Esso Exploration & Production Chad Inc.

Site Specific Plan Mbanga Village

Land Use Mitigation Action Plan

Prepared by the EMP Department June 2015

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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.

IFC International Finance Corporation

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. Individual

whose eligibility established initially through the declarative

process was confirmed using the VLUS.

VLUS Village Land Use Survey previously called Cadastral survey.

Refer to the measurement of every field, fallow & house of

households.

WBG World Bank Group

WHHH Women head of household

1. Introduction

While the Village Land Use Survey (VLUS) data has allowed us to gain a very good understanding of the processes taking place in the field, incorporating data from the Synergy Team, the impact surveys and the land return surveys allow us to gain a real time perspective of the effects the Project is having on communities and individuals.

Previously developed tools, such as the Site Specific Plan (SSP), gave us a fairly detailed view of the communities which are impacted by the Project. We now find that such tools are difficult to update and review in view of the masses of information they contain. Often the SSP incorporated too much information and much of this information was not necessarily relevant to the ultimate objective. The purpose of a Site Specific Plan (SSP) is to clearly define the village's situation and identify a set of measures that mitigate the specific issues the village's population is encountering within their own village area. After having identified the issues which are specific to a village, the plan will consolidate all applicable livelihood restoration tactics into a strategy that will lead the restoration of its livelihood.

While an SSP was performed for Mbanga (Bero Canton) in 2009, it has since gone through a number of new rounds of infill drilling. We must, at this point wonder whether previous mitigation efforts in terms of Community Compensation and individual resettlement initiatives were sufficient to fully mitigate the impact of the repeated land take on this community. Mbanga is considered to be in the moderate village impact category in terms of the land take factor (% of village area occupied by Project) and in the low village impact category on social impact basis (% of individuals found to be at risk) (as per the 1Q-2015 Village Impact Report).

As of March 31st, 2015 these facilities occupied 113.2 ha out of a village land area of about 3059 ha, or about 3.7% of the village's area. Although the Project has at one time occupied 453.9 ha of land, the rehabilitation and return of unneeded land has made it possible to maintain the footprint at as a low level as possible. At present Mbanga is considered to be a moderately impacted village (as per the 1Q-2015 Village Impact Report). These impacts could include:

- Reduced pool of land available for agricultural use
- Limited access to bush resources
- Depletion of bush resources
- Shortened fallow availability

In addition to having received a community compensation package, in the form of a two-class-room building, this community received a fully equipped one-room school building in 2009 (Mbanga1) and a community building in 2010 (Mbanga 2) as supplementary community compensation.

As such the purpose of Mbanga's SSP is 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 a compensation and resettlement training) and the community as a whole. 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 this still at risk and, if so, what actions would be efficacious.

The proposed mitigations measures must be feasible, using resources that are available to the project and within the community, emphasizing the enhancement of the knowledge and capabilities of its residents. The plan will consolidate all applicable livelihood restoration tactics into a strategy that will lead to livelihood restoration in this impacted village.

2. Mbanga's population at a glance

With a total area of 3059 ha, Mbanga is a relatively large village, in fact it ranks 3rd out of 21 in terms of area (see annex 2). It has a relatively low population density with 265 households and 1576 residents, 5% increase since 2009 SSP (see annex 1 for comparison). This is reflected by the fact that this village has the 6th highest availability of land with 1.83 ha/person (a slight reduction from 1.88 in 2009). The village has been impacted by the development of the Kome oil field.

Table 1: Distribution of Households and Individuals by Eligibility Factor

Range	Nbr HH	Nbr Individual
0.000 - 0.667	14 (5.0 %)	102 (6 %)
0.668 - 0.999	16 (6.0 %)	110 (7.0 %)
1.000 - 2.499	93 (35.0 %)	662 (42.0 %)
2.5000	142 (54.0 %)	702 (45.0 %)
Total	265 (100 %)	1576 (100 %)

Mbanga's households are made up on average of 5.9 members only a little bit larger than the average OFDA HouseHold, which stands at 5.8 (see annex 3)). Some notable facts can nonetheless be outlined:

- 21.51% of households are headed by women. This is slightly higher than what is found in comparable villages. The average number of women headed households in the OFDA is 18.2%.
- 696 individuals or 44% of the population have received a form of compensation at one time or another. Most of these individuals having received multiple compensations (average of 2.33 compensation payments per individuals compensated). This probably reflects the fact that the development has been concentrated in a specific part of the village affecting only a small number of relatively large land owners.
- 94 % of the area of the village is either actively cultivated or being fallowed. The residents of this village also farm some land outside its limits; this gives them access to 129.6 ha. This land accounts for 5.6% of the land available to Mbanga's residents.

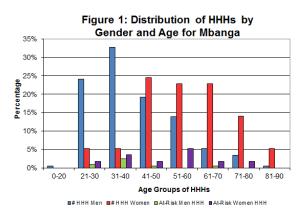
If one considers the fact that 4.9 % (77 individuals) of the population was identified as project affected non-viable. The analysis conducted showed that Mbanga is considered to be in the moderate village

impact category in terms of the land take factor (% of village area occupied by Project) and in the low village impact category on social impact basis (% of individuals found to be at risk) (as per the 1Q-2015 Village Impact Report). From table 1 (page 5), we can note that 95% of Mbanga's households are viable, in fact the non-viable category is made-up of 14 households (9 households non-viable project affected).

In order to ascertain whether any vulnerable groups (youngsters, elderly villagers and women) are put at any particular risk/disadvantage by the Project infill drilling program we must:

- Identify the most vulnerable groups (Elderly villagers, youngsters and women).
- Evaluate whether any of the groups are facing an inappropriate portion of the burden.

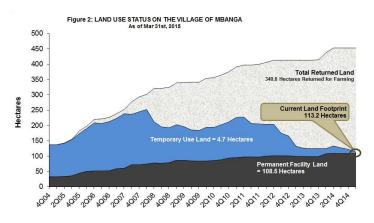
While most households are headed by men (78% of cases), women are far more present as household heads when they are older (starting in their fourties) (Figure 1). Women are the household head in 36% of cases where the HHH is more than 40 years old. This would appear to result from the fact that some widows retain control of a sufficient asset base to support their family following the death of the spouse or that some women accumulated sufficient wealth/resources to have gained their autonomy and have separated from their spouse.



In the OFDA the proportion of at risk household tends to correspond to the gender distribution, in the case of Mbanga WHHH (Women Head of Household) represent 50% of at risk HHs while only representing 22% of households. MHHH would thus appear to have a significant advantage and are in general better off. Contrary to what we usually find in comparable households younger households head (less than 40 years of age) do not appear to be at a disadvantage in this community, only 56% of non-viable households are headed by younger adults, although they represent 60% of the households.

3. The Project's Footprint at the Village Level

While the original land take was relatively important (137.1 ha), emphasis on land return limited the increase of the project's footprint. New activities that took place in 2010, 2012 and again in 2014 on the territory of this community resulted in an additional encroachment on the villages available land base (112.3 ha or 33% increase of the area affected by the Project). If we do not account for recent land return the project has touched 453.9 ha representing 14.84 % of the village's area. 340.7 ha have since



been returned or 75% of the total land-take. At present the Project's land take stands at 113.2 ha or 11.9 % of the village area.

It must be noted that the initial community compensation (Two class room building built in 2005) was a compensation for the original land take, a number of additional land takes have taken place since then. A supplemental Community Compensation, taking the form of a one class-room school building, was constructed in Mbanga 1 in 2009 and a community hall was constructed in Mbanga 2 in 2010 to compensate for land takes having taken place following the initial compensation. Figure 2 indicates that a significant amount of land has been returned since the latter part of 2011. From this illustration we can conclude that while the Project's net footprint has not grown over the last four years, the project has had a recurring impact on Mbanga.

From table 3 (page 8), we further learn that 67% of the land taken by the project and returned since then, was returned with some form of restriction as to the use to which it can be put. This indicates that even when land has been and will be returned some residual effects may remain.

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

	Total area (hec	tares)	
Land use type	Compensated	Returne	d
Permanent with public access	71.1	6.1	9%
Permanent with no Public access	48.8	5.3	11%
Sub-Total Permanent	119.9	11.4	10%
Temporary returned without restriction	108.3	107.5	99%
Temporary returned with restriction	225.7	221.8	98%
Sub-Total Temporary	334.0	329.3	99%
Grand Total	453.9	340.7	75%

- 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.

4. The Project and the Environment of Mbanga

Groundwater Quality Monitoring

Over the years EEPCI has established a network of community level groundwater quality monitoring stations.

This network is comprised of:

- EEPCI owned and operated groundwater monitoring wells (piezometer) built specifically for the purpose of sampling ground water quality and collecting data on the level of the aquifers.
- © Community owned surface or traditional wells. Communities allow EEPCI to monitor the quality of the water.

For the village of Mbanga the data is collected from three piezometers and one village well. The data presented below illustrates the results for two of these sampling points. The water does not breach the standards for most indicators. The low pH in these wells is a recurring concern and is due to the nature of the soil. These results indicate that the water has not been affected by the activities of the Project (see Table 4 on page 9). In fact, the results indicate that the presence of monitored chemical compounds is often many times lower than the actual applicable norms.

Table 4: Water quality monitoring data for the village of Mbanga

Results	Cond (μS/cm)	PH	Turb. (NTU)	Cl	SO ₄ ²⁻	NO ₃ - N	NO ₂ - N	NH ₃ -N	Fe	Mn	fecal coliforms	Temp
					Pie	zometer K	PZ 07					
Q4-2014	24.7	5.5	11.2	0.2	0	0.8	0.069	0.02	0.012	0.1	0	30.5
Q1-2015	16.6	5.0	10.30	0.3	1	0.2	0.001	0.03	0.037	0	0	31.2
					Tradit	ional surfa	ace well					
Q4-2014	18.6	5.3	7.48	0.2	1	0.9	0.002	0.02	0.005	0.2	TNTC	30.2
Q1-2015	20.5	5.5	10.2	0.3	1	0.2	0.001	0.25	0.061	0.2	TNTC	29.6
Standard		6.5 - 8.5	5	250	250	50	3	1.5	0.3	0.5	OMPN/ 100ml	

NT: Not Tested

N/D: Not detected

TNTC: Too numerous to count

Air Quality Monitoring Data

In accordance with schedule 17 of the Credit Coordination Agreement and Exxon Mobil's Environmental Standards, there is a continuous monitoring of ambient air for nitrogen oxides (NO₂) and monitoring of sulfur dioxides (SO₂) on a quarterly basis.

A sampling location for air monitoring is present at well K604 and K915 located close to Mbanga village.

Ambient air data collected shows the following:

- Average of monthly levels of emission (Oct Nov 2014) for NO₂ varies between 3.07 and 6.26 micro grams per cubic meter of air (ug/m³), or at worst 15 times less than the maximum allowable of 100 ug/m³.
- Average monthly levels of emission (Oct-Nov 2014) for SO₂ at these two sampling site (K604 & K915) varies between 1 and 1.1 micro grams per cubic meter of air (ug/m³), or at worst 72 times less than the maximum allowable of 80 ug/m³.
- PM10 data are not available for this location. All results for other locations where data is available indicate that levels of particulate in the air are below thresholds.

From the above, we can conclude that the project has no significant if any detrimental impact on both the air and water quality of the village of Mbanga.

5. Mitigation of the effect of the Project on Impacted Individuals

As discussed in a previous section, the sensitivity of HHs and their heads to a land take depends to a large extent on other changes which may be taking place within their households. Each household will change over time through the addition or removal of HH members, through traditional land sharing practices which result in either the reduction or expansion of the land base available to the household and finally because of the impacts of the Project through either the land take or land return processes.

However, we must also understand that with the advent of the infill drilling program, a small number of HHs may have a large number of interactions with the Project. At this level it must be noted that interactions do not necessarily mean land loss to the Project. In fact, the majority of interactions that have taken place in the last years take the form of land return for the benefit of these households and of the community. Some specific process improvements are in progress to address the needs of currently at risk or marginal HHs that had frequent interactions with the Project.

In order to ensure that households can withstand the impact of the land takes while awaiting an eventual land return, a number of programs have been establish as per the EMP.

The first of these programs is the cash or in kind compensation. In this case, the land user or declared user is compensated for his land

Table 5: Compensated Individuals and Amounts

Year	Compensation Payment (XAF)	# of Compensated Individuals	Cumul Compensated Individuals*
1998-2000	3,981,975	16	16
2001	25,545,900	37	51
2002	45,789,342	71	95
2003	34,123,300	83	133
2004	31,324,300	75	181
2005	66,731,500	161	279
2006	71,908,000	146	349
2007	158,250,500	332	522
2008	37,017,000	96	538
2009	20,088,750	72	554
2010	88,350,500	130	587
2011	57,580,500	178	624
2012	20,424,500	25	628
2013	0	0	628
2014	86,047,000	203	696
2015	0	0	696
Total	747,163,067	1,625	696
* Compensa	ted individuals a	re only counted	once

effort. This first level of compensation is based on the area lost to the project and takes the form of a monetary compensation.

Since the Project was started, 696 individuals were compensated receiving more than 747 million XAF or about 1.49 million \$US.

A second means of supporting impacted individuals or household is through the Resettlement Program.

As individuals are impacted and real land users are identified through the Synergy Process, a number of them, those that are facing a more difficult situation, are being declared eligible for resettlement through on or off-farm training. Since the first impacted individual was trained in 2002, 75 impacted individuals opted for one of the training options of the resettlement program.

Comparing table 5 and 6 we can note that only 10.8% of impacted individuals have become eligible to resettlement. This situation arises from the fact that:

- Following intervention of the synergy team, it is often noted that compensated individuals are not necessarily real land users who could benefit from the resettlement program.
- Most compensated individuals have an eligibility factor of more than 0.67 and are thus not eligible for resettlement.

On the basis of the village land use survey it was found that, 71 of the 75 previously trained individuals have sufficiently increased their available land base to no longer be considered at risk. The increase in land base resulted from, either:

- The identification of land not previously associated with the household. The VLUS being a more precise process being a more precise method than the declarative surveys previously used.
- They may have received, from the project, some reclaimed land through the land return process.

 They may have received some land through more traditional mechanisms (inheritance, land transfers...)

Table 6: Number of trained individuals by option and year

Year	Improved Agriculture	OFF Farm	Total
2001	0	0	0
2002	3	0	3
2003	0	0	0
2004	5	0	5
2005	11	5	16
2006	8	0	8
2007	9	5	14
2008	11	4	15
2009	0	0	0
2010	8	0	8
2011	3	0	3
2012	3	0	3
2013	0	0	0
2014	0	0	0
Total	61	14	75

N/	lhanaa	Fa	ct
IVI	lbanga	Non Viable	Viable
on	Non Viable	True Eligible	False eligible
Evaluation	Non Viable	4	71
alu	ve-l-l-	False non-Eligible	True non-eligible
Ev	Viable	5	185

6. Mitigation of the effect of the Project on the Community

Mbanga is a fairly significant community that occupies a central position in the OFDA. Over the years it has benefited from a number of initiatives from the project in the form of donations and various levels

of Community Compensation.

In 2005, Mbanga received an initial community compensation, in the form of a two-class-room school building. In 2009 Mbanga 1 became eligible for a Supplemental Community Compensation. Following a series of community meetings they selected a one-class-room school building, thus increasing the number of pupils the school can accommodate.



Mbanga's one-class-room school

Presently Mbanga's school offers a full 6 year primary grade



Mbanga's two-class-room School

program to about 250 registered students. Ngader Amond, village chief of Mbanga II, stated that:

"I thank the project for the completion of numerous initiatives in our community. While the three class rooms offered by the project have made a significant contribution to the education of our children, they are

insufficient to house all of them. The community has added three temporary structures made of straw that house, as can be, the rest of the students. Two of the four community teachers presently teaching at our school come from our community and received their primary education in the village's school. That they return to share what they have learned is an indication of the importance all in the community give to education."

In 2009 Mbanga II also became eligible for a Supplemental Community Compensation; they in turn chose a community building. This building is used on a quarterly basis for public meetings, and as on some occasion been rented to various groups or associations that want to hold a training session or a meeting in the community. The moneys generated by these activities (5000 XFA per day) have been set aside to ensure maintenance when and if it will become necessary.



Mbanga's Community Building

7. Relations with the community and Major Topics of concerns

Public consultation (2013 - 2014)

From 2013 to 2014, 18 public awareness sessions were held. In total 965 participants were present at these various sessions. The major topics discussed during these sessions are:

- Risk of electrocution in OHL
- Theft and act of vandalism in the project facilities
- Malaria Prevention
- Risks of having bath in stagnant waters like borrow pits and push back
- Road security and thief of bolt
- Scholarship
- Security and surveillance of project facilities
- Using of reclaimed sites
- Claims procedure and notification
- Control measures of surface and underground water
- Using of well pad and other facilities as support for harvest

Local job opportunity

- 2013, 12 people were hired by CAIS as grass cutters in Kome5 camp and under OHL.
- 2014, 10 people hired by CAIS for the same activities.
- 2 residents of this village were also hired by Weatherford
- 1 other is working for EEPCI security.

Claims process

With the establishment of a new claims management program/process in early 2011 all of the old claims have been settled.

- 2010: 4 Claims out 7 were found to be valid, resulting in the payment of damage.
- 2011: 35 Claims out 55 were found to be valid, resulting in the payment of damage.
- 2012: 30 Claims out 87were found to be valid, resulting in the payment of damage.
- 2013: 20 Claims out 49were found to be valid, resulting in the payment of damage.
- 2014: 53 Claims out 125 were found to be valid, resulting in the payment of damage.
- 2015: 6 Claims out 37 were found to be valid, resulting in the payment of damage.
- 1 pending claims.

This new process brought about a number of advantages:

Claims are settled rapidly

- Because of the very short period between claims receipt and the investigation there is sufficient evidence on the site to make a decision based on evidence.

 Decisions are thus based on the facts at hand.
- At present claims are settled in real time with a turn around of about four weeks. Oldest claim from Mbanga was solved on April 9th 2015.

Local Job opportunity

- In 2013, 12 people were hired by CAIS as grass cutters in Kome5 camp and under OHL. In 2014, 10 people hired by CAIS for the same activities.
- 2 residents of this village were also hired by Weatherford and
- 1 other is working for EEPCI security.

Donations or other contributions from the Project

- Donation of 298 mango threes and associated equipment to impacted households of community.
- From 2013 to 2014, 12 trucks of waste wood were donated to the community of Mbanga village.

8. Mbanga's Current Needs and Resources

- The amount of land needed by those compensated non-viable families to become economically viable is 11.94 ha.
- Mbanga's resident population has access to 2186.8 ha of arable land within the limits of their village; they also have 129.6 ha of farmland in other villages.
- 75 HH have previously graduated from resettlement training programs.
- 1 At Risk households' heads has entered into the resettlement program in 2015. Note that this
 household may now be viable following receipt of returned land or may recover on a land basis
 before completing the resettlement program. As it had been declared eligible to the
 resettlement program before recovering this land, they will complete their training program as
 committed.
- At present, no employment opportunity exists in this community other than agriculture and commerce. All recent concerned eligible individuals have chosen improved agricultural training (IAT) as a resettlement option.
- In terms of public infrastructure, Mbanga's children presently have access to 3 modern class rooms, 2 provided through the initial Community Compensation and 1 through a supplemental Community Compensation.
- Water is supplied through a number of traditional wells. The only drilled well in the village, established by Geyzer in 2005, has not worked for many years.

9. Recommended Site Specific Actions

The LUMAP calls for the Site Specific Plan to consider all of the options in the CRCP and its implementing procedures described in the Land Management Manual (LMM). The package made available to the community must reflect the fact that it is now considered to be a moderate impact community, having moved down from its previous rating (high impact).

For the individual HH which are currently non-viable, specific interventions will be used:

- 1 project-affected HH is non-viable; it has been offered resettlement options in the class of 2015. First they will participate in Basic Literacy training (BBS) in 1 and 2 Q 2015 and then implement their option (IAT).
- Eligible individuals who received resettlement benefits in the past and are still considered to be at risk were monitored in 2014 and 2015. Those that were found not to have recovered will be targeted for reinforcement. One such case has been identified and has been integrated in the 2015 reinforcement Program.
- If this at-risk individuals do not succeed during the 5 years of monitoring, then the HH will be offered a physical resettlement options or if qualified reinforcement training and/or grant equipment and livestock.

As described in the following table (page 17) the best avenue of supporting this community and assisting it in facing the issues arising from the new land take which took place since 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 the following option offers the best potential to address the needs of the community. They are:

- A one room school to replace one of the temporary straw-buildings that was damaged due to a storm.
- School furniture as the original furniture as now fallen into disrepair, this need could be met alternatively through the donation of some wood that could be used to build benches and tables.
- A flour mill or a complementary facility such as a Shea butter or peanut oil extraction mill. Further reinforcing what activities are presently taking place in the community.
- A water well. This village is fairly large a second well would certainly be a welcomed grant this should be considered if budget allows. At present this community has no suitable water supply system.

As explained earlier and while we can use our influence to give the relevant information so that the villagers make a wise choice, this must not be construed as an attempt to stifle their ability to make a choice. Ultimately the community will make the final choice that best meets its' needs and aspiration.

The following table describes each option and its relevance to the At Risk Households in Mbanga as per the CRCP, LMM procedures:

Site Specific Actions for Mbanga

CRCP/LMM Resettlement Option	Description	Desirable Option (Yes/No)	Comments
Land Reclamation & Return	Reclaim land and return to community & former users; free land targeted to vulnerable HH	Yes	While some limited land return is expected in the immediate future little significant gains are expected in this area.
Physical Relocation Individuals	Physically move at risk household to new location outside of current village	Yes	Possible however, no one in Mbanga has chosen physical resettlement options.
Third Party Compensation	Land User with surplus land may donate to at risk household and receive normal land compensation payment	Yes	This is possible however no one in the OFDA has used this option to date.
Rainy Season Resettlement	Provide field clearing, rainy season hut, well, bicycle, and hand cart for use in distant farm field	Yes	Possible but no requests in this regards at this point.
Off Farm Training	Provide training to earn income in non-agricultural work	No	14 previously trained in off- farm. The rural demand for non-agricultural skills is now saturated.
Improved Agriculture	Provide training to generate more production of subsistence crops and produce cash crops	Yes	Most widely used resettlement option in the OFDA. 61 eligible persons underwent the training program since 2004. One Registered as part of 2015 promotion.
Physical Relocation of Village	Physically relocate entire village to new location in cooperation and in concert with government	No	The traditional mechanisms for voluntary and gradual resettlement are working well in the OFDA.
First time Community	Phase 1: Rural Participatory Assessment of Needs & Resources	Yes	Completed in 2004. Community chose 2-Classroom School
Compensation	Phase 2: Oversee implementation; Create management committee	Yes	Construction and establishment completed in 2005.

CRCP/LMM Resettlement Option	Description	Desirable Option (Yes/No)	Comments
Supplemental Community	Phase 1: MARP	Yes	Complete in 2009. Community chose an equipped one room school
Compensation Mbanga 1	Phase 2: Oversee implementation; create management committee.	Yes	Completed in 2009
Supplemental Community	Phase 1: MARP	Yes	Complete in 2009. Community chose community meeting hall.
Compensation Mbanga 2	Phase 2: Oversee implementation; create management committee	Yes	Completed in 2010
Supplemental	Phase 1: MARP	Yes	Could start in Q3 2015
Compensation	Phase 2: Oversee implementation; create management committee.	Yes	Could be completed latest in September 2016 if budget permits

Site Specific Plan Implementation Timeline

Green = Completed; Blue = Underway; White = To implement

Action	<u>Timeline</u>
EEPCI provides Training and equipment to qualified	2004-2012 (75)
resettlement training program graduates.	
EEPCI provided Reinforcement Training and equipment to	2009-2014 (27)
qualified resettlement training program graduates.	
MARP, Initial Compensation, 2-Classroom School	2005
Construction Initial Community Compensation	2005
Village Land Use Survey	2008
MARP – First Supplemental Compensation, One room School	2009
Construction First Supplemental Community Compensation	2009
MARP – Second Supplemental Compensation, Community	2009
Hall	
Construction Second Supplemental Community	2010
Compensation	
Monitoring process of individuals who previously received	2015 (2)
resettlement. two to be monitored in 2015	
EEPCI provides Reinforcement Training and equipment to	2015 (1)
qualified resettlement training program graduates. (1)	
EEPCI offers Basic Business Skills and Improved Agriculture	2015 (1)
Training to first time resettlement eligible farmers. (1)	
MARP – Supplemental Compensation	Q3-2015
Mbanga choice of Supplemental Community Compensation	July 2015 – July
	2016
Earliest Construction of Supplemental Community	Q4 2015
Compensation Projects	Budget permitting

Annexes

Annex 1: Change in situation of community between 2009 and 2015 (March 31st)

			2009	2015	Trend
Population	Nbr of Residents		1501	1576	5.0%
	Nbr HH		269	265	-1.5%
	Nbr Women HHH		63	57	-9.5%
	At-Risk Women HHH		9	9	0.0%
	Avg. HH size		5.6	5.9	6.6%
	Avg. cordes Land per HH inside and		16.7	17.3	3.6%
	outside village Avg. Resettlement Factor (Based		-	-	
	on all land inside and outside		3.00	2.92	-2.8%
Land Use	Village Area in Hectares		3068	3059	-0.3%
	Project Perm. Land Take + Temp.		184.1	113.2	-38.5%
	No Returned in Hectares	(% village)	6.0%	3.7%	-2.3 points
	Available Land inside the village limit in Hectares		2817	2883.5	2.4%
		(% village)	91.8%	94.3%	2.4 points
	Available Land Density inside the village limit (Hectares/Person)		1.88	1.83	-2.7%
Pop. Density	Density (people/Ha)		0.40	0.52	E 00/
p. 20113ity	Density (people/Ha) Density Increase		0.49	0.52	5.3%
	(Land Take Factor)		-2.3%		
	Density Increase (Population factor)		5.0%		
Land "Owned"	Area cultivated (Field) or owned		619.74	487.7	-21.3%
by Women	(Fallow) by women	%	27.3%	21.1%	-6.2 points
Outsiders Fields	Cultivated (Field) or Owned (Fallow)				
Outsiders rielus	by non-residents inside the village	0/	577	694.1	20.3% 3.6 points
		%	20.5%	24.1%	3.6 points
Villagers Fields	Cultivated Field Farmed by Resident inside the village limit in hectares (% of available land)		1122	1024.4	-8.7%
	Fallery Owned by Decident incide	%	39.8%	35.5%	-4.3 points
	Fallow Owned by Resident inside the village limit in hectares (% of available land)		1078	1162.4	7.8%
		%	38.3%	40.3%	2 points
	Ratio Fallow/Field		0.96	1.13	17.7%
	Cultivated (Field) or Owned (Fallow) outside the village in Hectares		70	129.6	85.2%
	(% of total land of the residents)		3.1	5.6	80.6%
	Total Cultivated (Field) or Owned (Fallow) by the residents in Hectares		2270	2316.4	2.0%
	Available Land Density inside and outside the village limit (Hectares/Person)		1.51	1.47	-2.6%
Jumbar at V		nt l cm d =	d Danislati		
	Fallow Possible Given Curre	iii Land ah	u Population		
ormula : Allan & Brus engthFallow =((Arable	n Land*LengthCultivation/Population)-	NecessaryAre	eaPerPerson*LenghtC	ultivation)/NecessaryA	AreaPerPerson
	Arable Land INSIDE (m2)		22,000,000	21,867,762	
	Arable Land TOTAL (m2)		22,700,000	23,164,247	
	Population		1501	1576	
	Length Cultivation		4	4	
	Necessary Area Per Person				
	(2/3 corde)		3362	3362	
	-				
	Years Fallow Village Only		13.4	12.5	-6.9%

Annex 2: Land available to villages

	Atan	Begada	Bela	Bero	Danmadja	Dildo	Dokaidilti	Kome	Madjo	Maïkeri	Maïnani	Mbanga	Missimadji	Mouarom	Naikam	Ndoheuri	Ngalaba	Poutouguem	OFDA	Bémira	Benguirakol	Moundouli	Moundouli Satellite
Village Area in Hectares	338	3282	2200	5772	480	1890	690	2448	2139	1245	1413	3059	181	1359	1450	811	2122	562	31440	651	1068	1151	2871
Settlement area in Hectares	223.9	55.5	35.0	158.0	34.9	46.0	24.2	80.6	27.4	46.4	67.5	62.3	7.5	22.8	22.8	42.1	97.1	28.2	1082.2	24.7	27.7	44.9	97.3
(% village)	66.3	1.7	1.6	2.7	7.3	2.4	3.5	3.3	1.3	3.7	4.8	2	4.1	1.7	1.6	5.2	4.6	5	3.4	3.8	2.6	3.9	3.4
Project Perm. Land Take + Temp. No Returned in Hectares	23.9	189.6	137.6	502.3	57.3	173.4	53	16.7	101.2	61.8	67.7	113.2	16.7	106.1	17.9	25.7	152	38.6	1854.7	13.1	47.5	44.9	105.5
(% village)	7.1	5.8	6.3	8.7	11.9	9.2	7.7	0.7	4.7	5	4.8	3.7	9.2	7.8	1.2	3.2	7.2	6.9	5.9	2	4.4	3.9	3.7
Available Land inside the village limit in Hectares	90	3037	2027	5111	388	1671	613	2350	1533	1137	1278	2884	157	1230	1409	744	1873	495	28503	613	993	1062	2668
(% village)	26.6	92.5	92.2	88.6	80.8	88.4	88.8	96	71.7	91.3	90.4	94.3	86.7	90.5	97.2	91.6	88.3	88.1	90.7	94.2	93	92.2	92.9
Available Land Density inside the village limit (Hectares/Person)	N/A	2.39	2.25	1.3	0.63	1.2	1.04	2.29	1.77	1.51	1.81	1.83	1.03	2.62	5.05	1.43	1.34	1.74	1.7	0.79	1.49	0.98	1.06
Cultivated (Field) or Owned (Fallow) outside the village in Hectares	830.1	117.5	81.8	794.4	161.1	127.7	124.9	394.6	177.6	86.0	378.5	129.6	139.7	226.1	21.4	48.3	87.5	7.5	3934.3	55.3	73.7	142.5	271.5
(% of total land of the residents)	96.3	4.1	4.8	15	30.5	8	21	19	14.3	8.2	24.6	5.6	49.6	24.8	2.8	9.6	5	2.8	15.1	8.7	10	15.8	11.9
Total Cultivated (Field) or Owned (Fallow) by the residents in Hectares	862.2	2839.4	1698.0	5280.2	527.8	1598.6	593.9	2081.3	1238.1	1049.2	1538.6	2316.4	281.4	910.6	752.2	501.2	1765.4	264.3	26098.8	637.5	734.5	903.3	2275.2
Available Land Density inside and outside the village limit (Hectares/Person)	N/A	2.23	1.88	1.34	0.86	1.15	1.01	2.03	1.43	1.39	2.18	1.47	1.84	1.94	2.7	0.97	1.27	0.93	1.56	0.82	1.1	0.83	0.9
Area Acquired by Project (ha)	49.6	486.5	317.7	1036.2	131.5	271.6	117.3	103.7	236.5	180.0	134.1	453.8	57.6	240.1	45.6	66.6	462.9	90.2	4481.6	36.2	127.0	125.8	289.0

Annex 3: Use of Available Land per Village

	Atan	Begada	Bela	Bero	Danmadja	Dildo	Dokaidilti	Kome	Madjo	Maïkeri	Maïnani	Mbanga	Missimadji	Mouarom	Naikam	Ndoheuri	Ngalaba	Poutouguem	OFDA	Bémira	Benguirakol	Moundouli	Moundouli Satellite
Cultivated (Field) or Owned (Fallow) by non-residents inside the village limit in Hectares (% of available land inside village limit)	7.0	286.6	400.2	509.8	19.3	139.5	138.8	648.1	472.2	177.4	131.7	694.1	2.8	545.6	852.9	283.6	153.6	235.1	5698.3	29.9	324.6	300.1	654.6
%	7.8	9.4	19.7	10	5	8.3	22.7	27.6	30.8	15.6	10.3	24.1	1.8	44.4	60.5	38.1	8.2	47.5	20	4.9	32.7	28.3	2
Cultivated Field Farmed by Resident inside the village limit in hectares (% of available land)	25.4	999.9	832.8	1910.5	275.7	698.1	291.8	547.5	594.4	611.4	453.7	1024.4	84.6	369.7	112.9	375.3	1059.9	186.4	10454.4	392.7	350.5	497.6	1240.8
%	28.2	32.9	41.1	37.4	71.1	41.8	47.6	23.3	38.8	53.8	35.5	35.5	53.8	30.1	8	50.5	56.6	37.6	37	64	35.3	46.9	4
Fallow Owned by Resident inside the village limit in hectares (% of available land)	6.8	1721.9	783.4	2575.2	91.0	772.8	177.2	1139.2	466.2	351.8	706.5	1162.4	57.1	314.8	617.8	77.6	618.0	70.4	11710.1	189.5	310.3	263.1	762.9
%	7.5	56.7	38.6	50.4	23.5	46.3	28.9	48.5	30.4	31	55.3	40.3	36.3	25.6	43.8	10.4	33	14.2	41	30.9	31.2	24.8	3
Ratio Fallow/Field	0.27	1.72	0.94	1.35	0.33	1.11	0.61	2.08	0.78	0.58	1.56	1.13	0.68	0.85	5.47	0.21	0.58	0.38	1.12	0.48	0.89	0.53	0.61
Area cultivated (Field) or owned (Fallow) by women	772.5	414.0	116.6	2037.2	112.8	225.1	44.0	1366.7	167.8	133.6	259.7	487.7	162.7	262.0	81.7	165.3	262.8	21.9	7094.2	66.1	61.3	133.9	261.3
% Area cultivated (Field) or owned (Fallow) by women out of total area "owned" by village residents inside and outside village		14.6	6.9	38.6	21.4	14.1	7.4	65.7	13.6	12.7	16.9	21.1	57.8	28.8	10.9	33.0	14.9	8.3	27.2	10.4	8.3	14.8	11.5

Annex 4: Demography of Villages

	Atan	Begada	Bela	Bero	Danmadja	Dildo	Dokaidilti	Kome	Madjo	Maïkeri	Maïnani	Mbanga	Missimadji	Mouarom	Naikam	Ndoheuri	Ngalaba	Poutouguem	OFDA	Bémira	Benguirakol	Moundouli	Moundouli Satellite
Nbr of Residents	N/A	1273	902	3939	611	1395	588	1027	867	755	707	1576	153	470	279	519	1395	285	16741	777	665	1084	2526
Men	N/A	610	455	1904	307	677	268	517	416	387	373	772	71	234	141	269	700	138	8239	352	329	543	1224
Women	N/A	663	447	1929	304	718	320	510	451	368	334	804	82	236	138	250	695	147	8396	425	336	541	1302
Avg Age in Years	N/A	18.8	18.6	18.1	19.4	19.3	18.3	19.9	18.1	20.2	19.2	19.1	17.2	18.8	18.9	19.8	19.5	19	19.0	18.7	19.1	18.7	18.8
Nbr HH	N/A	250	149	607	105	271	85	200	137	140	120	265	25	84	54	95	242	53	2882	145	106	178	429
Avg. HH size	N/A	5.1	6.1	6.5	5.8	5.1	6.9	5.1	6.3	5.4	5.9	5.9	6.1	5.6	5.2	5.5	5.8	5.4	5.8	5.4	6.3	6.1	5.9
Avg. cordes Land per HH inside and outside village	N/A	22.5	22.6	17.3	10.0	11.7	13.9	20.6	17.9	14.9	25.4	17.3	22.3	21.5	27.6	10.5	14.5	9.9	18.0	8.7	13.7	10.1	10.5
Avg. Resettlement Factor (Based on all land inside and	N/A	4.42	3.71	2.65	1.72	2.29	2.01	4.05	2.85	2.75	4.31	2.94	3.66	3.84	5.31	1.90	2.50	1.83	3.10	1.63	2.19	1.65	1.78
Women HHH	N/A	69	19	90	16	58	10	36	22	23	6	57	7	12	5	14	72	9	525	22	22	24	68
At-Risk HH	N/A	11	11	95	20	41	7	19	24	7	6	14	3	4	0	11	19	6	298	22	11	27	60