

## MINERAL SUPPLY CHAINS AND CONFLICT LINKS IN EASTERN DEMOCRATIC REPUBLIC OF CONGO

Five years of implementing supply chain due diligence



This report takes stock of 5 years of implementation of national and international programmes and initiatives designed to operationalize the recommendations of the *OECD Due Diligence Guidance on Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas* in the Great Lakes Region of Central Africa, mainly focusing on the Democratic Republic of the Congo. It has been prepared by the International Peace Information Service (IPIS) for the OECD.



IPIS is an independent research institute providing tailored information, analysis and capacity enhancement to support those actors who want to realize a vision of durable peace, sustainable development and the fulfilment of human rights. For more information, visit: <http://ipisresearch.be>



Supported by the Instrument for Stability of the European Union<sup>[1]</sup>

<sup>[1]</sup> A new Regulation succeeding the Instrument for Stability entitled "the Instrument contributing to Stability and Peace" (IcSP) was adopted on 11th March 2014.

© OECD 2015

---

This report is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries. 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.

# **MINERAL SUPPLY CHAINS AND CONFLICT LINKS IN EASTERN DEMOCRATIC REPUBLIC OF CONGO**

**Five years of implementing supply chain due diligence**





## Table of Contents

<b>Background .....</b>	<b>5</b>
A note on methodology.....	5
Risks under the OECD Due Diligence Guidance and IPIS mapping .....	6
<b>Executive summary and key findings .....</b>	<b>7</b>
<b>The artisanal mining sector in Eastern DRC .....</b>	<b>10</b>
Number of mines in Eastern DRC .....	10
Number of artisanal miners in eastern DRC .....	14
<i>Trends in artisanal worker figures</i> .....	15
Data on 3TG production and exports .....	18
<i>Production and export data</i> .....	18
<b>Militarisation at mining sites in Eastern DRC.....</b>	<b>21</b>
Militarisation of mining sites: overview .....	21
Interference at mine sites by Congolese public security forces .....	27
Interference at mine sites by non-state armed groups.....	29
Conflict financing and abuses at mining sites.....	34
<b>Implementation of on-the-ground due diligence programmes .....</b>	<b>35</b>
<b>Annex 1: Artisanal mining sector in Eastern DRC .....</b>	<b>41</b>
1A: Areas inaccessible to research teams in eastern DRC 2013/14 .....	41
1B: Estimated percentages of artisanal workers exploiting minerals per province 2013/14 .....	42
1C: Estimated percentages of artisanal workers exploiting gold by locality.....	42
1D: Official 3T production and export data (tonnes) for the DRC 2010-2013 .....	43
1E: Official gold production and export data (Kg) for the DRC 2010-2013 .....	44
1F: iTSCi Katanga Mine concentrate production (Kg) by territory Q2 2011 to Q2 2014 .....	45
1G: iTSCi Maniema Mine concentrate production (Kg) by territory Q2 2011 to Q2 2014 .....	46
1H: iTSCi South Kivu Mine concentrate production (Kg) by territory Q2 2011 to Q2 2014 .....	46
1I: Total iTSCi site production in Eastern DRC, 2011-2014 .....	46
<b>Annex 2: Militarisation at mining sites in Eastern DRC.....</b>	<b>47</b>
2A: Mines by armed actor presence 2009/10 and 2013/14 .....	47
2B: Map of criminal elements within FARDC presence at sites in North Kivu, 2013/14 .....	48
2C: Map of criminal elements within FARDC presence in South Kivu, 2013/14 .....	48
2D: Map of armed group presence at sites in North Kivu 2013/14.....	49
2E: Map of armed group presence at sites in South Kivu 2013/14.....	49





## Background

Between 2009 and 2010 IPIS collected data on over 550 mining sites as part a conflict mapping exercise focusing on Eastern Democratic Republic of Congo (DRC). With the collaboration of Congolese researchers, IPIS collected the coordinates of the most important mining sites and information on on-site security in North and South Kivu provinces, Maniema, Northern Katanga and southeast Province Orientale, publishing maps of this data.<sup>1</sup>

IPIS went on to undertake further such mapping in another project collaboration with the Congolese mining cadastre (CAMI), the '*Service d'Assistance et d'Encadrement du Small-Scale Mining*' (SAESSCAM), and local civil society organisations in 2013 and 2014. A first version of this map was published in November 2013, and a second in May 2014. The latest map encompasses nearly 1100 mining sites in Eastern DRC and includes detailed information on artisanal mining in both the Kivus and the neighbouring areas of Northern Katanga, Maniema and the Ituri District of Province Orientale. The data was collected by nine teams, each composed of SAESSCAM agents and civil society representatives equipped with GPS devices and questionnaires. With the aid of further funding<sup>2</sup> 2015 will see the extension of this mapping to cover central Katanga and Bafwasende territory in Province Orientale, as well as updating current data. New data collection methods including mobile data collection and satellite trackers, as well as an extended questionnaire to cover socio-economic issues will be deployed. Congolese mining division personnel are also to be included in research teams. IPIS' mapping exercises have benefited greatly from the support of the Congolese authorities. They have enabled IPIS to develop a sizable dataset on artisanal and small scale mining (ASM) and militarisation in large parts of the DRC's eastern provinces. The information contained in this document is largely drawn from this data with some additional references to third-party sources.

### A note on methodology

IPIS' methodology for conflict mapping has evolved and continues to evolve in accordance with needs and interests of data users, as well as access and resources available to its research teams. Early mapping took place prior to the implementation of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (hereafter OECD Due Diligence Guidance) and placed a primary focus on militarisation. It should be noted that numerous areas surveyed in 2009/10 were not revisited in 2013/14, due either to access difficulties (see annex 1A) or in some cases because they had already been visited by a governmental 'qualification mission'. These areas may also represent a

---

<sup>1</sup> For more detailed maps, including those for the Kivu hinterlands see Annex 1A. Interactive maps covering eastern DRC from 2009 to 2014 are available from: <http://ipisresearch.be/home/conflict-mapping/mapping-conflict-motives-war-areas/conflict-mapping-drc/>.

<sup>2</sup> This research has received donor support from PROMINES (World Bank/DFID), the Belgian Ministry of Foreign Affairs, and most recently the International Organization for Migration (IOM).

sizable proportion of tin, tungsten and tantalum (3T) and gold production. As direct comparisons are not therefore possible, information for both periods is presented principally in the form of snapshots. Where more general trends can be discerned, this will be indicated, yet the reader should avoid drawing definitive conclusions on trends given the evolving methodology and different sites visited over time. Information in this document refers principally to the situation in eastern DRC for the period 2013/14 and up to spring 2014, unless otherwise stated.

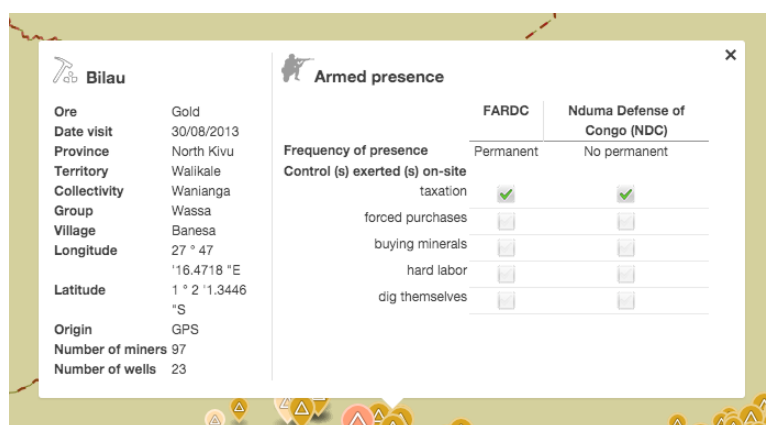
### Risks under the OECD Due Diligence Guidance and IPIS mapping

The OECD Due Diligence Guidance provides companies with clear and practical guidance to help them ensure that they do not contribute to conflict or human rights abuse through their mineral and metal procurement policies. The OECD Due Diligence Guidance outlines a 5-step risk-based due diligence process applicable to all companies throughout the mineral supply chain. It is accompanied by a model supply chain policy that lays down expectations regarding identified risks, and responses thereto (Annex II). Under the OECD Due Diligence Guidance, companies should:

- **NOT** source from parties linked to serious abuses (e.g. torture, forced labour, the worst forms of child labour, gross human rights abuse)
- **NOT** provide direct or indirect support to non-state armed groups
- **MITIGATE** direct or indirect support to public or private security forces
- **MITIGATE** bribery, fraud or misrepresentation; money-laundering; non-payment by suppliers of taxes, royalties or fees; and non-disclosure of payments under the EITI

Measures for risk mitigation and indicators for measuring improvement are outlined in Annex III to the OECD Due Diligence Guidance, to be read in conjunction with mineral specific supplements on the 3Ts (2011) and gold (2012).

As illustrated here, IPIS's interactive maps<sup>3</sup> provide users with geo-specific data on the presence or absence of non-state armed groups and public security forces at mining sites and trading hubs, as well as information on types of interference at mine sites. As such, they can help companies in their efforts to assess actual or potential risks in their operations by aiding them to conduct due diligence on supply



<sup>3</sup> Available at: <http://ipisresearch.be/publication/analysis-interactive-map-artisanal-mining-areas-eastern-drc-may-2014-update/>



chains, as well as pointing out unexploited, conflict-free areas that might be eligible for sourcing. IPIS also produces a weekly briefing that helps to keep stakeholders abreast of weekly security events in eastern DRC and the surrounding African Great Lakes region.<sup>4</sup>

This report contains two separate sections on public security forces and non-state armed groups at mine sites in eastern DRC. References to “militarisation” or “armed presence” in more general sections and figure headings denote the presence of both public security forces and non-state armed groups, unless otherwise specified. Whilst an armed presence was in most cases accompanied by interference in mining activities, the terms “militarisation” and “armed presence” should not be read as synonymous with interference, a term used in its own right and covering both direct and indirect support to the actors involved.

## Executive summary and key findings

### 1. Artisanal mining remains a key subsistence activity in eastern DRC

Artisanal and small-scale mining in the eastern provinces of the DRC remains a central source of revenues for several hundred thousand people. At the 1088 sites visited by IPIS teams in 2013/14, an estimated 216,000 miners were identified.

Moreover, 76% of sites visited by IPIS teams in 2013/14 were gold mining sites. Indeed, four out of five artisanal miners in the eastern provinces were found to be working in the gold sector at this time. This is partly the result of a tangible shift in production from tin, tungsten and tantalum (3T) to gold since 2009.

### 2. Significant gains have been made in raising the volume of responsible 3T minerals produced in eastern DRC, though criminal networks within the DRC’s public security forces (FARDC) - and to a lesser extent non-state armed groups - continue to benefit from 3T production and trade in a number of localities

At sites visited in 2009/10 the percentage of 3T workers engaged at mines affected by interference from non-state armed groups and public security forces was 57%, compared to 26% of workers at sites visited in 2013/14. This sizable drop reflects both a cleaning up and contraction of the 3T sector in eastern DRC, increasing the volume and proportion of 3T minerals being extracted responsibly.

In 2009, the Bisie cassiterite mine was widely considered the most productive 3T site in eastern DRC and had long been subject to interference from both non-state armed groups and public security forces. By the summer of 2013, Bisie remained subject to interference but had lost its status as the DRC’s largest 3T producer to what was by then conflict-free Nyabibwe. Whilst non-state armed group and public security force interference in a number of 3T mining areas persists, the above

---

<sup>4</sup> Available at: <http://ipisresearch.be/publication-category/weekly-brief/>

development is significant from a responsible sourcing perspective. OECD and ICGLR standards expect companies not to source from sites where there is a risk of direct or indirect support to non-state armed groups, whilst continuing to source with strong, measurable improvement plans and mitigation measures at sites that indicate direct or indirect support to public security forces. These findings indicate the extent to which such sourcing has become possible.

### **3. Militarisation of and interference with gold mining sites and trading points in the DRC remain a key challenge**

2013/14 research shows the strong significance of gold to conflict financing in eastern DRC, with a non-state armed group or public security force presence at 524 of around 850 gold mines (61%), compared to 59 of over 200 3T sites (27%). The apparent shift of artisanal miners from 3T to gold and the current scale of artisanal gold mining have important consequences for the financing of armed groups and criminal networks.

### **4. Levels of militarisation and interference differ between provinces**

Comparisons of the situation between 2009 and 2014 indicate a steep improvement in some regions, particularly at 3T mines in northern Katanga, whilst Maniema province has remained largely free from militarization. Other localities however have witnessed stagnation or momentary increases in levels of interference. The North and South Kivu provinces remained the regions most severely impacted by militarisation and interference, with 79% of sites in the former (out of 330) showing at least the presence of either a non-state armed group or public security forces at the time of IPIS visits in 2013/14. In some localities in the Kivus however security appears to have improved sufficiently to enable industry schemes to operate.

Levels of interference by criminal networks within the FARDC and by non-state armed groups vary between province and type of mineral resource. As already recorded in 2009, criminal networks within the FARDC continue to be the predominant source of armed interference at mine sites in 2014. FARDC presence at 1 of 3 mines highlights the Congolese army's role in the militarisation of mining; a snapshot of FARDC involvement at mine sites in 2013/2014 shows interference with mining in over three quarters of the mines at which FARDC had a presence. Illegal taxation forms the overwhelming majority of interference, followed by involvement in trade and direct participation in digging for minerals.

### **5. Since 2009 an encouraging dynamic of complementary initiatives and reforms has developed**

Compared to 2009, there is a dramatic increase in the number of tools, regulations, initiatives and programmes that were developed to address the recurring issue of illegal exploitation of mineral resources in the region. Numerous initiatives have been launched to combat armed interference with minerals and restore the trade reputation of the region, among them, for example, closed pipeline initiatives that have seen the return of former large international buyers to the region.

Armed interference at 3T mines in northern Katanga appears to have been virtually eradicated at the sites visited in 2013/14. Combined pressure from provincial authorities and industry programs appear to have had a specific effect on the extent of FARDC implication in armed interference in this area, leading to FARDC disengagement from 3T mines and a dramatic improvement in the region's trade reputation.

A shift of miners from 3T to gold production, occasioned in large part by developments on the world market, has also taken place in the context of:

- Increased local and international pressure on 3T sourcing practices;
- Deployment of responsible supply chain initiatives;
- Increased participation of local civil society; and
- Efforts towards improved governance of the mining sector by the central and provincial governments.

There are clear indications of a more comprehensive approach by provincial authorities to identify innovative strategies to support the development of legitimate mineral trade networks. The initiative taken by authorities in Maniema to route all supply chains via Kindu to distinguish them from mineral extraction and trade networks in the Kivu provinces suggests a deeper understanding by local actors of the dynamics of conflict financing in the region.

In the general context of mobilisation to improve governance in the sector, in particular with increased attention from central government authorities, the advancement of mining reforms has been slow. Lack of broad geographical and timely coverage by validation missions means that a large majority of artisanal sites have remained outside the legal trade.

An evolution in the approach taken by the authorities and main large-scale mining operators to the issue of ASM, from being purely coercive and exclusionary towards greater inclusion, is to be welcomed. The sensitivity of these actors to the significance of artisanal mining to local livelihoods through an inclusive policy approach to ASM continues to be encouraged.

Moreover, the interest of an industrial mining company in developing a large scale project at Bisie has the potential to be a major breakthrough, on a deposit where thousands of artisanal miners were formerly operating under the direct control of several armed actors.

The formation of local multi-stakeholder *comités de suivi* and *comités provincial*, based on the 'information units' recommended by the OECD, represents a breakthrough in terms of facilitating systematic community organisation and civil society involvement with local and central authorities. Designed and implemented to ensure the effective monitoring of the iTSCi due diligence programme, these structures enable groups to engage with authorities to share information on risks, express concerns, and provide advice on reform. Their functioning has also however been plagued by heavy procedures and bureaucracy, lack of funding and other issues that risk undermining their efficacy.

Since the launch of the OECD Due Diligence Guidance, it is clear that the number of tools, regulations, initiatives, and programmes developed to address the recurring issue of illegal exploitation of mineral resources in the region has dramatically evolved in a relatively short period of time.

## The artisanal mining sector in Eastern DRC

### Number of mines in Eastern DRC

Artisanal mining sites in eastern DRC are numerous, widely dispersed and often remote. Activity readily shifts from one area to another, with new sites discovered, others abandoned and others still rediscovered and revived. Combined with the complicated security situation on the ground this renders determining the exact number of active mines in the region challenging. The Congolese mining cadastre has outlined that by the end of 2010, the consolidated number of mining rights and active quarries in the eastern provinces as a whole totalled 3,279, with over half of these located in Katanga (1,846).<sup>5</sup> Table 1 represents those active sites for which IPIS teams collected data over the period 2009 to December 2014. These figures represent a minimum number of confirmed active artisanal sites in the eastern provinces.<sup>6</sup>

**Table 1: IPIS surveyed mining sites by province<sup>7</sup>**

<b>Province</b>	<b>Mines</b>
South Kivu	477
North Kivu	401
Southeast Province Orientale	299
Maniema	284
Northern Katanga	113
<b>Total</b>	<b>1574</b>

<sup>5</sup> *Cadastre Minier (CAMI) RDC, Rapport Annuel 2010*, June 2011, p.20. This includes in North and South Kivu, Province Orientale, Maniema and Katanga.

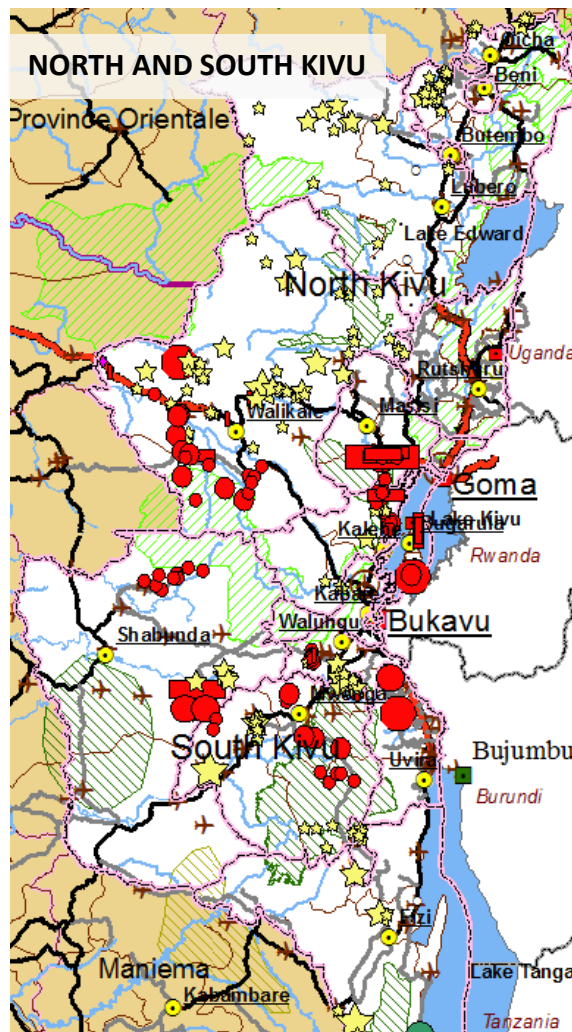
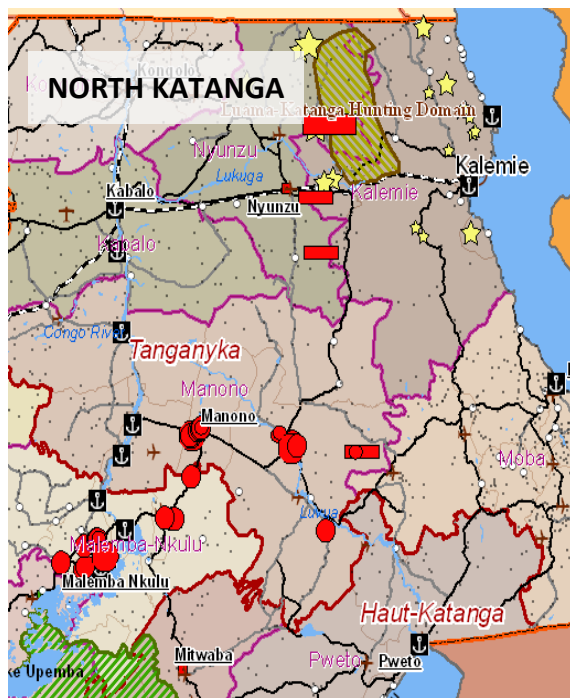
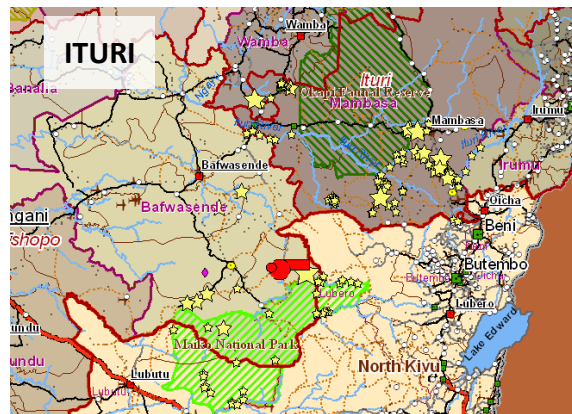
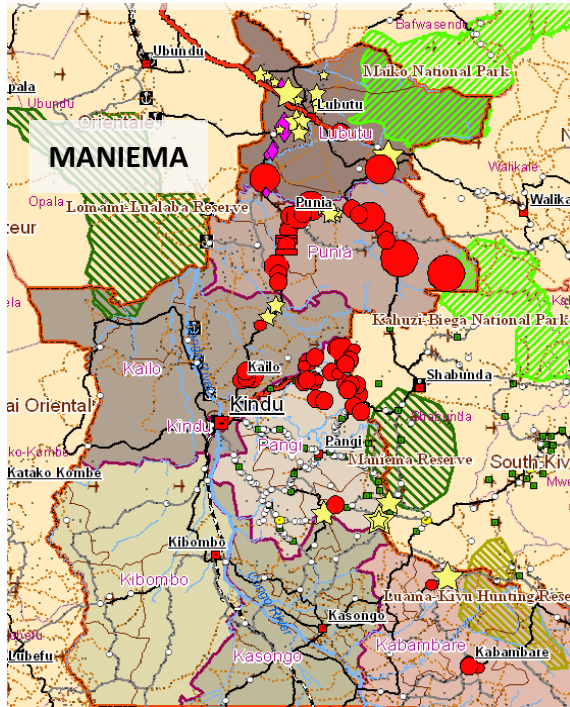
<sup>6</sup> IPIS' inability to revisit many sites originally covered during our earlier mapping exercises mean that whilst most mines in these areas may continue to be active, a small number may since have been depleted or abandoned.

<sup>7</sup> To date, IPIS research has covered only a small part of Province Orientale, gathering data on sites in Bafwasende, Wamba and Mambasa in 2010 and the whole of Ituri district (Mambasa, Irumu, Djugu, Mahagi and Aru territories) in 2013/14.

**Figure 1: Maps of sites surveyed by IPIS in the Kivus and their hinterlands in 2009 and 2010**

For the full interactive versions of these maps, including legends, visit:

<http://ipisresearch.be/home/conflict-mapping/mapping-conflict-motives-war-areas/conflict-mapping-drc/>

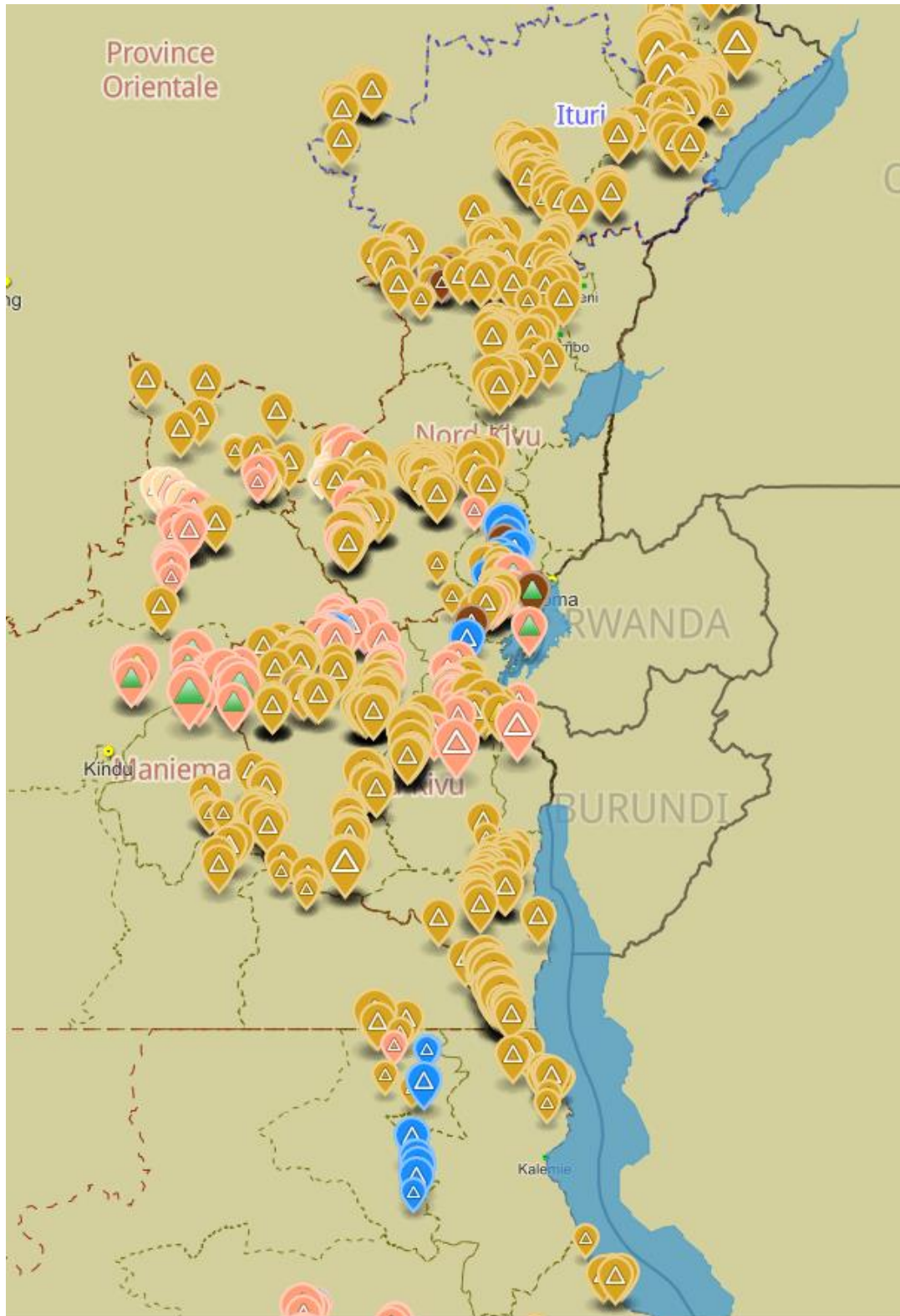




**Figure 2: Map of sites surveyed by IPIS in Eastern DRC 2013/14**

For the full interactive version of this map please visit:

<http://ipisresearch.be/publication/analysis-interactive-map-artisanal-mining-areas-eastern-drc-may-2014-update/>

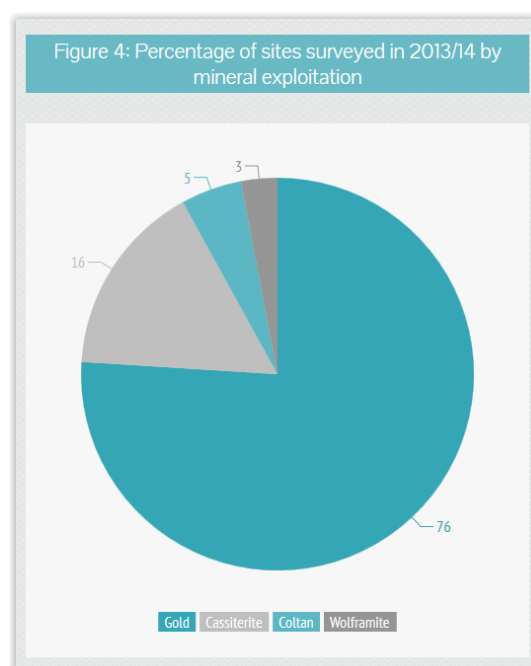
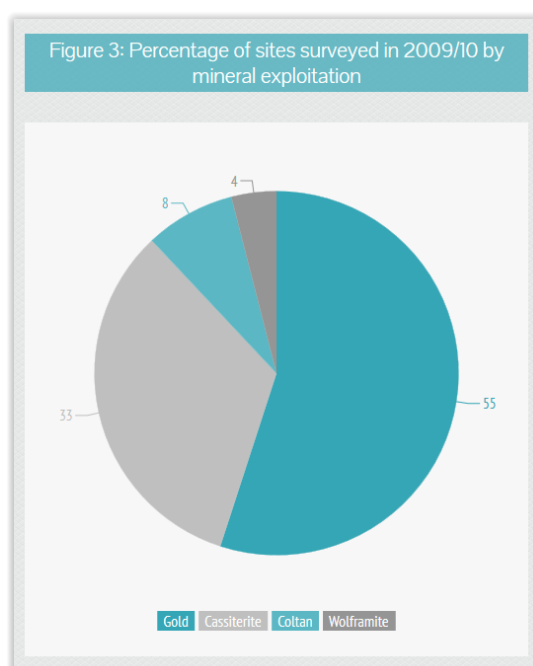




Estimates for the actual number of mines in existence can be expected to be notably higher than those presented in Table 1. Indeed, a number of IPIS' datasets aggregate several mines under a single site entry and there are sites that IPIS has not yet visited.<sup>8</sup>

**Table 2: Number of mining sites visited by mineral exploitation per province 2009/10 and 2013/14**

	North Kivu	South Kivu	Maniema	Katanga	Ituri District	Total
<b>2009/10</b>						
Cassiterite	21	63	87	33	3	207
Coltan	13	9	11	7	12	52
Wolfram	4	18	3	0	2	27
Gold	67	62	62	20	135	346
<b>2013/14</b>						
Cassiterite	33	70	54	24	0	181
Coltan	13	33	0	12	0	58
Wolfram	10	13	12	1	0	36
Gold	280	288	72	44	176	860



<sup>8</sup> For example, whilst data was gathered for around 14 mines around the village of PK7 (7 kilometres from Punia, Maniema), these are recorded as a single site entry. Moreover, Maiko National Park and its surrounding areas have numerous ASM sites but access problems have prevented the securing of further detail. In addition, there are a number of sites that IPIS has not yet visited. Sites included under the iTSCi traceability system in Maniema have not yet been visited, and our 2013/14 research covered only 21 sites in 35 iTSCi-covered sectors in Katanga and 3 mines of four active sectors in South Kivu. All iTSCi covered sites visited were free from militarisation. Table 2 provides an overview of the number of 3TG sites of over 550 sites surveyed in 2009/10 and 1088 sites surveyed in 2013/14. It includes sites where more than one mineral was found to be exploited and does not therefore correlate with the overall number of sites in Table 1.

The above data and the maps in figures 1 and 2 highlight that gold mining is currently by far the most important subsector in Eastern DRC's artisanal mining business, with over three times the number of mines extracting gold than 3Ts. This appears to be confirmed not only by the number of workers engaged in this sector (see below) but also at the level of trading centres where out of 148 markets for minerals visited by our teams in 2013/14, gold was available in 136. Indeed, the gold trade is spread all over eastern DRC.

By contrast, with the exception of Northern Katanga, the only other two major production and trade areas for coltan are Rubaya in Masisi territory (North Kivu) and Shabunda (South Kivu). Likewise, aside from Katanga, the regulated area of Nyabibwe (South Kivu) and the tin sector in northern Pang'i (Maniema), the major selling points for tin ore in North and South Kivu are Mubi, Ndjingala (Walikale) and Hombo (Kalehe), respectively. There are also much smaller but important local hubs in Punia (Maniema), Shabunda (South Kivu), Nzibira (Walungu, South Kivu) and Lemera (Uvira, South Kivu).

### Number of artisanal miners in eastern DRC

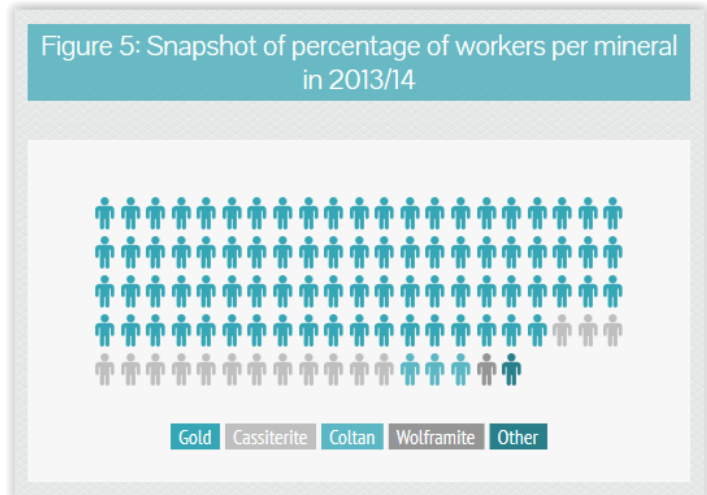
Artisanal mining can be characterized by sudden and large migrations of miners following changes in security, production, local and world market prices, and the (re)discovery of promising deposits. As such, the presence of miners at a given site can fluctuate significantly depending on prevailing conditions. This includes seasonal variations, with many miners digging only on a seasonal basis due to adverse weather conditions, as well as responses to world mineral prices. As such, data on miner numbers at best represents a snapshot of numbers at any given time.

Table 3 provides a snapshot of artisanal worker numbers at mines surveyed in 2013/14. It represents estimates made through on-site visits and figures offered by those individuals responsible for running the mine (e.g. the *Président-Directeur Général* (PDG)), encompassing not just the miners but also those engaged in assisting with extraction. The figures for 3T workers are presented as an aggregate because at some sites two or three minerals were being extracted. This was particularly so with cassiterite and coltan, as well as cassiterite and wolfram.

**Table 3: Snapshot of artisanal worker numbers for 3Ts and gold by province in 2013/14**

	3Ts	Gold	Total	Unknown (sites)
North Kivu	12847	44038	56885	0
South Kivu	9649	57752	67401	9
Maniema	9888	7090	16978	5
Katanga	7853	19233	27086	2
Southeast Province				
Orientale	-	47933	47933	7
<b>TOTAL</b>	<b>40237</b>	<b>176046</b>	<b>216283</b>	<b>16</b>

The extent to which workers are engaged in extracting any one mineral at a site where more than one mineral is being extracted can vary. This, and the fact that it can be difficult to distinguish how many workers are extracting which mineral, makes the provision of exact figures of workers by mineral challenging. Nevertheless, it is estimated that in 2013/14 around 32,000 workers



were engaged in cassiterite extraction with approximately 7,000 working in coltan and 1,350 in wolframite ores.<sup>9</sup> Such estimates are not possible for 2009/10 owing to incomplete worker data. Once again, notable from this data is that four out of five artisanal miners in the eastern provinces currently work in the gold sector.<sup>10</sup>

Indeed, of IPIS' 2013/14 visits the largest mine in the east in worker numbers was the gold mine of Musigha in North Kivu with nearly 16,500 miners, followed closely by Musebe gold mine in Katanga, then serviced by 15,000 workers. With only two 3T sites surveyed in 2013/14 showing worker numbers higher than 1,000 compared to 18 in 2009/10, these unprecedentedly high numbers indicate absorption of 3T workers by the artisanal gold sector since late 2010.

**Trends in artisanal worker figures**

The fluidity of worker numbers at sites, the fact that different mining sites were visited between 2009/10 and 2013/14, and a higher number of incomplete worker data sets for 2009/2010 than for 2013/14<sup>11</sup> render the provision of a clear picture of the evolution of artisanal worker numbers for each mineral throughout Eastern DRC difficult. Nevertheless, some general trends are observable.

Of 100 2009/10 surveyed sites revisited by IPIS in 2013/14, there appears to have been an overall increase in worker numbers at those sites.<sup>12</sup> However, the increase in worker numbers at gold mining sites was significantly higher than those at 3T

<sup>9</sup> A rough snapshot of the proportion of workers engaged in the extraction of each mineral in 2013/14 has been estimated using IPIS data by reference to the principle mineral mined at sites and adjustments based on disaggregated weekly mineral production for additional minerals, where necessary.

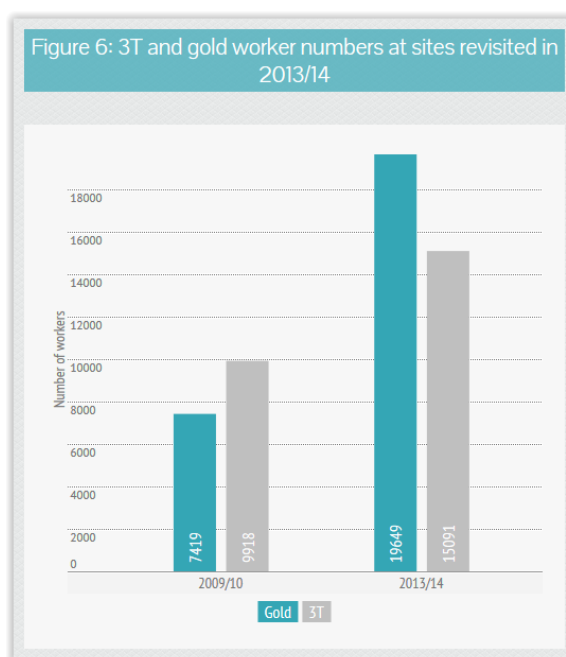
<sup>10</sup> Estimates of ASM workers by mineral for each province are provided at Annexes 1C and 1D

<sup>11</sup> Here, at least 117 incomplete datasets related to gold mines, as compared to 15 in 2013/14.

<sup>12</sup> This is partially explained by a higher number of complete datasets for 2013/14. Only five sites with unknown worker numbers in 2013/14 (four gold, one cassiterite) compared to 12 in 2009/10 (eight gold, four cassiterite).

sites, further supporting general indications of a shift towards artisanal gold mining. The main gold sites to have seen such increases during revisits were the South Kivu sites at Mobale (550 workers in 2009 to 2,500 in 2013) and Mukungwe (132 in 2009 to 7,000 in 2013), and the Pede mines (220 in 2010 to 1,200 in 2013) in *Province Orientale*.

The apparent shift of artisanal miners from 3T to gold and the current scale of artisanal gold mining have important consequences for the financing of armed groups and criminal networks. The wide availability of gold throughout the DRC, including in very remote areas, means that armed groups wishing to mine, trade or tax gold to finance their activities have many opportunities, not least because the country's artisanal gold production is exported almost entirely unrecorded (see below). As recommended in Appendix 1 of the Gold Supplement to the OECD Due Diligence Guidance, formalisation of the artisanal mining sector, especially for gold, is urgently needed and formal buyers need to be identified and held to account.



Moreover, within the 3Ts, although there seemed to be little difference in the numbers of workers exploiting cassiterite between 2009/10 and 2013/14 (at around 9,200 in 2009/10 and 9,600 in 2013/14), IPIS revisits indicated that coltan mining appeared to be attracting a larger number of workers, rising from around 625 in 2009/10 to 5,400 in 2013/14. These latter figures illustrate the interplay between global and local forces impacting artisanal miner presence, including market prices for minerals and 'conflict minerals' initiatives. Luwowo coltan mine had around 5,000 workers at the time of IPIS' revisit in September 2013 (up from 25 recorded in 2009). IPIS research from that period found that this was due to good prospects at the site but that it also formed part of a wider migration from cassiterite to coltan mining in North Kivu at that time.<sup>13</sup>

In 2013, locals in Rubaya (close to Luwowo) were reporting an influx of thousands of miners to the coltan-rich region. One reason for this influx was reported to be miners' belief that the establishment of a *Centre de Nègoce* in Rubaya – inaugurated in April 2013 - might revive the mineral trade in the area.<sup>14</sup> At that time, the province had experienced a collapse in the trade, due mainly to a ban on mineral air transports from Maniema through the Kivus, combined with an absence of on-the-

<sup>13</sup> K. Matthysen & A. Zaragoza, 'Conflict Minerals' initiatives in DRC Congo: Perceptions of local communities, IPIS/Humanity United/EURAC, November 2013, pp.11-12.

<sup>14</sup> Ibid.

ground due diligence programmes, such as iTSCi, and the suspension of two trading houses. As the cassiterite trade collapsed, so did cassiterite prices, reportedly leading miners from sites such as Bisie (North Kivu) and Nyabibwe (South Kivu) to come to Rubaya to dig for coltan, the market price for which had seen a significant hike in 2011.<sup>15</sup>

ITRI has since extended its Tin Supply Chain Initiative (iTSCi)<sup>16</sup> programme to cover minerals from Rubaya sites and at the end of March 2015 announced the start of iTSCi due diligence programme in Walikale territory. Indeed, Bisie cassiterite mine (Walikale, North Kivu) has also seen notable artisanal worker fluctuations since 2010. Despite a dramatic fall in worker numbers from 2,000 miners when visited by IPIS in 2009 to a few hundred during the presidential mining suspension (September 2010 to March 2011),<sup>17</sup> estimates of worker numbers at Bisie mine ranged between around 2,000 and 3,000. Worker's numbers have dropped below 200 in 2015 due to the difficulties they experienced with informal mining underground. iTSCi will not be extended to cover this site due to plans for its industrial exploitation by Alphamin Bisie Mining SA, by means of an underground mine.

Musebe gold mine's dramatic rise to prominence in the space of a few short months in early 2013 also highlights the issue of flash migration as relevant to responsible sourcing. Some worker estimates for the site were as high as 30,000 in June 2013 (Radio Okapi), with notable humanitarian implications for the locality, including school drop outs to engage in mining.<sup>18</sup> Such massive population movements have significant potential implications for health, safety and security at the sites affected and can disrupt established trading chains of companies trying to source responsibly. Katanga has seen a number of such large-scale migrations over the last years at sites such as Linga, Kisengo and Kahendwa.<sup>19</sup>

---

<sup>15</sup> Ibid.

<sup>16</sup> The system is an on-the-ground traceability and due diligence method for tracing mineral consignments to mines of origin through electronic bar-coded tags attached to individual bags of minerals and shipments.

<sup>17</sup> S. Z. Wimmer & F. Hilgert, *Bisie. A one-year snapshot of the DRC's principal cassiterite mine*, IPIS, November 2011. Recent estimates now indicate the presence of around 3,500 workers.

<sup>18</sup> See, Katanga : 4 personnes succombent à des maux de tête et à la toux à la mine Musebe, 25 June 2013, Radio Okapi; Katanga : un éboulement fait 4 morts dans la carrière d'or de Musebe, 27 July 2013, Radio Okapi; Katanga : des élèves abandonnent les cours pour exploiter de l'or à Nyunzu, 24 April 2013, Radio Okapi.

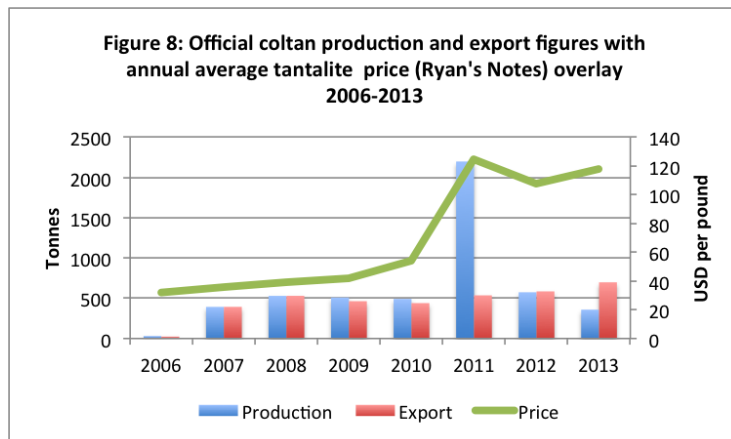
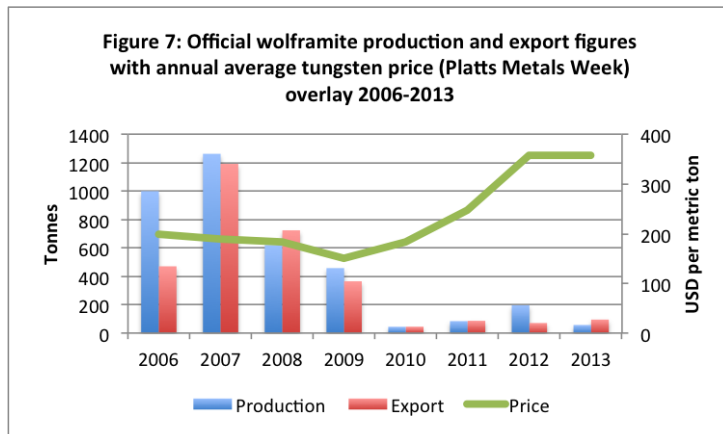
<sup>19</sup> *Analysis of interactive map of artisanal mining areas in eastern DR Congo*, November, IPIS, 2013, p.14.

## Data on 3TG production and exports

### Production and export data

Estimates of mineral production in the DRC are significantly hampered by data availability, comparability and reliability, as well as by difficulties in tracing illegal trade in eastern DRC. Official production and export data for 3TG from the DRC's Ministry of Mines<sup>20</sup> nevertheless provide a basis for the extrapolation of some broad trends.<sup>21</sup>

Official data highlights a peak in recorded wolframite and cassiterite production in 2007 and 2008, respectively (see figures 7 and 9), with a significant drop in production since that period, particularly for wolframite. The Congolese Ministry of Mines has outlined that this decline was initially triggered by the global financial crisis, though was exacerbated from 2010 by regulatory measures, including the September 2010 presidential mining ban and the onset of new market expectations for conflict-free minerals from the DRC.<sup>22</sup> Although 2012 to 2013 saw a drop in official production figures for wolframite and coltan ores of 71% and 37.6% respectively, transboundary smuggling, particularly for high value minerals such as tungsten and coltan ores, reportedly increased after September 2010.<sup>23</sup> Attracting



<sup>20</sup> Provided at Annexes 1E and 1F.

<sup>21</sup> Such official figures should be treated with notable caution in light of frequent occurrences of underreporting and site access difficulties. For example, the UN Group of experts have highlighted collaboration between the COOPERAMMA (Coopérative des Exploitants Artisanaux Miniers de Masisi) cooperative and mining agents in Masisi to understate actual production and export figures, allowing the concealment of a certain quantity of production for smuggling to Rwanda. See UN Group of Experts Report, S/2-14/42, para.205.

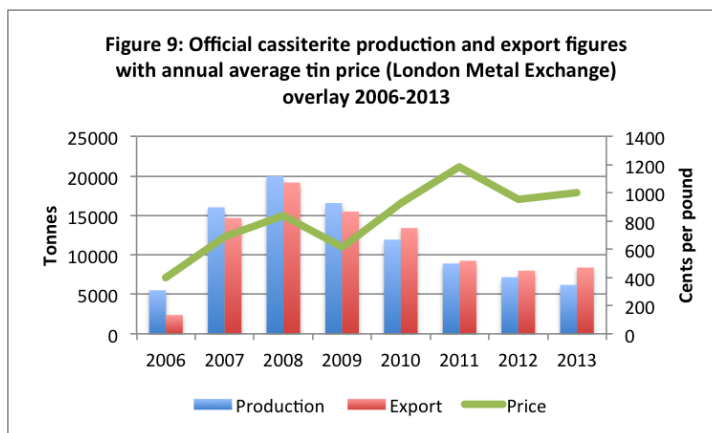
<sup>22</sup> Ministry of Mines, *Statistiques Minières de 2003 à 2012*, September 2003, p.6.

<sup>23</sup> UN Group of Experts, Final Report, S/2011/738, para.478.

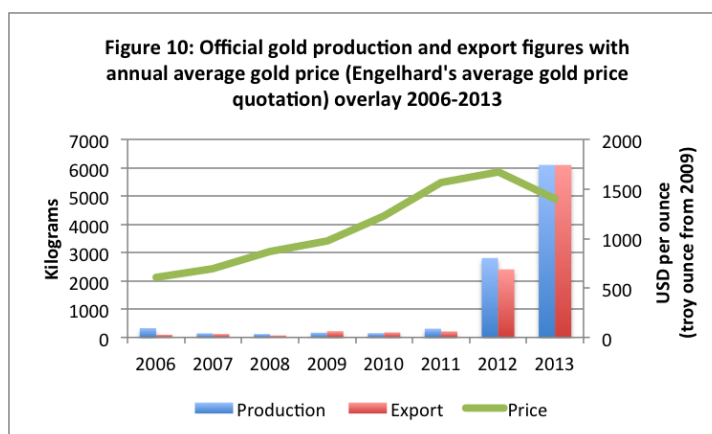


higher profit margins, tantalum and tungsten ores are particularly attractive for smugglers, indicating potential for distortion due to under-reporting.<sup>24</sup>

Moreover, an apparent spike in official coltan production in 2011 coincided with a significant hike in world tantalum prices that year (up to 125 USD per pound from 52 USD),<sup>25</sup> though was not attended by a commensurate rise in exports for that period. One explanation for the spike in official coltan production



figures for 2011 may have been the opportunity provided by stockpiling during the presidential ban to declare large quantities of minerals in the hope of subsequent export at high prices following the resumption of trade. Indeed, mining continued despite the introduction of the ban. However, the prohibition on trade and export at that time and a subsequent aversion of smelters and refiners to minerals without proof of due diligence after the launch of the Conflict Free Smelter Initiative in April 2011 saw the number of exporters in the Kivus fall dramatically in 2011 from 25 to three.<sup>26</sup> This, the subsequent suspension of two Kivu-based exporters accused of indirectly financing armed groups, and the redirection of mineral transports from Maniema away from the Kivus saw the UN Group of Experts on the DRC report that cross-border smuggling was again on the rise in 2012,<sup>27</sup> alleging a continuing pattern of smuggling to Rwanda throughout 2013.<sup>28</sup>



Despite an apparent drop in production and exports in the late 2000's, reported cassiterite production figures have remained higher than pre-2007 levels. However,

<sup>24</sup> UN Group of Experts, Final Report, S/2012/843, para.161-181.

<sup>25</sup> All prices obtained from US Geological Survey Mineral Commodity Summaries for 2010 and 2014.

<sup>26</sup> J. Cuvelier et al, *Analysing the Impact of the Dodd-Frank Act on Congolese Livelihoods*, SSRN, November 2014, p.13.

<sup>27</sup> UN Group of Experts, Final Report, S/2012/843, para.160.

<sup>28</sup> UN Group of Experts, Final Report, S/2014/42, para.200.

it would appear that a certain quantity of production remains unreported and leaves the country illicitly. Official cassiterite production for 2013 was around 6,210 tonnes. The majority of this figure can be accounted for by 2013 cassiterite production from iTSCi sites (around 4,378 tonnes, excluding Sn/Ta and Sn/W ores).<sup>29</sup>

The smuggling of gold is particularly apparent from official and estimated figures for the DRC. Official data indicates that 6,111.97 Kg of gold were produced in 2013 and 6109.74 Kg exported. The overwhelming majority of these official figures are composed of industrial gold production (5,833.31 Kg) and exports (5875.56 Kg), with a dramatic rise in official figures for 2012 and 2013 attributable to the advent of commercial production phases at the Twangiza Mining and Kibali Gold sites. Official figures for artisanal production are distorted by both access problems and underreporting. To give some indication of the magnitude of this distortion, whilst the official artisanal gold production for 2013 was 292.27 Kg, IPIS estimates of weekly production at artisanal gold sites visited in 2013/14 would suggest the annual production of around 8 to 10 tons of gold in eastern DRC in that period. With gold export figures predominantly lower than production, it is clear that all but a small fraction of the DRC's artisanal gold output continues to leave the country illicitly.

---

<sup>29</sup> Annexes 1H to 1J

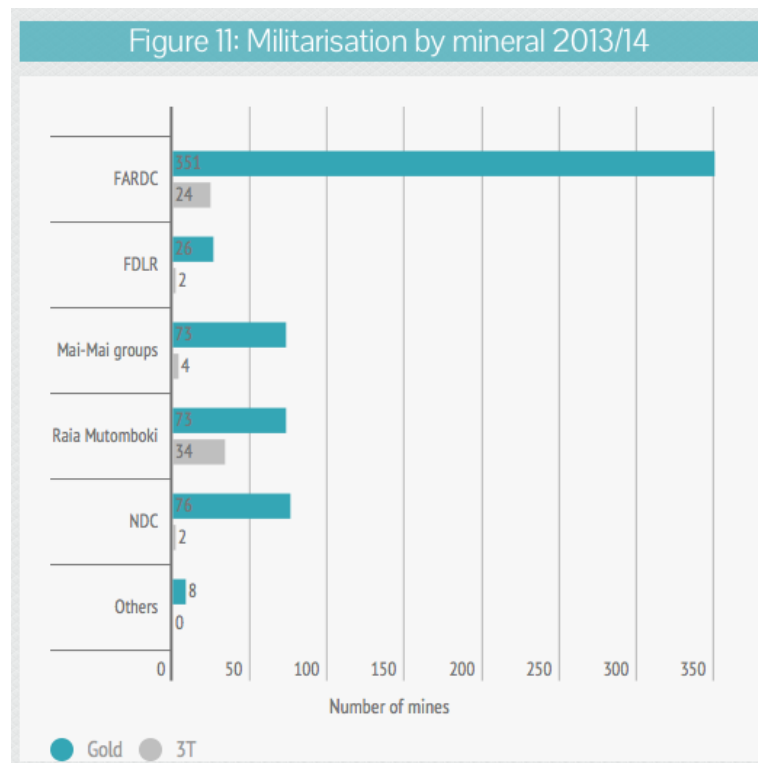
## Militarisation at mining sites in Eastern DRC

The following section provides some background and data on developments in the presence of non-state armed groups and public security forces at mine sites, as well as their interference with mining in eastern DRC. As research conducted over 2009/10 and 2013/14 was undertaken mostly at different sites, direct comparisons between data sets for these two periods is difficult. The complex and fluid dynamics of armed interference at mine sites means that data from these periods is again best viewed as a snapshot. It is important to be aware of the fact that information gathering on presence and interference at mine sites can be subject to research limitations. For example, interference at a site may not be perceptible at the time of a site visits due to the use of intermediaries. Nevertheless, some global trends may be observed.

### Militarisation of mining sites: overview

During IPIS' first conflict mapping exercise in 2009/10, non-state armed groups or public security forces were recorded to have a presence at 265 of 579 sites.<sup>30</sup> Two or more different armed actors were noted as present at 48 of these sites. Of 1088 mines subsequently surveyed in 2013/14 the presence of non-state armed groups or public security forces was reported at 591 sites, with 96 of those sites showing a presence of two different armed actors.

It should be noted that whilst in most cases, an armed presence was accompanied by interference, this was not the case in a number of instances and militarisation should not necessarily be equated



<sup>30</sup> Of these 265 sites, 46 had been identified as having an armed group presence in secondary sources, but this presence could not be confirmed through site visits due to access difficulties for security reasons. This issue particularly affected the territory of Mambasa (31 sites), as well Bafwasende and Lubero (Province Orientale), and Mwenga in South Kivu. Here, whilst the presence of an armed group was highly likely, these entries were designated as unconfirmed on the relevant IPIS maps for this period.

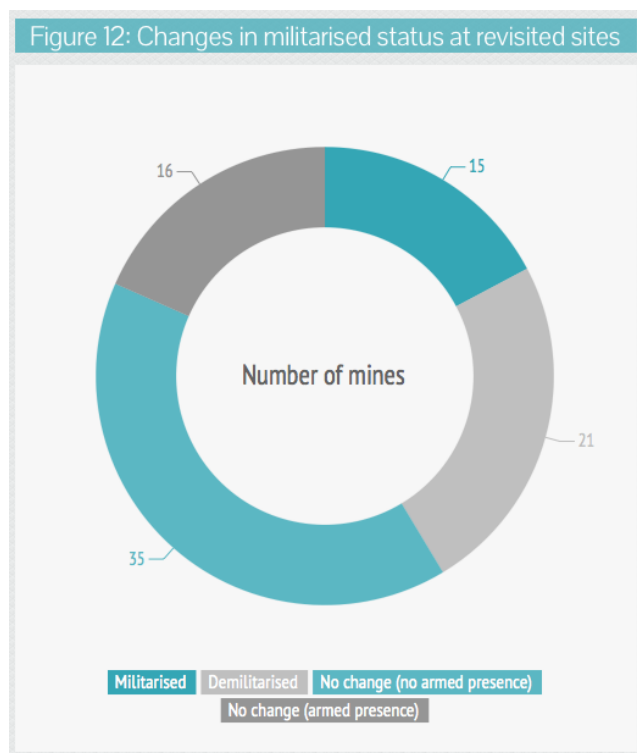
to interference. Moreover, numbers of mines showing the presence of non-state armed groups or public security forces are not necessarily reflective of the extent of mineral production taking place in a militarised context because production levels at sites vary.

When viewed globally, data on 3TG workers over the periods 2009/10 and 2013/14 indicates a reduction in the amount of 3T production involved in directly or indirectly financing both non-state armed groups and public security forces. Here, the number of 3T workers whose production was affected by the presence of these actors notably declined from 57% at sites visited in 2009/10 to 26% at sites visited in 2013/14. This drop in proportion is due in part to a contraction of the 3T sector between these two periods, with a number of miners moving from 3T to gold extraction. Thus, the situation on the ground for many remains unchanged with 57% of workers at gold mines working in the presence of either a non-state armed group or public security force.

Indeed, IPIS's 2013/14 research shows the strong significance of gold to conflict financing in eastern DRC, with an the presence of public security forces and/or non-state armed groups at 524 of around 850 gold mines (61%), compared to 59 of just over 200 3T sites (27%). This observation was not as apparent at the time of the drafting of the OECD Due Diligence Guidance, when IPIS surveys found reports of a non-state armed group or public security force at just over half of the nearly 340 gold mines, and 35% of around 200 3T mines. At that time, at least two armed actors were present at 18 3T sites in 2009/10, compared to 29 gold mines.

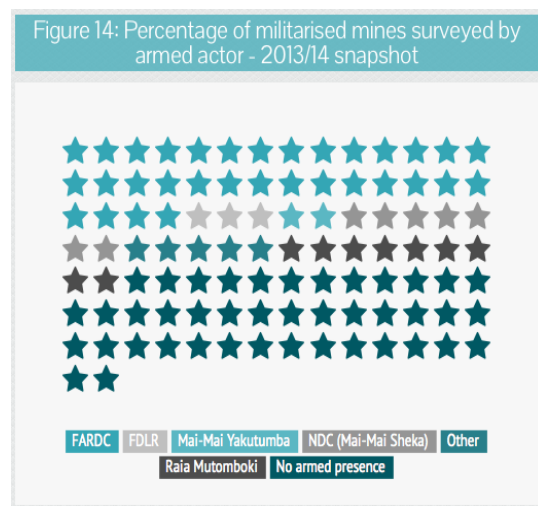
Sites covered in 2013/14 surveys were attended by two or more different armed actors at 89 gold sites compared to 7 3T sites. This latter finding supports a shift in focus from 3T to gold profiteering. Certainly, of around 100 sites revisited by our teams, the number of newly militarised sites producing gold was twice that of those producing 3Ts (10 to 5), though 12 gold sites in that sample were also demilitarised over the period, compared to 8 3T mines.

The extent of change at 100 sites revisited by IPIS teams in 2013/14 is presented in figure 12. Whilst the militarised status of 51 mines remained unchanged, 21 sites had since demilitarised and an armed presence had been newly established at 15 mines. Drawing



any conclusions regarding overall militarisation trends requires a larger sample of sites to be compared over a longer period. Nevertheless, the data from these two periods highlights the dynamism of armed actor presence at sites, particularly in the Kivus: here, whilst the FDLR had lost 6 sites revisited in 2013/14, they were nevertheless replaced by Raia Mutomboki and NDC Sheka forces, as well as in one case by rogue FARDC elements.

At the provincial level, whilst 39% of 97 3TG mines in North Kivu showed the presence of armed actors in 2009, the expansion of IPIS research into more remote areas highlighted that militarisation in the province appeared to be much higher at 79% of 330 mines visited in 2013/14. Whether such a substantially higher percentage of militarised sites represents an overall rise in militarisation in North Kivu, an anomaly caused by high levels of conflict in the province in 2013 due to the M23 rebellion, or simply a better understanding of the situation on the ground in light of a larger data sample, is unclear. Revisits to mine sites in the province in 2013/14 showed a higher level of FARDC presence (and interference) from seven sites in 2009 to 13 in 2013/14.



In South Kivu, 56% of 119 3TG mines showed the presence of non-state armed groups or public security forces in 2009. In 2013/14, 58% of 367 mines visited showed the presence of such entities. At revisited sites, FARDC interference appeared to have reduced from seven sites to five different sites. This latter finding is illustrative of the fact that militarisation at sites cannot be viewed as static. FARDC deployment and redeployment in light of prevailing security conditions naturally affects their presence at mine sites. IPIS has formerly highlighted the significance of illegal taxation by non-military state agents – found to exist on a striking scale in a 2014 commission of inquiry in South Kivu – to the issue of army interference in mining.<sup>31</sup> Any attempt to change the FARDC’s attitude and behaviour towards artisanal mining will require tackling the issue of illegal taxation as a whole, as the

<sup>31</sup> Analysis of the interactive map on artisanal mining areas in Eastern DR Congo: May 2014 update, IPIS, May 2014, p.17.

criminal networks facilitating such interference will continue to render it lucrative for those FARDC units with the ability and incentives to engage in it.

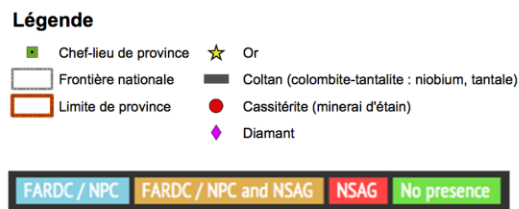
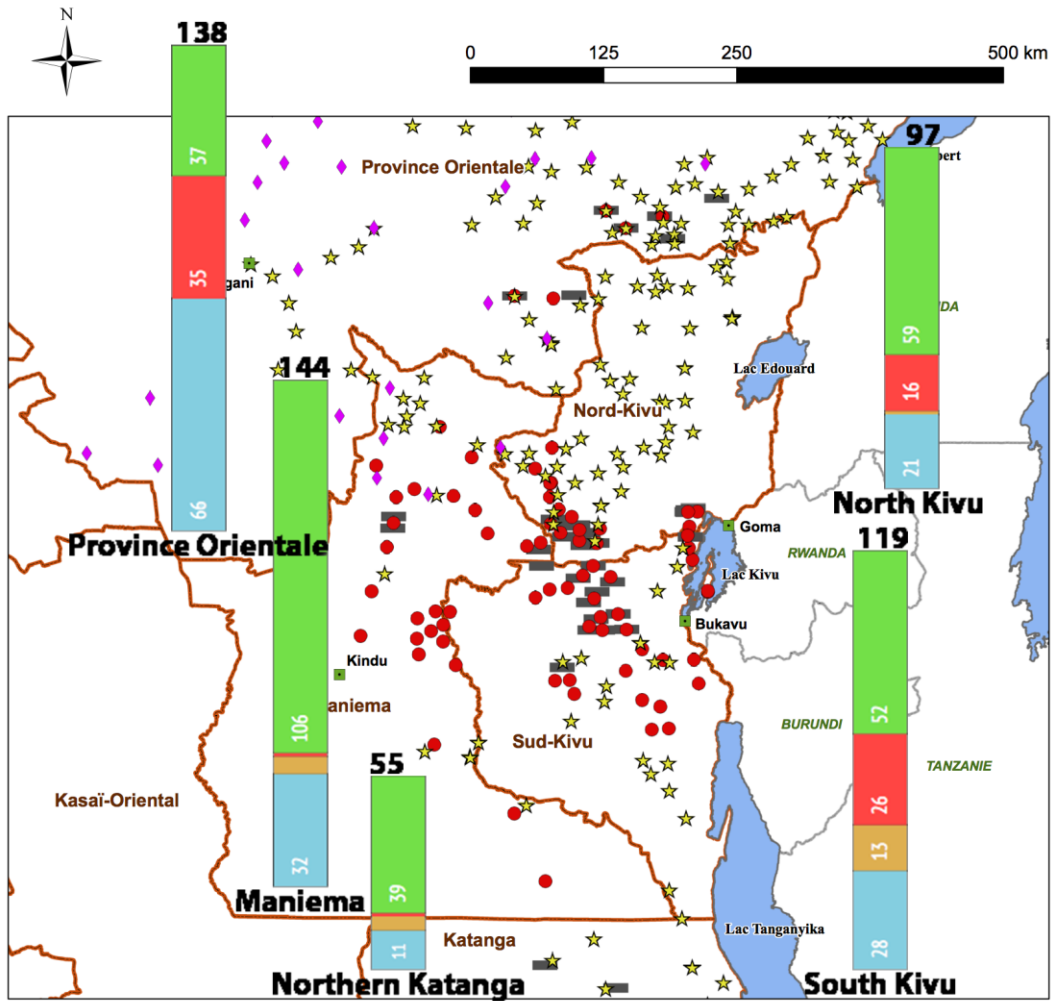
The fluidity of non-state armed actor interference at sites was also illustrated at revisited sites in South Kivu where FDLR presence had halved to three sites by 2013/14, whilst the Raia Mutomboki – formerly absent from these mines – were present at seven sites. IPIS mapping in Province Orientale has focused largely on Ituri. Data from territories covered in the province in 2010 indicated 73% of militarised sites. 2013/14 visits to 176 mines in Ituri found 61 militarised sites, with five out of 16 revisited sites having demilitarised since 2010.<sup>32</sup>

---

<sup>32</sup> This later research excluded Bafwasende territory and surveyed non-militarised sites not covered in Ituri in 2010.

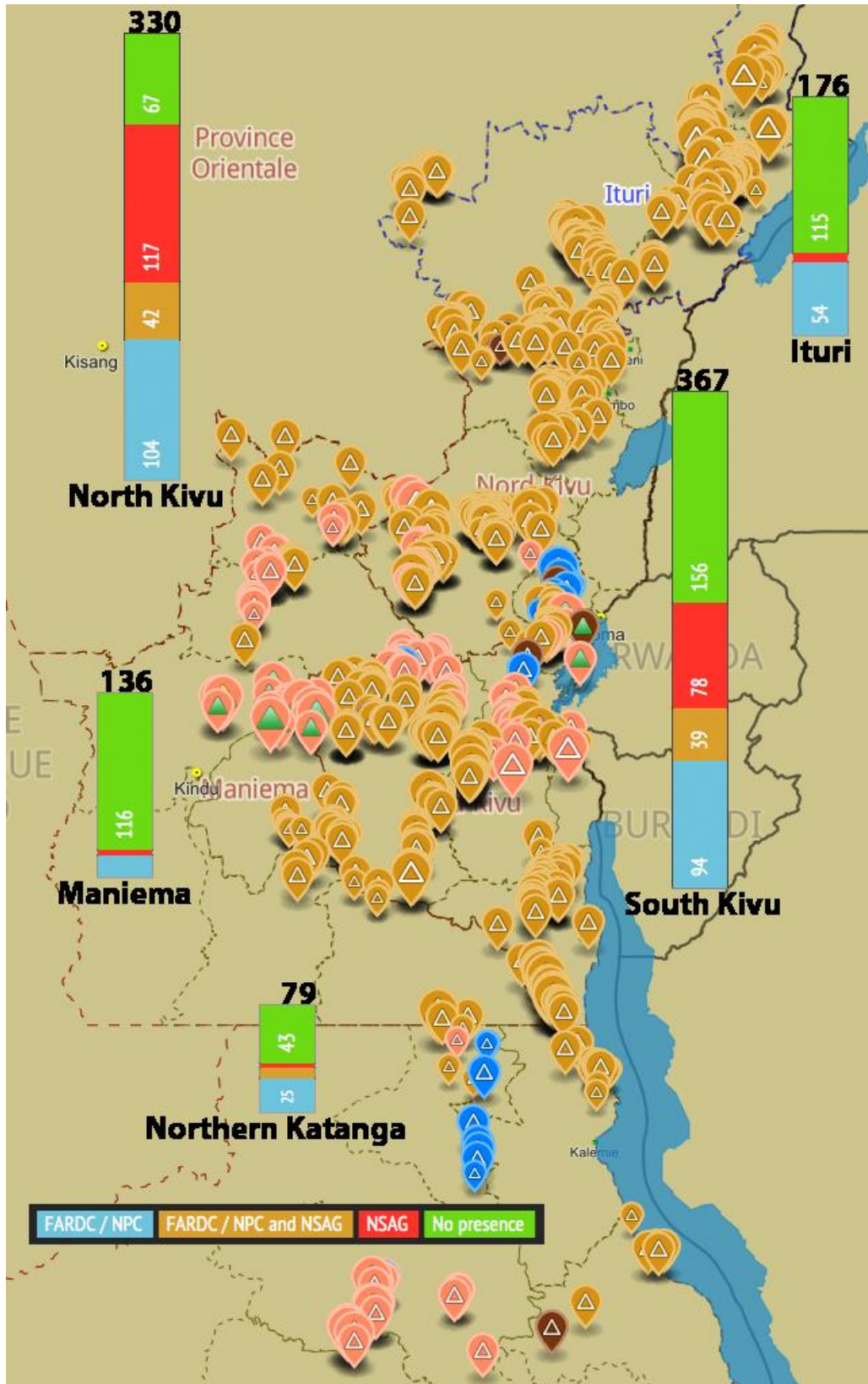


Figure 15: Snapshot of militarisation at mining sites surveyed in 2009/10



Carte établie par IPIS, 2011 (Sources: IPIS, Référentiel géographique commun, Musée royal de l'Afrique centrale)

Figure 16: Snapshot of militarisation at mine sites surveyed in Eastern DRC 2013/14



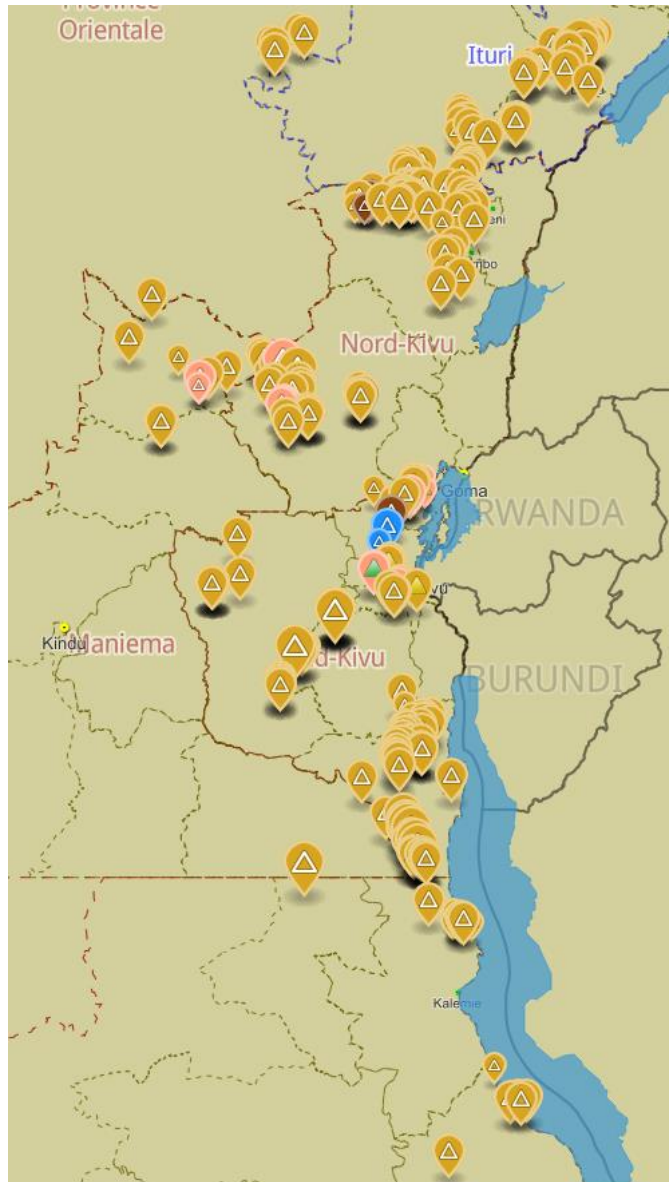
## Interference at mine sites by Congolese public security forces

As in 2009/10, FARDC presence at mines remained the predominant source of armed interference in the mining sector throughout 2013/14 (see figures 13 to 16).<sup>33</sup> FARDC presence at 1 of 3 mines highlights the Congolese army's role in the militarisation of mining in the East. Seventy sites of those with an FARDC presence in 2013/14 indicated no military interference in mining. However, systems of illegal taxation exist in Mwenga (South Kivu), affecting at least 6,000 artisanal miners around the gold mining centre of Kamituga alone. Moreover, reports of exploitation and taxation by undisciplined FARDC units at mining sites around Misisi in Fizi territory since 2009, were confirmed by IPIS in March 2013 and again in April 2014.<sup>34</sup>

Despite an apparent arrangement with the Mai-Mai Yakutumba in the area, in April 2014 the FARDC clashed with this group, in an around the major gold hub of Misisi.<sup>35</sup>

Negative FARDC elements have also been observed smuggling minerals from Rubaya (Masisi territory, North Kivu) to Rwanda.<sup>36</sup> Despite a relatively low level of interference in Maniema, 2013 saw criminal networks within the FARDC involved in illegal taxation of mining activities in Punia and Lubutu. Moreover, gold mining in Kalemie, Katanga, has seen reports of abuses against miners refusing taxation, and

**Figure 17: Snapshot of FARDC presence at mine sites, including undisciplined units, 2013/14**

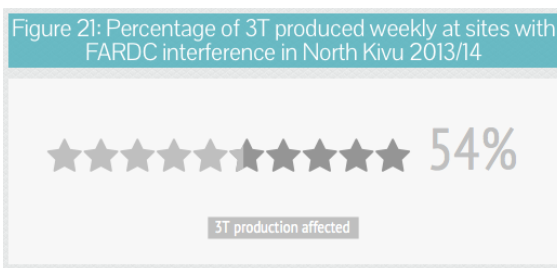
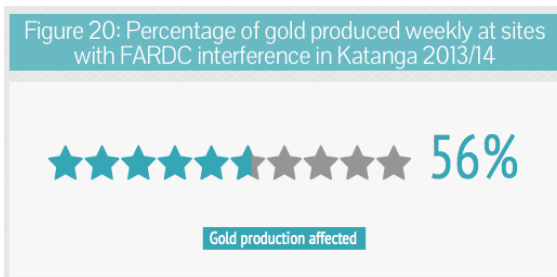
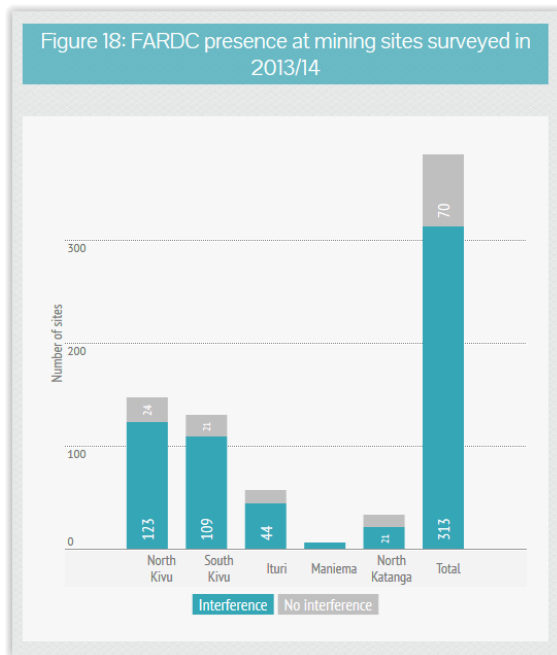


<sup>33</sup> For a closer look at undisciplined FARDC positioning in the Kivus see Annexes 2B and 2C.

<sup>34</sup> See also, UN Group of Experts report s/2015/19, para160-172.

<sup>35</sup> *Analysis of interactive map of artisanal mining areas in eastern DR Congo*, November, IPIS, 2013, p.17.

<sup>36</sup> UN Group of Experts report s/2015/19, para160-172.



at Musebe gold mining site army interference was reported, with clashes between security forces over mining issues in December 2013.

A snapshot of FARDC involvement at mine sites around 2013/14 shows interference by negative elements in over three quarters of the mines at which FARDC had a presence. Notably, such interference at 3T mines in Northern Katanga appears to have been eradicated at the sites visited in 2013/14, with combined pressure from provincial authorities and industry due diligence programmes leading to FARDC disengagement from 3T mines and a dramatic improvement in the region’s trade reputation. Despite this notable achievement undisciplined FARDC units continue to interfere at 3T mines elsewhere.

Determining the proportion of production from eastern DRC that is affected by FARDC interference is problematic.<sup>37</sup> IPIS estimates suggest that mine sites producing at least a third of eastern DRC’s gold are subject to FARDC interference. When looking at figures from a more localised perspective, mines producing over half of South Kivu’s gold are subject to activity by criminal networks within the FARDC. Moreover, whilst FARDC interference with the 3Ts in northern Katanga has been addressed, it is estimated that over 50% of the province’s artisanal workers work in mines subject to interference. This is again largely due to continued FARDC involvement with gold mining in the

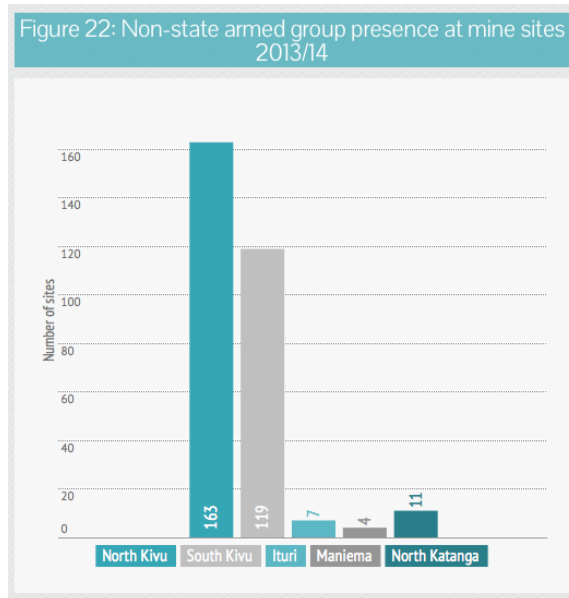
<sup>37</sup> Estimates of weekly production at mine sites affected by such activity can be subject to underreporting and fail reflect the mineral output interfered with off site or through intermediaries. They may nevertheless provide one possible indicator of approximate proportions of production affected by interference.



province and specifically interference at Musebe mine, home to around 15,000 workers at the time of survey. This involvement affects over half of Katanga’s gold production. A large portion of FARDC interference with 3T production recorded by IPIS in 2013/14 took place in North Kivu, often in the form of taxation.

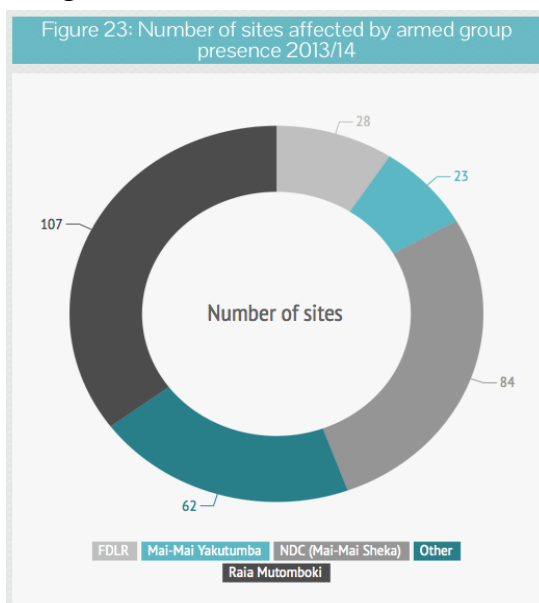
### Interference at mine sites by non-state armed groups

Non-state armed group presence was virtually equivalent to that of Congolese public security forces at mine sites surveyed in 2013/14. With a presence at 304 sites, these groups continue to benefit from mining activities whilst also being responsible for serious human rights abuses, including in the course of perpetrating incursions on mining areas. One in four artisanal workers is engaged at a mine subject to armed group interference. Here, the Raia Mutomboki and the NDC Sheka alone were active at over half of the mines surveyed in 2013/14.



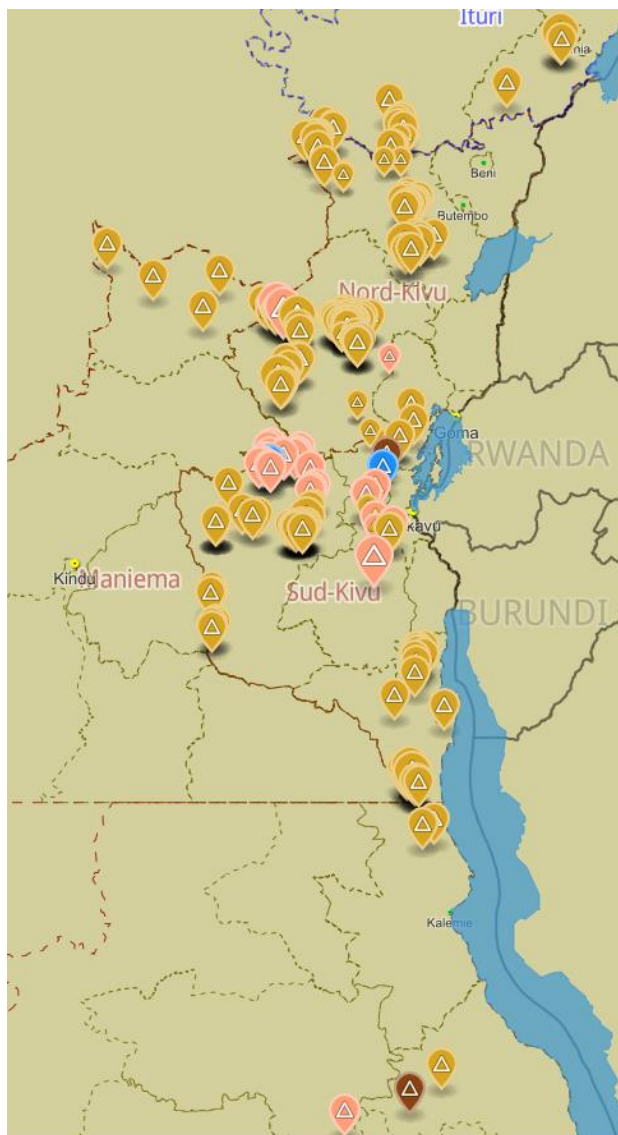
Weekly production estimates indicate that non-state armed group interference affects mines producing at least a fifth of eastern DRC’s gold production. In North Kivu, this percentage rises to nearly half of the province’s potential weekly output. Such groups likewise continue to engage in interference at 3T mines (see figure 25 below).

Since 2010 a number of non-state armed groups fomented in the aftermath of the Congo wars have been demobilised, with several groups (partially) integrated into the Congolese army. Security gains in this regard were compromised in 2012 with the formation of the M23 rebel group, which saw heavy combat with the FARDC in 2012 and 2013, particularly in North Kivu. However, the M23 did not appear to have much involvement in mining, and December 2013 saw fighting come to an end. By mid-2014 the security situation in the Kivus appeared to be progressing, with joint DRC/UN military operations weakening armed groups in the region, counting victories against the Islamist ADF in Beni and advances against the APCLS and NDC (Nduma Defense of Congo).



In North Kivu (Annex 2D), the FDLR has had a presence in mining areas since IPIS mapping began. In southern Lubero it has shared control over the gold trading towns of Kasugho and Bunyatenge with the Mai-Mai UCP. The group has been the target of a Congolese military offensive since late February 2015<sup>38</sup>, with March 2015 seeing reports of victories against the group in Lubero and Mwenga territories of North and South Kivu.<sup>39</sup> In mid-March, the FDLR was reported to have taken hostages in Bunyatenge,<sup>40</sup> with accounts that the group was heading north into Mambasa (Province Orientale),<sup>41</sup> a territory rich in gold with at least 150 deposits. The impact of the Congolese offensive on interference at FDLR controlled mines has yet to be seen. Of 98 site revisits in 2013/14, FDLR interference at sites was replaced with that of other armed actors, including in one case FARDC soldiers. In Walikale, the NDC Sheka has retained control over a large mining area in the inaccessible interior, appearing to seek control over the mining area of Fatua in early April 2014. The group is notorious for profiteering from mining and the mineral trade and has sophisticated systems for exploitation. It was involved in brutal confrontations over mining territory in the west with a Mai-Mai Simba faction in September 2013. A joint MONUSCO/FARDC offensive against the NDC since last July 2014 after NDC Sheka attacked the Alphamin site in Bisie, has seen it dislodged from a number of *groupements* (Luberiki, Wassa and Ihana), with reports of the return of those displaced from the Masisis-Walikale axis on which the group has

**Figure 24: Snapshot of armed group presence at mines sites, 2013/14**



of Fatua in early April 2014. The group is notorious for profiteering from mining and the mineral trade and has sophisticated systems for exploitation. It was involved in brutal confrontations over mining territory in the west with a Mai-Mai Simba faction in September 2013. A joint MONUSCO/FARDC offensive against the NDC since last July 2014 after NDC Sheka attacked the Alphamin site in Bisie, has seen it dislodged from a number of *groupements* (Luberiki, Wassa and Ihana), with reports of the return of those displaced from the Masisis-Walikale axis on which the group has

<sup>38</sup> MONUSCO is not part of the counter FDLR offensive, reportedly due to concerns about the human rights record of Congolese officers heading the operations.

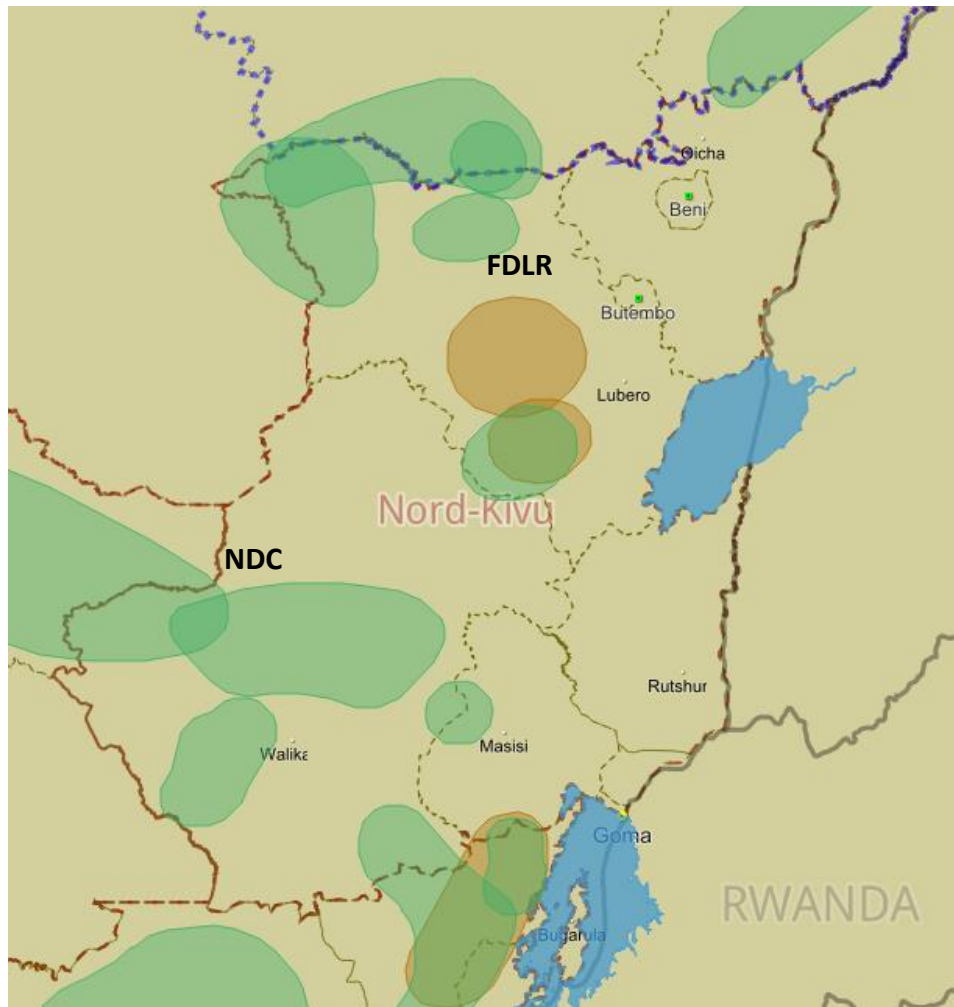
<sup>39</sup> Sud-Kivu: l'armée dit contrôler le fief des FDLR à Itombwe, Radio Okapi, 8 March 2015. Traque contre les FDLR: environ 182 rebelles neutralisés au Nord et Sud-Kivu, Radio Okapi, 14 March 2015.

<sup>40</sup> Nord-Kivu : les FDLR interdisent aux habitants de Lubero de sortir de leurs villages, Radio Okapi, 19 March 2015.

<sup>41</sup> Nord-Kivu: les FDLR fuient vers la Province Orientale, selon la société civile, Radio Okapi, 11 March 2015.



**Figure 25: Map of armed group presence in North Kivu**



hereto levied taxes (particularly around Kibua), in August 2014.<sup>42</sup> Much gold production in north Lubero and Beni was under the control of the FARDC in 2013, with a strong FDLR and especially the Mai-Mai UPCP grip on gold in the centre and south of Lubero. Unlike the gold mines of Beni, Lubero and Walikale, Masisi's 3T mines seemed to be largely free from the presence of non-state armed groups or public security forces in 2013/14.

In South Kivu (Annex 2E), the advent of the Raia Mutomboki after 2010 saw the development of its presence in almost 110 mining sites and several trading centres remain almost unchallenged, in both the north and west. They have a presence at several sites in the Baliga groupement. In Shabunda territory, the Kikuni faction controls an area with cassiterite mines and derives revenue from the trade through taxation.<sup>43</sup> Moreover, increased gold mining with the use of dredges on the Ulindi

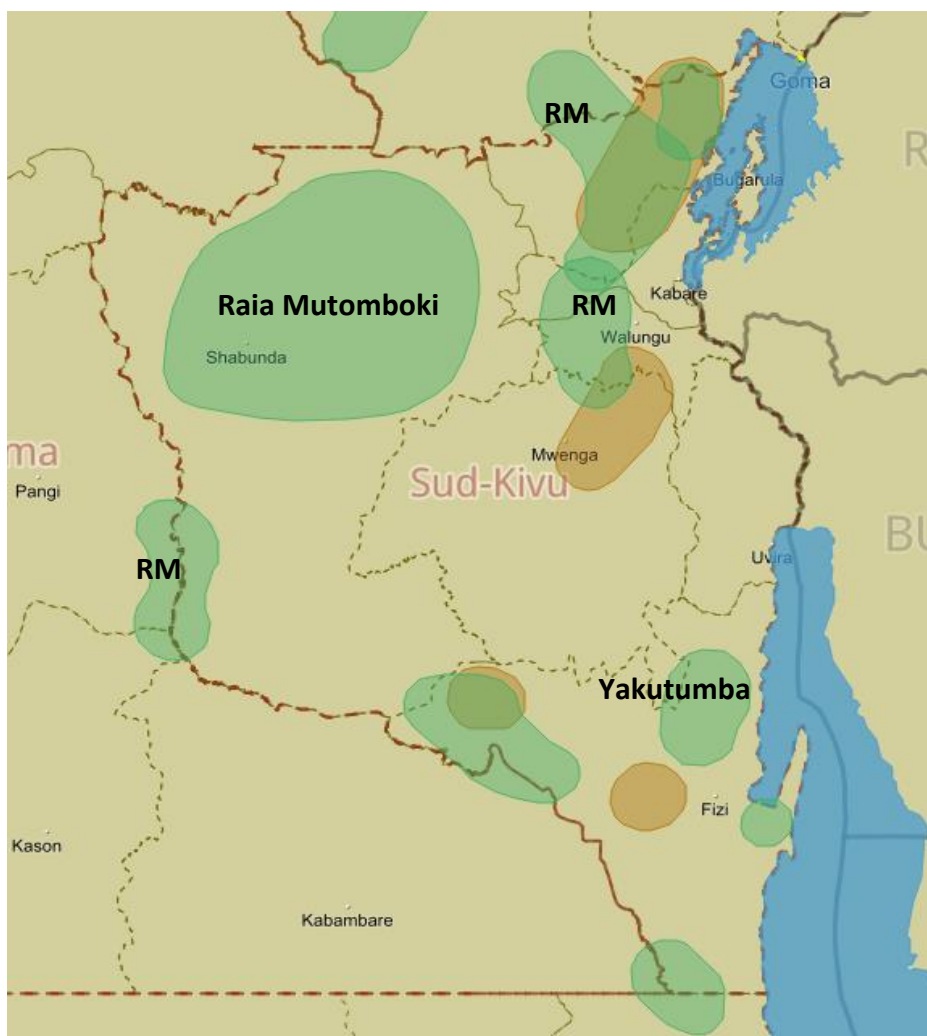
<sup>42</sup> Nord-Kivu: les FARDC délogent les Maï-Maï Cheka de Kabombo, Radio Okapi, 11 August 2014.

<sup>43</sup> UN Group of Experts report s/2015/19, para181-186.

river since January 2014 has seen dredgers entering Raia Mutomboki controlled areas since May, where dredge owners have to pay taxes to various Raia Mutomboki factions.<sup>44</sup> In Fizi territory, an accord between the Mai-Mai Yakutumba and the FARDC appears to have come to an end in April 2014 with clashes between the forces. The Mai-Mai Yakutumba have a reputation for gold smuggling and launching economically motivated attacks.

The ASM sector in Ituri revolves almost entirely around gold exploitation with problems of conflict financing in 2013 most pronounced in Irumu and Mambasa. In Irumu the FRPI has long been involved in income generation from gold mines. After lengthy negotiations with the FARDC over demobilisation, the group's leader Cobra Matata surrendered with a contingent of fighters in late November 2014, and was subsequently arrested. March 2015 has nevertheless seen reports of numerous FRPI abuses against civilians around Bunia, as well as the targeting of State agents and

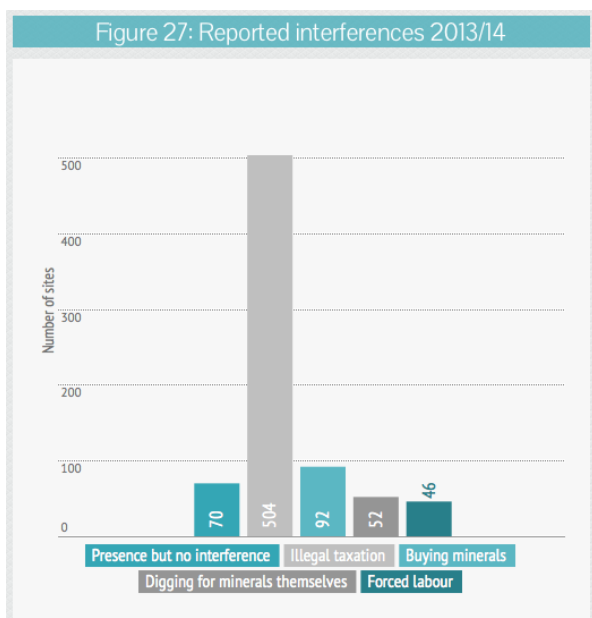
**Figure 26: Map of armed group presence in South Kivu**



<sup>44</sup> UN Group of Experts report s/2015/19, para193.

customs officials.<sup>45</sup> In Mambasa, the Mai-Mai Morgan have been involved in looting and extortion at mine sites and gold trafficking through a wider criminal network linked to high-ranking FARDC officers for a number of years.<sup>46</sup> The surrender and subsequent death under suspicious circumstances of the group's leader in April 2014 is expected to have a negative impact on the security in the area with criminal networks involved in illegal gold trading left undisturbed. Any successful FDLR migration to Mambasa could see a further deterioration in security in mining areas.

2013 data for Maniema confirmed the absence of armed groups at a large number of mining sites, with interference at 3T sites appearing notably low. This renders responsible sourcing from the province much easier than from the Kivus, with only 20 of 136 sites accessed by our teams in 2013/14 evidencing militarisation. In 2010, 38 of 144 mines were found to be militarised. In 2012 the provincial authorities moved to distinguish Maniema's mineral production from the Kivus by transporting minerals from Punia to Kindu – a move that has proved beneficial to the reputation



of the province and the re-establishment of the mineral trade there. Almost all miners in southern Maniema are currently digging for gold and the Canadian company Banro holds several concessions in this gold belt, which runs from South Kivu into Maniema. In late 2013 the Mai-Mai Kem were reported to be involved in gold mining on the border between Kailo, Punia and Shabunda.

Security in tin and tantalum mines in Northern Katanga has improved considerably compared to six years ago. Nevertheless, whilst tin is produced in good security conditions

at iTSCi regulated sites in northeastern Malemba Nkulu, in eastern Manono at least one medium-sized tin mine suffered repeated attacks from Mai-Mai in 2014. IPIS has pointed out that the security situation in Katanga and its implications for ASM requires further monitoring. Certainly, 2014 saw scores of attacks by Mai-Mai militias in Kalemie, Manono, Mitwaba, Pweto and Moba, with a spiral of violence in late 2014 occasioned by Bakata Katanga assaults on civilians and inter-ethnic clashes. The Bakata Katanga is operative in nearly all eastern territories with a significant impact on ASM activities.

<sup>45</sup> Les miliciens FRPI ciblent les représentants de l'Etat à Walendu Bindi, Radio Okapi, 9 March 2015.

<sup>46</sup> UN Group of Experts, Final Report S/2012/843, para.129.

## Conflict financing and abuses at mining sites

Data gathered in 2009/10 found the predominant mode of conflict financing among both non-state armed groups and public security forces to be taxation and trade, as well as direct exploitation either by armed actors themselves or by hiring others. At least two-dozen instances of forced labour were also recorded. Serious abuses such as pillage and assaults were also found, including human rights violations perpetrated in the context of extortion by state agents. Sporadic incursions seemed to be a particular *modus operandi* of armed groups.

IPIS data gathered on conflict financing at mines in 2013/14 (after the advent of the OECD Due Diligence Guidance), was more developed. At these sites, illegal taxation formed the overwhelming majority of armed interference at 504 cases, with involvement in the trade (92 cases) and digging for minerals directly (52 cases) also forming part of the trend.<sup>47</sup> Forced labour was identified in 46 instances.

No data was gathered on child labour during IPIS' 2009/10 conflict mapping. Nevertheless, whilst there was no strong emphasis on the systematic gathering of information on child labour in 2013/14, the presence of children was noted by our teams at over two dozen sites, with no reports at iTSCi covered sites. Whilst in some cases children were reported to be digging, a full picture of the extent of their engagement in the worst forms of child labour remains unclear. Research undertaken at Bisie cassiterite mine between June 2007 and December 2012 nevertheless also found children involved in extraction, as well as support work.<sup>48</sup>

---

<sup>47</sup> These findings must be tempered by the understanding that armed group and FARDC involvement in the minerals trade is not always readily apparent, particularly off mine sites. This is due to the fact that such involvement can be disguised through civilian networks and intermediaries

<sup>48</sup> P. K. Kyamwani, *Travail des enfants dans le site minier d'exploitation artisanale de Bisie en territoire de Walikale. une crise oubliée en République Démocratique du Congo*, IPIS, November 2015.

## Implementation of on-the-ground due diligence programmes

Since the start of 2011 a number of upstream initiatives have been taken and further developed at the regional level. Adopting the six tools forming its Regional Initiative against the Illegal Exploitation of Natural Resources (RINR), the International Conference for the Great Lakes Region (ICGLR) endorsed the OECD Due Diligence Guidance in its Lusaka Declaration of December 2010. The ICGLR incorporated the Guidance into its certification mechanism, seeking to harmonise its “Model Law” (for adoption as part of regional legislative harmonisation efforts) with the Guidance. The ICGLR’s regional certification scheme requires traders to undertake OECD due diligence before being issued a certificate. The DRC and Rwanda subsequently implemented the ICGLR regional certification mechanism into their own national frameworks in 2012, being later joined by Burundi. In May 2012, the DRC temporarily suspended two Chinese *comptoirs* for a breach of the obligation to undertake due diligence in accordance with a previously issued *note circulaire* imposing this requirement on those operating within the minerals sector on its territory.

ICGLR certification became effective in the DRC from 20 January 2014, when ICGLR certificates were brought into circulation throughout the country to replace the existing national certification system. The launch of the ICGLR certificates was undertaken at extremely short notice and a dearth of green-validated sites meeting certification standards imposed a break on the mechanism’s efficacy, prompting the issuance of a decree granting green status to 11 mines in North Kivu within a week of their validation visits.

In the US, final rules for the implementation of Section 1502 of the Dodd-Frank Act were adopted by the US Securities and Exchange Commission in August 2012, including endorsement of the OECD Due Diligence Guidance as a credible due diligence standard for compliance with the law. Initial reports under the provision were filed in May 2014.<sup>49</sup> Whilst it has courted controversy since its adoption, Section 1502 has nevertheless aided to raise the awareness of Congolese and global industry actors regarding the significance of addressing the harmful aspects of resource extraction to maintaining continued access to the world market. Indeed, over the three cycles of the pilot implementation of the 3T supplement to the OECD Due Diligence Guidance, IPIS observed a shift in attitudes to due diligence in the DRC from one of scepticism towards growing engagement.

This appeared to have been spurred in part by the enactment of Dodd-Frank, as well as changes in the DRC’s regulatory framework, and industry requirements imposed on the market through initiatives such as the Conflict-Free Smelter Programme and

---

<sup>49</sup> Litigation attempts to counter the SEC’s final rules saw the US Court of Appeals for the DC circuit uphold Section 1502 in April 2014, finding nevertheless that the requirement that companies publically declare that their products have not been determined “DRC conflict-free” is a violation of the first amendment of the US Constitution.

iTSCi (see below).<sup>50</sup> Nevertheless, the Presidential mining suspension imposed between 9 September 2010 and 10 March 2011 in response to growing international pressure created a difficult environment for the initial implementation of due diligence on the ground by stifling the legal trade. Difficulties in accessing the international market due to importer requirements for a conflict free guarantee rendered recovery from the harmful effects of this ban challenging.

At the Congolese national level, new initiatives taken to enhance verification, traceability and monitoring have been hampered by low levels of capacity and resources. Whilst these difficulties have been compounded by challenges stemming from increased market demand for due diligence-assured minerals, reduced prices and an unstable security situation in a number of localities, various initiatives by organisations such as the OECD, PAC, Pact, BGR and others have enhanced government as well as local industry capacity through training, as well as increased data collection on the artisanal mining in the DRC.

In the general context of an increased focus on improving governance in the sector on the part of the central government authorities, amongst others, the advancement of mining reforms has been slow. Budgetary constraints and security problems have prevented Joint Assessment Teams from undertaking regular field missions in accordance with the envisaged 3 monthly validation schedule. Moreover, even where validation missions have been undertaken, the consequent *arrêtés* have often not been passed by the Mining Minister until several months later, rendering any verified status obsolete and undermining the credibility of the system. The lack of broad geographical and timely coverage by validation missions means that the large majority of artisanal sites remain outside the legal trade. This is particularly a concern regarding gold mining sites in provinces such as Province Orientale, from which sourcing might otherwise prove viable.<sup>51</sup> Nevertheless, by November 2014, 152 sites had been validated (116 green; 16 yellow; 16 red), though only 25 had been visited twice and one three times. Further recent validations at mining sites in North Kivu saw six sites in Lubero territory and seven sites in Walikale territory qualified as green sites in early April.<sup>52</sup> iTSCi tagging has reportedly commenced at these mines. Having been designated an industrial exploitation site, Bisie will not be included in such tagging. The interest of industrial mining company, Alphamine Bisie Mining SA, in developing a large-scale project in Bisie may represent a breakthrough regarding this site.

Another initiative pursued by the Congolese government together with MONUSCO and the IOM has been the *Centre de Nègoce* scheme, designed to enable the

---

<sup>50</sup> See *Upstream Implementation of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High Risk areas: Final Report on one-year pilot implementation of the Supplement on Tin, Tantalum, and Tungsten*, OECD/IPIS, January 2014.

<sup>51</sup> See: G. Mthembu-Salter, *Baseline study three: Production, trade and export of gold in Orientale Province, Democratic Republic of Congo*, Phuzimoya Consulting, OECD 2015.

<sup>52</sup> Nord-Kivu : le gouvernement congolais valide six sites miniers à Bepere, 7 April 2015, Radio Okapi; Nord-Kivu: 7 sites miniers validés à Walikale, 8 April 2015, Radio Okapi.

construction of pilot trading centres and the enabling of transportation to mineral hubs. Intended to allow miners and traders to benefit from a competitive market environment free from armed interference, the initiative has suffered serious obstacles to its full implementation. Whilst two trading centres have been constructed and officially inaugurated, their effective functioning has reportedly been impeded by disputes between local concession holders and artisanal miners.

An evolution in the approach taken by the authorities and main large-scale mining operators to the issue of ASM, from being purely coercive and exclusionary towards being more inclusive is to be welcomed. The sensitivity of authorities and large-scale operators to the significance of artisanal mining to local livelihoods through an inclusive policy approach to ASM continues to be encouraged.

Traceability efforts were also slower to expand than anticipated, though they continue to grow. The iTSCi due diligence programme was first piloted at Nyabibwe mine (Kalehe territory) in South Kivu in 2010. Whilst activities in South Kivu were shut down from September 2010 due to the presidential mining ban, implementation nevertheless proceeded in Rwanda and Katanga from 2011. The scheme has since expanded to include tantalum and tungsten ores, and extended its geographic range to cover mine sites in certain areas of Maniema and South Kivu, expanding to cover the Rubaya mine concession of Mwangachuchu Hizi International (now, Société Minière de Bisunzu (SMB)) in Masisi Territory, North Kivu, in March 2014, and sites in Lubero and Walikale in April 2015. The benefits of iTSCi's extension to Maniema and South Kivu were observable in higher 2013 production figures, particularly for cassiterite. In the first quarter of 2014 recorded production was higher than that achieved in over the first two quarters of 2013 (see Annex 1K).

Industry initiatives to aid continued sourcing from the DRC have also seen the expansion of closed pipelines since the start of 2011. Indeed, after a year of on-going trade and due diligence implementation in Katanga and Rwanda, many stakeholders felt the need to initiate various projects to facilitate private sector implementation of the OECD Due Diligence Guidance.

In July 2011, Motorola Solutions and AVX launched the Solutions for Hope (SfH) project as a pilot initiative to source conflict-free tantalum from Katanga province. Other companies such as Nokia, Hewlett Packard and Intel subsequently joined the initiative. SfH's closed pipe supply involves a defined set of suppliers and buyers along the whole supply chain, i.e. pre-assessed mine sites that participate in the iTSCi traceability program, ASM cooperatives, exporters, smelters/processors, component manufacturers and end-users. In March 2014, SfH moved beyond conflict-free Katanga and started expanding in North Kivu, with first reports of sourcing from Société Minière de Bisunzu in January 2015. Early 2012, likewise saw the establishment of the "Partnership for Social and Economic Stability" as a closed-pipeline starting in Katanga for the manufacture of tantalum capacitors by KEMET, one of the world's largest tantalum users. Later, in September 2012, the Dutch government, together with industry partners Philips and Tata Steel, took the lead in establishing the Conflict-free Tin Initiative (CFTI) in South Kivu, identifying Kalimi as a



pilot tin mine. CFTI subsequently expanded its mining operations to Maniema at the start of 2014.

These types of initiatives have seen the return of former large buyers, Traxys and Malaysia Smelting Corporation, to source from the DRC in accordance with OECD due diligence. They have also stimulated interest in localised processing of minerals with the construction of smelters in Masisi (North Kivu) and Lubumbashi (Katanga).<sup>53</sup> However, the necessary restructuring of the artisanal mining sector, occasioning a rise in the formation of cooperatives, has also seen heightened tensions between workers and operators of closed pipelines, specifically around the issue of mineral prices. Here, some buyers and cooperatives have sought to buy minerals at fixed prices despite significant price fluctuations, which has led to miner protests and inducements to smuggle.<sup>54</sup>

The Public-Private Alliance for Responsible Minerals Trade, a multi-sector and multi-stakeholder initiative launched in November 2011 by the US Agency for International Development (USAID) has also sought to support pilot supply chain systems that allow companies to source from conflict-free mines, help align chain-of-custody programs and practices, and bolster in-region civil society and governmental capacity. To date it has funded the exploration of a traceable conflict-free mineral chain for artisanal gold from *Province Orientale*, as well as the provision of support to civil society initiatives in monitoring transparency, fostering early warning mechanisms and securing accountability of the mining sector in South Kivu.

Indeed, a number of local multi-stakeholder initiatives have been established to enhance monitoring.<sup>55</sup> In order to assist with monitoring and implementation a *Comité provincial de Pilotage du système iTSCi* has been established as part of a cooperation arrangement with the Congolese government. At the provincial level, *comités de suivi* are composed of state, civil society, business and security (e.g. MONUSCO) representatives and carry out assessments of the Congolese mining sector regarding the implementation of the ICGLR's RINR mechanism and the OECD Due Diligence Guidance. This includes monitoring compliance with national and international regulations on child labour, women's presence at mine sites and illicit state involvement in mining activities. Here, local (territorial level) multi-stakeholder committees oversee iTSCi activities, reporting on matters to be addressed by the provincial committees. Moreover, in North and South Kivu, *Observatoire Gouvernance et Paix* (OGP) has created committees trained in traceability issues to act as a warning system on related matters. Meanwhile, the establishment of Congolese NGO Save Act Mine in 2012 has seen the organisation develop its role in the implementation of the ICGLR's whistle-blowing scheme through the

---

<sup>53</sup> J. Cuvelier et al, *Analysing the Impact of the Dodd-Frank Act on Congolese Livelihoods*, SSRC, November 2014, p.21-22.

<sup>54</sup> Ibid, p.24.

<sup>55</sup> For further see, J. Cuvelier et al, *Analysing the Impact of the Dodd-Frank Act on Congolese Livelihoods*, SSRC, November 2014, p.13-14.

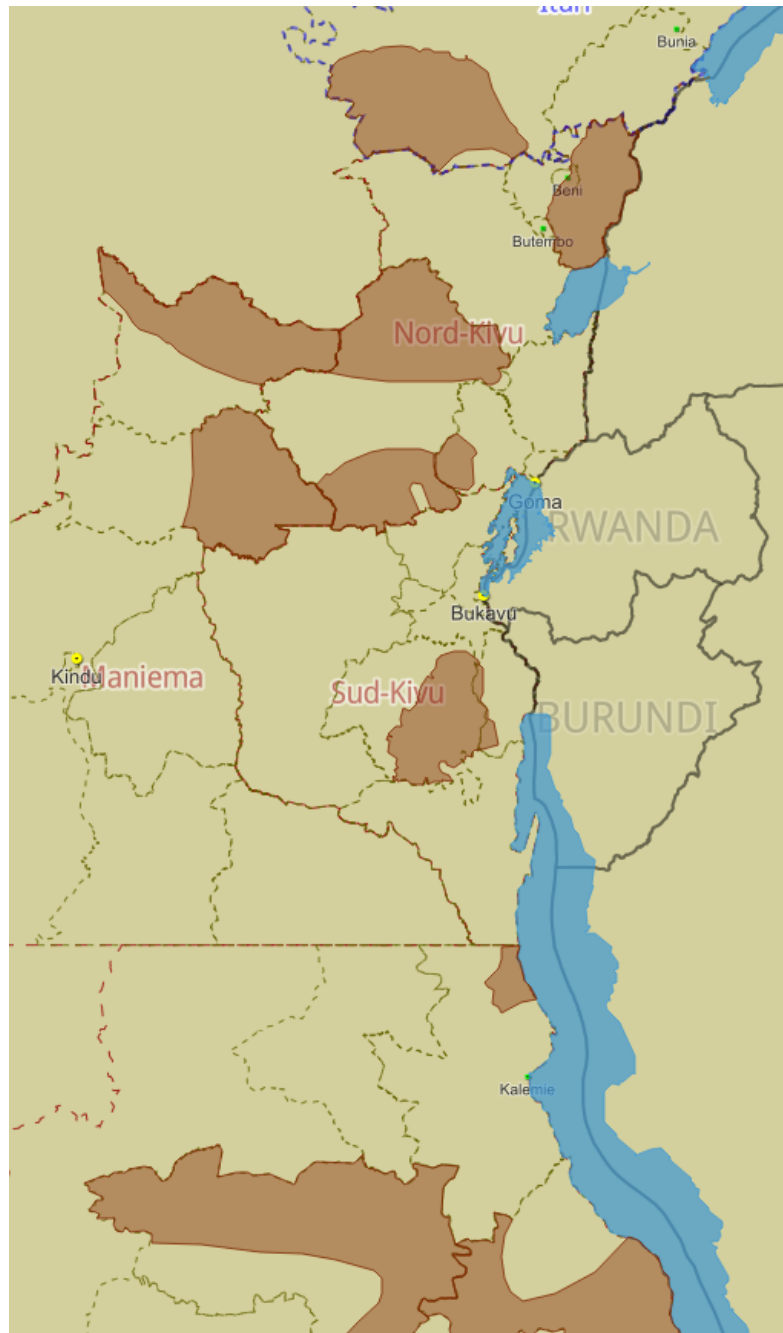
establishment of a fraud line for reports on illegal practices in the mining sector, and the piloting of local surveillance committees, amongst other things.

The creation of multistakeholder *comités* represents a major advancement as an innovation that has given civil society and community organisations an official avenue to systematically voice concerns with provincial and central authorities. However, they also suffer from high levels of bureaucracy and insufficient resources.



## Annex 1: Artisanal mining sector in Eastern DRC

### 1A: Areas inaccessible to research teams in eastern DRC 2013/14



**1B: Estimated percentages of artisanal workers exploiting minerals per province for 2013/14**



**1C: Estimated percentages of artisanal workers exploiting gold by locality**



**1D: Official 3T production and export data (tonnes) for the DRC 2010-2013**

Year	Mineral	Production (t)	Export (t)
<b>2006</b>	Cassiterite	5.527,97	2.388,00
	Coltan	30,67	24,00
	Wolframite	100.129,00	471,00
	<b>Total</b>	<b>105.687,64</b>	<b>2.883,00</b>
<b>2007</b>	Cassiterite	16.049,70	14.694,21
	Coltan	393,00	393,49
	Wolframite	1.264,60	1.193,73
	<b>Total</b>	<b>17.707,30</b>	<b>16.281,43</b>
<b>2008</b>	Cassiterite	20.012,76	19.189,41
	Coltan	530,00	530,51
	Wolframite	621,36	724,84
	<b>Total</b>	<b>21.164,12</b>	<b>20.444,76</b>
<b>2009</b>	Cassiterite	16.583,98	15.512,26
	Coltan	509,40	463,70
	Wolframite	458,31	365,32
	<b>Total</b>	<b>17.551,69</b>	<b>16.341,28</b>
<b>2010</b>	Cassiterite	11.943,33	13.414,99
	Coltan	492,09	439,78
	Wolframite	44,45	45,16
	<b>Total</b>	<b>12.479,87</b>	<b>13.899,93</b>
<b>2011</b>	Cassiterite	8.920,56	9.267,27
	Coltan	2.199,43	536,44
	Wolframite	84,24	86,63
	<b>Total</b>	<b>11.204,23</b>	<b>9.890,34</b>
<b>2012</b>	Cassiterite	7.188,85	8.018,21
	Coltan	574,62	585,53
	Wolframite	196,60	71,00
	<b>Total</b>	<b>7.960,07</b>	<b>8.674,74</b>
<b>2013</b>	Cassiterite	6.209,67	8.406,81
	Coltan	358,36	698,14
	Wolframite	57,09	95,24
	<b>Total</b>	<b>6.625,12</b>	<b>9.200,19</b>

Source: Statistiques Minières de 2003 a 2012, Ministre des Mines, DRC, Sept 2013 (for 2010-2012); Exercice 2013, Ministre des Mines, DRC, March 2014 (for 2013)



**1E: Official gold production and export data (Kg) for the DRC 2010-2013**

<b>Year</b>	<b>Production</b>	<b>Export</b>
<b>2006</b>	328,09	95,00
<b>2007</b>	143,73	121,60
<b>2008</b>	119,57	70,31
<b>2009</b>	166,61	220,14
<b>2010</b>	151,13	177,9
<b>2011</b>	309,41	213,36
<b>2012</b>	2812,62	2411,3
<b>2013</b>	6111,97	6109,74

Source: Statistiques Minières de 2003 a 2012, Ministre des Mines, DRC, Sept 2013 (for 2010-2012); Exercice 2013, Ministre des Mines, DRC, March 2014 (for 2013)

# 1F: iTSCi Katanga Mine concentrate production (Kg) by territory Q2 2011 to Q2 2014

	2011				2012				2013				2014				
	Q2	Q3	Q4	TOTAL	Q1	Q2	Q3	Q4	TOTAL	Q1	Q2	Q3	Q4	TOTAL	Q1	Q2	TOTAL
<b>KATANGA</b>																	
Malemba-Nkulu	201.914	423.525	221.562	847.001	179.594	193.060	207.045	139.334	719.034	118.297	204.034	292.567	257.294	872.192	209.027	225.461	434.487
Sn/Ta	32.823	39.629	8.664	81.116	67.859	116.442	117.807	79.987	382.095	100.477	335.826	286.473	239.724	962.499	392.201	359.459	751.660
Ta			3.516	3.516	551				551						154		154
Ta/W																	
<b>Total</b>	<b>234.737</b>	<b>463.154</b>	<b>233.742</b>	<b>931.632</b>	<b>248.004</b>	<b>309.502</b>	<b>324.852</b>	<b>219.321</b>	<b>1.101.680</b>	<b>218.774</b>	<b>539.860</b>	<b>579.040</b>	<b>497.018</b>	<b>1.834.691</b>	<b>601.382</b>	<b>584.920</b>	<b>1.186.301</b>
Manono	83.655	100.108	53.367	237.130	90.489	103.556	93.231	65.468	352.743	54.061	45.575	116.484	85.900	302.020	98.111	83.943	182.054
Sn/Ta	153.107	195.559	108.889	457.555	195.890	158.508	146.225	113.757	614.380	122.627	121.200	154.254	103.501	501.582	128.538	198.322	326.860
Sn/W	2.169	2.240	2.040	6.449	3.277	5.447	7.477	4.5	16.201	7.361	1.933	1.630	1.630	10.925	950	950	950
Ta	5.878	5.862	5.452	17.192	8.428	7.090	4.170	45	19.733	1.287	749	1.637	2.118	5.792	2.287	5.764	8.591
W	2.596	15.789	25.981	44.366	11.679	10.538	3.252	25.468	25.468								
<b>Total</b>	<b>247.404</b>	<b>319.557</b>	<b>195.730</b>	<b>762.691</b>	<b>306.486</b>	<b>282.969</b>	<b>252.325</b>	<b>186.747</b>	<b>1.028.525</b>	<b>185.336</b>	<b>169.457</b>	<b>273.375</b>	<b>193.149</b>	<b>820.319</b>	<b>229.886</b>	<b>288.029</b>	<b>518.455</b>
Mitwaba	248.772	582.664	242.147	1.073.583	260.217	123.624	95.801	123.893	603.536	104.363	201.203	229.996	193.794	729.355	176.931	275.834	452.765
Sn/Ta					820		605	3.602	5.027	5.878	1.086	10.550	1.084	18.598			1.950
Ta							22		22		1.230	1.039	1.492	3.761		1.950	1.950
W																	752
<b>Total</b>	<b>248.772</b>	<b>582.664</b>	<b>242.147</b>	<b>1.073.583</b>	<b>261.037</b>	<b>123.624</b>	<b>96.428</b>	<b>127.495</b>	<b>608.585</b>	<b>110.241</b>	<b>203.519</b>	<b>241.585</b>	<b>196.370</b>	<b>751.714</b>	<b>176.931</b>	<b>277.784</b>	<b>455.467</b>
Bukama/Luena	169.375	220.060	135.385	524.820	117.768	117.445	71.157	81.535	387.905	70.173	78.961	66.488	72.991	288.612	80.408	106.426	186.834
Sn/Ta					3.000		1.565		4.565				2.933		1.196		1.196
Sn/W					15.000	36.854	13.012		64.866								64.866
Ta						1.485	1.596	532	3.613	2.218	8.272	3.978	3.017	17.485	4.134	2.191	6.325
Ta/W																	
W					4.500	37.317	32.805		74.622	9.354	7.420	2.570	1.667	21.011	4.202	501	4.703
<b>Total</b>	<b>169.375</b>	<b>220.060</b>	<b>135.385</b>	<b>524.820</b>	<b>135.768</b>	<b>160.284</b>	<b>124.647</b>	<b>114.872</b>	<b>535.571</b>	<b>81.745</b>	<b>94.653</b>	<b>73.036</b>	<b>80.608</b>	<b>330.041</b>	<b>89.940</b>	<b>109.118</b>	<b>263.924</b>
Lubudi	95.245	117.060	130.836	343.140	129.942	116.400	193.697	88.783	528.822	31.362	146.182	147.740	149.166	474.451	133.211	120.935	254.146
Sn/Ta							1.259		1.259		1.899			1.899	1.350		1.350
<b>Total</b>	<b>95.245</b>	<b>117.060</b>	<b>130.836</b>	<b>343.140</b>	<b>129.942</b>	<b>116.400</b>	<b>193.697</b>	<b>90.042</b>	<b>530.081</b>	<b>31.362</b>	<b>148.081</b>	<b>147.740</b>	<b>149.166</b>	<b>476.350</b>	<b>134.561</b>	<b>120.935</b>	<b>255.496</b>
Nyunzu	57		4.500	4.557	4.514	3.406	4.229		12.148	5.919	1.883	1.075	2.800	11.677	8.580	15.859	24.439
Sn/Ta													250	250	6.200	34.006	40.206
Ta	45.319	38.729	114.909	198.957	104.488	48.012	53.049	42.027	247.576	30.887	33.001	48.899	41.308	154.094	43.816	63.363	107.179
<b>Total</b>	<b>45.376</b>	<b>38.729</b>	<b>119.409</b>	<b>203.514</b>	<b>109.002</b>	<b>48.012</b>	<b>56.455</b>	<b>46.256</b>	<b>259.724</b>	<b>36.806</b>	<b>34.884</b>	<b>49.974</b>	<b>44.358</b>	<b>166.021</b>	<b>58.596</b>	<b>113.228</b>	<b>171.824</b>
Kalemie	2.990	5.927	2.712	11.629	2.587	3.119	4.062	1.732	11.499	1.320	1.966	1.923	1.698	6.908	2.067	2.238	4.305
Moba										353				353			
Kabalo							31		31	25	21	33		79			
<b>TOTAL KATANGA</b>	<b>1.043.899</b>	<b>1.747.151</b>	<b>1.059.961</b>	<b>3.851.009</b>	<b>1.192.826</b>	<b>1.043.910</b>	<b>1.052.466</b>	<b>786.496</b>	<b>4.075.665</b>	<b>665.962</b>	<b>1.192.441</b>	<b>1.365.706</b>	<b>1.162.367</b>	<b>4.386.476</b>	<b>1.293.363</b>	<b>1.496.252</b>	<b>2.855.772</b>

Source: iTSCi DRC Data Summary Q2 2011 to Q4 2013, ITRI, July 2014 (for 2011); iTSCi DRC Data Summary Q1 2012 to Q2 2014, ITRI, Jan 2015 (for 2012-2014)

**1G: iTSCi Maniema Mine concentrate production (Kg) by territory  
Q2 2011 to Q2 2014**

	2011				2012					2013					2014		
	Q2	Q3	Q4	TOTAL	Q1	Q2	Q3	Q4	TOTAL	Q1	Q2	Q3	Q4	TOTAL	Q1	Q2	TOTAL
<b>MANIEMA</b>																	
Pangi	Sn							192	192	20.129	194.021	307.029	511.231	1.032.410	393.183	327.169	720.352
	Sn/W							219	219		229			229			
<b>Total</b>								<b>411</b>	<b>411</b>	<b>20.358</b>	<b>194.021</b>	<b>307.029</b>	<b>511.231</b>	<b>1.032.639</b>	<b>393.183</b>	<b>327.169</b>	<b>720.352</b>
<b>Kailo</b>																	
	Sn									3.235	35.031	61.428	73.468	173.163	28.715	50.545	79.260
	Sn/Ta																
	Sn/W						10	10	10	10.677	23.526	17.540	1.383	53.126			
	Ta/W										654			654			
	W									540			468	1.007			
<b>Total</b>							<b>10</b>	<b>10</b>	<b>10</b>	<b>14.452</b>	<b>59.211</b>	<b>78.968</b>	<b>75.319</b>	<b>227.950</b>			<b>79.260</b>
<b>TOTAL MANIEMA</b>							<b>832</b>	<b>832</b>	<b>832</b>	<b>55.168</b>	<b>447.253</b>	<b>693.026</b>	<b>1.097.781</b>	<b>2.293.228</b>	<b>28.715</b>	<b>50.545</b>	<b>79.260</b>

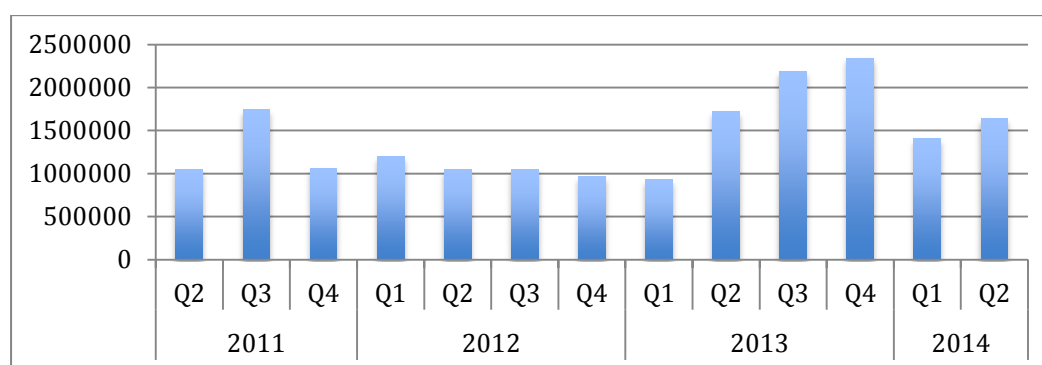
Source: iTSCi DRC Data Summary Q2 2011 to Q4 2013, ITRI, July 2014 (for 2011); iTSCi DRC Data Summary Q1 2012 to Q2 2014, ITRI, Jan 2015 (for 2012-2014)

**1H: iTSCi South Kivu Mine concentrate production (Kg) by territory  
Q2 2011 to Q2 2014**

	2011				2012					2013					2014		
	Q2	Q3	Q4	TOTAL	Q1	Q2	Q3	Q4	TOTAL	Q1	Q2	Q3	Q4	TOTAL	Q1	Q2	TOTAL
<b>SOUTH KIVU</b>																	
Kalehe	Sn							181.044	181.044	207.062	80.680	124.791	81.404	493.937	85.036	91.698	176.734
<b>Total</b>	Sn/Ta														797		797
	Ta															115	115
<b>TOTAL SOUTH KIVU</b>								<b>181.044</b>	<b>181.044</b>	<b>207.062</b>	<b>80.680</b>	<b>124.791</b>	<b>81.404</b>	<b>493.937</b>	<b>85.833</b>	<b>91.813</b>	<b>177.646</b>

Source: iTSCi DRC Data Summary Q2 2011 to Q4 2013, ITRI, July 2014 (for 2011); iTSCi DRC Data Summary Q1 2012 to Q2 2014, ITRI, Jan 2015 (for 2012-2014).

**1I: Total iTSCi site production in Eastern DRC, 2011-2014**



Source: iTSCi DRC Data Summary Q2 2011 to Q4 2013, ITRI, July 2014 (for 2011); iTSCi DRC Data Summary Q1 2012 to Q2 2014, ITRI, Jan 2015 (for 2012-2014).

## Annex 2: Militarisation at mining sites in Eastern DRC

### 2A: Mines by armed actor presence 2009/10 and 2013/14

2009/10		
	Presence	Reports of interference
No armed presence	293	
FARDC	178	162
Raia Mutomboki	2	1
FDLR	54	44
Mai-Mai groups	55	6
FRF	7	7
National Police	41	33
2013/14		
	Presence	Reports of interference
No armed presence	497	
FARDC	383	313
Raia Mutomboki	107	107
NDC ( Sheka)	84	84
FDLR	28	28
Mai-Mai Yakutumba	23	23
Other	62	62

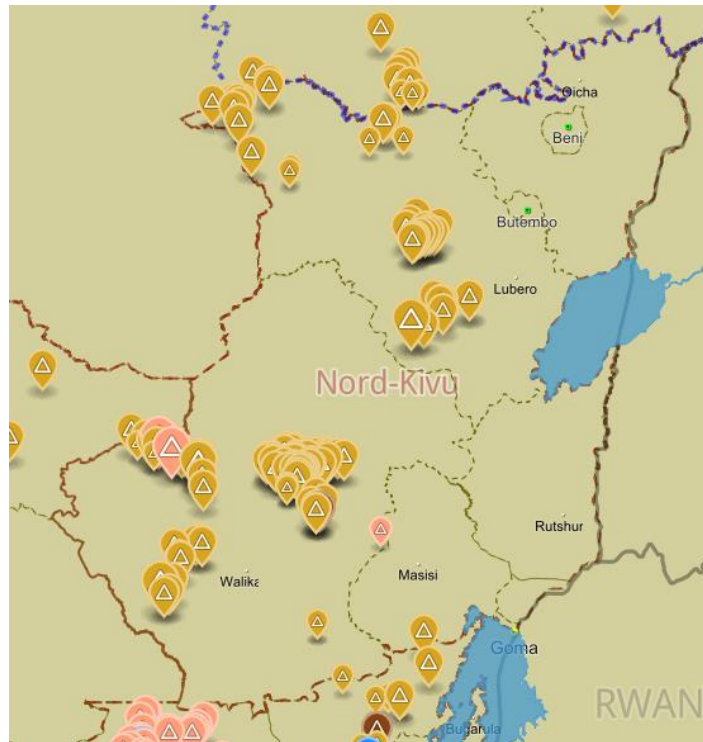
**2B: Map of criminal elements within FARDC presence at sites in North Kivu, 2013/14**



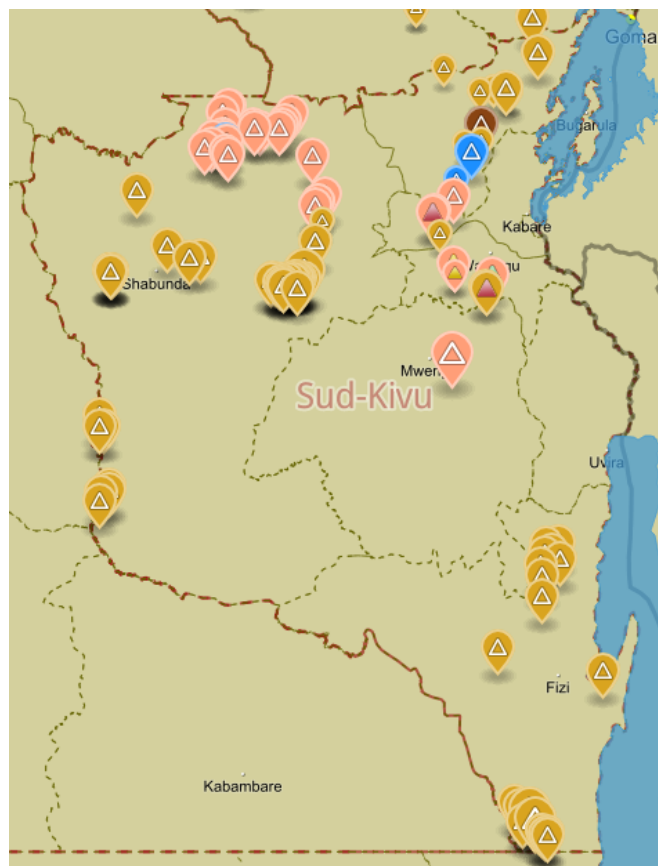
**2C: Map of criminal elements within FARDC presence in South Kivu, 2013/14**



**2D: Map of armed group presence at sites in North Kivu 2013/14**



**2E: Map of armed group presence at sites in South Kivu 2013/14**





This report takes stock of 5 years of implementation of national and international programmes and initiatives designed to operationalize the recommendations of the OECD Due Diligence Guidance on Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas in the Great Lakes Region of Central Africa, mainly focusing on the Democratic Republic of the Congo. It has been prepared by the International Peace Information Service (IPIS) for the OECD.

[mneguidelines.oecd.org/mining.htm](https://mneguidelines.oecd.org/mining.htm)

