Esso Exploration & Production Chad Inc.

Site Specific Plan
Danmadja Village

Land Use Mitigation Action Plan

Prepared by the EMP Department
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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
EMP	the EMP Resettlement Program.
EMP-IS	Environmental Management Plan
ECMG	EMP Information System: manages Land Acquisition,
HH	Socioeconomic and Land return data.
HHH	External Compliance Monitoring Group
HHM	Household
IFC	Head of Household
LCC	Household Member. Include the CdM and all it dependents,
MARP	regardless their age.
NGO	International Finance Corporation
Potential	Local Community Contact
Eligible	Participatory Rural Assessment process
Project	Non Governmental Organization
Footprint	Individual that may be eligible to the EMP Resettlement
True Eligible	Program. Analysis must be completed.
	Total area occupied by the Project at a given time (e.g.
VLUS	Compensated but not returned land)
	Individual eligible to the EMP Resettlement Program. Individual
WBG	whose eligibility established initially through the declarative
WHHH	process was confirmed using the VLUS.
	Village Land Use Survey previously called Cadastral survey.
	Refer to the measurement of every field, fallow & house of
	households.
	World Bank Group
	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 to the restoration of its livelihood.

While an SSP was performed for Danmadja (Kome Canton) in 2009, this village 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. Overall Danmadja is considered to be a highly impacted village, from both a land take factors (% of village area occupied by Project) and social impact basis (% of individuals found to be at risk).

As of March 31st, 2015 these facilities occupied 57.3 ha out of a village land area of about 480 ha, or about 11.9% of the village's area. Although the Project has occupied 131.6 ha of land at one time or another, the rehabilitation and return of unneeded land has made it possible to maintain the footprint at as low a level as possible. At present Danmadja is considered to be a highly impacted village in terms of project land use (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 public market, this community received a fully equipped one room school as supplementary community compensation. This community also received three two-class room buildings as a donation, making 6 class rooms in total).

As such the purpose of Danmadja'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 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 the restoration of the livelihood in this impacted village.

2. Danmadja's population at a glance

With a total area of only 480 ha, Danmadja is a relatively small village, in fact it ranks 23rd out of 29 in terms of area. It has a relatively high population density with 105 households and 611 residents, 7.2% increase since 2009's SSP (see annex 1 for comparison). This is reflected by the fact that this village has the third lowest resettlement eligibility factor at 1.72 cordes per household member (a slight reduction from 1.76 in 2009), only the villages of Bemira and Moundouli have less land available per HHM. The village has been impacted by the development of the Bolobo oil field.

Table 1: Distribution of Households and Individuals by Eligibility Factor

Range	Nbr HH	Nbr Individual
0.000 – 0.667	20 (19.0 %)	136 (22.3 %)
0.668 – 0.999	15 (14.3 %)	92 (15.1 %)
1.000 – 2.499	48 (45.7 %)	308 (50.4 %)
2.5000 - ……..	22 (21.0 %)	75 (12.3 %)
Total	105 (100 %)	611 (100 %)

Danmadja's households are made up on average of 5.8 members reflecting the average of the OFDA's HH (see annex 4)). Some notable facts can nonetheless be outlined:

- 13.5% of households are headed by women. This is lower than what is found in comparable villages. The average number of women headed households in the OFDA is over 18%.
- 261 individuals or 43% of the population have received a form of compensation at one time or another. This is much lower than the situation in the OFDA region where about 70% individuals have received a form of compensation. This probably reflects the fact that the development has been concentrated in a relatively small part of the village affecting only a small number of relatively large land owners.
- 80 % of the area of the village is either actively cultivated or being fallowed. The residents of this village farm a significant amount of land outside its limits; this gives them access to 161.1 ha. This land accounts for 31% of the land available to Danmadja's residents.
- With 22.3 % (136 individuals) of its population which is made up of non-viable project affected individuals, this village is considered to be in the high impact category for the socio-economic criteria.

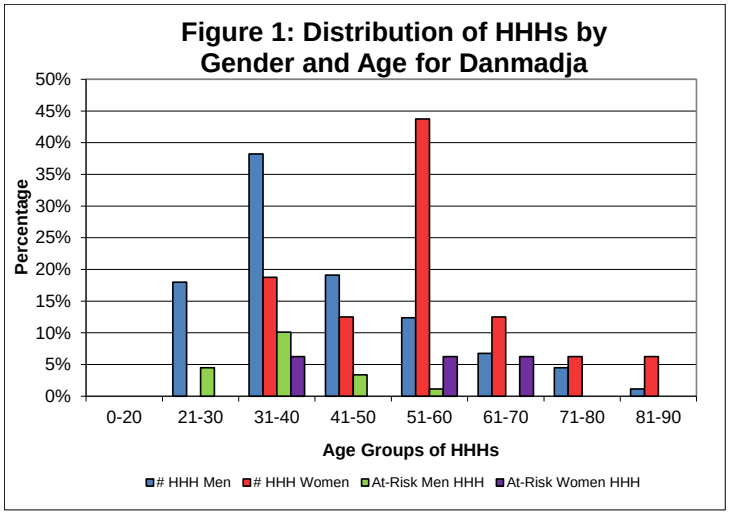
If one considers the fact that 22.3 % (136 individuals) of the population was identified as being non-viable. The analysis conducted showed that Danmadja is in the **high impact category** in terms of both the social criterion and the land take criterion. From table 1 (page 5), we can note that more than 80% of Danmadja's households are viable, in fact the non-viable category is made-up of 20 households (19 households non-viable project affected).

Danmadja		Village Land Use Survey	
		Non Viable	Viable
Declarative	Non Viable	True Positive	False Positive
		12	36
	Viable	False Negative	True Negative
		7	50

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:

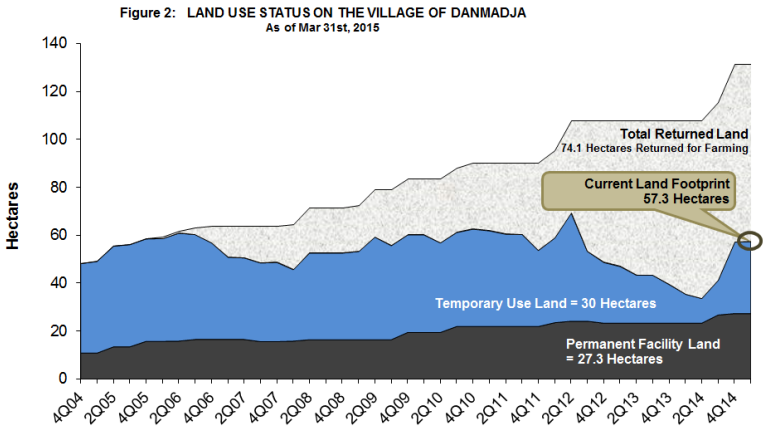
- Identify the most vulnerable groups (Elderly villagers, youngsters and women).
- Evaluate whether any of the groups are facing an inappropriate portion of the burden.

While most households are headed by men (84.7% of cases), women are far more present as household heads when they are older (starting in their fifties) (Figure 1). Women are the household head in 33% of cases where the HHH is more than 50 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.



As is normally the case in most communities in the OFDA, the proportion of at risk household tends to correspond to the gender distribution, in Danmadja WHHH (Women Head of Household) represent 15% of at risk HHs while representing 15.3% of households. MHHH would thus appear to have no advantage and are in general no better off. As is the case in most communities we find that non-viable or at-risk households are mainly headed by young adults (less than 40 years of age), 70% of non-viable households are headed by younger adults, although they represent only 50% of the households.

3. The Project's Footprint at the Village Level



While the original land take was relatively important (about 48 ha), emphasis on land return limited the increase of the project's footprint. New activities took place on the territory of this community in 2011-2012 and again in late 2014, resulting on both occasions in an increase in the project's footprint (refer to the two spikes in the blues portion of figure 2). If we do not account for recent land return the project has touched 131.40 ha representing 27.38 % of the village's area. 74.1 ha have since been returned or 46% of the total land-take. At present the Project's land take stands at 57.3 ha or 11.9 % of the village area.

It must be noted that the initial community compensation (public market 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 was put in place to mitigate the effects of land the land take that took place between 2005 and 2009. It took the form of a one class-room school building.

Figure 2 (page 7) indicates that a significant amount of land has been returned during the latter part of 2011 and the first half of 2012 and again in 2014. From this illustration we can conclude that, while it has fluctuated to some extent, the Project's net footprint has not grown over the last four years. Overall we can conclude that the Project has had a recurring impact on Danmadja.

From table 3 (page 8), we further learn that 68% 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 (hectares)		
Land use type	Compensated	Returned	
Permanent with public access	14.8	1.2	8 %
Permanent with no Public access	14.2	0.6	4 %
Sub-Total Permanent	**29.1**	**1.8**	**6 %**
Temporary returned without restriction	45.7	21.7	47 %
Temporary returned with restriction	56.8	50.8	89 %
Sub-Total Temporary	**102.5**	**72.5**	**71 %**
Grand Total	**131.6**	**74.3**	**56 %**

- 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 Danmadja

Groundwater Quality Monitoring

Over 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 Danmadja the data is collected from two village wells respectively identified as Danmadja 1 and 5. The water does not breach the standards for most indicators. The high iron content in Danmadja 5's well 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 Danmadja

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**
Danmadja 1												
Q4-2014	26.5	5.4	334	0.3	1	0.2	0.152	0.09	0.19	0.2	TNTC	28.8
Q1-2015	20.6	5.8	3.26	0.4	1	0.6	0.007	0.1	0.04	0.1	TNTC	28.2
Danmadja 5												
Q4-2014	26.3	5.2	14.1	0.2	1	1.1	0.003	0.21	0.01	0.2	TNTC	28.9
Q1-2015	28.9	5.7	9.64	0.3	1	0.4	0.027	0.45	0.71	0.1	TNTC	28
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 (NO_2) and monitoring of sulfur dioxides (SO_2) on a quarterly basis.

A sampling location for air monitoring is present at well K604 located a few kilometers from Danmadja village.

Ambient air data collected shows the following:

- Average of monthly levels of emission (Q1-2015) for NO_2 varies between 4.04 and 5.2 micro grams per cubic meter of air (ug/m^3), or at worst 19 times less than the maximum allowable of 100 ug/m^3.
- Average monthly levels of emission (Q1-2015) for SO_2at this site (K604) varies between 0.95 and 29.95 micro grams per cubic meter of air (ug/m^3), or at worst 2.6 times less than the maximum allowable of 80 ug/m^3. It must be noted that the results for February are much higher than historical trends. It is believed that they may have been affected by brush fires.
- PM10 data are not available for this location. All results for other locations where data is available indicated 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 Danmadja.

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

As discussed previously, 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 had 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 effort on the land. This first level of compensation is based on the area lost to the project and takes the form of a monetary compensation.

Table 5: Compensated Individuals and Amounts

Year	Compensation Payment (XAF)	# of Compensated Individuals	Cumul Compensated Individuals*
1998-2000	601,075	3	3
2001	3,165,200	18	21
2002	9,965,450	38	55
2003	7,729,500	21	63
2004	32,702,000	79	103
2005	16,397,500	60	118
2006	15,360,000	63	144
2007	2,897,000	17	150
2008	25,761,000	69	174
2009	20,741,500	59	187
2010	22,069,000	49	204
2011	6,069,500	26	207
2012	20,977,500	67	223
2013	1,694,500	10	224
2014	40,639,000	101	261
2015	101,000	1	261
Total	**226,600,725**	**681**	**261**
*** Compensated individuals are only counted once**			

Since the Project was started, 261 individuals were compensated receiving more than 226 million XAF or about 1.13 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 2004, 48 impacted individuals opted for one of the training options of the resettlement program.

Table 6: Number of trained individuals by option and year

Year	Improved Agriculture	OFF Farm	Total
2001	0	0	0
2002	0	0	0
2003	0	0	0
2004	1	0	1
2005	8	0	8
2006	1	2	3
2007	0	7	7
2008	5	13	18
2009	9	0	9
2010	0	0	0
2011	1	0	1
2012	1	0	1
2013	0	0	0
2014	0	0	0
Total	**26**	**22**	**48**

Comparing table 5 and 6 we can note that only 18.4% of impacted individuals have become eligible to resettlement. This situation arises from the fact that:

- Following intervention of 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 cord of land and are thus not eligible for resettlement.

On the basis of the village land use survey it was found that, 12 of the 42previously 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 (Village Land Use Survey) 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…)

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

Danmadja 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.

Danmadja Market

In 2005, Danmadja received an initial community compensation, in the form of a market. Unfortunately, it was actively used only shortly as merchants were discouraged by the floods that frequently isolate Danmadja during the rainy season and the competition from Kome Atan.

Established in 1994 the village of Kome Atan was spontaneously created in the early part of the development of the Bolobo oil field. It has since grown significantly, becoming a regional center with many shops and a daily market. In 2014 it became a town. Over the years many merchants have chosen to favor Atan over Danmadja and other local communities. Although the market infrastructure established in Danmadja has not been used for many years it is still in pristine conditions.


Village Chief Danmadja

Djimrabey Emmanuel, village chief of Danmadja since 2006 "I thank the project for the completion of numerous initiatives in our community, among them the construction of three two-classroom buildings in the village as a donation, which enabled us to have a full cycle primary school. The School was founded in 1987, long before the Project. It's one of the oldest schools in the area and is recognized throughout the region for the excellence of its teachers and educational program. This donation allowed it to grow and offer a better learning environment to its pupil."

In 2008, a strong wind with heavy rain blew off the roofs of all three buildings, making the six classes unusable. Villagers, through their effort, managed to recover one building with two classes and the other two buildings fell to ruin, deteriorated because of lack of means.


Directeur ecole de Danmadja

In 2009, following the supplemental community compensation, villagers wished to expand the school because of rising number of pupils coming from neighboring villages. Esso built a new building of one classroom. This later building was offered to the community as per the Supplementary Community Compensation Program following the establishment of a series of new wells resulting from the infill drilling process.

Director of the school, Mr. Kalnonet Patalet Jerome "The construction of these schools by Esso contributed to the education of our children. One of our first pupils is now at university in Ndjamena. It is a pride for us. Today the school has 215 students. To encourage parents to enroll their children, registration has been reduced to 1,500 XAF francs instead of 2,000 XAF. Our priority now is to supply the school with a water well and to repair damaged building".

7. Relations with the community and Major Topics of concerns

Public Consultation

From 2013 to 2014, 18 public awareness sessions were held. In total 1,566 participants were present at these various sessions. The major concerns raised by community during these sessions dealt with:

- Security issue with the presence of gendarmes
- Local employment for young people
- ESSO should hire local population to surveillance of project facilities
- Rehabilitate school roofs
- Drilling a water well for the school
- SEWAC caravan (malaria campaign without mosquito nets distribution)

Claims process

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

- 2010: 3 Claims out 10 were found to be valid, resulting in the payment of damage.
- 2011: only 1 claim received and found to be valid, resulting in the payment of damage.
- 2012: 2 Claims received, both were investigated and no action taken.
- 2013: No claims received.
- 2014: 2 Claims received, both were investigated and no action taken.
- 2015: 1 Claim received, investigated and no action taken.

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 evidence at hand.
- At present claims are settled in real time with a turn around of about four weeks. Oldest claim from Danmadja was solved in two weeks ago.

Local Job opportunity

- In 2012, 3 women hired by CAIS as grass cutters and 2 in 2013. A resident of this village was also hired by CIS

Donations or other contributions from the Project

- A water well equipped with foot pumps in order to mitigate the shortage of drinking water.
- Three two room school buildings, allowing for a full primary grade.

8. Danmadja's Current Needs and Resources

- The amount of land needed by those compensated non-viable families to become economically viable is 16.03 ha.
- Danmadja's resident population has access to 366.7 ha of arable land within the limits of their village; they also have 161.1 ha of farmland in other villages.
- 48 HH have previously graduated from resettlement training programs.
- 2 At Risk households' heads will enter into the resettlement program in 2015. Note that some of these households may no longer be non-viable following receipt of returned land or may recover on a land basis before entering the resettlement program. As they 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 concerned eligible individuals have chosen improved agricultural training (IAT) as a resettlement option.
- In terms of public infrastructure, Danmadja's children presently have access to 3 modern class rooms, 2 provided through donations and 1 through community compensation.
- Water is supplied through a drilled well. This water well appears to be managed in a sustainable fashion.

9. Recommended Site Specific Actions

The LUMAP calls for the Site Specific Plan to consider all of the options in the Chad Resettlement and Compensation Plan (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:

- 2 project-affected HH are non-viable; they have 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. Those that were found not to have recovered will be targeted for reinforcement. Two such cases have been identified.
- If these 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 (table 7, page 18), 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 later part of 2010 and in 2011 and in 2014 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 the building that was damaged due to a storm.
- 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 close to the school. This village being fairly large a second well would certainly be a welcomed grant.

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 Danmadja as per the CRCP, LMM procedures:

Table 7: Site Specific Actions for Danmadja

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 Danmadja 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	The rural demand for non-agricultural skills is 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. 26 eligible persons underwent the training program since 2004. 2 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 Compensation	Phase 1: Rural Participatory Assessment of Needs & Resources	Yes	Completed in 2004. Community chose public Market
	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 Compensation	Phase 1: MARP	Yes	Complete in 2009. Community chose an equipped one room school
	Phase 2: Oversee implementation; create management committee.	Yes	Completed in 2009
Supplemental Community Compensation	**Phase 1: MARP**	**Yes**	**Could start in Q3 2015**
	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	Timeline
EEPCI provides Training and equipment to qualified resettlement training program graduates.	2004-2012 (48)
EEPCI provided Reinforcement Training and equipment to qualified resettlement training program graduates.	2009-2014 (12)
MARP, Initial Compensation, Public Market	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
Monitoring process of individuals who previously received resettlement. None planned for 2015.	February 2014
EEPCI provides Reinforcement Training and equipment to qualified resettlement training program graduates. (1)	Q2-2015 (1)
EEPCI offers Basic Business Skills and Improved Agriculture Training to first time resettlement eligible farmers. (2)	Jan 2015 (2)
MARP – Supplemental Compensation	July 2015
Danmadja choice of Supplemental Community Compensation	July 2015 – July 2016
Earliest Construction of Supplemental Community Compensation Projects	Q4 2015 Budget permitting

Annexes

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

			2009	2015	Trend
Population	Nbr of Residents		570	611	7.2%
	Nbr HH		101	105	4.0%
	Nbr Women HHH		14	16	14.3%
	At-Risk Women HHH		2	3	50.0%
	Avg. HH size		5.6	5.8	3.1%
	Avg. cordes Land per HH inside and outside village		10.0	10.0	0.1%
	Avg. Resettlement Factor (Based on all land inside and outside		1.76	1.71	-2.9%
Land Use	Village Area in Hectares		480	480	0.0%
	Project Perm. Land Take + Temp. No Returned in Hectares		53.2	57.3	7.7%
		(% village)	11.1%	11.9%	0.9 points
	Available Land inside the village limit in Hectares		419	387.8	-7.4%
		(% village)	87.3%	80.8%	-6.5 points
	Available Land Density inside the village limit (Hectares/Person)		0.74	0.63	-14.9%
Pop. Density	Density (people/Ha)		1.19	1.27	7.2%
	Density Increase (Land Take Factor)		8.0%		
	Density Increase (Population factor)		7.2%		
Land "Owned" by Women	Area cultivated (Field) or owned (Fallow) by women		76.05	112.8	48.3%
		%	15.0%	21.4%	6.4 points
Outsiders Fields	Cultivated (Field) or Owned (Fallow) by non-residents inside the village		17	19.3	13.8%
		%	4.1%	5.0%	0.9 points
Villagers Fields	Cultivated Field Farmed by Resident inside the village limit in hectares (% of available land)		241	275.7	14.4%
		%	57.5%	71.1%	13.6 points
	Fallow Owned by Resident inside the village limit in hectares (% of available land)		124	91.0	-26.6%
		%	29.6%	23.5%	-6.1 points
	Ratio Fallow/Field		0.51	0.33	-35.3%
	Cultivated (Field) or Owned (Fallow) outside the village in Hectares		122	161.1	32.0%
	(% of total land of the residents)		24.1	30.5	26.6%
	Total Cultivated (Field) or Owned (Fallow) by the residents in Hectares		507	527.8	4.1%
	Available Land Density inside and outside the village limit (Hectares/Person)		0.89	0.86	-3.4%

Number of Years Fallow Possible Given Current Land and Population

Formula : Allan & Brush
LengthFallow =((ArableLand*LengthCultivation/Population) - NecessaryAreaPerPerson*LenghtCultivation)/NecessaryAreaPerPerson

	Arable Land INSIDE (m2)		3,650,000	3,666,995	
	Arable Land TOTAL (m2)		5,070,000	5,278,000	
	Population		570	611	
	Length Cultivation		4	4	
	Necessary Area Per Person (2/3 corde)		3362	3362	
	Years Fallow Village Only		3.6	3.1	-13.2%
	Years Fallow Village + Outside		6.6	6.3	-4.6%

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	89.6	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