



# Linking Land Tenure and Use for Shared Prosperity

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## **PROPERTY RIGHTS CONUNDRUMS IN ARTISANAL AND SMALL-SCALE MINING: EXPERIENCES FROM USAID PROJECTS IN CÔTE D'IVOIRE, GUINEA, AND THE DEMOCRATIC REPUBLIC OF CONGO**

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## **Abstract**

The artisanal and small-scale mining (ASM) sector contributes a significant, but under-recognized economic contribution to national development in resource-rich countries. Whether diamonds, gold, tin or other minerals millions of artisanal miners throughout the world confront a complex land tenure situation of overlapping and competing tenurial regimes. The State often claims subsurface rights, but customary tenure institutions in fact often enforce informal arrangements around the use, access, and transfer of rights to these mineral resources. In other cases, warlords and drug cartels have captured resource-rich territories and imposed rules of access and use of subsurface minerals on a servile labor force.

Considerable confusion has long occurred among both state and civil society actors about what tenurial regime predominates – surface or subsurface – with the result that tensions and violent conflicts sometimes erupt in artisanal mining zones around interpretations of both statutory and customary governance norms. Illustrations from the USAID-financed projects Property Rights and Artisanal Development (PRADD II) and Capacity Building for a Responsible Minerals Trade (CBMRT) describe how these programs are seeking to clarify and formalize claims to sub-surface mineral resources while also taking account of the rights and claims of customary surface rights claimants. Recommendations are spelled out.

**Key Words:** *Artisanal mining, customary tenure, subsurface rights, Dodd-Frank, Kimberley Process Certification Scheme*

# **Property Rights Conundrums in Artisanal and Small-Scale Mining: Experiences from USAID Projects in Côte d’Ivoire, Guinea, and the Democratic Republic of Congo**

Mark Freudenberger with Bocar Thiam, Catherine Picard, Sabine Jiekak, and Terah DeJong

## **I. Introduction**

The artisanal and small-scale mining (ASM) sector contributes a significant, but under-recognized economic contribution to national development in resource-rich countries. Whether diamonds, gold, tin, or other minerals millions of artisanal miners throughout the world using little more than a pick, shovel, and sieve confront a complex land tenure situation of overlapping and competing tenurial regimes. The State often claims subsurface rights, but customary tenure institutions in fact often enforce informal arrangements around the use, access, and transfer of rights to these mineral resources. In other cases, warlords and drug cartels have captured resource-rich territories and imposed rules of access and use of subsurface minerals on a servile labor force. Considerable confusion has long occurred among both State and civil society actors about what tenurial regime predominates – surface or sub-surface – with the result that tensions and violent conflicts sometimes erupt in artisanal mining zones around interpretations of both statutory and customary governance norms.

This paper presents fresh data on the complex resource tenure situation found around artisanal mining of diamonds in Côte d’Ivoire, Guinea, and “conflict minerals” in the Democratic Republic of Congo. Illustrations from the USAID-financed projects Property Rights and Artisanal Development (PRADD II) and Capacity Building for a Responsible Minerals Trade (CBMRT) describe how these programs are seeking to clarify and formalize claims to sub-surface mineral resources while also taking account of the rights and claims of customary surface rights claimants. This paper describes the suite of innovative approaches implemented by these projects that are leading to reforms in national policies, regulatory procedures, and administrative bodies.

## **II. Resource Tenure and Artisanal Diamond Mining in Guinea**

### *The Artisanal Diamond Mining Sector in Guinea*

Diamonds were discovered in Guinea in 1932 by the Irishman R. Dermody along the Makona River in Macenta (USAID, 2014). Commercial diamond mining started in the colonial era in 1935 near Baladou, in the Kissidougou—Beyla region with the Guinea mining company (*Société guinéenne d’exploitation minière--SOGUINEX*). Artisanal diamond mining was not officially authorized but it was common. Some

artisanal mining communities in the Beyla region remember SOGUINEX that the company was strongly supported by the colonial administration (USAID, 2009). The dominating presence of the SOGUINEX and other private companies led to the increase of clandestine mining in the Kérouané—Beyla corridor throughout the 1950s. At the same time, the eviction of miners in the diamond fields of Sierra Leone also compounded this clandestine situation.

From the second half of the 1950s, the colonial government shifted its stance towards artisanal mining and allowed indigenous communities to extract diamonds in the Kérouané region. In 1957, the triangle Beyla—Kissidougou—Macenta (BEKIMA) referred to by some miners as “cooperative” was established to reorganize the sector and encourage mining by local communities (USAID, April 2009). By 1960 BEKIMA produced 1,285,000 carats of diamond. Following Guinea’s independence, between 1961 and 1973, a new state mining company (*Entreprise guinéenne d’exploitation du diamant*—EGED) was created and produced 214, 314 carats of diamond (USAID, Jan. 2014). Following the independence, and continuing to present, more than ten mining companies have invested in Guinea in prospecting and mining (USGS, 2010). From 1979 to 1984, the government established the *Service national d’exploitation du diamant* (SNED—national service for diamond mining) to manage the ASM sector (USAID, April 2009). It was during this period that the “parceling” system was introduced to define and manage access to and use of the artisanal mining sites. The parceling system (which continues through to the present) consists of dividing the mining zone into one hectare plots for allocation to individual miners. In most cases, parcels were established by the authorities on owned held under customary tenure arrangements and that bear alluvial diamond deposits. Usually, these lands were originally used for farming and or grazing. From 1981, a new industrial mining company called AREDOR was established and issued a license for an area that stretched from Kérouané to Kissidougou and Macenta.

When the military regime, led by Lansana Conté, took power in the mid-1980s, artisanal diamond mining was banned through the early 1990s. AREDOR were allowed to extend its license on most of the areas reserved to artisanal mining. It was only in 1992 that artisanal diamond mining was once again authorized with the establishment of the *Division exploitation artisanale* (DEA) as the national entity within the Ministry of Mines in charge of controlling and managing the ASM sector. The DEA re-introduced the parceling system to regulate the access to the mining sites. By that time, all of the ASM areas occupied by AREDOR had been exhausted.

Up to the 1990s, diamond mining in Guinea through the years was marred with repression and violence originating from the state central and directed against artisanal miners. The violence that accompanied the

destruction of Banankoro (the highest diamond producing site in Guinea located in Kérouané) in 1984 remains vivid in the memory of most local residents of the Kérouané region.

Since the early 1990s' subsequent reform, both illicit and licit artisanal mining have been taking place not only in the Southeastern Beyla—Kérouané--Macenta triangle but also in other prefectures and regions of the country. Over the years, diamonds were also discovered in Kissidougou, Kindia, Telimélé, Coyah and Forécariah. The civil war in Sierra Leone contributed to the discovery of new sites when miners fleeing the war arrived in the country to start exploration.

In 2009, a Ministerial Order was passed to legalize diamond mining in more than ten prefectures extending from the coastal plain to the southeastern tropical forest of the country. In 2002, 464,000 carats (worth of \$19 million) of diamonds was officially produced in the country. Alluvial diamond reserves were estimated to be between 25 to 30 million carats (USAID, 2014). This estimate will most likely increase because of the discovery of kimberlite pipes and dykes. In a study conducted by the United State Geological Survey (USGS) in 2011-2012 on the diamond potential of Guinea in fifty mining sites spread across five prefectures of the country, it was estimated that the diamond potential of Guinea could reach forty (40) million carats (Chirico, and Malpeli, 2012).

Stakeholders involved in the artisanal diamond sector include diggers, miners (mining license holders known as masters), collectors, brokers, and dealers. The Ministry of Mines and Geology is responsible for managing the sector. Within the ministry, the Kimberley Process Secretariat acts as advisor to the Minister to promote compliance with the official internal control system of the country (in compliance with the Kimberley Process Certification Scheme<sup>1</sup>); the National Directorate of Mines and its ASM Division in charge of monitoring diamond production; the *Bureau national d'expertise du diamant* (BNE) in charge of marketing diamond; and the anti-fraud brigade, which is the enforcement arm of the mining sector. In addition, the custom and the Central Bank are also involved in managing diamond marketing.

In 2014, the ASM Division issued 129 ASM licenses, which correspond to the number of miners (masters) who conducted licit mining in the country. There are no official statistics currently available on the number of illicit artisanal miners directly involved in ASM. Evidence proves that the sector provides direct employment to hundreds of thousands of national citizens as diggers, miners, brokers, collectors,

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<sup>1</sup> The Kimberley Process Certification Scheme (KP) is a voluntary commitment set up by diamond producing and marketing countries and civil society organizations to in which each country monitors the production and marketing of diamond to avoid transactions of “blood diamonds.” In 2003, the KP published its certification scheme for diamond marketing. Guinea has been participating member of the KP since its start.

and dealers. In the minds of some local communities (especially in the savanna region of Guinea), diamond mining is considered to be the highest and the best use of land resources (USAID, 2009). Whenever a new diamond discovery is made, the land originally used for grazing or farming is converted into mining plots for licit and or illicit mining activities, with no compensation (in most instances) by the government or miners and no post mining rehabilitation by either stakeholder. Tensions between surface right owners and the government claiming the sub-surface rights often occurs whenever parceling is conducted on customary lands. This situation raises a series of questions including whose tenure systems applies: customary or statutory? Whose rights prevail: landowners or miners? Whose use and resources priorities prevail (miners or farmers)? Whose livelihood triumphs? And who benefits from the value chain? In the next section, this paper provides in-depth discussion on the interface between surface rights and sub-surface rights in the context of artisanal diamond mining in Guinea based on PRADD II program experience. The PRADD project focus region for the moment is Forécariah, in coastal Guinea.

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### ***The Interface between Surface and Sub-Surface Tenurial Regimes***

Guinea has a fascinating but complex land tenure situation, which has evolved throughout the history of the country from colonial times to the present. Artisanal mining of diamond is taking place, in most cases, on lands held by land owners ascribing to customary tenure arrangements. In the rural areas where mining (both industrial and artisanal) takes place, multiple land tenure regimes co-exist. From the tropical southeastern forest to the savanna flat lands and down to the costal alluvial plains, there is an overlap of multiples rights on both the surface and subsurface lands. The state as well as private individuals claim certain ownership rights on the surface of the land and any existing resources above it. This explains why the access, use and management of land and other natural resources are mostly governed by the interaction between statutory rules, customary practices and, in some instances, Islamic rules. The subsurface, however, is governed by statutory legislation whereby the state manages the subsurface on behalf of citizens. However, in many mining areas where indigenous communities have been able to retain strong power in managing their surface rights, land is being allocated on a customary basis for artisanal mining.

Customary tenure systems are a complex set of rules and practices that determine property rights around different resources as well as use rights of other individuals who are not necessarily land owners. Even though this set of rights often looks incoherent at first sight, customary tenure systems are not a product of hazard. In the mining areas of Guinea, customary rights held by local residents were acquired through first settlement, inheritance, purchase and

or gifts. These rights have been evolving to adapt to a shift in the sociopolitical paradigm. Field work by the author in the savanna region of Guinea indicates that members of some mining communities are very critical of how diamond mining by miners (mostly outsiders with no consideration to customary rights or to sustainable environmental management) and under the eyes of representatives of the Government (who fail to enforce and monitor compliance with property rights and environmental regulations), continues to seriously impact their livelihood. In a meeting with members of a mining community in the region, the *Sotikemo* (head of the village) of Wandadou village, located outside of Banankoro in Kérouané stated that: “farmlands have become scarce in our territory, please help us to backfill these pits so that we will be able to do farming, which is the main income generating activity of the village”.

In the Forécariah region of coastal Guinea where artisanal diamond mining started in the early 1990s after the war broke out in neighboring Sierra Leone, field research has also shown that “customary regimes are the most widespread and influential means of regulating access to land and mining and natural resources” (USAID, 2014). In the villages such as Bassiah, Khoboto, Kourouya, Feindoumodouya and Woula where the PRADD program carries out its work, the descendants of the founding families of the villages claim and maintain property rights on all of the farming and grazing lands as well as on alluvial swamps that are subject to artisanal diamond mining. Although these descendants do not have any documentation to support their rights, these rights are ultimately recognized and respected by members of the community. Resident allies in these communities hold permanent user rights, which require them to seek permission from the customary property right owners for land transactions. Field research at various sites in Forécariah and elsewhere in the savanna region of Guinea confirms the presence of these types of tenure realities.

As previously mentioned, to organize and regulate access to artisanal mining sites, the mining administration of Guinea introduced parceling operations in the 1980s through the SNED and then following the temporary ban of artisanal mining, the system was re-established in the 1990s. During those years and up to 2003, parceling were carried in the three regions of the savanna region, the southeastern forest and the coast of Guinea, especially in Kérouané, Macenta, NZérékoré, and Kindia prefectures. In Banankoro (Kérouané), the *Service d'encadrement* and more recently the *Coordination régionale* have been in charge of parceling sites where alluvial deposits are discovered through artisanal prospections conducted by miners. Major constraints influencing the success of the parceling system include the lack of geological evidence of diamond deposits needed before carrying out parceling, the high cost of the license for a parcel (GNF 2,500,000 = \$340 for one hectare/year), the low return of investment due to the lack of geological research, and the limited presence of the mining administration in the field to administer and monitor the parcels. Of the twelve prefectures where mining is authorized in Guinea, the

ASM Division has only one *Coordination Régionale* based in Banankoro to administer parcels and monitor production.

Officials in the Ministry of Mines and Geology have noted informally that the parceling system has been a failure. Despite this reality, in 2013, the Ministry of Mines and Geology extended the parceling system to Forécariah's alluvial swamps held by customary land owners. Before the arrival of the parceling operation in Forécariah and because of the fact that no mining land in the entire Forécariah watershed falls under the state domain, customary land owners were already defining access and management rules around the alluvial swamps based on their rights to the surface of the land. Customary land owners extract benefits from the subsurface resources by charging a fee of GNF 50,000 (= \$7.00) for 16m<sup>2</sup>. In addition, landowners do not require the miner to restore the site when mining is completed. Compared to the cost GNF 2,500,000 for a parcel of one hectare issued by the State, the customary tenure arrangement is cheaper for the artisanal diamond miner seeking access to diamond deposits.

During the last few years, in addition to its objective to increase the presence of the State in the artisanal mining sector, parceling has become the official procedure for the government of Guinea to formalize and regulate artisanal mining to seek compliance with the Kimberley Process Certification Scheme. By the end of 2014, 137 parcels were created in the Forécariah region. 90% of the sites parceled were already active mining sites or mined out sites. As of the writing of this paper, only 7 of these parcels have been purchased by miners. As in the savanna region, no research was conducted to orient the parceling operation toward diamond deposits. Since parcels bear no relation to reality, purchase of a parcel is a risky investment for the diamond miner. So, why then, does government continue this practice? The State has long intended through parceling to halt customary landowners from issuing informal mining agreements to miners, and thereby, take full control of artisanal diamond mining and compliance with the Kimberley Process Certification Scheme. In Forécariah, as of the writing of this paper, landowners continue to issue informal mining agreements to miners on 16m<sup>2</sup> plots.

Resistance to the State is strong. During the parceling operations, local landowners threatened the agents of the ASM Division from conducting physical parceling of the land. In the end, the government agents were required to meet with and seek permission from customary landowners in order to proceed with the parceling operations. Sources from both the government and local landowners confirmed to the author that promises were made that once parcels have been purchased by prospective miners, the funds would be deposited into a bank account and some money (GNF 1,500,000) would be given to the local authorities and the customary landowners with the rest of the money (GNF 1,000,000) being used to

rehabilitate the mined-out sites. This promise highlights some provisions of the newly adopted Mining Code of 2013 on compensation whereby Article 124 reads that: “property rights shall be exercised throughout the term of the operation through the collection of compensation,” and that “The holder of the Mining Title or Authorization must pay any lawful occupant of land required for its activities, compensation for the disturbance of enjoyment suffered by such occupants...” During the PRADD team’s various discussions with local communities, both in the mining areas in both the savanna and the coastal regions, it appeared that no proper compensation has been made so far to local landowners as indicated in the mining law.

Currently, individual miners who hold official authorizations for mining parcels have secure rights until their permits expire, while the customary land owners’ rights are insecure because they do not have any documents affirming their property rights. Although in the spirit of the Mining Code customary owners have certain rights during and after mining operation, such as the recognized right to compensation for interrupted land use (Articles 123 and 124 of the Mining Code), customary owners do not possess the tools they need to stand up to the State, either while the parcel is being mined or when mining activities have ended. The government has been so far unable to set up mechanisms for the compensation to proceed as promised during the parceling operation. The issue of compensation has become very critical opposing local communities and private investors especially with the large-scale land acquisition programs starting to take place in the Forécariah region either for mining (both artisanal and industrial) and or for the development of major infrastructures (mining ports, railways for mining, airports and highways).

### ***Innovations in Policy and Practice toward the Artisanal Diamond Mining Sector***

The government of Guinea expressed its intentions to formalize artisanal mining on one hand and to promote tenure security on the other hand through the current policy and legal framework. The new Mining Code provides room for organizing better the artisanal mining sector and to generate revenues for miners and their communities. The Code also protects the rights of indigenous landowners. However the government’s inability to set up appropriate, simplified and clear steps and approaches to resolve the issue of land tenure security in the rural area has created frustrations among local communities. So far, the Code’s implementation regulations relating to local communities’ rights and compensation have yet to be drafted. To address the issue of benefit sharing for compensation, the Ministry of Mines and Geology has expressed its willingness to revise the joint Ministerial Order signed by Finance and Mines in 1994 defining the revenue benefit sharing scheme from artisanal mining licenses to include customary landowners. The PRADD project is working with the ASM Division to make those changes to the Ministerial Order.

The Land Code of 1992 on the other hand is criticized for being too technical and urban oriented, and not applicable in the rural areas. The implementation decrees of this Code have yet to be completed especially those relating to procedures for recognizing customary rights (USAID, Jan. 2014).

In an attempt to address the weaknesses of the Land Code, the Government of Guinea issued a land policy statement for the rural area in May 2001. This policy states in its preamble that, “despite the introduction, with the Land Code (CFD) of 1992, of a liberal land regime based on respect for private land ownership, the rights of land users and traditional landowners remain insecure and uncertain.” On the issue of clarifying and securing land rights, Section B, paragraph 33 of the policy notes that “the government designs mechanisms to secure land tenure in order to respond appropriately to identified factors of insecurity. This is why no suitable tool or method for securing tenure should be automatically excluded. Actions should respond to the diversity of the problems identified and to regional contexts, while taking account of the legitimate interests of all actors concerned; these are primarily the State and decentralized local governments (public actors), the private sector and rural populations” (USAID, 2014).

The gaps in recognizing and securing customary rights are not created only by the shortcomings of the policy and legal framework. The overlaps in institutional mandates as well as the weakness around internal collaboration and coordination between line ministries contribute to a great extent to confusion. To support the government to address these constraints, the PRADD project, in collaboration with the Rural Land Resources Service (RLRS) of the Ministry of Agriculture, has launched a policy, legal and institutional review to identify and analyze the constraints related to implementing of the rural land policy statement and the Land Code as they relate to formalizing customary tenure rights in Guinea. Through this process PRADD and the RLRS will engage various actors (Ministries of Mines, Environment, Decentralization, Justice, Finances, and Urban Planning) to implement national dialogues on ways to improve rural land tenure security. Through this platform, PRADD II and the RLRS will work with stakeholders to design a road map for formalizing customary rights.

On the other hand, given the probably expansion of development programs in the Forécariah region and the threat of unplanned expansion of mining, agriculture, and infrastructure projects, the ASM division, with support from the PRADD project, has delineated an area of 983 km<sup>2</sup> and officially declared it as Exclusive Reserved Zone for Artisanal Diamond Mining. A ministerial *Arrêté* was signed by the Minister of Mines and Geology to provide the legal basis for this operation. Through this official set aside and subsequent demarcation of boundaries, the government of Guinea intends is to secure subsurface rights for the benefit of artisanal mining in this area increasingly characterized by land speculation. Support is

being provided to the government of Guinea by the United States Geological Survey, through the PRADD project, to model diamond production potential. It is anticipated that the results of this modeling effort might identify prime diamond mining areas, and thereby result in land speculation and corruption around the diamondiferous sites if mechanisms are not set up and enforced to control and manage access to these valuable diamond sites. Meanwhile, PRADD is planning to conduct a socioeconomic profiling of all of the mining sites in Forécariah and to identify customary landowners as first step toward recognizing customary rights.

Field research carried out by the PRADD project in Forécariah revealed that artisanal diamond mining is ranked as the third most important economic activity behind farming (rice, cassava, *fonio* and sweet potatoes) and charcoal production (sale of charcoal to the nearby urban market). Community members in the PRADD intervention sites have expressed the need to support the agricultural sector. Based on this need, the PRADD project is working with the communities to facilitate community-based organizational development and the promotion of intensified agricultural production. Some communities have expressed interest in investing in rehabilitating mined out diamond in order to promote alternative livelihood activities. Action plans are being developed to field test ecological restoration of these sites. To further address environmental damage to alluvial diamond mining areas, the project is using past experience from the Central African Republic, Liberia, and Sierra Leone to promote improved bench terrace mining techniques known as SMARTER mining that reduce the labor demands for diggers and facilitates later environmental restoration. The Ministry of Mines and Geology is considering a requirement to use SMARTER mining practices for all new ASM mining licenses.

### **III. Resource Tenure and Artisanal Diamond Mining in Côte d'Ivoire**

#### ***The Artisanal Diamond Mining Sector in Côte d'Ivoire***

Côte d'Ivoire is a relatively minor producer of diamonds compared with neighbors Guinea and Sierra Leone, but the precious stones have still played an important role in its economic and political history. Diamond mining in Côte d'Ivoire occurs in two areas centered on the towns of Séguéla (region of Worodougou, in the center-west) and Tortiya (region of Vallée du Bandama, in the center-north). Diamonds were first discovered in Côte d'Ivoire in 1928, but exploitation only began in the 1940s by the French company SAREMCI (*Société Anonyme de Recherche et d'Exploitation Minières en Côte d'Ivoire*). SAREMCI focused on Tortiya—allegedly named in honor of John Steinbeck's book "Tortilla Flats"—and eventually closed down in 1975 when further exploitation was economically unviable. At its height, SAREMCI produced 150,000 to 175,000 carats per year. Most of the inhabitants of the town of Tortiya are either former workers or descendants of former workers for SAREMCI.

In Séguéla, exploitation began in 1952 by another French company called the *Compagnie Minière du Haut-Sassandra* (SANDRAMINE), replaced three years later by the *Société Diamantifère de la Côte d'Ivoire* (SODIAMCI). During the first decade of exploitation, production reached a peak of 25,000 carats. Right after independence in 1960, the new government encouraged artisanal mining by granting miners the right to work diamondiferous deposits in areas outside of the SANDRAMINE and SAREMCI permit zones, and even created the African Research and Minerals Exploitation Cooperative (CARED). Artisanal miners were even subcontracted by mining companies to mine low grade gravels. Artisanal mining spread rapidly across the Séguéla diamond fields and by 1961 an estimated 30,000 miners were working the region.

The situation soon spiraled out of the government's control, however, and in 1962 authorities used violent military force to suppress artisanal mining, banning the practice and instead promoting commercial mechanized mining. In the meantime, SODEMI (*Société pour le Développement Minier en Côte d'Ivoire*) partnered with an American-backed company Waston and used industrial and semi-industrial methods until 1977. Artisanal mining did not stop, however, but continued in a disorderly and illicit manner. In 1984, the government reversed course and legalized ASM. In 1986, the government charged the national mining company SODEMI with the task of organizing miners into village-based cooperatives called GVCs (*Groupements à Vocation Coopérative*).<sup>2</sup> SODEMI proceeded to map and delimited zones inside of their diamond research permits. Agreements were signed with the 22 GVCs who joined the scheme that set forth conditions, including a ban on mining kimberlitic deposits, which were reserved for SODEMI, which entered into a partnership with Australian-backed African Carnegie Diamonds Plc in the 1990s. This arrangement was enforced by joint patrols by SODEMI agents and military police. Anyone found without SODEMI-issued mining worker cards, which indicated which GVC they belonged to, or anyone working outside of the delimited area, was subject to prosecution. Over the 16 years in which this arrangement existed, nearly 100 zones were delimited and exploited.

In 2002, Côte d'Ivoire entered into decade-long period of political instability. A coup d'état in 1999 created the conditioned leading to a rebellion and partition of the country in 2002, and then years of negotiation culminating in a violent post-electoral crisis of 2010/2011. Access to natural resources and insecure land tenure were both underlying factors of the crisis. Côte d'Ivoire's "economic miracle" of the 1980s was made possible through internal and regional migrations into productive agricultural regions. As the economy collapsed with world cocoa prices in the 1990s, nationality and ethnicity issues were manipulated by politicians to justify taking back agricultural land from "foreigners." Despite the adoption in 1998 of a rural land tenure law<sup>3</sup> aimed at definitively clarifying claims, this dynamic did not abate and helped fuel conflict, both locally and nationally.

In the north, the *Forces nouvelles* rebels controlled both of Côte d'Ivoire's diamond mining areas around Séguéla and Tortiya. As evidence emerged that diamonds were helping purchase arms—which constituted a classic case of

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<sup>2</sup> The GVC was a legally recognized form of organization in Côte d'Ivoire that was not just valid in the mining sector, but for any legal economic activity. The legal form of GVC existed until 1997, when a law on cooperatives gave a two-year window to convert into cooperatives. None of the GVCs in Séguéla did so.

<sup>3</sup> Loi n° 98-750 du 23 décembre 1998 relative au domaine foncier rural modifiée par la loi du 28 juillet 2004.

conflict diamonds as defined by the Kimberley Process—the United Nations, under recommendation from the KP, imposed an embargo in 2005. The embargo did little to prevent smuggling, however, and Ivoirian diamonds infiltrated the legal commodity chain in Ghana, Guinea, Liberia, and Mali. With the reunification of the country, the situation improved, though the embargo remained in effect. In 2013, the United States and the European Union funded a technical adviser to help Côte d’Ivoire become compliant with the Kimberley Process, which it achieved in November 2013. This paved the way for the lifting of the U.N. embargo in April 2014. Côte d’Ivoire is currently in a transition period supported by the PRADD II project, co-financed by the European Union and USAID.

Production levels have varied greatly over the years and reliable statistics are hard to come by. A 2013 study by the United States Geological Survey estimated that annual production between 2006 and 2011 varied between 91,048 carats and 288,138 carats nationwide (Chirico and Malpeli, 2012). This variation was due in large part to the discovery and artisanal exploitation of several primary deposits in the area. The U.N. Group of Experts has estimated 2012 production as between 50,000 and 100,000 carats (S/RES/2013/228.p.37). Several factors could account for the decrease, including the depletion of financing and the end of rebel-led production. In addition, many diamond miners—especially migrants from other countries in the region—switched to gold mining, which since the end of the crisis has taken on “rush” proportions in various parts of the country, including areas near Séguéla (Pennes and Elbow, 2012). As a result, whereas Tortiya once supported 40,000 miners, and Séguéla some 30,000 miners, recent government estimates point to 1,000 to 2,000 miners in Tortiya and 5,000 to 10,000 miners in Séguéla (Chirico and Malpeli, 2012).

With the lifting of the embargo, it remains unclear if and how diamond production will evolve. A key variable will be whether accessible deposits will be discovered. While the USGS estimates that there are some 11,100,000 carats that remain (Chirico and Malpeli, 2012), not all of this may be economical to extract, and most are concentrated in primary deposits off limits to artisanal miners. While SODEMI has relaunched a research program in both Séguéla and Tortiya, it remains uncertain how the situation will evolve.

### ***The Interface between Surface and Sub-Surface Tenurial Regimes***

Surface and sub-surface regimes are distinct in Ivoirian law. The 2014 mining code, like the 1995 code that came before it, establishes clearly that all mineral resources belong to the state (Article 3). Holders of surface rights do not and cannot therefore have ownership rights to mineral resources. The mining code establishes, however, the ways in which a legal or physical person can acquire a time-bound right to extract sub-surface resources. Mining exploration or exploitation permits for industrial-scale activity are authorized by the President of the Republic. Semi-industrial and artisanal authorizations are delivered by the Mining Minister. The requirement of an authorization or a permit from the state is universal, even if one possesses state-recognized surface rights.

However, the mining code recognizes the reality that one cannot normally access sub-surface resources without removing or passing through the surface regime, and therefore works to establish a framework to mediate between surface and sub-surface tenure regimes. The 1995 mining code refers to a *propriétaire du sol* and dedicates a number of articles (68-71) on the relationship with “land owners.” Amongst its provisions, the occupation of land

needed to extract resources gives a right to compensation to landowners or to “legitimate occupants.” Indeed, while the code and its application decree of 1996 refer primarily to landowners, it also makes reference—seemingly interchangeably—to legitimate occupants. However, neither document defines who is a legitimate occupant or a landowner.

The new mining code of 2014 also contains a chapter on the rights of surface owners in relationship with sub-surface extraction, though instead of talking about “landowners” and “legitimate occupants” it refers to “land occupants” and “legitimate land occupants.” All reference to “land owners” is removed. Unlike the 1995 code, the 2014 law defines these terms. A land occupant is a physical or legal person who has put a piece of land to good use, or *mise en valeur*.<sup>4</sup> A legitimate land occupant, in contrast, is defined as a physical or legal person who has acquired permission from the State to occupy a parcel of land or by a person who has occupied and used a parcel of land for generations.

One reason for this change, described by a senior official who participated in the drafting process of the code, was that the 1995 code created considerable confusion about who was entitled to compensation. There was one case, for example, in which compensation to a village that was to be displaced by a gold-mining operation was challenged by another village outside of the concession area. As is typical in customary tenurial arrangements (see next section) villages are often created when a family gains permission from a customary land chief to create a new village. The new village is “installed” by the older village, but the older village often will continue for many generations down the line to consider the new village as part of its territory. In this particular case, the older village used the mining code’s discussion of “land owner” by arguing that it was the “land owner” of the displaced village and that any compensation must go to them as the mining was on their ancestral land.

The new mining code attempts to redress this by ruling that compensation must go to the “land occupant” and the “legitimate land occupant,” which it appears to use interchangeably. The notion is that compensation is due to the person or entity that is occupying and putting to good use land needed for mining. This definition affords more rights to those occupants that have permission from the State and/or put the land to use than those who make some historical or customary claim to ancestral land. However, the code does not clarify how the state goes ahead and defines or certifies these claims. It leaves this to a case-by-case negotiation.

Another piece of legislation does provide some guidance, however. The 1998 rural land law<sup>5</sup> is a keystone document in Ivoirian law that creates a framework to clarify who owns rural land regardless of whether the land is put to good use or not. The law allows land ownership to the Ivoirian state, public entities and Ivoirian nationals. Non-Ivoirian nationals and legal persons can receive 99-year leases from the state but cannot become landowners. Importantly, the law creates a framework through which individuals or groups of individuals can have their customary land rights

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<sup>4</sup> The French term “mise en valeur” is a key concept in Ivoirian land tenure. This is defined as the « *occupant du sol, la personne physique ou morale qui a mis en valeur une parcelle du sol; occupant légitime du sol, la personne physique ou morale qui a obtenu auprès de l'Administration, l'autorisation d'occuper une parcelle du sol ou celui qui, par usage depuis des générations, occupe une parcelle du sol.* »

<sup>5</sup> Loi n°98-750 du 23 décembre 1998 modifiée par la loi du 28 juillet 2004

recognized by the state through a *Certificat foncier* which must in turn become a land title within 3 years of acquisition.

Progress in implementing the law since 1998 has been slow. By 2014, only 306 land certificates out of an estimated demand for 500,000 had been issued. While the government has donor support for the implementation of its national plan to secure rural land rights, much work remains. In this context it makes sense that the mining code would leave a flexible arrangement when customary rather than official arrangements when it comes to surface rights continue to dominate.

The traditional land tenure systems are similar in both Séguéla and Tortiya, but vary in their strength and effectiveness for historical reasons. In Séguéla, customary tenure is strong and based on several management principles and rules. While it is recognized that customary land tenure is communal, land is actually owned by a unique person or group of persons, namely, the first occupant and his family. The representative of this first occupant is the land chief (*chef de terre*). The customary land ownership is passed on from generation to generation between male members of the family. The land chief manages the land on behalf of male community members, acts as guarantor of land governance and supervises land allocation to those in need for mining or agriculture, either indigenous (*autochtone*) family members or outsider communities, organized into foreign-born and non-native Ivoirian communities. As a general rule, the principle of first occupant is primordial, and also governs relationships between villages. When a new family sets out to found a new village, they are “installed” by the land chiefs of the village that owns that territory. This leads to a complex and contested hierarchy among villages.

With respect to natural resources, the main land management principle is that land can never be bought and sold. However, leases and rent over a period of time for mining or agricultural activities are possible and involve permission by the *chef de terre* in agreement with the village chief and main family members who hold a specific portion of land. However, the land must revert to the community/family at the end of the lease or cessation of the activity for which the lease was granted. Despite this appearance of insecurity, this arrangement appears to be suitable for many people, in part because land pressure is less compared with other parts of Côte d’Ivoire.

Artisanal diamond mining, which constitutes a major livelihood activity for communities in Séguéla, is also controlled through these customary rules. Access to diamond deposits varies depending on whether one is a member of the local community (autochthones) or not (non-autochthones). The first group can access without a problem patrimonial lands of their lineage. However, non-autochthones who represent the majority of artisanal miners and the majority of inhabitants in the mining communities of Séguéla, can access land under the *tutorat* system. This common form of “rent” used also in agriculture works as such: an autochthone community member allocates a piece of land to an outsider for mining after negotiations done according to traditional customary practices. Any diamond found under this land is subject to a share for the landowner. If, for example, a miner has 5 team members to share revenue with, the *tuteur* is considered a 6<sup>th</sup> member. In some cases, tuteurs demand that they receive 2 or even 3 parts in the spoils if the diamond site is particularly productive. The relationship between *tuteur* and the outsider

extends to other social obligations as well: the outsider must, for as long as they remain in the community, offer acts of gratitude to the person who allowed them to access land.

A final aspect of the surface / subsurface dynamics in Séguéla is the way in which customary authorities “zone” land for particular uses. In diamond mining, the land chief always retains the prerogative to designate certain areas for mining should a discovery be made. This decision cannot be appealed by the families that may have agricultural activities on that land. However, the land-owners have the right to a negotiated compensation should cashew trees or other crops be destroyed, as well as rights to enter into tuteur relationships with the miners. In many ways, this practices mirrors statutory law at a local level: just as the state controls all sub-surface resources and has a strong right over surface land-owners to access them, the customary land chiefs similarly can decide that certain zones be open for mining. We also see how in Séguéla these strong customary rules have helped local communities maintain their control over land and its benefits despite being often physically outnumbered by outsiders. However, this system can also lead to conflict and chaos if these traditional structures and rules break down.

The case of Tortiya demonstrates this risk, as its key characteristic is an absence of a strong or agreed upon customary authority due to its particular history. The town of Tortiya today exists only because of the SAREMCI mining company. When the company arrived in the 1940’s, it completed a customary ceremony—in addition to gaining a large permit from the state—in which customary rights to the land were completely purged. This ceremony involved the sacrifice of a number of bulls and other acts. During SAREMCI’s zenith, workers came in from all over the region as well as neighboring countries. However, with the closure of the mine in 1975, Tortiya began a long decline.

This decline was due in no small part to the fact that Tortiya and its surrounding villages lacked customary land management systems. The tiny village called Natiemboro that gave its rights to SAREMCI was in a weak position to reclaim its role as a land chief given that the state claimed that the land was now state-owned. In addition, Natiemboro’s version of the story became contested by a rival ethnic group, who claimed that Tortiya was in fact part of its ancestral hunting grounds. This contestation took on a new fervor during the crisis years when for political reasons administrative lines were drawn up such that Tortiya belonged to a region headquartered at the rival ethnic group’s ancestral grounds.

Meanwhile the de facto situation on the ground was an open access situation whereby first groups of artisanal miners and then cashew farmers moved in to claim land. This has set up a conflict not only between the two rival ethnic groups who claim customary rights but has also set up conflicts between cashew farmers and descendants of the SAREMCI mine who claim that the land was theirs because they worked those particular sites after SAREMCI’s closure. Ironically, these descendants are generally no longer involved in diamond mining. The actual remaining artisanal miners are mostly foreign migrant workers rewashing old tailings. Despite attempts to suppress the activity by the state, the activity continues, albeit at a low level.

The case of Tortiya shows how the lack of clarity and colliding tenure regimes can lead to conflict. On the one hand, a neighboring village claims to be the land owner under the practice of “installation”, arguing that using the

customary land management rules, they have been the one conceding Tortiya land to SAREMCI, and per the same customary rule, this land must revert to them as the *mise en valeur* is complete. On the other hand, as noted Tortiya was assigned to an administrative region different from the administrative region where the customary land chief was located. This in turn has led to a competing claim by the dominant ethnic group of this region, and because there are no written documents, the truth is subject to manipulation. Amidst this conflict, there has also been the emergence of another “customary” community that bases its claims on being descendants of SAREMCI workers, who claim to have inherited the land after its 7. A number of these actors are involved in the conflict with the cashew-farmers who came in well after SAREMCI’s closure. Finally, for its part the Ivoirian state has been mostly absent due to the crisis, and despite claiming that the land is state land controlled by the mining administration, appears to have no legal basis—such as an official act following SAREMCI’s closure—to make that claim. In summary, the situation is marked by considerable confusion and conflict due to a lack of clarity about surface rights, as well as an unusual situation where former sub-surface rights (the ex-SAREMCI miners) are used to justify surface rights (against the cashew farmers).

### ***Innovations in Policy and Practice toward the Artisanal Diamond Mining Sector***

Three innovations in policy and practice in the ASM sector are worthy of mention given the above legal and field context: the so-called SODEMI model, pilot efforts to apply the 1998 land law in diamond mining areas, and a nascent land-use planning and zoning process for Tortiya.

#### *SODEMI model*

As noted above, in 1986 the government charged national mining company SODEMI with the task of organizing miners into village-based cooperatives called GVCs. Perhaps the most innovative feature of the system was the sales organization. As per their agreements with SODEMI, GVCs were required to coordinate and control all diamond sales. Guards would monitor all diamond washing and take possession of any stones discovered. The GVC would then organize regular events in which the lead mining worker would negotiate with his financial backer. The final sales figure would be recorded by the GVC, who would then take 20 percent. Of this 20 percent, 12 went to the GVCs, and 8 went to SODEMI. Of this 8 percent, 4 percent was used to pay the guards, and the rest was collected on behalf of the state.

GVCs have been interpreted “pre-cooperatives” but in reality they were more of a cross between a land management and a local development (Elbow and Pennes, 2012). Few characteristics of a cooperative were present - there was never profit-sharing, never financing activities of members, never pooling resources, never selling collectively and never material or financial support provided to members. In addition, membership was not based on profession but based on being an indigenous member of the village. In these ways, the GVCs were not cooperatives or even pre-cooperatives but rather structures that used customary land authority to control diamond production. By most accounts this system was much more effective than state-led law enforcement alone, since collective financial and cultural interests created social pressure that kept everyone in check. In addition to this role of “land management

committee,” however, the GVCs acted as a village development committee. Using its resources, the GVCs funded village development efforts. Construction projects included mosques, schools, cultural centers, health facilities, bridges and even roads.

The SODEMI model declined during the politico-military crisis from 2002 to 2011. However, the basic model survived during the crisis years even in SODEMI’s absence with the occupying rebels supplanting SODEMI in at least one locality in taking the state’s part of taxes and allowing mining to continue. With the end of the crisis, the state decided to revive the model as part of its efforts to become compliant with the Kimberley Process Certification Scheme. In May 2013, the president signed three decrees granting diamond exploration permits to SODEMI covering roughly the same area of its exploration permits pre-2002. Following this, the mining minister signed a decree authorizing and mandating SODEMI to organize ASDM miners inside its permit areas. In addition, SODEMI was granted a mining research permit for the Tortiya area in January 2015, although it has not yet received a mandate to organize artisanal miners and does not have the same history of involvement as in Séguéla.

A key innovation to highlight in the so-called SODEMI model is the way in which the Ivoirian state reconciled customary and statutory surface and sub-surface regimes. As a permit-holder, SODEMI has a state-sanctioned right to the sub-surface diamond resources. SODEMI uses that claim to assert its authority over diamond mining communities in a way that the mining administration alone cannot, mainly because SODEMI also has a commercial interest in the zone. For its part, SODEMI then effectively “outsourced” a portion of its management responsibilities to customary authorities for their ASM sites. As long as authorized by SODEMI, the village-based GVCs are empowered to use their customary authority, in the framework of their agreement with the state, to control mining in their area and therefore benefit from its revenues. This benefits SODEMI as it allows them to better control access to the primary deposits that it seeks to develop while averting confrontation with communities. It also benefits communities as it in effect creates an indirect local tax on production that is invested locally in infrastructure and other good use.

Moving forward SODEMI has expressed an aim of turning these ex-GVCs into full-fledged cooperatives. Indeed, as part of an effort to harmonize business law, the government adopted the OHADA standards which put an end to GVCs as a legal category. As a result, the GVCs had to become cooperative enterprises. SODEMI has expressed interest in building these entities into such enterprises, but it remains to be seen how such entities will reconcile commercial interests with its land-tenure and village development mandate. In addition, if and when SODEMI begins commercial exploitation of diamonds, one wonders whether the “sharing” model with miners will continue to work, especially if artisanal deposits became less and less productive.

#### *Implementation of the 1998 Land Law*

A second innovation is the implementation of the 1998 land law in mining areas for the first time. In July 2014 the government signed a decree announcing the beginning of this process for 15 diamond-mining villages in Séguéla and Tortiya. This marks the first time that the law is to be implemented at a significant scale in diamond-producing

and in mining areas more generally. The pilot effort is supported by the USAID and EU co-funded PRADD program.

The PRADD II program supports the Ministry of Agriculture in training administrative authorities of Séguéla and Tortiya concerned by the implementation of the land law, and the training created the space to discuss some of the opportunities and challenges surrounding the implementation of the 1998 land law in mining areas. Following the training, administrative authorities with PRADD support started community sensitization that led to the constitution and installation of villages land committees, followed by a training on their roles and responsibilities according to the law.

PRADD has yet to begin its support to the delimitation process, which will involve an official from the Agriculture Ministry to collect the historical limits of the village and have villages negotiate with each other in case of disagreement. This process will be fraught with difficulties especially linked to the system of older villages “installing” other newer villages, as well as administrative divisions that do not correspond with this historical reality. For example, one village has refused to participate in the process because its land committee must be installed by a sub-prefect who is based in a rival village. In the case of Tortiya, PRADD has had to exert pressure through local authorities for the rival communities to participate in the process. The key has been an active sensitization process and ensuring that the land committees are as representative as possible.

Indeed, the overall support to 1998 land law implementation in Séguéla and Tortiya is supported by a conflict management strategy, developed by the PRADD team to ensure that that land negotiation process for diamond artisanal mining development and other local development initiatives will not be sources of conflicts. Approaches and recommendations made are based on a major strength in customary land tenure and traditional conflict resolution mechanisms used at the community level but also with respect to national land laws and the new post embargo mining framework. In addition, PRADD has been testing some specific tools such as conflict registers kept by community members. Finally, PRADD intends to pilot the use of participatory mapping to pre-identify boundary conflicts before the official process begins.

PRADD expects that the key immediate result of the delimitation process will be a reduction of conflicts over resources near villages. In addition, PRADD expects that this can help strengthen the positive aspects of customary tenure and clarify the negotiating partner in case of further mineral development. For example, if SODEMI begins industrial exploitation there will be less likelihood of problems like those described earlier in which multiple villages claim compensation or a part of royalties for sub-surface extraction because boundaries are clear.

In Tortiya, the result could be no less significant but in different ways. First, the implementation of the law affords an opportunity to acknowledge customary ownership in a way that goes beyond a traditionalist perspective. The implementation of the law may allow the intractable fight between the two ethnic groups claiming land ownership to be sidestepped. The reason is that the 1998 land law contributes to considerable flexibility in negotiating new tenurial agreements. In Tortiya, a village land management committee (CVGFR) can be composed of representatives of both communities. The committee could create a de facto “land chief” through a representative

structure and therefore completely avoid the thorny and possibly intractable question of who is the true and rightful land chief. This innovation could go a long way in resolving the conflicts between the communities.

Second, the implementation of the 1998 land law in Tortiya offers a pathway for descendants of SAREMCI employees to use their sub-surface claims as a way to acquire surface land rights. If, for example, a mining descendent applies for a land certificate from the CVGFR and the committee agrees with that claim, then the mining descendent will become a land-owner. However, in this case his customary rights are recognized not by his affiliation with the family of the first occupant but by his long-standing residence and use of that land. In these ways the case of Tortiya may demonstrate how the 1998 land law can take an expansive definition of what constitutes “customary” land ownership and all customary rights clarification in multiple cases.

### *Land-use planning in Tortiya*

While the SODEMI model was being set up in the 1980s in Séguéla, in Tortiya the state took a different tact. All diamond-producing areas were sub-divided into 100-hectare square lots, and these could then be licensed for artisanal or semi-industrial production. In 1995, the new mining code formalized this possibility by introducing the “artisanal and semi-industrial production” authorization, which was distinct from industrial research or exploitation permits. Accurate maps were developed for this system, and numbers attributed to each of the approximately 500 lots. The amount of permits never reached this number, however, because most of the plots were not profitable. The total number of valid authorizations immediately prior to the civil was 19.

With the end of the crisis, the question of if and how to revitalize Tortiya for both mining and non-mining activities came into focus. PRADD determined that land-use planning seemed to be a very appropriate way forward given a history of zoning in the region, a need to identify economic potential and a need to resolve and avert further land-based conflicts. Due to the particular situation of Tortiya, PRADD supported a mapping analysis and legal study on Tortiya. The cartographic study, supported by the United States Geological Survey, offered an objective basis to look at how land-use patterns have evolved since the closure of the SAREMCI mine. The legal study allowed stakeholders to have an answer to the question of who owns the land of the SAREMCI area now.

The studies were discussed in a workshop with the all stakeholders, who after considering the options agreed to a number of recommendations, including the application of the rural law tenure law to clarify land rights, and launching a land-use planning process for the commune of Tortiya, and the updating of artisanal mining zoning maps based on geological and social realities before delivering new authorizations. These studies will be key tools in defining the land-use planning strategy for Tortiya, considering that the legal study recommended several options to move toward application of the 1998 land law through a strategic development plan, while the cartographic study led to recommendations about the need to re-zone the entire region to ensure proper dedicated areas for mining and other areas for agriculture, as cashew farming has become the dominant economic activity in Tortiya.

In Tortiya, PRADD will focus its support to land-use planning on the commune of Tortiya rather than the whole sub-prefecture. This is to provide a practical starting point and a smaller area to pilot the process before extending to

broader areas with higher-level administrative structures. In Séguéla a similar approach will be used in terms of evidence-gathering and supporting the creation of land-use planning platforms, although the aim will be eight land-use plans at a village level. This level was chosen as it coheres with the village demarcation initiative described previously and because villages are more deeply established and better organized than in the Tortiya area. This will also allow PRADD to explore the legal and practical possibilities of using the land committee as the land-use planning platforms.

A critical point to consider in the process is the collaboration between many different state actors involved in the process, from the Ministry of Planning and Development, which has developed land-use planning guides for multiple levels, to the regional councils, which are new decentralized bodies with planning and development as part of their responsibilities through the Ministry of Agriculture in charge of 1998 land law implementation and village delimitation processes. This will be a very innovative but quite challenging process because as of now, there is no institutional or legislative support to the inter-ministerial planning process.

In conclusion, the SODEMI model, the rural land tenure law and land-use planning are all Ivoirian solutions to the conflicts and conundrums created by unclear surface and sub-surface rights and the disconnect between laws and reality when it comes to practice in the field. The initiatives currently being supported by PRADD have their roots in these attempts to create a flexible but viable framework to mediate between these regimes. The key, however, is how this flexibility plays out in reality and whether that flexibility can result in unintended consequences. For example, the SODEMI model gives significant financial power to “indigenous” village leaders whereas long-time outsider residents are not in control. There is a risk that supporting this model solidifies a system that fosters inequality between outsider miners and local land-owners. The approach does little to address possible pre-existing inequities in traditional land ownership patterns. For its part, implementing the 1998 land law also carries significant risks in mining areas should the law be used to exclude certain groups of people, especially outsiders who have been present for generations. PRADD’s contributions in piloting and strengthening these innovations in mining areas of Côte d’Ivoire for the first time should help better understand these risks while pointing a way forward for fostering peace and economic development only possible with clear and coordinated surface and sub-surface land tenure systems.

#### **IV. Resource Tenure and Artisanal Mining in the Democratic Republic of Congo (DRC)**

Described as a “geological scandal,” the DRC’s mineral reserves are legendary, and largely still untapped. It is estimated the Congo contains 10% of the planet’s known copper; 30% of its cobalt; and 80% of its coltan (used in electronics and manufacturing); as well as untold quantities of bauxite, uranium, gold and diamonds. Artisanal and small scale mining (ASM) has a long history in the DRC, dating back to the Belgian colonial era, however only in the past 20 years has ASM emerged as a major economic driver and source of livelihood. While estimates range dramatically, somewhere between 3-10 million people currently benefit either *directly or indirectly* from artisanal and small scale mining in the DRC.

Today, artisanal and small scale mining comprises somewhere between 75-80 percent of the DRC's mineral exports, but this figure is may decrease over time as industrial production increases.

Several key political and economic factors have played a role in fuelling the growth of the ASM sector in the Congo. First, the nationalization of the industrial mining sector by Mobutu in the late 1960's, and the subsequent mismanagement and rapacious looting of minerals by his administration, resulted in a precipitous decline in industrial production and stymied foreign investment. As a result, many people turned to the ASM sector as a source of quick cash income to support themselves. Mobutu later sought to liberalize the mining sector, and in doing so also boosted another wave of ASM activity when he allocated specific zones for artisanal mining that were not of any industrial value or located on an existing concessions. A third boom in ASM occurred during the Congolese wars (1997-2002) as violence, displacement, insecurity, decreased availability of productive land, and rising social and ethnic tensions all contributed to a massive increase in ASM as a means of support for men, women and youth –as well as armed groups.

In reaction to the role that artisanal mining played in fueling Congo's civil wars, and continues to play in the insecurity and violence seen in eastern DRC, the US Congress passed a provision - known as Section 1502 – in the Dodd Frank Wall Street Reform Act of 2010. Section 1502 requires any entity listed on the US Security and Stock Exchange to disclose if they source “conflict minerals” (defined as tin, tantalum, tungsten or gold) from the DRC, or any adjoining country. If they knowingly source from any of these countries, the entity must file a disclosure form demonstrating how they conducted due diligence to determine if these minerals either directly or indirectly benefitted any armed groups. This disclosure requirement created a powerful incentive to reform the ASM sector, but at the same time also resulted in many companies choosing to source elsewhere rather than absorbing the reputational risk and cost to demonstrate their minerals were conflict free. The immediate impact of this *de facto* embargo was a drop in ASM mining and exports from the region, however ASM is picking up as traceability and certification schemes are scaling up and investor confidence is restored in sourcing the ASM sector.

Today, ASM remains a controversial activity that is both an important source of income for millions of Congolese, as well as a critical source of revenue and support for illegal armed groups. Both state (e.g. rogue elements of the DRC armed forces) and non-state armed groups in eastern DRC benefit from ASM through taxation on production at mining pits, fines imposed on mineral transport routes, and trading in mineral rights for profit and military support. Illegal mineral revenues also serve as a source of “off-budget” funding to poorly paid state security forces and mining officials.

Artisanal mining in the DRC also presents significant challenges from a regulatory perspective. Despite the large number of artisanal miners and traders involved in the sector, it remains largely informal, unregulated, and many artisanal mines function in a state of legal limbo and insecurity. Despite its enormous potential, the contribution of the DRC's artisanal mining sector to economic growth and sustainable development remains untapped. The Congo's debilitating colonial past followed by a rapacious dictatorship, two civil wars, and continued transboundary tensions have left the nation in a fragile state of post-conflict transition, characterized by limited security, governance, rule of law, and economic opportunity. Challenges to transforming the DRC's artisanal mining sector into a platform for sustainable economic growth and development are summarized below.

### *Insecure Resource Rights*

The role of land rights and tenure security and its linkages to extractive industries—including minerals—have not been sufficiently addressed to date. Challenges include contradictions between statutory law and customary tenure systems, legal contradictions between surface and sub-surface rights that result in grievances and conflict, general lack of statutory laws that protect the tenure rights of artisanal miners, and forced evictions of artisanal mining communities without compensation. Weak land governance systems in the DRC limit economic growth in the minerals sector; often sustain conflict; and pose special problems for vulnerable groups, including minorities, indigenous people, the poor, and women.

### *Governance, Capacity, and Policy Reform*

Despite the significant number of people who are directly dependent upon artisanal mining in the DRC (estimates suggest 90 percent of some minerals – such as tin, tantalum and diamonds are extracted using ASM methods), the capacity of the state to govern and regulate the artisanal mining sector remains extremely limited. Lack of capacity, lack of resources, and corruption are commonly cited challenges. Yet underlying these concerns is a legal, regulatory, and taxation system that is unevenly unenforced, often contradictory, and fails to incentivize artisanal miners to formalize their activities.

### *Harmonization and Scaling Up of Certified Supply Chains*

The passage of Dodd-Frank (Section 1502) in 2010, and subsequent legal and voluntary instruments, left artisanal mining and trading in the DRC in a state of flux. Interventions driven by industry, national governments, donors, civil society, and the International Conference on the Great Lakes Region (ICGLR) have each addressed varying aspects of mineral traceability and due diligence systems, however the mechanisms, costs, and capacity to scale up are unclear, resulting in a patchwork of compliance across the region. Certified chains of custody for conflict-free artisanal gold have yet to be established, leaving the artisanal gold sector increasingly vulnerable to exploitation and smuggling. These challenges require an integrated approach that combines initiatives across donors, the private sector, civil society, and national governments. The private sector is particularly critical to scaling up artisanal mineral value chains and restoring credibility and investor confidence in the region.

### *Limited Infrastructure*

Many of the ASM mine sites in the DRC are located in remote areas with limited infrastructure, accessibility and security. This increases the potential for armed groups to prey upon artisanal miners transiting through these remote areas as enforcing security and upgrading roads and other infrastructure imposes massive logistical and financial challenges.

### **The Interface between Surface and Sub-Surface Tenorial Regimes**

Land tenure in the DRC, and its relationship to artisanal mining, is shaped by a complex set of political circumstances and negotiated rules that draw on both customary arrangements as well as statutory land and mining law. Historically, customary rights over land were awarded by a traditional authority – the “Mwami” - in return for regular tribute payments. However, after the DRC gained independence in 1960, the state declared all land the property of the government, and the customary system was officially replaced by administrative procedures (the General Property Law), which required registration, surveying and the issuance of permits and titles by state authorities. Despite the State’s attempt to end (or limit) customary tenure and traditional authority, the government was unable to effectively implement or enforce the General Property Law, and a de facto dual system of land tenure persisted throughout most of the DRC. As such, the relationship between surface and subsurface rights at any given ASM site remains characterized by an opaque, informal and negotiated set of customary rules and official regulations. This lack of clarity frequently leads to conflict between LSM and ASM, between cooperatives and local landowners, and between cooperatives and other competing title holders.

The lack of clarity around land tenure, access and use, is exacerbated by the fact that artisanal mining itself remains largely informal and unregulated. Under DRC mining law, all artisanal miners are required to be registered with the provincial mining authorities and pay an annual fee to obtain a registration card, or “*carte de creuseur*.” However, the cost of the fee and bureaucratic complexity associated with registration combined with the lack of enforcement serves as a major disincentive for miners to register. Other actors in the supply chain, including buyers, or “*négociants*,” transporters, and processing entities are also supposed to have registration cards or accreditation to allow them to participate in the minerals trade, but many do not. Finally, artisanal mining can only officially take place within a designed artisanal mining zone. Not only is the process and persons responsible for designating artisanal mining zone unclear, it also remains illegal for any industrial title holder to have a artisanal mining zone within its concession –thereby preventing industrial mining companies from legally and productively engaging with artisanal miners operating illegally on their concession.

According to the law in the DRC, all artisanal miners are also supposed to join an accredited cooperative, the only entities legally allowed to organize and manage ASM. The accreditation criteria and process are however fraught with unclear criteria, and many cooperatives are managed by and for local elite further dis-incentivizing miners to register. Furthermore, a cooperative with accreditation by the Ministry of Mines is supposed to be assigned a specific concession. In many cases however, cooperatives negotiate only informal agreements with legal title holders, or simply find sites where there is little resistance to their presence. In other cases, artisanal miners invade a concession under active research or small mine or industrial exploitation permits further exacerbating tensions between LSM and ASM actors. Furthermore, cooperatives often refuse to recognize customary tenurial arrangements that pre-date the formation of the cooperative.

The importance of clear, enforceable tenure over surface and sub-surface resources is frequently overlooked in discussions about conflict minerals in the DRC. The majority of efforts to stem the flow of conflict minerals have instead focused on establishing traceability, certification and due diligence systems designed to comply with the Dodd Frank law described above, and international guidance developed by the OECD. Competition for land and mineral resources, and the atmosphere of opaqueness and informality around tenure at ASM sites, does however play a critical role in local land disputes, and has become linked to the regional struggle for economic control and politico-military power.

### **Innovations in Policy and Practice toward the Artisanal Mining Sector**

The goal of the USAID-funded Capacity Building for a Responsible Minerals Trade (CBRMT) project is to strengthen the capacity of the DRC and regional institutions to transparently regulate and control a critical mass of the trade in strategic minerals in eastern DRC in order to transform the region's mineral wealth into economic growth and development. To achieve this goal, CBRMT has two specific objectives: 1) Support the DRC Ministry of Mines (MoM) and targeted mining sector actors to increase the scale and quality of the conflict-free minerals supply chain to achieve a critical mass through validation of conflict-free mine sites, improved policy and practice as it relates to the allocation and management of sub-surface mineral rights for all supply chain actors, and scaling of traceability schemes, so that international end-users can purchase conflict-free gold, tin, tungsten and tantalum (referred to as "3T's") and; 2) Support the operationalization of the ICGLR Independent Mineral Chain Auditor to audit and monitor the conflict-free mineral supply chains to assure further global market acceptance of these minerals.

The CBRMT project differs significantly from other conflict mineral projects by adopting an explicit focus on the role of overlapping and competing tenurial regimes, and the need to bring greater awareness and resolution to the contradictions between customary and statutory rights and the ability to enforce arrangements around the use, access, and transfer of rights to mineral resources. Four key activities under CBRMT support this goal.

First, CBRMT recognizes that any effective reform of the DRC's mining policy and laws to reconcile competing systems of customary and statutory law will depend, in part, on champions in Parliament, senate subcommittees and the Provincial Ministry of Mines. A total of fifteen policy reform "champions" (three individuals from each of the five targeted CBRMT Provinces) are taking part in week-long field based scoping exercises to examine and "ground-truth" the challenges associated with the formalization of the ASM sector from a resource rights perspective. A key theme explored by each scoping team are the customary and statutory tenure arrangements that govern access, use, and management (enforcement) of land and minerals. Teams are asked to explore and reflect upon the legal and regulatory loopholes and gaps they observe in the field which constrain the ASM sector, and identify targeted solutions and reforms at the local and provincial level.

Observations and recommendations from the scoping trips will feed into a report which will identify gaps and priority areas for reform in support of a legal, formalized, responsible, and economically productive small-scale and artisanal mining sector. Recommendations will identify constraints and identify practical interventions to strengthen tenure clarity and security within DRC mining law, policy, and regulations.

The report will be vetted and discussed at a national conference planned for the spring of 2015 in Kinshasa.

The second innovation under CBRMT is a growing amount of field-based evidence that certification and traceability efforts - including those that will be scaled up under CBRMT – are unexpectedly contributing to the formalization and exercise of land rights at the local level. For example, a pilot site launched in Nyabibwe (South Kivu) created an island of formalization where an increased number of artisanal miners were registered, cooperatives and government agents legally collected levies and taxes, and the local landowners increased their understanding of their legal rights. As a result, landowners began transferring their traditional land titles into formal statutorily-based titles, and claiming compensation for subsurface access to minerals by miners. While the Nyabibwe pilot preceded CBRMT, there is hope that CBRMT sites implementing traceability and certification under CBRMT will likewise increase stakeholder's awareness of their rights, which will lead to the gradual formalization and exercise of land and mineral rights. When communities understand and exercise their legal rights it stands to reason that greater pressure will be brought to bear upon the government to reform the Mining and Land Code such that the loopholes, contradictions and gaps between customary and statutory regimes can be reconciled.

A third and final innovation within the sphere of the CBRMT project is the increasing pressure on industrial concession holders to allow artisanal miners (through cooperatives) to legally operate on their concessions. For example, the large scale concession holder Banro, a Canadian listed gold mining company operating in South Kivu and Maniema Provinces, signed a Memo of Understanding in December, 2013 with USAID/DRC to explore the legalization and formalization of artisanal mining near their concession. Other large scale concession holders have indicated they will be watching the Banro pilot carefully to understand how greater clarity and regulation around the use, access, and transfer of rights to mineral resources to artisanal miners on industrial concessions can help resolve tensions between artisanal and industrial mining operations.

Finally, drawing on the experience of the PRADD programs, training modules will be developed for delivery at CBRMT mine sites to explain and clarify customary and statutory laws with respect to surface and sub-surface rights. These trainings will also include practical guidance and exercises on conflict and dispute resolution to help resolve conflicts between customary procedures and statutory laws.

In conclusion, the CBRMT project recognizes that conflict in eastern DRC Congo will not be resolved by simply scaling up conflict free minerals supply chains. The drivers of conflict in eastern DRC are rooted

in a complex set of dynamics, including competition for power, resources and patronage, which are, in turn, deeply rooted in rights, access and control over land. Nor will inequalities around access and control over land and minerals, which have indirectly contributed to the genesis of violent conflict in Eastern Congo, be solved purely through legislative reforms. The underlying structures – political, economic, and social – through which land and minerals access are mediated, must also be reformed. Sustained peace, security and development in the region therefore depends, in part, upon having pragmatic, contextual and enforceable land tenure arrangements that recognize the role of customary and statutory institutions. Sustained success will not come from dismantling customary institutions or reforming statutory laws, but rather strategically harmonizing both systems to enable the ASM sector itself to more effectively enforce, regulate, and negotiate their rights in order to improve their livelihoods and the conditions and environments in which they work.

## V. Conclusions

The minerals underneath land in West and Central Africa contribute to competition and conflict given opaque and competing authorities over subsurface minerals. The three case studies described here illustrate how surface and sub-surface rights are held by the State unless otherwise appropriated. The State can grant surface rights to private or public parties, but surface rights do not entail the right to exploit the mineral substances of the soil or subsoil. Conversely, customary authorities often negotiate access to both surface and sub-surface rights, often separately or distinct from any statutory tenure regimes. Despite decades of attempts by government to impose their authority, customary land rights are often the *de facto* norm across all three countries, yet they are not adequately defined or protected in the policies, laws, and regulations of each country. Customary tenure regimes remain surprisingly strong even as they adapt to new institutional and political configurations in each country. While customary tenure regimes remain very strong in some countries, like Guinea and Côte d'Ivoire, in others competing and insecure tenure regimes over surface and sub-surface rights are both systemic drivers and accentuating aspects of violence in some countries, especially in the case of the eastern DRC.

While statutory sub-surface mining regulations have historically preempted those of surface rights holders, this situation is gradually changing as shown in the case studies reviewed in this paper. Fundamental re-thinking about the complex interface between sub-surface and surface rights and claims is occurring because of rural protest and resistance in places occupied by artisanal miners extracting precious and rare earth minerals. New and creative policy alternatives and mining practices are emerging in all three countries that are contributing to growing State recognition of the primacy of customary tenure regimes – a reality increasingly codified in national legal frameworks – but that also allows for extraction of subsurface resources while incentivizing environmental restoration. This nascent paradigm shift is fortuitously unfolding in resource rich countries of West and Central Africa thanks to concerted engagement between the tripartite actors of the private sector, civil society, and the State,

but also with timely technical contributions supported by international donor organizations. The USAID supported programs and projects described in this paper merit further monitoring in the years to come.

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**Key Words:**