Foreword

Green growth strategies in agriculture need to meet global food demand by fostering innovation and improving productivity in a sustainable way. This, as demonstrated by OECD work, is a *sina qua non*.

The agricultural sector has been a highly innovative sector. In many countries, the "Green Revolution" has been the result of scientific developments in agriculture that have brought about a rapid increase in productivity growth, the development of new crop varieties, and increased yields. Major challenges remain, however, as do opportunities in further greening economic activity. Farm management practices that increase productivity, stability and resilience of production systems need to be encouraged and the technology for sustainable development must go well beyond just raising yields. It must also save water and energy, reduce risks, improve product quality and protect the environment. Technologies and farm practices that can contribute to an economically efficient farm sector and provide financial viability for farmers, while at the same time improve environmental performance in a way that is acceptable to society will provide "triple dividends" to green growth.

Based on a literature review, this report analyses the effects on resource productivity and efficiency of key farm management practices with green growth potential as compared to conventional agriculture. The selected practices examined include: soil and water conservation practices; integrated pest management; organic farming; modern agricultural biotechnology; and precision agriculture.

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