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# PROPERTY RIGHTS AND ARTISANAL DIAMOND DEVELOPMENT (PRADD) PROJECT

QUARTERLY PROGRESS REPORT  
(JULY – SEPTEMBER 2011)



OCTOBER 2011

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Cover Photo: Miners in a village in PRADD's area of intervention.

Photo by André Yakota.

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# ACRONYMS

ADM	Artisanal diamond mining
AFL	<i>Artisan Facilitateur Local</i> or Local Mobilizing Artisan
CAR	Central African Republic
CIG	<i>Centre d'Information Géographique</i> (GIS Unit of the General Direction of Mines)
CPJP	<i>Convention des Patriots pour la Justice et la Paix</i> (Rebel group that signed a cease fire accord with GOCAR in June 2011)
GIS	Geographic Information System
GIZ	German Development Cooperation
GOCAR	Government of the Central African Republic
IGA	Income-Generating Activities
IR	Intermediate Result
M&E	Monitoring and Evaluation
MM	Ministry of Mines
MOU	Memorandum of Understanding
NGO	Non-Governmental Organization
PEA	Programmatic Environmental Assessment
POMIGER	Post-Mining Income-Generating Environmental Rehabilitation
PMP	Performance Monitoring Plan
PRSP	Poverty Reduction Strategic Paper
PRADD	Property Rights and Artisanal Diamond Development Project
TtARD	Tetra Tech ARD
USAID	United States Agency for International Development

# INTRODUCTION AND BACKGROUND

Public Law 108-19, The Clean Diamond Trade Act, provides the authority for implementation of the project called Property Rights and Artisanal Diamond Development (PRADD). Section 9 of the law states: “The President may direct the appropriate agencies of the United States Government to make available technical assistance to countries seeking to implement the Kimberley Process Certification Scheme.”

The Kimberley Process Certification Scheme (KPCS) came into effect in 2003. It is not an international treaty, or a multilateral organization. It is a voluntary agreement that functions as a tripartite alliance of representatives from the diamond industry, civil society, and the governments of diamond-producing and trading countries to combat the trade in conflict diamonds. There are 49 members, representing 75 countries, with the European Community and its member states counting as an individual participant. The KPCS is chaired on a rotating basis by participating countries. The 2011 Chair is the Democratic Republic of Congo (DRC).

Under the terms of the KPCS, only diamonds certified as originating from conflict-free areas and sealed in tamper-proof containers at the point of export are traded among KPCS members. Participating states must enact a domestic law to meet the KPCS minimum requirements. Member states must designate the national institutions responsible for export, import and internal controls. Finally, they must commit to the exchange of statistical data as well as periodic review missions.

In cooperation with the US Department of State, the US Agency for International Development (USAID) Economic Growth, Agriculture and Trade (EGAT) Land Tenure Unit manages PRADD. Funding comes from Congress’s annual Economic Support Fund (ESF) appropriations.

Tetra Tech ARD implements PRADD as part of a task order called the Property Rights and Resource Governance Program (PRRGP) under the Prosperity, Livelihoods and Conserving Ecosystems (PLACE) Indefinite Quantity Contract (IQC). PRADD has been operating in the Central African Republic since 2007 and in Liberia since 2010. PRADD also includes a number of activities in support of “regional” aspects of the KPCS.

Under the terms of the PRRGP Task Order the PRADD project is intended (a) to bring greater quantities of alluvial diamonds into the legal chain of custody, and (b) to improve the livelihood options of local populations. Making it easier for artisanal miners to acquire licenses while making their rights to prospect and dig for diamonds more formal and secure creates incentives for more miners to enter their production into the formal chain of custody – the key requirement of the KPCS. This decreases diamond smuggling and increases national revenue from diamond exports. Secure property rights also increases the economic value of the land on which the diamonds are mined, thereby making the eventual rehabilitation of that land into other productive uses more likely.

PRADD has defined the following five intermediate results (IRs):

- IR 1 – Customary land and natural resource rights in target areas identified, clarified, and formally recognized;
- IR 2 – System for reliable tracking of production and initial sale information strengthened and appropriated by GOCAR;

- IR 3 – Benefits of mining activities to local communities increased and food production diversified and intensified;
- IR 4 – Capacity to prevent and mitigate environmental impacts of artisanal mining strengthened; and,
- IR 5 – Access and availability of information on artisanal diamond mining to stakeholders increased.

# 1.0 SUMMARY OF MAJOR ACCOMPLISHMENTS THIS QUARTER

During this reporting period, PRADD made the following noteworthy achievements:

- PRADD, the Ministry of Mines and local communities completed the preliminary identification of 3,457 new mining claims belonging to 1,821 artisanal miners.
- PRADD received seven quality GPS devices donated by the Taiwanese government.
- PRADD produced two preliminary reports proposing practical recommendations to improve the property rights certificate and the organization of a community-based customary cadastre.
- PRADD fully completed training to the ministerial staff of the GIS Unit.
- The five diamond valuation workrooms are completed, equipped, inaugurated and operational.
- PRADD completed a ‘pre-feasibility’ report that offers a diagnosis of microfinance in CAR and a review of the realities of investment, risk and profitability in artisanal diamond mining.
- PRADD competitively selected nine local entrepreneurs in its three provinces of intervention to run its post-mining income-generating environmental rehabilitation (POMIGER) business production units. All three tree-farming units and thirty percent of the first fish farming unit were completed.
- 921 artisanal miners made an additional income of \$6,799 from alternative livelihoods. The amount of income and the number of income earners continued to increase despite PRADD’s shift from a cost sharing to a commercial scheme.
- Fish farmers supported by PRADD doubled the total surface area of exhausted mining sites reclaimed into fishponds since the last quarter.
- Two artisanal mining associations initiated by PRADD in the Nola area strengthened their internal regulations and shifted activities from pooling savings to pooling labor and equipment.
- PRADD collected and reviewed all necessary organizational and procurement information for the creation of local equipment rental pools.
- PRADD organized eight public screenings of its educational film *The Diamond Journey* in the three provinces of intervention.
- PRADD started filming the steps of fish farming and tree farming methods of environmental reclamation.
- The new PRADD Office of Berberati introduced PRADD into sixteen communities and organized peer-to-peer exchange visits in the original project provinces.

- PRADD conducted its second household survey. The data reveal impact in the areas of economic livelihoods, diamond mining and gender equity.
- PRADD proposed to the government of CAR (GOCAR) a review of its draft MOU as called for in the approved work plan.

## 2.0 DETAILED DESCRIPTION OF MAJOR ACCOMPLISHMENTS THIS QUARTER

### 2.1 PROJECT ADMINISTRATION AND MANAGEMENT

During the reporting quarter, PRADD submitted to GOCAR a draft version of the revised MOU with USAID as called for in the approved work plan. The discussions are ongoing (see also 2.7.3 Partnerships below).

On the staffing side, PRADD was not able to identify suitable candidates for the positions of Legal Advisor, Governance Advisor and Boda Administrator. PRADD took the following steps:

- Instead of a Legal Advisor, PRADD recruited two graduate students in law and anthropology as interns to perform a field study and make propositions on the practical organization of customary land tenure and on means to improve the property rights certificate. The students ended their internship and submitted two comprehensive reports at the end of the reporting period. The work of the Legal Advisor on the legalization of PRADD's certificate is described below in 2.3.2.
- PRADD was unsuccessful in recruiting a qualified Governance Advisor despite repeated attempts by the chief of party (COP) to persuade influential reform-minded government officials to join the team. Because a Central African civil servant must request a "secondment leave" for no less than two years, the uncertainty of PRADD's future dampened their interest. Having determined it is impossible to fill this post by the end of the work plan, the COP started empowering the Property Rights and Mining Development Coordinator in all relations with GOCAR, especially on the MOU discussions and the transfer of responsibilities to the MM. The extent to which PRADD will be able to trigger interest in land tenure reform in the National Assembly and various ministries is unclear (for more detail see 2.3.2 below).
- The ongoing recruitment of a new Boda Administrator is proceeding slowly. PRADD is taking every precaution to avoid a recurrence of past mistakes. PRADD has not been able to retrieve the \$435 embezzled through fuel pilfering by the previous incumbent, and is still in court with the original Boda Administrator who filled the post from 2009-2011.

Management under the present staffing plan is improved and all staff members recruited in June successfully completed their end of probation performance evaluation. PRADD is particularly satisfied with the performance and dedication of the nine Community Mobilizers.

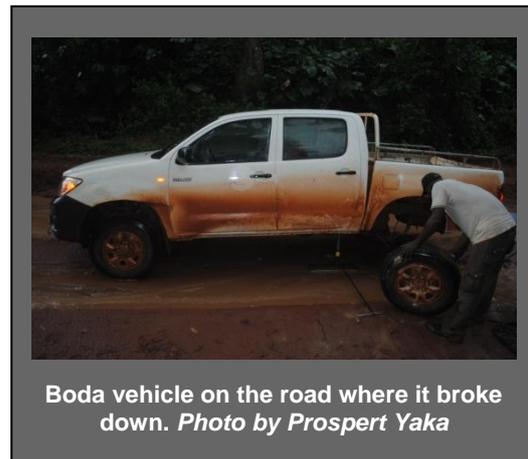
The new Berberati office was equipped, furnished and operational in early July. PRADD upgraded its communications. All three offices were equipped with very small aperture technology (VSAT) dishes protected by lightning rods. PRADD procured better Internet service in July, and supplied cell phones to all staff in September. This allows constant internal communication, and the result of the increased

flow of information is much-improved decision-making. The consequence is a 125% expenditure on equipment and 85% on communications at the end of the reporting period.

By transferring its three 4X4 vehicles and nine of its ten motorcycles to the field offices, PRADD also greatly improved its outreach. However, as a consequence fuel and maintenance costs are proving higher than planned. In September the Boda vehicle suffered a major and costly breakdown and as of the end of this reporting period was still undergoing repairs. PRADD found the driver to be negligent and terminated his contract in early October.

Finally, the annual national staff medical insurance expired in July and PRADD adopted a new plan in August. PRADD estimated the annual ceiling of medical expenses per staff and pays this ceiling in tranches of medical indemnities every month. Although this plan bears the same costs as the previous one and is quite less equitable, it was the first attempt to delegate the proposition of an improved medical plan to the staff and their legal representatives. PRADD will evaluate the plan at mid-term.

PRADD introduced its new staff medical plan in time to cover the medical costs of the two PRADD Community Mobilizers who suffered serious motorcycle accidents during this quarter, despite the motorcycle training delivered in June by the Fleet Manager. PRADD deployed two temporary replacements. In September, one of the two Community Mobilizers ended her convalescence and resumed her post in Berberati. However, she will not use a motorcycle again.



Boda vehicle on the road where it broke down. Photo by Prosper Yaka

## 2.2 STAFF CAPACITY BUILDING

The two-week all-staff training undertaken in June proved cost efficient, as upon deployment all field staff were immediately operational.

During the reporting period, the Community Mobilizers and the provincial AFLs participated in training sessions in agroforestry and, in Nola, in fish farming. In addition, USAID approved a two-week professional English training program in Ghana for the Property Rights and Mining Development Coordinator in October, and the Communication Advisor was selected by the US Embassy to participate to the Edward Murrow International Visitors Program organized by the State Department for journalists and opinion leaders. The Administrative Coordinator has collected requests from staff for various trainings.

## 2.3 IR 1 – CUSTOMARY LAND AND NATURAL RESOURCE RIGHTS IN TARGET AREAS IDENTIFIED, CLARIFIED AND FORMALLY RECOGNIZED

### 2.3.1 Property Rights Validation

PRADD and the MM applied the property rights methodology under the transferred format agreed upon in April 2011. The Regional Mining Directorate and PRADD's monitoring teams now undertake preliminary identification of sites and miners. This documents the tenure dynamics in the communities they are working in, including how people gain access to land and mineral resources, for what duration, under what conditions, and so replaces the participatory rapid appraisal (PRA) and census exercises PRADD used before.

Among other modifications described below, PRADD intends to limit the time duration of the certificate to periods of two years to avoid granting permanent land rights to temporary migrants.

The Regional Directorate first proposed a priority list of roads in all three provinces. PRADD Community Mobilizers – accompanied by the Regional Director in two of the three provinces – visited

the new communities, explained the purpose of the program, and agreed with the local village chiefs on which local miners could be trusted as opinion leaders to collect information on the claims from the local site owners. The PRADD field teams came back regularly to assist and explain, but respected the delegation of this task to the communities.

The process lasted two months. By the end of the reporting period, the teams had identified 3,457 mining sites belonging to 1,821 artisanal miners. With the claims certified during the first and second work plan periods this brings the number of identified claims to 5,740. The following table summarizes the results of this activity.

**Figure 1: Number of Claims in the PRADD Property Rights Validation Process**

Province and Area by Work Plan Period	Number of identified sites/claims	Number of GIS-mapped sites/claims	Number of validated sites/claims	Number of certified sites/claims
Lobaye (2007-2011)	559	559	552	552
Lobaye (2007-2011)	153	-	-	-
Lobaye (2011-2012)	366	-	-	-
Sangha Mbaere (2009-2011)	1,724	1,323	880	880
Sangha Mbaere (2009-2011)	302	-	-	-
Sangha Mbaere (2011-2012)	746	-	-	-
Mambéré Kadéi (2011-2012)	1,890	-	-	-
<b>TOTAL</b>	<b>5,740</b>	<b>1,882</b>	<b>1,432</b>	<b>1,432</b>

It is interesting to note that in addition to the sites of the new communities of Lobaye and Sangha Mbaere (PRADD now covers six more roads there than before), many artisanal miners who were reluctant to declare their property during the 2007-2011 process have now insisted on being included in the dataset.

The total of 5,740 identified claims places PRADD in a position to exceed the PMP target of 3,000 certified sites. PRADD does not expect all of the newly identified sites to complete the process, however. Experience shows that only two thirds of the identified sites will end up validated and certified. It is important to note concerns about PRADD's ability to meet the expectations of local miners. Success will depend in large part on the level of commitment of GOCAR.

At the behest of the authorities and the communities, and to align better with the Mining Code provision that the MM should define the "artisanal mining zones" to be protected from industrial methods of extraction, PRADD made an important change in the method for identifying sites. Previously, PRADD identified sites by reference to the nearest village or "artisanal zone". The authorities and the communities pointed out that "watercourse" is a better unit of identification because the same watercourse can attract miners from different villages, and mining sites are frequently located quite far from the miners' residence. PRADD agrees that this methodological change is appropriate; the watercourse is a more natural unit of identification<sup>1</sup>.

Although the Regional Directorate is now working very closely with PRADD and the Directorate of Mining Support, host structure to the property rights methodology, has participated fully, the MM has not yet converted all decisions taken during the April workshop into action. Questions remain about which Directorate pays for what, which Directorate has the final say, how will cost sharing between PRADD and the MM work, and so forth. In September, the Directorate of Mining Support proposed to the Minister a list of recommendations that are still under consideration. It is unfortunate that, six months after the official transfer of the methodology, these practical matters have not been decided. PRADD is concerned that the cost sharing might not match the assumptions that underlie the approved activity budget. PRADD will reallocate activity funds for this activity.

<sup>1</sup> The Regional Director agrees that previous use of "the village" as the unit of identification might not have been the most appropriate. Incidentally, other sectors of development, especially in irrigation have identified this change as a best practice. A "water community" that can associate different parts of different villages to the same watercourse is better suited to manage irrigation canals than any single village.

PRADD received the seven GPS devices donated by Taiwan. They are all working and of a very good quality. PRADD is waiting for the Ministry's decision on their specific internal allocation before handing them over formally. The government of Taiwan had previously given its approval for this transfer of property.

### 2.3.2 Toward Formalization

**Artisanal Mining Licenses:** The MM was unfortunately unable to provide reliable figures on the number of artisanal mining licenses issued during this quarter. PRADD is however certain that the number of 2011 licenses issued countrywide exceeds that of 2010, as it was already the case at the end of the last quarter, which is a progress toward formalization.

In the areas covered by PRADD, the proportion of licensed artisanal miners remains two to three times superior to the national 2-3% estimate, as the table next indicates.

**Figure 2: Number of "PRADD" Identified and Licensed Artisanal Miners**

		Number of "PRADD" artisanal miners	Percentage of "PRADD" artisanal miners bearing a license
Lobaye Province (PRADD present since 2007)	October 2009	255	5.1%
	December 2010	402	9.7%
	<b>September 2011</b>	<b>402</b>	<b>10.7%</b>
Sangha Mbaere Province (PRADD present since 2009)	October 2009	0	N/A
	December 2010	1,123	3.4%
	<b>September 2011</b>	<b>1,123</b>	<b>5.3%</b>
Mambéré Kadéï Province* (PRADD present since July 2011)	<b>September 2011</b>	<b>778</b>	<b>4.6%</b>
<b>TOTAL</b>	October 2009	255	5.1%
	December 2010	1,525	5.1%
	<b>September 2011</b>	<b>2,303</b>	<b>6.0%</b>

\* The percentage of licensed artisanal miners in the Mambéré Kadéï province is a baseline and is not included in the Performance Indicator, as the identification process is not completed and so they are not yet included in the database.

While the number of licensed artisanal miners remains quite low, the proportion is growing substantially. In the province of Sangha Mbaere especially, which previously always recorded a lower rate than Lobaye, the number of licensed miners doubled in the last quarter. The proportion of licensed miners in the longstanding PRADD areas is now 6.7%.

Mambéré Kadéï Province also recorded a higher rate than the national estimates, but lower than the longstanding PRADD areas. The reason might be twofold: first, miners in the Berberati area tend to take their mining activity more seriously, people often describing them as more professional; second, the provincial candidate to the last January parliamentary elections was the former Minister of Mines who distributed licenses to hundreds of voters.

Formalization goes beyond the acquisition of a mining license and PRADD now has evidence that the rate recorded is indicative of a broader trend to comply with the law within the PRADD areas. The results of PRADD's second household survey performed in July show that the Lobaye and Sangha Mbaere miners not only have a better knowledge of the law than the Mambéré Kadéï miners (even though they are said to be more professional), but also are more likely to obey the law:

- 18% recorded all diamonds they produced during the season in their production notebook against 8% in the Mambéré Kadéï;
- 23% received purchase slips for all diamonds they sold against 8% in the Mambéré Kadéï<sup>2</sup>;

<sup>2</sup> This is the best indication of a lower rate of fraud in the PRADD areas, as a diamond recorded on a purchase slip cannot be smuggled out of the chain.

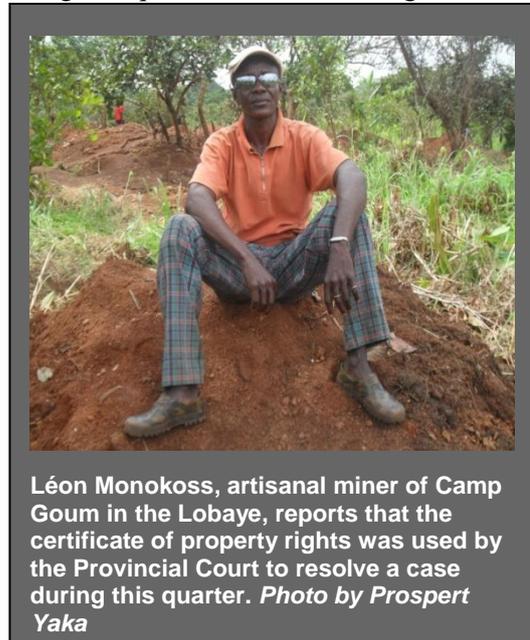
- Only 8% usually sell their diamonds to 'coxeurs' (illegal middlemen) against 22% in the Mambéré Kadéï;
- 42% know who are the legal diamonds buyers against 28% in the Mambéré Kadéï;
- 14% have a relatively good knowledge of the diamond's characteristics against 3% in the Mambéré Kadéï.

With these figures, PRADD can now claim with more confidence that it plays a chief role in the evidenced increase of diamonds entering the legal chain of custody from its areas of intervention (see 2.4.3 below).

**Improving the PRADD Property Rights Certificate:** During this quarter PRADD's two graduate interns analyzed the format of the PRADD certificate through a review of the available literature and a three-week field study and proposed practical changes in their reports. On two separate occasions during the same period judicial and mining authorities used PRADD certificates to resolve two property conflicts. This indicates the certificate has acquired significant legal weight and makes improvement important. Currently, the format

- does not specify the maximum surface covered by the claim
- does not give the name of the spouse
- the term 'customary' does not clearly indicate whether it is a legitimate form of ownership or a tribal form of traditional ownership<sup>3</sup>
- does not clearly specify that the claim is to the land, whatever the activity performed on it

The law student found that people perceive the PRADD certificate to confer use rights only. This causes confusion about the legal requirements to mining on one side, as well as the possibility of shifting to agricultural activities. The law student proposes a time limit to customary ownership based on the legal land titles.



Léon Monokoss, artisanal miner of Camp Goum in the Lobaye, reports that the certificate of property rights was used by the Provincial Court to resolve a case during this quarter. Photo by Prosper Yaka

The anthropology student noted previously existing confusion between the traditional and the administrative issues of limits and rights, and found that the PRADD certificate does not elucidate. For example, in inheritance, tradition favors the first son while the law favors the spouse. In not naming spouses on the certificate, PRADD does not enhance possibilities of advancing the interests of justice.

PRADD will thoroughly analyze these various recommendations and submit them to USAID for approval.

**Toward a Comprehensive Land Tenure Code:** PRADD has not been able to move forward on triggering GOCAR's interest in comprehensive land tenure reform. The Minister has still not replied to the report that PRADD's legal expert Arsène Sendé submitted in April, or to PRADD's proposition to support the presentation of the report to a panel of government representatives. PRADD also was not able to recruit a Governance Advisor whose terms of reference would have had this activity as a major objective. PRADD is thus considering other advocacy options, such as introducing the property rights debate into the university and the media next quarter and organizing regional study tours in 2012.

PRADD did identify a couple of champions in GOCAR interested in property rights, and the one tangible success this year was the introduction of the plan of mapping and formally recognizing all artisanal mining claims in the government's 2011-2015 Poverty Reduction Strategic Paper (PRSP). In

<sup>3</sup> To remove uncertainties about the meaning of "legitimate" and "legal" PRADD will submit for USAID approval changes in the certificate. Once approved, if the changes are accepted by GOCAR, this will address these limitations.

September, before the government officially presented its PRSP to the donors, the Ministry of Economy used PRADD inputs in building an estimated budget, and proposed an organization to achieve this task. However, the Ministry of Economy does not have the same political weight as the Ministry of Mines or the Ministry of Finance.

The link between strengthened property rights and increased property value is not always intuitive to the political decision maker. PRADD has always had difficulties convincing higher authorities of the value of land tenure reform, despite facts presented in various technical reports and the support of the economic section of the World Bank, the US Embassy and the GIZ. PRADD now has new facts from its July Household Survey to support its argument:

- 28% of those surveyed in the longstanding PRADD areas have heard about certified mining sites being sold at a higher price than non-certified ones.
- 12% have heard of exhausted mining sites – worthless holes in the riverbank before the property certificate – being sold (at around \$65 each).
- 2% have declared they intend to sell their site after exhaustion of the diamond-rich gravel.

These are clear signs of an unused market potential that could be unleashed through strengthened land tenure. It also amounts to a request from the miners themselves. When asked about the priority reforms the Ministry of Mines should undertake, the provision of an official property rights certificate on mining claims came as the first answer. A certificate of land rights ranked more important than free public diffusion of diamond prices and free training on prospection and extraction, *even in the new Berberati area*.

## **2.4 IR 2 – SYSTEM FOR RELIABLE TRACKING OF PRODUCTION AND INITIAL SALE INFORMATION STRENGTHENED AND APPROPRIATED BY GOCAR**

### **2.4.1 Artisanal Mining Claims Registry/Production and First Sales Database**

During this quarter, PRADD completed delivery of the seventeen training modules to the staff of the ministerial GIS Unit. The training started in February and lasted seven months because PRADD used a slow and thorough approach to ensure that participants both retain and use the skills. At the end of the training PRADD gave a series of practical tests to the GIS staff. The results were satisfactory, and an evaluation report is in progress.

Overall, the GIS management by the General Direction of Mines is satisfactory. The GIS Unit is fully capable of

- updating the AMCR/FS database that was transferred in March
- processing data, and
- designing digitalized maps

PRADD will periodically follow-up for the remainder of the project.

At the request of ministerial cadres PRADD will add a second type of training to be conducted in October that will target the Directors and decision makers of the MM. This training will be much less technical and will focus instead on the useful applications of the GIS Unit.

During the current reporting period, for the first time since its creation by Ministerial Order a year ago, the GIS Unit was tasked by the Presidency to update the map of the mining permits granted to the diamond mining industry. It was also, tasked by the Minister for inputs needed for the weekly staff meetings. PRADD's support is thus helping the Ministry becoming more professional.

The next quarter will be defining. First, the MM will enter the operational phase of identifying and registering over 1,000 artisanal mining sites in the new areas of PRADD's intervention. This will require steady workflow and good coordination and communication between the departments. Second,

the software license will expire in December. This will test GOCAR's written commitment to fund and maintain the GIS Unit. The General Direction of Mines is aware of this important benchmark.

## 2.4.2 Production Tracking

Since the end of the mine to export tracking test last quarter this activity has been at a standstill due to the regular lack of availability of the Director of Marketing and Industry and Permanent Secretary to the Kimberley Process in CAR, who is the main driver. This does not mean that GOCAR is disinclined to move ahead on production tracking. In fact, the MM component of the PRSP cell at the Ministry of Economy was resolute in enshrining the identification and GPS mapping of *all* artisanal mining sites in its five-year poverty reduction plan. PRADD must also acknowledge that this prospect is extremely ambitious and goes far beyond the financial capabilities of PRADD or even GOCAR. Diamond exports bring only \$6 million in revenue into the national Treasury. Without ongoing donor support, the prospects for implementation of a mine to export tracking system are dim.

PRADD hopes to finalize its evaluation of the 2011 tracking pilot with the help of the Director of Marketing and Industry over the next quarter, and will prepare for a broader test in early 2012.

## 2.4.3 Diamond Production Data

In early September the international price of rough diamonds fell sharply. Reportedly the average price of rough diamonds in Antwerp decreased by 35%, with the biggest decreases being for the biggest stones. Although it has not yet fallen as low as in late 2008, this fall is said to be more structural than three years ago. People fear the worst is yet to come; every actor is adjusting in anticipation of a sharper downward curve to come. The consequences are being amplified as they go up the supply chain. Through a recent qualitative survey PRADD found that first sale prices proposed by collectors to artisanal miners are 65% lower than a month ago, down to an average \$17 per carat. Reasons for the sharp decline are due to the high level of fixed fees to all traders in CAR, including the buying house's license fee, the collector's license fee, mandatory real estate investments, and the overvalued dollar/euro exchange rate. There is a significant cash flow crisis intensified by current euro and banking issues, meaning that collectors and buyers are *not even able to buy* all production presented to them anymore. Investment has stalled, significantly hampering production.

**Figure 3: Diamond Production: National and in the provinces PRADD has been operating in since 2009<sup>4</sup>**

Period	National Exports (carats)	Nola and Boda Production		Berberati Production	
		Volume (carats)	% to national	Volume (carats)	% to national
Q1 2009	76,573	3,159	4.13%	N/A	N/A
Q2 2009	81,658	3,357	4.11%	N/A	N/A
Q3 2009	66,839	1,752	2.62%	N/A	N/A
Q4 2009	85,398	N/A	N/A	N/A	N/A
<b>Total 2009</b>	<b>310,469</b>	<b>N/A</b>	<b>N/A</b>	N/A	N/A
Q1 2010	63,189	2,217	3.51%	N/A	N/A
Q2 2010	87,753	5,885	6.71%	N/A	N/A
Q3 2010	86,112	3,068	3.56%	N/A	N/A
Q4 2010	64,503	5,135	7.96%	N/A	N/A
<b>Total 2010</b>	<b>301,557</b>	<b>16,304</b>	<b>5.41%</b>	N/A	N/A
Q1 2011	76,493	3,875*	7.00%	N/A	N/A
Q2 2011	97,156	14,316	14.74%	N/A	N/A
Q3 2011	73,974	20,350	27.5%	24,930	33.7%

\*Boda figures for Q1 2011 are for Boda's 14 collectors only, and do not include the buying offices.

<sup>4</sup> Approximately 40% of miners in the provinces PRADD has been operating in since 2009 are participating. With the current extension along new roads, this will soon be 80%.

The local impact is very visible, with miners unable to sell at a price they are willing to compromise on, market traders selling fewer goods and fewer people coming to town. In a country where the diamond trade influences 68% of the local economy, these are difficult developments.

The results from the July household survey on the respect for the mining law (see also 2.3.2 above) indicate that PRADD is contributing to an increase in the proportion of diamonds entering the legal chain of custody. The proportion of carats entering the legal chain from the PRADD areas started to grow in the last quarter of 2010 when PRADD increased its various support schemes. At this time, PRADD had communities validate over 1,200 mining claims in the Sangha Mbaere province, started organizing mining associations into savings groups, stocked 44 fishponds, and supported socio-economic groups on a larger scale than before (see Figure 5 below). Another sharp increase occurred in the second quarter of 2011 when PRADD helped communities build five diamond valuation workrooms, doubled the number of fishponds, and increased the number of supported soap-making groups to twenty-two. PRADD's reputation in the field also improved due to general knowledge about its role in the decrease of the 2011 mining license's fees.

## **2.5 IR 3 – BENEFITS OF MINING ACTIVITIES TO LOCAL COMMUNITIES INCREASED AND FOOD PRODUCTION DIVERSIFIED AND INTENSIFIED**

PRADD's third intermediate result – to increase benefits to artisanal miners – accounts for 36% of the approved activity budget against 16% in the previous work plan. IR3 has become the responsibility of every technical staff member. The Property Rights and the Sustainable Development Coordinators work together on the development of best mining (SMARTER) practices, the Communication Advisor leads the advocacy on the diamond fixed price list, and the women staff created a local gender group to monitor the execution of PRADD/CAR's Gender Strategy.

### **2.5.1 Assisting Alternative Development Groups**

Data from the second household survey show how the combined effect of support to socioeconomic groups for alternative livelihoods (POMIGER, soap making) and to mining associations (diamond valuation workrooms, pooled savings for mining licenses) have improved the livelihood of artisanal miners:

- 61% of those surveyed in the previously existing project areas are earning more income than in November 2010, while 24% are earning less. With 921 people earning an additional income during this last quarter, PRADD supports a good proportion of the members of the participating communities<sup>5</sup>.
- This increased income is greater in agriculture and fish farming (66% earn more, 13% earn less) than diamond mining (40% versus 28%).
- 24% own a fishpond, against 19% in October 2009.
- 18% participate in savings groups, two thirds of them on a weekly basis.
- Those surveyed have more domestic assets than in November 2010.
- 58% have less debt than November 2010; less than 2% have more<sup>6</sup>.

During this quarter, PRADD started applying its sustainability plan and stopped providing goods to beneficiaries. However, PRADD Community Mobilizers continued working regularly with the socio-economic groups to improve their technique of fish farming, vegetable gardening or soap making. The table below presents the quarterly income of these groups and individuals.

Despite the end of the cost-sharing scheme, artisanal miners continue to see growth in additional incomes. Without counting the savings, the total revenues once again increased this quarter, being 16% higher than the previous quarter. Fish farming continues to bring the biggest income per individual.

<sup>5</sup> An accurate percentage is difficult to determine. PRADD's weekly tables of alternative revenues (compiled into Figure 4) track individuals, but the same person is counted twice if she is engaged in both fish farming and soap making, for instance. PRADD estimates the proportion of miners in its database benefiting from alternative livelihoods to be between 9% and 60%, admittedly not a very precise range.

<sup>6</sup> The chief reason for the last two results might be due to the different seasons that the surveys were conducted.

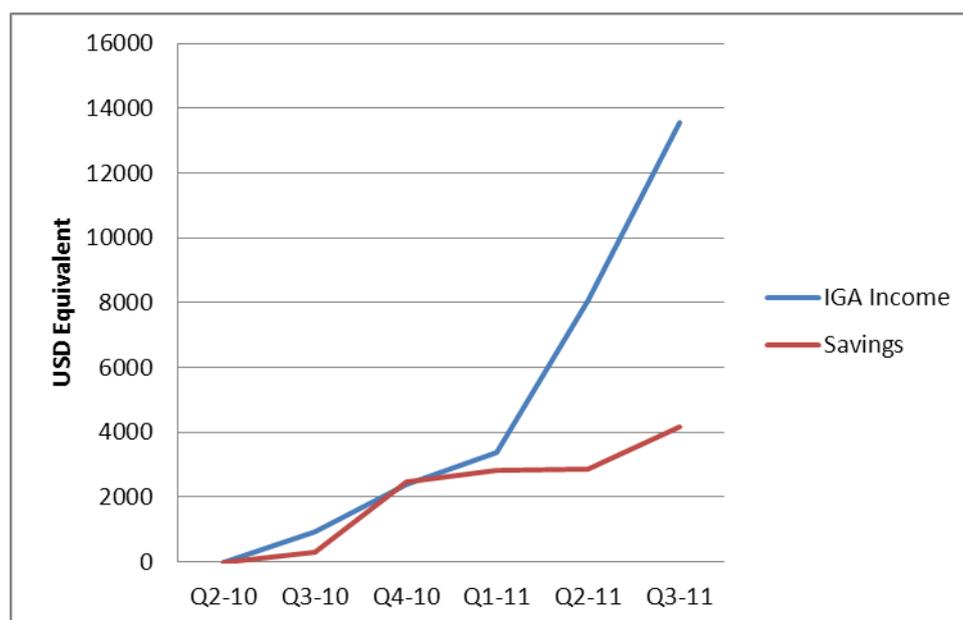
Savings associations are more efficient, evidence that PRADD's new sustainability plan is having an effect. PRADD is confident that the socioeconomic groups are steadily becoming more financially self-sufficient, though for now they still require technical support.

**Figure 4: Income Generated by Groups Supported by PRADD**

Type of Association or Activity	Total Production (Q2 2011 only)	Total Monetized Income (USD equiv.)	Number of participants			Total Monetized Income per Individual (USD equiv.)
		Q3 2011	W	M	Total	Q3 2011
Soap-Making Groups	3,944 batches of soap	789	276	54	330	2.4
Fish Farming Groups	812 Kg of fish	2,915	29	28	57	51.1
Agricultural Groups	Various baskets of cassava and vegetables	1,334	245	152	397	3.4
Petty Trade Groups	Various	440	16	6	22	20
Savings Associations (artisanal miners)	-	-	-	-	-	-
Savings Associations (IGA)	Savings	1,321	4	111	115	11.5
<b>TOTAL</b>		<b>6,799</b>	<b>570</b>	<b>351</b>	<b>921</b>	<b>7.4</b>

Since the third quarter of 2010, PRADD helped artisanal miners earn a total additional income of \$17,748 from alternative livelihoods. The graph next summarizes the success of PRADD's approach since it launched the activity of fish farming over exhausted mining sites in June 2010.

**Figure 5: Cumulative Non-Diamond Income to Artisanal Miners Prompted by PRADD<sup>7</sup>**



The graph in Figure 5 distinguishes between savings and income from income-generating activities (IGAs) even though they are very closely linked. Neither would have been possible without PRADD's support. Savings help them buy their mining license (hence increasing the likelihood of selling diamonds at a fairer price), or enable them to invest in the necessary raw material to conduct their IGAs. The latter is becoming more important now that PRADD has shifted to a commercial model whereby fingerlings, seeds and seedlings that previously were provided for free are now sold by

<sup>7</sup> To avoid unnecessary distortions, PRADD uses the same exchange rate of 500 XAF to \$1 throughout the reporting quarters.

commercial operators. This is why PRADD is encouraging groups and associations to increase their savings this quarter.

During this reporting period PRADD received funding from the US Embassy Self-Help Funds for the Boulaye agricultural group's project of oxen-drawn plows. PRADD distributed the plows in August, selected the cattle in the local market with the help of the provincial Director of Rural Development and group representatives, and started organizing the training. Animal traction will significantly improve the cassava yields next year.

### 2.5.2 Advancing Gender Equity

PRADD's vision is that a more gender balanced access to land, income and decision-making opportunities will improve artisanal mining households' overall livelihoods. During this quarter, PRADD continued to promote gender equity through the organization of focus group discussions and technical support to twenty-two women's soap making groups.

The soap making groups produced and sold 3,944 batches of soap compared with 4,582 in the previous quarter. The decline was due to a lack of replenishment of the raw materials. PRADD was unable to convince provincial retailers to procure caustic soda and palm oil in large enough quantities to meet demand. In the next quarter, PRADD will attempt to organize the soap making groups into a federation capable of procuring wholesale in Bangui. Artisanal soap is lower priced and generally a better quality than the locally available industrial ones. Demand is sufficient for much higher sales than the current production. Nevertheless, PRADD has been quite successful in promoting gender through alternative livelihoods, as over 60% of those making an additional non-diamond income over the last three quarters have been women.

PRADD was less successful in promoting women's access to land, which is the first objective of its Gender Strategy. The 4% proportion of women among the artisanal miners preliminary identified as site owners during this quarter was lower than the 7% of women receiving a property rights certificate during the periods of the first and second work plans. One reason was the preliminary identification task was delegated to local communities who were not sufficiently prepared to give weight to women's ownership, with the result that, reportedly, many women owners felt safer declaring their claims in the name of a brother or a son. PRADD will correct this during the final identification and mapping process in the next quarter by taking the name of the real owners and verifying that no woman owner was omitted.

For the last nine months PRADD Community Mobilizers have organized group discussions on gender equity in the law, early marriages, division of responsibilities, fair economic opportunities, and most importantly decision-making. These continue to attract interest in the communities among men and women alike.

PRADD separately asked the husbands and wives in the surveyed households who would usually make the decision on seven economic and five social topics, and compared the answers given in the July 2011 survey with those of November 2010. The results of the July survey show that women participate in decision-making in 38% of the households compared to 12% from November 2010. It is noteworthy that the answers of the new Mambéré Kadéi households were quite similar to those of the Lobaye and Sangha Mbaere households last November. This indicates that change is attributable to PRADD.

### 2.5.3 Improving Artisanal Miners' Ability to Negotiate Fair Prices

**Artisanal Mining Associations:** PRADD continued to support the mining associations it has helped create and to encourage unaffiliated miners to join associations. The establishment of five diamond valuation workrooms encouraged many of the already created associations to strengthen their systems of internal controls, and PRADD responded to multiple requests for samples of internal codes and regulations. In Nola, the field office developed a basic standard guideline to eight mining associations. PRADD will replicate this good practice in the other provinces.

PRADD noted another very positive development in the Nola area in the expansion of associations' pooling activities. So far, none of the associations has gone beyond the first step of pooling savings. During the past quarter, two started working on each member's mining site on a rotating basis, pooling labor, and acquired equipment to share, such as water pumps, with accumulated savings. When the next step of pooling profits is reached, PRADD will be ready to attempt the jump from local associations to legal cooperatives.

As part of a second production tracking exercise in early 2012, PRADD and the MM will decide which association is ready to communicate its monthly production.

**Diamond Valuation Workrooms:** PRADD completed the equipping and furnishing of five diamond valuation workrooms this quarter. The equipment and furniture will remain the property of USAID until the disposition of property is approved and a final evaluation is completed. The reputation of these workrooms has immediately extended far beyond their location: 81% of the people surveyed throughout the areas of PRADD's intervention at the end of July knew about them, as did 25% of those surveyed in the new Berberati area. In August, the Director of Mining Support of the MM inaugurated two of the workrooms in the Lobaye area, an event broadcast on national television, and the Regional Mining Director and the provincial governor inaugurated those of the Sangha Mbaere province in September.



Despite a slow start for some of the workrooms and the understandable reluctance of the unlicensed miners to put their name on written records, this activity is starting to show positive outcomes. In the Lobaye province, PRADD collected some anecdotal evidence of miners selling their stone at a better price per carat than before. That was of course before the September price crisis.

PRADD's diamond valuation workrooms are *much* less popular with collectors. Some declared they would stop working with miners using those services. In Berberati, a delegation even formally complained to the mayor when PRADD opened its office. PRADD's vision to professionalize the diamond sector is not yet well understood. PRADD's local peer-to-peer valuation scheme is not intended to cut into the legitimate profit made by the collectors who usually take all the financial risks in funding the mining operations. It proposes a system where miners and collectors can discuss prices on a professional and informed ground rather than a subjective relation of patronage. It also reduces the iniquitous practice of profiting from ignorance and illiteracy, which is the daily bread of many illegal intermediaries. In fact, by encouraging miners to discuss prices with the well-informed buyers, PRADD would rather expect miners to bring *more* diamonds to the official collectors. The PRADD provincial Team Leaders and COP increased their outreach to collectors during the quarter but the atmosphere remains lukewarm at best. PRADD intends to include some collectors in its next valuation training and hopes that its other mining support activities, such as the equipment rental pool or the microfinance component, will disclose more of PRADD's support to the sector as a whole<sup>8</sup>.

**Diamond Fixed Price List:** One positive effect of the September diamond price crash is that everyone in the sector is now considering how to reorganize their profit scheme. Everyone craves price stability whatever that might be. As the diamond buying houses began insisting on an end to the export quotas set by GOCAR, and questioning the dollar exchange rate the government sets too, PRADD took this opportunity to bring up once more the discussion of establishing a diamond fixed price list for artisanal miners.

<sup>8</sup> Even though PRADD used to introduce itself as an empowerment tool of miners against collectors in its early years, the approach changed. However, as PRADD has become more and more associated with GOCAR it cannot avoid the consequences of the underlying tensions between the usually Christian, Central African miners and the so-called "foreign" Muslim collectors, which the present nationalistic government has been altogether too keen on exploiting.

PRADD first launched this effort a year ago and raised some interest in the Ministry, most especially at the Export Office and at the Directorate of Marketing. At the time, however, it was a low priority, and was not supported at all by the collectors and buyers without whom the details of such a scheme could not be agreed on. PRADD thinks this is an idea whose time has come.

PRADD argues that the practice, after all, was successful during the coffee price crisis in the 1990s. When challenged on the fact that the price of a coffee grain does not increase exponentially according to its size or color, PRADD retorts that the value of the smallest stones is usually only determined by its carat anyway. A fixed price list only for small stones would certainly benefit the majority of miners, as 68% of them mined less than one carat in the last dry season, according to the July household survey.

#### 2.5.4 Supporting Smarter and More Profitable Mining Operations

PRADD added this new set of activities in the present work plan after it realized that the additional income artisanal miners generate out of savings and alternative livelihoods activities will never be enough to fund mining operations. PRADD had not yet addressed the core of the problem, which is the fact that those issuing in-kind and in-cash support to mining operations are also those buying the production. PRADD believes that working to increase mining productivity will benefit both miners and collectors and increase formalization. PRADD plans three activities under this sub-component.

**Equipment Rental Pool:** According to the July household survey, only 9% of miners opened new sites during this last dry season. One major cause for this is the lack of locally available quality mining equipment. The high demand raises the rental prices and discourages investors and miners alike: a quality shovel bought for 6,500 XAF in the main city market is rented at 500 XAF per day in a mining camp; a 5,500 XAF sieve is rented at 1,000 XAF per day. Rattan baskets to transport the gravel to the washing area or quality sheeting are simply not available. The same goes for quality agricultural equipment. PRADD is thus preparing to set up local rental schemes based on the equipment's real amortization and on sustainability.

During this quarter, PRADD started reflecting on the practical organization of these rental pools. The basic rationale is that the equipment must be located within a mining community, made available to local miners, and this mining community must be accountable for maintenance and replenishment. Although it is a local community service similar to the PRADD diamond valuation workroom, the empowerment of a local association of miners would not fit the complexity of the service, as it will involve full-time salaried staffing, regular inventories, a system of equipment retrieval, and relatively important financial and procurement transactions. It must generate enough profit to pay for staffing and equipment replenishment, but a simple for-profit scheme such as the business production units applied to the POMIGER activities would end up benefiting the business owners only. The service is also too significant to be informal and must have legal status.

PRADD worked closely with the Directorate of Mining Support of the MM, the Ministry of Trade and the Ministry of Finances during the second half of this quarter. It has now narrowed the best system possibilities to one of local shareholders, or associates, electing a management committee for a fixed period and voting on the financial allocations on a regular basis. PRADD will set the rental fees and closely monitor the logistics and financial activities. It has not yet decided how to leverage equipment rental over formalization: the ownership of a mining license might be a prerequisite all the time, or only above a certain amount, or only after a period of test. As in the case of the diamond valuation workrooms, the equipment will remain USAID property until the request for disposition of property is approved.

Meanwhile, PRADD gathered all necessary information on the needs and availability of equipment from the communities as well as mining investors. It undertook a long and thorough procurement analysis both at the national and international level to find the best quality at the best price. Finally, it decided to include agricultural equipment for fish, tree and vegetable farming for post-mining land reclamation in order to both mitigate the environmental impact of opening new mining sites and give a sustainable future to POMIGER activities.

PRADD relinquished its plan of importing semi-mechanized equipment such as gravel pumps, air compressors or submarine jackhammers. The costs are too high, the sustainability of maintenance is risky and the availability of spare parts is scarce. PRADD also renounced importing diving equipment. While conscious that the richest diamond deposits are located in the riverbeds, the safety and liability risks are too high. Most of the equipment pool will be composed of locally available small equipment (see Annex III). For the imported equipment, PRADD reduced the choice to the following two items:

- Mechanical Jigs. This mid-sized jig activates various layers of sieves by the rotation of pedals and filters out diamonds into a sealed box located below. This simple and easily repairable mechanical device based on a system similar to a bicycle or a mechanical sewing machine processes thirty times more gravel per hour than an artisanal hand sieve and with negligible efforts. It also eliminates the missed diamonds roughly estimated by experts at 50% of the stones below 0.25 carats. Finally, it removes the possibility of theft during the washing process, a common practice that completely disrupts the balance between investment and profit. Out of the world's two vendors identified by PRADD, a South African firm was the cheapest.
- Hand Augers. Also based on a labor saving mechanical system, the mining hand auger carves narrow holes up to ten to fifteen meters deep. Replacing the thin local canes used by miners, it will maximize prospection in determining the presence of diamond-rich gravel. PRADD will procure these from a US vendor.

**SMARTER Mining Techniques:** Artisanal mining is considered “smarter” when it reduces both labor and environmental impact. PRADD breaks down this activity into three improved techniques: prospection, extraction, and “trenching”. PRADD will select a model quarry site, organize and supervise the prospection and extraction works, and film all the steps to produce a training tool to use in other communities. The work must be done during the next dry season, which starts in December.

During this quarter, PRADD identified a couple of good mining sites, collected mining and geological data, and started writing the technical module of prospection and extraction in quarry sites.



This mining site uses the improved extraction techniques that PRADD plans to develop further. *Photo by Prosper Yaka*

**Microfinance:** PRADD believes that increased availability of properly planned, legitimate and transparent funding will increase the profits of miners and thereby increase the likelihood of bringing production into the legal chain. Microfinance in artisanal mining is both a great opportunity and a great risk. To fund artisanal mining operations through microfinance is a reasonable option for a sector based on small entrepreneurship that makes a regular profit at the collective level. On the other hand, the unpredictability of the operations and the individualistic mentality of artisanal miners will make it difficult to implement, and most experiences tried in the past have failed.

During this quarter, PRADD reviewed past and present microfinance experiences in CAR, their specificities, and the reason for their outcome, whether failed or successful. It collected data on the legal requirements for setting up a microfinance system, and reviewed available partners in the banking and non-profit development sectors. Finally, it reviewed and analyzed the realities and figures of investment, risk and profitability in artisanal diamond mining during a three-week field mission. The PRADD Microfinance Advisor compiled these data into a report available in French, on which the approved international consultant will build her feasibility study. The consultancy is expected to start in December.

## 2.6 IR 4 – CAPACITY TO PREVENT AND MITIGATE ENVIRONMENTAL IMPACTS OF ARTISANAL MINING STRENGTHENED

PRADD's environmental approach in the present work plan is, on one hand, to establish a business-based sustainability scheme regarding the Post-Mining Income-Generating Environmental Rehabilitation (POMIGER) and, on the other hand, to regenerate six watercourses degraded by artisanal mining. During this quarter, PRADD also submitted to USAID a draft Environmental Threshold Determination and Initial Environmental Examination to comply with the US environmental regulations.

PRADD continued raising the awareness of communities on the negative environmental impact of artisanal mining using the appropriate toolbox of communication tools. During this quarter, 1,860 individuals participated in focus groups discussions organized by the Community Mobilizers, bringing the cumulative total to 4,988 since the second quarter of 2010. PRADD recognizes that these sensitizations reached their goal in the longstanding communities of intervention, as these results from the July household survey plainly demonstrate:

- **Change of knowledge:** 80% know that the mining law requires artisanal miners to backfill their exhausted sites, against 28% in the new province.
- **Change of mentality:** only 18% want to abandon their pits after exhaustion of the gravel, against 33% in the new province.
- **Change of behavior:** 24% now own one or more fishponds, against 22% in November 2010 and 19% in October 2009. Moreover, 12% heard about exhausted mining sites being sold and purchased, and 2% declared they would try to sell theirs<sup>9</sup>.

PRADD has decided to stop the environmental sensitizations in the old zones in order to focus on other types of awareness. Focus group discussions will start in the new extension areas.

### 2.6.1 Post-Mining Income-Generating Environmental Rehabilitation

The PRADD Community Mobilizers continued to provide technical expertise to those willing to convert their exhausted pits into productive agricultural units. However, PRADD stopped providing material to the economic groups or individual miners. Despite this announced shift to a new business model, artisanal miners continued converting their sites with means of their own and built 31 large new fishponds during the reporting quarter<sup>10</sup>. The present outcome is already 14% above the May 2012 target, as seen in the table below.

**Figure 6: Achievements in Environmental Rehabilitation**

Type of Rehabilitation	Number of trained people (total)	Number of completely rehabilitated mining sites (cumulative)					Total rehabilitated surface (acres)
		Q3 2010	Q4 2010	Q1 2011	Q2 2011	Q3 2011	
Fish Farming	547	18	83	159	245	276	28
Agroforestry	51	0	7	26	44	44	158.4
Vegetable Farming	212	0	0	71	136	136	149.5
<b>Total</b>	<b>810</b>	<b>18</b>	<b>90</b>	<b>256</b>	<b>425</b>	<b>456</b>	<b>335.9</b>

While the reclamation practice has taken a life of its own, PRADD focused on setting up business units for each type of POMIGER and in each province. The goal is to ensure sustainable supply to artisanal miners. During this quarter, PRADD successfully completed the three agroforestry business units and one third of a fish farming business unit in the province of Sangha Mbaere.

<sup>9</sup> This is a clear improvement from the common practice of abandoning the sites and represents a market of 31 pits, or \$2,000, from the mining claims registered in the PRADD database.

<sup>10</sup> PRADD only tracks, monitors, and records those present in the communities of intervention. Many other artisanal miners have applied this methodology in neighboring communities without PRADD's technical support.

The business model is of a commercial supplier competitively selected by PRADD and its partners, and supported by PRADD in setting up a professional production unit capable of meeting the provincial demand in the long run. PRADD discussed the selection criteria for these nine suppliers internally and submitted them to USAID in July for approval. The candidates had to demonstrate the following:

- They have enough time to run the unit;
- They have the minimum equipment and minimum financial capacity to run the unit;
- They reside in the locality of the unit and are well respected by their community;
- They have enough land, of which they are the legitimate owner, to set up the unit;
- They are experienced in the type of business they apply for;
- They can be either an individual entrepreneur or an association.

The provincial selection committees were composed of one representative of the municipality of the provincial city, one of the Regional Directorate of Mines (alternatively of the local Mining Brigade), one of the Regional Directorate of Waters and Forests, one of the Regional Directorate of Rural Development, one of the provincial women's association, and the PRADD provincial Team Leader.

PRADD announced the bids on the village PRADD boards and over local radios in July during three weeks and received over 25 applications. The provincial committees selected the winners in August. Out of the nine winners, six are individual entrepreneurs including two artisanal miners of the PRADD database, and three are associations (two for vegetable farming, one for fish farming) including two formerly initiated by PRADD. Contracts were signed with the three fish farming suppliers and the three agroforestry suppliers, and the construction equipment was purchased and distributed.

**Fish Farming:** Because of the technical requirements of this activity, PRADD hired a local consultant for the design and overview of the construction of the business unit. Work started in the Sangha Mbaere province in mid-August, using workers from the community, assisted by the supplier. The consultant and the PRADD Coordinator also used this exercise to train all PRADD Community Mobilizers and AFLs of the province in the early process of rehabilitation on site identification and layout. At the end of the reporting period, one of the three ponds of the fish farming business unit is completed, and the other two are in the site preparation phase.

Meanwhile, artisanal miners continued to rehabilitate their exhausted sites into fishponds. PRADD had anticipated a lower increase or a plateau in the number of reclaimed pits, due to the shift of business model. Thirty-one new ponds built over this last quarter is indeed a lower figure than the 86 of the previous quarter or the 76 of the one before. However, the growth of the standard surface is noteworthy, as those recently built fishponds are over eight times larger than the average of the former ones, bringing the total surface area of exhausted sites reclaimed into fishponds to twice that of the last quarter. One can infer that artisanal miners interested in fish farming are now becoming more professional, or more willing to invest to harvest higher incomes. This indicates there is still significant demand and that the business-based approach is likely to succeed.

**Agroforestry:** Fruit trees must be planted at the beginning of the dry season in November or December. PRADD prioritized the setup of the business units early in the work plan in order to meet the local demand. Work started as soon as the suppliers were selected and the three business units were all completed by the beginning of September. The construction works themselves are simple, as they only entail a shelter and a fence. PRADD Community Mobilizers and the AFLs of two provinces participated for training purposes. The purchase and delivery of 3,000 fruit tree seedlings to each unit, however, included high logistics costs. PRADD prioritized palm trees for the production of palm oil but also included other local species as before, such as cola and orange trees.

This most profitable and environmentally most sound of PRADD's three POMIGER activities seems to have started to attract the interest of larger numbers of artisanal miners, despite the long period necessary for the return on investment. In the July household survey, when asked what they intended to do with their pits after exhaustion of the gravel, 78% of the miners of the old PRADD areas mentioned agroforestry, against 56% for fish farming and 46% for vegetable gardening. It is to be noted that the planting of a tree is the best example of property ownership, further evidence that

PRADD is having an effect on securing property rights over the land. PRADD will carefully monitor the effect of such long-term land investments on local land conflicts.

The high quality papaya seeds imported from the University of Hawaii are still growing at the outskirts of Bangui for multiplication purposes. However, PRADD is monitoring a slower growth than the local species, which is already out in the markets. The productivity of this foreign species on Central African soil is therefore still uncertain.

**Vegetable Gardening:** PRADD Community Mobilizers continued assisting artisanal miners to cultivate the gardens built on reclaimed mining sites. During this quarter, gardeners made a relatively good profit from onions. PRADD noted that onions are usually sold, rather than consumed, which augers well for the sustainability of demand. During this quarter, Community Mobilizers informed artisanal miners on the need to fabricate compost to balance the lack of organic matter in the underground layers of soil used in the backfilling of pits.

The set-up of the vegetable gardening business units (seed banks) is scheduled for the first quarter of 2012 following the agricultural calendar.

## 2.6.2 Stream Regeneration

PRADD prepared for the regeneration of six watercourses based on last year's success. During this



One of the six water streams selected by PRADD for regeneration. Note the amount of sterile soil from gravel washing. *Photo by Prosper Yaka*

quarter, PRADD identified potential streams to regenerate and selected six, two in each province of intervention. To qualify for selection the watercourses must be degraded from artisanal mining, meaning dried up due to the exhausted gravel washed in it; must be located near a village; and must be used for other human activities such as fishing, washing or watering cattle. PRADD collected the baseline data (water purity and flow) to measure the impact of the intervention, which is scheduled for the next two quarters.

## 2.7 IR 5 – ACCESS AND AVAILABILITY OF INFORMATION ON ARTISANAL DIAMOND MINING TO STAKEHOLDERS INCREASED

### 2.7.1 Communication of Proximity

**Awareness-Raising:** PRADD Community Mobilizers continued their activities of awareness-raising and technical training using the toolkits and modules developed over the project. Awareness-raising activities are usually conducted in the late afternoons, evenings and early mornings, when miners are not working. The field staff frequently spend the evenings in the communities conducting focus group discussions as well as informal talks. Technical training is delivered by one PRADD Coordinator from Bangui to groups of 15 AFLs. The figure below summarizes PRADD's cumulative outputs of proximity communication, or cascade training.

**Figure 7: Outputs of PRADD Awareness Raising and Technical Training**

Theme	Type	Tool	Outreach (number of people)
Fish Farming	Technical Training	Module	1,315
Agroforestry	Technical Training	Module	528
Vegetable Gardening	Technical Training	Module	212
Soap Making	Technical Training	Module	1,243
Mining Law	Awareness Raising	Guide to Mining Code	4,107
Income Diversification	Awareness Raising	Sensitization Toolkit	4,314
Environmental Impact of Artisanal Mining	Awareness Raising	Sensitization Toolkit	5,165
Gender Equity	Awareness Raising	Sensitization Toolkit	3,058
Artisanal Mining Associations	Awareness Raising	Sensitization Toolkit	5,470

The most striking aspect of these results is the very high figures of individuals reached. They do not correspond to *proximity* communication whose principle is to target and convince potential change agents in a given community. Indeed, PRADD realized that its Community Mobilizers are more inclined to organize large focus groups to deliver messages, their overnight stay being an interesting distraction to the community<sup>11</sup>. In some cases such as gender equity or the environmental impact of artisanal mining, PRADD yielded very positive results that the household survey confirmed. However, large focus groups are not always the best audience for teaching: for instance, only 13% demonstrate a good knowledge of the mining law. Even though it is an achievement, it does not meet PRADD's expectations and targets.

In a thorough discussion on its communication and outreach techniques at the end of the reporting period, PRADD's field staff realized that while awareness-raising changes knowledge, it does not necessarily trigger changes in mentality and behavior. PRADD will thus endeavor to target smaller, better-selected audiences during the next quarters.

Finally, PRADD added a new tool to its outreach instruments during this quarter. The Microfinance and the Communication Advisors developed a small technical guide on cash management to help individual households organize their budget and manage their savings better. PRADD discussed the tool during the recent quarterly staff meeting and will test it during the next quarter.

**Cross-Provincial Exchange Visits:** Aware of the challenge of winning the trust of artisanal mining communities in the early stage of the implementation process, PRADD started organizing exchange visits of community leaders from the villages of the new Mambéré Kadéï province to the old villages of intervention in the Lobaye and Sangha Mbaere provinces. Instead of leading these visits, PRADD relies on a miner-to-miner demonstration effect, proposing to a family in one of the previously reached villages to host one community leader during one week. PRADD only organizes the trips and pays for the expenses, leaving it to artisanal miners to discover what PRADD really is about.

The success of this exercise is above expectations. Artisanal miners from the Berberati area were very positively surprised, and spontaneously organized feedback discussions in their villages upon their return. Rumors about "Americans sneaking in to steal our mining properties" ended immediately and artisanal miners in the new province started anticipating PRADD's activities, as mining associations and socioeconomic groups are now flourishing in the Berberati area. The challenge for PRADD's Community Mobilizers is no longer how to win the trust of artisanal miners, but how to manage their high expectations.

At the end of the reporting period, leaders from eight communities participated in these visits and the process is continuing. The PRADD Team Leaders of Nola and Boda requested that similar visits from their own new extension areas be organized within each province.

<sup>11</sup> Some of them, such as mining camps, are very remote and are only accessible after long hours of walking or by motorcycle.

## 2.7.2 Mass Communication

***The Diamond Journey:*** After the screenings in Bangui and during the June Kimberley Process Conference, PRADD screened its recent educational film on artisanal mining and the legal chain of custody in CAR in its provinces of intervention. PRADD started with private screenings to provincial authorities and local diamond buyers and collectors in the municipality halls of Boda, Nola and Berberati. Then it organized public screenings in the largest villages of the provinces, followed by a general discussion facilitated by PRADD staff and the local authorities. During this quarter, PRADD organized eight big public screenings attended by over 7,000 persons.

Both private and public screenings have been a big success. At the governance level, they offered the opportunity to improve provincial coordination between various departments. In Nola for example, the screening led to a strengthened implication of the *préfète* who talked about PRADD in every big village of the extension zones. The public screenings were followed by discussions, the enthusiastic of which demonstrated the educational effects of the movie. Incidentally, some of the most controversial debates were on PRADD's assertion that diamond mining is about technique and not rituals.

In Berberati, *The Diamond Journey* was used as an introduction tool of the project in the villages, along with the posters of the legalization campaign of early 2011.

The MM seems to have fully endorsed this film. In June, a couple of days after the signature of a ceasefire with the Eastern rebel group CPJP, the Ministry dispatched a couple of its cadres to organize a public screening and a follow-up debate on legal production and commercialization in the turbulent city of Sam-Ouandja in the North-East.

**Other technical films:** In order to prepare for a transfer of its technical training to GOCAR, PRADD started producing educational films on its POMIGER activities. PRADD borrowed a quality video camera from PRRG and during this last quarter the Communication Advisor composed a team and filmed the preparatory works of a fishpond and an agroforestry business unit. The editing started as well, but more filming will be necessary at each step of these technical rehabilitations. In the end, PRADD will hand over these technical films to the mining authorities.

Incidentally, PRADD also filmed the inauguration ceremony of one diamond valuation workroom and gave it to the national television, which broadcast it in primetime.

**Local Radio Program:** The regular broadcast of radio programs at the local level is the strongest of PRADD's tools of mass sensitization. According to the July household survey, only 3% of those surveyed do not know about PRADD's weekly radio program in the two longstanding provinces of intervention, and 68% follow it sometimes or regularly.

Following the signing of partnership contracts last quarter, PRADD started broadcasting its weekly 30 minute program on the local radio of the Mambéré Kadéï province, in addition to the Sangha Mbaere radio. The Communication Advisor trained provincial Community Mobilizers in the use of recording equipment and interview techniques during the month of August. However, the structure of these programs remained quite poor, and PRADD reorganized the field preparatory works during its October quarterly staff meeting. An accurate list of interviews and themes was prepared for each week to improve the quality of PRADD's popular program '*Nagbata Magazine*'.

Finally, PRADD continued to work with journalists to increase coverage of artisanal diamond mining. In the mass media, PRADD monitored ten new subjects during the reporting quarter, most of them on the mining law (six) and on the national radio (seven); these articles and programs always mentioned USAID. The table below describes the cumulative output of this activity.

**Figure 8: Media Coverage in CAR on Artisanal Diamond Mining  
(cumulative through September 30, 2011)**

Type of Media	Length (minutes)	Length (words)	Total Number of Subjects	Number of Subjects by Main Topic				
				Environ-ment	Property Rights	Artisanal Mining Law	IGA	Other
Radio	35,205		254	65	80	51	43	15
TV	364		10	2	4	2	0	2
Press		154,784	87	22	45	5	6	9
Web Press		65,314	45	11	17	6	6	5
Web Radio/TV	160		4	0	1	0	0	3
<b>TOTAL</b>	<b>35,729</b>	<b>220,098</b>	<b>400</b>	<b>100</b>	<b>147</b>	<b>64</b>	<b>55</b>	<b>34</b>

### 2.7.3 Partnerships

PRADD continued nurturing positive and constructive relationships with its usual partners throughout the reporting period. The focus of this last quarter was on GOCAR, as the Ministry of Mines requested a renewal of the MOU with USAID based on the new work plan. PRADD submitted a draft version of the new MOU in late August. PRADD translated the work plan and submitted it as an annex to the MOU. It also took off the 2007 “Partnership Statement”, which was actually not followed, from the annexes. It maintained, however, the 2007 “Program Design”. The submission included the following main changes:

- Article 7: PRADD proposed to change the statement that “*TtARD does not expect GOCAR to make any direct financial contribution to the execution of PRADD project*” to “*GOCAR commits to contribute a supplemental complement to the PRADD activities*”. This proposition, based on USAID’s increased focus on sustainability and transfer of responsibilities to the host government, follows USAID’s Timothy Fella’s March discussion with the cadres of the General Direction and State Department’s Brad Brooks-Rubin’s July discussion with the Minister. Despite the verbal agreements taken with Mr. Fella and Mr. Brooks-Rubin, as of the end of this reporting period GOCAR was not willing to commit to it in writing.
- Article 25: the statement on the distinction between PRADD and any type of for-profit mining company or diamond-trading agency remains unchanged, but PRADD proposes to add that it “*may facilitate the establishment of a United States-based diamond trading agency in the Central African Republic in accordance with the Central African laws in effect*”. This would allow the possibility of a potential direct marketing facilitation, or a microfinance test for mining operations, during this work plan. GOCAR agrees with the content but is not comfortable with the phrasing and will make a counter-proposal.

PRADD’s partnership with GOCAR remains of a high quality on a day-to-day basis. Even though this draft MOU is still under discussion before a submission to USAID, GOCAR is not showing any sign of blocking project implementation. The MM fully supported PRADD in its extension to the new areas, including the third province, participated regularly to PRADD’s meetings and workshops<sup>12</sup>, and kept sharing important data. Incidentally, GOCAR contributed financially to some of PRADD’s activities, especially regarding communication and awareness-raising, as the table below indicates. However, it is reluctant to enshrine this practice as a requirement in the proposed revised MOU.

<sup>12</sup> For the first time, a ministerial cadre participated to PRADD’s quarterly planning workshop at the beginning of October.

**Figure 9: GOCAR's direct counterpart funding of PRADD's activities**

Date	Description	Monetized Cost (USD equiv.)
15-16 June 2011	Public Screening of The Diamond Journey and sensitization in Sam-Ouandja (flight)	15,494
	Public Screening of The Diamond Journey and sensitization in Sam-Ouandja (per diem)	128
July-August 2011 (7 days total)	Presentation of PRADD activities and preliminary identification of sites in the communities of Mambéré Kadéi and Sangha Mbaere (Regional Directorate's vehicle)	1,065
GOCAR's Total Contribution		16,687
PRADD's Cumulative Phase III Activity Expenditure		108,845
<b>GOCAR's Direct Counterpart Funding</b>		<b>15.3%</b>

This reluctance does not seem to be specific to PRADD, GOCAR is currently experiencing grave financial issues vis-à-vis the IMF. With an export trade that is 40% dependent on diamonds, the government has good reasons to fear the economic effects of the current diamond price crash. However, it adds up to a suboptimal possibility of the GIS Unit being sustained. This is also likely to slow the adoption of PRADD's property rights methodology by the MM, and thus raises important concerns over the capability of the host government to make PRADD effectively sustainable.

## 2.8 OTHER ACTIVITIES

All activities planned three months ago are completed. The following activities are scheduled for the next quarter:

- The MM will officially endorse the practical recommendations submitted by the Directorate of Mining Support on the PRADD property rights methodology, and determine a specific cost-sharing scheme with PRADD.
- PRADD will assist the MM in the final identification and GPS mapping of around half of the preliminarily identified sites in the extension areas of the three provinces of intervention.
- PRADD and GOCAR will submit an improved version of the property rights certificate to USAID and redistribute it to all certificate owners of Phase I and II.
- PRADD will increase its political advocacy on a global land tenure reform and broaden the discussions to the University, the media, international partners and the Directorate of Cadastral Mining.
- PRADD will assist the Directorate of Marketing and Industry in completing its evaluation of the first mine-to-export production tracking test and in preparing for a second test in 2012.
- PRADD will organize and complete the general GIS training to the directors of the MM.
- PRADD will write and adopt its module on SMARTER mining techniques, select a training site, and start the prospection training in the Berberati area.
- PRADD will launch a second contest to local mining associations for the set-up of two diamond valuation workrooms in the Berberati area.
- PRADD and the MM will evaluate the activities of the first five diamond valuation associations and USAID will determine whether to transfer the property of the equipment to the managing valuation associations.

- PRADD will decide on the practical organization of the equipment rental pools, select two communities in the Boda and Nola areas, rehabilitate two community warehouses, procure and distribute the mining equipment.
- PRADD will launch the consultancy on the feasibility of microfinance to artisanal diamond mining in CAR.
- PRADD will assist 50% of the current mining associations it initiated adopting formal internal regulations and a legal status.
- PRADD will provide raw material to eighteen selected soap-making women's groups in the Mambéré Kadéï province and assist the 40 soap-making women's groups of the three provinces coalescing into provincial federations for the wholesale procurement of raw material;
- PRADD will organize its third Household Survey;
- PRADD will finalize the set-up of three fish farming business units;
- PRADD will assist a local community regenerating one watercourse and film the regeneration steps.
- PRADD will complete the shooting of the agroforestry and the fish farming technical films.
- PRADD will try to organize a workshop between all diamond stakeholders on the establishment of a diamond fixed price list to artisanal miners.

PRADD is conscious that this plan is very ambitious. However, it is necessary to complete all of the aforementioned activities by the end of the year in order to prepare for proper evaluations during the last half of the work plan in 2012.

# ANNEX I: PRADD CAR PERFORMANCE INDICATORS

#	Indicator Name/Definition	Indicator Type	Unit of Measure	June 2009	Sep 2011	Target (May 2012)
<b>Intermediate Result 1: Customary Land and Natural Resource Rights in Target Areas Identified, Clarified and Formally Recognized</b>						
1.1	Number of artisanal sites validated and officially recognized by local customary and administrative authorities	Outcome	Number	361	1,432	3,000 (cumulative)
1.2	Percentage of properly licensed artisanal miners	Outcome	Percentage	5.1% (Dec 09)	6.7%	8% (Dec 11)
1.3	Number of United States Government (USG)-supported initiatives/mechanisms designed to reduce the potential for violent conflict over the control, exploitation, trade, or protection of natural resources	FACTS/ Output	Number	0	12	18
1.4	GOCAR's direct counterpart funding of PRADD's activities (in percentage of PRADD's activity expenditure)	Outcome	Percentage	0%	15.3%	10%
<b>Intermediate Result 2: System for Reliable Tracking of Production and Initial Sale Information Strengthened</b>						
2.1	Number of artisanal miners introduced into the Artisanal Mining Claims Registry/Production and First Sales (AMCR/PFS) GIS Database, <i>disaggregated by gender, pilot site, community, and place of origin</i>	Output	Number	257	1,525	3,000 (cumulative)
2.2	Number of requests processed by the ministerial GIS Database unit	Output	Number / month	0	1	10
2.3	Proportion of carats entered legally in the legal chain of custody	Outcome	Percentage	4.1%	27.5%	6.7%

#	Indicator Name/Definition	Indicator Type	Unit of Measure	June 2009	Sep 2011	Target (May 2012)
	from the PRADD production areas against national legal exports		ge/quarter			
<b>Intermediate Result 3: Benefits of Mining Activities to Local Communities Increased and Food Production Diversified and Intensified</b>						
3.1	Number of stakeholders (i.e., miners, sellers, dealers, brokers, but with a focus on artisanal miners, <i>disaggregated by gender, pilot site, community, and place of origin</i> ) trained on the four Cs (Cut, Carat, Color, and Clarity)	Output	Number	33	43	100
3.2	Number of people ( <i>disaggregated by gender, pilot site, community, and place of origin</i> ) with increased economic benefits derived from sustainable natural resource management and conservation as a result of USG assistance—FACTS	Outcome / Impact	Number	0	3,879	10,000
3.3	Percentage of artisanal mining household reporting they earn income originating from non-diamond activities	Outcome / Impact	Percentage	N/A	57.1%	100%
3.4	Percentage of artisanal miners' wives declaring a greater participation in household decision-making	Outcome	Percentage	N/A	38%	35%
<b>Intermediate Result 4: Capacity to Prevent and Mitigate Environmental Impacts of Artisanal Mining Strengthened</b>						
4.1	Number of mined-out sites rehabilitated and/or regenerated and protected	Output	Number	0	456	400
4.2	Number of people ( <i>disaggregated by gender, pilot site, community, place of origin</i> ) receiving USG supported training in natural resources management and/or biodiversity conservation	FACTS/ Output	Number	0	2,055	1,200
<b>Intermediate Result 5: Access and Availability of Information to Stakeholders on Artisanal Diamond Mining Increased</b>						
5.1	Number of articles and programs on artisanal mining broadcast and disseminated by the media	Output	Number	120	400	450
5.2	Percentage of artisanal miners in project area demonstrating knowledge of the Mining Law	Outcome	Percentage	N/A	6.7%	50%

# ANNEX II: RESULTS AND ANALYSIS OF THE SECOND HOUSEHOLD SURVEY

## I. METHODOLOGY AND RATIONALE

PRADD conducted its second household survey during eight days at the end of July 2011. In the provinces of Lobaye and Sangha Mbaere, it surveyed the same 243 households randomly selected from its database of artisanal mining claim owners in November 2010 in all 19 communities of intervention. In the new province of Mambéré Kadéï, where PRADD had opened its office only three weeks before the survey, 130 surveyed households were selected randomly and with a fair representation of the 16 communities. PRADD selected those from the list of 771 preliminary identified households in PRADD's property rights process provided by the communities, since none is yet included in the database.

In Lobaye and Sangha Mbaere, only 75% of the identified households could actually be surveyed. The rest of the residents were absent, most usually out in the forest collecting caterpillars. Indeed, the survey occurred right in the year's two-week caterpillar season, but PRADD decided against postponing the survey in order to have the analysis ready for the present quarterly report. In the Mambéré Kadéï, there are fewer caterpillars and if a selected household was absent, another randomly selected household from the list replaced it. The total number of surveyed households, which was set to correspond to 15% of the total PRADD beneficiaries, thus only covered 13.7% of them this time. The methodology permits PRADD to generalize about the entire population of beneficiaries at the 90% confidence level.

Teams of enumerators were composed of one male and one female, each interviewing the household's husband and wife separately and at the same time. They were also composed of one permanent Community Mobilizer and one temporary hire. In Lobaye and Sangha Mbaere, responses were compared to those of November 2010. It is this comparison which informs most of this analysis.

Even though PRADD had collected retrospective data from October 2009 in the November 2010 survey, the absence of a proper baseline study and the impossibility of finding a suitable control group (PRADD is too well known, even in the provinces where it does not intervene) are a problem. The difference between the Mambéré Kadéï answers and those of the old provinces of intervention do provide a reasonable comparative basis of analysis PRADD can use to estimate its direct impact. However, this approach has limitations, as the Mambéré Kadéï province has its own specificities. A real impact measurement will be drawn from the Mambéré Kadéï answers in the next surveys.

PRADD added new questions in the present survey, especially on artisanal diamond mining. They will provide an interesting comparison in the next surveys. Finally, some answers were not representative enough to offer a proper analysis and PRADD chose to discard them: those regarding the diet (number of meals with meat every week) and those regarding female decision-making on children's education.

## II. GENERALITIES

The six-month period covered by the answers to this survey corresponds to the Central African dry season, during which rural communities make more income in both artisanal mining and agriculture. Indeed, the low water levels allow better digging in the riverbanks, and December to June is the season for vegetable sowing and harvesting as well as the season of sale of other agricultural goods such as cassava. This seasonal difference influences the results, especially in the socio-economic area. PRADD did its best to distinguish between the seasonal impact and the project's impact, but a better analysis could be drawn from the survey to be conducted next November, in the event PRADD is continued.

In between the two surveys the general rural economy was characterized by a worsening crisis. The wood sector, which is very big in these southwestern areas, was particularly affected: many producers reduced personnel, which had effects on the rural economy. The cost of manufactured goods increased, severely hitting the small market traders and informal trade as a whole. A couple of small enterprises went bankrupt. This situation must be kept in mind in reading the following results.

Much of the present analysis is based on a comparison between the Lobaye and Sangha Mbaere provinces on one side, and the Mambéré Kadéï on the other. However, the Mambéré Kadéï has specificities. First, it always had a healthier economy due to the trade with neighboring Cameroon, the remaining presence of an export agriculture (coffee and tobacco), and the dynamic city of Berberati, the country's second biggest city. People are generally more educated. Market prices are lower than elsewhere, in many cases even lower than in Bangui. Second, artisanal diamond mining is much healthier than the other two provinces too. The hydrographic network is richer in diamonds, bringing one of the country's highest productions per miner. The proportion of artisanal miners in the population is thus higher; there are also more collectors and more cash available for artisanal mining. In general, Mambéré Kadéï miners are considered more "professional". This means that where many miners in Lobaye and Sangha Mbaere undertake artisanal diamond mining as a side trade, in the Mambéré Kadéï diamond mining is a fulltime occupation and is considered more respectable. The ownership of an artisanal mining license, for instance, is higher in the Mambéré Kadéï than the national average. Finally, the Mambéré Kadéï population is ethnically more homogeneous.

## III. SOCIO-ECONOMIC SITUATION

**Table 1.1**  
**INCOME SOURCE**  
**AND VOLUME**

	Income Evolution		Income Source		Income Diversification	
	Comparison between November 2010 and July 2011		Part of Economic Activities in the Total Income		Proportion of Surveyed Declaring Non-Diamond Income	
	Proportion of surveyed with increased income	Proportion of surveyed with decreased income	Nov-10	Jul-11	Nov-10	Jul-11
<b>Lobaye and Sangha-Mbaere</b>						
Diamond Mining	39.6%	28.0%	23.1%	23.4%	97.0%	96.6%
Agriculture & Animal Breeding (incl. Fish Farming)	65.9%	13.2%	44.0%	59.3%		
Petty Trade & Salaries	15.9%	33.0%	32.8%	17.3%		
<b>Mambéré Kadéï</b>						
Diamond Mining	N/A	N/A	N/A	39.5%	N/A	7.7%

Agriculture & Animal Breeding (incl. Fish Farming)	N/A	N/A	N/A	53.6%				
Petty Trade & Salaries	N/A	N/A	N/A	6.8%				
<b>Table 1.2</b> <b>ASSETS</b>	<b>Proportion of Households Owning Item</b>				<b>Average Number of Animals (only amongst owners)</b>			
	<b>Lobaye &amp; Sangha Mbaere</b>			<b>Mambéré Kadéi</b>	<b>Lobaye &amp; Sangha Mbaere</b>			<b>Mambéré Kadéi</b>
	<b>Nov-09</b>	<b>Nov-10</b>	<b>Jul-11</b>	<b>Jul-11</b>	<b>Nov-09</b>	<b>Nov-10</b>	<b>Jul-11</b>	<b>Jul-11</b>
Caprine	37.0%	34.5%	34.6%	43.1%	6.2	4.6	8.4	6.0
Ovine	2.1%	1.7%	0.5%	2.3%	11.4	4.4	20.0	11.0
Poultry	65.1%	56.2%	48.9%	49.2%	11.5	6.2	7.7	8.2
Ducks	4.7%	5.1%	3.8%	11.5%	3.0	2.3	3.4	4.3
Dogs	11.9%	11.1%	8.8%	17.7%	1.9	1.3	1.3	2.1
N/A								
Cultivated Land Plot	96.2%	97.0%	91.8%	95.4%	N/A			
Fishpond	18.7%	21.7%	24.2%	25.3%				
N/A								
Radio Set	62.6%	53.2%	64.3%	69.2%	N/A			
Generator	7.7%	8.5%	7.7%	9.2%				
Cell Phone	20.4%	21.3%	30.2%	26.9%				
Peanut Mill/Grinder	17.4%	15.3%	17.6%	30.0%				
Cassava Mill/Grinder	8.5%	8.1%	9.9%	14.6%				
Sewing Machine	5.1%	4.3%	9.9%	9.2%				
Bicycle	5.5%	4.3%	4.9%	10.8%				
Motorcycle	9.4%	9.4%	7.7%	13.8%				
TV/DVD Player	4.7%	4.7%	5.5%	7.7%				
Foam-Rubber Mattress	18.7%	21.7%	24.2%	26.9%				

<b>Table 1.3</b> <b>DEBTS</b>	<b>Proportion of Surveyed Declaring More or Less Debt at the End of the Season</b>				
	<b>Much Less</b>	<b>A Little Less</b>	<b>No Difference</b>	<b>A Little More</b>	<b>Much More</b>
Lobaye & Sangha Mbaere	35.7%	22.0%	37.9%	0.5%	1.1%
Mambéré Kadéi	96.2%	3.1%	0.0%	0.0%	0.8%

## 1. PMP Indicators

### Number of people with increased economic benefits derived from sustainable natural resource management and conservation as a result of USG assistance (#3.2): 3,879

This figure is determined by comparing the answers provided on income level in July 2011 with those of November 2010. Because the survey had not covered the Mambéré Kadéi then, it only covers the

households of the Lobaye and Sangha Mbaere. The result is 61.5% with increased income against 24.2% with decreased income, whatever the source of that income, bringing the net result to 37.3%. This proportion is then drawn to the overall population of PRADD's beneficiaries, provided by the number of artisanal miners in the database (1,525) and the average household size taken from the survey (6.82).  $(1,525 \times 6.82) \times (61.5 - 24.2)\% = 3,879$ .

**Percentage of artisanal mining household reporting they earn income originating from non-diamond activities (#3.3): 57.1%**

This figure is the direct answer to the question "do you or one of your household members take an income from non-diamond activities?" It does include the answers of the Mambéré Kadéi households, which is the reason of the significant decrease of this indicator since the last survey, as the percentage remains roughly the same in the Lobaye and Sangha Mbaere.

## 2. Socio-Economic Analysis

The socio-economic results presented above can be interpreted as follows.

### *Better Income, Slightly Recovered Livelihood*

The overall income and the proportion of asset owners, the latter really indicating a variation in the household's wellbeing, increased from November 2010 to July 2011. This is not to say that most of the households are living a good life. In fact, the proportion of asset owners barely reaches the levels of November 2009, when the region had gone through a massive depletion of capital and assets due to the after-effect of the late 2008 diamond crisis. In addition, the average household size keeps on diminishing, going from 7.69 in November 2009 to 7.1 in November 2010, to 6.82 in the last survey. In a country that records 2.1% of population growth, such shrinking indicates that many individuals are forced to migrate for a better living.

The level of debt has also shrunk, which is the main reason for the stagnant proportion of animal owners, goats and sheep being the usual asset for debt reimbursement. This confirms one conclusion of the last household survey analysis, i.e. that there is more pressure to reimburse debts. Debts are indeed mostly contracted from members of the extended family who, unlike collectors and other diamond traders who do not expect reimbursement if no diamond is found, will hassle their creditors. (In fact, artisanal miners do not refer to the money handed over by collectors against diamonds as 'debt' but as 'insurance').

As both income and debt variation are very dependent on seasonal productions, PRADD does not infer that this relatively positive impact originates from the project's activities.

PRADD's impact on livelihoods is much better indicated by the proportion of fishpond owners, which increased steadily since the opening of the provincial offices. With 276 exhausted mining sites reclaimed into productive fishponds in the 19 communities of PRADD's intervention areas of the Lobaye and Sangha Mbaere provinces, fish farming is a growing income source. In fact, it now provides 20% of the agricultural income or 12% of the overall income.

The figures also confirm that the Mambéré Kadéi province has a healthier economy. Artisanal mining households own more domestic assets and more animals. Even though the price of goods increased in 2011, it remains lower in Berberati than in Nola or Boda; Mambéré Kadéi households thus have a better purchasing power.

### *Confirmation of the Agricultural Transition in the Lobaye and Sangha Mbaere*

Last year, PRADD made the hypothesis that artisanal miners were gradually transitioning back to an agriculture of subsistence as a consequence of the economic decline and the drying up of diamond

investment. PRADD always encouraged this diversification trend, even though it does not discourage them from diamond mining. This diversification is now confirmed, as nearly two thirds of the income originates from agriculture, cattle breeding or fish farming.

Agricultural activities are also the largest income source in the Mambéré Kadéi, although households are more dependent on diamond mining than their counterparts in the Lobaye and Sangha Mbaere. It is thus interesting to note that only 7.7% of them declare making an income from non-diamond activities. Either the diamond income is so big that it renders the agricultural one negligible, which PRADD knows is not the case, or it is the indication of a certain mentality. In the Mambéré Kadéi, when an artisanal miner heads a household, the family is considered one of artisanal miners. Money drawn from trade or kitchen garden is just seen as pocket money, even though in fact, it contributes to over half of the household's revenue.

However, agriculture is not replacing diamond mining, whose contribution to the shopping basket remains roughly the same. It is replacing petty trade and salaries, which went from a third to less than a fifth of the overall income. This likely consequence of the multiplier effects of the personnel cuts in the wood sector and of the increased price of goods ends up further benefiting agriculture.

### *Savings and Banking*

Despite the high amounts of money circulating in the artisanal mining areas, communities are mostly left out of the banking sector. This situation is somehow different in the Mambéré Kadéi where people have access to banking in the dynamic city of Berberati.

The majority of miners prefer to keep their money at home in cash (51%) or in kind (10%), with a lesser proportion in Mambéré Kadéi that has better access to banking. 33% of them would prefer to keep their money in banks if they had an access to them. Finally, in Lobaye and Sangha Mbaere, 18% contribute to savings groups against 1.5% in Mambéré Kadéi, which indicates a positive behavioral change induced by PRADD.

### *Diamond Income Level*

It is possible albeit risky to estimate the households' last seasonal diamond income in cash, as PRADD now has various figures to combine. The present survey asked miners how many diamond carats they sold during the season, an information miners are quite open to declare even though they would not declare (nor actually *know*) how much money they made. PRADD also knows the average price per carat at export (\$202.7 from December to June), which is official, and estimated in the last quarter the average proportion artisanal miners receive from this export price (23.5%). The result is as follows:

<b>DIAMOND INCOME</b>	<b>Proportion of miners selling volume of diamonds in the season</b>	<b>Total Estimated Diamond Income in the season (USD)</b>	
		<b>from</b>	<b>to</b>
0 to 1 carat	67.3%	0	48
1 to 5 carats	19.9%	48	238
5 to 10 carats	5.8%	238	476
over 10 carats	5.8%	476	N/A

The data limitations over these figures are numerous. First, the price of diamond is exponential according to its size, meaning that a miner selling only one one-carat stone will earn more than a miner selling ten 0.2-carat stones. Second, the other characteristics (color, clarity, cut) are as important in determining a price. Third, the proportion of the export price miners receive heavily depends on their individual relations with their affiliated collector.

Nevertheless, this rough estimation offers a good opportunity to compare the livelihood of artisanal miners to this of other socio-economic groups. At the village level, an official schoolteacher from the Ministry of Education makes \$240 per month, a health station nurse \$140, and a small but established market trader around \$45. With less than \$7 per month during the high production season, two thirds of artisanal miners live in absolute poverty. If we rely on the average proportion of diamonds in their income, those two thirds barely make \$20 per month for the whole household – 10 cents per person per day. The next 20% of them still leave with half a village market trader's income and the luckiest of the next 6% still make half of a nurse's income. If diamond mining is indeed a lottery, it is quite a harsh one when two out of three chances will bring you to the world's lowest income levels and a chance out of twenty would only make you live half a nurse's life. One can of course count on belonging to the top 6%.

#### IV. KNOWLEDGE AND PRACTICE OF THE MINING LAW

**Table 2.1**  
**KNOWLEDGE OF DIAMOND**

	Proportion of households demonstrating knowledge of a diamond's characteristics			
	Bad knowledge	Rudimentary knowledge	Good knowledge	Excellent knowledge
Lobaye & Sangha Mbaere	34.9%	51.2%	13.7%	0.0%
Mambéré Kadéi	67.7%	29.2%	3.1%	0.0%

**Table 2.2**  
**REGISTRATION**

	Proportion of households registering their diamonds in their production notebook			
	None	Some	Most	All
Lobaye & Sangha Mbaere	68.6%	10.1%	2.8%	18.2%
Mambéré Kadéi	63.8%	13.8%	13.1%	7.7%

**Table 2.3**  
**LEGAL SALES**

	Proportion of households receiving a purchase slip at first sale			
	None	Some	Most	All
Lobaye & Sangha Mbaere	53.3%	17.0%	5.5%	22.5%
Mambéré Kadéi	37.7%	33.1%	20.0%	7.7%

**Table 2.4**  
**KNOWLEDGE OF THE MINING LAW**

	Proportion of households demonstrating					
	Bad knowledge		Fair knowledge		Good knowledge	
	Lobaye & Sangha Mbaere	Mambéré Kadéi	Lobaye & Sangha Mbaere	Mambéré Kadéi	Lobaye & Sangha Mbaere	Mambéré Kadéi
Property of the underground	26.9%	42.3%			73.1%	57.7%
Conditions to become a legal artisanal miner	73.1%	97.7%	14.3%	2.3%	12.6%	0.0%
Legal diamond buyers	57.7%	93.1%			42.3%	6.9%
Purchase slip (official sales)	49.5%	73.1%			50.5%	26.9%
Environmental rehabilitation	19.8%	72.3%			80.2%	27.7%

## 1. Communication PMP Indicator

### Percentage of artisanal miners in project area demonstrating knowledge of the mining law (#5.2): 6.7%

PRADD chose to include the answers of the Mambéré Kadéi miners in this indicator, which combines the answers to the five specific topics of Table 2.4. In fact, none has a fair or good knowledge of the law in the new province, against 11.5% in the Lobaye and Sangha Mbaere. However, the proportion remains very low everywhere, even lower than in November 2010 (25.5%) when PRADD had mostly accentuated its awareness-raising on the law. This indicates that more education and pedagogy is needed.

## 2. Knowledge and Practice Analysis

### *Lack of knowledge prevents miners to increase their income and professionalize their activity*

It is quite worrying to note that the majority of artisanal miners do not know their product. Out of the diamond's four characteristics (carat, color, clarity and cut), only 15% of them know more than the carat or weight. Even then, many of those add other fanciful characteristics to it. Amongst the Mambéré Kadéi miners reputed for their 'professionalism', two thirds give more wrong than right answers and are in no position whatsoever to negotiate their sales.

That poor knowledge over how much a diamond is worth is further worsened by a lack of knowledge on who are the right diamond buyers. In the Mambéré Kadéi, only 7% can reply that only the licensed collectors and diamond houses are legally entitled to buy their diamonds. In fact, 22% of them most usually sell to the so-called 'coxeurs', or illegal intermediaries, who generally propose a lesser price. The lack of formalization and of knowledge creates a vicious circle: the less miners know about the law, the more they rely on illicit buyers, the less they thus learn about the legal trade.

### *Informal practices encourage fraud*

When two thirds of the miners never register their production and half of them never receive an official purchase slip at the time of sale, most diamonds remain invisible until they reach the hands of official traders.

It is here necessary to differentiate between illicit and illegal practices, even if it is the same to the mining law. A non-registered diamond does not always end up in the black market, and even *coxeurs* most usually bring their stones into the legal circuit. An artisanal miner without a license is against the law, but his production usually reaches the legal Kimberley-certified export market. However, illicit and informal practices are more likely to fuel the real illegal practices of smuggling and money laundering. Without a purchase slip, an intermediary can smuggle his diamond without anyone noticing; in fact, amongst all the legal documents, the purchase slip is the strongest instrument against fraud. A vicious circle is at stake here as well. A non-licensed miner, discouraged from going to the legal collectors in town for fear of being caught by the Mining Brigade, will be more likely to sell to an illicit intermediary without a proof of sale; the latter will then be more enticed to sell this legally invisible diamond to a smuggler. Formalization is thus the key to both increase benefits accrued from diamond mining and mitigate fraud.

### *PRADD's positive impact*

Miners working with PRADD demonstrate a much better knowledge than the others. Even if only 27% have a fair or good knowledge of the legal requirements to become a legal miner, the proportion is of

2% in the Mambéré Kadéi. The difference is also noteworthy in the practice, especially regarding legal sales, which indicates that there is less fraud where PRADD works.

## V. GENDER EQUITY

**Table 3.1**  
**WOMEN'S PARTICIPATION**  
**IN HOUSEHOLD DECISION-**  
**MAKING**

Area of decision	Gender Equity Rate*			Proportion of households with increased women's participation in decision-making (Lobaye & Sangha Mbaere only)
	Lobaye & Sangha Mbaere		Mambéré Kadéi	
	Nov-10	Jul-11	Jul-11	
Food expenses	-2.29	-0.54	-2.27	46.1%
Children's clothing expenses	-2.62	-0.81	-2.81	48.0%
Children's education expenses	-3.88	-1.59	-3.65	50.9%
Health expenses	-1.50	-0.95	-2.69	38.4%
Significant household investments	-4.34	-2.19	-2.27	45.1%
Family events	-2.91	-2.14	-2.27	40.6%
Family financial requests	-2.46	-0.63	-2.35	44.3%
<b>Economic Decision-Making</b>	<b>-2.86</b>	<b>-1.26</b>	<b>-2.62</b>	<b>44.8%</b>
Children's marriage	-1.18	+0.70	0	46.2%
Husband's travels	-1.58	+0.58	-1.27	27.4%
Wife's travels	-1.56	+1.23	-0.88	33.9%
Children's travels	-0.88	+1.20	-0.35	25.4%
Religious activities	-0.53	+1.26	-0.38	23.2%
<b>Social Decision-Making</b>	<b>-1.15</b>	<b>+0.99</b>	<b>-0.58</b>	<b>31.2%</b>
<b>Total Decision-Making</b>	<b>-2.00</b>	<b>-0.13</b>	<b>-1.60</b>	<b>38.0%</b>

\* PRADD attributed a decision-making rate to the household's answer on each topic, from 'women only' to 'men only'. The Gender Equity Rate is the average rate of all surveyed households. It goes from -10 (men only) to 0 (equity) to +10 (women only).

### 1. Gender Equity PMP Indicator

**Percentage of artisanal miner's wives declaring a greater participation in household decision-making (#3.4): 38%**

### 2. Gender Analysis

*Women in project area now have a prominent role in social matters*

The most striking result indicated by the above figures is that the gender equity rate applied by PRADD to the artisanal mining households went from negative to positive in all social decisions. The number of adult women to adult men remaining the same despite the migration trend, this indicates a relatively better assertion of women's rights. With one third of the women increasing their participation in how to run social affairs, the trend could even be beginning to influence their general participation at the community level. However, the area of social decision-making was already close to equitable and to name this the start of a revolution would be very far-fetched.

In the social area, PRADD is particularly satisfied to note an improvement in children's marriage, which mitigates the negative counter-effect of securing the property rights of the usually male artisanal miners over their mining sites.

The positive variation is demonstrated by both the percentage of women declaring a better participation than nine months before, and by the comparison with the Mambéré Kadéi women's answers, which is quite similar to these of November 2010 in Lobaye and Sangha Mbaere.

#### *Economic decision-making matters more*

While the gender equity rate variation is the same in the social and economic areas, women's economic empowerment is more indicative of a better household's livelihood. The economic area remains male-dominated, but in lesser proportions than last year. In the case of food expenses, this means that the family is more likely to receive a better, more diversified diet. In the case of children's education expenses, this means that children from 12 to 16 are likely to spend a little less time in the mining sites and at least to pursue their schooling at the same time.

The improvement of women's economic decision-making is also the effect of a better income, especially as the income was growing more in agricultural activities, usually performed by women household members, than in diamond mining.

## **VI. GENERAL CONCLUSION**

In the context of a general economic downturn, the improvement of the artisanal mining household's income is a step in the right direction. In Lobaye and Sangha Mbaere, the shift to a more agricultural economy continues, confirming an improved autonomy. The pressure on debts and the rise of market prices, however, still hamper the capacity of these households to turn this higher income into a better life. On the other hand, this survey was conducted at the end of the dry season and the data only provides a snapshot of an economic situation at the year's best time to rural communities.

The increased weight of women's participation in the household's decisions and the improved knowledge and practice of the mining law give reasons to be optimistic in the long term. The more artisanal miners will accelerate their formalization process, the better they will sell their production. Equally, the more women will bring economic benefits to the household, the more the all family will see concrete benefits in its daily diet or in securing children's education.

However, the recent diamond price crash in early September might completely change the course of these trends and severely hit artisanal mining communities. PRADD will endeavor to accompany them further into a more diversified economy, while empowering miners in their mining and selling capacities.

# ANNEX III: COMPOSITION OF AN EQUIPMENT RENTAL POOL

The equipment in each rental pool is designed to run 10 mining sites and 5 post-mining sites at the same time. It is composed of the following:

Utilization	Item	Quantity	Total Price (USD)
Mining Operations	Mining Shovel	100	1,304
	Crowbar	10	239
	Sledgehammer	10	245
	Mining Chisel	20	130
	Wheelbarrow	20	1,022
	Machete	50	212
	File	20	39
	Water Pump	10	2,935
	Hand Sieve	50	543
	Mechanical Jig/Sieve (w/o import costs)	2	9,070
	Hand Auger (w/o import costs)	3	TBD
<b>Total Mining Equipment</b>			<b>15,739</b>
Post-Mining Activities (Fish Farming, Agroforestry and Vegetable Gardening)	Hoe	5	43
	Spade	25	217
	Squared Shovel	25	217
	Pickaxe	5	43
	Rammer	5	87
	Axe	5	76
	Watering Pot	25	380
	Chariot	10	1,609
	Sorting Table	2	130
	Scale	2	39
	Fish Container	2	52
	Bailer	4	174
	Machete	50	212
	Crowbar	5	109
Wheelbarrow	5	326	
<b>Total Post-Mining Equipment</b>			<b>3,714</b>
<b>Grand Total</b>			<b>19,453</b>

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