasing is also exempt from VAT payment which creates additional incentives compared to other options, such as buying machinery or using conventional long-term loans. In parallel to operating budget-funded leasing programmes, KAF also provides leasing on market ("commercial") terms.

Having an advantage of budgetary financing the KAF has become the largest leasing operator in Kazakhstan, both in terms of new leasing provided annually and overall leasing portfolio. By 2010, agricultural leasing accounted for around 92% of the total leasing market in Kazakhstan.

In addition to leasing, the KAF was responsible for setting up machinery service stations. After the collapse of the Soviet machinery service system, the lack of this type of service became a major problem, more so given the increasingly depreciated machinery park. The KAF received KZT 1 billion (USD 7 million) of state budgetary funds in 2003, KZT 1 billion (USD 7 million) in 2004, and KZT 2 billion (USD 15 million) in 2005 for the establishment of a network of machinery pool and service stations. These units buy or lease agricultural machinery, equipment and spare parts, provide machinery services, as well as repairs and maintenance. Between 2003 and 2005, 25 machinery pools were established in various regions.<sup>7</sup>

In addition, the government intends to provide subsidies to KAF to reduce interest rates on its foreign borrowings taken to finance machinery imports.

### ***Farm debt situation and government's relief proposals***

Many factors that impeded agricultural credit in the 1990s, are still relevant today (Box 2.4). The farm debt situation in Kazakhstan has considerably deteriorated as a result of the 2008-09 financial crisis. The impact of this crisis on agricultural debt was compounded by other unfavourable developments. Thus, in 2006-08 agricultural producers were making borrowings at relatively high interest rates to purchase new machinery. Most of these loans were in foreign currencies and the depreciation of the tenge in 2009 sharply increased the cost of debt service. The grain sector, the largest agricultural sector in Kazakhstan, incurred substantial losses due to a ban on grain exports imposed in 2008 as a reaction to international food price hikes. In 2009, this sector faced low prices following the bumper crop in the CIS region, while in 2010 it saw substantial crop losses due to drought.

The share of bad loans in the agricultural credit portfolio of commercial banks rose sharply in 2010 (Figure 2.15). Although the banks managed to reduce the share of bad debts in the following two years, the quality of the agricultural credit portfolio has remained poor. As of January 2012, bad and sub-standard loans represented over one-half of the total agricultural credit portfolio in commercial banks. Although the situation in the KazAgro system developed less dramatically, it nevertheless progressively deteriorated; by January 2012, the share of bad loans in total KazAgro's portfolio had nearly reached their level in the commercial banks. At the beginning of 2012, bad and sub-standard loans accounted for 42% of all KazAgro portfolio.

Although the debt situation in agriculture is less critical than in the economy overall, it points to the urgency of financial rehabilitation. This is one of the principal blocks of the new agricultural programme for 2013-20, which contains a series of measures to deal with the agricultural debt situation.

An agricultural debt relief package will be implemented and will concern loans provided by commercial banks and KazAgro credit agencies. Both will prepare lists of individual debtors to benefit from debt restructuring, and which in turn will be approved by a special government commission in charge of the debt relief package. KazAgro will raise KZT 300 billion (USD 2 billion) from the financial markets through emissions of state

#### **Box 2.4. Improving access to finance in agribusiness in Kazakhstan: Findings from the OECD Eurasia Competitiveness Programme project**

Agriculture is a priority sector for diversification and the government of Kazakhstan aims to improve the competitiveness and increase investments in this sector. The value added of agriculture was USD 1 782 per worker in 2010, lower than in Russia at USD 2 731 per worker and in Ukraine at USD 2 500 (in constant 2000 US dollars, World Bank, 2012b). In 2011, agriculture represented 5.2% of total GDP, although it still employed more than one quarter of the labour force, and foreign direct investments in agribusiness represented less than 0.1% of total inward investment flows (National Bank of Kazakhstan, 2012).

In 2011, the amount of credit extended to agriculture accounted for 3.6% of total bank credit in Kazakhstan. A lack of access to finance for agribusiness firms – especially for small- and medium-sized enterprises (SMEs) – is a significant barrier to increased competitiveness of the sector. The agricultural finance market in Kazakhstan involves agribusiness companies and producer co-operatives on the demand side, and commercial banks, the state-owned company KazAgro, micro-credit organisations and Credit Partnerships (CPs) on the credit supply side. These players face the following major issues:

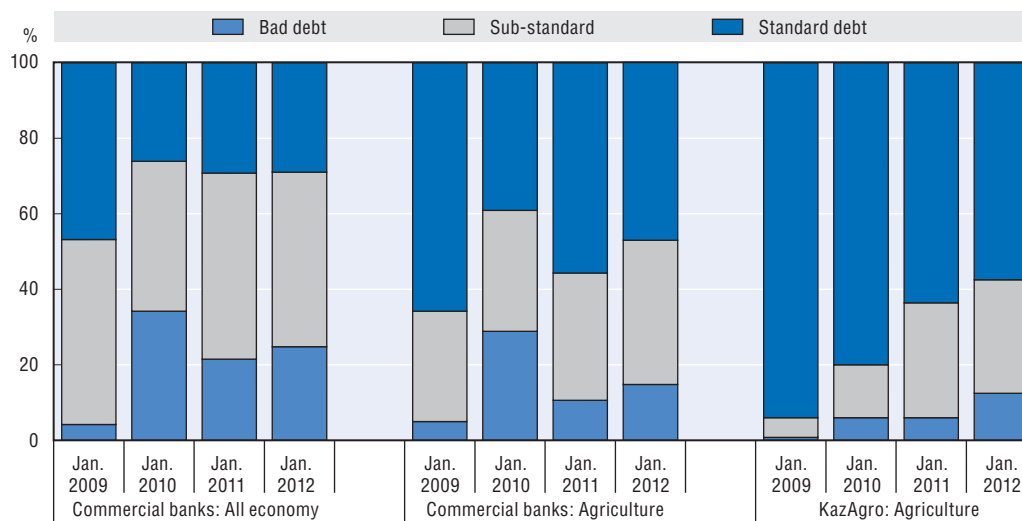
1. *Information asymmetries*: Commercial banks deliver the bulk of loans to the most profitable and largest borrowers but have limited transactions with agribusiness SMEs due to poor information on their creditworthiness. Agribusiness companies lack financial education and knowledge about bank instruments.
2. *High transaction costs*: Reaching agribusiness SMEs in remote areas and processing their loan applications is costly for banks considering the low returns expected. Reaching banks in urban areas, gathering the necessary information and filling in complex application forms remains a challenge for agribusiness SMEs and can discourage them from engaging in loan transactions.
3. *High risk of agri-business*: Agriculture is considered a risky business given, for example, the uncertainties of output due to weather conditions. This contributes to a high rate of delinquent loans. In addition, a lack of collateral, credit history and guarantees on the part of agribusiness companies increases the risks perceived by lenders.
4. *Low competitiveness of agriculture*: The competitiveness of this sector is significantly lower than that of other sectors, especially extractive industries.
5. *Favoured position of state lenders*: KazAgro agencies benefit from access to state finance on preferential terms, which diminishes the incentives of private banks to enter the agricultural credit market.

To improve access to finance, financial resources need to be allocated more efficiently by creating an open, decentralised and competitive agri-finance market, rather than relying on credit concessions. Three main areas for policy reform were identified under the OECD *Eurasia Competitiveness Programme project, Diversifying and Strengthening Kazakhstan's FDI and Sector Competitiveness*, a project co-financed by the European Union:


- Strengthening Credit Partnerships (CPs) by enforcing the framework of CPs to promote autonomy and accountability, expanding membership among agribusiness companies in CPs, and developing the services provided by CPs to include representation, advisory, training and access to technology.
- Increasing the liberalisation of the agri-finance market by improving the transparency of KazAgro management and the efficiency of its programmes, and attracting foreign investors – including banks – to the agribusiness sector.
- Improving state policies by designing and implementing a Credit Guarantee Scheme to guarantee loans and reduce risk, disseminating accounting standards to SMEs, and improving information on credit history.

Source: OECD, 2012b.

Figure 2.15. Quality of agricultural credit portfolio, 2009-12



Source: Atameken Union (2012a) based on data of the Committee for Control and Surveillance of Financial Markets and Financial Organisations.

StatLink  <http://dx.doi.org/10.1787/888932781159>

securities. These relief funds will be used to provide liquidity to KazAgro credit agencies and commercial banks, which will then implement the restructuring of agricultural loans to the final borrowers. At present, the prolongation of loans for up to 8 years is proposed. KazAgro credit agencies and commercial banks will be liable for the repayment of the sums provided by the government for the relief package. The interest rate on restructured loans for the final borrowers will be 12% per annum, which roughly corresponds to the market rate. However, final borrowers will be eligible for interest rate subsidies, effectively bringing their debt service costs down to 7% per annum on long- and short-term loans, and to 4% per annum on leased machinery. Thus, the proposal on debt restructuring as it currently stands foresees considerable concessions to agricultural debtors.

The debt restructuring is complemented by a provision on a new function of KazAgro Holding. It would perform the function of a “bank of the banks” by providing financial resources to commercial banks which will direct them for agricultural loans. This is driven by the desire to strengthen the incentives of commercial banks to engage with agriculture and, in particular, to increase longer-term lending. In principle, this breaks the privileged access of KazAgro’s own credit agencies to budgetary funding. Logically, they would need to compete for these funds on equal terms with commercial banks if the government intends to provide effective incentives for commercial banks.

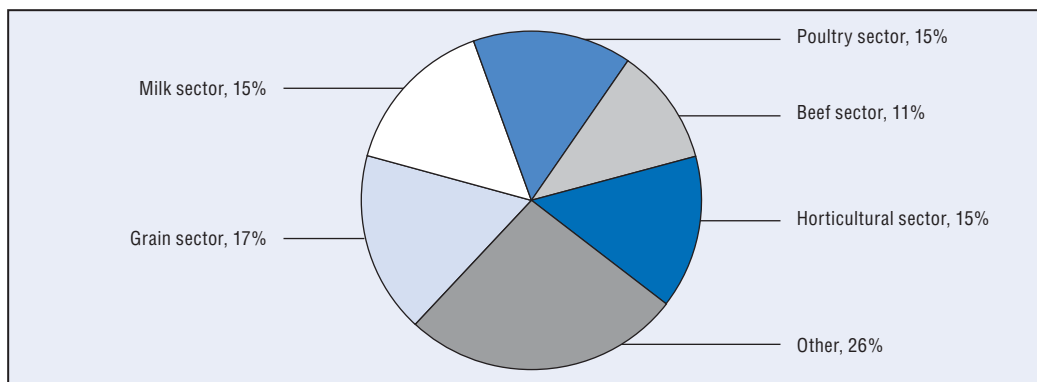
Another new feature is the shift away from fixing concessional interest rates on agricultural loans to providing interest rate subsidies. This seems to be a logical change if the government’s goal is to attract commercial banks into agriculture – interest rate subsidies represent a more flexible policy instrument than do administratively fixed interest rates currently implemented by state agencies. In addition, with the interest rate subsidies the cost of credit support policies becomes more transparent. Other new measures consist of supporting the risk insurance of credit institutions and the development of mechanisms of state guarantees for agricultural loans. This may potentially attract more insurance companies and commercial banks to agricultural credit market.

Overall, these changes can be interpreted as an intention to reduce reliance on state credit institutions in the provision of concessional credit to agriculture and to develop more market-based policy instruments to support it.


### Public support for investment projects

Since 2007, the Ministry of Agriculture has been responsible for the implementation of 205 government-supported investment projects. Some of these projects have been completed, while others are to be completed by 2016. These investments cover the construction and modernisation of facilities in the agricultural sector and downstream industries (Figure 2.16 and Table 2.18). Five sectors (grain, milk, poultry, beef and horticulture) account for almost 90% of the total cost of these projects. Public support is provided in the form of concessional loans. Over three-quarters of total investment comes from loans based on public sources, with the main contribution being from the National Fund and the republican budget. A smaller part is provided by local budgets (through Social and Business Corporations) and own funds of KazAgro agencies (the FCC, the KAF, the ACC, the FFSA, and the KAP). KazAgro agencies are responsible for the financial management of the projects.

Figure 2.16. **Cost structure of publicly supported investment projects implemented since 2007, by sector**



Source: Ministry of Agriculture of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932781178>

The FCC supports investment projects related to grain export infrastructure (grain terminals), grain storages and deep grain processing, cotton and textile cluster development and marketing of agricultural production. The KAP is developing large-scale projects to establish livestock breeding farms, including two with up to 1 000 animals each, and a feedlot (up to 5 000 animals). The ACC credited investment projects in 2009-11, mostly related to livestock production, grain infrastructure, and food processing. Since June 2011, all ACC's credit financing of investment projects was given to KAF. ACC, however, continues to finance the projects launched earlier. KAF's range of investment projects covers milk, poultry, fruit and vegetable production, vegetable storage, and the assembly of agricultural machinery. Today, it is by far the largest crediting agency for publicly supported investment projects in the agro-food sector. In the draft proposal for the new 2013-20 agricultural programme it is foreseen to complement concessional credit for



Table 2.18. **Cost of publicly co-financed investment projects with completion years between 2007 and 2016**

Sectors/activities	Number of projects	Total investments		Of which financed from in %:						
				Subsidised investment loans	Of total subsidised investment loans provided from:				Private funds	Other sources
		KZT million	USD million		Republican budget	National Fund	Local budgets	KazAgro agencies		
<b>Total investments</b>	<b>205</b>	<b>159 357</b>	<b>1 077</b>	<b>76</b>	<b>24</b>	<b>46</b>	<b>2</b>	<b>4</b>	<b>22</b>	<b>2</b>
<i>Of which:</i>										
Grain terminals and milling facilities	4	9 810	66	<b>58</b>	19	38	0	0	26	17
Grain processing	23	12 899	87	<b>82</b>	23	55	0	4	18	0
Grain storages	14	4 882	33	<b>82</b>	0	82	0	0	18	0
Commercial milk complexes	20	23 623	160	<b>78</b>	26	51	0	0	15	7
Commercial poultry complexes	18	24 072	163	<b>77</b>	8	64	0	4	23	0
Feedlots	8	11 847	80	<b>79</b>	45	26	7	2	21	0
Meat slaughter and processing facilities	14	6 037	41	<b>100</b>	38	37	26	0	0	0
Greenhouses	19	13 405	91	<b>80</b>	6	59	1	14	19	0
Vegetable storages	21	9 954	67	<b>55</b>	5	49	0	1	45	0
Drip irrigation	6	5 400	37	<b>93</b>	71	4	0	19	3	4
Milk processing facilities	5	646	4	<b>100</b>	38	0	0	62	0	0
Livestock breeding farms	28	18 449	125	<b>75</b>	27	47	0	0	25	0
Development of feed industry	5	2 762	19	<b>85</b>	1	84	0	1	15	0
Other	20	15 573	105	<b>70</b>	51	13	2	4	30	0

Source: Ministry of Agriculture of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932782337>

investment projects with investment grants to cover the cost of construction works and machinery. Investment grants would be limited to several “priority” areas of investment.

Publicly-supported investment projects are also realised within the *Development of Regions and Business Roadmap 2020* programmes. These programmes are implemented under the umbrella of the Ministry of Economic Development and Trade. Public support in this case is provided in the form of interest rate subsidies on investment credit. Within the *Business Roadmap 2020*, around 17% of the total cost of projects were for projects related to food and beverage processing, and 10% to agriculture, fisheries and forestry. Between 2010 and 2012, the three years of the implementation period of the *Business Roadmap 2020*, KZT 1.6 billion (USD 109 million) were allocated as interest rate subsidies for these projects.

At the sub-national level, support to investment projects is provided by local administrations through Social and Business Corporations (SBCs). The SBCs participate in investment projects as debt and equity investors. They also implement financial leasing of equipment.

### **Tax concessions**

There has been a substantial evolution of the tax system since the beginning of the 1990s. In the early transition period, new taxes were introduced, while the taxes existing under the planned economy system were eliminated or modified. In 1995, the tax legislation was consolidated in the first Tax Code, which was succeeded by a new one in

2002. To date, the 2002 Tax Code remains the principal framework of the national tax system, including in the agricultural sector.

The main taxes in agriculture include land tax and land use payment, single land tax, property tax, social tax, VAT, corporate income tax, and a tax on vehicles. The land tax applies to privately-owned land and is paid by the actual user of that land (an owner or a lessee). Land use payment applies to land leased from the state (e.g. agricultural lands that are in 49-year leases from the state currently represent the principal form of land use in agriculture). Overall, since the beginning of the 1990s, agricultural taxation has evolved towards the increasing scope of concessions and the formation of a special tax regime for commercial agricultural producers.

The current system of agricultural taxation differentiates between types of agricultural producers: i) agricultural enterprises in various legal forms and rural co-operatives who represent taxpayers which have the status of legal entities; ii) individual farms, who are not obliged to maintain official bookkeeping and, who represent taxpayers with the status of “non-legal” entities; and iii) rural households whose members are eligible only for personal taxes. Given these different groups of agricultural producers several regimes of taxation in agriculture exist.

Agricultural producers with the status of legal entities (agricultural enterprises and rural co-operatives) can choose between two regimes (Table 2.19): i) a standard regime with a corporate income tax rate reduced to 10% (compared to a standard rate at 20%) and ii) a special tax regime for legal entities that provides a 70% discount on the following principal taxes: land tax, land use payment, property tax, social tax, VAT, corporate income tax and tax on vehicles.<sup>8</sup>

Table 2.19. **Principal taxes for commercial agricultural producers and taxation regimes**

Tax types	Standard regime	Special regime	
		For legal entities (agricultural enterprises)	For non-legal entities (individual farms)
Land tax (for privately owned land)	Between KZT 0.48/ha and KZT 202.65/ha depending on the type of land and fertility score	30% of standard rate	Single Land Tax: between 0.1% and 0.5% of the estimated cadastre value of land depending on land size
Land use payment (for rented state-owned land)	Same as land tax	30% of standard rate	
Property tax	From 0.1% to 1.5% of property value depending on the type of owner	30% of standard rate	
Social tax	11%	30% of standard rate	
Vehicle tax	Minimum reference indicator set annually	30% of standard rate	
Personal income tax	10%	Not applicable	
VAT	12%	30% of standard rate	Not eligible
Corporate income tax	10% for agricultural activity	30% of standard rate	Not applicable

Agricultural producers with the status of “non-legal entities” can also select either of the following: i) a standard regime similar to that for legal entities, but with eligibility for personal income tax instead of corporate income tax (the tax rate is the same as for corporate tax, i.e. 10%), or ii) a special tax regime for non-legal entities which provides for payment of

a Single Land Tax (SLT). The SLT replaces personal income tax and taxes which are discounted under the special regime for legal entities, except the VAT, as “non-legal” entities are not eligible for payment of the VAT. The SLT is set as a percentage of the estimated cadastre value of land owned and/or used.

The third group of agricultural producers is represented by members of rural households. For the purpose of taxation, they are regarded as individuals and are eligible for the taxes imposed on physical persons, including land and property taxes. Physical persons are not eligible for declaration of personal income. An income that rural households may generate by selling agricultural products at local markets is not registered and generally is not taxed.<sup>9</sup> However, if gross receipts of individuals exceed the 12-fold official minimum wage, they are obliged to register as individual entrepreneurs. Violation of this provision can only be established through paper method checks carried out by tax service. As individual entrepreneurs, members of rural households become eligible for payment of a 2% tax on gross receipts.

Beyond the three groups of agricultural producers described above, tax concessions are also granted to food processors. They benefit from a reduced VAT rate on a relatively broad range of food products. This concession was first introduced in 1998, when the VAT rate on processed foods was brought to one-half the standard rate and further to 30% in 2008. Thus, with the current standard VAT rate in Kazakhstan at 12%, agro-food processors are effectively eligible for a 3.6% VAT rate. The scope of processors covered by this concession is explicitly defined and covers the majority of the agro-food processing industry.<sup>10</sup>

Taxation in agriculture is currently an area of intense debate in Kazakhstan and land taxes have become a central issue. The low level of land taxes is viewed as one of the factors that impedes the re-allocation of agricultural lands to more efficient users and results in a high share of agricultural lands remaining uncultivated. The land valuation as the basis to determine land-based taxes is outdated and disconnected from the situation today. As concerns the Land Tax, it is based on the land fertility scores that date back to 1986-1990. As for the Single Land Tax, the land valuation is based on the cadastre value of land established in 2003 and which is also outdated. Current proposals to reform land taxation include as a starting point a revaluation of agricultural land to reflect its quality and market value more appropriately.

It is also proposed to eliminate differences in the regimes of land taxation for agricultural enterprises (legal entities) and individual farms (non-legal entities). To this end, it is proposed to withdraw the land tax from the Single Land Tax, so that individual farmers would become explicitly eligible for payment of Land Tax at rates aligned with agricultural enterprises.

Another tax reform under discussion concerns the VAT regime and is taking place in the context of the current WTO negotiations. Preferential VAT treatment of domestic producers is viewed by Kazakhstan’s trade partners as discriminatory. In this respect, the government is considering the proposal to withdraw the VAT from the special regime for legal entities, which would effectively mean the elimination of a 70% VAT discount for this group of taxpayers. It is also proposed to introduce voluntary registration of individual farms as VAT payers, but refund the collected VAT back to them. This measure is also argued on the grounds that processors have no incentive to buy from individual farms because the latter are not eligible for the VAT. The reason is that processors in this case pay

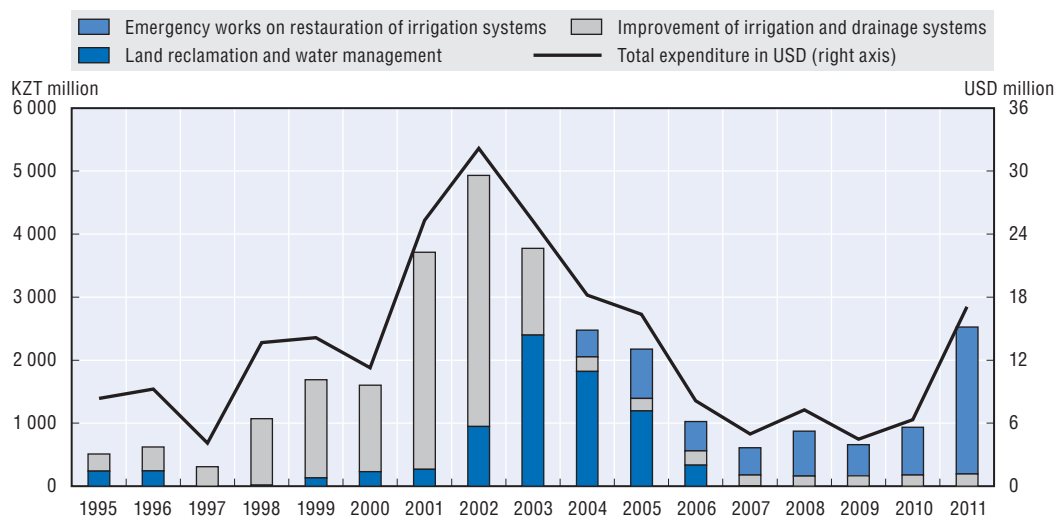
the VAT on processed products, which is not reduced by the VAT on purchased raw materials. In practice, some relatively large individual farms interested in having stable contracts with processors register as VAT payers and pay this tax, even if they are not legally obliged to do so.

### **Irrigation and land amelioration**


The section of infrastructure and resources for agro-industrial complex in the *National Programme of Accelerated Industrial and Innovative Development for 2010-14* identifies, among other, two priority areas for development: i) use of water resources in accordance with the principles of integrated management of water resources, and ii) conservation and improvement of land conditions by introducing advanced irrigation methods.

Budgetary expenditures on irrigation, water and land management were volatile throughout the period of 1995-2011. The highest spending was in 2000-02 when KZT 2.2 billion (USD 15 million) per year were invested in improving irrigation and drainage systems (see below). Since 2006, expenditures have decreased markedly, although in 2011 they rose again due to emergency works on the overhaul and repair of inter-farm water channels, irrigation and drainage systems (Figure 2.17).

Figure 2.17. **Outlays on irrigation systems, land amelioration and water management, 1995-2011**



Source: Ministry of Agriculture of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932781197>

Irrigation systems in Kazakhstan are not fully private. Large-scale irrigation schemes (more than 1 000 ha) are managed by state organisations. Small-scale systems are managed by local water management bodies which are financially autonomous. The first rural water user associations were established in 1996, and currently there operate 300 such associations covering 42% of all irrigated lands. Private forms of water service (delivery and management) are not developed.

Each farm has a fixed and registered water allocation. During water shortages, water is pro-rated according to the crop water requirement norms: higher value cash crops

usually have first priority (FAO, 2007). In 1994, Kazakhstan implemented water fees. The price of water was defined by volume and according to the value added irrigation could bring to *agricultural* production, and was differentiated by oblasts. However, the actual price was fixed well below the level which would have enabled full recovery of operational and maintenance costs.

The operation and maintenance of on-farm irrigation has been neglected due to lack of funds. Inter-farm systems also face difficulties because of staff cuts and inadequate funding. Hence, the maintenance of the irrigation systems is deficient and the efficiency of the systems is low as there is seepage in unlined channels that results in water losses and water logging of adjacent lands.

In 1996-2004, a publicly financed project on *Upgrading of Irrigation and Drainage Systems (PUID-1)* was implemented. It covered 32 000 hectares of irrigated lands in nine oblasts. Improvement of irrigation and drainage systems was complemented by co-operative water use based on international experience. The programme also included assistance to the Hydrogeological and Ameliorative Expedition of the Committee on Water Resources to monitor the irrigated lands. After the project completion, practical support of the rural water is given to co-operatives. Currently, the second phase of the PUID is being developed with the aim of transferring 113 000 hectares of irrigated land in the basins of the trans-border districts of Syrdarya, Talas, Shu and Ili rivers to a water-saving basin.

The *Land Amelioration* programme provides for the maintenance of the Zonal Hydrogeological and Amelioration Center, South Kazakhstan Hydrogeological and Amelioration Expedition, and Kyzylorda Hydrogeological and Amelioration Expedition. The activities include agricultural inspections of irrigated lands, fixed hydrogeological observations of the groundwater levels and salt ratios, hydrological observations of flows of collector and drainage waters, soil and salt surveys, and laboratory tests. Based on the monitoring and assessment of the conditions of the land, the expeditions inform all state authorities concerned, develop recommendations for a more rational use of land, irrigation water, and measures to prevent salinisation, alkalinisation, irrigation erosion and diminishing fertility. These recommendations serve as the basis for planning land reclamation, and water management, as well as provide operational services to land users of the irrigation systems.

The project on *Water Resources Management and Land Restoration* was implemented by means of loans from the Asian Development Bank and co-financing from the republican budget. The project envisaged the improvement of 39.2 thousand hectares of irrigated land in the Makhtaaraal Region of South Kazakhstan where agriculture is focussed on cotton. Under the project, the restoration and upgrading of irrigation and drainage systems were implemented, including the amelioration of soils prone to salinisation, and water management was improved. In addition, the project provided support to agricultural service institutions and farms incorporated in rural co-operatives of water users.

### **Research and development**

KazAgroInnovation is the umbrella institution for agricultural research in Kazakhstan, established in 2007. It is fully owned by the government and currently incorporates 23 research institutes with their 26 regional branches, 14 experimental stations, and six innovation and analytical centres. These institutions cover practically all fields of agricultural research and operate in all country regions. The task of the KazAgroInnovation

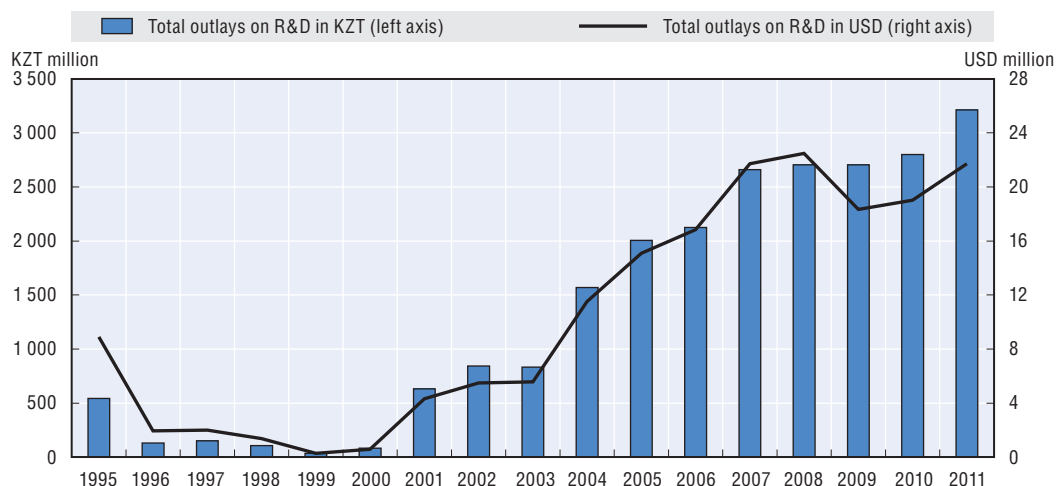
is to introduce new scientific products for commercial use in agriculture and commercialise them, transfer and adapt advanced foreign technologies to local conditions, and improve the efficiency and level of development of scientific organisations. It also implements state R&D policy in the agricultural sector. In recent years, KazAgroInnovation has enjoyed substantial increases in funding. In 2010, its budget was KZT 5.35 billion (USD 36 million), more than double the level of research financing in 2006.

The applied research programme for the agro-industrial complex for 2009-11 focussed on six priorities: i) creation and improvement of stress-resistant crop varieties and resource-saving technologies; ii) improvement of technologies for processing and storage of agricultural products; iii) creation and improvement of agricultural animal breeds, modern animal feeding and keeping technologies, and development of veterinary medicines and vaccines; iv) development of machinery complexes for moisture- and energy-saving technologies and systems of water supply for remote farms; v) rational management of natural resources; and vi) scientific principles for strategic agricultural development.


The *Law on Science* (2011) stipulates that research and technical activities receive basic state financing to cover expenses on research infrastructure, services, facilities and administrative expenditures. Basic financing is complemented by project and grant financing. According to the Ministry of Agriculture, the share of agriculture in total public outlays for research is estimated to be 12% (in 2011).

Total budgetary outlays on R&D and related activities were negligible up to 2001, but rapidly increased in the following years (Figure 2.18). During 2001-03, the annual average spending on applied R&D was KZT 770 million (USD 5 million), and increased to KZT 2.9 billion in 2009-11 (USD 20 million); the latter figure includes KZT 77 million (USD 0.5 million) allocated from local budgets for the implementation and dissemination of innovations in agri-business. Despite the substantial increase of funds, this occurred from a very low level financing in the 1990s and early 2000s. Public expenditures on agricultural R&D in Kazakhstan amounted to only 0.3% of agricultural value added in 2009-11 (in comparison, this percentage in the majority of OECD countries is above 1%,

Figure 2.18. **Outlays on applied agricultural research and development, 1995-2011**



Source: Ministry of Agriculture of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932781216>

reaching the maximum of 4% in the United States [OECD, 2011c]). The contribution of private funding to applied agricultural research is marginal and is estimated by the Ministry of Agriculture to account for only 0.76% of total funding (in 2011). The government's intention is to attract private funding to applied research via public and private partnerships.

### **Agricultural education**

The agricultural sector in Kazakhstan faces acute shortage of skilled and highly skilled labour. There is a high demand for agro-technicians, zoo-technicians, veterinarians and sanitary specialists and medical assistants, farm managers, mechanics engineers, technology engineers for meat and dairy products, grain processing and bakery, tractor operators, and other specialists. Several factors contribute to this situation. One is that agriculture is a low-paying sector. According to the national Statistics Agency, the monthly average salary in 2010 was KZT 36 332 (USD 246), compared to the national average of KZT 77 482 (USD 524) and to KZT 93 043 (USD 629) in industry. In addition, living and working conditions in rural areas are much less favourable than elsewhere.

Ten institutions of higher education train specialists for the agri-business sector in 18 disciplines. There are also 168 rural vocational schools for technical and professional education in 25 disciplines.

The Ministry of Agriculture undertakes annual monitoring to determine the need for specialists in the agricultural sector and submits requests to the Ministry of Education and Science. This serves as the basis for state educational quota for agricultural specialists for the academic year. For 2011/12, 1 930 government grants for bachelor degrees in agricultural disciplines and 630 for veterinary discipline were allocated; the numbers of grants for doctoral degrees in similar disciplines were 110 and 50 respectively. In addition, a national programme, *Bolashak*, finances education of students abroad on the condition that they return to work in Kazakhstan for a certain period of time. A relatively large quota for agricultural disciplines is allocated within this programme, but it is under-filled, possibly because potential participants are not sufficiently informed.

### **Extension services**

In 2009, KazAgroInnovation began to set up an extension system for agricultural enterprises and individual farms. Currently it includes ten knowledge dissemination centres operating in eight country regions. The development strategy of the extension system for 2010-14 foresees extending the networks and offices of the regional knowledge dissemination centres. By 2015, five new extension centres are to be established, so that all country regions are covered. The existing centres provide a number of services, but which are yet limited in scale:

- Free seminars on modern technologies: Each seminar includes theoretical and practical parts and demonstrations. In 2009-12, 332 seminars were organised and 8 000 participants from all regions trained.
- Free distance consulting by telephone, which has provided 4 700 consultations since the second half of 2010.
- Direct consulting via farm visits: Since 2009, the staff of extension centres made over 5 000 consultation visits across the country.

In addition to knowledge dissemination centres of by KazAgroInnovation, 160 rural information consulting centres operate as structural divisions of KazAgroMarketing.

In 2011, KazAgroInnovation jointly opened with the Hohenheim University (Germany) an international extension centre in North Kazakhstan region. Its objective is to promote foreign technologies through education.

In 2005, Kazakhstan and the International Bank for Reconstruction and Development (IBRD – World Bank) began the project *Increasing Competitiveness of Agricultural Production*. The cost is USD 70.8 million, of which USD 24 million is covered by the loan from the IBRD. Two of the project's components concern knowledge diffusion and the improvement of agricultural research. The project finances competitive grants and stimulates collaboration between independent local and international experts. Around 23% of the grants allocated to date went to scientific research and higher education institutions.

### **Market information**

KazAgroMarketing was created in 2003 as a state agency to disseminate market information, advice and promotion, training, and business assistance. It has a network of 160 rural information and consultation centres that operate across all country regions.

Since its creation, the key activity of KazAgroMarketing has been price monitoring. It covers 138 basic food items in all country regions. It is carried out by the company's rural information and consulting centres. The agency also monitors and disseminates information on food prices on global markets. Price data is updated weekly and is available to the public via a dedicated web page ([www.kam.kz](http://www.kam.kz)), and market information bulletins.

In 2011, KazAgroMarketing initiated monitoring of prices for livestock and launched a new centre for consulting services on livestock production, which are also available by telephone toll-free.

Another recent activity of KazAgroMarketing is the establishment of information and logistics centres. The aim is to support the development of a “food belt” around cities to ensure the supply of fresh fruits and vegetables, and to promote marketing of local foodstuffs.

KazAgrex, a 100% public company, provides consulting and promotional services to cotton exporters. Another agency, the National Investment Promotion Agency of Kazakhstan (Kaznex Ivest) assists exporters and is not specific to the agro-food sector. Kaznex Ivest provides market research information, organises conferences and fairs to enhance business connections, etc. The agency has been operating since 2007 with the additional objective of attracting FDI into the country's key economic sectors. Kaznex Ivest also manages government exports subsidies.

### **Veterinary and phytosanitary services**

#### **Veterinary system**

The top veterinary bodies in Kazakhstan are the Direction of Veterinary and Food Safety and the Committee for Veterinary Control and Supervision, both within the Ministry of Agriculture. The former carries out strategic and regulatory functions, while the latter



executes control and supervisory functions. The Committee for Veterinary Control and Supervision has several subordinated agencies, each with a network of local branches.

- A network of *territorial inspections* covering oblast, city and rural district levels, veterinary inspectors operating at trading and storage sites, and *frontier veterinary control points*.
- *National Referential Veterinary Centre* carries out diagnostics of animal diseases and develops actions to ensure food safety. It maintains a national collection of repository strains of microorganisms and epizootic monitoring of wild animal diseases.
- *Republican Veterinary Laboratory*, which carries out diagnostics of highly dangerous animal diseases and of enzootic animal diseases, and approbates veterinary medicine, feedstuffs and feed additives. The laboratory has oblast branches and district diagnostics centres.
- *Republican Anti-epizootic Group*, which implements measures to protect animals from diseases, and national territory from the entry and propagation of infectious and exotic animal diseases.

In addition to these agencies, *Veterinary Directions* of the local administrations (*akimats*) operate at the oblast, district and town levels. The responsibilities of the Veterinary Directions include the organisation of veterinary actions in co-ordination with the republican-level agencies of the Committee for Veterinary Control and Supervision; development of the list of enzootic animal diseases, prevention and diagnostics of diseases; decisions on the establishment or removal of veterinary regime in quarantine areas, etc.

In addition to the state system, 199 private enterprises provide veterinary services. The development of this segment is impeded by lack of investment, but the share of private veterinary services has increased substantially in recent years with the appearance of a network of private veterinary clinics.

### **Phytosanitary system**

The top phytosanitary body in Kazakhstan is the Direction of State Phytosanitary Inspection and the Committee for State Inspection of the Agro-Industrial Complex, which are subordinate structures of the Ministry of Agriculture. The Committee for State Inspection of the Agro-Industrial Complex has several subordinated institutions, including:

- a network of *territorial inspections* covering oblast, city and rural district levels; veterinary inspectors operating at trading and storage sites, and *frontier phytosanitary control points*;
- *Republican Centre for Phytosanitary Diagnostics and Projections*, with its oblast and district network, examines territory and quarantined animals/areas to prevent the spread of particularly dangerous organisms;
- *Republican Quarantine Laboratory* carries out the identification of quarantine objects;
- *Republican Quarantine Nursery for Introduction of Fruits and Berries* identifies hidden diseases in imported young plants;
- *Republican Quarantine Nursery for Introduction of Field Crops* identifies hidden diseases in imported seeds;
- *State Phytosanitary Enterprise* is responsible for the identification and localisation of pest holes of quarantine organisms, and for the analysis of products subjected to quarantine.

Kazakhstan's veterinary and phytosanitary systems are in a process of development. A harmonisation of national legislation and creation of a common sanitary and phytosanitary system within the Customs Union (CU) has been taking place since the late 2000s. CU members have adopted agreements on common phytosanitary and veterinary measures, covering issues such as common lists of goods subject to inspection and quarantine, animal and plant health requirements, customs inspection procedures, and certification (see also sub-section on trade measures). Alignment of the national SPS system with the international framework continues, both within the framework of the CU and in the context of Kazakhstan's integration into the WTO.

Despite most recent efforts to develop plant and animal health systems, Kazakhstan faces considerable challenges. The epizootic situation is unstable, in particular along the border regions with Central Asian neighbours where veterinary control continues to be difficult. In 2011, 227 cases of acute infections epizooties were registered, resulting in bans on livestock export from several Kazakhstan regions. A significant factor impeding appropriate veterinary control is that the majority of animal inventories are concentrated in rural households. According to information available to date, there is no full identification of all animals, although in 2010 this was accomplished for cattle. Other pressing issues are the lack of modern slaughter points, with animals slaughtered in obsolete facilities or even outside the slaughter sites (according to the Ministry of Agriculture, existing official facilities are sufficient to slaughter only 30% of animals destined for slaughter). Another problem is inadequate equipment and staffing of veterinary and quarantine laboratories, which do not comply with international standards. The phytosanitary system faces similar problems of under-equipment, particularly at border control points, lack of staff and qualified quarantine specialists. There is also an issue of the absence of quarantine laboratories at the border. To allow for improvements in these areas, budgetary funds were allocated and progress has been made, for example within the investment programme on construction and equipment of veterinary laboratories. However, the needs to develop modern phytosanitary and veterinary systems that would support Kazakhstan's development into a competitive agricultural producer and exporter remain considerable.

### **Rural development**

In 2003, for the first time since independence a *Rural Development Programme for 2004-10* was launched, although with a modest budget. The aim was to improve living conditions in rural areas by optimising rural settlements and developing economic activities. Investments were to be made primarily in construction and renovation of the rural infrastructure. The programme sought to define a model of rural settlement. The related tasks included the monitoring of the socio-economic development and economic situation in rural areas; assessment of land resources; development of norms and standards for social and infrastructural services for rural residents; re-settlement of rural residents in areas with more favourable conditions.

*Rural Development Programme for 2004-10* was a package unifying investments related to rural areas under a number of national investment programmes. Up until 2010, the Committee on Rural Development at the Ministry of Agriculture was responsible for implementing state policy on regional development and acted as a focal point for the

co-ordination of these investments.<sup>11</sup> An overall budget for seven years amounted to KZT 976 million (USD 7 million), with the main funding allocated to water and gas supplies, rural roads, education and medical care infrastructure (Table 2.20).

Table 2.20. **Total budget and components of the 2004-10 Programme for Development of Rural Territories**

	Total	<i>Of which:</i>		
		Republican budget	Local budgets	Other sources
Total budget, KZT million	976	437	424	115
Total budget, USD million	7	3	3	1
<i>Of which in KZT million:</i>				
Institutional development	3	3	0	0
Investments in engineering infrastructure	493	218	199	76
Water supply	135	88	42	4
Post services	39	3	0	1
Electric supply	32	6	7	20
Rural roads	181	71	108	2
Gaz supply	104	24	41	39
Telephone services	37	26	0	11
Investments in social infrastructure	480	276	225	39
Education	260	113	139	7
Medical care	132	90	42	1
Culture, sports and tourism	36	1	23	13
Housing	29	8	5	17
Community security	1	0	1	0
Environmental safety	15	1	12	2
Land issues	2	2	0	0
Modelling of rural settlements	3	3	0	0
Rural employment	2	0	2	0

Source: Ministry of Agriculture of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932782356>

During the implementation of the 2004-10 Programme, the approach was to move the rural population from areas with unfavourable environmental and economic conditions and to develop rural settlements that were thought to have economic potential. Criteria were established incorporating economic, environmental and social indicators to determine the potential of rural settlements. By the end of the programme in 2010, the share of settlements with the highest potential had increased to 37% from 16% in 2004, and the share of population living in such settlements increased to 56% from 25% (Table 2.21).

The indicators of infrastructure development in rural areas in the first and last year of the 2004-10 programme show that the most significant progress was made in improving the centralised water supply in rural areas (Table 2.22).

Since the completion of the 2004-10 Programme, no specific policy framework has been adopted for rural development. Rural development issues are now incorporated in a number of programmes related to territorial development.

At present, the key framework for the implementation of territorial policies is the *Development of Regions* programme adopted in July 2011 and developed on the basis of the national *Projection Scheme of Territorial and Spatial Development* up to 2020. The aim of the

Table 2.21. **Distribution of rural settlements by economic and social potential, 2004 and 2010**

	2004		2010	
	Number of settlements	Number of inhabitants	Number of settlements	Number of inhabitants
Total	7 512	7 244 146	6 979	7 665 476
<i>As per cent of total number:</i>				
Category 1 settlements (highest potential)	16.0	25.2	37.4	55.9
Category 2 settlements	74.9	72.2	60.7	43.9
Category 3 settlements	7.9	2.6	1.3	0.2
Settlements without inhabitants	1.2	0.0	0.5	0.0

Source: Ministry of Agriculture of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932782375>

Table 2.22. **Selected indicators of infrastructural development of rural settlements**

	Per cent	
	2004	2010
Percentage of rural settlements with:		
Education facilities	77.4	76.5
Medical care facilities	84.6	83.6
Centralised water supply	29.0	42.5
Centralised electricity supply	95.8	98.4
Roads with hard cover	84.4	88.4

Source: Ministry of Agriculture of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932782394>

*Development of Regions* programme is to focus investments on the long-term solution of territorial development problems. The programme also integrates activities foreseen under several national programmes related to specific areas, such as *Employment 2020*, *Efficiency 2020*, *Ak Bulak (Drinking Water) 2011-20*, *National Programme for Development of Education 2011-20*, *National Programme for Development of Health Care 2011-20*, and *Salamatty Kazakhstan 2011-15* (medical train to provide specialised medical care to the people in remote areas). The result is that at the local level multiple nation-wide and regional programmes are being implemented related to rural development, but there is no independent framework specific to rural development. Box 2.5 illustrates the range of various development programmes being implemented at the lowest administrative (district) level using Zelinogradsky rayon of Akmola oblast as an example.

#### **Box 2.5. Programmes related to rural development implemented at the local level: Zelinogradsky district of Akmola oblast**

The *Comprehensive plan for social and economic development of settlements in the suburban zone of Astana for 2011-14*, covers 16 settlements of the Zelinogradsky rayon of Akmola oblast. This includes improvements in water and electricity supply, heating systems, reconstruction of roads, construction of schools, kindergartens and educational facilities. The overall cost is KZT 37 billion; KZT 7.7 billion were allocated in 2011 from the republican and oblast budgets.

**Box 2.5. Programmes related to rural development implemented at the local level: Zelinogradsky district of Akmola oblast (cont.)**

The *Programme of territorial development of Zelinogradsky rayon* includes support for the adoption of innovation technologies in the agro-food and industrial sectors; development of social services and human capital; the modernisation of business and social infrastructures; reducing disparities in economic and social conditions of administrative units of the rayon; and development of local governance and self-governance systems. Total cost of the programme is KZT 73 billion.

The *Business Roadmap 2020* – is the local application of the national programme with similar name. Local authorities are currently reviewing the project applications (meaning that this programme is at a very early stage). These applications include construction of a railway to a cement plant in one of the rural areas; construction of water pipelines for dairy operations in one of the settlements; construction of roads to connect local production facilities, electricity networks and water supply systems for feedlots, and a pipeline to the “multi-functional” market in one of the rural settlements. Estimated cost to support these projects is KZT 8 billion.

The *State Programme of Housing Construction* covers construction of housing in rural areas and in the rayon central town. They use government credit and government co-investment with private funds.

The *Map of Industrial and Innovation Development of Akmola oblast*. This includes the modernisation of a milk processing plant and construction of a cement plant in one of the villages.

The *Creation of a food belt around the city of Astana*. This includes the construction of an agricultural cluster of production and processing of livestock products belonging to Astana-Onim (the Astana branch of KazAgroProdukt company). Total project cost is KZT 2.5 billion; construction of feedlot with total size of 700 heads of beef; the cost of the project is KZT 630 million.

**Support to the downstream industries**

The low level of development of the processing industry is seen by the government as an impediment to growth in the agro-food sector. Since the mid-2000s, several policies have been put in place to support the processing industry. This includes concessional credit to processors provided through the ACC, as well as concessional machinery and equipment leasing for the processing industry provided through the KAF (see sub-section on credit support, Table 2.14 and Table 2.17). Subsidies for leasing fees are also provided for the leasing of machinery and equipment from commercial leasing companies; in addition, interest subsidies on loans taken by the processors from commercial banks are also available (this is limited to processors in “priority” sectors).

Another principal activity is the provision of subsidised credit for investment projects related to food processing and the grain infrastructure. Of 205 publicly co-financed investment projects initiated in the second half of the 2000s, 80 projects concerned investments in meat and milk processing, and grain and vegetable storage facilities accounting for one quarter of total investments. The total cost of these projects is estimated at KZT 34 billion (USD 233 million), with around 70% financed from public sources (see sub-section on investment projects and Table 2.18).

Since 2006, a subsidy is provided to processors who introduce modern quality control systems with 50% of the costs incurred compensated. Annual allocations for this programme have almost doubled compared to 2006, reaching KZT 60 million in 2011 (USD 1.6 million).

Finally, agro-food processors are eligible for reduced VAT on processed food products (see sub-section on tax concessions).

### **Consumer measures**

The volatility of world agricultural markets revived concerns about the affordability of food and the deterioration of the social situation. In 2011, the government introduced a regulation to establish a maximum limit on retail prices for “socially important” foodstuffs. These limits are differentiated by each oblast and main cities. Local administrations are responsible for the monitoring of compliance by retail traders.

Bread is considered to be a particularly important foodstuff and its price is closely monitored. A specific mechanism is implemented to control consumer prices for bread. Food grain resources (see section on producer price support) are used to restrain bread prices in the event of grain price increases. The FCC supplies food grain from the state resources to millers at low fixed prices. The flour is then supplied to retailers or bread manufacturers at prices controlled by the local authorities.

The government also makes recourse to border measures to limit the outflow of certain agricultural and food products. Thus, temporary export bans were imposed on oilseeds and vegetable oil in 2007-11 (see section on agro-food trade policies), which had a distinct price-dampening effect at both the producer and consumer levels. Export bans were also applied to sugar in 2010 and 2011.

In 2011, a new food price stabilisation mechanism was introduced due to the concern about the volatility of world agricultural prices. The purpose was to prevent sharp price increases and eliminate seasonal price fluctuations. The mechanism includes the establishment of the regional “stabilisation funds” for local food markets.

Local governments are responsible for the operation of the stabilisation funds. Since 2008, KZT 5.6 billion have been allocated from the republican budget to Social and Business Corporations to set up the Service and Collection Centres (SCC). Budget funds were allocated as a contribution to the authorised capital of the SCCs. Sixty SCCs were incorporated, of which 51 are at present operational. In 2011, the FCC received KZT 17.1 billion from the republican budget and provided the Social and Business Corporations with low-interest loans. The SBCs allocate these resources to the Service Collection Centres which carry out the purchasing, storage and selling of products. An additional purpose of the programme is to stimulate rural co-operation in the collection and primary processing of agricultural commodities. SCCs also provide services to farmers and organise machinery pools.

The range of products covered by the stabilisation funds includes potatoes, onions, carrots, cabbages, wheat flour, buckwheat, rice, sugar and sunflower oil. At present the SCCs experience a lack of facilities, high cost of transportation, and low local demand. So far the SCCs have been dealing mainly with fruit and vegetable produce. In the fall season, SCCs purchase fruits and vegetables from producers into stabilisation funds, and sell them during the winter and spring season when prices increase. A similar mechanism would be applied for commodities, for which seasonal fluctuations are not strong; the stabilisation funds will operate according to the price trend – buy if prices are low and sell if prices go

up. The Ministry of Agriculture estimates off-season needs for each of the products by region. The volume of purchased fruits and vegetables as a percentage to this estimated need varied from 1% (apples) to 22.2% (onions). In February 2012 vegetables were sold at market prices or at prices up to 30% below market levels (varied by region and commodity).

The stabilisation fund system is transparent: all volumes and prices of purchased and sold commodities are published weekly on the Ministry of Agriculture's website. However, the difficult and costly storage of fruits and vegetables, which are not food staples, will likely lead to considerable budget expenditures. There is also evidence that informal pressure may be exerted on producers by local authorities to deliver to stabilisation funds. Targeted actions to support low-income families and vulnerable social groups may be a more efficient policy response to the problem of affordability of staple foods.

### **Environmental measures**

Environmental measures are recent and most are in the form of long-term plans, with more specific programmes and actions yet to be undertaken (Table 2.23). The areas that received most attention are the management of water, and rangeland and pastures, which occupy most of the country. The government has initiated the following activities to tackle agro-environmental issues: the *Programme on Combating Desertification*; a pilot project on conversion of abandoned farmland to pastureland; establishment of river basin councils of Tchu and Talas rivers; rehabilitation of irrigation and drainage systems, with substantial impact on water use efficiency and salinity reduction; and restoration of the Northern Aral Sea. However, integrated pest management methods are not being applied and only preliminary actions to dispose of outdated pesticides have been taken (World Bank, 2007).

**Table 2.23. Environmental priorities in strategic programming documents**

Strategic programmes	Priorities
The Concept of Rational Use and Protection of Land Resources during 1994-95 and the period up to 2010	<ul style="list-style-type: none"> <li>Conservation of agricultural lands.</li> <li>Forest restoration and creation of shelterbelts in fields and pastures.</li> <li>Expansion of protected areas.</li> <li>Combat water and wind erosion.</li> <li>Improvement of feed fields.</li> <li>Introduction of soil protection technologies.</li> <li>Reconstruction of irrigation systems.</li> <li>Increase in soil and geo-botanical research measures.</li> </ul>
State Agricultural Food Programme 2003-05	<ul style="list-style-type: none"> <li>Soil conservation and rehabilitation of soil fertility by increased mineral fertiliser use.</li> <li>Improved legislation that contains a mechanism of liability for reducing fertility of agricultural lands.</li> <li>Educating 25-30 agrochemical and soil specialists annually.</li> </ul>
Programme for Rational Use of Agricultural Land for 2005-07	<ul style="list-style-type: none"> <li>Development of measures for rational use and protection of land resources to conserve soil.</li> <li>Restoration of soil fertility.</li> <li>Reduce negative anthropogenic impacts on land.</li> </ul>
The Concept of Sustainable Development of Agricultural Sector for 2006-10	<ul style="list-style-type: none"> <li>Increasing mineral and organic fertiliser use to increase soil fertility.</li> <li>Enhancement of soil fertility on the basis of scientifically-grounded crop rotation.</li> <li>Expansion of perennial legume grasses.</li> <li>Introduction of fallow.</li> </ul>
The Strategy for Development of Agriculture until 2010	<ul style="list-style-type: none"> <li>Improvement of soil fertility and reduce land degradation and desertification by introduction of modern crop production and animal breeding technologies.</li> </ul>
Strategic Plan for Development of the Republic of Kazakhstan until 2010	<ul style="list-style-type: none"> <li>Use of sustainable agricultural practices based on organic and environmentally friendly crop farming.</li> </ul>

Source: World Bank, 2007.

In 2007-12, the government provided per hectare payments for a number of priority crops with the subsidy rates differentiated according to the cultivation technology. Grain producers applying reduced-tillage are eligible for increased rates of per hectare subsidies. Similarly, producers of sugar beet and vegetables and melons with drip irrigation benefit from considerably higher per hectare payments compared to those who do not use drip irrigation. Apart from its effects on crop productivity, drip irrigation has beneficial environmental outcomes, such as water saving and prevention of soils salinisation, swamp formation and erosion of the irrigated lands (Box 2.2).

### 3. Agro-food trade policies

In the first years after independence Kazakhstan's principal concern was to ensure food security. Imports were largely unregulated and much trade was conducted by small-scale shuttle traders (*chelnoki*). The main instruments of trade policy were export restrictions to limit the outflow of essential commodities. In 1994-95, considerable trade liberalisation was undertaken. Export quotas were cancelled, the list of licensed products was shortened, and export duties were simplified (and abolished in 1996). A tariff schedule was drawn up in 1995 and simplified in 1996. Tariff rates were reduced in 1997 and again in July 1998. Although agricultural tariffs changed little, no tariffs on agricultural products exceeded 25%.

Liberalisation slowed down in the decade after 1998. In response to the adverse effects of the 1998 Russian crisis on Kazakhstan's economy, tariff and non-tariff regulations were introduced to protect local producers. After a significant devaluation of the tenge in 1999, which encouraged exporters and provided added protection for import-competing producers, trade policy was fairly stable for almost a decade. In 2004, a *Law on Trade* was adopted that established the principles, objectives and organisational bases for state regulation of trade. According to this law, the main objectives of trade policy were to integrate Kazakhstan into the world trading system while protecting domestic producers.

During the 1990s, Kazakhstan was active in concluding bilateral and multilateral trade agreements with its main trading partners in the CIS region. Among the CIS arrangements the most active involved the Union of Five (Belarus, Kazakhstan, the Kyrgyz Republic, the Russian Federation and Tajikistan), which in October 2000 became the Eurasian Economic Community (EurAsEC). Kazakhstan also joined the Economic Cooperation Organisation in 1992, and signed several proposals on Central Asian trade organisations, although none had a significant impact on trade policy.

The most important change in trade policy was heralded in October 2007 when Kazakhstan, Belarus and Russia signed the Treaty on the Formation of a Customs Union. In July 2010, a common customs code, customs rules and common external tariff came into effect. Once they enter into force, the measures have treaty status, taking precedence over national trade laws and regulations, and can only be revised by agreement among the Customs Union members. A further step towards the Eurasian integration followed in January 2012, when the Customs Union members signed an agreement on the creation of a Common Economic Space, which could lead to deeper economic integration with free movement of goods, services, capital and labour within the EurAsEC, and harmonised regulations in key economic areas (Box 2.6).

The EurAsEC integration developed along with the negotiations to accede the World Trade Organisation (WTO). Kazakhstan applied to join the Organisation in 1996. Although



negotiations initially progressed quickly, they stalled in 1999. However, the process has influenced national policymaking towards compliance with WTO principles. The negotiations slowed again in the late 2000s amid the uncertainties on the implementation of the Customs Union. The momentum was soon re-gained, although at present important issues, such as Kazakhstan's domestic support commitments in agriculture and integration of bilateral market access agreements into the country's schedule of commitments, remain to be finalised.

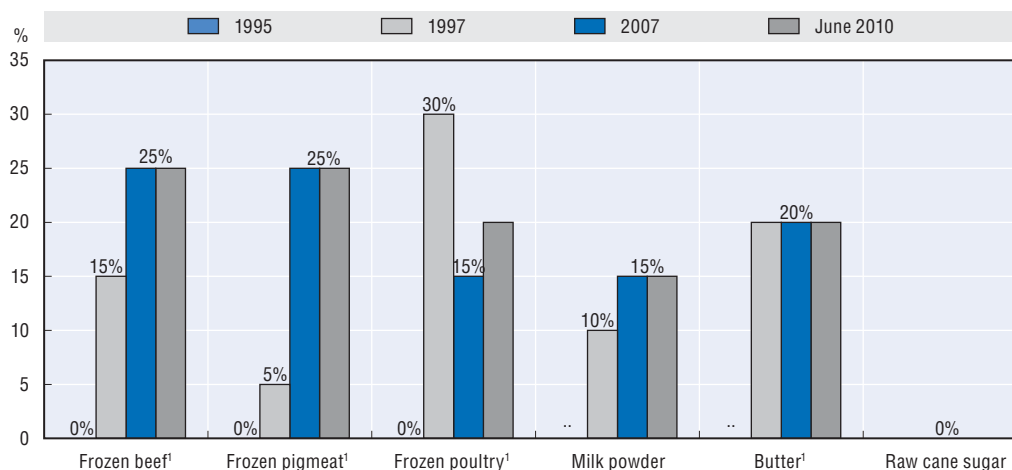
### Import policy measures

#### Tariffs

Tariffs are the main trade policy instrument in Kazakhstan. A Customs Code was adopted in 1995. In 1996, the national tariff schedule was simplified to twelve tariff bands and after the 1997 revision the maximum tariff rate was 50%. Tariffs on key agricultural products were between zero and 30%.

Up to 2006, tariff policy was relatively stable. However, import tariffs for agricultural products, in particular bovine, swine and poultry meat, milk powder, and white sugar, were increasing. In 2007, meat import tariffs were again increased. In 2009, in addition to frozen bovine and poultry meat, non-*ad valorem* tariffs were introduced for swine and sheep meat in preparation for the implementation of the Customs Union the following year.<sup>12</sup> The proportion of HS10-digit tariff lines in the agricultural sector (HS 1-24) with zero duty rates fell from 18% in 1996 to 4% in 2010 and the number of tariff lines with non-*ad valorem* duties rose to 42%. MFN tariffs were highest for white sugar and meat products, followed by dairy products. The lowest tariffs were applied to raw sugar, vegetables and cereals, with the exception of rice and non-seed potatoes. The changes in the tariffs for several Kazakhstan's agricultural imports from 1995 up to June 2010 (the month preceding the adoption of the common CU tariff) are shown on Figure 2.19, and more detailed information is contained in Annex Table 2.A.1.

Figure 2.19. **Changes in Kazakhstan's tariffs for key agro-food imports during the period preceding the Customs Union**



..: Not available.

1. For these products combined tariffs are applied, only the *ad valorem* rates of combined tariffs are shown on the figure.

Source: ACEPAS based on Government Resolutions.

StatLink  <http://dx.doi.org/10.1787/888932781235>

Although before 2010 Kazakhstan was a signatory to various free trade agreements within the CIS, it implemented free trade in agricultural products only with some CIS countries (Russia, Azerbaijan, Kyrgyz Republic and Ukraine). As part of the January 1997 tariff schedule, 46 least developed countries received free access to Kazakhstan's markets. Kazakhstan also applied a preferential tariff rate equal to 75% of the MFN tariff on commodities imported from developing countries, with the list of eligible countries approved by the government. Nevertheless, the share of duty free imports in total imports of agricultural products was small, accounting for 6% in 2009.

In July 2010, Kazakhstan introduced the common external tariff of the Customs Union (Annex Table 2.A.2). For agricultural products, the main changes were the tariff rate quotas (TRQs) with combined tariffs applied to meat imports (see below). The CU tariff regime also included a complex structure of varying tariffs on raw sugar. For raw beet sugar, the import duty was set at USD 250 from 1 January to 31 June and USD 270 between 1 July and 31 December. For raw cane sugar, the CU regime also provided for seasonal tariffs, which were pegged to the average price of the New York Mercantile Exchange (NYMEX): the higher the price at the NYMEX, the lower the duty. However, as a derogation from the common CU tariff, Kazakhstan will maintain a zero import duty on raw cane sugar up to 2019 with the obligation that neither raw sugar for processing, nor white sugar would be re-directed to Russia or Belarus. For refined sugar, the previous combined duty of 30% (but not less than EUR 120 per tonne) was replaced by a specific duty of EUR 340 per tonne.

Overall, joining the Customs Union meant a substantial increase in import tariffs for Kazakhstan, as 92% of the common external tariffs were aligned with the Russian tariff system. Tariff rates were increased for many agricultural products and Kazakhstan's tariff system became less liberal than it had been prior to the CU (Box 2.6).

CU's tariff regime should be viewed in the context of the WTO process in which all three CU members are engaged: Russia officially acceded to the Organisation in August 2012, and Kazakhstan is at an advanced stage of negotiations. This implies that the CU tariff will evolve in accordance with the commitments that the CU members undertake within the WTO framework. According to EurAsEC's *Treaty on the Functioning of the Customs Union in the Framework of the Multilateral Trade System* (2011), common CU tariff must not exceed the rates bound by a CU member at the accession to the WTO, except in cases specified by the WTO Agreement (EurAsEC, 2011). In relation with Russia's tariff reduction commitments to the WTO, important tariff changes concern the live animals and meat product group (see below). Among other products that will see important tariff reductions are butter, cheeses, and certain fruits and vegetables (Annex Table 2.A.2).

An insight into the future evolution of the common CU tariff due to implementation of Russia's accession commitments can be drawn from a recent study by Shepotylo and Tarr (2012). They compare the levels of Russia's MFN tariffs in 2011 (which for the agro-food group generally correspond to the CU's MFN tariffs applicable also for Kazakhstan) with Russia's final WTO bound rates in 2020. Figure 2.20 shows the results for several product groups which represent Kazakhstan's principal imports. The degree of tariff changes in some cases strongly depends on whether these changes are measured on the basis of simple average or trade weighted tariffs.<sup>13</sup> Based on the weighted average tariffs, the most important tariff reductions among these selected groups are estimated for live animals, meats, oilseeds and beverages.

### Box 2.6. Implications of Kazakhstan's membership in the Customs Union: Findings from several studies

Changes in Kazakhstan's import tariff levels as a result of joining the Customs Union (CU) were examined by Jandosov and Sabyrova (2011a and 2011b) from the Centre for Economic Analysis RAKURS in Almaty. They estimated the effective level of Kazakhstan's tariff protection before and after joining the CU. In their definition, effective tariff protection accounts for the preferential free trade regime within the CIS area, tariff preferences granted to developing and least developed countries, and Kazakhstan's transition tariffs which differ from the common CU tariffs. The study reported a substantial increase in tariff protection: the total trade-weighted average import tariff changed from 4.30% to 12.56% after the adoption of the common CU tariff (the weights were based on 2009 imports, and the CU tariffs accounted for Kazakhstan's transition rates applicable in the second half of 2011). For the group of agriculture and hunting, and the services in these two sectors, the respective weighted average tariff increased from 4.35% to 12.07% (Table 2.24).

Table 2.24. **Changes in Kazakhstan's effective tariff rates**  
Per cent


		2009	Transition period <sup>1</sup>	After the transition period
<b>Jandosov and Sabyrova (2011b)</b>				
Total	Simple average	6.45	12.02	n.c.
	Trade weighted average	4.30	12.56	n.c.
Agriculture <sup>2</sup>	Simple average	7.39	10.04	n.c.
	Trade weighted average	4.35	12.07	n.c.
<b>Shepotylo (2012)</b>				
Total	Simple average	6.72	11.08	11.51
	Trade weighted average	5.33	9.47	10.43
Agriculture	Simple average	6.34	7.36	8.10
	Trade weighted average	4.70	6.88	11.11

n.c.: Not calculated.

1. Second half of 2011 for Jandosov and Sabyrova; 2010-11 for Shepotylo.

2. Also includes hunting and services in agriculture and hunting.

Source: Jandosov and Sabyrova, 2011b; Shepotylo, 2012.

StatLink  <http://dx.doi.org/10.1787/888932782413>

A further analysis was undertaken by Shepotylo (2012). He calculated Kazakhstan's effective tariff rate before joining the CU (2009), in the CU with transition tariff rates (2010-11), and in the CU with all exceptions eliminated. The results are also summarised in Table 2.24 and are broadly in agreement with those obtained by Jandosov and Sabyrova, although a direct comparison of the results from the two studies requires caution due to differences in the computations (e.g. slightly different trade periods used for weighting the tariffs). According to Shepotylo, the trade-weighted average tariff for agriculture increases from 4.70% before the CU, through 6.88% during the transition period, and to 11.11% after all tariffs are aligned with the common CU tariff.

The World Bank study led by Jensen and Tarr (World Bank, 2012a) looked at the broad economic impact of Kazakhstan's participation in the CU. A special focus of the study was on the trade-off between possible gains from trade facilitation and reduction of non-tariff barriers to trade (NTBs) and the losses from higher tariffs for Kazakhstan in the CU. A 57-sector computable general equilibrium model of Kazakhstan was employed to test three scenarios. The "Customs Union Current" scenario estimated the impact of policies implemented by the spring 2011, i.e. common external tariff with exceptions and a *status quo* in trade facilitation and NTBs. The "Customs Union Future – Pessimistic Outlook" assumed that Kazakhstan had fully implemented the common external tariff, but made no progress in trade facilitation and decreasing NTBs. Finally, "Customs Union Future – Optimistic Outlook" assumed that in addition to a fully implemented common external tariff, some progress had been made in trade facilitation costs and the reduction of NTB barriers, with the trade costs decreased by 10%. For changes in tariff rates, the study relied on the work by Shepotylo (2012) mentioned above.

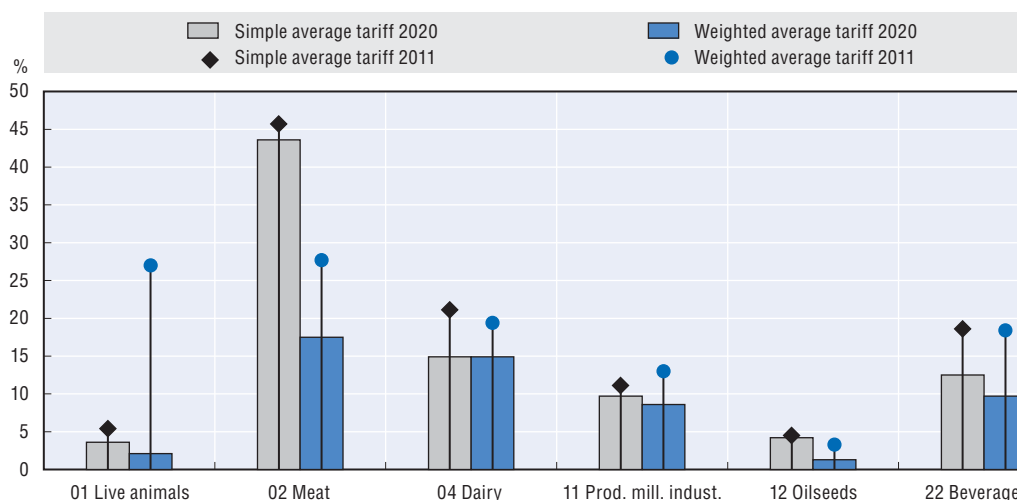
### Box 2.6. Implications of Kazakhstan's membership in the Customs Union: Findings from several studies (cont.)

The first scenario showed that under spring 2011 conditions, Kazakhstan was losing about 0.2% in real income per year. The income loss reflected the implementation of the higher common external tariff of the CU. Trade with the rest of the world decreased and expanded with Russia, Belarus and the rest of the CIS. Manufacturing sectors expanded, but less imported technology from the more technologically advanced countries could lead to a loss of productivity gains in the long run. The results of the pessimistic scenario showed that the loss in real income would rise to 0.3% per year as a result of the elimination of exceptions to the common CU tariff. A larger diversion of imports from non-CIS area to the CU and the rest of the CIS occurs, especially in agriculture and chemicals. Under the optimistic scenario, which assumes that the CU would improve trade facilitation in importing to or exporting from Kazakhstan and reduce the NTBs (particularly related to sanitary and phytosanitary requirements), the country would see an increase in real income of about 1.5% per year. Most of this gain would come from the reduction of trade facilitation costs (1.4%); the gains from reduced NTBs are 0.4%, which roughly offsets the losses from full implementation of the common CU tariff. The authors note that the implementation of the common CU tariff is the least difficult aspect of the integration, while the progress in trade facilitation and reduction of NTBs requires a serious commitment to improving institutions.

Vinhas de Souza (2011) estimated the impact of creation of the CU on GDP, sectoral output and trade flows with a computable general equilibrium model from the Global Trade Analysis Project (GTAP). He found that the negative trade diversion effects would overwhelm any positive trade-creation effects as the CU economies were already largely integrated in terms of trade (formally liberalised intra-CIS trade and the free trade area of Belarus and Russia). The full implementation of the CU would result in a decrease in Kazakhstan's GDP by 0.54%. According to the model estimation, most of the economic sectors experience losses (except for textile/apparel and truck industries), but trade balance improves for Kazakhstan.

It is important to highlight that both the analysis by Jensen and Tarr and Vinhas de Souza did not consider the potential impact of the WTO process in which CU members are involved (e.g. changes in the operation of the CU resulting from Russia's current trade liberalisation commitments to the WTO, and potential commitments by the other two CU members).

Figure 2.20. Estimated changes in the Customs Union MFN tariff rates for agro-food products following from to Russia's WTO commitments between 2011 and 2020



Source: Shepotylo and Tarr, 2012.

StatLink <http://dx.doi.org/10.1787/888932781254>

### Import licenses and import quotas

Licenses were required for imports of agricultural products up to 1995. The 1995 *Law on Licensing* set a list of commodities subject to licensing, where imports of the main agricultural products were no longer listed.

An import quota for white sugar was applied between 2008 and 2010 (Table 2.25). The quota system aimed to secure the needs of confectionery companies in Kazakhstan, while protecting local sugar producers. An import quota was allocated to confectionery companies under the condition that they use the imported sugar only to produce confectionery. The quotas did not apply to sugar imported from Russia and Belarus, and was nullified by the implementation of the Customs Union in July 2010.

Table 2.25. **Kazakhstan's import quotas for white sugar,<sup>1</sup> 2008-10**

Validity period	Quota volume, tonnes	Government resolutions
Until 1 October 2008	46 736	No. 190 of 26 February 2008
Until 1 July 2009	56 694	No. 931 of 8 October 2008
Until 1 April 2010	54 423	No. 1 186 of 6 August 2009
Until 1 July 2010	6 122	No. 669 of 30 June 2010

1. Quotas did not apply to sugar originating from the Russian Federation and Belarus.

The Customs Union agreement allows members to introduce import licensing and quotas on a national basis. Kazakhstan does not currently impose any quantitative restrictions on imports other than tariff rate quotas for meat.

### Tariff rate quotas

The 2004 *Law On Regulation of Trade Activity* created the legal framework for introducing tariff rate quotas (TRQs) in Kazakhstan. However, Kazakhstan did not apply TRQs until 2010, when they were introduced in accordance with the agreements of the CU. The three CU members signed the Agreement on Conditions and Mechanism of Implementation of Tariff Rate Quotas in December 2008. Each year the EurAsEC Commission establishes the list of goods subject to TRQs, the volumes involved and whether CU or national bodies should be responsible for their administration.

In 2010-12, the TRQs were administered by the national governments.<sup>14</sup> The TRQ volumes for Kazakhstan were set at the same level in 2010 and 2011, but were increased in 2012 for frozen beef and for fresh or chilled pork (Table 2.26). The TRQ provides a substantial protection, with over-quota tariff rates varying between 50% for beef and 80% for poultry meat. As noted above, Russia's WTO accession implied changes in the TRQ conditions – the most important was implemented for pigmeat for which in-quota tariff was brought to zero and over-quota reduced from 75% to 65% (Russia has also committed to eliminate pigmeat TRQ after 2020 and apply a flat 25% tariff on such imports).

Table 2.26. **Kazakhstan's tariff rate quotas for meat imports under the Customs Union, 2011**

	2010	2011	2012 <sup>1</sup>	Changes in the tariffs foreseen under Russia's WTO commitments	
				Bindings at accession	Final binding
<b>Beef fresh and chilled, 0201</b>					
TRQ, tonnes	20	20	20		
In-quota tariff		15%, n.l. 0.2 EUR/kg		15%	27.5% if TRQ is eliminated
Over-quota tariff		50%, n.l. 1.0 EUR/kg		55%	
<b>Beef frozen, 0202</b>					
TRQ, tonnes	10 000	10 000	13 900		
In-quota tariff		15%, n.l. 0.2 EUR/kg		15%	27.5% if TRQ is eliminated
Over-quota tariff		50%, n.l. 1.0 EUR/kg		55%	
<b>Pigmeat fresh, chilled or frozen, 0203</b>					
TRQ, tonnes	7 400	7 400	9 400		
In-quota tariff		15%, n.l. 0.25 EUR/kg		0%	25% and TRQ eliminated as of 2020
Over-quota tariff		75%, n.l. 1.5 EUR/kg		65%	
<b>Poultry meat fresh, chilled or frozen, 0207</b>					
TRQ, tonnes	110 000	110 000	110 000		
In-quota tariff		25%, n.l. 0.2 EUR/kg		25%	37.5% if TRQ is eliminated
Over-quota tariff		80%, n.l. 0.7 EUR/kg		80%	

n.l.: Not less than.

1. Tariffs effective up to 23 August 2012 (see Annex Table 2.A.2.).

Source: EurAsEC Commission.

StatLink  <http://dx.doi.org/10.1787/888932782432>

### Temporary restrictions on imports

In 1999, Kazakhstan imposed temporary restrictions on imports of some agricultural products. In January of that year, Kazakhstan banned imports of meat from Russia and set a prohibitive customs duty (200%) for six months on meat imported from Uzbekistan and the Kyrgyz Republic because the devaluation of those countries' currencies sharply reduced the cost of their meat. On 25 June 1999, after devaluing its own currency, Kazakhstan withdrew these restrictions. A six-month ban on food and grain imports from Russia was also in place in 1999 to protect domestic market from low-cost Russian exports.

Under the current conditions of the CU, the authority to impose non-tariff measures on imports to third countries rests with the EurAsEC Commission – the decision can be made on the initiative of the Commission itself or a CU member. The countries may unilaterally impose a temporary non-tariff measure if it, among other specified cases, is aimed at the “protection of life and health of citizens, environment, life and health of animals and plants”. However, the period during which a restriction may apply is determined by the EurAsEC Commission (EurAsEC, 2009).

### Technical barriers to trade (TBT) and sanitary and phytosanitary measures (SPS)

In 1992, the CIS countries signed an agreement on providing co-ordinated policy in areas of standardisation, metrology, certification and accreditation. The agreement accepted state standards inherited from the Soviet Union as Interstate Standards of CIS countries. These standards formed the initial platform of technical regulation in Kazakhstan.

In 1993, the *Law on Standardisation and Certification* was adopted. The Law introduced two types of certification: obligatory certification of products according to the “List of products subject to mandatory certification”, and voluntary certification that could be initiated by a producer, distributor or consumer of a product. The List included over a hundred agricultural and processed products, and any sale of such products, including imports, required a certificate of compliance that ensured quality and safety. The *Law on Technical Regulation*, which entered into force in 2005, replaced the 1993 law (Table 2.27).

**Table 2.27. Key laws in Kazakhstan related to SPS and TBT issues**

Date of adoption	Document
11.02.1999	Law On Plant Quarantine
03.07.2002	Law On Plant Protection
16.07.2002	Law On Veterinary Issues
08.04.2004	Law On Quality and Safety of Food
13.05.2005	Law On Technical Regulation (replaces 1993 Law On Standardization and Certification)

Provisions on packaging and labelling were covered in the *Law on the Quality and Safety of Food*. Unlike previous certification mechanisms, the new system relied on technical regulations that provided mandatory requirements for products and services to be allowed to circulate in Kazakhstan. The aim was to harmonise national standardisation and the certification system with international standards.

SPS measures were based on the *Laws on Veterinary Issues, on Plant Protection and on Plant Quarantine*. The principal national bodies involved in SPS issues are the Ministry of Health (the Committee for State Sanitary and Epidemiology Surveillance) and the Ministry of Agriculture (the Committee of State Inspection in the Agro-Industrial Complex and the Committee for Veterinary Control and Supervision). In 2005, an Information Centre on Sanitary and Phytosanitary measures and Technical Barriers to Trade was created for the exchange of information with the WTO Secretariat and WTO members.

During the 2000s, Kazakhstan modified most of its legislation on food safety and marketing standards and on plant and animal health to comply with the principles laid down in the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements of the WTO, as well as other internationally agreed standards (e.g. set out by the World Organisation for Animal Health, *Codex Alimentarius*, IPPC). This process continued within the framework of the CU. In 2008, the member countries signed agreements on co-ordinated policy in the area of technical regulation and SPS measures and creation of a common information system on these issues. On 1 July 2010, agreements on veterinary and sanitary measures and on quarantine of plants entered into force. These agreements included a unified list of goods subject to veterinary, phytosanitary and sanitary-epidemiological control at the customs border and within the CU territory; veterinary, sanitary-epidemiological and hygienic requirements concerning these goods; and documentation confirming safety of goods. According to the unified veterinary requirements, imports for products subject to veterinary control are possible only from the points of entry included in a common list approved by all three CU parties.

Since 2009, common CU technical regulations have been developed. As of September 2012, out of 18 common technical regulations in the agro-food area identified

in food preparation, nine have already been adopted, while the others are at the stage of co-ordination within the member countries (Table 2.28). Until the completion of common technical regulations, national ones are valid. Once adopted, technical regulations of the CU supersede national requirements.

Table 2.28. **Technical Regulations of the Customs Union related to the agro-food area**

Title	Status as of January 2013
1. Safety of Grain	Adopted
2. Safety of Foodstuffs	Adopted
3. Safety of Fruit and Vegetable Juice Products	Adopted
4. Safety of Oil and Fat Products	Adopted
5. Requirements on Labelling of Food Products	Adopted
6. Technical Regulation on Packaging Safety	Adopted
7. Requirements on Safety of Food Additives, Aromatic and Auxiliary Technological Substances	Adopted
8. Safety of Agricultural and Forestry Tractors and Trailers	Adopted
9. Safety of Certain Specialised Foodstuffs, Including Dietetic Medical and Dietetic Prevention Foods	Adopted
10. Safety of Meat and Meat Products	Intra-state clearance
11. Technical Regulation on Milk and Milk Products	Intra-state clearance
12. Safety of Alcoholic Beverages	Intra-state clearance
13. Technical Regulation on Tobacco Products	Intra-state clearance
14. Safety of Fertilisers	Intra-state clearance
15. Safety of Feed and Feed additives	Public discussion
16. Safety of Fish and Fish Products	Public discussion

Source: EurAsEC Commission.

### **Export policy measures**

#### **Export taxes**

Up to the mid-1990s Kazakhstan imposed minimum export prices and export duties of 10-30%. Export duties on meat were abolished in 1994 and on grain in 1995. Export duties on wool and skin, which were abolished in 1996, were reintroduced in 2000 to ensure supplies for the domestic processing industries due to the shortages of these goods in the domestic market (WTO, 2008). In the CU, export duties remain a national prerogative.

#### **Export licences and export quotas**

Licenses were required for exports of agricultural products and physical limits (quotas) were imposed from 1991 to 1995 amid concerns on food shortages during that period. The list of licensed products included live animals, dairy products, oilseeds, flour products, vegetable oils and margarine. In 1995, the export licensing and quota system for agricultural products were abolished.

Up until 1996, grain exports were regulated by the Kazak International Agro-Industrial Exchange (KIAE). All export contracts had to be registered with the KIAE, mandatory minimum prices were set by the government for different grades of grain to prevent foreign exchange losses, and the KIAE controlled compliance of export contracts with the minimum price requirement. A 10% export tax was imposed on grain exports. It was eliminated in 1995 and in 1996 the government no longer set a minimum export price, although grain exporters continued to register contracts with the KIAE until 1997 (USDA, 2007).



Licensing of grain exports was required until 1 February 2012. Individuals and companies could obtain a grain export licence from the Ministry of Agriculture. In order to do so, exporters had to have production and storage facilities, and not less than 5 000 tonnes of grain for export. A year's experience in grain trading was also required. In response to the global commodity price increases, grain export licensing was restricted between September 2007 and September 2008.

### Temporary restrictions on exports

Kazakhstan applied temporary export bans on agricultural products with the aim of stabilising food prices. Due to shortages in domestic oilseed production, several decrees have been enacted since 2007 banning oilseeds and vegetable oil exports (Table 2.29). An export ban on oilseeds effectively constrained increases in domestic oilseed prices during the peak of world food prices in late 2007 and 2008. As of 15 April 2008, when prices on the world grain market were rapidly increasing, Kazakhstan applied an export ban on wheat for five months. This had a negative impact on the grain sector, in particular given the high crop harvested the following season. Consequently, after the 2010 drought-affected crop, the government resisted applying export restrictions. Exports of rice and milk products were banned from 1 December 2008 until 1 January 2009.

**Table 2.29. Temporary export bans of agro-food products imposed by Kazakhstan between 2007 and 2012**

Date	HS Code	Document
23.10.2007 – 01.02.2008	1206 00 (sunflower seeds) 1512 (sunflower oil)	Government Resolution No. 976 of 20.10.2007
1.04.2008 – 01.10.2008	1206 00 (sunflower seeds) 1512 (sunflower oil)	Government Resolution No. 260 of 18.03.2008
13.09.2008 – 01.04.2009	1205 (rapeseeds) 1507 (soya oil) 1514 (rapeseed oil)	Government Resolution No. 777 of 28.08.2008
01.10.2008 – 01.04.2009	1206 00 (sunflower seeds)	Government Resolution No. 930 of 08.10.2008
27.10.2008 – 01.04.2009	1201 00 (soybeans) 1207 20 (cotton seeds) 1207 99 (other oilseeds)	Government Resolution No. 930 of 08.10.2008
20.10.2010 – 20.04.2011	1008 10 (buckwheat) 1103 19 (buckwheat cereal preparations) 1201 00 (soybeans) 1206 00 (sunflower seeds) 1207 99 (cotton seeds) 1507, 1512, 1514, 1515 11, 1515 19 (vegetable oils), vegetable and animal fats (1516)	Government Resolution No. 1024 of 05.10.2010
01.09.2010 – 01.03.2011	1701 99 (white sugar)	Decision of the Customs Union Commission No. 334 of 16.04.2010
11.05.2010 – 01.07.2010	1701 99 100 (white sugar), 1701 99 900 (other sugar)	Decision of the Customs Union Commission No. 334 of 16.04.2010
29.10.2011 – 29.02.2012	1512 1 (sunflower oil, safflower oil, cotton oil)	Government Resolution No. 942 of 23.08.2011

Source: EurAsEC Commission.

Currently, the authority to impose non-tariff measures on exports to third countries rests with the EurAsEC Commission. As is the case with temporary restrictions on imports, the Commission can authorise national measures, but a CU member has yet to request the Commission to do so. A CU party may unilaterally impose a temporary non-tariff measure

if it, among other specified cases, is aimed at the “prevention or reduction of a critical shortage in the domestic market for food or other goods essential for the domestic market” (EurAsEC, 2009). During the period of its membership in the CU, Kazakhstan imposed bans on exports of buckwheat, oilseeds, vegetable oils and animal fats, and white sugar in 2010-12, in order to maintain domestic availability, even though Kazakhstan remains an insignificant exporter of these commodities.

### ***Transport subsidies for exporters***

Until 1997, reduced rail transportation tariffs were applied to agricultural goods on the grounds of Kazakhstan’s remoteness from major agricultural markets and poor connection to waterway transport routes (Mosoti and Gobena, 2007). No information is available on the policies related to transportation pricing during the period from 1997 and to 2009.

Since 2009, the government has provided transport subsidies for grain exports. Following the bumper wheat harvest crop in 2009, in November of that year the government decided to allocate KZT 5 billion (USD 34 million) to reduce the cost of transportation of the grain exported through Russian and Chinese territories. This was explained by the need to free storage facilities in the northern region for the new crop by moving grain out to export markets. The subsidy was initially set at USD 20 per tonne of wheat. The Centre for Transport Service (CTS)<sup>15</sup> was given the rights of an exclusive operator of subsidised transport services and, thus to receive the subsidy exporters would have to use only CTS services. A debate emerged when the CTS offered higher rates on its transport services as compared to private companies.<sup>16</sup> In April 2010, the transport subsidy to Russia and China was again introduced and increased to USD 40 per tonne. A total of KZT 11.8 billion (USD 80 million) was spent on export transportation subsidies between end-2009 and 2010, applying to 2.3 million tonnes of exported wheat.

In August 2011, the Government again approved the continuation of a transport subsidy for wheat for 2011 and 2012. The subsidy rate was set at KZT 6 000 (USD 40 per tonne) and covered 2.5 million tonnes of wheat exports. KZT 5 billion (USD 34 million) was allocated in 2011 for this purpose, and KZT 10 billion (USD 68 million) for 2012. The subsidy was available for wheat transported after 1 September 2011 to China or which transited through Chinese or Russian territory. As in 2009-10, the CTS remained the single operator of subsidised exports. In May 2012, it was decided to allocate additional funds to subsidise grain transportation so that exporters received another KZT 10 billion in 2012, although the subsidy rate was reduced to KZT 4 000 (USD 27) per tonne. As of August 2012, the grain transportation subsidy was discontinued.

### ***Regional and bilateral trade agreements***

Kazakhstan’s most important regional economic integration framework is the Eurasian Economic Community (EurAsEC) whose member countries are Belarus, Kazakhstan, the Kyrgyz Republic, Russia and Tajikistan. The EurAsEC aims to develop the Common Economic Space between its members, with the free movement of goods and services, harmonised legal base, common infrastructure and co-ordinated tax, monetary and currency policies. The ultimate goal is the creation of the Eurasian Economic Union by 2015. The principal pillar of the EurAsEC is the Customs Union, currently including Belarus, Kazakhstan and Russia (Box 2.7).

### Box 2.7. **The Eurasian Economic Community and the Customs Union between Belarus, Kazakhstan and Russia**

Eurasian Economic Community (EurAsEC) Treaty was signed in 2000 and came into force in 2001 after ratification by the member countries, Belarus, Kazakhstan, the Kyrgyz Republic, Russia and Tajikistan.\* Within the EurAsEC framework, member countries co-ordinate their economic and social reforms and take steps to develop common EurAsEC policies and institutions. The latter include an Interstate Council, Inter-Parliamentary Assembly and the Community Court of Justice. Interstate Council unites national heads of state and the heads of government. Its role is to define the overall strategy and set directions for the Community policies, including policies related to the agro-food sector, food safety, transportation, energy, labour, and international activities of the EurAsEC. Inter-Parliamentary Assembly consists of delegates appointed by each member country according to the size of the country. The Assembly co-ordinates EurAsEC legal policy and creates conditions for harmonising legal codes of the member states. The Community Court of Justice is responsible for dispute resolution on issues of economic importance and which may concern the implementation of laws or treaties adopted by the EurAsEC.

In 2007, three EurAsEC members – Russia, Kazakhstan and Belarus – signed a Treaty on Establishment of the Common Customs Territory and Formation of the Customs Union (CU). The Treaty, together with subsequent agreements forms a single undertaking, i.e. the signatories must apply all the terms or withdraw from the Union. The integrated customs area forms part of the EurAsEC and is managed by the regulatory bodies of the EurAsEC.

In 2007, a CU Commission was established whose main task was to ensure the functioning and development of the CU at the supranational level. The decisions of the CU Commission were legally binding and effective in domestic law without the need for adoption of a special legislation. Among the principal areas under the competency of the CU are the classification of goods for foreign economic activity; import tariffs (changes in import customs duty rates; setting import tariff exemptions and tariff quotas; the system of tariff preferences, etc.), and non-tariff regulation. In the area of non-tariff regulation, the CU co-ordinates export and import licensing, develops common technical regulations, sanitary and phytosanitary regulations, and standards and conformity assessment systems. The implementation of trade restrictions, including prohibitions and quotas on goods traded with the third countries, are also regulated by the CU. The national authorities retain the competency in the areas such as registration requirements for engaging in economic activity (including import and export operations); application of customs fees to exports or imports, and export tariffs. The three CU members have an agreement on the distribution of customs duties. By the end of 2010, the customs duties collected on goods originating outside the CU were distributed according to an agreed formula of 4.70% for Belarus, 7.33% for Kazakhstan and 87.97% for Russia.

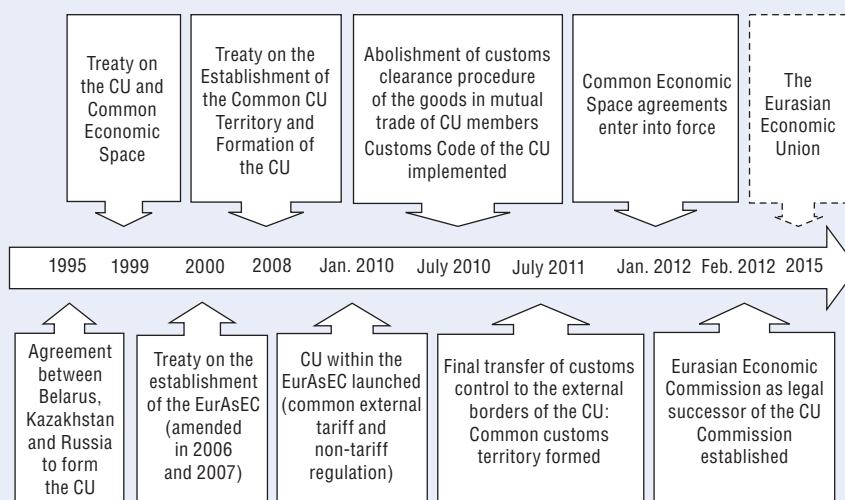
Since 2007, 80 agreements have been adopted by the member countries to establish a legal framework for the Customs Union. In July 2010, a common customs code, customs rules and common external tariff came into effect. Customs clearance and control procedures at the Kazakh-Russian border were abolished on 1 July 2011. The work on the CU legal framework continues: in the agro-food area it is focused on further harmonisation of SPS and technical regulations between the CU members and with the WTO requirements.

Following implementation of the CU, further EurAsEC developments included the signing of the Declaration on Eurasian Economic Integration by the three CU members in November 2011, and the introduction of a Common Economic Space (CES) in January 2012. A Eurasian Economic Commission was created within the framework of the CES on 1 February 2012. It took over the duties of the CU Commission to become a single permanent regulatory body of the CU and the CES. Beyond the competences previously held by the CU, the Eurasian Economic Commission will also

### Box 2.7. The Eurasian Economic Community and the Customs Union between Belarus, Kazakhstan and Russia (cont.)

cover areas of macroeconomic, competition and energy policies, industrial and agricultural policy, natural monopolies, state and municipal purchases, international trade in services and investment, transport, currency policy, protection of intellectual property, migration policy, and other. It is in this context that a draft *Concept of Co-ordinated Agro-Food Sector Policy* was prepared in January 2013 to cover issues in agriculture concerning state support, market regulation, technical and phytosanitary regulation, export enhancement, innovations and exchange of information. This *Concept* is intended to lay the basis for the future EurAsEC agreement on co-ordinated agro-industrial policy.

Figure 2.21. **Timeline of the Eurasian integration**



Source: Based on Yacheistova, 2012.

\* EurAsEC was the successor to the Union of Five. In January 1995 Belarus, Kazakhstan and Russia signed an agreement to form a customs union, and the union was extended to include the Kyrgyz Republic in 1996 and Tajikistan 1999. The renaming in 2000 was intended as a catalyst to completing tariff harmonisation by 2005, but little progress was made at that time.

Kazakhstan joined the Economic Cooperation Organisation (ECO) in 1992. ECO is an inter-governmental regional organisation established in 1985 by Iran, Pakistan, and Turkey. The main purpose of the organisation is the sustainable socio-economic development of the member states. The three original ECO members have limited tariff preferences on intra-ECO trade, but attempts in the 1990s to extend these to the new independent states of Central Asia or to implement transit rules failed. On 6 March 2000, a Framework Agreement on ECO Trade was signed to enhance trade relations among the members through an agreement aimed at liberalising regional trade, and the ECO Trade Agreement (ECOTA) was finalised and signed in 2003.

Kazakhstan has signed and implemented five bilateral free trade agreements with CIS countries (Table 2.30). Although these agreements propose to abolish all unjustified restrictions in trade, they have not been fully effective in doing so. Kazakhstan had also signed about 30 bilateral agreements with non-CIS countries by 2010.

Table 2.30. **Bilateral Free Trade Agreements within the CIS**

Free Trade Agreement	Effective since
Kyrgyz Republic	1995
Uzbekistan	1997
Ukraine	1998
Georgia	1999
Armenia	2001

In general, the bilateral and regional arrangements other than the Customs Union have had minimal impact on Kazakhstan's trade policies. When Kazakhstan adopted the common external tariff of the CU, in principle it had to renegotiate most of these agreements, although in practice this has not been done, suggesting that the agreements were moot. A trade agreement between the CU and New Zealand, currently under negotiation may provide a blueprint for future bilateral trade agreements. Most recently, CU members considered opening the FTA process with Viet Nam.

### **WTO accession process**

Kazakhstan applied to join the World Trade Organisation (WTO) in January 1996, and the Working Party was established in February 1996. Negotiations moved quickly as Kazakhstan adopted a fairly liberal tariff schedule, and the first three Working Party meetings in 1997 and 1998 suggested an early accession. However, the process slowed down after 1998 when the government introduced ad hoc trade restrictions.<sup>17</sup>

The pace of negotiations picked up in 2001. After four Working Party meetings in 2001-04, the Factual Summary was released in September 2004. The Working Party then submitted a draft report in May 2005, a revised report in September 2006 and a subsequent revision in June 2008. This would normally signal the final stages of the accession process, but negotiations appear to have stalled at the final stage. In 2008, Kazakhstan responded to the spike in world grain prices by imposing export restrictions. At the same time, the expansion of agricultural subsidies introduced more potential obstacles to agreement on a protocol of accession and the list of commitments. The process lost momentum also due to the implementation of the CU with Russia and Belarus, which brought about changes in Kazakhstan's trade regime, in particular an increase in import tariffs.

Some of these obstacles, e.g. the temporary export restrictions were removed and Russia's WTO accession in 2012 as a member of the CU is likely to be the catalyst for Kazakhstan to take the final steps necessary for membership. Progress has been made in making SPS and TBT legislation WTO-compatible, as in developing the regulatory base for the CU its members aimed at the harmonisation with WTO principles.

Since the beginning in 2003 of bilateral negotiations on access to the commodity and services market, Kazakhstan has completed negotiations with 29 WTO members interested in access to Kazakhstan's market, most recently with the United States (September 2011), the European Union (October 2011), Guatemala (December 2011), Argentina (March 2012), and Saudi Arabia (April 2012). These agreements are yet to be integrated into a country's Schedule of Concessions and Commitments, the process which started in the second half of 2012. The majority of bilateral agreements were finalised prior to the launch of the CU and reportedly, some of the bilateral agreements incorporate lower tariff commitments than the tariffs of the CU. This issue is expected to be addressed during the process of integration of Kazakhstan's Schedule of Concessions and Commitments.

Among the outstanding multilateral issues is the amount of domestic support to agriculture that Kazakhstan would be able to provide to domestic producers after accession to the WTO. Negotiations in this area are not yet at the advanced stage. The most recent revised estimates of domestic support based on the WTO methodology were submitted by Kazakhstan to the WTO Secretariat in December 2012. For the moment, no agreement on the base period has been reached. Kazakhstan's position in negotiations is to seek 10% *de minimis* level of the developing country status. Kazakhstan has included in its proposal also the possibility to provide export subsidies, which most likely may become disputable. Kazakhstan's arguments behind this position are its unfavourable climate, insufficient infrastructure, landlocked geographical location, and remoteness from major agricultural markets.

Three institutions in the agro-food sector of Kazakhstan could be subject to scrutiny with respect to the activities of the state trading enterprises: the Food Contract Corporation, KazAgroProduct and KazAgroFinance. The most important is FCC, which qualifies under GATT Article XVII because it has the power to issue state bonds and receives annual transfers from the state budget. FCC is the agent executing Kazakhstan's state grain reserves, and the contract for state procurement was granted to FCC without an open competition (from a single source). In principle, the situation enables FCC to influence both the domestic price level and the level of exports, although the actual exports by the FCC have been highly variable relative to total grain exports (Figure 2.4).

Another specific issue that emerged in the course of the negotiations concerns tax concessions provided to agricultural producers and agro-food processors in Kazakhstan, in particular the reduced VAT rates. This is regarded as discrimination against foreign suppliers and therefore has become an issue of dispute in the accession negotiations.

#### 4. Evaluation of support to agriculture

This section concludes the overview of Kazakhstan's agricultural and trade policies with a quantitative evaluation of the support provided through these policies. The evaluation is based on the indicators of agricultural support developed by the OECD, including the Producer Support Estimate (PSE), Consumer Support Estimate (CSE), Total Support Estimate (TSE), General Services Support Estimate (GSSE), and others (Box 2.8 contains detailed definitions of these indicators). Evaluation of agricultural support for Kazakhstan covers the period between 1995 and 2011.

##### Box 2.8. OECD indicators of support to agriculture

###### Indicators of support for producers

**Producer Support Estimate (PSE):** The annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, arising from policy measures that support agriculture, regardless of their nature, objectives or impacts on farm production or income.

**Percentage PSE (%PSE):** PSE as a share of gross farm receipts (including support).

**Producer Nominal Assistance Coefficient (producer NAC):** The ratio between the value of gross farm receipts (including support) and gross farm receipts valued at border prices (measured at farm gate).

### Box 2.8. OECD indicators of support to agriculture (cont.)

**Producer Nominal Protection Coefficient (producer NPC):** The ratio between the average price received by producers at farm gate (including payments per tonne of current output), and the border price (measured at farm gate). The NPC is also available by commodity.

**Producer Single Commodity Transfers (producer SCT):** The annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, arising from policy measures directly linked to the production of a single commodity such that the producer must produce the designated commodity in order to receive the transfer.

**Producer Percentage Single Commodity Transfers (producer %SCT):** The commodity SCT as a share of gross farm receipts for the specific commodity.

#### Indicators of support to consumers

**Consumer Support Estimate (CSE):** The annual monetary value of gross transfers from (to) consumers of agricultural commodities, measured at the farm gate level, arising from policy measures that support agriculture, regardless of their nature, objectives or impacts on consumption of farm products.

**Percentage CSE (%CSE):** CSE as a share of consumption expenditure (measured at farm gate) net of taxpayer transfers to consumers.

**Consumer Nominal Assistance Coefficient (consumer NAC):** The ratio between the value of consumption expenditure on agricultural commodities (at farm gate) and that valued at border prices (measured at farm gate).

**Consumer Nominal Protection Coefficient (consumer NPC):** The ratio between the average price paid by consumers (at farm gate) and the border price (measured at farm gate).

**Consumer Single Commodity Transfers (consumer SCT):** The annual monetary value of gross transfers from (to) consumers of agricultural commodities, measured at the farm gate level, arising from policy measures directly linked to the production of a single commodity.

#### Indicators of support to general services for agriculture

**General Services Support Estimate (GSSE):** The annual monetary value of gross transfers to general services provided to agricultural producers collectively (such as research, development, training, inspection, marketing and promotion), arising from policy measures that support agriculture regardless of their nature, objectives and impacts on farm production, income, or consumption. The GSSE does not include any transfers to individual producers.

**Percentage GSSE (%GSSE):** GSSE as a share of Total Support Estimate (TSE).

#### Indicators of total support to agriculture

**Total Support Estimate (TSE):** The annual monetary value of all gross transfers from taxpayers and consumers arising from policy measures that support agriculture, net of associated budgetary receipts, regardless of their objectives and impacts on farm production and income, or consumption of farm products.

**Percentage TSE (%TSE):** TSE as a share of GDP.

A detailed description of the OECD methodology to estimate agricultural support (the "PSE Manual"), and a comprehensive database for OECD and selected non-OECD countries are available at [www.oecd.org/tad/support/psecse](http://www.oecd.org/tad/support/psecse). The methodology applied in this study is fully consistent with that used for other countries as presented in OECD reports that monitor and evaluate agricultural policies.

### **Support to agricultural producers**

The percentage Producer Support Estimate (%PSE) is the OECD's key indicator to measure support to agricultural producers. It expresses the monetary value of support transfers to agricultural producers in per cent of producer gross receipts. Kazakhstan's %PSE equalled 11% in 2009-11, indicating that somewhat more than one tenth of gross receipts of agricultural producers were generated by support policies (Table 2.31 and 2.32). Producer support was slightly lower at 8 % in 1995-97.

Compared to other economies, Kazakhstan ranks among those with relatively moderate aggregate levels of support (Figure 2.22). Its PSE in 2008-10 was close to that of Ukraine (7%) and Indonesia (9%), the United States (9%), but is less than half the Russian level (22%) and the OECD average level (21%).<sup>18</sup>

Producer support in Kazakhstan reveals no distinct long-term trend (Figure 2.17). The %PSE fluctuated considerably between 1995 and 2011 within the range between plus 27% and minus 5%. With the exception of 2003, fluctuations in support were within a positive range, indicating that overall policies were supportive of domestic producers. The lack of a distinct trend in support in Kazakhstan is similar to the situation observed in Ukraine, but differs from that in Russia where support has been on the rise since the early 2000s (OECD, 2011).

The variations in producer support in Kazakhstan were driven mainly by changes in the Market Price Support (MPS) component (Box 2.9). Budgetary transfers were insignificant as a component of the PSE up until the mid-2000s, having a small impact on the level and variations in support during these years (Figure 2.23). Budgetary transfers became more important in the second half of the 2000s, as the economy returned to economic growth and increasing public funds were directed to successive agricultural programmes. The share of budgetary transfers in the total PSE rose from 13% on average in 1995-2005 to 49% in 2006-11. During this second period, budgetary support became a more important driver of the aggregate support level, which either smoothed decreases in the market price support, as in 2007-08 and 2010, or amplified increases of market price support, e.g. in 2005-06, 2009 or 2011.

### **Composition of producer support**

When assessing producer support it is important to consider both its level and how it is provided. Support may take the form of market price regulation or may be provided through subsidies to reduce the cost of inputs; it may take the form of a payment per hectare or per animal, or as a top-up to producer income. These distinctions are important as support delivered in these various ways has a different impact on agricultural production, trade and agricultural incomes.

Market price support (MPS) is directly linked to commodity output and can have a significant effect on production. For this reason, this type of support is qualified as trade distorting. In addition to being production and trade distorting, market price support is less effective in increasing producer income than support, which is more decoupled from commodity output. Market price support also imposes additional costs on domestic consumers. Support which is not based on commodity output, however, such as payments per hectare or direct income support, can be more effective to improve farmer incomes, to achieve environmental or rural development objectives, as well as have less spill-over effects on international trade.



Table 2.31. Estimates of support to agriculture in Kazakhstan, KZT million

	1995-97	2009-11	2006	2007	2008	2009	2010	2011
<b>Total value of production (at farm gate)</b>	<b>269 202</b>	<b>1 789 620</b>	<b>853 313</b>	<b>1 121 774</b>	<b>1 384 188</b>	<b>1 640 188</b>	<b>1 442 630</b>	<b>2 286 042</b>
<i>Of which share of MPS commodities (%)</i>	74	79	77	77	79	79	77	80
<b>Total value of consumption (at farm gate)</b>	<b>245 430</b>	<b>1 508 212</b>	<b>843 600</b>	<b>1 030 224</b>	<b>1 359 581</b>	<b>1 471 559</b>	<b>1 637 960</b>	<b>1 415 117</b>
<b>Producer Support Estimate (PSE)</b>	<b>19 066</b>	<b>200 409</b>	<b>121 527</b>	<b>58 685</b>	<b>61 026</b>	<b>233 892</b>	<b>124 334</b>	<b>243 002</b>
Support based on commodity output	17 660	148 616	95 567	28 621	4 179	184 910	76 132	184 807
<i>Market Price Support</i>	17 660	134 018	95 550	26 070	-5 681	173 243	61 752	167 060
<i>Payments based on output</i>	0	14 598	16	2 551	9 860	11 667	14 380	17 748
Payments based on input use	858	35 589	25 774	17 027	35 885	32 513	35 303	38 951
<i>Based on variable input use</i>	373	18 285	16 002	7 022	15 284	15 975	19 414	19 467
<i>With input constraints</i>	0	0	0	0	0	0	0	0
<i>Based on fixed capital formation</i>	485	15 488	9 042	8 989	19 000	14 776	13 862	17 827
<i>With input constraints</i>	0	0	0	0	0	0	0	0
<i>Based on on-farm services</i>	0	1 815	730	1 015	1 601	1 762	2 027	1 657
<i>With input constraints</i>	0	0	0	0	0	0	0	0
Payments based on current A/An/R/I1, production required	0	16 204	187	13 037	20 962	16 468	12 899	19 244
<i>Based on Receipts / Income</i>	0	0	0	0	0	0	0	0
<i>Based on Area planted / Animal numbers</i>	0	16 204	187	13 037	20 962	16 468	12 899	19 244
<i>With input constraints</i>	0	0	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production required	0	0	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	0	0	0	0	0	0	0	0
<i>With variable payment rates</i>	0	0	0	0	0	0	0	0
<i>With commodity exceptions</i>	0	0	0	0	0	0	0	0
<i>With fixed payment rates</i>	0	0	0	0	0	0	0	0
<i>With commodity exceptions</i>	0	0	0	0	0	0	0	0
Payments based on non-commodity criteria	0	0	0	0	0	0	0	0
<i>Based on long-term resource retirement</i>	0	0	0	0	0	0	0	0
<i>Based on a specific non-commodity output</i>	0	0	0	0	0	0	0	0
<i>Based on other non-commodity criteria</i>	0	0	0	0	0	0	0	0
Miscellaneous payments	548	1	0	1	1	2	0	0
<b>Percentage PSE</b>	<b>8</b>	<b>11</b>	<b>14</b>	<b>5</b>	<b>4</b>	<b>14</b>	<b>8</b>	<b>10</b>
<b>Producer NPC</b>	<b>1.00</b>	<b>1.07</b>	<b>1.09</b>	<b>1.04</b>	<b>1.04</b>	<b>1.11</b>	<b>1.05</b>	<b>1.06</b>
<b>Producer NAC</b>	<b>1.09</b>	<b>1.12</b>	<b>1.16</b>	<b>1.05</b>	<b>1.04</b>	<b>1.16</b>	<b>1.09</b>	<b>1.11</b>
<b>General Services Support Estimate (GSSE)</b>	<b>1 815</b>	<b>49 873</b>	<b>18 557</b>	<b>21 395</b>	<b>28 686</b>	<b>34 721</b>	<b>53 448</b>	<b>61 450</b>
Research and development	275	6 349	2 870	3 263	4 033	6 290	6 064	6 692
Agricultural schools	0	1 733	635	1 063	938	1 142	1 653	2 403
Inspection services	1 060	26 399	9 959	10 644	15 227	18 744	29 460	30 994
Infrastructure	480	5 187	1 744	1 430	2 136	2 182	2 930	10 449
Marketing and promotion	0	7 662	2 435	4 058	5 426	5 097	8 023	9 865
Public stockholding	0	1 332	798	779	821	1 150	1 937	910
Miscellaneous	0	1 211	116	159	105	116	3 381	138
<b>GSSE as a share of TSE (%)</b>	<b>11.5</b>	<b>21.1</b>	<b>13.2</b>	<b>26.7</b>	<b>32.0</b>	<b>12.9</b>	<b>30.1</b>	<b>20.2</b>
<b>Consumer Support Estimate (CSE)</b>	<b>-5 777</b>	<b>-77 482</b>	<b>-71 761</b>	<b>-83 819</b>	<b>-77 284</b>	<b>-119 563</b>	<b>-58 900</b>	<b>-53 983</b>
Transfers to producers from consumers	-3 947	-70 627	-60 961	-63 797	-58 559	-118 309	-50 292	-43 279
Other transfers from consumers	-861	-7 467	-13 010	-11 714	-7 615	-11 011	-8 600	-2 790
Transfers to consumers from taxpayers	0	0	0	0	0	0	0	0
Excess feed cost	-969	611	2 211	-8 308	-11 111	9 757	-8	-7 915
<b>Percentage CSE</b>	<b>0</b>	<b>-5</b>	<b>-9</b>	<b>-8</b>	<b>-6</b>	<b>-8</b>	<b>-4</b>	<b>-4</b>
<b>Consumer NPC</b>	<b>1.03</b>	<b>1.06</b>	<b>1.10</b>	<b>1.08</b>	<b>1.05</b>	<b>1.10</b>	<b>1.04</b>	<b>1.03</b>
<b>Consumer NAC</b>	<b>1.03</b>	<b>1.06</b>	<b>1.09</b>	<b>1.09</b>	<b>1.06</b>	<b>1.09</b>	<b>1.04</b>	<b>1.04</b>
<b>Total Support Estimate (TSE)</b>	<b>20 881</b>	<b>250 282</b>	<b>140 084</b>	<b>80 081</b>	<b>89 713</b>	<b>268 613</b>	<b>177 781</b>	<b>304 452</b>
Transfers from consumers	4 808	78 093	73 971	75 512	66 174	129 320	58 892	46 068
Transfers from taxpayers	16 934	179 656	79 124	16 283	31 154	150 304	127 489	261 174
Budget revenues	-861	-7 467	-13 010	-11 714	-7 615	-11 011	-8 600	-2 790
Percentage TSE (expressed as share of GDP)	1.72	1.17	1.37	0.62	0.56	1.58	0.81	1.10
<b>GDP deflator 1995-97 = 100</b>	<b>100</b>	<b>644</b>	<b>368</b>	<b>425</b>	<b>515</b>	<b>539</b>	<b>644</b>	<b>750</b>

NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.

A (area planted), An (animal numbers), R (receipts), I (income).

MPS commodities for Kazakhstan are: wheat, rice, maize, barley, sunflower, potatoes, cotton, milk, beef, pigmeat, sheepmeat, poultry meat, and eggs. Market Price Support is net of producer levies and Excess Feed Cost.

Source: OECD, PSE/CSE Database, 2012.

StatLink  <http://dx.doi.org/10.1787/888932782451>

Table 2.32. **Estimates of support to agriculture in Kazakhstan, USD million**

	1995-97	2009-11	2006	2007	2008	2009	2010	2011
<b>Total value of production (at farm gate)</b>	<b>3 944</b>	<b>12 167</b>	<b>6 767</b>	<b>9 154</b>	<b>11 506</b>	<b>11 120</b>	<b>9 790</b>	<b>15 592</b>
<i>Of which share of MPS commodities (%)</i>	74	79	77	77	79	79	77	80
<b>Total value of consumption (at farm gate)</b>	<b>3 591</b>	<b>10 248</b>	<b>6 690</b>	<b>8 407</b>	<b>11 302</b>	<b>9 977</b>	<b>11 116</b>	<b>9 652</b>
<b>Producer Support Estimate (PSE)</b>	<b>291</b>	<b>1 362</b>	<b>964</b>	<b>479</b>	<b>507</b>	<b>1 586</b>	<b>844</b>	<b>1 657</b>
Support based on commodity output	270	1 010	758	234	35	1 254	517	1 260
<i>Market Price Support</i>	270	911	758	213	-47	1 175	419	1 139
<i>Payments based on output</i>	0	99	0	21	82	79	98	121
Payments based on input use	13	242	204	139	298	220	240	266
<i>Based on variable input use</i>	6	124	127	57	127	108	132	133
<i>With input constraints</i>	0	0	0	0	0	0	0	0
<i>Based on fixed capital formation</i>	7	105	72	73	158	100	94	122
<i>With input constraints</i>	0	0	0	0	0	0	0	0
<i>Based on on-farm services</i>	0	12	6	8	13	12	14	11
<i>With input constraints</i>	0	0	0	0	0	0	0	0
Payments based on current A/An/R/I, production required	0	110	1	106	174	112	88	131
<i>Based on Receipts / Income</i>	0	0	0	0	0	0	0	0
<i>Based on Area planted / Animal numbers</i>	0	0	0	0	0	0	0	0
<i>With input constraints</i>	0	0	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production required	0	0	0	0	0	0	0	0
Payments based on non-current A/An/R/I, production not required	0	0	0	0	0	0	0	0
With variable payment rates	0	0	0	0	0	0	0	0
With commodity exceptions	0	0	0	0	0	0	0	0
With fixed payment rates	0	0	0	0	0	0	0	0
With commodity exceptions	0	0	0	0	0	0	0	0
Payments based on non-commodity criteria	0	0	0	0	0	0	0	0
<i>Based on long-term resource retirement</i>	0	0	0	0	0	0	0	0
<i>Based on a specific non-commodity output</i>	0	0	0	0	0	0	0	0
<i>Based on other non-commodity criteria</i>	0	0	0	0	0	0	0	0
Miscellaneous payments	9	0	0	0	0	0	0	0
<b>Percentage PSE</b>	<b>8</b>	<b>11</b>	<b>14</b>	<b>5</b>	<b>4</b>	<b>14</b>	<b>8</b>	<b>10</b>
<b>Producer NPC</b>	<b>1.00</b>	<b>1.07</b>	<b>1.09</b>	<b>1.04</b>	<b>1.04</b>	<b>1.11</b>	<b>1.05</b>	<b>1.06</b>
<b>Producer NAC</b>	<b>1.09</b>	<b>1.12</b>	<b>1.16</b>	<b>1.05</b>	<b>1.04</b>	<b>1.16</b>	<b>1.09</b>	<b>1.11</b>
<b>General Services Support Estimate (GSSE)</b>	<b>26</b>	<b>339</b>	<b>147</b>	<b>175</b>	<b>238</b>	<b>235</b>	<b>363</b>	<b>419</b>
Research and development	4	43	23	27	34	43	41	46
Agricultural schools	0	12	5	9	8	8	11	16
Inspection services	15	179	79	87	127	127	200	211
Infrastructure	7	35	14	12	18	15	20	71
Marketing and promotion	0	52	19	33	45	35	54	67
Public stockholding	0	9	6	6	7	8	13	6
Miscellaneous	0	8	1	1	1	1	23	1
<b>GSSE as a share of TSE (%)</b>	<b>11.5</b>	<b>21.1</b>	<b>13.2</b>	<b>26.7</b>	<b>32.0</b>	<b>12.9</b>	<b>30.1</b>	<b>20.2</b>
<b>Consumer Support Estimate (CSE)</b>	<b>-29</b>	<b>-526</b>	<b>-569</b>	<b>-684</b>	<b>-642</b>	<b>-811</b>	<b>-400</b>	<b>-368</b>
Transfers to producers from consumers	-3	-480	-483	-521	-487	-802	-341	-295
Other transfers from consumers	-12	-51	-103	-96	-63	-75	-58	-19
Transfers to consumers from taxpayers	0	0	0	0	0	0	0	0
Excess feed cost	-13	4	18	-68	-92	66	0	-54
<b>Percentage CSE</b>	<b>0</b>	<b>-5</b>	<b>-9</b>	<b>-8</b>	<b>-6</b>	<b>-8</b>	<b>-4</b>	<b>-4</b>
<b>Consumer NPC</b>	<b>1.03</b>	<b>1.06</b>	<b>1.10</b>	<b>1.08</b>	<b>1.05</b>	<b>1.10</b>	<b>1.04</b>	<b>1.03</b>
<b>Consumer NAC</b>	<b>1.03</b>	<b>1.06</b>	<b>1.09</b>	<b>1.09</b>	<b>1.06</b>	<b>1.09</b>	<b>1.04</b>	<b>1.04</b>
<b>Total Support Estimate (TSE)</b>	<b>317</b>	<b>1 701</b>	<b>1 111</b>	<b>653</b>	<b>746</b>	<b>1 821</b>	<b>1 207</b>	<b>2 076</b>
Transfers from consumers	16	530	587	616	550	877	400	314
Transfers from taxpayers	314	1 222	628	133	259	1 019	865	1 781
Budget revenues	-12	-51	-103	-96	-63	-75	-58	-19
Percentage TSE (expressed as share of GDP)	1.72	1.17	1.37	0.62	0.56	1.58	0.81	1.10
<b>GDP deflator 1995-97 = 100</b>	<b>100</b>	<b>644</b>	<b>368</b>	<b>425</b>	<b>515</b>	<b>539</b>	<b>644</b>	<b>750</b>

NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.

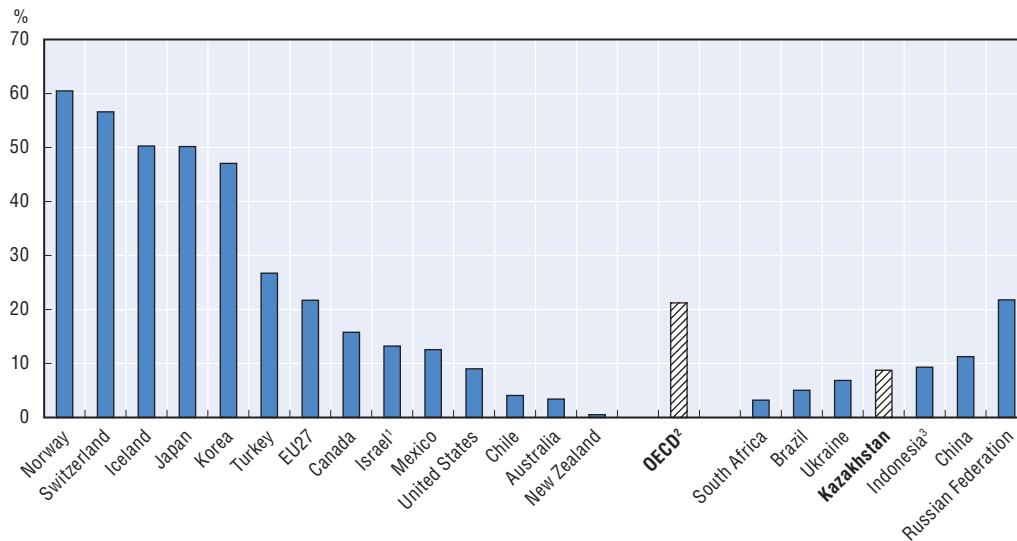
A (area planted), An (animal numbers), R (receipts), I (income).

MPS commodities for Kazakhstan are: wheat, rice, maize, barley, sunflower, potatoes, cotton, milk, beef, pigmeat, sheepmeat, poultry meat, and eggs. Market Price Support is net of producer levies and Excess Feed Cost.

Source: OECD, PSE/CSE Database, 2012.

StatLink  <http://dx.doi.org/10.1787/888932782470>

Figure 2.22. **Producer Support Estimate in Kazakhstan and selected countries, 2008-10**  
Per cent of gross farm receipts

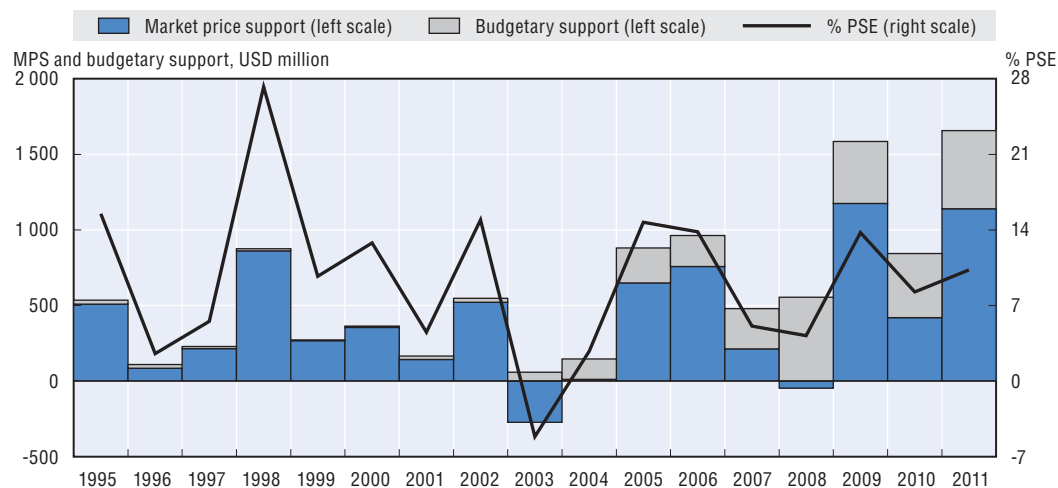


1. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
2. The OECD total does not include the non-OECD EU member states.
3. 2006-10 average for Indonesia.

Source: OECD, PSE/CSE Database, 2012.

StatLink <http://dx.doi.org/10.1787/888932781273>

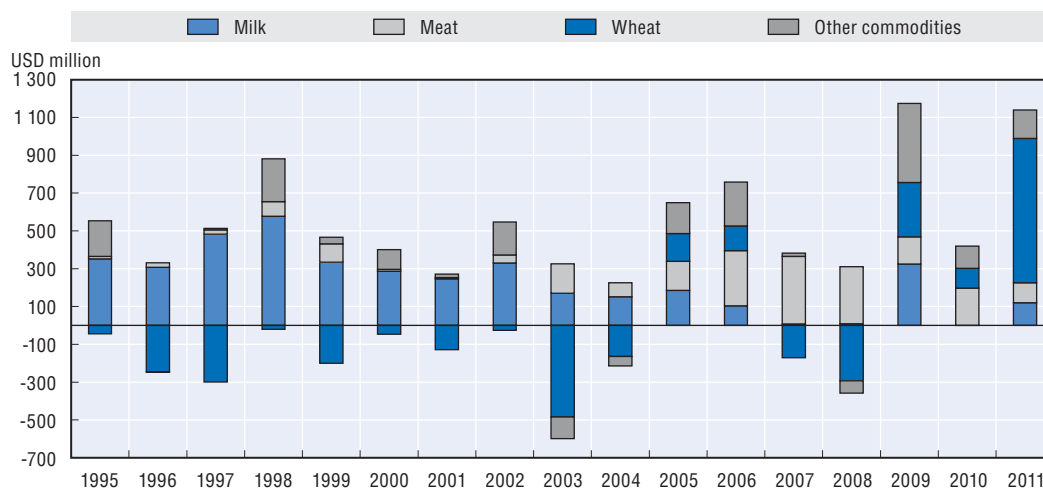
Figure 2.23. **Level and composition of Producer Support Estimate in Kazakhstan, 1995-2011**



Source: OECD, PSE/CSE Database, 2012.

StatLink <http://dx.doi.org/10.1787/888932781292>

MPS is the dominant component of Kazakhstan's PSE. Its aggregate value is the outcome of price taxation of some commodities (a negative MPS) and price support of others (a positive MPS) (Figure 2.24). Wheat producers in Kazakhstan generally receive prices below those of external markets – a negative MPS for wheat is measured for almost all years during 1995-2011 (with the exception of 2005-06 and 2009-11). Wheat is Kazakhstan's key agricultural export and its prices are affected by the pricing policy of the FCC, which acts as a price leader and state purchasing agency on the grain market. In

Figure 2.24. **Level and composition of Market Price Support in Kazakhstan, 1995-2011**

Source: OECD, PSE/CSE Database, 2012.

StatLink  <http://dx.doi.org/10.1787/888932781311>

recent years, FCC has begun to implement a countercyclical approach depending on the market situation. Thus, in some years, wheat is subjected to export restrictions, as was the case in 2008, or receives support through state purchases (in 2009) and export transportation subsidies (in 2009-11). Price policy interacts with other factors that contribute to the gap between domestic and international wheat prices. Infrastructure deficiencies are considerable in Kazakhstan and prevent domestic agents from fully benefiting from higher prices found in external markets. There is also evidence that the FCC with its domestic and export operations crowds out access by private business to the existing infrastructure. Thus, the estimated MPS for wheat – and more generally for all commodities in Kazakhstan – results from policy operations on markets with weak infrastructure and organisation, and the effects of both these factors on prices are closely intertwined.

Meat and milk are the two other principal sectors which receive market price support. These sectors produce import-competing commodities and are protected through import tariffs. There is virtually no price regulation at the national level. KazAgroProdukt, a state agency, purchases livestock products, but overall acts as a regular market operator, with the exception of a short-lived episode of price intervention in the meat market in 2007 and in the milk market in 2008.<sup>19</sup> Market price support for livestock products also accounts for additional support to the sector due to the fact that prices for feed grain in Kazakhstan are generally below world levels (with the exception of some years, notably, the most recent ones, 2009-11). In the case of the livestock sector, the weakness of market infrastructure creates additional protection to producers as it increases costs to import products, thus eroding the competitiveness of imports on Kazakhstan markets.

The differing price situation in the grain and livestock sectors is a feature that is also observed in Russia and Ukraine. In all three countries, export-oriented crop sectors are price-taxed. In contrast, the import-competing livestock sectors are supported through border measures and the fact that prices for grain used as feed are typically below the international levels. The result is that an aggregate MPS estimate masks much larger policy distortions, as negative price transfers in one sector are offset by positive transfers in others. This underscores the importance of looking not only at the aggregate levels of support in these countries, but at how support is distributed across commodity sectors (see below).

### Box 2.9. Estimation of market price support in Kazakhstan

#### General concept and interpretation

Market price support is based on the measurement of the gap between a country's domestic prices and international prices. This price gap results from a variety of policy measures that prevent domestic prices from aligning with international levels. These policies include trade measures, such as import tariffs, import quotas, tariff quotas, SPS regime, export subsidies and taxes, as well as quantitative restrictions on exports. Policies creating a price gap also include domestic measures, such as administered pricing, market interventions, or public stockholding. In emerging economies like Kazakhstan, the gaps between domestic and international prices are also created by factors that are not strictly policy-related, e.g. deficiencies in physical infrastructure, inadequate information and weak market institutions. All of this generates market inertia as it takes time and creates costs for market agents to implement contracts in reaction to market signals. Such inertia is even stronger in countries with large territories where its vastness exacerbates the effects of weak market organisation. The consequence is the deficient adjustment of domestic prices to world market levels, which becomes particularly visible in crop markets when temporary deficits or excess supplies due to weather conditions produce sharp market price reactions. In addition, some commodity sectors may be weakly integrated with markets because of their specific production structure. Thus, around 90% of beef and 80% of milk in Kazakhstan are produced by rural households and mostly for their own consumption. Household producers participate in markets mainly to sell quantities that exceed their home consumption, and are less guided by market signals than commercial producers. This is examined in greater detail in Chapter 3. The implication for support measurement is that the price gaps between domestic and international prices for Kazakhstan, and hence the estimated market price support, result from both policy and non-policy factors and their interaction. This feature should be borne in mind when interpreting support estimates for Kazakhstan.

#### How MPS is estimated for Kazakhstan

The MPS for Kazakhstan is based on the estimation of price gaps for 13 products: wheat, rice, maize, barley, sunflower, potatoes, cotton, milk, beef, pigmeat, sheepmeat, poultry meat and eggs. Altogether, these commodities accounted on average for 77% of the total value of gross agricultural output (GAO) in 1995-2011. The seven crops represent 65% of the value of total crop production, and the six livestock products 90% of total livestock production. The corresponding data on domestic, external reference prices, and transportation, processing and handling margins have been collected and price gaps calculated for all 13 products. For the purpose of calculating the price gaps, five products – wheat, rice, maize, barley, and cotton – are treated as exportable products over the whole period. Five commodities – sunflower, potatoes, milk, poultry meat and eggs – are considered as the importable ones. The trade status for beef, pigmeat, and sheep meat has changed over the analysed period: these products are considered as the exported during the initial period (beef between 1995 and 2002, pigmeat between 1995 and 2002, and sheep meat between 1995 and 1997), and as the imported commodities onwards.

**Producer prices** are the average prices received by producers at farm gate as reported by the Statistics Agency of the Republic of Kazakhstan.

**Box 2.9. Estimation of market price support in Kazakhstan (cont.)**

**Reference prices:** For wheat, maize, barley, and cotton, milk products (skim milk powder and butter), poultry meat, and eggs reference prices are Kazakhstan's export or import trade unit values sourced from Kazakhstan's trade statistics. Trade for beef, pigmeat and sheepmeat is very small and does not generate reliable trade unit values. For the first two products, Brazil's and Australia's producer prices were used respectively, increased by international transportation cost to Kazakhstan. For pigmeat, EU unit values of pigmeat exports outside the European Union were applied. For rice, the reference price is an average of Thailand and Viet Nam export prices (5% and 25% broken rice). For sunflower, the reference price is Russian FOB export unit value of sunflower, and for potatoes, Russian farm gate price for potatoes.

**Marketing margins:** Marketing margin represents an estimate of transportation, processing and handling costs that are added to the price of a product between the farm gate and the wholesale or export exit point. Marketing margin adjustment to the reference prices is required to exclude these costs to make the reference price comparable with domestic price, which measured at the farm gate. For the majority of products, marketing margins estimates are based on the published Kazakh data (e.g. on transport costs), as well as the information received from processors and traders. In the case of milk, the processing margin of butter and SMP from one tonne of raw milk is an average of these margins in four major exporters (Australia, New Zealand, European Union and the United States). For several imported products where the farm gate price of other countries was used as the reference prices (beef, pigmeat, sheep meat and potatoes), no margin adjustments were made except for the adjustment of international transport costs.

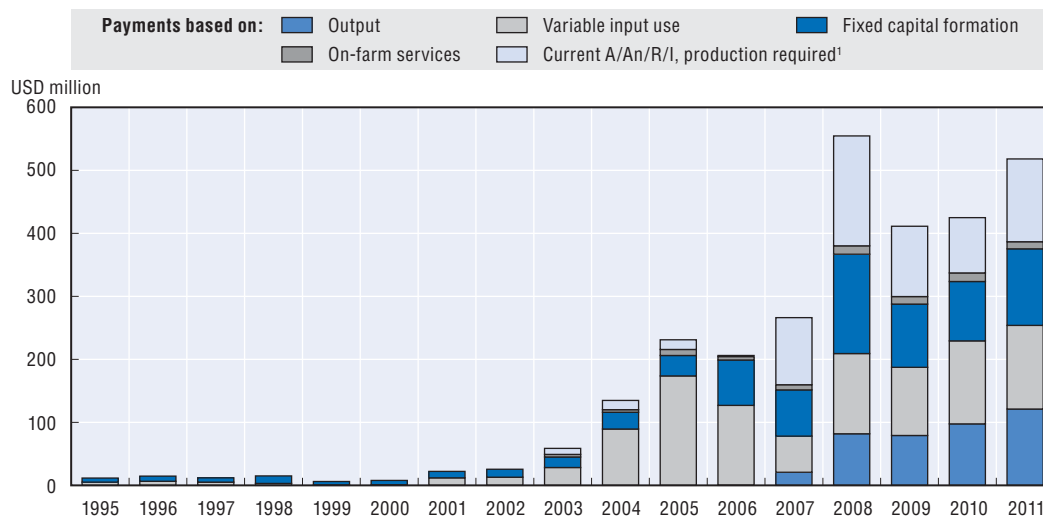
**“Zero price gap” assumption for imported products:** When for imported commodities negative gaps were obtained for some years, these gaps were set to zero on the assumption that these commodities effectively receive border protection and that the estimated negative price gaps reflects factors other than the agricultural policies.

Budgetary transfers are another component of producer support. Unlike the MPS, which is “financed” by consumers of agricultural commodities, this support originates from taxpayers. Budgetary transfers are an increasing source of the overall support to producers in Kazakhstan (Figure 2.25). The complexity of budgetary flows in Kazakhstan was discussed in Section 2.1 and illustrated in Figure 2.3 (section on financial arrangements for administering policy). Consistent with OECD methodology, efforts were made to include in the support estimate budgetary financing as comprehensively as possible. Essentially, this means that financial flows from all principal institutions, administrative levels and from all sources are captured.

Up until 2007, budgetary support was provided to reduce the cost of variable and fixed inputs, and predominantly through concessional credit for field work and machinery leasing (the related transfers in the PSE correspond to the estimated interest rate concession on such loans and not to the total amount of loans). In the late 2000s, budgetary support was provided in more diversified forms following the introduction of high per tonne payments for livestock products and per hectare subsidies. These recent payments amounted to almost half of total budgetary transfers in 2009-11.


Altogether, market price support, payments based on output, and payments based on variable input use with no constraints accounted for 82% of total PSE in Kazakhstan in 2009-11 (95% in 1995-97). This indicates that producer support in Kazakhstan is based

Figure 2.25. **Level and composition of budgetary transfers in Kazakhstan, 1995-2011**



1. A (area planted), An (animal numbers), R (receipts), I (income).

Source: OECD, PSE/CSE Database, 2012.

StatLink  <http://dx.doi.org/10.1787/888932781330>

predominantly on forms of support that are production distorting and least efficient in increasing producer incomes. This situation in Kazakhstan fits into a broader picture observed across emerging economies: the share of the most distorting support in the total PSE was 68% in Brazil, 81% in Russia, 86% in Ukraine, and 74% in South Africa in 2008-10. In China, this share is notably smaller but still around one-half of the country's PSE. In terms of its use of the most distorting support, Kazakhstan and the majority of emerging economies stand approximately where most of the OECD countries were in the mid-1980s. Policy reforms in many OECD countries, driven by internal pressures and international trade commitments, led to a considerable reorientation of support towards less distorting forms. For the OECD area on average, the share of the most distorting support fell from 86% in 1986-88, to 74% in 1995-97 and 50% in 2009-11. The equivalent percentage in the European Union decreased from 92% in 1986-88 to 63% in 1995-97 and 25% in 2009-11 (but from a considerably higher support level).

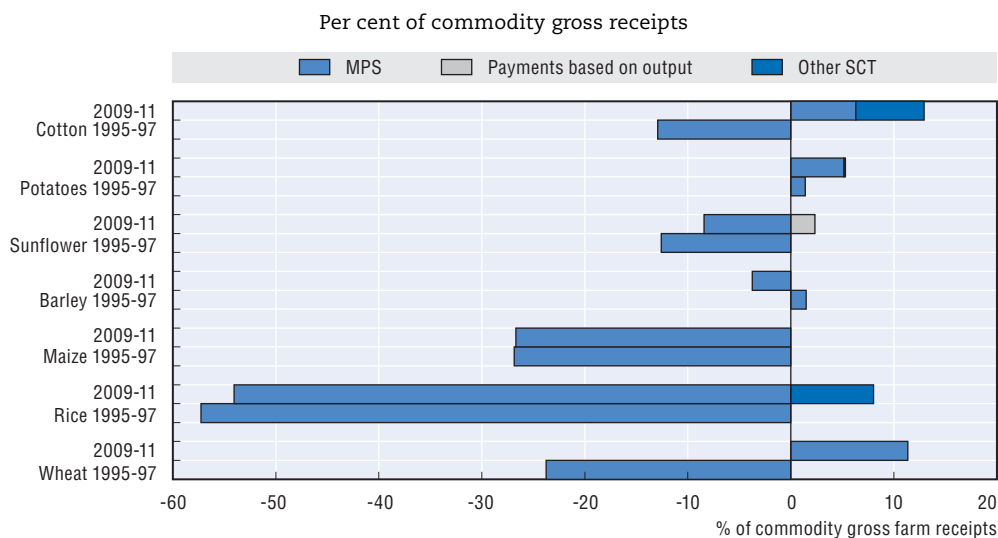
### **Commodity profile of producer support**

Producer Single Commodity Transfers (SCT) is an indicator showing the extent to which agricultural policies are commodity specific. The SCT indicates the flexibility that policies accord to producers in their choices of product mixes. For example, a payment designated for only one specific commodity implies that in order to receive payment, a farmer must produce that commodity. Alternatively, payment may be provided for any commodity in a designated group (for example, any crop within a cereal group), or simply to any commodity without distinction. The latter payments progressively give freedom to those who receive support to define their production mix, and producers become more responsive to market signals. The SCT corresponds to the first type of support and includes the MPS and payments provided for the production of only a specified individual commodity.


The SCT can be expressed in relative terms as a percentage of gross receipts for a given commodity. For example, an SCT of 25% means that support transfers specific to this particular commodity represents one-quarter of producer receipts for this commodity.

Figure 2.26 shows Kazakhstan's %SCTs for crop products (see also Table 2.33) These indicators principally reflect the market price support for these commodities, as other single-commodity payments are provided only for a few crops: per hectare payments for rice and cotton,<sup>20</sup> and output payments for sunflower (in 2010). The %SCT for wheat was negative in 1995-97, but turned to positive in 2009-11 (11%). The SCT for wheat in 2009-11 well reflects the supporting policies, in particular, export transportation subsidies provided during these years which supported domestic wheat prices above the world levels. The %SCTs were negative in 1995-97 for maize (-27%) and rice (-57%), and remained negative in 2009-11: at the same level for maize (-27%) and at -46% for rice. The negative SCTs indicate implicit losses in receipts that producers of these commodities incur because they face prices on the domestic market that are below the world levels. Negative SCT is also measured for sunflower, with a significant rise in producer taxation in 2009-11, reflecting in part the restrictions applied to exports of oilseeds and vegetable oil to limit increases in consumer prices. It should be noted that in all cases it would be incorrect to interpret taxation of crop products exclusively as a policy outcome as the impediment of market adjustment exacerbates any policy impact on prices and adds to the negative results. Cotton is the only crop for which the %SCT was at a relatively high level in 2009-11 (13%). This reflects the significant rise in domestic prices during this period which resulted from a considerable fall in local supply. Cotton production fell every year in 2008-10, and in 2010 was almost at half the 2007 level; although in 2011 production picked up.<sup>21</sup> The domestic market deficit was exacerbated by the hike of cotton prices on external markets in 2010-11.

Figure 2.26. **Producer SCTs for crop products in Kazakhstan, 1995-97 and 2009-11**



Source: OECD, PSE/CSE Database, 2012

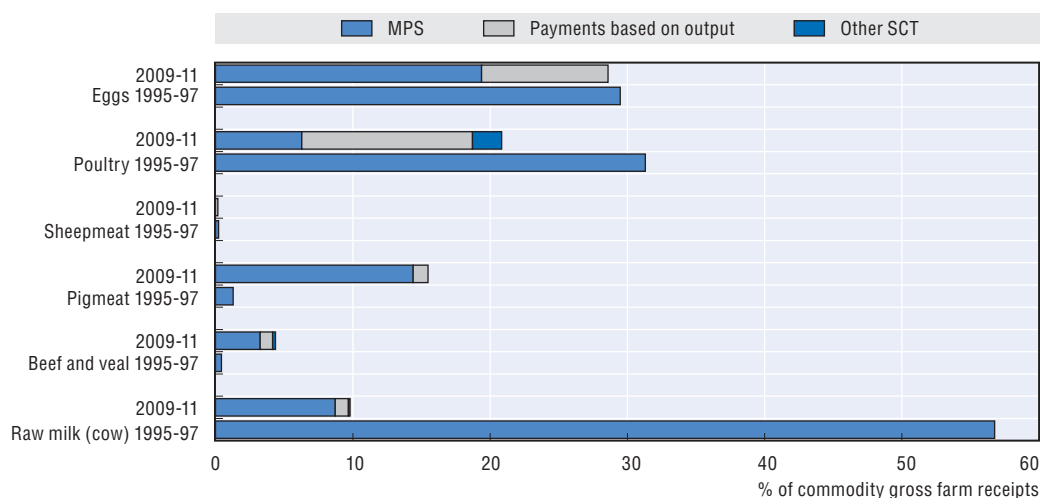
StatLink  <http://dx.doi.org/10.1787/888932781349>



The SCTs for livestock products show that all are supported by single-commodity policies (Figure 2.27 and Table 2.33). In 2009-11, the SCTs varied across the livestock group from 29% for eggs, to 0.1% for sheep meat. Compared to the mid-1990s, single-commodity support increased for beef and for pigmeat. The most important factor was the change in trade status of these products which became imported commodities in the 2000s. Import parity, rather than export parity prices, began to determine the domestic price levels for livestock commodities in Kazakhstan. At the same time, the exchange rate was strengthening and import tariffs were gradually increasing, with the most recent rise in 2010 when Kazakhstan aligned its tariff regime with the common Customs Union tariff. Livestock products also began to receive per tonne subsidies in 2007. Milk did not follow this trend – its SCT dropped sharply from 57% in 1995-97 to 10% in 2009-11. This result is related to strong movements in the world dairy markets in the late 2000s; significant spikes in dairy prices were only partly transmitted to Kazakhstan's domestic milk prices. As milk is mostly sold via local markets, it reacted slowly to the price rise on external markets. In addition, the government applied a policy to cushion the transmission of high world prices for food security reasons. For example, in 2008 it released dry milk from state reserves to restrain increases in prices of dairy foods. Since mid-2010, the simplification of trade within the Customs Union facilitated cheaper imports of dry milk from Belarus, which has likely put a significant competitive pressure on domestic milk prices.

Figure 2.27. **Producer SCTs for livestock products in Kazakhstan, 1995-97 and 2009-11**

Per cent of commodity gross receipts



Source: OECD, PSE/CSE Database, 2012.

StatLink  <http://dx.doi.org/10.1787/888932781368>

### Support to consumers of agricultural commodities


The Consumer Support Estimate (CSE) is a related indicator that measures the cost to consumers arising from market price support policies. If prices for agricultural commodities are below or above international levels, consumers who buy these

Table 2.33. **Producer Single Commodity Transfers (SCTs) in Kazakhstan**

		1995-97	2009-11	2009	2010	2011
<b>Total PSE (KZT mn)</b>		19 066	200 409	233 892	124 334	243 002
<b>Total Producer SCT (KZT mn)</b>		17 660	153 486	189 185	80 334	190 938
<b>Share of Producer SCT in Total PSE (%)</b>		89	75	81	65	79
<b>Wheat</b>	Producer SCT (KZT mn)	-13 917	56 643	42 397	15 524	112 008
	Percentage SCT	-23.8	11.4	9.7	7.4	17.0
	Producer NPC	0.81	1.13	1.11	1.08	1.20
<b>Maize</b>	Producer SCT (KZT mn)	-236	-3 220	-1 237	-2 228	-6 195
	Percentage SCT	-26.9	-26.7	-11.3	-21.4	-47.4
	Producer NPC	0.81	0.80	0.90	0.82	0.68
<b>Barley</b>	Producer SCT (KZT mn)	-377	-1 114	17 055	-483	-19 913
	Percentage SCT	1.5	-3.7	36.6	-2.7	-45.2
	Producer NPC	1.06	1.08	1.58	0.97	0.69
<b>Rice</b>	Producer SCT (KZT mn)	-1 618	-6 729	-4 713	-4 193	-11 281
	Percentage SCT	-57.3	-46.0	-31.1	-22.7	-84.3
	Producer NPC	0.66	0.65	0.70	0.77	0.49
<b>Sunflower</b>	Producer SCT (KZT mn)	-128	-289	901	-6 236	4 469
	Percentage SCT	-12.6	-6.1	5.8	-40.4	16.4
	Producer NPC	0.89	0.99	1.06	0.71	1.20
<b>Potatoes</b>	Producer SCT (KZT mn)	405	8 331	9 986	87	14 920
	Percentage SCT	1.4	5.3	7.8	0.1	8.0
	Producer NPC	1.01	1.06	1.08	1.00	1.08
<b>Cotton</b>	Producer SCT (KZT mn)	-605	2 738	1 343	9 752	-2 882
	Percentage SCT	-12.9	13.0	8.7	38.8	-8.7
	Producer NPC	0.89	1.14	1.00	1.55	0.87
<b>Milk</b>	Producer SCT (KZT mn)	26 197	24 764	50 001	2 965	21 326
	Percentage SCT	56.8	9.8	21.9	1.1	6.4
	Producer NPC	2.44	1.12	1.28	1.01	1.06
<b>Beef and Veal</b>	Producer SCT (KZT mn)	137	9 651	11 849	2 675	14 428
	Percentage SCT	0.4	4.4	6.1	1.2	5.8
	Producer NPC	1.00	1.04	1.07	1.01	1.05
<b>Sheepmeat</b>	Producer SCT (KZT mn)	25	131	-222	200	416
	Percentage SCT	0.2	0.1	-0.3	0.3	0.4
	Producer NPC	1.00	1.00	1.00	1.00	1.00
<b>Pigmeat</b>	Producer SCT (KZT mn)	147	13 735	11 342	27 641	2 222
	Percentage SCT	1.3	15.5	13.8	30.4	2.2
	Producer NPC	1.00	1.21	1.18	1.44	1.01
<b>Poultry</b>	Producer SCT (KZT mn)	1 037	6 452	4 772	6 224	8 358
	Percentage SCT	31.3	20.8	19.3	19.6	23.6
	Producer NPC	1.37	1.26	1.32	1.22	1.24
<b>Eggs</b>	Producer SCT (KZT mn)	1 876	13 189	8 238	13 659	17 670
	Percentage SCT	29.5	28.6	20.0	29.9	35.8
	Producer NPC	1.78	1.44	1.47	1.43	1.42

PSE: Producer Support Estimate; SCT: Single Commodity Transfers; NPC: Nominal Protection Coefficient.

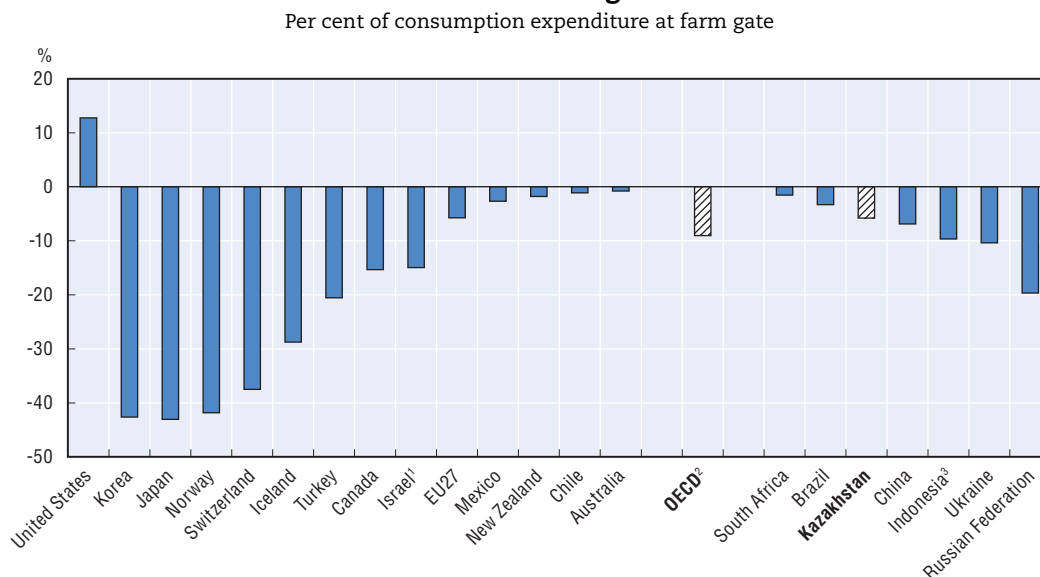
Source: OECD, PSE/CSE Database, 2012.

StatLink  <http://dx.doi.org/10.1787/888932782489>

commodities are either subsidised (leading to a positive CSE) or taxed (a negative CSE). In the majority of countries monitored by OECD, consumers are taxed but may be partly compensated, e.g. through direct budgetary subsidies to processors, various forms of food assistance.<sup>22</sup> In the absence of such support, the CSE mirrors the MPS component of the PSE.

Similar to the PSE, the CSE can be expressed in relative terms as a percentage of consumption expenditures (%CSE). The average %CSE for Kazakhstan is estimated at -6% in 2008-10, indicating that policies to support agricultural prices increased consumption expenditure by 6% on aggregate (Figure 2.28). Comparing across countries, this aggregate tax on consumers is relatively modest in Kazakhstan and one of the lowest in the group of emerging economies, exceeding only the CSEs in South Africa (-2%) and Brazil (-3%). Nevertheless, low aggregate level of consumer taxation in Kazakhstan disguises differences across products. Consumers of livestock products are taxed, while consumers of crop products are typically subsidised.

Figure 2.28. **Consumer Support Estimate in Kazakhstan and selected countries, 2008-10 average**



1. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
2. The OECD total does not include the non-OECD EU member states.
3. 2006-10 average for Indonesia.

Source: OECD, PSE/CSE Database, 2012.

StatLink  <http://dx.doi.org/10.1787/888932781387>

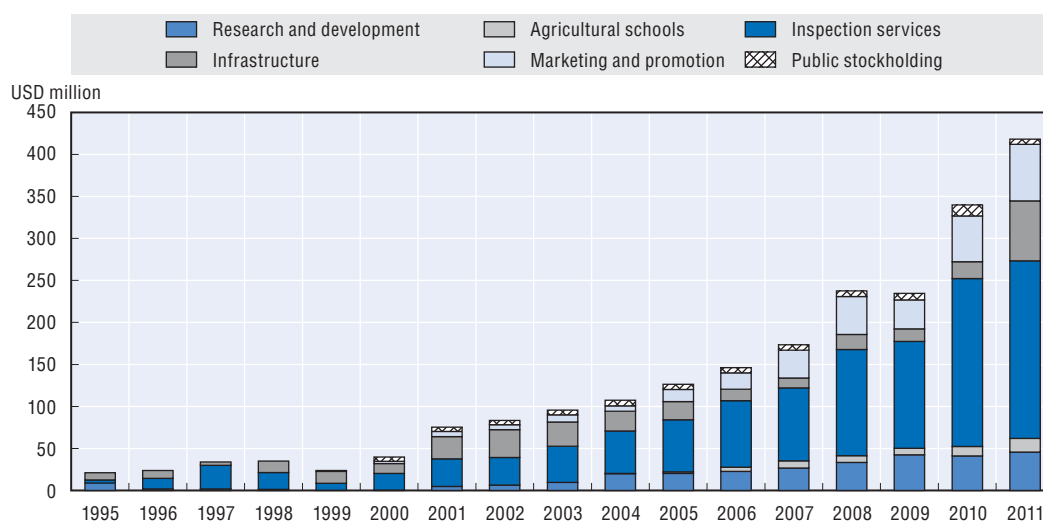
### Support to general services for agriculture

In addition to support provided to producers individually, the agricultural sector is assisted through the financing of activities that provide general benefits, such as agricultural research and development, training, inspection, marketing and promotion, and public stockholding. This support is measured by the General Services Support Estimate (GSSE) indicator. This provision of common, as opposed to individual, benefit is what distinguishes the general services support from that measured by the PSE.

Expenditures on general services for agriculture in Kazakhstan have increased steadily since the beginning of the 2000s, albeit from a very low base in the 1990s when due to the economic recession the funding for these areas was dwarfed (Figure 2.29). The GSSE rose from KZT 1.8 billion (USD 26 million) per year in 1995-97 to KZT 49.9 billion (USD 339 million) in 2009-11. The most important increases concerned financing of inspection services

(phytosanitary and veterinary systems). Another rapidly growing GSSE expenditure was marketing and promotion, an area which did not exist under the planned economy. Marketing and promotion expenditures focussed on improving the competitiveness of agricultural products, developing agro-food processing and the warehouse receipt system, and the development of market information systems in rural areas. Funding for research and development has also increased since the mid-1990s, in particular as a result of financing directed to KazAgroInnovation since 2008. Compared to research and development, agricultural education continues to receive significantly lesser funds (although these expenditures have been steadily rising). Infrastructure expenditures varied during the analysed period, with the highest spending taking place between 2001 and 2003 when a large project to improve irrigation and drainage systems was implemented. However, towards the end of the 2000s, the funds directed for infrastructure improvement decreased substantially.

Figure 2.29. **Level and composition of General Services Support Estimate in Kazakhstan, 1995-2011**



Source: OECD, PSE/CSE Database, 2012.

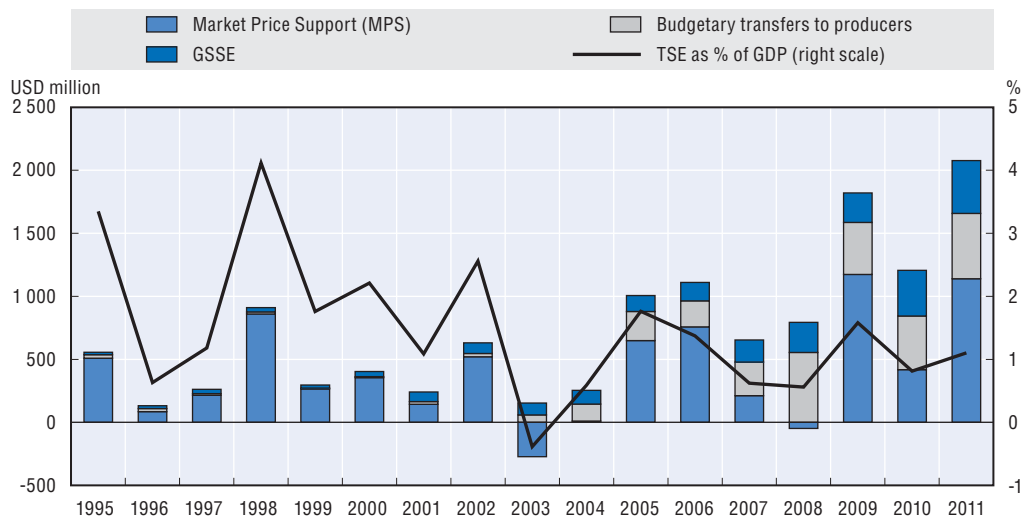
StatLink  <http://dx.doi.org/10.1787/888932781406>

### Support to the agricultural sector as a whole


The Total Support Estimate (TSE) is the broadest indicator of support, representing the sum of transfers to agricultural producers individually (PSE) and collectively (GSSE), and direct budgetary transfers to consumers. Figure 2.30 illustrates the importance of each component in the total support to the agricultural sector in Kazakhstan.

Kazakhstan's TSE averaged KZT 250.3 billion (USD 1.7 billion) per year in 2009-11. Expressed in per cent of GDP, this amounts to 1.17%. The percentage TSE (%TSE) indicates the burden that support to the agricultural sector places on the overall economy. Its value depends on the degree to which the agricultural sector is supported in a country, the size of this sector and its importance relative to the overall economy. Between 1995 and 2011, the %TSE in Kazakhstan fluctuated considerably (the broken line in Figure 2.30), as it mainly followed the large variations in the MPS. Nevertheless, this share tended to decrease over this period, which to a large extent reflects the diminishing importance of

Figure 2.30. **Level and composition of Total Support Estimate in Kazakhstan, 1995-2011**



Source: OECD, PSE/CSE Database, 2012.

StatLink  <http://dx.doi.org/10.1787/888932781425>

the agricultural sector in the overall economy and its growth, a phenomenon observed in all countries monitored by OECD.

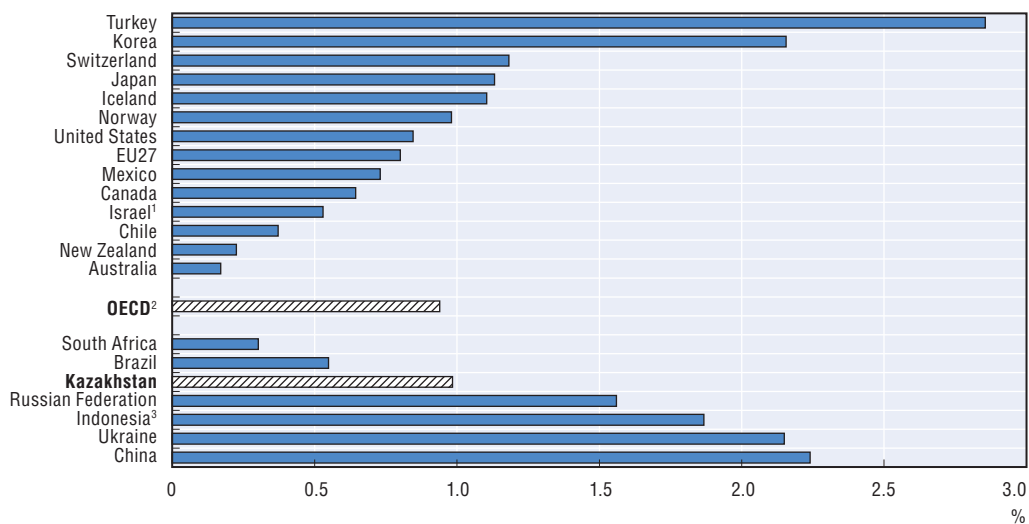
There has been a shift in the composition of the TSE from support to individual producers towards support to general services. The share of the GSSE in the TSE increased from 12% in 1995-97 to 21% in 2009-11. This is a positive trend as the long-term improvements in the sector's productivity and competitiveness depend crucially on such investments. However, some areas that are critical for agricultural development in both the short and long term, such as infrastructure and education, receive relatively little support. Over four-fifths of agricultural support in Kazakhstan continues to be provided as transfers to individual producers in ways that strongly distort output and input prices for producers.

The level of total support to the agricultural sector Kazakhstan in 2008-10 was slightly above the OECD average (a %TSE 0.94%), and is roughly comparable to that of the United States (0.85%) and the European Union (0.80%). However, Kazakhstan's %TSE far below the majority of the emerging economies monitored by OECD (Figure 2.23).

Several conclusions can be drawn on agricultural support in Kazakhstan based on OECD indicators of agricultural support.

- The level of producer support, as measured by the %PSE, was variable during 1995-2011 without revealing any distinct long-term trend. Nevertheless, the %PSE remained positive over most of this period, indicating that producers generally received moderate support.
- The variations in producer support level were driven mainly by sharp fluctuations of its market price support component, with budgetary transfers having a stronger impact on changes in support only in the most recent years.
- An aggregate relatively moderate market price support disguises taxation of exported commodities (crops) and support to imported ones (livestock). Policies in the crop sector are dominated by the measures directed to the wheat sector, which since the mid-1990s have been alternating between restraining and supporting producer prices. Since 2009,

Figure 2.31. **Total Support Estimate in Kazakhstan and selected countries, 2008-10**  
Per cent of GDP



1. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
2. The OECD total does not include the non-OECD EU member states.
3. 2006-10 average for Indonesia.

Source: OECD, PSE/CSE Database, 2012.

StatLink  <http://dx.doi.org/10.1787/888932781444>

wheat price support through trade and domestic policies is clearly observed. Price policies in the livestock sector have been increasingly protective. For all commodity sectors, the estimated market price support transfers, whether positive or negative, reflect not only policy factors, but also market weaknesses which generate additional price taxation or protection to domestic producers.

- Budgetary transfers are an increasing source of overall support to producers in Kazakhstan since the 2000s, when the economy returned to registering economic growth. Public funds were increasingly directed to successive agricultural programmes.
- Producer support in Kazakhstan is based predominantly on the most distorting forms of support, although their share in total support has declined compared to the mid-1990s.
- In the livestock sector, support is increasingly tied to specific commodities as border protection increases and additional per tonne payments introduced. This implies that policies in the livestock sector are evolving towards greater inefficiencies in resource allocation and becoming less cost-effective.
- General services for the agricultural sector have become a greater share of the total support transfers, which is a positive development. This increase, however, is largely a phenomenon of growth from a low base, and certain critical areas such as infrastructure and education continue to receive relatively limited support.
- Total support to agriculture is small relative to the overall economy and is comparable to that in the European Union and the United States, and much smaller than in Ukraine and Russia, countries moving on a similar economic path as Kazakhstan.

## Notes

1. The other priorities included: national security; internal stability and consolidation of society; economic growth on the basis of an open economy; health, education and well-being of citizens; energy resources; infrastructure, transport and communications; and professional government.
2. The term “republican” here and further in the text is used synonymously to the terms “national”, or “national-level”, as it is commonly understood in Kazakhstan.
3. The National Fund of the Republic of Kazakhstan was formed in 2000 based on the revenues from exports of natural resources. This fund is used for stabilisation needs during unfavourable economic situations, as well as to create savings for future generations (see also Chapter 1).
4. *Rules for Formation, Storage, Renewal, Dislocation, and Use of State Grain Resources*, Decree No. 394 of the Government of Kazakhstan of 28 March 2001, version amended by the Decree No. 940 of the Government of Kazakhstan of 14 September 2010.
5. For example, the criteria for grade I milk include: availability of own breeding stock of cows and heifers (over two years old, not less than 700 heads); the share of pedigree livestock thereof (100%); average number of dairy cows (not less than 500 heads); availability of a modern dairy complex with a fully developed infrastructure; availability of modern high-technology dairy equipment (on dairy premises); use of artificial insemination (100%); and availability of own fodder base.
6. For example, requirements applied for grain in 2010 and 2011 included “compliance with scientifically established cultivation technologies”, such as maintenance of arable land under fallow, with the share of fallow not less than a minimum limit, and use of high-quality seeds with a detailed specification of quality. However, some specialists in Kazakhstan question the advantages of keeping land under fallow (Suleimenov, 2012). More broadly, the concept and the exact meaning of “scientifically established cultivation technologies” remains an issue of debate.
7. Development of machinery pools based on private-public partnership is also organised through Service and Collection Centres, established by local Social and Business Corporations that received budget funds for this purpose. Their activities are focused on small farmers.
8. Not all legal entities, however, may be eligible to use the special tax regime. Thus, a legal entity must not have subsidiaries, depend on or be able to control other entities using special tax regime; members of rural consumer co-operatives must not be members of other rural consumer co-operatives using special tax regime.
9. This may change in the future, as one of the tax reform proposals currently under consideration includes introduction of a universal revenue declaration by physical persons as of 2017.
10. The beneficiaries include: organisations that do not benefit from any special tax regime, do not produce or process excisable products and whose annual income at not less than 90% is generated from processing (excluding catering) of meat and meat products, processed and canned vegetables and fruits, vegetable and animal oil and fat, dairy products and cheese, flour and cereal products, animal feed, bread, baby and diabetic food.
11. In 2011, the Committee on Rural Development at the Ministry of Agriculture was dissolved and its staff transferred to the Department on Regional Development of the Ministry of Economic Development and Trade.
12. Prior to 2010, combined duty rates were applied only to frozen beef, poultry meat, butter and white sugar.
13. For the weighted average tariffs, the estimated changes are also dependent on the assumptions of the future commodity structure of trade. This study assumed that the trade weights for the years up to 2020 correspond to the average trade weights for 2009, 2010 and the first half of 2011.
14. The administration of the TRQ regime in Russia was a point of controversy in concluding Russia's WTO accession, and this could be also scrutinised in Kazakhstan's WTO accession negotiations. In the final report of the Working Party on Russian WTO accession (WTO document WT/ACC/RUS/70 WT/MIN(11)/2, dated 17 November 2011, Article 364, pages 88-90), the Russian representative made seven specific commitments on how the Russian national body would administer TRQs.
15. The CTS is part of Kazakhstan's national railway company Temir Zholy.
16. [www.kazakh-zerno.kz/index.php?option=com\\_content&view=article&id=17461:2010-04-15-07-19-11&catid=18](http://www.kazakh-zerno.kz/index.php?option=com_content&view=article&id=17461:2010-04-15-07-19-11&catid=18).
17. Following the August 1998 Russian crisis, Kazakhstan introduced a 20% value-added tax on all personal imports from Russia, the Kyrgyz Republic and Uzbekistan, and then in December 1998 enacted a law on *Measures to Protect the Domestic Market from Imported Goods*. Under this law, tariffs

as high as 200% were imposed on a number of goods imported from the Kyrgyz Republic and Uzbekistan in February 1999, when other restrictions, such as import quotas on cement imports from the Kyrgyz Republic were also imposed. In April 1999, the 200% February tariffs were eliminated, but new licensing procedures, transit fees and mandatory deposits on imports from the Kyrgyz Republic and Uzbekistan were introduced.

18. Estimates for the emerging economies are available only up to 2010. For this reason, all cross-country comparisons in this sub-section where the emerging economies are included are based on the period 2008-10.
19. The practice of regional stabilisation funds may theoretically affect meat and dairy product prices. However, this practice is very recent (in effect since 2011), and has so far been mainly focussed on fruit and vegetable products.
20. Other per hectare subsidies are set for groups of commodities, such as grains, vegetables and melons, fruits and berries, and feed crops, and therefore are not included in the SCTs.
21. These developments were linked to the difficulties of ginners to attract credit for forward-contracting cotton growers. This was due to the 2007 local banking crisis, and also to the regulations introduced that limited the ways ginners could attract finance.
22. For example, the CSE in the United States is positive because the tax of agricultural price support is more than offset by direct subsidies to consumers through domestic food aid programmes.

## References

- Abdimoldayeva, N. (2001), *Accession to WTO: The Case of Kazakhstan*, Sub-regional Workshop on Accession to WTO – Economies in Transition, UN/ESCAP, Tashkent, 25-27 July 2001.
- Agency of Statistics of the Republic of Kazakhstan (2012), *Statistical Indicators* No. 1-2012.
- Agrarian Credit Corporation (2011), “Presentation on the analysis of current situation on SKTs and suggestions for improvement”, 29 November 2011.
- Asian Development Bank (2011), *Asian Development Outlook 2011: South-South Economic Links*, Mandaluyong City, Philippines, [www.adb.org/documents/books/ado/2011/ado2011-kaz.pdf](http://www.adb.org/documents/books/ado/2011/ado2011-kaz.pdf).
- Asian Development Bank (2000), *Report and Recommendation of the President to the Board of Directors on Proposed Loans and Technical Assistance Grant to the Republic of Kazakhstan for the Farm Restructuring Sector Development Program*, [www.adb.org/Documents/RRPs/KAZ/rrp-30106-kaz.pdf](http://www.adb.org/Documents/RRPs/KAZ/rrp-30106-kaz.pdf).
- Asian Development Bank (1995), *Report and Recommendation of the President to the Board of Directors on Proposed Loans and Technical Assistance Grant to the Republic of Kazakhstan for the Agriculture Sector Program*, [www.adb.org/Documents/RRPs/KAZ/rrp-R21795a1.pdf](http://www.adb.org/Documents/RRPs/KAZ/rrp-R21795a1.pdf).
- Atameken Union (2012a), “Condition of agricultural credit portfolio”, Powerpoint presentation, the National Economic Chamber of Kazakhstan “Atameken Union”, 26 June 2012, Astana.
- Atameken Union (2012b), “Overview of current situation with agricultural finance: Proposals for improvement of access to finance”, Powerpoint presentation at the 3rd meeting of the Bureau of the National Economic Chamber of Kazakhstan “Atameken Union”, 28 May 2012, Astana.
- Babu, S.C. and S. Djalalov (2006), *Policy Reforms and Agriculture Development in Central Asia*, Springer, New York.
- Berkum, S. van and L. Dvortsin (2011), “Implications of the establishment of a customs union between Russia, Kazakhstan and Belarus for the Dutch agribusiness”, *LEI Memorandum 11-061*, LEI, part of Wageningen UR, The Hague.
- Chufrin, G. (2012), “A difficult road to Eurasian economic integration”, *Russian Analytical Digest* No. 112, 20 April 2012.
- Csaki, C., Z. Lerman and S. Sotnikov (2001), “Farm debt in the CIS countries: A multi-country study of the major causes and proposed solutions”, *World Bank Discussion Paper* No. 424, Washington, DC.
- De Broeck M. and K. Kostial (1998), “Output decline in transition: The case of Kazakhstan”, *IMF Working Paper* No. 98/45, Washington, DC.
- Dudwik, N., K. Fock and D. Sedik (2007), “Land reform and farm restructuring in transition countries. The experience of Bulgaria, Moldova, Azerbaijan, and Kazakhstan”, *World Bank Working Paper* No. 104, Washington, DC.



- EurAsEc (2012), Annex to the decision of the Council of Eurasian Economic Commission of 16 July 2012 N54 on the Adoption of Common Customs Nomenclature for External Economic Activity and the Common External Tariff of the Customs Union.
- EurAsEC (2011), Treaty on the Functioning of the Customs Union in the Framework of the Multilateral Trade System, 19 May 2011, Minsk.
- EurAsEC (2009), Agreement on Procedures for Introduction and Application of Measures Affecting External Trade in Goods in the Common Customs Territory with Respect to Third Countries, Annex 1 to the Decision of the Inter-State Council of the Eurasian Economic Community No. 11 of 9 June 2009 (in Russian), Moscow.
- FAO (2011), "FAO regional policy consultation on high food prices", Europe and Central Asia Region, *Summary of Proceedings*, Budapest, Hungary.
- FAO (2010), *Highlights on Four Livestock Sub-Sectors in Kazakhstan*, Rome.
- FAO (2007), "Water profile of Kazakhstan", in C.J., Cleveland (eds.), *Encyclopedia of Earth*, Environmental Information Coalition, National Council for Science and the Environment, Washington, DC, [www.eoearth.org/article/Water\\_profile\\_of\\_Kazakhstan](http://www.eoearth.org/article/Water_profile_of_Kazakhstan).
- FAO (1995), "A profile of Kazakhstan's agricultural reforms", *The State of Food and Agriculture 1995*, Rome.
- Gaisina, S. (2010), "Access to bank credit by agricultural producers in Kazakhstan: A micro-econometric analysis", *The International Journal of Economic Policy Analysis*.
- Gaisina, S. (2007), "Rural credit partnerships and their role in the development of agriculture in Kazakhstan", in Petrick, M., Buchenrieder, G. (eds.), *Sustainable Rural Development. What is the Role of the Agri-Food Sector?*, Halle (Saale), IAMO, pp. 148-163.
- Gray, J. (2000), "Kazakhstan: A review of farm restructuring", *World Bank Technical Paper No. 458*, Washington, DC.
- Heidelbach, O. and R. Bokusheva (2009), "Crop insurance market development in a transition economy: The case of Kazakhstan", Contributed paper prepared for presentation at the International Association of Agricultural Economists Conference, Beijing, China, 16-22 August, 2009.
- Hindley, B. (2008), "Kazakhstan and the world economy: An assessment of Kazakhstan's trade policy and pending accession to the WTO", *Jan Tumlir Policy Essays*, No. 1, March 2008, European Centre for International Political Economy, Brussels.
- IMF (2011), *Republic of Kazakhstan: Selected Issues*, IMF, Washington, DC.
- Jandosov, O. and L. Sabyrova (2011a), "Indicative tariff protection level in Kazakhstan: Before and after the Customs Union (Part I)", *RAKURS Discussion Papers*, No. 5.3, March 2011, Almaty.
- Jandosov, O. and L. Sabyrova (2011b), "The level of tariff protection in Kazakhstan: Before and after the Customs Union (Part II)", *RAKURS Discussion Paper*, No. 5.4, 26 May 2011, Almaty.
- Jones, A. (2007), "Environment and health in rural Kazakhstan: Linking agricultural policy and natural resource management to rural welfare", Case study #8-3, in Pinstrup-Andersen, P. and Cheng, F. (eds.), *Food Policy for Developing Countries: Case Studies*, 14 pp. <http://cip.cornell.edu/dns.gfs/1200428191>.
- Kazybayeva, S. and A. Tanyeri-Abur, (2003), "Trade policy adjustments in Kazakhstan: A general equilibrium analysis", Contributed paper presented at the International Conference: Agricultural Policy Reform and the WTO: Where are we Heading?, Capri, Italy.
- Kiselev, S. and R. Romashkin (2012), "Possible effects of Russian's WTO accession on agricultural trade and production", *ICTSD Issue Paper No. 40*. April 2012.
- Krotov, I. (2011), "Customs Union between the Republic of Belarus, the Republic of Kazakhstan and the Russian Federation within the framework of the Eurasian Economic Community", *World Customs Journal*, Vol. 5, No. 2, September 2011.
- KuBentayev A. (2011), "KazAgro national holding: Doing together, achieving more", *Agrozharshy*, No. 10, October 2007, [www.kazagro.kz](http://www.kazagro.kz).
- Mahul, O. and C. Stutley (2010), *Government Support to Agricultural Insurance: Challenges and Options for Developing Countries*, World Bank, Washington, DC.
- Ministry of Agriculture (2010), Master Plan of Cereals, [www.minagri.kz/images/master\\_plan/ms\\_pl\\_zerno.pdf](http://www.minagri.kz/images/master_plan/ms_pl_zerno.pdf).
- Mosoti, V. and A. Gobena (2007), "International trade rules and the agricultural sector: Selected implementation issues", *FAO Legislative Study 98*, Rome.

- National Bank of Kazakhstan (2012), National Bank of Kazakhstan website (figures excluding food industry), [www.nationalbank.kz](http://www.nationalbank.kz) (accessed in April 2012).
- OECD (2012a), *Agricultural Policy Monitoring and Evaluation 2012: OECD Countries*, OECD Publishing.
- OECD (2012b), *Enhancing Access to Finance to Strengthen Agri-Business Competitiveness in Kazakhstan. Private Sector Development Policy Handbook*, OECD Eurasia Competitiveness Programme, forthcoming.
- OECD (2011a), *Agricultural Policy Monitoring and Evaluation: OECD Countries and Emerging Economies*, Paris, 2011.
- OECD (2011b), *Competitiveness and Private Sector Development: Kazakhstan 2010 – Sector Competitiveness Strategy*, OECD Publishing.
- OECD (2011c), *Fostering Productivity and Competitiveness in Agriculture*, OECD Publishing.
- OECD (2009), “Facilitating access to finance”, Discussion paper on credit guarantee schemes.
- OECD (2005), *OECD Guidelines on Corporate Governance of State-Owned Enterprises*, OECD Publishing.
- Oshakbayev (2010), “Overview of domestic agricultural policy and government regulations in Kazakhstan”, Presentation at workshop on Developments in Agricultural Commodity Markets: A Special Focus on Ukraine, Russia and Kazakhstan, Institute for Prospective Technological Studies, Kiev.
- Ospanov, B.S. and A.F. Deberdeyev (1997), “Reforms in agriculture and the formation of agricultural industry in the Republic of Kazakhstan”, in *Economic Reform in Kazakhstan and Kyrgyzstan: Lessons from the East Asian Development Experience*, The Sasakawa Peace Foundation, Tokyo.
- Petrick, M., J. Wandel and K. Karsten (2011), “Farm restructuring and agricultural recovery in Kazakhstan’s grain region: An update”, *IAMO Discussion Paper No. 137*, Leibniz Institute of Agricultural Development in Central and Eastern Europe, Halle, Germany.
- PWC (2010), “Doing business in Kazakhstan 2010-2011”, [www.pwc.com/kz/en/publications/dbg\\_publications.jhtml](http://www.pwc.com/kz/en/publications/dbg_publications.jhtml).
- Samson, I. et al. (2007), Analysis of economic consequences of accession of Kazakhstan to the WTO, Europe Aid Project 2005/110722, Grenoble, [www.docstoc.com/docs/49885056/Analysis-of-Economic-Consequences-of-Accession-of-Kazakhstan-to](http://www.docstoc.com/docs/49885056/Analysis-of-Economic-Consequences-of-Accession-of-Kazakhstan-to).
- Scott, D. and K. Druschel (2004), “Institutional issues and prerequisites for efficient savings mobilization and allocation in rural and lesser developed regions in China”, in *Rural Finance and Credit Infrastructure in China* (pp. 34-50), OECD Publishing, Paris.
- Serova, E. and D. Prikhodko (2010), “National policies to support the modernisation of farm machinery in CIS countries”, *Working Paper*, FAO Investment Centre, FAO, Rome.
- Shepotylo, O. (2012), “Calculation of the tariff rates of Kazakhstan before and after the imposition of the Customs Union Common External Tariff in 2010”, Mimeo, World Bank, Washington, DC.
- Shepotylo, O. and D.G. Tarr (2012), “Impact of WTO accession and the Customs Union on the bound and applied tariff rates of the Russian Federation”, *Policy Research Working Paper No. 6161*, World Bank.
- Silitski, V (2010), The 2010 Russia-Belarus-Kazakhstan Customs Union, PONARS Eurasia Policy Memo No. 110, Belarusian Institute for Strategic Studies, Minsk. [www.gwu.edu/~ieresgwu/assets/docs/pepm\\_110.pdf](http://www.gwu.edu/~ieresgwu/assets/docs/pepm_110.pdf).
- Spoor, M. (2004), “Agricultural restructuring and trends in rural inequalities in Central Asia, A socio-statistical survey”, *Civil Society and Social Movements Programme Paper No. 13*, United Nations Research Institute for Social Development, Geneva.
- Suleimenov, M. (2012), “On terminology of field husbandry and crop growing”, *The Agrarian Sector*, No. 3(13), September, 2012, Astana (in Russian).
- UNDP (2002), *Rural development in Kazakhstan: Challenges and prospects, Kazakhstan 2002*, Almaty.
- USDA (2011a), “Grain and feed annual 2011”, *GAIN Report*, USDA Foreign Agricultural Service.
- USDA (2011b), “Customs Union announces 2012 meat and poultry TRQs”, *GAIN Report*, USDA Foreign Agricultural Service.
- USDA (2011c), “Republic of Kazakhstan. grain and feed update”, *GAIN Report*, USDA Foreign Agricultural Service.
- USDA (2010a), “Agricultural overview, Kazakhstan”, *GAIN Report*, USDA Foreign Agricultural Service.

- USDA (2010b), "Food and agriculture import regulations and standards – Narrative, Russian Federation, FAIRS Country Report", *GAIN Report*, USDA Foreign Agricultural Service.
- USDA (2010c), "Customs Union reported oilseeds and oils export ban from Kazakhstan", *GAIN Report*, USDA Foreign Agricultural Service.
- USDA (2008), "Grain and feed update", *GAIN Report*, USDA Foreign Agricultural Service.
- USDA (2007), "Grain and feed", *GAIN Report*, USDA Foreign Agricultural Service.
- USDA (2005), "Grain and feed annual", *GAIN Report*, USDA Foreign Agricultural Service.
- USDA (2004), *Grain Trade Policy, Commodity and marketing programs*, USDA Foreign Agricultural Service.
- USDA (2003), "Grain and feed", *GAIN Report*, USDA Foreign Agricultural Service.
- USDA (1999a), "Livestock annual", *GAIN Report*, USDA Foreign Agricultural Service.
- USDA (1999b), "Grain and feed annual report", *GAIN Report*, USDA Foreign Agricultural Service.
- Wandel, J. (2009), "Agroholdings and clusters in Kazakhstan's agro-food sector", *Discussion Paper No. 126*, Leibniz Institute of Agricultural Development in Central and Eastern Europe, IAMO.
- World Bank (2012a), "Assessment of costs and benefits of the Customs Union for Kazakhstan", Report No. 65977-KZ, Poverty Reduction and Economic Management Unit, Europe and Central Asia Region, Washington, DC.
- World Bank (2012b), *World Bank Web Database*, <http://data.worldbank.org/data-catalog> (accessed in April 2012).
- World Bank (2010), "Kazakhstan: Public expenditure and institutional review of the agricultural sector", Washington, DC.
- World Bank (2007), "Integrating environment into agriculture and forestry, progress and prospects in Eastern Europe and Central Asia", *Kazakhstan Country Review, Volume II*, Washington, DC.
- WTO (2011a), "Tariff Profiles Kazakhstan" (statistics database), [http://stat.wto.org/tariffprofiles/KZ\\_e.htm](http://stat.wto.org/tariffprofiles/KZ_e.htm).
- WTO (2011b), *World Tariff Profiles*, WTO, Geneva.
- WTO (2010), *World Tariff Profiles*, WTO, Geneva.
- Yacheistova, N. (2012), Customs Union of Belarus, Kazakhstan and the Russian Federation, Presentation made on the Fifth Session of the Committee on Trade in UNECE, 18-19 June 2012, Geneva, Switzerland.

Table 2.A.1. **Kazakhstan's applied MFN tariff rates on key agro-food products, 1995-June 2010***Ad valorem and specific rates*

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 up to June 2010	
020130 Bovine cuts boneless, fresh or chilled	0	20	20	15	15	15	15	15	15	15	15	15	25	25	25, ≥ 0.35 EUR/kg	
020210 Bovine carcasses and half carcasses, frozen	0	15, ≥ 0.15 ECU/kg		5, ≥ 0.05 EUR/kg	15, ≥ 0.15 EUR/kg								25, ≥ 0.35 EUR/kg			
020230 Bovine cuts boneless, frozen	0	15, ≥ 0.2 ECU/kg		5, ≥ 0.05 EUR/kg	15, ≥ 0.2 EUR/kg							15, ≥ 0.15 EUR/kg	25, ≥ 0.35 EUR/kg	25, ≥ 0.15 EUR/kg		
020311 Swine carcasses and half carcasses, fresh or chilled	0	20	20	15	15	15	15	15	15	15	15	15	25	25		
020321 Swine carcasses and half carcasses, frozen	0	5	5	5	15	15	15	15	15	15	15	15	25	25		
020322 Hams, shoulders and cuts, of swine, bone in, frozen	0	5	5	5	15	15	15	15	15	15	15	15	25	25		
020329 Swine cuts, frozen nes	0	5	5	5	15	15	15	15	15	15	15	15	25	25		
020423 Sheep cuts, boneless, fresh or chilled	0	20	20	15	15	15	15	15	15	15	15	15	25	25		
020441 Sheep carcasses and half carcasses, frozen	0	20	20	15	15	15	15	15	15	15	15	15	25	25		
020442 Sheep cuts, bone in, frozen	0	20	20	15	15	15	15	15	15	15	15	15	25	25		
020443 Sheep cuts, boneless, frozen	0	20	20	15	15	15	15	15	15	15	15	15	25	25		
020711 Fowls, domestic, not cut in pieces, frozen	0	30, ≥ 0.35 ECU/kg		20, ≥ 0.15 EUR/kg				30, ≥ 0.25 EUR/kg	20, ≥ 0.15 EUR/kg	10	10	15, ≥ 0.15 EUR/kg	20, ≥ 0.4 EUR/kg			
040210 Milk powder, granules or other solid forms, of a fat content, by weight, not exceeding 1.5 %	..	10	10	10	15	15	15	15	15	15	15	15	15	15		15
040510 Butter	..	20, ≥ 0.3 EUR/kg														
040700 Birds' eggs, in shell, fresh/preserved/cooked	..	0	0	0	0	0	15	15	15	0	0	15	0	0	0	
070190 Potatoes, fresh or chilled, except seed	..	25	25	25	25	25	25	25	25	25	25	25	25	25	15	
1001 Wheat and meslin	..	5	5	5	5	5	5	5	5	5	5	..	..	..	0	
1006 Rice	..	5	20	20	20	20	20	20	20	20	20	20	20	20	20, ≥ 0.07 EUR/kg	
1206 Sunflower seeds, whether or not broken	..	0	0	0	0	0	0	0	0	0	0	5	5	5	5	
1205 Rape or colza seeds, whether or not broken	..	0	0	0	0	0	0	0	0	0	0	5	5	5	5	
170111 Cane sugar, raw, in solid form, not containing added flavouring/colouring matter	..	0	0	0	1	0	1	0	0	0	0	0	0	0	0	
170112 Beet sugar, raw, in solid form, not containing added flavouring/colouring matter	..	..	1	1	1	1	1	1	1	0	0	1	1	1	0	
170199 Cane/beet sugar and chemically pure sucrose, in solid form, not containing added flavouring/colouring matter	..	25, ≥ 0.07 EUR/kg			30, ≥ 0.12 EUR/kg							1	30, ≥ 0.12 EUR/kg			
520100 Cotton, not carded/combed	..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

..: Not available; ≥: Not less than.

Source: ACEPAS based on Government Resolutions.

Table 2.A.2. Customs Union applied MFN import tariffs

Ad valorem and specific rates

Tariff lines	CU MFN tariff effective up to 23 August 2012		CU MFN tariff effective as of 23 August 2012		Russia's WTO bound tariffs		
	Intra-quota:	Over-quota:	Intra-quota:	Over-quota:	Bindings at accession		Final binding 2020
020130 Bovine cuts boneless, fresh or chilled							
020210 Bovine carcasses and half carcasses, frozen	Intra-quota: 15% ≥ 0.2 EUR/kg	Over-quota: 50% ≥ 1 EUR/kg	Intra-quota: 15	Over-quota: 50% ≥ 1 EUR/kg	Intra-quota: 15%	Over-quota: 55%	27.5% if TRQ is eliminated
020230 Bovine cuts boneless, frozen							
020311 Swine carcasses and half carcasses, fresh or chilled							
020321 Swine carcasses and half carcasses, frozen	Intra-quota:	Over-quota:	Intra-quota:	Over-quota:	Intra-quota:	Over-quota:	25% and TRQ eliminated
020322 Hams, shoulders and cuts, of swine, bone in, frozen	15% ≥ 0.25 EUR/kg	75% ≥ 1.5 EUR/kg	0%	65%	0%	65%	as of 2020
020329 Swine cuts, frozen nes							
020423 Sheep cuts, boneless, fresh or chilled							
020441 Sheep carcasses and half carcasses, frozen							
020442 Sheep cuts, bone in, frozen	25% ≥ 0.35 EUR/kg		15% ≥ 0.15 EUR/kg		15% ≥ 0.15 EUR/kg		15% ≥ 0.15 EUR/kg
020443 Sheep cuts, boneless, frozen							
0207 Fowls, domestic, fresh, chilled or frozen	Intra-quota: 25% ≥ 0.2 EUR/kg	Over-quota: 80% ≥ 0.7 EUR/kg	Intra-quota: 25% ≥ 0.2 EUR/kg	Over-quota: 80% ≥ 0.7 EUR/kg	Intra-quota: 25%	Over-quota: 80%	37.5% if TRQ is eliminated
040210 Milk powder, granules or other solid forms, of a fat content, by weight, not exceeding 1.5 %	25%		20%		20%		15% by 2015
040510 Butter, natural	15% ≥ 0.4 EUR/kg		15% ≥ 0.29 EUR/kg		20% ≥ 0.29 EUR/kg		15% ≥ 0.22 EUR/kg by 2015
040700 Birds' eggs, in shell, fresh/preserved/cooked, not for hatching	15%		15%		15%		10% by 2015
070190 Potatoes, fresh or chilled except seed	15%		15%		15%		10% by 2015
1001 Wheat and meslin	5%		5%		5%		5%
1006 Rice not for sowing, paddy or milled, short-grain	0.12 EUR/kg		15% ≥ 0.045 EUR/kg		15% ≥ 0.045 EUR/kg		10% ≥ 0.03 EUR/kg by 2015
1205 Rape or colza seeds, whether or not broken	5%		5%		5%		0%
1206 Sunflower seeds, whether or not broken, not for sowing	5%		5%		5%		5%
520100 Cotton, not carded/combed	0%		0%		0%		0%
170113, Cane sugar, raw, in solid form, not containing added flavouring/ 170114 colouring matter							0% until 2019 <sup>1</sup>
170112 Beet sugar, raw, in solid form, not containing added flavouring/ colouring matter	1 January to 30 June 250 USD/tonne 1 July to 31 December 270 USD/tonne		1 January to 30 June 250 USD/tonne 1 July to 31 December 270 USD/tonne		1 January to 30 June 250 USD/tonne 1 July to 31 December 270 USD/tonne		1 January to 30 June 250 USD/tonne 1 July to 31 December 250 USD/tonne by 2015
1701 99 Cane/beet sugar and chemically pure sucrose, in solid form, not containing added flavouring/colouring matter	340 USD/tonne		340 USD/tonne		340 USD/tonne		340 USD/tonne

≥: Not less than.

1. Derogation from the common CU tariff for Kazakhstan.

Source: EurAsEC Commission.



## Chapter 3

# Constraints to agricultural incomes beyond the farm gate: A focus on wheat, dairy and beef sub-sectors

*The efficiency of the agricultural sector in Kazakhstan is constrained by factors beyond the farm gate. This chapter looks at how supply chains operate in Kazakhstan and the costs that agricultural producers and other participants incur in transactions. The focus is on the three largest sub-sectors of the agro-food system: wheat, dairy and beef. Case studies of these three sectors undertaken for this review highlight the importance of reducing transactions costs within existing supply chains (as for grain), or by lengthening existing supply chains (for milk and beef) to benefit producers, especially small ones. Direct state intervention is not necessarily the solution, and may be counter-productive. What is needed is to create a friendly environment for agribusiness to facilitate transactions through better functioning institutions and regulations. Creating such an environment is complementary to the provision of more traditional public goods such as improved infrastructure, animal and plant health, education and information systems, and extension. Improvements in these areas could bring substantial long-term gains to agricultural producers through more transparent markets, improved price formation, and, ultimately, higher agricultural incomes. Benefits would also accrue to other agents of the supply chain, including food consumers for whom more competitive food chains would provide higher quality products.*

## 1. Introduction

This chapter looks at how supply chains operate in Kazakhstan and the costs that agricultural producers and other participants in the chain incur in transactions. Because these characteristics vary with the product, and the location or size of the farm, the focus is on specific subsectors: wheat, dairy and beef, the three largest sub-sectors of Kazakhstan's agro-food system. The general characteristics of the three sub-sectors are presented. This is complemented by the evidence on how supply chains function as experienced by farmers, intermediaries and processors based on the case studies undertaken specifically for this Review (ACEPAS, 2012). Additional information is derived from recent FAO studies on food chains in Kazakhstan (FAO, 2010a and 2010b). General observations and policy issues conclude the discussion of each sub-sector.

The evidence presented in this chapter shows that inefficiencies in supply chains present an important impediment to agricultural development. For meat and milk producers, the lack of a cold chain limits sales to local markets with uneven quality and a high rate of spoilage. For exported grain, for which the final price is set beyond national borders, the price received by the farmer is depressed by bottlenecks at elevators and inadequate rail facilities. Poor local roads impede the integration of producers into modern supply chains and put them in the position of price takers facing a single local buyer. Even if the hard infrastructure of road, rail and port facilities is improved, the soft infrastructure related to market information, knowledge, contractual practices, collective action, red tape, and competition policy also need to be developed. Policy efforts to boost production are unlikely to succeed without adequate attention to improvements in these areas. This can bring substantial long-term gains to agricultural producers through the establishment of more favourable price formation conditions and, ultimately, higher agricultural incomes. The benefits would also accrue to other agents of the supply chain, including food consumers for whom more competitive food chains would provide higher quality products. Improvements in hard and soft infrastructure beyond the farm gate largely depend on the provision of adequate general services and properly functioning market institutions, areas where public support could be most appropriately directed.

While there is little systematic analysis of domestic and international trade costs in Kazakhstan, they are widely believed to be high. This was a central theme of reports on Central Asia by the UNDP (2005) and ADB (2006). Based on price dispersion for narrowly defined commodities, Grafe et al. (2005) concluded that market integration was at least as poor within countries as across the Central Asian region. The two-volume World Bank study by Cadot et al. (2006) emphasised the deficiencies in hard and soft infrastructure in Central Asia.

More generally, trade and transaction facilitating measures with special significance for rural producers have been emphasised in the economic development literature of the last two decades. Pinstrup-Andersen and Shimokawa (2007) review the evidence for a positive impact of rural infrastructure investment. In the case of China, Poncet (2003) concluded that economic reform and foreign trade liberalisation failed to reduce internal trade barriers, and Amity and



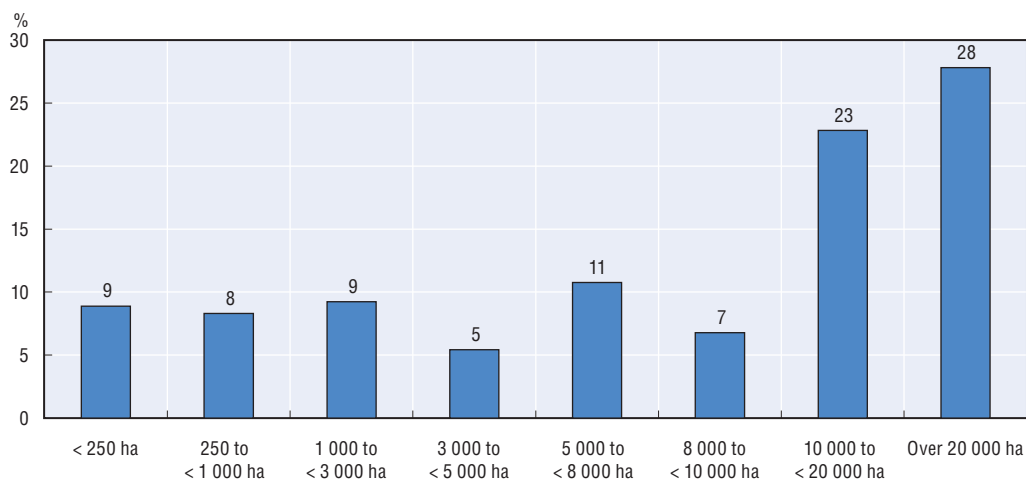
Javorcik (2008) identify poor transport infrastructure and informal internal trade barriers as causes of market fragmentation. The creation of value chains from farmer to retailer can stimulate quality upgrading and bring benefits of higher and less volatile prices, e.g. the participation in global value chains initiated by European supermarkets brought benefits in terms of higher welfare, more income stability, and shorter lean periods to poor farmers in Madagascar (Minten et al., 2009). Many empirical studies have illustrated the benefits gained from improved rural roads, not just for increased agricultural value-added, but also for improved schooling and healthcare access (e.g. Jacoby and Minten [2009] and Khandker et al. [2009] on Bangladesh) and for poverty alleviation (e.g. Menon and Warr [2008] on Laos).

## 2. Wheat chain

Wheat production is concentrated in the northern wheat region, which includes Kostanay, Akmola and North Kazakhstan oblasts. These three oblasts account for around 80% of the country's wheat area and 85% of total wheat produced (2009-11 average).

Over half of the total grain output is concentrated in large-scale agricultural enterprises with a land area of over 10 000 hectares (Figure 3.1). The minimum viable size of a self-sufficient wheat farm in the northern grain region is around 250 hectares, i.e. the minimum area for an economically rational base to keep basic machinery; farms with less than 250 hectares have to use contractors for on-farm operations. Wheat farms with an arable land area of up to 3 000 hectares are considered to be small; few of these farms have drying facilities and storage space. Medium-sized producers operating on 5 000 to 20 000 hectares are typically equipped with a fleet of modern machinery, grain storage and other facilities. Large producers with over 20 000 hectares often have direct contracts with buyers overseas – either foreign traders or mills. Many large producers belong to so-called “agroholdings”, vertically integrated structures which incorporate farms, silos and processing plants, and sometimes sea terminals. The parent company usually operates as a trading company, supplying farms with inputs and investment funds, and marketing the crops (Wandel, 2009). The top three holdings in the northern wheat region control over 700 000 hectares each, and the land of the 15 largest agroholdings comprises 35% of the total sown area in this region.

Figure 3.1. **Distribution of area planted to wheat by farm size in Kazakhstan, 2009**



Source: Statistics Agency of the Republic of Kazakhstan; Ministry of Agriculture.

StatLink  <http://dx.doi.org/10.1787/888932781463>

### **Operation of the grain chain: Evidence from case studies**

The evidence and case studies in this sub-section are drawn from the northern wheat region and are based on interviews with grain producers and traders undertaken for this study in 2011-12.

#### **From farm gate to local wholesale point**

Following harvest, wheat is usually delivered to the farms' barn-floor for initial treatment. Some producers may store grain to sell at a later date, probably with a better price, but small farmers usually cannot afford their own storage and drying facilities. From the farm, wheat may be delivered to grain elevators for drying, cleaning and storing, or to mills. An increase in flour exports during the 2000s resulted in the milling industry gaining in importance as a buyer of domestic wheat. Deliveries to millers increased from 1.8 million tonnes in the 2000/01 marketing year to 4.1 million tonnes in 2010/11. Due to the relative simplicity of milling and the scalability of investments, it became an attractive activity for local entrepreneurs. Mills actively procure wheat either directly from farmers or through local traders. Almost half of Kazakhstan's flour is produced by mills in the northern grain region. Grain elevators and mills are usually situated within 100-150 km from a farm. Most grain goes to an elevator; licensed elevators may issue grain warehouse receipts which confirm the availability of grain and property rights.

Small producers typically sell wheat for cash to local traders, who are responsible for transportation to the elevator or mill (Table 3.1). Local traders are able to aggregate grain lots into volumes more suitable for the elevator operators, who prefer to deal with large deliveries, and some traders have good connections with and preferential access to mills or elevators. Small local traders usually work with small growers, buying wheat "from field", i.e. from the thrashing floor or even directly from the combine. Most of these "unprofessional" traders operate only during the harvest period. With turnover above 5 000 tonnes it is feasible to have employees, and annual turnover varies from 5 000 to 30 000 tonnes for small traders, from 30 000 to 80 000 tonnes for medium-sized traders, and over 80 000 tonnes for large traders. The larger local traders are professional grain trading companies which can export big lots.

Table 3.2 presents estimates of the costs to deliver grain from the farm to a local elevator. These estimates should be taken with care as they are based on information collected from a small grain producer with a grain area of 2 500 hectares who incurred higher transportation costs in searching for elevator space and elevator services than a larger producer would typically face. The cost of transportation and elevator services is also inflated due to a high harvest year in 2011. The estimates in Table 3.2 should rather be seen as an illustration of the impact of high transactions costs on producer prices. Thus, total producer cost of delivering, receiving and storing grain before it is sold came to USD 59 per tonne at harvest time in 2011/12. Assuming that the grain was sold to the FCC at its purchase price of USD 170 per tonne (KZT 25 000 effective in October 2011), the price at the farm gate is USD 111 per tonne. Alternatively, assuming that the grain was not sold to the FCC but to private buyers at an average market price of USD 108 (KZT 15 900 October 2011 price), the price at the farm gate would be USD 49 per tonne (KZT 7 200). Given these costs, farm gate price was reduced by over a third (the FCC option) and by over one half (the private channel option) compared to the wholesale price. This case also

Table 3.1. **Typical marketing channels and arrangements in the grain chain**

Buyers	Sellers				
	Small producer (SP)	Medium producer (MP)	Large producer (LP)	Small local trader (SLT)	Larger local trader (LLT)
<b>Mill</b>	Common contracts are sales for cash; SP delivers wheat himself.	MP is responsible for transportation, some MP own small milling facilities.	Some large producers own mills.	SLT acts as intermediary between SP and mill, often has privilege in sales to mill.	-
<b>Small local trader (SLT)</b>	Common contracts are sales for cash; SLT is responsible for transportation to mill or elevator.	-	-	-	-
<b>Larger local trader (LLT)</b>	Contracts on delivered to elevator basis (grain receipts).	Contracts on delivered to elevator basis (grain receipts).	-	SLT may collect a tradable quantity of wheat and sell to LLT on elevator basis.	-
<b>International trader (IT)</b>	-	Common contracts are DAP border station, western direction is preferable.	Common contracts are DAP border station, western direction is preferable. LP often acts as LT. Each contract is 10 000-100 000 tonnes. Forward contracts.	-	Common contracts are DAP border station, western direction is preferable. Each contract is 10 000-100 000 tonnes. Forward contracts.
<b>Buyer abroad</b>	-	-	Agroholdings may export by themselves and trade on FOB Black Sea port basis. Independent LP usually sell wheat to Central Asian countries. Each contract is 10 000-100 000 tonnes. Forward contracts.	-	Rarely local traders sell grain to buyers abroad, mainly this concerns deliveries to Central Asian countries. Each contract is 10 000-100 000 tonnes. Forward contracts.

Source: ACEPAS, 2012.

StatLink  <http://dx.doi.org/10.1787/888932782527>

underscores the fact that during the high harvest season producer prices are under the double pressure of high supply and increased marketing costs, which are higher when infrastructural deficiencies are considerable.

Table 3.2. **Estimated costs between the farm gate and elevator, December 2011**

Type of cost	Value		Commentary
	KZT/tonne	USD/tonne	
Delivery to elevator	3 000	20	Distance of 150-180 km.
Receipt, drying and cleaning	2 000	14	- Drying costs 300 KZT per 1% reduction of humidity. - Cleaning costs 30 KZT per 1% reduction of impurities. - Cleaning costs 30 KZT per 1% reduction of grain admixtures.
Possible loss due to downrating of quality	2 000	14	Grain producers reports that elevator laboratory may sometimes underrate actual gluten content of their wheat. This concerns mostly small producers. The value in the table represents the differential between the prices for 3rd grade wheat with 23-24% and with 27-30% gluten content.
Possible loss due to upgrading of humidity	1 400	10	Grain producers report that elevator laboratory may sometimes overrate actual moisture content of their wheat. This concerns mostly small producers. The value in the table is estimated using price of 20 000 KZT/tonne and assuming moisture content 7% higher than the actual one.
Storage per month	300	2	One month storage.
<b>Total cost</b>	<b>8 700</b>	<b>59</b>	-

Source: ACEPAS, 2012.

StatLink  <http://dx.doi.org/10.1787/888932782546>

All interviewed growers and private grain traders highlighted inadequate storage and transport facilities as their major problem. However, as harvests vary significantly from year to year,<sup>1</sup> the situation with storage availability changes. For example, in the 2010/11 season, when only 12 million tonnes of grain were harvested, excess storage capacities existed. In contrast, Kazakhstan's elevator capacity of around 15 million tonnes was less than the 23 million tonnes wheat harvest in 2011/12. Transport capacity is likewise insufficient for bumper harvests, pushing up the cost of storage and freight charges in 2011/12.

For the very large farms with their own elevators or warehouses, the problem was less severe, but the bargaining position of smaller-scale farmers was affected by their desperate need for access to storage facilities.<sup>2</sup> Another advantage to having own storage facilities is the ability to control quality, in contrast to when grain is delivered to an elevator and mixed with deliveries from other farms. All interviewed farmers agreed that the current elevator practices do not provide stimuli to grain producers to improve quality because differentiation of grain by quality when it enters an elevator is almost non-existent. Supporting this, an interviewed representative of the Union of Millers and Bakers noted that during the Soviet period a typical elevator would have 18 reception points, enabling separation of grain in different quality lots. At present, elevators have three reception points at best. According to producers, elevators also tend to underrate the quality of delivered grain, which farmers have to accept when they have no other channels through which to sell their grain. An interviewee reported that because of such behaviour by the local elevator operator, he decided to sell grain to another more distant elevator, considering that the benefit would offset higher transportation costs. The Union of Millers and Bakers representative considers that such a situation is in part due to a lack of action on the producer side as well, noting that they underestimate the importance of investing in own quality control devices to strengthen their position *vis à vis* buyers.

#### ***From local wholesale to export exit point***

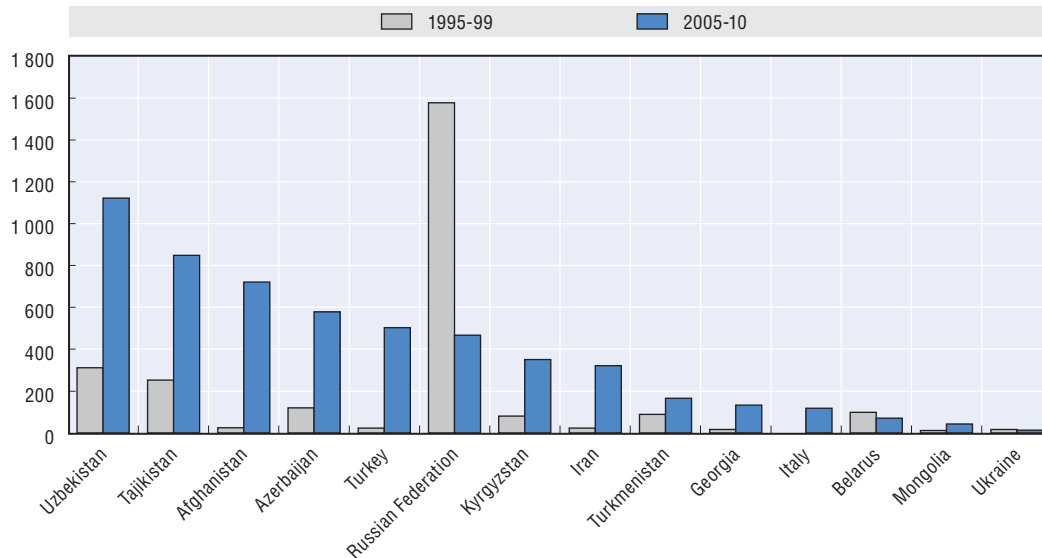
Kazakhstan ranks among the world's top ten wheat exporters (sixth in 2011/12). Only half of wheat exports are delivered as grain, the rest as wheat flour. Being a landlocked country, Kazakhstan exports wheat to its closest neighbours (Figure 3.2). Kazakhstan is the main supplier of wheat to Central Asia and provides almost all wheat imported by Uzbekistan, Turkmenistan, Tajikistan and Kyrgyzstan, and nearly 50% of Afghanistan's imports.

Most of the world's leading international traders have partner or daughter companies in Kazakhstan, e.g. Cargill – SP Dan, Glencore – Kazakh Grain Company, Nidera – Vitalmar Kazakhstan. These traders work directly with buyers abroad and usually operate between Kazakhstani borders and the importing country. The annual turnover of such companies exceeds 100 000 metric tonnes and may reach up to one million. Generally, contracts between large producers or large local traders and international traders are on a “delivered at place” basis (DAP at the border station) for 10 000-100 000 metric tonnes. Forward contracts also exist. Agroholdings may export directly, trading on a free on board (FOB) Black Sea port basis. Where independent large producers trade between themselves, it is usually to sell wheat to Central Asia. Local traders rarely sell grain abroad, and if they do, it also concerns mainly the Central Asian market.

Wheat delivery to Azerbaijan, Georgia and Iran may be either by railway or by cargo ships on the Caspian Sea. Kazakhstan's only Caspian Sea grain terminal situated in Aktau


Figure 3.2. **Export of wheat and flour by country of destination**<sup>1</sup>

Thousand tonnes, grain equivalent



1. Countries are ranked by the average exports in 2005-10.

Source: UN COMTRADE Database.

StatLink  <http://dx.doi.org/10.1787/888932781482>

has an annual capacity of 0.5 million tonnes, which was sufficient for only 30% of exports to these destinations in 2009/10. Aksarayskaya railway crosses Kazakhstan into the Russian Astrakhan oblast and is the main entry point for transport by rail into the Caucasus and Black Sea ports. The rail link through Uzbekistan and Turkmenistan to Iran appears to be little used, although a direct rail line under construction between Kazakhstan and Turkmenistan may make this route more attractive. Exports to the European Union, African and Middle East countries (except Iran) are mainly through Russian ports on the Black Sea. There is also a route from Tobol in Kostanay oblast via Russia's Trans-Siberian railway to Ventspils in Latvia, where a Latvian-Kazakh joint venture grain terminal has an annual capacity of 1.5 million tonnes. Dostyk railway station in Almaty oblast is the point of exit for the sole rail line between Kazakhstan and China.

Based on interviews with traders and data collected by the Ministry of Agriculture, Table 3.3 reports estimates of transport and documentation costs to take grain from inland elevators to major border stations in early 2012. It should be noted that transportation costs change considerably over time; for example, between 2007 and early 2012 rail freight for 1 498 km from Tobol to Aksarayskaya station (the station belonging to Kazakh railways situated in Russia) increased from USD 19.6 to USD 25.9 per tonne.


Besides transport freight rates, traders incur official costs to obtain permits, certificates, payments for customs clearance, and other expenses. Table 3.4 shows the main components of these costs based on data for exports passing through Novoishimskaya rail station, a major crossroad in the northern wheat region. For all exports destined to China, these costs are estimated to be USD 30.4 per tonne, or triple those for other destinations as China applies phytosanitary barriers on Kazakh grain transported through its territory and which affects the competitiveness of Kazakh exports on Asian markets, such as Japan and Korea, as well as China itself. In addition to official costs, exporters also incur informal charges; for example, to receive railway cars. According

Table 3.3. **Exporter costs between internal elevator and export exit point, early 2012**

Export exit point	Delivery basis	Transport USD/tonne	Other costs <sup>1</sup> USD/tonne	Port charges USD/tonne	Total costs USD/tonne	Direction
Aksarayskaya rail station (Russia, Astrakhan oblast)	DAP	25.9	10.8	-	36.7	Black Sea ports, Azerbaijan and Georgia.
Tobol rail station (Kostenay oblast)	DAP	8.1	10.8	-	18.9	Black and Baltic sea ports
Aktau port (South-West Kazakhstan)	FOB	45.6	10.8	14.0	70.4	Iran, Azerbaijan, and Georgia
Saryagash (South Kazakhstan)	DAP	29.3	10.8	-	40.1	Uzbekistan, Turkmenistan, Iran, Afghanistan, and Tajikistan
Lugovaya station (South Kazakhstan)	DAP	23.6	10.8	-	34.4	Kyrgyzstan
Dostyk rail station (South-East Kazakhstan)	DAP	23.1	30.4	-	53.5	China and South East Asia

1. See Table 3.4 for details. Except for China destination, these estimates are based on the data collected for Novoishimskaya rail station in North Kazakhstan.

Source: ACEPAS, 2012 based on data of the Ministry of Agriculture.

StatLink  <http://dx.doi.org/10.1787/888932782565>

to traders, after the bumper 2011 harvest these charges increased from USD 150-200 per car in June to USD 500 in November (in Table 3.4 they are estimated per tonne, assuming a payment of USD 200 per 69-tonne car). After the cost of grain unloading, this was the second-largest item of non-transport costs by grain exporters in 2011/12.

Table 3.4. **Exporter transactions costs for deliveries bound to the north Kazakhstan border, 2012**

Type of cost	Value, USD/tonne
Certificate of quality and compliance	0.1
Certificate of origin	0.2
Phytosanitary certificate	0.0
Certificate of quality by SGS <sup>1</sup>	1.0
Customs clearance	0.1
Customs broker	0.1
Storage (1 month)	1.4
Unloading	3.6
Identification seal	0.5
Fumigation	0.4
<b>Total official costs</b>	<b>7.4</b>
Estimated non-official collection for rail car delivery	2.9
Other estimated non-official collections	0.5
<b>Total costs</b>	<b>10.8</b>

1. SGS S.A. (formerly Société Générale de Surveillance), an internationally recognised multinational company providing inspection, verification, testing and certification services.

Source: ACEPAS, 2012.


StatLink  <http://dx.doi.org/10.1787/888932782584>

The final stage in the export journey is from the export station to the export market. Table 3.5 reports transport costs for delivery of grain from Kazakhstan's principal export exit points to major foreign markets.

Table 3.5. **Transportation costs between internal export point and external market, 2011**

Exit/Entry point	Delivery basis	Freight cost through		Port charges	Total	Importing countries
		Russia	Ukraine/ Latvia/China			
		USD/tonne	USD/tonne	USD/tonne	USD/tonne	
Azov (Russia)	FOB	45.9	-	20.0	65.9	Turkey, Jordan, and EU
Ventspils (Latvia)	FOB	85.3	11.0	16.0	112.3	North Africa and EU
Kherson (Ukraine)	FOB	63.0	21.0	20.0	104.0	Turkey, North Africa, and Middle East
Novorossisk (Russia)	FOB	49.1	-	25.0	74.1	Turkey, North Africa, and Middle East
Lianyungang (China)	FOB	-	57.0	12.0	69.0	Japan, South Korea, and South East Asia
Sarakhs (Turkmenistan)	DAP	42.0	-	-	42.0	Iran
Naushki (Mongolia)	DAP	73.5	-	-	73.5	Mongolia

Source: ACEPAS, 2012 based on data of the Ministry of Agriculture.

StatLink  <http://dx.doi.org/10.1787/888932782603>

### Grain marketing risks and implicit costs

In assessing trade costs it is important to consider the costs imposed on producers and traders that are not explicitly accountable. Such costs arise from risks related to information deficiencies, loss of time in marketing operations, e.g. due to shortages of elevator and transport capacities, or impeded access to port facilities, etc. Table 3.6 identifies some of these costs and attempts to quantify them. These estimates highlight that deficiencies in physical infrastructure involve additional implicit costs that diminish incentives of grain producers and traders. The estimates also suggest that this factor is particularly strong in years of abundant harvest. Following the 2011/12 harvest, the government provided a transportation subsidy of USD 40 per tonne to facilitate outflows of wheat to export markets. The evidence below suggests that part of this subsidy is eroded by the implicit risks faced by exporters in marketing grain.

Paradoxically, some of these risks are related to the activity of the state agent on the grain market. The Food Contract Corporation (FCC) has priority claim for storage and transportation facilities. This imposes additional costs on private traders, such as time and, consequently, financial losses in marketing. Wheat farmers are obliged “to participate in the establishment of state resources” through priority sales to the Food Contract Corporation (FCC). Following the 2011 harvest, the FCC purchase price was USD 170 per tonne (October), far higher than the market price (Figure 3.3).<sup>3</sup> Thus producers were keen to sell to the FCC. However, to receive the FCC price they had to deliver wheat to designated elevators which led to a scramble for the limited capacity. The situation was exacerbated by the fact that the FCC started moving its grain from busy northern elevators to southern/western ones and all other transportation requests stopped.

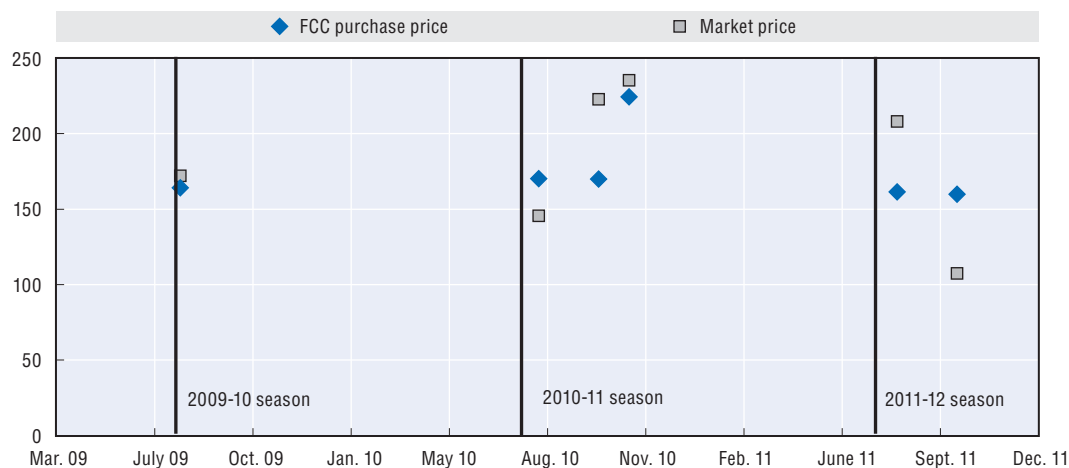
In contrast, during the poor 2010/11 year, grain producers were obliged to supply grain to the FCC at prices fixed by the FCC and some local authorities exerted informal pressure to deliver in excess of the targets set. In 2010/11, FCC purchase prices were below market prices for most of the season.

A priority given to the state trading agency in the situation of limited infrastructure leads to opaque practices. There is anecdotal evidence that during high harvest seasons when FCC offers higher prices than the market (a situation at harvesting time in 2009/11 and 2011/12), some producers and traders are ready to pay bribes for access to designated

Table 3.6. **Trading risks beyond the farm gate and estimated implicit costs**


Implicit costs and risks	Assumption	Estimated cost, USD/tonne
<b>Farm level</b>		
1. Busy elevators Waiting near elevator gates, assumingly two days	2-day driver's salary	1.36
<b>Trader level</b>		
2. Rail car shortage Informal fee to forwarding agents for providing railway cars for rent	Fee amount	up to 11
3. Busy terminals Rail cars may get blocked in the Black Sea ports (e.g. deep-water ports were frozen for two weeks in 2012), or in Aktau port (due to priority passage provided to certain companies).	Fine per day of delay	0.44
4. Rail blocked until priority FCC shipments are made. Cost of additional storage, 0.05 USD/tonne per day.	3 month storage	4.5
5. Rail cars delayed in Uzbekistan of Afghanistan Rail cars transit or unloading may be blocked on Uzbekistan's territory.	Fine per day of delay	0.44
6. Rail cars delayed in Sarakhs (Iran) station Capacity of station is limited.	Fine per day of delay	0.44
7. Ship delay	Fine per day of delay	1.44
8. Higher charge applied by the Centre of Transport Services (CTS). CTS is the only forwarding agent operating grain export subsidies; CTS service rates exceed those of other forwarding agents.	Excess of CTS rate over rates of other agents	1 to 2
9. Delays in VAT refunds Delays in refunds of 12%-VAT may exceed one year; an opportunity cost of money is calculated assuming a delay of one year, wheat price of 150 USD per tonne, and a deposit interest rate of 9% p.a.	Opportunity cost of money	1.62
10. Inappropriate identification of grain quality A case is reported that a local certifier inappropriately identified quality of exported grain; the grain trader was fined by his grain buyer.	Fine amount	5.0
<b>Total implicit costs</b>		
In high harvest (sum of items 1 to 3 and 5 to 13)		58.4
In low harvest year (sum of items 4 and 6 to 13)		22.9

Source: ACEPAS, 2012.

StatLink  <http://dx.doi.org/10.1787/888932782622>Figure 3.3. **FCC purchase prices and market prices for wheat<sup>1</sup>**  
USD per tonne

1. FCC price is the announced price for purchases of grain to state resources; market price is the price reported by Kazakh-zerno.kz based on the average for the northern grain region.

Source: FCC; Kazakh-zerno.kz.

StatLink  <http://dx.doi.org/10.1787/888932781501>

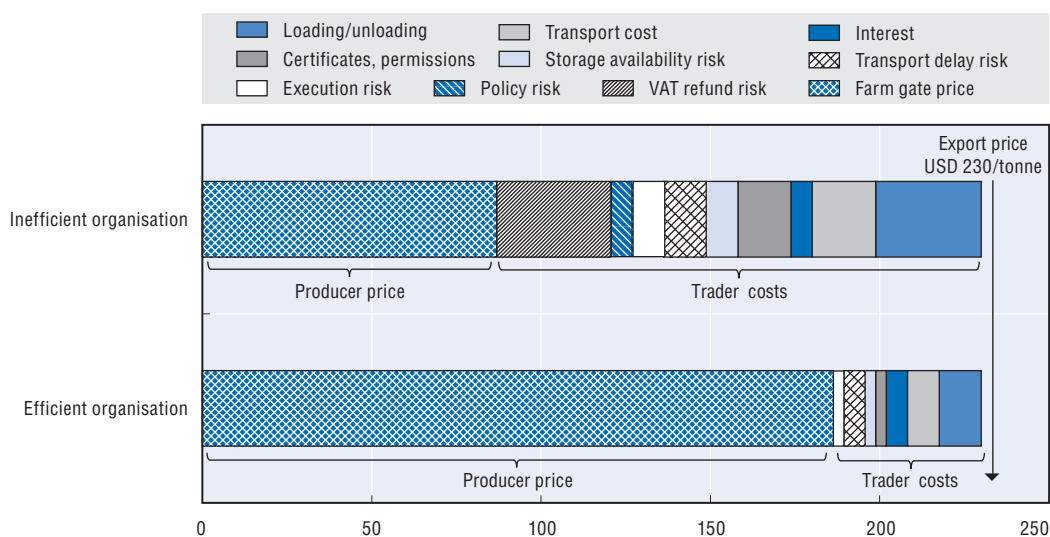


FCC elevators in order to benefit from higher prices. In contrast, when FCC prices are low but producers are obliged to sell to the FCC (a situation of the 2010/11 season), producers may enter into informal agreements with local authorities to sell none or less grain to the FCC and forfeit receiving a per hectare subsidy the following season.

### Policy issues

The discussion above highlights that inefficiencies in the grain supply chain exist at all levels. These inefficiencies increase explicit costs of grain chain participants, as well as add implicit costs. They are passed down the chain and grain producers ultimately bear the principal burden of these inefficiencies by facing lower prices than would be the case if market organisation was more efficient. Figure 3.4 illustrates this point (this figure is not based on actual data and should be considered only as an illustrative tool to show how post-farm costs affect producer price).

Figure 3.4. **Relationship between post-farm costs and producer price**  
Illustrative example



Source: Adapted from Strieve, 2010.

StatLink  <http://dx.doi.org/10.1787/888932781520>

Critical infrastructure bottlenecks are a significant obstacle to increased output and efficient marketing of wheat in Kazakhstan. Poor rural roads add directly to trade costs by increasing travel time and vehicle repair costs, and perhaps indirectly by making reliable delivery difficult and hence forcing farmers to allow extra time for their goods in transit. Gray (2000) raised these problems, although he placed more emphasis on universal harassment by the police and other officials. Since the beginning of the 2000s, such highway harassment appears to have declined, exposing the poor quality of unpaved and poorly maintained rural roads as the longer-term problem.

In high harvest years, the problem has less to do with freight rates, than with finding capacity. A combination of inadequate capacity and preferential access for favoured users means that independent farmers and grain-traders spend too much time searching for space in elevators and on railway wagons, and incur additional costs. The issue is whether

to provide capacity to deal with peak demand or whether to operate with capacity sufficient for a good but not bumper harvest. The latter involves lower capital costs, but demand for storage and transport is inelastic during the autumn of a bumper harvest year such as 2011. In any case, it may be questioned whether developing storage capacities should be a matter of direct state investment. However, government may step-in to help business, e.g. by facilitating credit, or by providing other incentives such as amortisation rules, taxation, and easier construction permit procedures.

A more direct policy issue related to access to storage and transportation capacity is how the FCC operates. With its market intervention and prior claims on elevator space and transportation, it is crowding out private traders who are exposed to additional risks and costs. The crowding out effect of FCC activities most probably exaggerate the volatility of grain markets, which poses problems for small and medium-sized producers in particular. Agroholdings and large traders may not be affected as much because they have opportunities to store grain and release it at the most profitable moment.

Additional problems arise from the lack of access to ports. Russian ports are believed to prioritise domestic wheat exports over Kazakhstan's, while transport costs to more distant ports in Ukraine and Latvia are high. China applies arbitrary non-tariff barriers, such as requiring wheat to be imported in sacks and not in bulk. Difficulties for transit exist with Uzbekistan and are such that Kazakhstan has finished building a new southbound railway to Turkmenistan to link with Iran without passing through Uzbekistan. The resolution of some of these issues are within the government's remit and could be facilitated by WTO accession, especially if more of Kazakhstan's neighbours also accede, but others can only be resolved at the bilateral level.

### 3. Dairy chain<sup>4</sup>

Dairy is the second largest agricultural sub-sector in Kazakhstan, accounting for almost 16% of the value of agricultural output and almost one-third of its livestock output in 2008-10. During the recession in the 1990s, annual milk production dropped from around 5.5 million tonnes in 1990-92 to nearly 3 million tonnes in 1996-97. Kazakhstan became a substantial importer of dairy products and large-scale domestic production practically disappeared. Small household plots with between one and five cows became the principal milk producers.

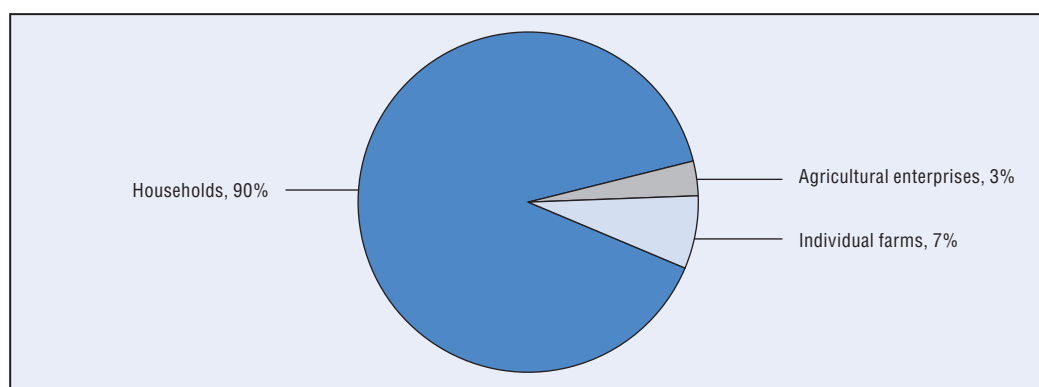
Household production was an important coping mechanism in the 1990s to alleviate economic hardship. With a few cows, a household could meet its own consumption needs and help relatives and friends. Sale of surplus milk and calves was a source of cash for other essential purchases. Cows also provided organic fertiliser and fuel. Indeed, with six or seven cows, a family had no need for coal through the harsh winters (van Engelen, 2011).

Milk production was revived after 2000 and by 2010 had recovered to the levels of the early 1990s. In 2010, around 60% of the country's total milk production originated from five oblasts: East Kazakhstan, Almaty oblast, South Kazakhstan, Kostanay, and North Kazakhstan. These regions fall into two distinct groups. Almaty oblast, East Kazakhstan and South Kazakhstan have traditionally been a mixed farming area, with livestock migration between the mountains in summer and the lowlands in winter. Crop and forage production in the valleys provide winter feeding for animals, while summer migration to the mountains in a paid herding system frees up land and labour in the lowlands for crop production and protects crops from livestock damage. Dual-purpose cattle are considered


to be the most appropriate for this livestock system. Kostanay and North Kazakhstan have the lowest shares of small-scale units. Large farms in these oblasts produce for local consumption, large-scale processing, and export to Russia. It is expected that animal health standards, through animal identification and registration and regular testing and vaccination can be achieved more easily and quickly in this area than in the other regions.

Overall, almost 90% of milk in Kazakhstan is produced by rural households (Figure 3.5). They usually have a range of animals (cattle, sheep, goats, horses, pigs, poultry) and depend on communal grazing with rotational herding duties, or a paid shepherd and purchased feed and fodder. Households are not qualified as legal entities and do not pay business taxes, nor are they eligible for production subsidies.

Figure 3.5. **Shares of different types of producers in total milk production, 2008-10 average**



Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932781539>

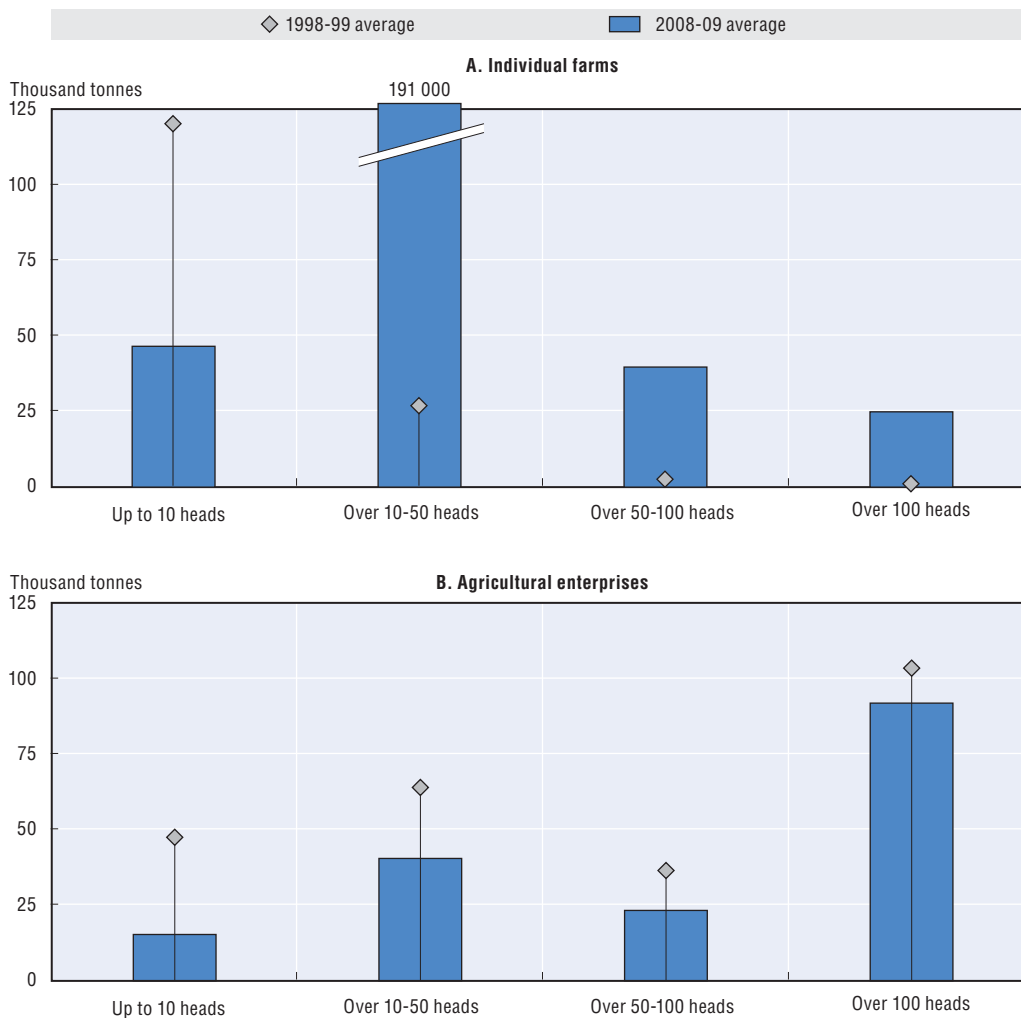
Individual farms account for around 7% of the overall milk output, with their production expanding rapidly since the late 1990s. The dominant share of milk is produced by units of between 10 and 50 heads of cattle (Figure 3.6). Only 3% of the overall milk output comes from agricultural enterprises, and their total production has fallen since the late 1990s. This decrease concerned agricultural enterprises of all sizes, but the largest units with over 100 heads continue to dominate.

### **Dairy supply chain**

Typical value chains in the dairy sector are illustrated in Figure 3.7. Individual farms usually use similar channels as household plots. Agricultural enterprises may have on-site processing plants and their produce goes straight to the wholesaler or retailer. Most agricultural enterprises do not have a wide distribution network and their product range is limited. Packaging is largely basic (plastic bags, simple cups with lids) and only a small number have leased packaging equipment.

The shortest dairy value chain is that for home consumption and sale to neighbours. Home dairy processing primarily occurs on household farms with up to four cows and produce up to 100 litres per day. Above these amounts, households encounter logistical problems in processing and marketing dairy products, and they sell their surplus milk to an intermediary or directly to a dairy with a collection scheme. There is great seasonal fluctuation and milk collection often stops in the winter because it is not profitable for the

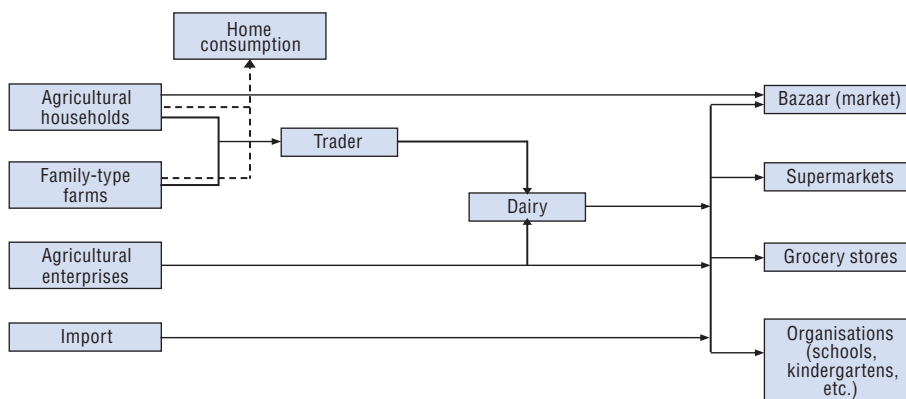
**Figure 3.6. Distribution of milk production in agricultural enterprises and individual farms by farm size, 1998-99 and 2008-09 averages**



Source: Estimates based on Statistics Agency of the Republic of Kazakhstan data.

StatLink <http://dx.doi.org/10.1787/888932781558>

**Figure 3.7. Dairy value chains**



Source: ACEPAS, 2012.

processor. This obliges farmers to process and market their entire milk production. However, winter milk output in the household sector is low owing to seasonal breeding and poorer winter feeding conditions.

A slightly longer value chain runs from home processors converting their milk into dairy products for sale to a circle of steady clients, usually family and friends in nearby towns. This production system is highly seasonal, running from February-March to September-October. There may also be some sales of stored butter during the winter months to maintain cash flow. This category of household transports the milk over longer distances than those selling within their village.

A small number of individual dairy farms process their milk and sell it daily at bazaars in larger cities where meat, fruit, vegetables and dairy products are sold. According to the 2007 agricultural census, there was a total of 17 mini-dairy processing units in individual farms. The need to produce sufficient milk for customers every day forces this group to feed animals properly and spread calving throughout the year to ensure steady milk production. In general, these farmers invest more in their cattle and have better management skills and higher production levels than the home consumption and home processing categories.

Both households and small- or medium-sized individual farms are likely to keep calves for meat production, increasing their returns to labour. More specialised dairy farmers tend to sell the calves they do not need for herd replacement, and use milk for processing and selling. These producers feed their cows and organise production schedules to maximise milk output and sales. Milk replacer for calves is becoming more common in this sector, but its availability is erratic.

A longer dairy supply chain starts with milk producers and continues with milk processors. Between these two, intermediaries operate under contract with a dairy or as individual entrepreneurs. These small traders usually collect milk from agricultural households and sell it to a dairy or receive a small monthly rate plus commission, which depends on the quality and quantity of delivered milk. Some intermediaries have agreements to deliver liquid milk to a single dairy; others sell to different buyers depending on the price offered. The milk flow from household to a dairy can also take place without intermediaries. In this case, dairies purchase milk directly from producers. Agents of the processing units must go to the households to collect milk; with distances from households to a processing unit of 200-300 kilometres, this can involve substantial transportation costs.

When supplies of raw milk are scarce, dairy plants are likely to purchase milk that their competitors have refused for quality reasons. Dairies operate with generally poor-quality milk; the practice of attributing bonuses or penalties with respect to the quality of milk does not seem to be widespread. As noted, most large-scale dairy processors rely on a high percentage of recombined milk to satisfy their customers, especially in winter.

### **Milk processing**


In 2008, 256 milk-processing enterprises operated in Kazakhstan with a combined capacity of just over 2 million tonnes. They processed about 1.4 million tonnes of whole milk, i.e. operating at 70% of capacity. Milk capacity is regionally concentrated in Almaty oblast where the five largest enterprises accounted for over a quarter of the country's capacity, and in the three northern oblasts and the north-eastern oblast of Pavlodar (Table 3.7).

Table 3.7. **Number and capacity of milk processing plants, 2008**

Oblast	Number	Capacity, tonnes per year	Distribution by size		
			Over 15 000 tonnes	15 000-3 000 tonnes	Below 3 000 tonnes
Almaty	45	712 493	5	13	27
North Kazakhstan	29	213 217	3	14	12
Akmola	49	193 515	1	18	30
Kostanay	10	178 628	3	2	5
Pavlodar	20	158 100	2	4	14
South Kazakhstan	13	120 000	-	6	7
East Kazakhstan	17	106 006	1	7	9
Jambyl	14	99 000	2	4	8
Karaganda	15	89 422	-	4	11
Aktube	21	84 940	-	7	14
West Kazakhstan	4	32 693	1	1	2
Atyrau	6	19 220	-	2	4
Kyzylorda	8	8 939	-	1	7
Mangistau	5	8 680	-	2	3
<b>TOTAL</b>	<b>256</b>	<b>2 024 853</b>	<b>18</b>	<b>85</b>	<b>153</b>

-: Absolute zero.

Source: FAO, 2010a based on Statistics Agency of Kazakhstan data.

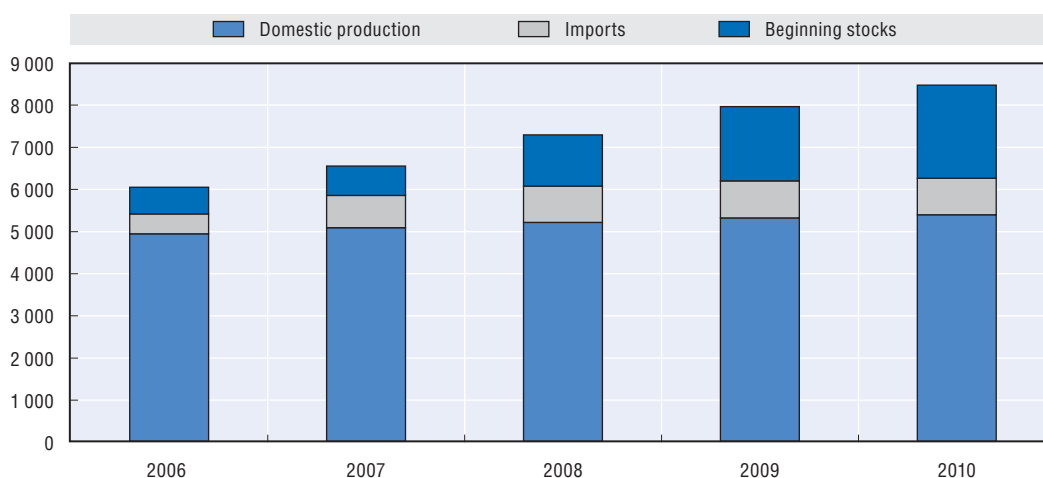
StatLink  <http://dx.doi.org/10.1787/888932782641>

A common processors' response to limited and uneven supply of domestic milk was to turn to imports.<sup>5</sup> A large share of dairy imports consists of milk powder from Belarus, the United States and Ukraine which is reconstituted into dairy products, e.g. almost all of the UHT milk produced in Kazakhstan is from imported milk powder. Reconstituted drinking milk, a rapidly growing share of the market, sold in 2009 between KZT 48 and KZT 61 per kilogramme. At these prices, processors reported that domestic milk was competitive as long as the price did not exceed KZT 50 per kilogramme (FAO, 2010a).

Imported dairy products account for about a quarter of the total amount of milk supply (Figure 3.8). Imports come overwhelmingly from CIS countries. Milk in the southern

Figure 3.8. **Sources of cow milk supply in Kazakhstan, 2006-10**

Tonnes, whole milk equivalent



Source: Statistics Agency of the Republic of Kazakhstan.

StatLink  <http://dx.doi.org/10.1787/888932781577>

part of the country is sourced from intermediaries, some of whom obtain it from the Kyrgyz Republic and Uzbekistan. Almaty dairies, always short of milk, buy milk year-round from Kyrgyz middlemen who bring milk from Chui and Issykkul across the border to Almaty. Officially, the Kyrgyz veterinary services authorise about 50 000 litres per day, but according to van Engelen (2011), citing a spokesperson for the Kyrgyz veterinary services, as much as 100 000 litres a day may be crossing the border with illegal traders.

Nearly all of the milk-processing enterprises originated in the Soviet era and most have outdated equipment. One reason for the slow modernisation of equipment is excess capacity, even though the enterprises' capacity can process only less than two-fifths of domestic milk production. This in turn reflects the problem of milk collection in a country where most milk is produced on 1.5 million household plots.

The state-run milk collection system from the Soviet period broke down during the 1990s. Several new owners of privatised milk-processing enterprises (e.g. FoodMaster and Adal) have developed milk collection points, establishing cooling tanks and organising the purchase and transport of milk. A few collection points have been set up by farmers who supplement the output of their own farm by organising the collection of milk from nearby farms. In some areas, collection points were established through projects with international organisations and the government has started to support programmes for introducing networks of milk collection points. Nevertheless, they are far too few to serve all dairy farmers or to meet the demand of milk processors.

Development of a wider milk collection system requires complementary investments. A unified cold chain system implies not only cooling tanks, but also cooling trucks, laboratory equipment and trained staff. Trained staff can help milk suppliers to improve animal care through better feeding and sanitary standards, thus improving the quality of milk delivered. Such a chain is best established by milk-processing enterprises, although the combination of low quality/high cost domestic milk and inexpensive imported milk powder undermines the profitability of such investment. Nevertheless, evidence from Eastern Europe is that processors are willing to provide assistance to suppliers and, once begun, wide coverage can be established within a few years (Box 3.1). The lessons for Kazakhstan are positive. Although Kazakhstan lags behind Eastern Europe in these developments, given that to date neither foreign investors nor supermarkets play a large role, the potential to improve the performance of the dairy industry and for this to benefit

#### **Box 3.1. Vertically co-ordinated supply chains in the dairy sectors of Eastern Europe**

The collapse of milk output with the end of central planning was a common feature in Eastern Europe and the former Soviet Union. By the mid-1990s, however, countries such as Poland, the Czech Republic, Hungary and Romania were experiencing major foreign investment in their food sectors, and this drove improvements in farm productivity and food quality by creating new supply chains.

In the early 2000s, Dries, Germenji, Noev and Swinnen conducted surveys in five countries to examine how the restructuring of dairy supply chains varied with income levels, the structure of dairy farming, and the speed of transition to a market-based economy. They paid particular attention to the impact of new vertical co-ordination systems on small farms, focusing on Poland, Bulgaria and Albania.<sup>1</sup>

### Box 3.1. Vertically co-ordinated supply chains in the dairy sectors of Eastern Europe (cont.)

After dairy processing facilities were privatised in the early 1990s, firms invested to improve their quality standards. However, processors faced problems of sourcing reliable supplies of suitable quality of milk, while farmers complained about disputes over delivery (e.g. measurement of quality) and delays in payment. A common reaction among farmers was to sell their milk directly to consumers in local markets, thereby shortening the supply chain.

Processors addressed the supply constraints by becoming proactive in helping farmers to improve quality and develop cold supply chains. The contractual initiatives varied, but in many cases the processing companies provided their suppliers with technical and financial assistance for improved equipment. The common sequence began with input assistance (e.g. to obtain feed), and then to the processor providing loans and, at a later stage, bank loan guarantees. The Polish, Bulgarian and Albanian experiences illustrate this sequence and its relationship to income levels and speed of transition, with Poland leading, followed by Bulgaria and Albania which moved more slowly through these stages.

Specialist storage in the form of new collection centres or on-farm cooling tanks was especially important and widely adopted after vertical co-ordination was introduced. For example, in Poland, by 2001, 76% of surveyed farms, which were mostly small (21% had fewer than 5 cows, 27% had 5-9, 36% 10-19 and only 12% had 20 or more cows), had made investments after vertical co-ordination and over half had used loans for on-farm cooling tanks. The market share of the highest quality milk increased from less than 30% in 1996 to 80% in 2001. The actual involvement of small farms in vertically co-ordinated supply chains has been much greater than would be expected from predictions about minimum economic scale for dairy farms or from processors' purported wish to deal with few suppliers.<sup>2</sup>

Foreign investors played an important role in initiating institutional innovation in Eastern Europe, but convergence by domestic firms was rapid. In Poland, the large gap between the behaviour of foreign and domestic milk processors in the 1990s had largely disappeared by 2001. In Slovakia, foreign investors came after 1999, but the subsequent path was similar to Poland's. In Bulgaria and Albania, foreign investment began after 2002, and the surveys were undertaken too early to identify the consequences.

Supermarkets also played an important role in all of the surveyed countries. Processing companies signed contracts with supermarkets, which imposed quality demands but also opened up national markets which allowed greater specialisation by processors. The supermarket impact has been stronger in Russia, which has not been influenced by the impact of EU standards, suggesting that both public and private pressures can drive quality upgrading.

The process does not always go smoothly, with many cases of farmers breaching contracts after they have received assistance from the processor. There is also the concern of processors obtaining and then abusing monopsony power. Such problems have, however, been moderated by competition as processors compete for reliable suppliers of quality milk and such suppliers choose among them as contracts come up for renewal. Once cold chains are established, local monopsonies become less important.

1. Between 2001 and 2005, Dries et al. first conducted semi-structured interviews with processing companies, and then surveyed dairy farms. The average dairy farm had 1.6 cows in Albania, two in Bulgaria and 11 in Poland. The other two countries surveyed were characterised by large corporate dairy farms (Slovakia), and a mix of household and large farms (Russia).
2. Dries et al. give the example of the Dutch firm, Friesland, which entered the Romanian market in 2000 and by 2003 was sourcing milk from 40 000 farms.

Source: Dries et al., 2008.



small producers seems clear. The message from Poland, Bulgaria, Romania and elsewhere is that once the process starts, the development of vertically co-ordinated supply chains can be rapid.

Based on the FAO study, Table 3.8 presents the costs to process pasteurised milk for wholesale or retail customers at six dairies. The main cost item is the price of raw milk, which explains the lower costs for the integrated farms and dairies (i.e. the two small dairies and the medium-sized dairy in Akmola oblast). A major problem, especially for the large dairies, is their low capacity utilisation rate to the extent that one of the small dairies processed more milk than either of the medium-sized dairies and had a higher capacity utilisation than the two large dairies, whose capacity was more than three times as big.

Table 3.8. **Cost of processing pasteurised milk in six dairies,<sup>1</sup> 2008**  
KZT per kilogramme


	Small dairy		Medium-sized dairy		Large dairy	
	Akmola	North Kaz	Almaty	Akmola	North Kaz	East Kaz
Milk processed, tonnes	5 250	1 570	2 525	1 800	9 400	15 440
Processing costs:	57.0	51.5	77.5	52.9	69.7	66.0
Of which cost of raw milk	51.7	41.0	53.0	36.2	47.0	42.0
Marketing and administration	2.1	1.2	7.2	5.7	8.4	14.2
Depreciation	0.4	0.8	0.8	0.3	1.7	2.1
Taxes	-	3.5	3.5	3.4	1.8	2.4
Interest on credit	-	0.4	0.4	-	-	4.8
<b>Total costs</b>	<b>59.5</b>	<b>57.4</b>	<b>89.4</b>	<b>62.3</b>	<b>81.6</b>	<b>89.5</b>
<b>Price ex dairy</b>	<b>85.0</b>	<b>90.0</b>	<b>102.0</b>	<b>90.0</b>	<b>98.0</b>	<b>105.0</b>
VAT (12%)	9.1	9.6	10.9	9.6	10.5	11.3
<b>Gross profit</b>	<b>16.4</b>	<b>23</b>	<b>1.7</b>	<b>18.1</b>	<b>5.9</b>	<b>4.3</b>
Tax on profit	3.3	4.6	0.3	3.6	1.2	0.9
Interest concessions	-	0.1	0.1	-	-	-
Tax relief	6.4	6.8	7.7	6.8	7.4	7.9
Net profit without subsidy	13.1	18.4	1.4	14.5	4.7	3.4
<b>Net profit</b>	<b>19.5</b>	<b>25.3</b>	<b>9.2</b>	<b>21.3</b>	<b>12.1</b>	<b>11.3</b>

-: Absolute zero.

1. Cost of processing 1 kilogramme of raw milk into pasteurised packaged milk with 3.2% fat content. The two small dairies are integrated with farms, the large dairies process milk collected on-farm and from milk collection centres.

Price ex farm includes VAT; Gross profit equals price ex farm minus total costs and VAT; Net profit without subsidy is Gross profit minus tax on profits; Net profit with subsidy is Gross profit minus tax on profits, plus subsidies and tax relief.

Source: FAO, 2010a.

StatLink  <http://dx.doi.org/10.1787/888932782660>

For the larger dairies to use technology advantages, they need to be able to increase their raw milk supplies, preferably by reaching out to farmers in more remote areas where the price of milk is lower. If they could do so, then the position of smaller dairies could become precarious because these cannot spend the same amounts on marketing as the larger dairies. This process has begun in some regions, e.g. 11 dairies belonged to the Karaganda Milk Producers' Association in 2003, but only five remained in 2011 (van Engelen, 2011).<sup>6</sup> One issue may be that the fixed costs of introducing collection points and cooling facilities may exclude small farms from the supply chain. The empirical evidence

from Eastern Europe, however, suggests that while processors express a preference to deal with larger suppliers, they are willing to contract with small farms of two-five cows.<sup>7</sup>

To summarise, most milk in Kazakhstan is consumed locally. Less than two-fifths of milk production is processed through dairies, primarily due to the lack of a cold supply chain from the farm gate.<sup>8</sup> The absence of longer more modern supply chain is reinforced by the poor quality and seasonal variability of milk production. The atomised production and truncated supply chain reduce incentives for farmers to improve product quality, while the fixed costs of creating cold supply chains discourage processors and end-sellers from investing in order to improve deliveries to industrial dairies. Further developments will include a greater role for large dairy firms (including transnational companies) with well-known branded products and for supermarkets selling own brand products. These retail-driven supply chains will impose stricter quality controls at every step, from the farmer to the processor to final delivery at point of sale.<sup>9</sup>

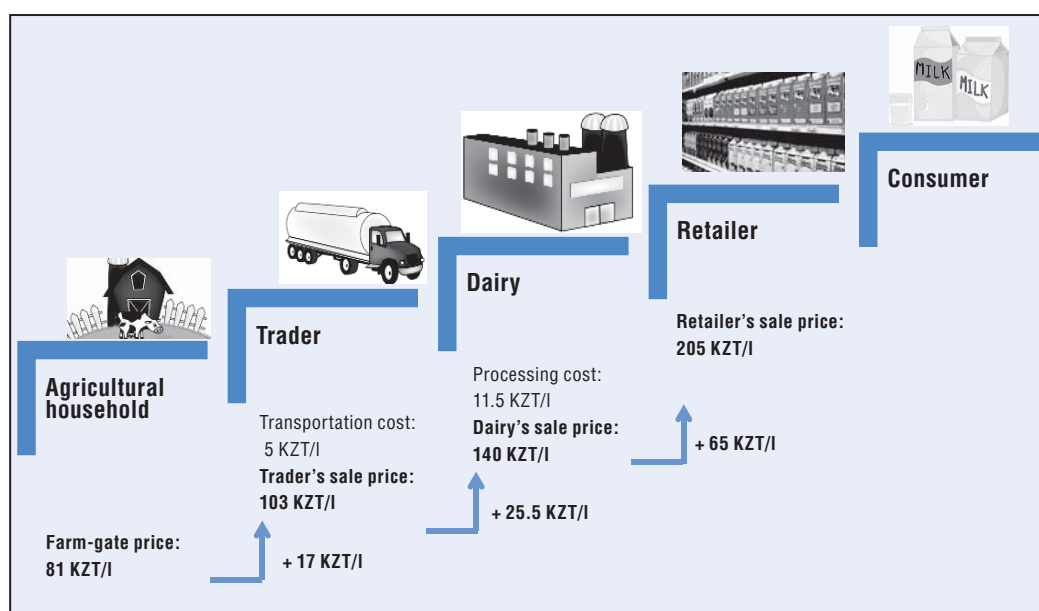
### Operation of the milk chain: Evidence from case studies<sup>10</sup>

#### Household – local dairy processor


The agricultural household taken as an example is located in Zerendinky district of Akmola oblast (Figure 3.9). The farmer keeps three cows and produces milk both for his own consumption and sale. He sells twenty litres per day directly to a local dairy. The dairy's agent collects the milk from the household's premises every morning.

There is no official contract between the farmer and dairy plant. The farmer and dairy plant agreed on the volume and frequency of delivery. By agreement, the farmer receives payment for milk at the end of the week, but more often he is paid at the end of the month. Sometimes he receives a premium price for higher fat content in the milk.

Figure 3.9. Milk value chain for a household producer, Akmola oblast



Source: ACEPAS 2012.

StatLink  <http://dx.doi.org/10.1787/888932781596>

The household producer from this case study strongly depends on feeds he can buy locally. Due to the drought in 2010, the price of barley that year soared, but then fell in 2011. In 2010, the producer received KZT 40-45 per tonne of milk supplied, and due to the low profitability of selling milk he decided to make own butter and store it. Whole milk prices are subject to seasonal variations, and in 2011/12 the farmer received a high winter price of KZT 81 per tonne. Maximum farm gate prices are observed from November to March and decrease from April to September due to mass production of milk. A collector takes milk from neighbouring producers and sells it to the nearest dairy in Akmola oblast at the price of KZT 103 per tonne; the average price of a one-litre Tetra Pak is around KZT 205. Some veterinary services are provided to the producer for free, in particular tests for particularly dangerous diseases, which are done three times a year. However, the producer normally pays a fee of KZT 200-500 for emergency calls by a veterinarian. He also pays KZT 500 per cow to a shepherd during the grazing period.

#### ***Village milk collector – local processor***

This and the next two case studies are from Pavlodar oblast. The village dairy collector is an individual entrepreneur who buys milk from 70-120 households in the village once or twice a day depending on the season. In summer, the trader collects about 2 tonnes of milk per day from households and 400-500 litres of milk per day from his own farm. He delivers the milk to the local processing plant every day; his contract with the plant is for milk delivery only.

The collector uses a horse-drawn vehicle with cisterns for milk collection. To store milk, he has two cooling tanks that hold 2 000 and 800 litres respectively. All equipment and vehicles were bought at his own expense because he does not want to rely on banks or government leasing programmes. The processing plant gives loans at a zero interest rate and offers cooling tanks for free, but the interviewee prefers to have his own cooling tanks.

The processing plant sets milk prices every month. During the winter of 2011/12, the plant bought milk for KZT 51-52 per litre, KZT 2-3 higher than at city processing plants (75 km from the village). The milk price was KZT 35-40 per litre during the summer period. The collector informs households from whom he collects milk for the month on the milk price. The volume of collected milk taken from each household is registered and the collector pays them twice a month after the processing plant has paid him. If the producers (households) prefer, they may choose to receive in-kind payment, such as fodder from the collector (he has a small farm), or dairy products (cheese, sour cream, or butter) from the processing plant.

Milk quality is determined at the processing plant upon delivery. The processing plant has its own laboratory and before acceptance the milk is tested for fat, density, acidity and bacterial contamination. Testing takes ten minutes. The milk price does not depend on the quality – the main requirement is that the milk must be fresh. The laboratory testing is necessary only to determine the milk processing parameters. This process was to change as of the summer of 2012 when the plant would set milk prices according to quality standards, including fat and density.


The collector's expenses to deliver milk to the local processing plant amount to slightly over 1% of his total costs (Table 3.9). He pays other producers KZT 47 per litre and his costs amount to about KZT 0.6 per litre. At the processing plant, quality testing is free for the trader. On the collector's sale price of KZT 51.5 per litre, his profit is KZT 3.9 (7.6%).

Table 3.9. **Costs and gross margins of milk collectors, 2012**

	Village dairy collector – Local milk processor		Individual farmer – City milk processor		Village collectors – Local cheese processor	
	Per litre, KZT	Per monthly volume, KZT	Per litre, KZT	Per monthly volume, KZT	Per litre, KZT	Per monthly volume, KZT
Monthly volume of collected milk, tonnes	x	6 000	x	300 000	x	360 000
<b>Total expenses</b>	<b>47.60</b>	<b>285 600</b>	<b>45.80</b>	<b>13 740 000</b>	<b>47.00</b>	<b>16 920 000</b>
Payment to milk producers	47.00	282 000	45.00	13 500 000	45.00	16 200 000
Other costs:	0.60	3 600	0.80	240 000	1.60	576 000
Collection and cooling	..	..	0.08	24 000	0.08	28 800
Transportation	..	..	0.57	171 000	0.56	201 600
Milk quality certification from the local veterinary laboratory	..	..	0.15	45 000	0.16	57 600
Miscellaneous	..	..	..	..	0.8	288 000
<i>Other costs in % of total expenses</i>	x	1.3	x	1.7	x	3.4
<b>Price received from processor</b>	<b>51.50</b>	<b>309 000</b>	<b>49.00</b>	<b>14 700 000</b>	<b>51.00</b>	<b>18 360 000</b>
Gross margin	3.90	23 400	3.20	960 000	4.00	1 440 000
<i>Gross margin in % of total expenses</i>	x	7.6	x	6.5	x	7.8

..: Not available; x: Not applicable.

Source: Interviews with milk collectors.

StatLink  <http://dx.doi.org/10.1787/888932782679>

When asked what impedes households from producing more milk to sell, the collector indicated that milk producers in the village are usually people whose main work is in other areas, such as hospital, school, etc., or elderly people who cannot look after many cows. Keeping livestock requires much time and effort, so households prefer to have one to three cows to provide themselves with fresh milk and dairy products (many of them produce sour cream and cottage cheese at home), and they sell only the surplus. However, the collector noted stable growth in the number of livestock in the region during the last three years. As for the dairy collector, the impediment to marketing more milk was his age (65 years). If he were younger, he could collect milk from nearby villages (e.g. within 30-40 kilometres). Collecting milk and selling it to the processing plant in the same village involve no significant costs between the household gate and the processing plant. The only way the collector's costs could be reduced would be if the availability of fodder for the horse he uses to collect milk was increased in the region.

#### **Individual farmer – city dairy**

The farmer in this case has his own herd of about 20-30 cows that produces 400-600 litres of milk daily. He collects milk in his village as well as in two or three villages located on the way to the city. Consequently, the farmer can market his own and the collected milk to the city milk plant directly or he can sell his milk to intermediary buyers. He usually delivers the milk by himself.

Milk prices are set by the dairy every month. The delivered milk must meet quality standards based on fat, density, acidity, and temperature. Based on these parameters, the price is differentiated by quality grades, with higher grades commanding 2-4% price premium. Milk is accepted after a quick analysis (about 15 minutes) at the plant's laboratory. The farmer can call the processing plant to find out the price for each quality grade, but effectively he supplies all the available milk.

The costs to deliver 300 000 tonnes of milk per month are KZT 45.8 per litre (Table 3.9). The processor paid KZT 49 litre for Grade 1 milk. The main cost item between the farm gate and the processing plant is transportation, but it is insignificant, leaving the farmer with a 6.5% profit. Processing costs are KZT 16 per litre, the dairy's sale price KZT 85, and the retail price is KZT 105.

The interviewee indicated that the main impediment to buying more milk from farmers was the lack of raw milk available for purchase. For the farmers, the main obstacle to increase the number of cattle is the lack of fodder and, consequently, high fodder price. Animal husbandry also takes much time and effort, although farmers try to increase milk volume by buying dairy breeding cows or through artificial insemination with the sperm of breeding bulls.

### ***Cheese processor***

The last case study involves a cheese factory located in the Uspenski district of Pavlodar oblast. The factory uses only raw milk to produce cheese, so it depends totally on raw milk suppliers. The main suppliers are households and individual farms, located within 50-70 kilometres. The plant also has its own herd with 200 cows that provide about one-fifth of the milk processed.

The factory does not collect raw milk from producers as there are many independent collectors (who also produce milk) who do it every day. Some independent collectors supplying large quantities of milk have a formal contract with the factory.<sup>11</sup> The factory offers milk coolers to collectors for free, and equips transport vehicles at very low rates. The collectors are responsible for the maintenance of the rented equipment and transport. The factory sends its milk tanker vehicle to take about twelve tonnes of milk per day from the local collectors who have collected milk from households. Express quality testing is made at the local collectors' places with laboratory equipment transported by the tanker. Local collectors are paid once a month and earn a 7.5% profit (Table 3.9).

The factory supplies its own store in the city with fresh dairy products. According to the processor, the retail market differentiates between dairy products produced from fresh raw milk and those from reconstituted milk. People with high incomes can afford to buy dairy products made from fresh raw milk and the demand for such products can be two to three times higher than the price of the same products produced from reconstituted milk. The processor's expansion is constrained by the supply of fresh milk. As the factory works with fresh raw milk, it is 100% loaded in summer and has two to three months downtime from December to February. The factory is also concerned about the quality of milk collected from households. Competition from Belorussia, Ukraine and Kyrgyzstan, where dairy products are made from reconstituted milk and exported to Kazakhstan at low cost, is also a deterrent to increasing output.

When asked what impedes farmers to produce and market more milk, the processor pointed to high fodder prices. Sometimes the factory will sell fodder and coal to farms at a low cost. Farmers are also reluctant to increase the number of cattle due to unfavourable epizootic conditions; they are concerned that if a disease occurs, the entire region will be closed for quarantine, milk prohibited for sale and all cattle in the region slaughtered.

### **Policy issues**

The crucial issue for Kazakhstan is to create supply chains that allow good quality products to be sold beyond the local market. At present, a large part of the fresh milk produced does not go through such chains, and in the absence of adequate supply channels, much milk deteriorates rapidly, worsening the already low quality of a product that is often milked under poor hygiene conditions and leaving milk processors with low capacity utilisation rates. The capacity issue is partially resolved by importing milk powder, which is reconstituted as UHT milk.

The establishment of modern links between processors and primary suppliers is driven by processors who in turn need to be under pressure of competition, consumer requirements and food safety regulations. This includes cooling tanks for farms with small numbers of cows, improved milk collection and transportation in chilling tankers, and quality and safety controls. The latter requires the establishment of rules and protocols, training and laboratory equipment, and specialised training and assistance to farmers so that they can upgrade from local supply to cold chain supply. Payment for milk differentiated by quality would provide milk producers an incentive to improve hygiene and technology. The policy issue here is to encourage processors to establish farm-to-dairy cold supply channels.

Downstream requirements are to provide assistance on improvements before the milk leaves the farm, e.g. cows' diet and husbandry, veterinary services, and milking techniques. Investment in veterinary education is important, and the epizootic situation in the country could be improved so that the likelihood of infection is reduced and, if there is a disease outbreak, the consequences are less severe.

If the goal is to replace the two-cow household plot as the dominant milk producer, the expansion of milk production on individual farms and larger households that effectively operate as individual farms should also be promoted. This may begin on a more modest scale and gradually expand if it is profitable to do so.

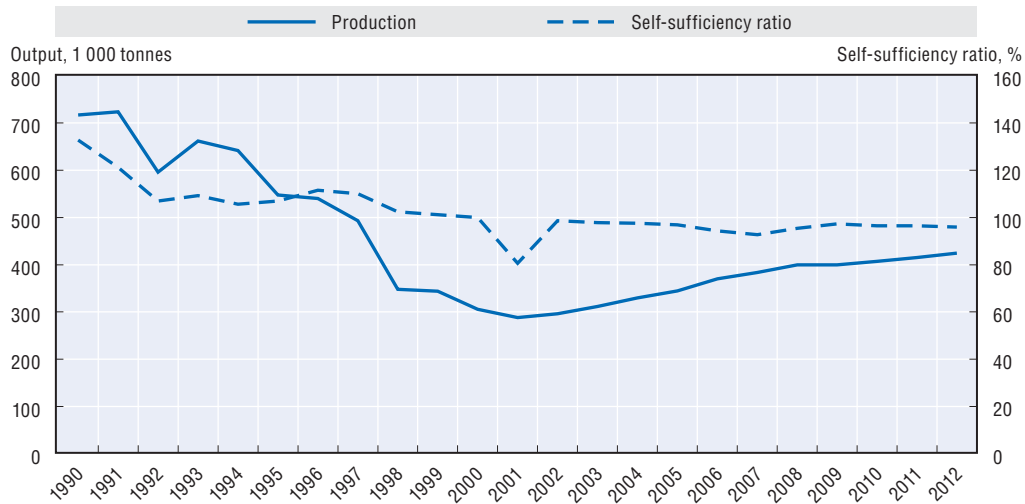
An appropriate policy approach is to facilitate increases in operations of small producers and trade within the sector and to address market failures. Pure market failures are only a small part of the above analysis, e.g. provision of information and of veterinary training and setting and enforcing quality standards are the salient public policy areas. Increases in operations can be facilitated by improving the market for land so that dairy-farming entrepreneurs can expand their acreage and other farmers can respond to increased demand for fodder crops, and by improving the general business environment so that milk-processing enterprises have sufficient incentive to invest in establishing cold chains from the farms. Internal trade can be facilitated by general purpose policies, such as improving rural roads to reduce the cost of collecting milk from dispersed farms.

## **4. Beef chain**

The beef sector is the third largest sector of Kazakhstan's agriculture, accounting for over 10% of the value of agricultural output and almost a quarter of livestock output in 2008-10. Beef production was more than halved during the 1990s. It has been recovering since the early 2000s, but is still well below the early 1990s level (Figure 3.10). Kazakhstan has turned from a net exporter to a net importer of beef, but in contrast to the milk sector, imports play a minor role in beef supply, with the country's self-sufficiency ratio in beef at around 95% over the past two decades. Domestically-produced beef is sold mostly fresh or

chilled, as are small quantities delivered from Russia. Imports are mostly frozen beef from Argentina, Australia and Poland. Imported frozen beef is utilised by processing plants for sausage products and prepared foods, and is preferred due to its stable high quality and lower cost compared to fresh or chilled meat. Most recently, the development of the beef subsector and its export potential has become a government priority area.<sup>12</sup>

Figure 3.10. **Total beef production and self-sufficiency ratio,<sup>1</sup> 1990-2012**



1. Self-sufficiency ratio is the percentage of production to domestic consumption.

Source: USDA, 2012.

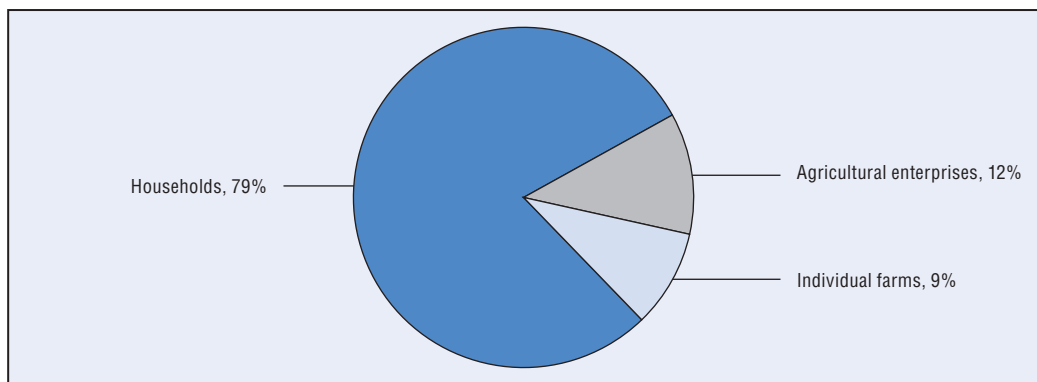
StatLink  <http://dx.doi.org/10.1787/888932781615>

The leading regions for beef production are Almaty, East Kazakhstan and South Kazakhstan, which have moderate climate and pasturelands for livestock breeding. In the north, livestock breeding is developing at a rapid pace and Kostanay oblast is the fourth largest beef producer.

The structure of beef production is heavily skewed towards small farms; nearly four-fifths of beef is produced on household plots (Figure 3.11). The average household has two to five heads of cattle and other livestock and poultry, and production is focused on satisfying their own needs for milk and dairy products. Selling livestock for slaughter usually occurs due to a need for cash or at the end of the pasture season. Inadequate conditions for cattle breeding, lack of balanced feeding from a nutritional perspective, limited veterinary services and insufficient knowledge, lack of financial resources, and an undeveloped infrastructure are common. Animals are typically of dual, milk and beef purpose. The productivity of beef cattle by households is low partly because there is a lack of purebred cattle and because they tend to give preference to dairy production. Regardless of the problems, households remain the principal source of beef.

Another group – individual farms – are usually small in scale and combine livestock production with cultivated crops. Units with over 10-50 heads account for the largest share of beef produced by this type of farm, which was also the most rapidly expanding group amongst individual farms (Figure 3.12). As for agricultural enterprises, their contribution to total beef production has been declining across all farm sizes, except the largest operations which kept over 100 heads, not least because many are part of large holdings that produce grain.

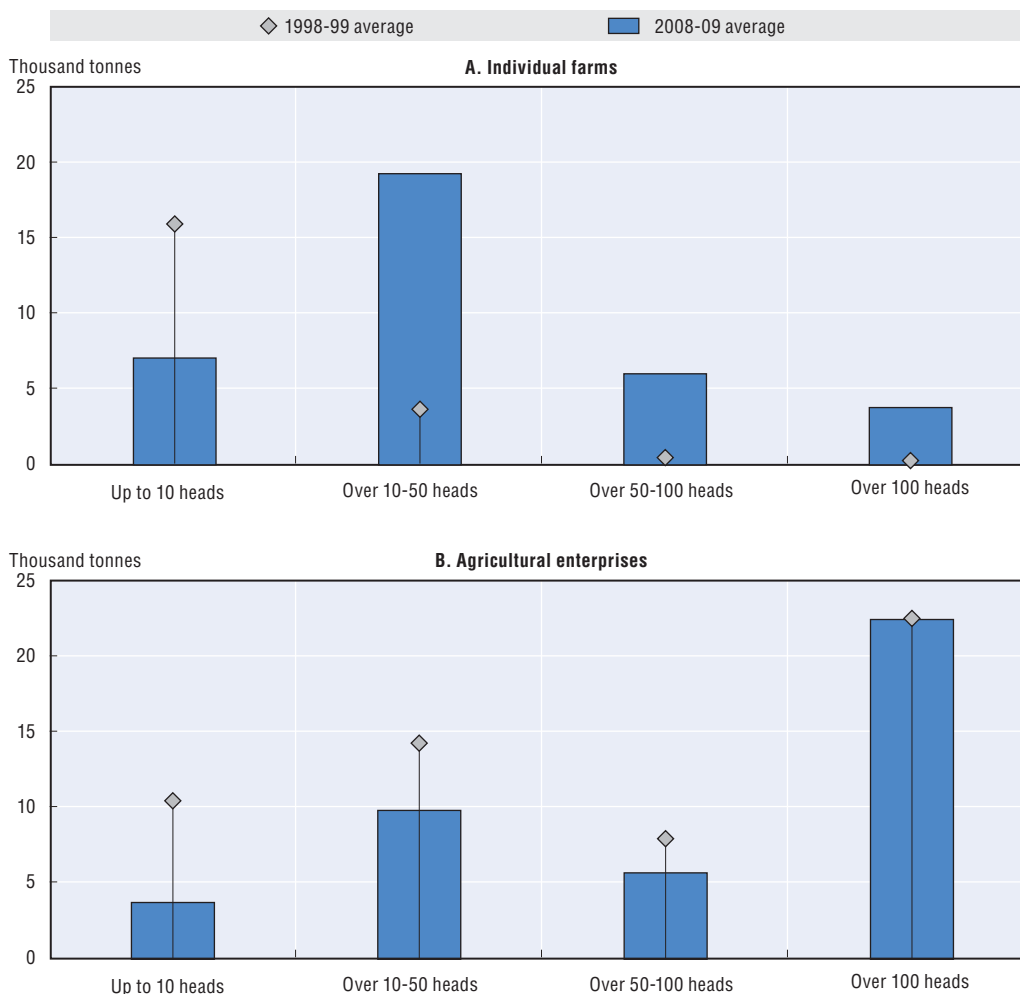
Figure 3.11. **Shares of different types of producers in total meat production, 2008-10 average**



Source: Statistics Agency of Republic of Kazakhstan.

StatLink <http://dx.doi.org/10.1787/888932781634>

Figure 3.12. **Distribution of beef production in agricultural enterprises and individual farms by farm size, 1998-99 and 2008-09 averages**



Source: Estimates based on Statistics Agency of the Republic of Kazakhstan data.

StatLink <http://dx.doi.org/10.1787/888932781653>



### **Beef supply chain**

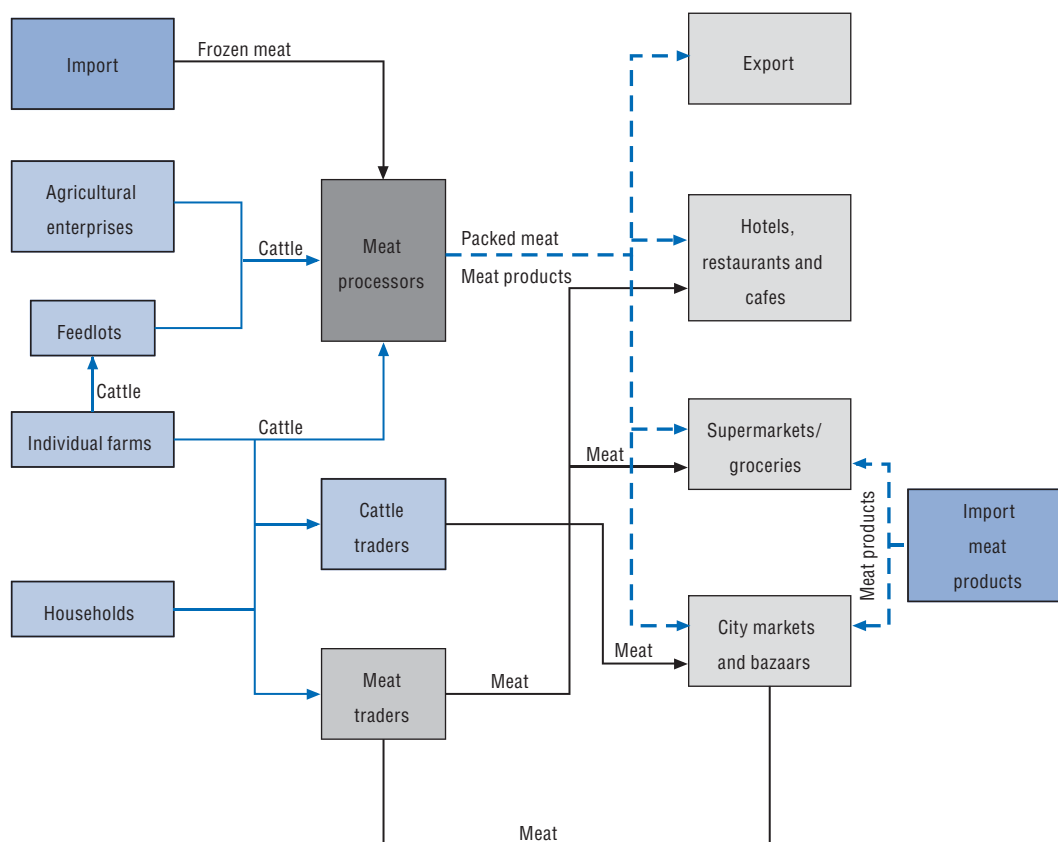
Livestock farms are generally located within 100-200 kilometres of cities, and most of the marketable beef is sold to the cities where markets and processing enterprises are concentrated. From the Soviet era, Kazakhstan inherited mega-plants for processing canned and frozen products for export, and primitive slaughter units supplying local consumers (rural families and their neighbours, or for sale in bazaars) with fresh meat; the former have disappeared, while the latter are the basis of the informal sector. The class A units are modern slaughterhouses supplying high quality carcasses to processors and factories producing packed fresh meat and sausages for retailers. A range of small- and medium-sized market-oriented enterprises provide slaughter facilities and supply bazaars and shops with fresh meat or provide sausage and other meat products. These enterprises have problems meeting international veterinary and hygiene standards, and most sausages have a shelf life of less than a week (FAO, 2010b).

Several types of supply chains have emerged in today's beef market, distinguished by the quality of marketed meat (Figure 3.13). High-income urban consumers are more often concerned that the beef has passed through Class A slaughterhouses and factories with strict sanitary controls. More economical consumers may buy meat at a bazaar, where it is subject to veterinary inspection, but traders may also sell cheaper uninspected meat. There is also the possibility that lower quality uninspected meat, either smuggled into the country or from local suppliers, may enter into the value chain at various points. There is anecdotal evidence that although officially the border between the Kyrgyz Republic and Kazakhstan is closed for livestock, large numbers of live animals pass into Kazakhstan either through the Chui River on hoof or across the border by truck.

Meat is primarily sold on city markets and local bazaars and supplied by intermediaries, which collect meat from households. This is typically a semi-formal value chain because prices are more attractive with a shorter value chain than those offered by processors. The animals may be slaughtered by the farmer himself and sold to a meat trader who will then sell it to a grocer or a restaurant. Cattle traders also buy live animals and organise slaughter. Individual farms sell cattle to feedlots and meat processing plants, and, like household producers, sell meat on the domestic market directly or through intermediaries.

Cattle traders purchase cattle from households and individual farms, slaughter them in the slaughterhouses or by themselves, and transport and sell meat on central markets in the cities. Cattle traders go round the villages and buy cattle on a daily basis collecting on average between three and five heads per trip. If there are slaughterhouses within the village, slaughter is carried out there. Although the law strictly prohibits home slaughter, most farmers do this given the absence of slaughterhouses or their remoteness. Violation of this law can result in a fine of KZT 7 000 per head. As distances to the city usually do not exceed 200 kilometres, transportation is by passenger car. To transport meat within the region, a veterinary certificate or a certificate issued by the laboratory at the slaughterhouses is necessary. Usually, meat is delivered to the central market early morning in order to conduct laboratory testing; meat is then sold by retailers that same day.

Large agricultural enterprises are engaged in cattle breeding on an industrial basis and usually have their own meat processing plants that carry out industrial slaughter,

Figure 3.13. **Principal supply chains for beef**

Source: ACEPAS, 2012.

processing and packaging of meat. Feedlots also operate as agricultural enterprises, fattening cattle for sale on domestic and foreign markets.

A range of meat processing plants of different sizes, types of products, technical equipment and other parameters operate in Kazakhstan. Large processing companies usually have their own brand that is widely known in the domestic market.

Meat processors purchase cattle from all agricultural entities, but have suffered from the shortage of cattle due to the short value chains as described above, and most meat processing plants and sausage producers purchase imported frozen meat. Traders and processors may face difficulties in cattle procurement; in 2010, for example, due to the drought and consequent scarcity of feed, household farms had to slaughter cattle during the winter, and in 2011 a deficit of livestock appeared and prices rose. The demand for livestock has increased because of the feedlots that are already built and that are under construction. The prices were also affected by the introduction of a Tariff Rate Quota on meat imported into the Customs Union area by suppliers outside the CIS (Section 2.3 in Chapter 2).

Meat processors produce a wide range of products and market these through a variety of outlets, with different advantages and disadvantages. Establishing own retail chains improves profitability, but requires investments. Supermarkets dictate the terms and the supplier often has to bear the cost of placing the goods in supermarkets; high sales costs (including advertising and administrative costs) and delays in payment to suppliers also

reduce returns. Meat products are also distributed to central markets or bazaars, small grocers, government agencies, hotels, and restaurants. Meat is also supplied to city markets through intermediaries (cattle traders), and each market is equipped with a laboratory to ensure the safety of products. Supermarkets, hotels, restaurants and cafes operate under contracts with meat producers and meat suppliers, or purchase meat on the market.

The programme to develop the export potential of beef implies expanding output and creating a new chain: farm – feedlot – processing plant – export market. Chilled beef is considered to be a product for export and the large Russian cities are viewed as the main market for Kazakhstan meat. Both high-income consumers who buy premium meat in retail chains and economy consumers comprising more than 90% of those who buy meat at central city markets, are targeted.

### ***Operation of the beef chain: Evidence from the case studies***

This section presents case studies on value chains for beef which were carried out for this Review in 2011 and 2012 around Astana city and which demonstrate the prevalence of short chains also in this food segment (ACEPAS, 2012).

#### ***Cattle producers – meat collectors***

The major meat suppliers to the city market in Astana are intermediaries who collect fresh meat from farms. Table 3.10 reports the value formation from the farm gate to a meat trader and to a central market and compares it with a longer supply chain studied by the FAO in 2009.<sup>13</sup> In the first case (December 2011), a meat trader collects on average between three and five heads of cattle per trip; the price of the cattle at the household farm is KZT 140 000 per head, which is equivalent to KZT 830 per kg of carcass weight. The costs of slaughtering and primary dressing at a village slaughterhouse, which are usually incurred by the trader, are about KZT 2 000 per head (KZT 12 per kg). Despite the awareness of penalties, it is not uncommon that animals are killed not in slaughterhouses. Transportation costs to the city market (bazaar), depending on the distance, weather and season, are on average just over KZT 20 per kilogramme. The trader also pays an entry fee to the market (KZT 500, or KZT 3 per kg) and the cost of laboratory testing (KZT 12 per kg). He may have other costs, e.g. obtaining a veterinary certificate (KZT 2 000). If the meat is sold without such a certificate, the trader can be fined KZT 13 000 per head. The price received by the trader, including his margin, reaches KZT 1 020 per kg. As the trader is an individual entrepreneur, he is exempt from paying VAT. Adding a 10% margin for the bazaar retailer who is also typically an individual entrepreneur, the meat will sell at KZT 1 126 per kg.

Another meat collector Astana oblast reported similar prices and costs in an interview undertaken in July 2012. He collects meat from 4-6 households daily and pays cash from own sources; he rarely takes credit to pay the households for purchased meat. Price information is usually obtained at the city market or from friends; the trader also mentioned the availability of daily online price information by KazAgroMarketing. Most of the meat is sold at the bazaar, with any unsold meat going to processing plant. The latter does not provide any facilities (e.g. car rental), or money advances to the trader. When asked what prevents households to produce and sell more meat, the trader responded that generally for smaller livestock keepers this is a self-subsistence activity and they are not oriented at improving cattle productivity or herd expansion. However, some larger

households may be interested in expansion and become more commercial, but they may face administrative barriers such as availability of land required for creation of family farm. When asked what impedes traders to collect more meat, he indicated a deficit of offer as the main constraint. Another obstacle is the insufficient slaughter capacities. Slaughter is allowed only in special slaughterhouses and slaughter sites. However in some areas slaughterhouses are located at a far distance from farmers and markets, thus facing in high transportation costs. The result is that cattle are often slaughtered without the use of slaughterhouses with the risk of being fined.

Table 3.10. **Short and long value chains for beef meat<sup>1</sup>**

Short chain: Meat on bones producer – trader – central market	December 2011		July 2012		Long chain: Deboned meat producer – trader – meat packer – supermarket	December 2009 (FAO, 2010)	
	KZT per kg	In % of retail price (%)	KZT per kg	In % of retail price (%)		KZT per kg	In % of retail price (%)
<b>Farm gate price</b>	<b>830</b>	<b>74</b>	<b>860</b>	<b>80</b>	<b>Farm gate price</b>	<b>423</b>	<b>55</b>
Transport to slaughter	0	0	0	0	Trader or management margin	13	2
Slaughter cost	12	1	12	1	Transport to slaughter	10	2
					Slaughter costs (including inspection)	66	10
					By-products	-55	..
Transportation cost to central market	24	2	14	1	Slaughterhouse profit (20% of costs)	13	2
Entry fee to central market	3	0	3	0			
Laboratory testing	12	1	11	1			
Trader's margin	139	12	150	14			
<b>Wholesale price (price received by trader)</b>	<b>1 020</b>	<b>91</b>	<b>1 050</b>	<b>98</b>	<b>Wholesale price</b>	<b>470</b>	<b>71</b>
					Cold store hire and transport	12	2
					Processor/packer purchase price	482	73
					Processing costs (deboning)	24	4
					Delivery and marketing costs	4	1
					Processor margin	6	1
					Retailer purchase price	516	78
Retailer margin	106	9	106	10	Retailer margin	78	12
VAT	0	0	0	0	VAT	71	11
<b>Central market retail price</b>	<b>1 126</b>	<b>100</b>	<b>1 075</b>	<b>100</b>	<b>Supermarket retail price</b>	<b>665</b>	<b>100</b>

...: Not available.

1. All values for 2009 and 2011 are expressed in carcass weight equivalent for comparative purposes.

Source: FAO, 2010b; interview with beef trader.

StatLink  <http://dx.doi.org/10.1787/888932782698>

An important factor explaining the persistence of short value chains is the poor domestic road network. Studies of price variations indicate that price dispersion within Kazakhstan is greater than across borders in Central Asia (Grafe et al., 2005). This is especially true of beef prices. In January 2006, in western Kazakhstan beef cost KZT 280 per kg in Uralsk and KZT 491 in Aktau. Even within the northern part of the country, the price varied from KZT 293 in Pavlodar to KZT 375 in Astana. In July 2009, this range remained large, e.g. KZT 604 in Astana and KZT 435 in Kokshetau, even though the two cities are only 300 kilometres apart (FAO, 2010b). Such differences indicate that transactions costs of moving beef between cities were too high to permit profitable arbitrage. Transport costs would also be too high for intermediaries to collect carcasses and take them a few hundred kilometres to a large processing plant.

An individual farmer was also interviewed in July 2012. He sells meat to intermediaries or to private clients for own consumption and sees no significant difficulties in selling

meat as demand is high. His main concern is about production costs, especially the high cost of feeds. Thus, the larger individual farms seem to have similar short supply chains as the more numerous household producers. Another interviewee was an agricultural enterprise which operated as part of an agricultural holding with its own processing plant located nearby. All cattle produced were delivered directly to the plant for slaughter at almost no transport cost. The main impediment to increased production in the view of the agricultural enterprise was the lack of cattle for stock replenishment and the lack of qualified animal specialists.

### ***Meat processors and retailers***

In July 2012, two meat processors were interviewed. A processing plant in Akmola region has supply contracts with individual farms and agricultural enterprises, and imported meat is supplied through intermediaries; the interviewee would not provide cost data but commented that the main problem was inadequate meat supply and hence operation below capacity. There has been an attempt to provide incentives to cattle suppliers by offering a 30% advance payment, but this proved to be ineffective and was stopped. Imported meat is of higher quality, but imports have become more expensive due to introduction of TRQs, and importer companies to whom the quota is allocated have the power to dictate prices. Another processing plant located in Karaganda region purchases cattle only from local households and individual farms and does not use imported meat. The processor has responded proactively, buying from households and individual farms and collecting cattle in his own vehicles which carry 10-30 heads, but he also buys meat through intermediaries (as in the short supply chain above). However, he considers his cattle collection to be costly compared to a situation if bigger catchment areas and bigger lots could be developed, leading to lower per unit transportation costs. When asked what impedes producers to raise more cattle, both meat processors agreed that the causes were insufficient feed supply, administrative barriers to expand land use, and poor veterinary service.

Interviews with retailers indicated some desire for longer supply chains, but only limited quantities actually pass along such supply chains. The management of a city market responded that meat is supplied to the market by individual meat collectors. The majority of meat is sold fresh, while chilled meat is virtually absent. Supplies are stable, but the handicap is that they are of poor quality and unknown origin, with the high risk that meat has not gone through appropriate veterinary control prior to being delivered for sale. An important potential driver of change in beef supply chains could be modern retailers. An Astana supermarket manager reported that the store buys through contracts with large individual farms or agricultural enterprises. The supermarket sells only fresh and chilled, but no frozen, meat and caters to more affluent consumers who are concerned about provenance and quality. To date, however, such stores account for only a small part of meat sales and are found only in the main cities.

### ***Policy issues***

Policy efforts to boost production are unlikely to succeed without adequate attention to improving supply chains. Households and individual farms are the main meat producers and will remain as such for the foreseeable future. Greater incentives to producers to supply modern slaughterhouses rather than rely on short value chains supplying beef of uneven quality to local markets should come from industry and consumers demanding

better quality and safer standards. The government's role would be to put in place appropriate standards and to enforce them, while policy support would be most appropriately given to closing the knowledge gap by spreading technology, market and business knowledge amongst small producers and facilitating their access to finance.

A distinctive long-term pressure on the beef supply chain is to improve the minimum quality. As living standards increase and urbanisation continues, more domestic consumers will demand better health and hygiene standards in the longer value chain. Tolerance of opaque sourcing, undocumented slaughtering practices, and lack of cold stores attendant on beef sold at city markets and bazaars would diminish. Exports will have to show credible quality certification. The government can support such changes by legislation and, more importantly, by stricter enforcement of quality and health standards in order to achieve long-term development targets.

Given the geographical spread of cattle farms, it may be prudent to construct municipal abattoirs that provide slaughtering services for a fee rather than only concentrate on large state-of-the-art facilities. This was the approach in many western European countries until the 1970s because it facilitated meat inspection, while providing access for small-scale farmers who would otherwise be tempted to do their own slaughtering (FAO, 2010b). There is a case for public provision in areas poorly provided with abattoirs, although once established they may be open to privatisation.

Meat processing is best suited to private enterprises competing by product differentiation as well as on price. Investments in this activity should be privately driven. Apart from inspection on public health grounds, appropriate public policy is similar to that for all private activities: facilitating entry and exit, minimising administrative costs, and setting clear rules for doing business.

Better transport facilities would increase the catchment area of abattoirs and stimulate more intensive use of feedlots and best-practice processing plants. The priority for public investment is to improve rural roads. Private investment is not trivial: a modern long-distance meat truck with 20-22-tonne capacity costs EUR 160 000 and poor quality rural roads increase running costs. The contrast between such a transport facility and a cattle dealer picking up animals in a private car is stark.

The government has recently shifted large resources to a programme of livestock breeding with the objective to increase domestic meat production and exports. Large investments are foreseen in large-scale modern cattle breeding units, improvements of breeding stock, and increasing the provision of feedstuffs, including through better pasturelands. This programme largely focuses on the development of a large-scale commercial production. Its cost, however, should be compared to that of other policies.

Evidence from Western Europe and other formerly centrally planned economies suggests that large gains are possible when there are incentives for small livestock farmers to increase their size in response to market demand. This process can be facilitated by public policies that reduce the transactions costs of participating in longer supply chains. The evidence presented in this section indicates that in Kazakhstan such facilitating policies include public provision of information, regulation and veterinary services, improved local infrastructure such as rural roads, and possible public provision of municipal slaughterhouses in disadvantaged regions.

## 5. Conclusions

The varying market situations of wheat, beef and dairy farmers mean that different obstacles have been highlighted in the subsections of this chapter. However, some general conclusions may be drawn. A defining characteristic of most agricultural activity is its geographical dispersion. There is a role for public policy in improving transport infrastructure, especially rural roads, which is a critical first step in the supply chain of goods from farm to market. Kazakhstan has high human capital indicators for its level of development, but this chapter highlights the knowledge and skills bottlenecks, as well as the importance of disseminating specific knowledge and best practice, e.g. with respect to cold chains, business management and marketing. Encouragement of producer associations could be one institutional approach to advance in these areas. The spread of information and improvements in infrastructure could yield major benefits from integrating small-scale producers into longer supply chains.

A common feature of the case studies presented is the importance of reducing transactions costs either within existing supply chains (as for grain exports) or by lengthening existing supply chains (for milk and beef) to benefit producers, especially small ones, although it is often unclear how longer chains should be established. Direct state intervention is not necessarily the solution, and may even be counter-productive. What is needed is facilitating public policy. The experience of dairy farms in Eastern Europe provides examples of vertical integration to overcome market failures, e.g. dairies organising cold chains to individual farms. Public investment in the cold chain is not necessary, but private sector providers must have incentives to invest, access to capital, and trust in contract enforcement. Creating such an environment is complementary to the provision of more traditional public goods such as improved infrastructure.

The bottom-up concerns about transactions costs and policy promotion in creating an environment in which the rural sector becomes more integrated contrasts with the top-down emphasis on public investment of current agricultural policy. These, however, can be complementary. The encouragement of large enterprises and the introduction of capital-intensive techniques in livestock farming are not necessarily inconsistent with measures to integrate smallholdings into the broader agricultural economy. Under the present circumstances, the latter may be seen as a necessary step to promote rural development by a pro-poor strategy and should complement measures aimed at boosting output and export expansion with less emphasis placed on rural employment.

### Notes

1. For example, since 2000 wheat crop varied within the range of 9 million tonnes (in 2000/01) and 23 million tonnes (in 2011/12).
2. Building an elevator to store around 10 000 tonnes costs at least USD 3 million, and between USD 5 million and USD 10 million for a 20 000-tonne capacity elevator.
3. It later fell to USD 60-80 per tonne as evidence of a bumper crop became clearer.
4. This section focuses on the cow milk chain. Milk production from animals other than cows, such as horses and camels, is non-negligible in Kazakhstan.
5. To the extent that, for example, one of the interviewed milk processors located in the city of Astana operated exclusively on imported dry milk. Experiencing difficulties in raw milk supplies in the 1990s, which almost led the business to stop, the dairy shifted to dry milk imports and,

according to its manager, is at present successful. However, the reliance of dairies on dry milk imports falls the further away they are located from large urban and commercial centres.

6. The small dairies in Table 3.9 may not be fully representative. Nearly all of the small dairies have their origin on a former *kolkhoz*, and many became separate enterprises during the 1990s if the livestock were all killed or transferred to households. Faced with competition from larger dairies, village dairies with outdated equipment and limited distribution networks either closed down or focussed on specialty products that are less suited for large-scale production (e.g. *kumys* or *qurt*).
7. Dries et al. (2008), for example, suggest that while per unit transactions costs are lower with large suppliers, contract enforcement may be easier with small-scale farmers.
8. Kazakhstan's Technical Regulation on Requirements for the Safety of Milk and Dairy Products (2008) sets down minimum quality standards, similar to those in EU directives. The need for a cold supply chain is spelled out by the requirement that raw milk should be filtered and cooled to between 2 and 4 degrees Celsius within two hours of milking and can be stored by the producer at 2-4 degrees for no more than 24 hours, including transportation time for processing. This national regulation will be succeeded by a technical regulation of the Customs Union, which is currently under the discussion within the countries, and should be approved by all three countries.
9. Currently, most supermarkets in Kazakhstan sell milk on a commission basis and expect the dairy plant to send one of its own workers to pack the products in coolers, monitor expiry dates, and keep displays organised and clean.
10. This section is based on interviews carried out in January and March 2012 for this Review.
11. Usually the plant has individual-work contracts with farmers who have more than fifty head of cattle for milk supply. Every year the plant holds a lottery between the milk suppliers and provides the bonus lump sums according to the volumes of delivered milk per year.
12. According to the programme *Development of the Export Potential of Kazakhstan*, the construction of 60 feedlots with a capacity of 150 000 heads is planned. This programme will be implemented in almost all regions of Kazakhstan. Two feedlots currently function in West Kazakhstan and Kostanay oblasts, with a total capacity of 11 000 head of livestock. A feedlot in Akmola oblast for 5 000 head of stock and two breeding farms for 2 000 head of purebred breeding stock are planned.
13. Although based on data from only two years before the previous interview, comparison of price and cost levels is difficult due to the rapid increase in beef prices during these years.

## References

- ACEPAS (2012), "Transactions cost beyond the farm gate: Wheat, dairy and beef case", report submitted to the OECD.
- ADB (2006), *Central Asia: Increasing Gains from Trade through Regional Cooperation in Trade Policy, Transport, and Customs Transit*, Asian Development Bank, Manila.
- Amiti, M. and B. Javorcik (2008), "Trade costs and location of firms in China", *Journal of Development Economics* 85, 129-49.
- Brooks, J., ed. (2012), *Agricultural Policies for Poverty Reduction*, OECD, Paris.
- Cadot, O., C. Carrère and C. Grigoriou (2006), *Landlockedness, Infrastructure and Trade in Central Asia*, two volumes, World Bank, Washington, DC.
- Dries, L., E. Germenji, N. Noev and J. Swinnen (2009), "Farmers, vertical coordination, and the restructuring of dairy supply chains in Central and Eastern Europe", *World Development* 37(11), 1742-1758.
- FAO (2010a), *The Dairy Sub-Sector*, Highlights on four livestock subsectors in Kazakhstan, set of five booklets plus executive summary, Food and Agriculture Organisation of the United Nations, Rome.
- FAO (2010b), *The Meat Sub-Sector*, Highlights on four livestock subsectors in Kazakhstan, set of five booklets plus executive summary, Food and Agriculture Organisation of the United Nations, Rome.
- Grafe, Clemens, M. Raiser and T. Sakatsume (2005), "Beyond borders: Reconsidering regional trade in Central Asia", *EBRD Working Paper No. 95*, European Bank for Reconstruction and Development, London.
- Huang, J., S. Rozelle and M. Chang (2004), "Tracking distortions in agriculture: China and its accession to the World Trade Organisation", *World Bank Economic Review* 18(1), 59-84.



- Jacoby, H. and B. Minten (2009), "On measuring the benefit of lower transport costs", *Journal of Development Economics* 89(1), 28-38.
- Khandker S., Z. Bakht and G. Koolwal (2009), "The poverty impact of rural roads: Evidence from Bangladesh, economic development and cultural change", 57(4), 685-722.
- Menon, J., and P. Warr (2008), "Roads and poverty: A general equilibrium analysis for Lao PDR", in D. Brooks and J. Menon (eds.), *Infrastructure and Trade in Asia*, Edward Elgar, Cheltenham, UK, pp. 115-142.
- Minten, B., L. Randrianarison and J. Swinnen (2009), "Global retail chains and poor farmers: Evidence from Madagascar", *World Development* 37(11), 1728-1741.
- Petrick, M., J. Wandel and K. Karsten (2011), "Farm restructuring and agricultural recovery in Kazakhstan's grain region: An update", *IAMO Discussion Papers* 137, Leibniz Institute of Agricultural Development in Central and Eastern Europe, Halle.
- Pinstrup-Andersen, P. and S. Shimokawa (2007), "Rural infrastructure and agricultural development", in F. Bourguignon and B. Pleskovic (eds.), *Rethinking Infrastructure for Development*, World Bank, Washington, DC.
- Poncet, S. (2003), "Measuring Chinese domestic and international Integration", *China Economic Review* 14(1), 1-21.
- Shepherd, B. and J.S. Wilson (2007), "Trade, infrastructure, and roadways in Europe and Central Asia: New empirical evidence", *Journal of Economic Integration* 22(4), 723-47.
- Strieve, L. (2010), Distribution channels and organisation of regional agricultural markets, Power point presentation at the JRC EU-Commission Workshop, Kiev, Ukraine, October 2010.
- United Nations Development Programme (2005), *Central Asia Human Development Report, Bringing Down Barriers: Regional Cooperation for Human Development and Human Society*, UNDP, Bratislava.
- USDA (2012), *Production, Supply and Distribution Online Database*, [www.fas.usda.gov/psdonline/](http://www.fas.usda.gov/psdonline/).
- Van Engelen, A. (2011), "Dairy development in Kazakhstan", *Dairy Reports*, Food and Agricultural Organisation of the United Nations, Rome.
- World Bank (1992), "Kazakhstan, country economic memorandum", Report No. 10976-KK, vol. I and II, November, World Bank, Washington, DC.

## ANNEX 3.A

### *Case studies of grain producers*

The evidence and case studies presented in this Annex are drawn from the northern wheat region. Five farmers were interviewed. Four were medium-sized producers with wheat plantings between 1 500 and 3 000 hectares, and one was a large producer with a wheat area of 25 000 hectares. There is a selection bias in so far as the interviewees were dynamic producers willing to experiment, seeking to increase their scale of operations, and happy to collaborate in an exercise that might improve their policy environment. The information presented here is mainly based on the 2011 harvest, a record crop year presenting its own special problems, although some interviewees referred to the relatively poor crop year of 2010, and the better harvest of 2009. There was also a lingering impact of the government's intervention in 2008, when wheat exports were banned for five months in order to keep domestic bread prices down as world wheat prices peaked. Policy uncertainty remains a major concern for farmers.

The large producer represented a joint venture with foreign investors. The operation is comprised of two farms located at a distance of 200 km and having a total of 25 000 hectares, of which 15 000 hectares were sown. One farm devoted equal acreage to wheat, barley and oats, while the other had 40% of the acreage in wheat, 30% in rapeseed, 20% in linseed, and a small percentage in sunflowers. The land of both farms is leased on a long-term basis, together with the pre-existing machinery and equipment. The EU investors imported modern equipment and built their own storage facilities. In 2011, when industry elevator capacity was in shortage, the producer stored 80% of the crop in their own warehouses.

An individual family farm operated by an older farmer and his three adult sons can serve as an example of smaller grain producers. The operation has 1 800 hectares of arable land, of which 90% is sown to wheat and the remaining to barley. They use old equipment, some from the Soviet era, which they received in settlement of salary arrears from the collective farm when they decided to create their own enterprise. They spent time on maintenance in order to keep the old machinery operational. They also bought new machinery through a subsidised state leasing programme. The lease was repaid within four years and they are now full owners of this machinery. A significant issue is that many large farmers (and the Union of Farmers) complain of the lack of skilled labour, including mechanics.<sup>1</sup> If mechanical maintenance can be done by a family member, then this is not a problem. The fact that this farm got involved in livestock production – they currently keep some cattle, pigs and horses – is to some extent due to the need to keep reliable workers busy throughout the year. The general point is that farm profiles vary considerably in terms

of equipment, skills, and business profiles, and that there are alternative routes to efficient production.

Farms also vary by micro-climate and by village culture. The joint venture with two farms highlighted the issue; each farm dominates employment in its village, but has experienced different labour problems. In one village alcoholism is a serious problem, while in the other workers are generally more productive but there is a tradition of cover-ups amongst workers. Poorly funded local administration led the large joint venture farm to become involved in social investment. When pipes broke in one of their villages, the company organised and paid for repairs; they also provide some funds to the local school. This highlights the fact that, as under the previous system, large-scale producers are obliged to undertake social functions in rural areas.

The grower collects a per hectare subsidy from the state, administered by the local authority. Producers referred to the uncertainty of these payments, both with respect to their level and in terms of if and when in the year they would actually be paid. The growers also receive subsidies for fertilisers and pesticides, and purchase diesel fuel at a reduced price. If the grower applies advanced improved technologies, he can benefit from higher subsidy rates, but these added benefits may not be claimed. Indeed, one interviewee believed it was not worth the effort of trying to prove that the technology used on his farm qualified for higher subsidy rates.

Interviewed farmers also highlighted imperfect land regulations that made it difficult to expand their holdings.<sup>2</sup> For example, an offer to buy land must be put to tender, eliciting malicious bids that may derail the process. The more ambitious farmers diversify into other activities, such as small livestock holdings or operating a retail outlet in the village, although it is not clear whether such diversification is a consequence of land regulations or whether these farmers would have diversified in any case within and outside agriculture. The farmers indicated the uncertainty caused by frequent regulatory changes, which deterred them from acquiring more land, as well as hampering their access to credit as laws about collateral were revised. The joint venture farm uses foreign banks for loans, while the other farmer does not take loans (the only exception was recourse to subsidised machinery leasing). They both consider the risks of borrowing from local banks to be high. Despite comments about land markets, little was said about land leasing; low land rents help less efficient farmers to hold on to their allocation of state lands, while larger farmers do not criticise the leasing system as they are likely to be leasing some of their land.

## Notes

1. This is a central finding in the survey of the northern wheat-producing region by Petrick et al. (2011). They see the skill shortage in the 2000s as a legacy from the large-scale emigration during the 1990s which consisted disproportionately of skilled workers.
2. In another interview, a potato farmer with 300 hectares, but with equipment to cultivate 1 000 hectares, said that unclear property rights prevent him from purchasing suitable uncultivated land. He needs to build storage facilities, but this requires government permission and payment of fees, and KazAgro will not support this investment. The potato farmer makes use of government credit programmes, but perceives the proliferation of different schemes as inferior to focusing on a simpler low-interest programme.

## ANNEX 3.B

### *Costs of milk production*

The cost of milk production reported by the Statistics Agency and recorded by FAO is an average based on a large range. Table 3.B.1 reports 2008 cost and price data for several types of producers in four leading dairy-farming oblasts. The price received by commercial producers varied between KZT 49 and KZT 60 per kilogramme. Two large farms with around 1 000 cows apiece producing higher quality milk and the private farm in Akmola oblast, near Astana, commanded a higher price. An important feature is the variance in costs, and hence profits, across producers. The four larger farms, i.e. the modern dairy farm and three agricultural enterprises, had total costs of KZT 40 per kilogramme or more, with the modern dairy farm having costs over KZT 50 due to its higher depreciation and leasing charges. The individual farms had total costs of KZT 26 and KZT 29 per kilogramme, which is similar to the estimate for a small household plot of KZT 25.\* Another important feature revealed by the study is the high reliance of larger commercial milk producers on government support. Ninety per cent of the net profit of the modern dairy farm in Akmola was due to subsidies and tax concessions; these shares were around 60% and 80% in the agricultural enterprises in Almaty oblast and North Kazakhstan, and between one-third and one half for the two individual farms, while the farm in East Kazakhstan was unprofitable and in operation only due to policy support.

\* The FAO study notes that a large household plot, with 38 cows, has implausibly high numbers for feed and labour. Fodder is relatively less expensive in Almaty oblast and East Kazakhstan than in the northern wheat region, and household plots usually use unpaid family labour. The interviewer explains the anomaly by saying that the farm is in a transition stage, seeking to improve quality by introducing new breeds and techniques.

Table 3.B.1. **Costs of milk production in different farm types, 2008**

KZT per kilogramme


	Modern dairy farm	Agricultural enterprise	Agricultural enterprise	Agricultural enterprise	Individual farm	Individual farm	Household	Household <sup>1</sup>
	Akmola	Almaty	East Kaz	North Kaz	East Kaz	Akmola	Almaty	
Number of cows	1 040	993	550	600	170	220	38	2
Yield, kg/cow	5 800	5 640	4 670	3 000	3 609	3 200	3 200	2 250
Milk output, tonnes	6 032	5 601	2 569	1 800	614	704	122	5
Variable costs	31.6	25.7	41.2	38.8	22.5	27.7	44.6	25.0
Depreciation	11.4	8.6	3.0	1.3	3.2	1.2	-	-
Taxes	1.2	1.4	0.8	0.6	0.5	0.6	-	-
Leasing charges	7.5	4.3	-	-	-	-	-	-
<b>Total costs</b>	<b>51.7</b>	<b>40.0</b>	<b>45.0</b>	<b>41.0</b>	<b>26.3</b>	<b>29.4</b>	<b>45.2</b>	<b>25.0</b>
<b>Price ex farm<sup>2</sup></b>	<b>60.0</b>	<b>60.0</b>	<b>50.0</b>	<b>50.0</b>	<b>49.0</b>	<b>60.0</b>	<b>50.0</b>	<b>30.0</b>
VAT (12%)	6.4	6.4	5.4	5.4	-	6.4	-	-
<b>Gross profit<sup>2</sup></b>	<b>1.9</b>	<b>13.6</b>	<b>-0.4</b>	<b>3.6</b>	<b>22.7</b>	<b>24.2</b>	<b>4.8</b>	<b>5.0</b>
Profit tax	0.4	2.7	-	0.7	-	4.8	-	-
Subsidies	20.0	11.0	11.0	11.0	11.0	11.0	-	-
Tax relief on VAT	4.5	4.5	3.8	3.8	0.0	4.5	-	-
Tax relief on profit tax	0.3	1.9	-	0.5	0.0	3.4	-	-
Net profit without subsidy	1.5	10.9	-0.4	2.9	22.7	19.4	4.8	5.0
<b>Net profit with subsidy<sup>2</sup></b>	<b>26.3</b>	<b>28.3</b>	<b>14.4</b>	<b>18.2</b>	<b>33.7</b>	<b>38.3</b>	<b>4.8</b>	<b>5.0</b>

-: Absolute zero.

1. Estimates based on secondary data.

2. Price ex farm includes VAT; Gross profit equals price ex farm minus total costs and VAT; Net profit without subsidy is Gross profit minus tax on profits; Net profit with subsidy is Gross profit minus tax on profits, plus subsidies and tax relief.

Source: FAO, 2010a.

StatLink  <http://dx.doi.org/10.1787/888932782508>



## **ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT**

The OECD is a unique forum where governments work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Union takes part in the work of the OECD.

OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

# OECD Review of Agricultural Policies

## KAZAKHSTAN

This *Review*, undertaken in close co-operation with the Ministry of Agriculture of the Republic of Kazakhstan and conducted within the framework of the OECD Eurasia Competitiveness Programme, assesses the performance of agriculture in Kazakhstan over the last two decades. It evaluates agricultural policy reforms in Kazakhstan and provides recommendations to address key challenges in the future. This analysis is based on the approach that agriculture policy should be evidence-based and designed to support productivity, competitiveness and sustainable development, while avoiding unnecessary distortions to production decisions and to trade. A special chapter of the *Review* highlights the constraints to farm incomes that exist beyond the farm gate and related policy issues.

### Contents

Executive summary

Highlights and policy recommendations

Synthèse et recommandations pour l'action publique

Chapter 1. The policy context

Chapter 2. Policy trends and evaluation

Chapter 3. Constraints to agricultural incomes beyond the farm gate: A focus on wheat, dairy and beef sub-sectors

### Also available in this series:

*Indonesia* (2012)

*Israel* (2008)

*Chili* (2006)

*South Africa* (2006)

*China* (2005)

*Brazil* (2005)

Consult this publication on line at <http://dx.doi.org/10.1787/9789264191761-en>.

This work is published on the OECD iLibrary, which gathers all OECD books, periodicals and statistical databases. Visit [www.oecd-ilibrary.org](http://www.oecd-ilibrary.org) for more information.

