# Esso Exploration & Production Chad Inc.

# Village Impact Quarterly Report

# Land Use Mitigation Action Plan

## Fourth Quarter 2011

**Prepared by the EMP Department**
**April 2012**

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## List of Acronyms & Terms Used in this Report

| | |
|---|---|
| BBS | Basic Business Skills Training |
| CRCP | Chad Resettlement and Compensation Plan |
| CdM | Household Chief (Chef de Ménage) |
| EEPCI | Esso Exploration & Production Chad Inc (the Project) |
| Eligible | Generic term to designate an individual that may be eligible to the EMP Resettlement Program. |
| EMP | Environmental Management Plan |
| EMP-IS | EMP Information System: manages Land Acquisition, Socioeconomic and Land return data. |
| ECMG | External Compliance Monitoring Group |
| HH | Household |
| HHH | Head of Household |
| HHM | Household Member. Include the CdM and all it dependents, regardless their age. |
| IAT | International Finance Corporation |
| IFC | Improved Agriculture Training |
| LCC | Local Community Contact |
| MARP | Participatory Rural Assessment process |
| NGO | Non-Governmental Organization |
| Potential Eligible | Individual that may be eligible to the EMP Resettlement Program. Analysis must be completed. |
| Project Footprint | Total area occupied by the project at a given time (e.g. Compensated but not returned land) |
| True Eligible | Individual eligible to the EMP Resettlement Program. |
| VLUS | Village Land Use Survey previously called Cadastral survey. Refer to the measurement of every field, fallow & house of households. |
| WBG | World Bank Group |
| EFC | Eligibility Factor Class |
| V Process | V Process refers to the monitoring of each interaction with an individual. Under this acronym the VX refers to the version of the survey for the specific individual. For example the V2 would refer to the data relating to the second survey for the individual. As a new survey takes place with each interaction/land transaction between individuals and EEPCI we thus have the basis of a continuous monitoring process. |

# Executive Summary

The Quarterly Village Report provides information to Esso Exploration & Production Chad Inc (EEPCI) management and the International Finance Corporation (IFC) on the progress made in calculating, analyzing and reducing the EEPCI Oil Project (Project) land use impact on villages and households.

Tracking and analysis of land use impact is the purpose of Village Impact Classification and the "Watch List". The classification follows the movement of a village from one category to another in order to judge the effectiveness of Environmental Management Plan (EMP) Chad Resettlement and Compensation Plan's (CRCP) implementing procedures (e.g. the Land Management Manual) and the system improvements made through the Land Use Mitigation Action Plan (LUMAP) or to signal when ongoing Project land take requires the Project to review the situation and adjust plans as per the Environmental Management Plan (EMP) principles.

The village impact classification (high, approaching high, medium and low) is also used to:

- Improve the targeting of mitigation activities by more clearly defining an OFDA village's specific problems.
- Determine eligibility (actual versus estimated land acquisition) for Supplemental Community Compensation.

The Fourth Quarter 2011 (4Q11) Village Impact summary:

- **4** High impact villages (Poutouguem, Danmadja, Missimadji and Béro)
- **5** approaching high villages
- **5** moderate impact villages
- **15** low impact villages

The reduced footprint of the project in Dokaidilti resulted in a change of the impact classification from high to approaching high for this community. The only village impacted significantly over the last quarter is Maikeri which saw the Project's footprint increase by 4.5 ha. The situation of this village reflects the impact of the infill drilling process which concentrates its effort on few villages at a time. We basically see cycles of concentrated drilling (Maikeri) which are rapidly followed by concentrated rehabilitation and land return (case of Bero and Begada). It is expected that about 4 ha should be returned in Maikeri as this village enters a land return phase.

The primary accomplishments of 4Q11 are:

**EMP-IS**

- Completed fragmentation management project.
- Developed in partnership with EMP-Construction a strategy to accelerate the return of flow-lines through a bundling process addressing in this way, our will to accelerate the reduction of our footprint while addressing to a large extent the fragmentation issue.
- Completed the integration of the data from both the 2010 and 2011 Impact Surveys (both land take and land return) for all OFDA villages. Future surveys in these villages will be completed in real time. Results from this work for the villages of Mbanga and Poutouguem are presented in Sections 2.2 and 2.3.
- Completed compilation and production of list of eligibility for those to be incorporated in the 2012 Resettlement program.

**Resettlement Program**

- 29 eligibles were identified as being admissible for the Resettlement program and were informed of this fact.
- Organized and held 5 Steps of Reflection (as per the reviewed process developed in the previous quarter) with the 29 new eligibles, accompanying them in the selection of their resettlement option. All of them have opted for improved agriculture training.
- Material and process for the Five Steps of Reflection Process reviewed as per the EMP and the Land Management Manual, in preparation for launching the process in November 2011.

- All 90 members of the 2011 class have entered the dry season portion of the Improved Agriculture Training Program (optional program).
- Distribution of equipment and livestock complement associated with optional dry season program was started and is to be completed in Q1-2012. All animals were vaccinated.
- Implementation of the new design for livestock housing, forage storage and grain bins has been associated with a communication campaign which should alleviate most of the concerns that could arise from such a change.
- The contractor providing the Livelihood Restoration Monitoring survey program, ISM Consult, developed and tested an interview process in order to identify the reinforcement process most appropriate for the previously trained eligibles who are deemed to be at risk.

**Community Compensation and Supplemental Community Compensation Program**

- The flour mills of Maïmbaye and Bedara were completed and are presently in use.
- Training programs were held with operators (millers) of the five flour mills in order to ensure that that they are fully able to operate and maintain said facility.
- Development of a training program in micro business management was started by the contractor providing the Livelihood Restoration Monitoring survey program, ISM Consult, in association with the Cedifop.
- In partnership with Cedifop develop the terms of reference of the Basic Business Skills Training Program (BBS) to be held in the early part of 2012.

**Work Plan for First Quarter 2012(1Q12)**

- Start the Cadastral survey for Miandoum NW (Ndoherie and Dogoi).
- Prepare the outline of the Annual Individual Restoration Report for 2011, and start the preparation of the said report.
- Finalize and publish the Site Specific Plan for Missimadji.
- Publish 4$^{th}$ Quarter 2011 Village Impact Report.
- Complete the development of a training program in micro business management taking into account the needs of the Management Comities of the flour mills established in 2011.
- Organize a workshop in order to review the performance of the Five Steps of Reflection held in November and December 2011.
- Organize a workshop in order to review the performance of the Improved Agriculture Training Program in 2011.
- Complete the post training phase of the IAT training program for the 56 eligibles of both the 2009 and 2010 classes.
- Develop the terms of reference for the post training phase of the IAT training program for the eligibles registered in the 2011 IAT class.

# 1.0 Village Classification

The village classification is calculated using land use (area of temporary and permanent take) and two socioeconomic criteria (see annex 2 for details). Each criterion classifies a village into one of four categories: High, Approaching High, Moderate and Low. It should be noted that the socio-economic criterion made possible by investigation using the Village Land Use Survey (VLUS) methodology provides a more direct measure of impact, and that this information is continuously upgraded using the data collected through the Impact and Land return Surveys. This process measures land holdings per capita and the number of currently non-viable individuals among the total population of the village. For villages where the survey is not completed or is not being implemented, we have had to rely on declarative data collected during land compensation in past years; therefore the criterion becomes individuals made non-viable by Project compared to the population of the village.

Table 1 : Village Classification Last Quarter

| Categories | Villages - 4Q11 | Villages – 3Q11 |
|---|---|---|
| High | • **Poutouguem**<br>• **Danmadja**<br>• **Missimadji**<br>• **Bero** | • **Poutouguem**<br>• **Danmadja**<br>• **Dokaïdilti**<br>• **Missimadji**<br>• **Bero** |
| Approaching High (Watch List) | • **Dokaïdilti**<br>• **Maïkéri**<br>• **Ngalaba**<br>• **Dildo-Bayande**<br>• **Bela** | • **Maïkéri**<br>• **Ngalaba**<br>• **Dildo-Bayande**<br>• **Bela** |
| Moderate | • **Madjo**<br>• **Mbanga**<br>• Maïnani<br>• Madana Nadpeur<br>• **Begada** | • **Madjo**<br>• **Mbanga**<br>• Maïnani<br>• Madana Nadpeur<br>• **Begada** |
| Low | • Ndoheuri<br>• Kaïrati<br>• Bendo<br>• **Mouarom**<br>• Meurmeouel<br>• Kome<br>• Ndolobe<br>• Miandoum<br>• Morkete<br>• Naïkam<br>• Maïmbaye<br>• Koutou Nya | • Ndoheuri<br>• Kaïrati<br>• Bendo<br>• **Mouarom**<br>• Meurmeouel<br>• Kome<br>• Ndolobe<br>• Miandoum<br>• Morkete<br>• Naïkam<br>• Maïmbaye<br>• Koutou Nya |
| Low (Declared low through other processes)* | • Bedara*<br>• Bekia 2<br>• Bekia 3 | • Bedara*<br>• Bekia 2<br>• Bekia 3 |

Villages in bold have a Site Specific Plan (SSP).

* Villages added to the list may have received Community Compensation but may not have lost land to the Project. When the resident of a village is impacted by the Project even if impacted field is located in another village the village of residence is automatically classified as being in the low impact category and receives the corresponding Community Compensation.

It must be noted that Dokaidilti's impact classification was reduced from high to approaching reflecting the reduction of the projects footprint over the last quarters

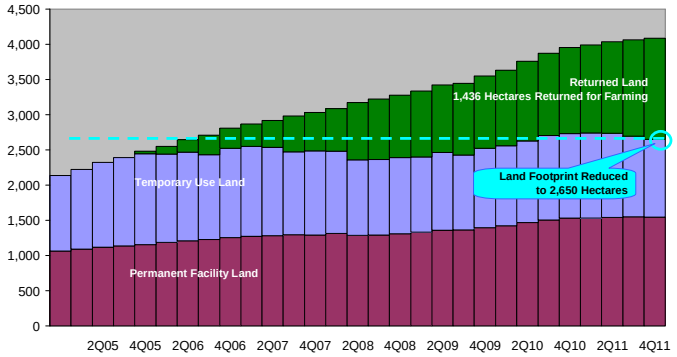
As per the LUMAP, Site Specific Plans (SSP) were developed for the most impacted villages (12 villages). Villages for which an SSP was prepared are presented in bold in Table 1 (page 6). In all villages where SSPs were completed and fully implemented (10 villages), only low residual impacts remain. It should be noted that following a reduction in the Project's footprint Dokaidilti has been moved from the high to the approaching high category.

Only two (2) SSP's are still in the process of implementation. For the last two villages concerned with this process (Dokaïdilti and Bero 3). At the present time the Project is in discussions to finalize their choice of Supplemental Community Compensation project. It should be noted that an SSP was being prepared for the village of Missimadji.

## 1.1 Land Use Criteria and Trends

From a land use perspective the criterion is the area of the village affected by the project, note that some villages can pass from High to Moderate or Moderate to Low as temporary land is returned, or move up as land is acquired.

Figure1: Land Use Status on the 6 fields impacted villages




As shown in figure 1, the footprint of permanently and still temporarily occupied acquired land (in the three original fields) was **reduced** by 43.7 ha during the 4Q11. Generally speaking the Project's footprint has maintained a downward trend over the last year and a half in spite of the establishment of new facilities.

The land returned is not the only factor that counterbalances the new land take. The second factor is due to the fact that many of the new facilities being established are in areas previously occupied by the project. An area already compensated for an initial facility is simply reused for the new well, if it has not yet been returned, without requiring much additional land acquisition. Using the fault block approach in reclaiming land i.e. postponing reclamation until the work in the fault block has been completed, reduces the risk of wasting top soil by re-acquiring newly reclaimed land. Top soil in the OFDA and elsewhere in southern Chad is a scarce resource.

Villages in the Kome oilfield continue to have the majority of land take due to infill drilling. The calculation of additional land acquired is not straightforward as new facilities are now overlapping old facilities. Simple addition or subtraction would compute the same area twice to determine how much land has been acquired or returned (delta column) compared to the previous quarter.

When we consider the information presented in Table 2 we can easily note that the actual reduction in the area occupied by the Project is not only limited to the case of villages located in the three original fields (Kome, Bolobo and Miandoum) but it also reflects the situation of villages located in the newer development areas of the OFDA (Maikeri, Timbre and Nya oil fields).

During the fourth quarter of 2011, 11 villages saw an actual reduction in the Project's footprint on their territory, 12 saw no change and only 2 villages were affected by an increase of the Project's footprint. Of these villages only one, Maikeri, saw a significant increase in the project's footprint (4.5 ha). We must nonetheless note that the area occupied by the project at present is lower than the peak land use in this village (presently 111.2 against a maximum of 112.8 ha). ***The fact that the Project's impact during this quarter was mainly focused on one village does reflect the reality associated with the in filling process.*** Similarly land return mainly took place in Béro and Mbanga two villages targeted in the two first quarters of 2011 for infill drilling.

Table 2: Land Use by Village in OFDA.

| Village | Total Village Area (ha) | Maximum land use (ha) | Land use Q3-2011 | | Land use Q4-2011 | | Delta |
|---|---|---|---|---|---|---|---|
| | | | % | (ha) | % | (ha) | (ha) |
| Danmadja | 480 | 63.6 | **12.9%** | 62.0 | **12.6%** | 60.4 | -1.6 |
| Ngalaba | 2120 | 330 | **12.4%** | 262.6 | **12.0%** | 253.7 | -8.9 |
| Missimadji | 181 | 60 | **11.4%** | 20.7 | **11.4%** | 20.7 | 0 |
| Béro | 5713 | 664.6 | **11.2%** | 640.7 | **11.0%** | 629.4 | -11.3 |
| Dokaïdilti | 689 | 157 | **10.9%** | 75.4 | **10.9%** | 75.4 | 0.0 |
| Mouarom | 1350 | 159 | **10.7%** | 144.7 | **10.7%** | 144.7 | 0 |
| Dildo-Bayande | 1890 | 203 | **10.0%** | 188.4 | **10.0%** | 188.4 | 0 |
| Bégada | 3272 | 348 | **10.1%** | 329.7 | **9.7%** | 318 | -11.7 |
| Poutouguem | 562 | 62 | **8.9%** | 49.8 | **8.9%** | 49.8 | 0 |
| Maïkéri | 1245 | 112.8 | **8.6%** | 106.7 | **8.9%** | 111.2 | 4.5 |
| Béla | 2200 | 225 | **9.0%** | 197.7 | **8.7%** | 190.6 | -7.1 |
| Mbanga | 3044 | 253 | **7.0%** | 211.7 | **6.9%** | 210.8 | -0.9 |
| Madjo | 2138 | 148.8 | **6.4%** | 136.8 | **6.3%** | 133.8 | -3 |
| Maïnani | 1386 | 86.3 | **6.0%** | 83.8 | **5.9%** | 81.2 | -2.6 |
| Madana Nadpeur | 295 | 17 | **5.7%** | 16.7 | **5.7%** | 16.7 | 0 |
| Ndoheuri | 708 | 31 | **3.3%** | 23.3 | **3.2%** | 22.6 | -0.7 |
| Kaïrati | 187 | 6 | **2.9%** | 5.4 | **2.9%** | 5.4 | 0 |
| Meurmeouel | 1128 | 22 | **1.9%** | 21.4 | **1.9%** | 21.4 | 0 |
| Miandoum | 4061 | 62 | **1.4%** | 56.1 | **1.4%** | 56.6 | 0.5 |
| Naïkam | 1445 | 28 | **1.3%** | 18.6 | **1.1%** | 16.4 | -2.2 |
| Komé Ndolobe | 2441 | 81 | **1.0%** | 25.2 | **1.0%** | 25.2 | 0 |
| Bendo | 761 | 17 | **1.2%** | 9.1 | **0.9%** | 6.9 | -2.2 |
| Koutou Nya | 1818 | 8.9 | **0.5%** | 8.9 | **0.5%** | 8.9 | 0 |
| Mainbaye | 420 | 1.3 | **0.3%** | 1.3 | **0.3%** | 1.3 | 0 |
| Morkété | 440 | 7 | **0.1%** | 0.5 | **0.1%** | 0.5 | 0 |
| **Total** | 39974 | | **6.7%** | 2697.2 | **6.6%** | 2650 | -47.2 |

As the Impact and Land-Return Survey processes become fully operational, identification of the impacted land users will be calculated when or shortly after the impact has taken place (real time). As part of the 2011 work calendar, the Impact Survey (both land take and land return) data have been fully integrated into the system in 2011, the Project is thus able to make full use of the information. Sections 2.2 and 2.3 highlight the impact of this updated information on the situation of the villagers of Mbanga and Poutouguem.

If we consider the maximum land use of the Project, each of the 23 villages, on which such data is presented in the table 2, has known a reduction of its footprint in relation to its land use peak. It should be noted that although 2 villages have seen the project's footprint

increase, during the last quarter, the Project has returned more land over the last few years than it is presently taking.

As the integration of impact survey data was completed, all impacted individuals who are deemed to have been made non-viable by the Project or who were already non-viable before being impacted by the Project, before November 1st 2012, have been integrated into the roster of the 2012 Resettlement Promotion.

As we forge ahead to complete the integration of the tools and processes developed under the LUMAP into the daily routine of the EMP's Socioeconomics, we have also completed a thorough review of the processes leading to and including the Five Steps of Reflection. This revised process was used in the later portion of 2011. It resulted in a further integration of all of the EMP team members involved in the process such as the Local Community Contacts (LCC), the Socio-economic Monitors, EMP IS System Administrators and Database Specialists, the survey teams (Synergy, Impact, Fragmentation and Land Return), Socioeconomic Advisor, and EMP Socioeconomics Supervisors, LUMAP Project Managers and the resettlement and community compensation contractor management firm (ISM Consult). In doing so our goal was to further enhance the interconnection between the various players and ultimately improve relations with the communities and eligible individuals to seamlessly deliver the Five Steps of Reflection Process sustainably over time.

## 1.2 Compensated and Returned Land by Land Use Type

This section presents the compensated and returned areas. Table 3 (page 10) shows the current portion of each Land Use Type out of the total Compensated Land. The "Returned" column shows the number of hectares returned (on the left) and the percentage of returned area out of the total compensated area (on the right), for each land use type. It should be noted that this data covers all of the land requirements in Kome, Bolobo, Miandoum, Maikeri, Nya and Timbre oil fields.

As was presented in Table 2 (page 8) the data presented below (Table 3 on page 11) confirms that land returned more than compensated for new land take with a net footprint decrease over the quarter. During the last quarter only 22.5 ha of land was compensated for, by the Project, while 66.2 ha were returned to the communities. Overall, this resulted in 43.7 ha of net land return during this period.

As was the case in previous quarters, most of the land compensated during this period was for temporary use. In fact, land required for temporary use represented 65% of the quarter's land take. It must be noted that land return (53.6 ha) in this category exceeded new land take (14.6), by a significant margin. The Project actually had a net reduction in its temporary land use of 39 ha during the quarter. A number of initiatives are being developed in order to accelerate the return of land associated with underground facilities (mainly flow lines) and overhead lines (OHL, referring to power lines). As 926.1 ha are still to be returned in these two categories, returning but a portion of this area would have a significant impact on the project's footprint.

All of the land which was compensated in Maikeri during this quarter was associated with the construction of new wells.

**Table 3: Compensated and Returned Land by Land Use and Facility Type**

| | Total area (hectares) | | | 4Q11 (hectares) | |
|---|---|---|---|---|---|
| Land us type | Compensated | Returned | | Compensated | Returned |
| **Sub-Total - Permanent with public access-** | 700.1 | 37.5 | 5 % | 3.2 | 4.4 |
| **Sub-Total – Permanent with no Public access** | 983.7 | 101.4 | 10 % | 4.7 | 8.2 |
| **Sub-Total Permanent** | **1683.8** | **138.9** | **8 %** | **7.9** | **12.6** |
| Borrow Pit | 530.6 | 412.7 | 78% | 0.0 | 0.0 |
| Others | 24.7 | 17.8 | 72% | 0.0 | 0.7 |
| **Sub-Total – Temporary returned without restriction** | **555.3** | **430.5** | **78%** | **0.0** | **0.7** |
| Underground facility | 988.5 | 312.4 | 32% | 8.5 | 27.4 |
| OHL | 330.7 | 80.7 | 24% | 0.0 | 0.0 |
| Well Pad | 527.5 | 473.4 | 90% | 6.2 | 25.4 |
| **Sub-Total – Temporary returned with restriction** | **1846.8** | **866.5** | **47%** | **14.6** | **52.9** |
| **Sub-Total Temporary** | **2402.1** | **1297** | **54%** | **14.6** | **53.6** |
| **Grand Total** | **4085.9** | **1435.9** | **35%** | **22.5** | **66.2** |

- The column "total areas in hectares: compensated" shows the total area compensated since the project started up to the end of the quarter covered in this report.
- "Total areas in hectares: returned" shows the total area returned since the project started up to the end of the quarter covered in this report.
- "1Q2011: Compensated" shows the total hectares compensated during the quarter covered in this report.
- "1Q2011: Returned" shows the total hectares returned during the quarter covered in this report.
- 6 fields = Kome, Bolobo, Miandoum, Maïkeri, Nya and Timbre

## 1.3 Socio-economic Criteria

Village level impact depends both on absolute amounts of land taken or returned and the way in which land resources are allocated within the village. In some villages, people depend mainly on farming for their livelihood. In others, a portion of the inhabitants depend on fishing as well as farming; fishing families in these villages often have (and need) less farmland than in inland villages and may already be below the general threshold of agricultural viability (2/3 cordes per HHM). Others are recently established households who will progressively gain access to land from their family land trust. These households may appear to be non-viable or marginal while in reality they are simply in a transitional phase.

Attributing all non-viable household to Project land acquisition in these villages would overstate the Project's impact.

To distinguish between these two types of situations, the social criteria using compensation database information were initially set according to 1) the number of people already non-viable before they were impacted by the project and 2) those that were made non-viable when they lost land to the project.

Completed village land surveys have demonstrated that the declarative data used to calculate non-viability often overstated the number of people dependent on the household's land and understated the amount of land available. Therefore the number of non-viable households found through a village survey presents a more accurate picture of Project impact. Such data was not available when the Land Use Impact list was first calculated but now, as measured data has become available for most villages, the pre-Project non-viability criterion has been dropped. When the survey is complete and a village is open to reclassification only the current but accurate criterion of currently non-viable HH (compensated and not compensated) has been used.

**Table 4: Percentage of Individuals Made Non-viable by Project Land Take According to the Declarative Database**

| Total non-viable individuals today | Value Now | Made non-viable by project | Value Now |
|---|---|---|---|
| Kaïrati | 17.2 | Madana Nadpeur | 1.4 |
| Madana Nadpeur | 16.3 | Merméouel | 1.0 |
| Koutou Nya | 13.9 | Miandoum | 0.7 |
| Miandoum | 7.6 | Kaïrati | 0.0 |
| Merméouel | 2.7 | Koutou Nya | 0.0 |
| Bendo | 2.6 | Bendo | 0.0 |
| Benguirakol | 2.6 | Benguirakol | 0.0 |
| Maïmbaye | 2.1 | Maïmbaye | 0.0 |
| NDoheuri | 2.0 | NDoheuri | 0.0 |
| Morkété | N/A | Morkété | N/A |

While no better tool, than the declarative surveys, is available for the villages presented in Table 4 it must be noted that excessive reliance on this data could lead the reader to some interpretation errors. Please note that the villages in this table are those where no Village Land Use Survey (VLUS) has been performed The number of non-viable households below 2/3 cordes of land per HHM is much more reliable in villages with complete VLUS data given the higher level of accuracy and the fact that the whole village is surveyed versus only Project affected households.

**Table 5: Percentage of Individuals Made Non-viable by Project Land Take According to the VLUS and Impact Databases**

| Village | Non-Viable project affected individuals |
|---|---|
| Poutouguem | 17.4 % |
| Danmadja | 14.3 % |
| Dokaïdilti | 13.3 % |
| Missimadji | 11.1 % |
| Madjo | 10.7 % |
| Béro | 10.4 % |
| Maïkéri | 8.2 % |
| Ngalaba | 7.8 % |
| Béla | 6.8 % |
| Dildo-Bayande | 4.8 % |
| Mouarom | 3.5 % |
| Bégada | 3.4 % |
| Mbanga | 2.8 % |
| Komé Ndolobe | 2.2 % |
| Maïnani | 2.1 % |
| Naïkam | 0.0 % |

Table 5, presents the data originating from the VLUS and now incorporates the information from the impact and land return surveys. It should be noted that a complete review of the VLUS data should be done for Poutouguem in 2012. This will help us to adjust for any changes which have occurred within the village and eliminate certain households that should not have been included in the first place as they reside and farm in other villages.

# 2. Socioeconomic monitoring

## 2.1. Village Surveys

**Table 6: Total Number of HH Survey by Village**

| Village | Cadastral survey completed | Impact Survey completed | | Land return survey completed | | Monitoring Surveys completed total | Total HH Survey completed |
|---|---|---|---|---|---|---|---|
| | | Q4- 2011 | Total | Q4-2011 | Total | | |
| Bégada | **263** | 16 | **174** | 1 | **126** | **9** | **572** |
| Béla | **145** | 0 | **74** | 0 | **20** | **4** | **243** |
| Bero | **603** | 2 | **187** | 0 | **75** | **43** | **908** |
| Danmadja | **102** | 5 | **38** | 1 | **32** | **21** | **193** |
| Dildo-Bayande | **276** | 0 | **34** | 0 | **7** | **18** | **335** |
| Dokaïdilti | **85** | 0 | **9** | 0 | **0** | **11** | **105** |
| Komé | **200** | 0 | **1** | 0 | **0** | **0** | **201** |
| Madjo | **131** | 1 | **71** | 1 | **45** | **20** | **267** |
| Maikeri | **141** | 10 | **39** | 0 | **15** | **3** | **198** |
| Maïnani | **112** | 1 | **15** | 0 | **3** | **3** | **133** |
| Mbanga | **270** | 5 | **186** | 0 | **25** | **14** | **495** |
| Missimadji | **24** | 0 | **1** | 0 | **1** | **4** | **30** |
| Mouaroum | **85** | 1 | **6** | 0 | **23** | **2** | **116** |
| Naïkam | **54** | 0 | **0** | 0 | **0** | **0** | **54** |
| Ngalaba | **251** | 4 | **118** | 0 | **41** | **20** | **430** |
| Poutouguem | **61** | 0 | **30** | 0 | **25** | **0** | **116** |
| Other villages | **11** | 0 | **0** | 0 | **0** | **88** | **99** |
| **Total** | **2814** | **45** | **983** | **3** | **438** | **260** | **4495** |

The objective is to use the data generated by these various surveys and investigations to track each community and household over time. Ensuring that the specific impact, whether they be a land take or a land return, are accounted for and that the Resettlement option selected achieved its livelihood restoration goal. Integrating all of this information will allow tracking the communities over time ensuring that each community and individual HHH receives the kind of support which is best suited to his/her situation as well as process and performance indicators regarding the effectiveness of the Chad Resettlement and Compensation Plan (CRCP) implementing procedures.

**Impact surveys**: Although the Project is now surveying impacted HHs on a real time basis, integrating this information into the EMP IS is proving to be a greater challenge than initially expected. At the end of the third quarter, 57% of the Impact Surveys from 2010 (299 on 529) and 18% of the 2011 Impact Surveys had been verified, validated and fully integrated into the EMP IS. Full integration of the 2010 Impact Surveys work has been completed for five (5) villages.

**Land Return:** While the actual field work associated with the Land Return process is almost in real time, the integration of the data in the system is only at its initial stages. It must be noted that 112 households out of the 304 who have had reclaimed land returned to them were previously surveyed using the Impact Survey basis and technique. The remaining households are in the process of being resurveyed in order to identify any changes that may have taken place within the household or to its land base.

**Livelihood Restoration Monitoring:** The first stage of the monitoring process is now completed. An interview process was developed in order to establish an individualized reinforcement program for each at risk households identified through the monitoring program.

## 2.2 Impact Survey: Analysis of Mbanga village trends over time

### Table 2: Evolution of Key Factors

In **2010,** 53 HHs were touched by the Project in Mbanga. Of these, 51 had been surveyed in 2009 when the VLUS was completed and only two (2) are deemed to be new households.

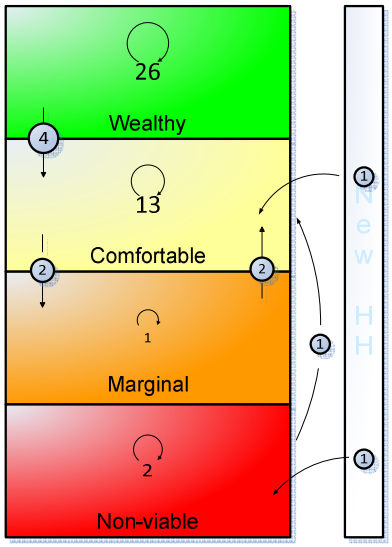
| | VLUS 2009 | Impact 2010 |
|---|---|---|
| Mean area (cordes) | 23.24 | 22.72 |
| Mean # of HHM | 7.12 | 7.39 |
| Mean of eligibility factor | 3.92 | 3.81 |
| | Last touch * | Impact 2011 |
| Mean area (cordes) | 23.27 | 23.07 |
| Mean # of HHM | 7.23 | 7.39 |
| Mean of eligibility factor | 4.25 | 4.18 |

The # of HHM increased by 0.27 members (3.8%), while land area went down by 0.52 Cordes (2.2 %) between the VLUS and 2010 for the impacted households. These changes resulted in the mean eligibility factor going down by 2.8%.

* Last situation reported (Impact 2010 or VLUS)

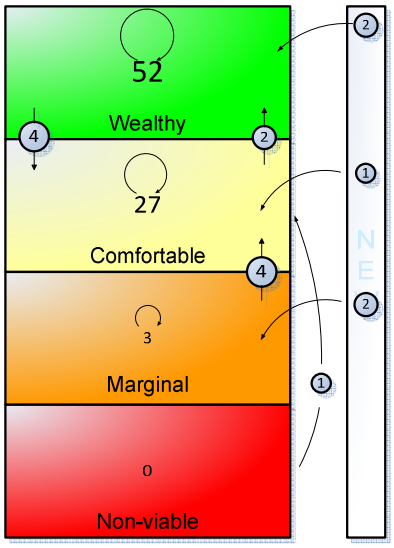
- 9 HHs changed Eligibility Factor Class.
- 6 HHs went down one class, 2 of which went from comfortable to marginal.
- 3 HHs went up by one class, 2 of which went from marginal to comfortable.
- 2 new households were created during ensuing period.
- Of these 51 HHs 82 % did not change Eligibility Factor Class (EFC).

2010 Impacted Household of Mbanga
Evolution of Eligibility factor class




In **2011,** 98 HHs were touched by the Project in Mbanga. Of these, 93 had been either surveyed in 2009 when the VLUS was completed and/or had been touched in 2010 (Impact Survey) and only two (2) were previously unknown households. The mean # of HHM, land area by HH and eligibility factor did not change significantly between the last data available for the impacted households and 2011.

2011 Impacted Household of Mbanga
Evolution of Eligibility factor class




- 11 HHs changed Eligibility Factor Class, 4 HHs went down, 7 HHs went up and 82 remained the same EFC.
- 5 new households were created during ensuing period, 2 being classified wealthy, 1 comfortable and the 2 others non-viable.
- Of the 93 HHs who had been surveyed previously (2009 VLUS or Impact survey) 88 % did not change EFC.

A review of the individual cases which have changed EFC would lead us to believe that these changes are to a great extent due to changes in the makeup of these specific households or to change in land area available to the household. It must also be noted that changes in the land basket of the HH would appear to relate more to transactions between individuals than to the impact of the Project.

## 2.3 Impact Survey: Analysis of Poutouguem village trends over time

### Table : Evolution of Key Factors between VLUS Impact 2010 and Impact 2011

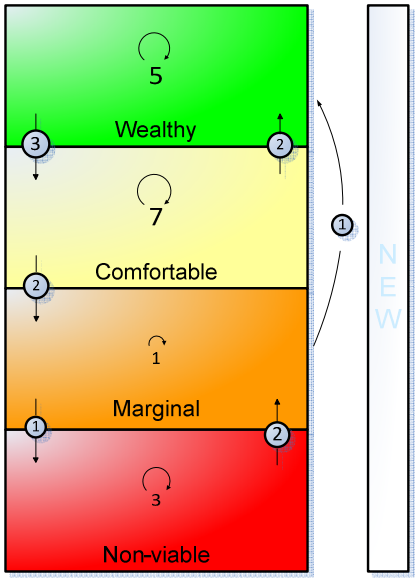
| | VLUS 2009 | Impact 2010 |
|---|---|---|
| Mean area (cordes) | 14.69 | 13.6 |
| Mean # of HHM | 5.8 | 5.4 |
| Mean of eligibility factor | 2.25 | 2.25 |
| | Last touch * | Impact 2011 |
| Mean area (cordes) | 9.32 | 9.79 |
| Mean # of HHM | 5.7 | 5.74 |
| Mean of eligibility factor | 2.12 | 2.19 |

* Last situation reported (Impact 2010 or VLUS)

In **2010,** 5 HHs were touched by the Project in Poutouguem. All of these HHs had been surveyed in 2009 when the VLUS was completed. # of HHM decreased by 0.4 members (6.8%) while land area went down by 1.09 Cordes (7.4 %) between the VLUS and 2010 for the impacted households. This resulted in the mean eligibility factor being unchanged. In view of the very small population affected in 2010 these trends may not be representative of the population as a whole.

- 1 HH changed Eligibility Factor Class, going down from marginal to non-viable.
- Of these 5 HHs, all of whom had been surveyed previously (2009 VLUS), 80 % did not change Eligibility Factor Class (EFC).

2011 Impacted Household of Poutouguem
Evolution of Eligibility factor class



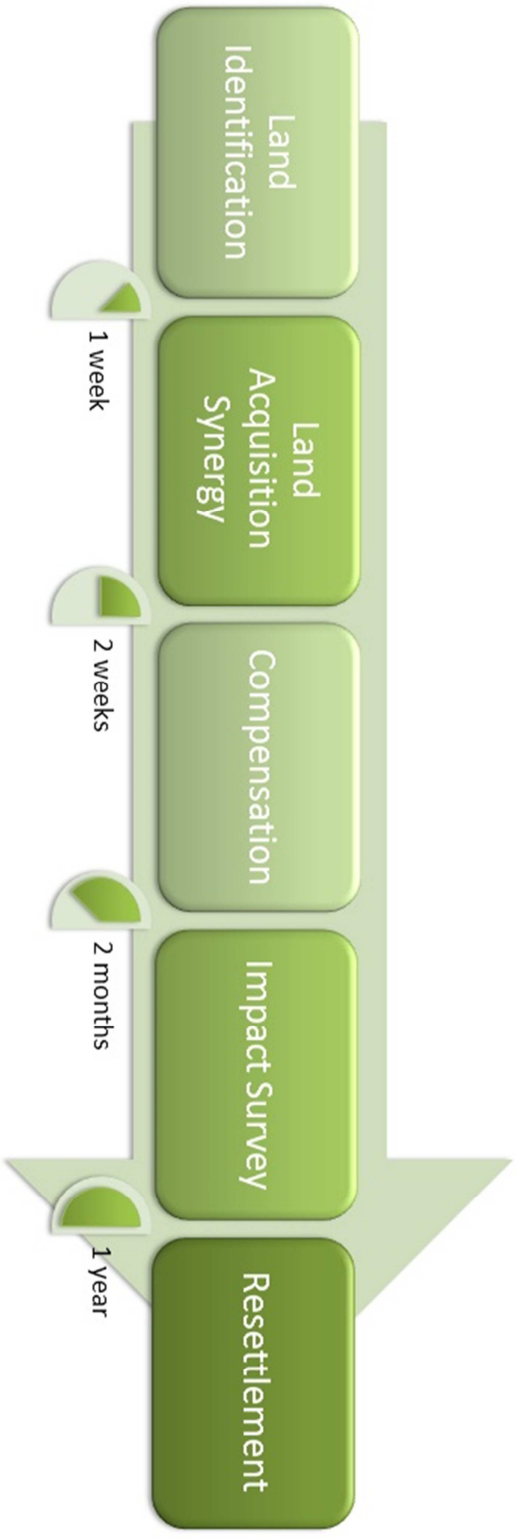

In **2011,** 27 HHs were touched by the Project in Poutouguem. All of these HHs had been either surveyed in 2009 when the VLUS was completed or/and had been touched in 2010 (Impact Survey). The mean # of HHM, land area by HH and eligibility factor did not change significantly between the last data available for the impacted households and 2011.

- 11 HHs changed Eligibility Factor Class, 6 HHs went down, 5 HHs went up.
- Of the 27 HHs who had been surveyed previously (2009 VLUS or Impact survey) 59 % did not change EFC.

A review of the individual cases which have changed EFC would lead us to believe that these changes are to a great extent due to changes in the makeup of these specific households or to change in land area available to the household. It must also be noted that changes in the land basket of the HH would appear to relate more to transactions between individuals than to the impact of the Project.

## 2.4. Real time management of data and eligible's

To work in real time, is to deal with an issue or an individual at the time the event takes place, whether it be a land take or a land return. Changes in the processes which took place in late 2010 and 2011 have made it possible to all but eliminate the backlog and address issues when the need arises. The Environmental Management Plan's Information System, is presently considered to be operating in real time.




For the project working in real time first requires that we confirm that individuals identified by the compensation process are real land users. This task must take place as soon as possible after our interaction with potential eligibles (identification). At present, the Land Acquisition Synergy Team is in the field one week after identification has taken place. Doing so ensures that the Impact team will focus its attention on individuals who can truly benefit from the resettlement program.

Impact surveys are completed within the following month. Making it possible to update the information regarding the potential eligible and is household. While the information thus collected covers a wide range of issues, it focuses on the two criteria's which most clearly define the ability of a household to sustain itself, being:

- The size and composition of the household
- and the area of cultivable land available to the household

The information thus collected is integrated in the data base making it possible to recalculate the eligibility factor. The result of this improved process is a clearer understanding of the situation of impacted households and a more rapid integration in the resettlement process.

An affected individual who is eligible to resettlement benefits will receive his benefits within the current year; for example he will be enrolled in the next Improved Agriculture Training Class if that is his choice. Such a real time process is a necessary improvement in order to clearly monitor and minimize the impacts of the development of the oil reserves of the OFDA, at both the individual and community level.

# 3.0 Milestones of Q4-2011

## 3.1 Missimadji's Site Specific Plan

Created in 1986, Missimadji (Bero canton) is the latest of 16 OFDA villages to be surveyed using the Village Land Use Survey technique. It is the smallest of the 16 villages surveyed up to this point, both in terms of area and population. The village has been impacted by the mining of lateritic clay from Kome Borrow Pit 2.

It should be noted that this community received a community compensation package, in the form of a two classroom school in 2006. As such the purpose of Missimadji's SSP was to establish whether the village as a whole has been able to offset its land losses to the Project in view of the compensation received by individual land users (in the form of compensation and resettlement training) and the community as a whole (a two-classroom school). The SSP additionally evaluates the land-holding situation of all the households (HH) in the village to judge whether the village as a whole is at risk and, if so, what actions would be efficacious.

While the original land take was fairly significant in view of the size of the village, 48.8 ha representing 27 % of the village's area. At present the Project's land take stands at 20.7 ha or 11 % of the village area. It must be noted that the initial community compensation (two-classroom school built in 2006) was a compensation for the original land take; two additional land takes have taken place since then.

As explained by M. Ngarnaissem Ngarndolé Prosper, chief of the village of Missimadji the land which has been reclaimed and returned has been put in production and is being actively farmed by members of his community and farmers from neighbouring villages. This land has brought an important contribution to the ability of his community to feed itself and sustain the local economy.

The SSP concluded that the best avenue of supporting this community and assisting it in facing the issues arising from the new land take which took place in the early part of 2010 is to offer them a Supplemental Community Compensation opportunity. While the wish of the community must and will be respected in the selection process (MARP) it is clear that three options offer the best potential for addressing the issues raised during the SSP process. They are:

- A one-classroom school to increase the capacity of the existing two-classroom school, making it possible to either welcome more pupils or to improve the learning environment.
- A flour mill, greatly reducing the work load of women who either have to walk great distances to reach the nearest mill or expend a great amount of energy to pound their grain, noting that women may have been disproportionally affected by the land take which took place.
- A water well in view of issues in regards to the quality of the water in the village's existing shallow well. Furthermore as it is often women who need to go and fetch water from the river (the second closest source of water) this would also reduce their burden.

## 3.2. Flour Mills for Bedara and Maimbay

The last of the community compensation projects to be completed in 2011 was turned over to the residents of Bedara, represented by their chief, Mathieu Digamro and the members of the management committee. The village of Maimbay having received their mill only a few days before.

We met with M. Digamro a few months after they received their community project. He confirmed that they are still very happy with their choice. An unexpected benefit is that the mill has fostered the creation of a market place where clients can get food, drinks and an assortment of goods while waiting for their Sorgho to be processed. It has become a fairly active gathering place on Mondays and Wednesday the two market days.

For Ms. Madjibeye, one of the users of the mill it represents a major time saving for herself and her children, who had to walk great distances to one of the neighbouring villages. It must be noted that the two closest villages where the service is offered are Miladi which is at 2 km and Mbaikoro at more than 10km. While the Mbaikoro mill is much further it has often been to only option available as the Miladi mill is not operating on a consistent basis. Having a mill in the village has been a blessing as she no longer has to send the youngest of the family to the neighboring village to have their grain process with all the risk that such a task has for a youngster. Having a mill close by is a major advantage when she must tend to guests and to prepare a meal for a large number. While she makes flour she is prevented from tending to her guests who have to wait many hours for the meal to be ready, she can now prepare the meal rapidly as the mill producers the required amount of flour in only a few minutes.

While a new venture for this community they have demonstrated a keen sense of business. Managing their cashflow and inventory wisely they have generated gross sales of about 275000 CFAs per month and net sales (profit after fuel and labour) of about 150 000 CFAs per month. The management team is aware of the need to manage these funds wisely to replenish the required supplies (fuel, oil and parts) and to tend to any unexpected expense which may occur.

The millers, represented by Abel Madiadoum, expressed their satisfaction at the employment opportunity created by the mill. By working as a team they are managing to offer the service 7 days a week. In doing so they want to maximise the income of the mill and even develop new opportunities.

Overall the creation of a mill in this village has changed the lives of many and will continue to do

so if they manage it wisely.

### 3.3. Improved agriculture training: Vegetable production.

Once they successfully complete the rainy season farming portion of the Improved Agriculture Training Program eligibles go on to the optional or dry season portion of the program. One of the options offered to our 90 eligibles of 2011 was vegetable production. This option, while it is not selected by a large proportion of eligibles, offers a very significant potential for smaller land holders who wish to diversify must mainly to intensify their agricultural production system.

An eligible from Poutouguem, Célestin Dingamndolum is one of the two too have selected vegetable production as his option. In addition to training in all aspect of this production he has received various equipments and certain key inputs such as fertilizer and seeds. As part of his equipment grant the motor pump and associated pipes has had a major impact on both the high yields and quality of his crops, such as ognions, tomatoes, beans, pepers, eggplant, lettuce and spinash.

As Célestin and his wife, Lochim, work hand and hand in their vegetable patch they are able to help each other. Furthermore this allows her to learn and share in the knowledge and improved agricultural approaches that are available through the Improved Agriculture Training Program. Having direct access to the Nya river, Celestin and Lochim can easily irrigate their vegetable Plots. The motor pump granted by the Project has made it possible to irrigate his crop without having to carry hundreds of buckets of water over the 30m that separate field from river.

In order to protect his crop he has built a fence out of branches and twigs. This has made it possible to keep out cattle, goats and pigs that forage on the vegetable crop often destroying it. This initiative was undertaken by the eligible himself demonstrating his will to take ownership of the process.

One of the few producers to have fuly embraced the production of compost he buys manue from neighboring producers. He views manure and compost as a way to limit his dependency of chemical fertilizers while protecting the soil on which he depends to feed his family.

With over 1 800 $m^2$ in production he is not only able to diversify and improve the nutrition of his wife and children, but also to generate some cash income in order to meet the other needs of his family in terms of education and health.

## 3.4. Steps of reflection: Eligibles choose their resettlement option.

One of the highlights of the third quarter was the selection of the eligibles of the 2012 class and the various activities associated with the steps of reflection. As explained in a previous issue, ensuring that the eligibles make an informed choice as to the resettlement option best suited to their need is a critical aspect of the resettlement process. Making the wrong decision at this point may result in wasting time and resources that could potentially be better invested somewhere else.

The **first** of four meetings is dedicated to the information of the chief and the elders of the village. Their role is essential in guiding the eligibles and understanding both the project's commitment toward their community but also the commitment that must be made by the eligibles themselves if this process is to succeed. The level of implication of the community's leadership is a key factor in the success of the process. This is one of the basic change that was made to the process in order to ensure that the village takes some level of ownership of the resettlement process. It is for that reason that one of the outcome of this meeting is to seek the commitment that the village's leadership will actively participate in all meetings to take place.

The **second** stage of the process involved the eligibles of the community, under the watchful eyes of their leadership. During this meeting, representatives of the project outlined the process to take place over the next few weeks and described the various options available to eligibles. For example the chief of Miandoum V, Djimé Edmond, outlined that for such a process to work it must be a partnership where all stakeholders and most of all the eligibles commit to both the process and the desired outcome in order to maximize the benefits for the eligible and his household. The two main options outlined, were:

- Improved agriculture: Description of skills to be acquired and of the equipment complement available to eligibles. In addition to a thorough description of the curriculum of the rainy season portion of the program each of the dry season options was outlined (livestock husbandry, small ruminant's husbandry, food processing, vegetable production…..).
- Various relocation and land management options that may assist an eligible in using remote resources or acquiring more land.

During the **third** session eligibles who have successfully completed their resettlement option in previous years outlined the key success factor required in order to succeed, and the opportunities available in the various fields of training available.

During the **fourth** and final session the eligibles selected their resettlement option. Those that chose Improved Agriculture training were also called on to select an option amongst the various program offered. Considering their individual situation and the area of training best suited to their needs all 29 eligibles selected Improved Agricultural training as their Resettlement option, while 23 selected cattle production, 5 sheep production and on one goat production as their optional dry season production option.

# Conclusion

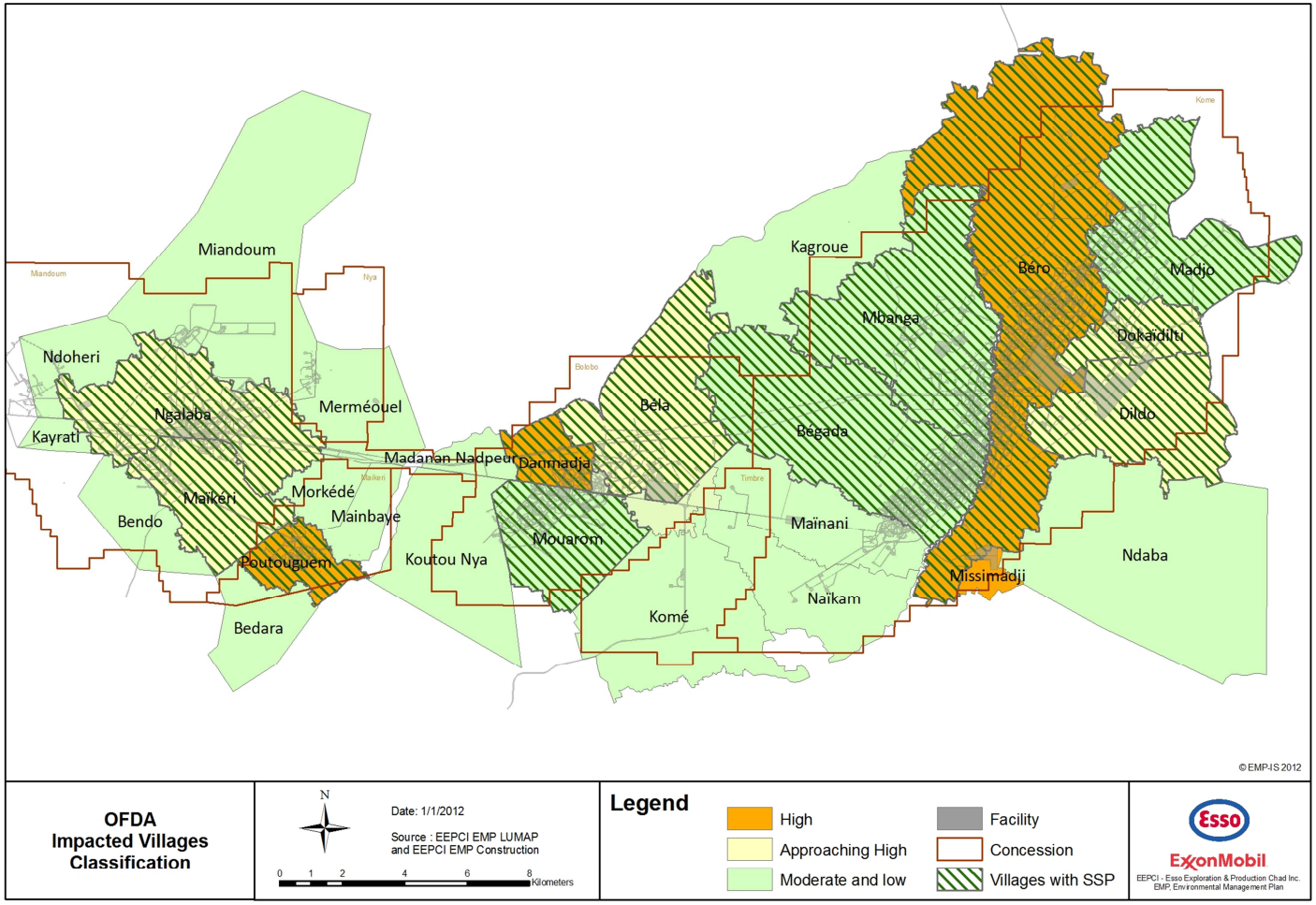
With the end of the fourth quarter the project was able to complete the incorporate of the data from the Impact and Land Return Surveys (V Process), Fragmentation Surveys and Livelihood Monitoring surveys in the Quarterly Village Impact Report. This has allowed us to have a better understanding of the processes taking place in the field and a much more dynamic tool to monitor the impact of the Project on both the communities and individual land users.

From this report we can make the following conclusions:

1. Land reclaimed and returned has exceeded the Project land take. The project's footprint is maintaining its downward trend.
2. The accelerated return of lands associated with linear facilities such as flow lines and overhead power lines give us a significant opportunity to minimize our footprint in agreement with the EMP. While both the community compensation and the resettlement programs have and remain important tools in supporting both at risk villages and households, accelerating land return remains the best tool available to minimize the Project's impact on the population of the OFDA.
3. Community Compensation Projects in villages (7 in all) of the Maikeri Oilfield have been completed as planned, confirming that the revised MARP has made it possible to respond to the needs of the villages much more efficiently and effectively.
4. The project is having important positive effects on communities and many individuals whether they are Project affected and eligible for resettlement or not.
5. Managing our impact on communities and individuals on a real time basis was a necessary improvement in order to clearly monitor and minimize the impacts of the development of the oil reserves of the OFDA, at both the individual and community level. Overall this will truly give the project the ability to operate in a proactive fashion rather than a reactive one.

# Annex 1

## OFDA Village Impact Map



# Annex 2: Village Classification Criteria's

## Land Use Criteria

The criteria concerning Land Use impact represents the percentage of village area used by the project within each village. The boundaries of the village used to set the village area are not official and are computed based on a global survey of the village limits. The thresholds between levels of impact represent "natural breaks" or large numerical gaps in between villages.

**Calculation of Land Use Impact**

The final percentage used to classify the village's level of impact is computed by adding the "temporary" land not yet returned land to the land permanently used by the project:

$$\frac{\sum \text{Permanent Not Returned} + \text{Temporary Not Returned}}{\sum \text{Village Area}}$$

| Thresholds | |
|---|---|
| **High** | ≥11% |
| **Approaching High** | 7% - 10.9% |
| **Moderate** | 3% - 6.9% |
| **Low** | 0% - 2.9% |

### Initial Classification with Compensation Data

**Criterion 1: % all non-viable individuals/all individuals in the village**

**Description**: Percentage of all project-affected individuals in the village currently below the resettlement factor of 2/3.

**Rule:**

$$\frac{\sum \text{(All individuals below 2/3 cordes after land take)}}{\text{Village Population}}$$

**Threshold:**

| Threshold Criteria 1 | | |
|---|---|---|
| | Min | Max |
| **High** | 50.1% | 100% |
| **Approaching High** | 30.1% | 50% |
| **Moderate** | 20.1% | 30% |
| **Low** | 0% | 20% |

This criterion includes people who were already non-viable before the Project.

**Criterion 2: % individuals in the village made non-viable by project land take/all individuals in village**

**Description:** Percentage of the number of individuals that were economically viable before surrendering land/feeling any project impact (the resettlement factor > 2/3) but who became agriculturally non-viable upon surrendering land/ after project impact (the resettlement factor < 2/3 cordes).

**Rule:**

$$\frac{\sum \text{(All individuals that were not eligible } \textbf{before} \text{ land take \& are eligible } \textbf{after} \text{ Land take)}}{\text{Village Population}}$$

**Threshold:**

| Threshold Criteria 2 | | |
|---|---|---|
| **High** | 20.1% | 100.00% |
| **Approaching High** | 15.1% | 20.00% |
| **Moderate** | 9.1% | 15.00% |
| **Low** | 0% | 9% |

This criterion cannot be calculated with village land survey results and is no longer applied when a change in village impact classification is calculated.

### Criterion 3: Reclassification with Village Survey data

**Description:** When a village reclassification is calculated and village survey data is available, a single criterion is used. This criterion represents all the members of the non-viable compensated households compared to the population of the village:

## Rule:

$$\frac{\sum \text{All members of non-viable compensated Households}}{\text{Village Population}}$$

*This statistic excludes non-viable households with resettlement options

## Threshold:

| Threshold Criteria 3 | | |
|---|---|---|
| **High** | **15.1%** | **100.00%** |
| **Approaching High** | **10.1%** | **15.0%** |
| **Moderate** | **5.1%** | **10.0%** |
| **Low** | **0%** | **5.0%** |