

## **Site Specific Plan Poutouguem Village March 2011**

### **Context of the Land Use Situation**

Since construction began in 2000, the Chad Cameroon Oil Export Project (the Project) has compensated nearly 12,900 individual land users for almost 7,100 Hectares (Ha) of land in 375 villages along the entire length of the Project from Kome, Chad to Kribi, Cameroon.

Compensation in the Oil Field Development Area (OFDA) has been paid for nearly 3,800 Ha of land involving about 4,400 individual land users. The Project has utilized 3% of the 100,000 ha of land in the OFDA. When all of the land taken for construction and not needed for permanent facilities has been returned the percentage still in use by the Project will be just over 1% of the total OFDA area.

All land users and villages have been compensated according to the Environmental Management Plan (EMP) that was approved prior to Project construction. The Project's compliance with the EMP compensation requirements has been documented in the Project Update reports and by the World Bank's External Compliance Monitoring Group (ECMG) and the International Advisor Group (through 2009).

A set of principles set out in the EMP have guided the land acquisition and compensation effort, including:

- A transparent compensation procedure with, at minimum, four information and consultation steps so that all village residents can see that no other resident is gaining an advantage.
- Sensitivity to cultural practices and local legal requirements. Most land is controlled by the village and allocated by the local chief. In Chad, nearly all land is owned by the state. So farmers, rather than owning land as in Europe or North America, have only the use of the land for crops. The Project therefore does not buy land but compensates for farmer labor and lost crop opportunities as provided in the EMP.
- Recording all compensation transactions. Each payment is archived with a photo of the transaction and the recipient's thumb print.
- Avoiding resettlement of households through project redesign and by offering two resettlement alternatives - Improved Agriculture Training and Off-Farm Skills Training.

These principles have been developed into a set of guidelines and procedures that govern how compensation, resettlement, and other mitigations are applied. These guidelines are contained in an in-house Land Management Manual (LMM), which serves as a Desk Guide to implementation. This guide is periodically updated to include improvements and modifications (last revision in February 2011).

### **Evolution of the OFDA Land Use Situation**

As the three original Oil Field Development Area (OFDA) fields were being developed, and results began coming in from the completed wells, it became clear that more rather than fewer of the projected wells would be needed in order to develop Chad Doba Basin oil. This continued drilling, and the infrastructure to collect the oil and to supply electricity to the wells, was consuming more land than originally anticipated on the basis of the low-end estimate. The project's efforts to address this land use situation began in mid-2005, when it declared a Level II Noncompliance Situation (NCS) regarding the pace of returning to communities temporary use land that had been reclaimed in accordance with the Environmental Management Plan (EMP).

By the end of 2006, with the help and input from the World Bank Group (WBG), the project had developed initial mitigation actions and had begun implementing them. An action plan was agreed in 2007, which included among other actions the development of Site Specific Plans to address particular problems facing certain villages that had surrendered substantial areas to project use and for which land return was lagging.

### **Purpose of a Site Specific Plan**

The purpose of a Site Specific Plan (SSP) for each of these villages is to develop measures that mitigate the precise problems the village's population is encountering within their own village area. First, the study must determine the problems specific to that village. Then the mitigations proposed must be feasible, using the resources that are available to the restricted vicinity and maximizing the knowledge and capabilities of its inhabitants. The plan consolidates all applicable livelihood restoration tactics into a strategy that will lead to livelihood restoration in this heavily affected village.

Although the absolute foot print of the Project (Permanent Land Take and Temporary Land Take Not Returned) has not grown to any significant extent since December 2005, the slow return of temporary use land plus the increase in compensated land has highly impacted certain villages located in the OFDA. These impacts include:

- Reduced pool of land available for agricultural use
- Access to bush resources
- Depletion of bush resources
- Shortened fallow availability
- The Land Use Mitigation Action Plan (LUMAP) Site Specific Plan for each highly impacted village in the OFDA develops mitigation measures by clearly defining the village's situation.

### **Focus of a Site Specific Plan**

Within the OFDA, land acquisition for production facilities has affected 47 official villages according to 2008 administrative categorization -- 32 if the geographic rather than administrative units are counted -- 61 if all the unofficial quarters are included

For purposes of a SSP, it is the **geographic unit** that will be considered since the aim is to remediate impacts on the geographical area of the village and its inhabitants.

Out of the 32 geographical villages in the OFDA, 12 were categorized as more affected by ongoing project land needs than others. Poutouguem was classified as High according to land acquisition and social impact and for this reason a SSP has been developed. Only two wells were drilled in the Maikeri oilfield near Poutouguem in 2010. Two additional wells are being considered in 2011. Therefore, the land take in the Poutouguem area is not increasing significantly.

In 1H2010 a Village Land Use Survey was completed and the data and analysis became available. Since a village is classed by its worst indicator, the village is categorized as high impact.

### **Purpose of the Poutouguem Site Specific Plan**

The purpose of the Poutouguem SSP is to provide the village as a whole with sufficient livelihood to offset its land losses to the Project. The SSP additionally evaluates the land-holding situation of all the HHs in the village to judge whether the village as a whole is at risk and, if so, what actions would be efficacious. The plan also looks at the more affected people in the village to appraise their situation and take remedial action if needed. For at-risk HHs this can be done by increasing revenues from Off-Farm training or Improved Agriculture, through providing additional land to the village, particularly to those below the viability threshold, or other means that can be employed through a precise identification of the individual HHs' and the village's condition. The mitigations proposed must be feasible, using the resources that are available to the restricted vicinity and maximizing the knowledge and capabilities of its inhabitants. The plan consolidates all applicable livelihood restoration tactics into a strategy that will lead to livelihood restoration in this heavily affected village.

### **Elements of the Poutouguem Site Specific Plan**

- Land use status of the community prior to the Project
  - Nature and quantity of resources available before the Project
- Resources currently available
  - The inhabitants already have the knowledge and habits to exploit these resources
- Socioeconomic survey data and analysis to obtain current status of the village:
  - Community inhabitants
  - Which village and individual resources have been impacted by the Project
  - Households in difficulty
- Ways in which the village has been unable to deal with Project impact
  - Define the livelihood difficulties found at the specific site
  - Identification of impacts unforeseen in the EMP and CRCP

- Will new additional measures be needed to reverse Project impact?
- Review of possible actions for Site Specific Plans providing for village level livelihood enhancement
- Actions so that all Project-affected agriculturally non-viable HHs have maintained or improved their livelihood
- List of actions selected in priority order
  - Quantify resources needed to reverse Project impact
  - Identify units/entities responsible for execution
- Implementation plan for each listed action, with time-bound actions and dedicated budgets

### **Land Use Status Prior to the Project**

#### ***The OFDA***

- The population of the 10 most affected villages in the OFDA doubled between 1993 and 2006.
- The average population growth was 124% and the modal increase in population ranged from 90-96% in these villages
- Compared with natural population growth the Project's impact on land (bush, fallow, settlement, fields) was very limited.
- Project land take caused only a 4% increase in population density per ha compared to the increase caused by natural population growth.
- In the OFDA the population growth reduced the amount of bush available to people by one half between 1993 and 2006. Only 8% of the decrease in bush area can be attributed to Project land take.

### **Poutouguem's Land and Population, past and present.**

Lying within the Miandoum canton on the eastern boundary formed by the Nya River (a tributary of the Logone River and often referred to as the Logone Oriental or East Logone River), Poutouguem village is bordered by the village of Maikeri to its northwest and by Morkete and Mainbaye villages to its north. On the southwest lies the village of Bedara. On the opposite bank of the Nya River and slightly to the north lies the village of Koutou Nya.

- Poutouguem falls eighth from the top of the 12 most impacted villages in the OFDA in amount of bush/fallow, grouped with Bela and Mouarom.
- Poutouguem was created in 1998 by few numbers of villagers coming from Miandoum. Poutouguem's population in 2000 was 191. The number of residents counted in 2010 Village Survey is 306.

The following is based on the manual interpretation of a satellite image dating from November 2003. At that time, the approximate village limit of Poutouguem gave an area of 545 ha, categorized as follows:

- 179 ha of bush
- 353 ha of cultivated and fallow land
- Settlement area of 13 ha

By topographic measurement of Poutougum's land, its total available land area in June 2010 is 515 ha or 92% of its pre-project area (562 ha):

- During the Village Survey, the village declared 0 ha of Bush. (Bush that was estimated on the 2003 satellite image is, according to the farmers claiming the land, long-term fallow).
- The history of land take and land return plus the impact of In Fill drilling is as follows:
  - In 1Q 2010 Poutougum had lost 8.4% of its pre-project arable land.
  - In 3Q 2010 – pre-project arable land lost to the project decreased to 7.8%.
  - In 4Q 2010 – pre-project arable land lost to the project increased to 8.8%.

The Project land take has increased the population density by 10.2% from the beginning of the project to today, the population increase accounts for 10.9% and the settlement expansion for 2.8%.

Poutougum had 0.36 people/ha pre-project and now has 0.54. This increase in density is aligned with the 60% population growth in Poutougum since 2003.

Poutougum's population density falls at the lower end surveyed villages in the OFDA:

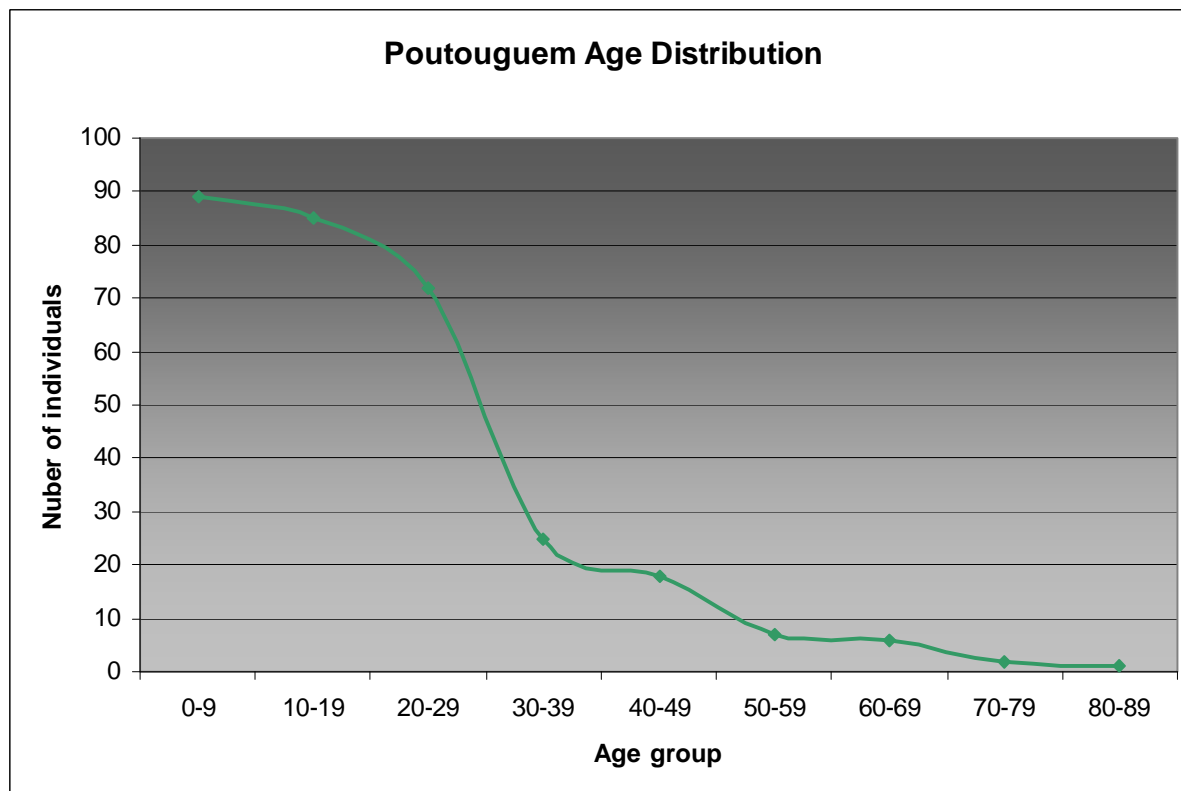
Village	1993 pop density	2000 pop density/ha	2007 pop density/ha	Village Survey Data
Bégada	0.18	0.29	0.38	0.43
Béla	0.15	0.27	0.47	0.42
Béro	0.25	0.92	0.40	0.77
Danmadjia	0.43	0.84	1.72	1.48
Dildo	0.39	0.70	0.79	0.81
Dokaïdilti	0.29	0.52	1.41	0.92
Madjo	0.16	0.53	0.24	0.43
Mbanga	0.18	0.44	0.54	0.53
Mouarom	0.18	0.19	0.38	0.38
Ngalaba	0.39	0.64	0.88	0.75
Poutougum	-	0.36	0.42	0.54
Average	0.26	0.52	0.69	0.68

## Poutougum's Current Demographics

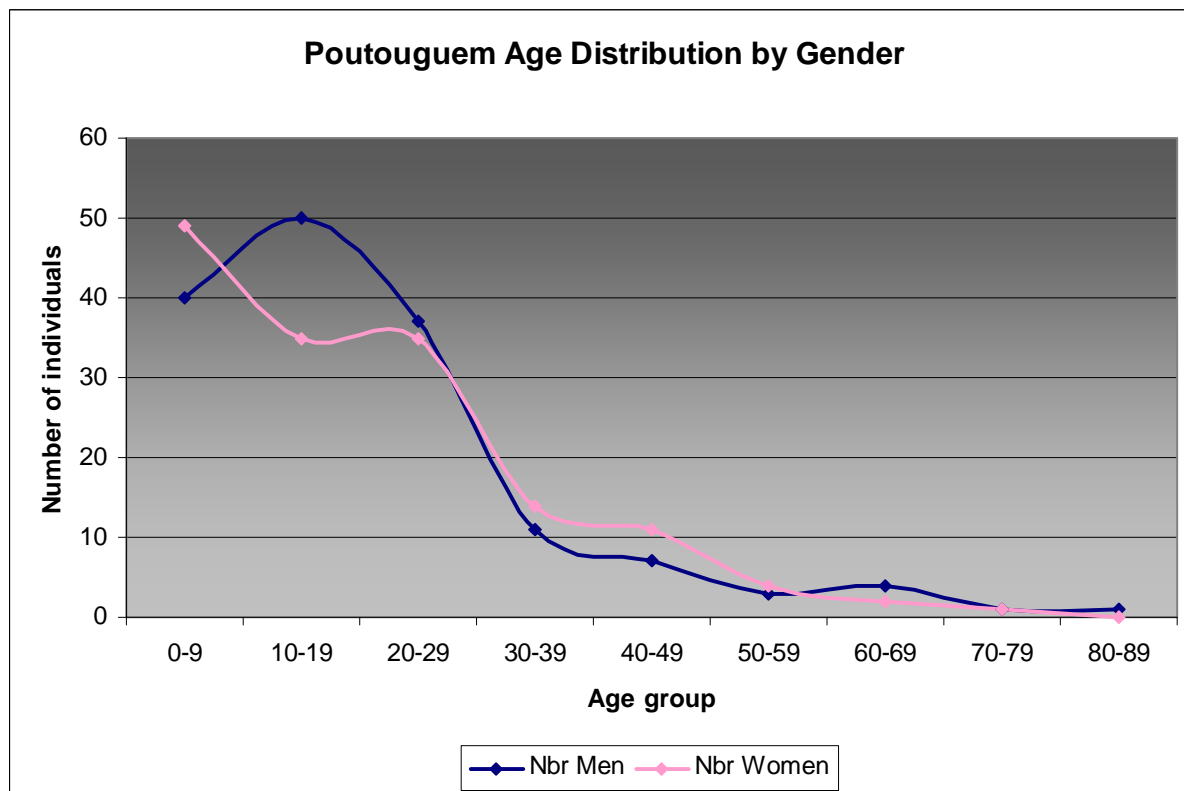
Today, looking at Poutouguem's households and using topographic measurements of land holdings rather than individuals' reported dependents and holdings:

- Poutouguem has 61 households (HH) and 306 inhabitants.
- 16% of HH are headed by women.
- Poutouguem's population is very young; 33% of the population is under 10 years of age.
- 89% of population is under 40 years of age
- 80% of population is under 30 years of age

Age	Number individuals	% of pop
0-9	89	29.1%
10-19	85	27.8%
20-29	72	23.5%
30-39	25	8.2%
40-49	18	5.9%
50-59	7	2.3%
60-69	6	1.9%
70-79	2	0.7%
80-89	1	0.3%
N/A	1	0.3%

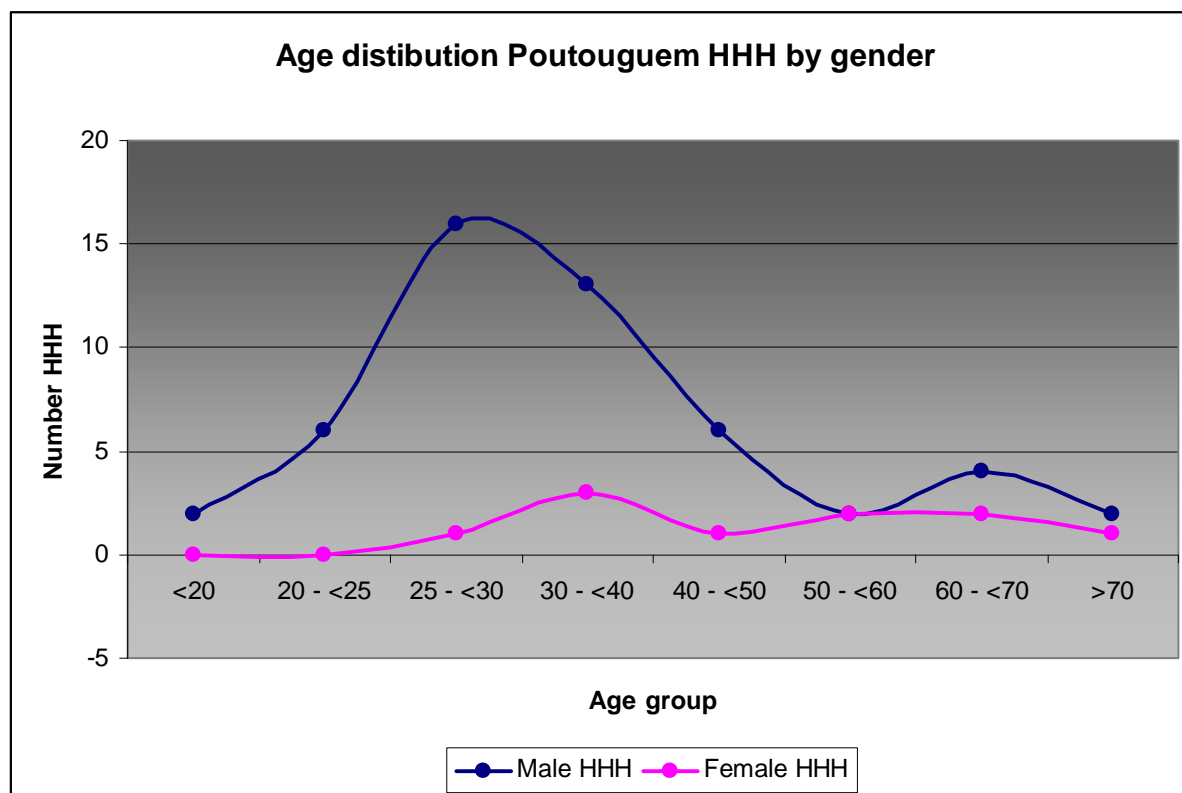


- Only 40% of the population is of the age considered mature enough to head a household. Another 1% >70 years of age, although they may be an independent HH, they depend on their children for most of their subsistence.



Like Maikeri village, Poutouguem's male to female proportion evens out at around 25 years of age. The gender proportions track each other as their ages increase.



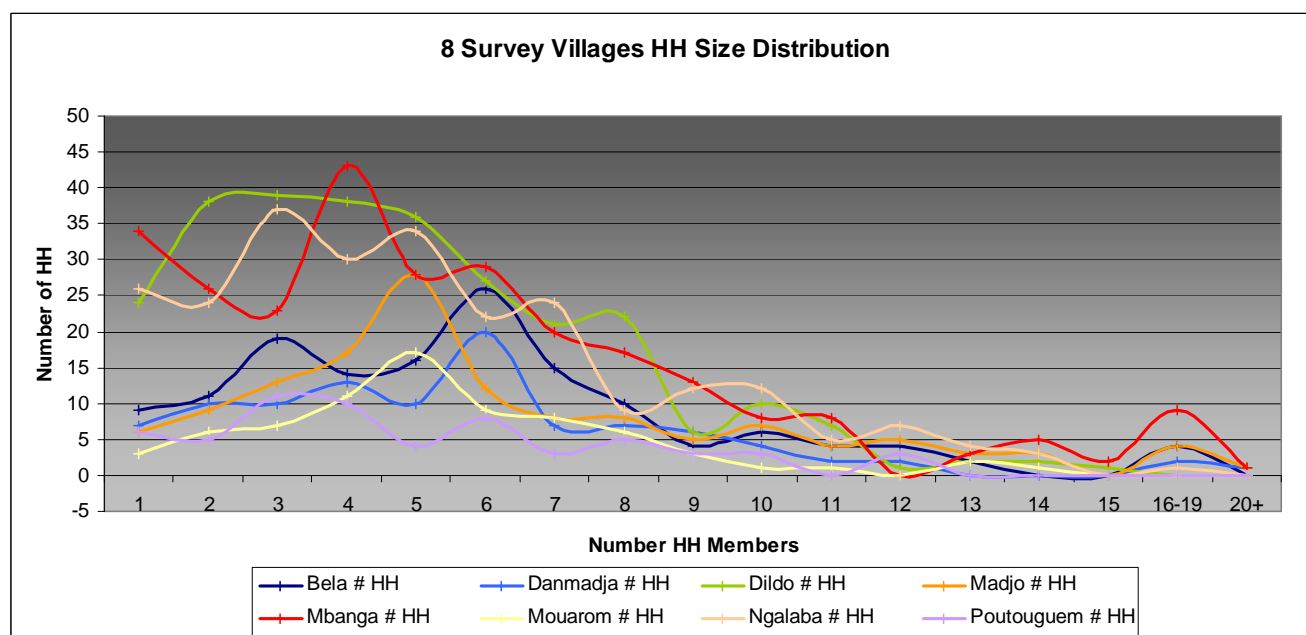


- Although there is a low number of Female HHH (FHHH) in Poutouguem, 19% of the land in Poutouguem is cultivated or owned by women.

### HH Size

- While the average HH size in the area is about 5.6, in Poutouguem average is 5.1.
- The **mode** of HH composition at Poutouguem is 3 HHM.
- The overall distribution of Poutouguem's households by size, in comparison with other surveyed villages, is:

# HHM	Bela # HH	Bero # HH	Danmadja # HH	Dildo # HH	Madjo # HH	Mbanga # HH	Mouarom # HH	Ngalaba # HH	Poutouguem # HH
1	9	21	7	24	6	34	3	26	6
2	11	45	10	38	9	26	6	24	5
3	19	59	10	39	13	23	7	37	11
4	14	81	13	38	17	43	11	30	10
5	16	88	10	36	28	28	17	34	4
6	26	72	20	27	12	29	9	22	8
7	15	61	7	21	8	20	8	24	3
8	10	37	7	22	8	17	6	9	5
9	4	42	6	6	5	13	3	12	3
10	6	23	4	10	7	8	1	12	3
11	4	27	2	7	4	8	1	5	0
12	4	16	2	1	5	0	0	7	3
13	2	16	0	2	3	3	2	4	0
14	0	8	0	2	3	5	1	3	0
15	0	3	0	1	0	2	0	0	0
16-19	4	11	2	0	4	9	0	1	0
20+	0	1	1	0	1	1	0	0	0



### Vulnerability or Non-Viable Agricultural HHs

#### **Age**

- The age of the HHH plays a role in the HH's vulnerability; HHH at certain ages are more likely to have insufficient land for their HHM. But it must be remembered that the **HH land holding of 2/3 corde per HHM covers both land in cultivation and in fallow**. A HH may have under 2/3 corde per HHM but put most of that land in cultivation so that it currently has plenty to eat, while the fallow that will be needed in a few years lies in the family land pool, held by an older relative.
- Hence there is a large number of vulnerable HHHs in their 20s, usually males, because women at this age are newly married and dependent on their husbands, mortality, etc. not having yet had much impact:

Age HHH	# All HHH	# Vulnerable HHH	# Male Vulnerable HHH	# Female Vulnerable HHH
less than 20	1	0	0	0
20 - 29	24	3	3	0
30 - 39	14	2	2	0
40 - 49	8	2	1	1
50 - 59	5	2	1	1
60 - 69	6	0	0	0
More than 70	3	0	0	0

- As is typical of other villages, the number of vulnerable female HHH increases with age.

### Size

- The average HH size of all Poutouguem's vulnerable HHs is 7.1 like large HH found among vulnerable families in most other villages. But the younger HHH have larger HH (7 to 9 members) than the older ones (only 4 to 5 members), putting a burden on the younger HHH.
- The total number of individuals in the vulnerable HH = 64, of which 57 belong to Project-affected HH.

Age HHH	Avg HH Size	Avg At-Risk HH Size
20 <	3	-
21 - 30	4.3	7.7
31 - 40	5.5	8.0
41 - 50	7.9	5.5
51 - 60	6.6	7
61 - 70	4.3	-
> 71	2.0	-

### Land Holdings

- Looking at the number of individuals within HHs shows the percent of the entire population, not just of HHs, that finds itself at a particular economic level:
  - 21% of Poutouguem's population lacks sufficient agricultural land, though there may be other HH sources of revenue.
  - Another 20% live at the Margin of insufficient land for agricultural viability
  - The remaining 59% of the population find themselves in good circumstances:

Range of Land Holdings per Dep.	Number of HHs	Number of Individuals	% HH	% Individual
0.001 - 0.667	9	64	15	21
0.668 - 0.999	12	62	20	20
1.000 - 2.499	26	147	42	47
2.500 - ...	14	38	23	12
Total	61	311	100	100

### Description of Project Impact

The 2003 satellite imagery indicates that there was a significant amount of bush or long term fallow land in three major areas within Poutouguem's borders. The 2010 satellite imagery shows less bush and considerable land in cultivation around and near the Project's facilities.

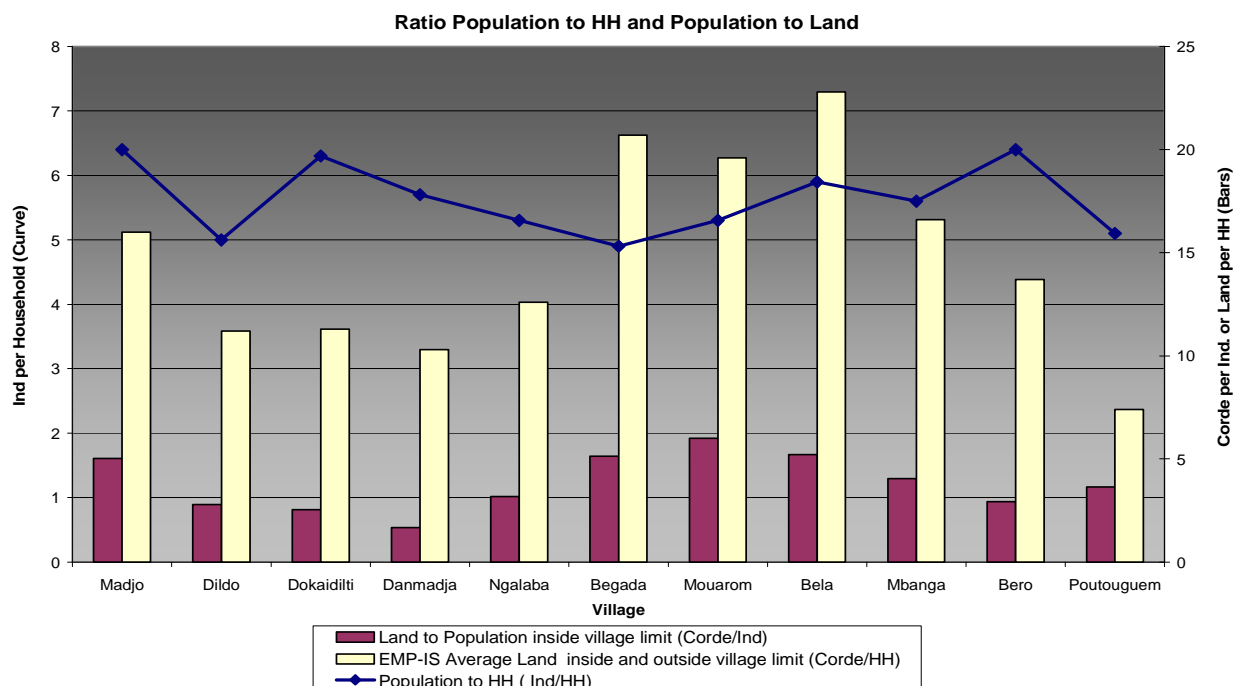
Interviews with the village chief and farmers were completed to help understand the driving forces behind the data. The interviews indicated that farmers with lands bordering the bush/long term fallow may have cleared much of this land in the hope that the Project would use these lands for facilities.

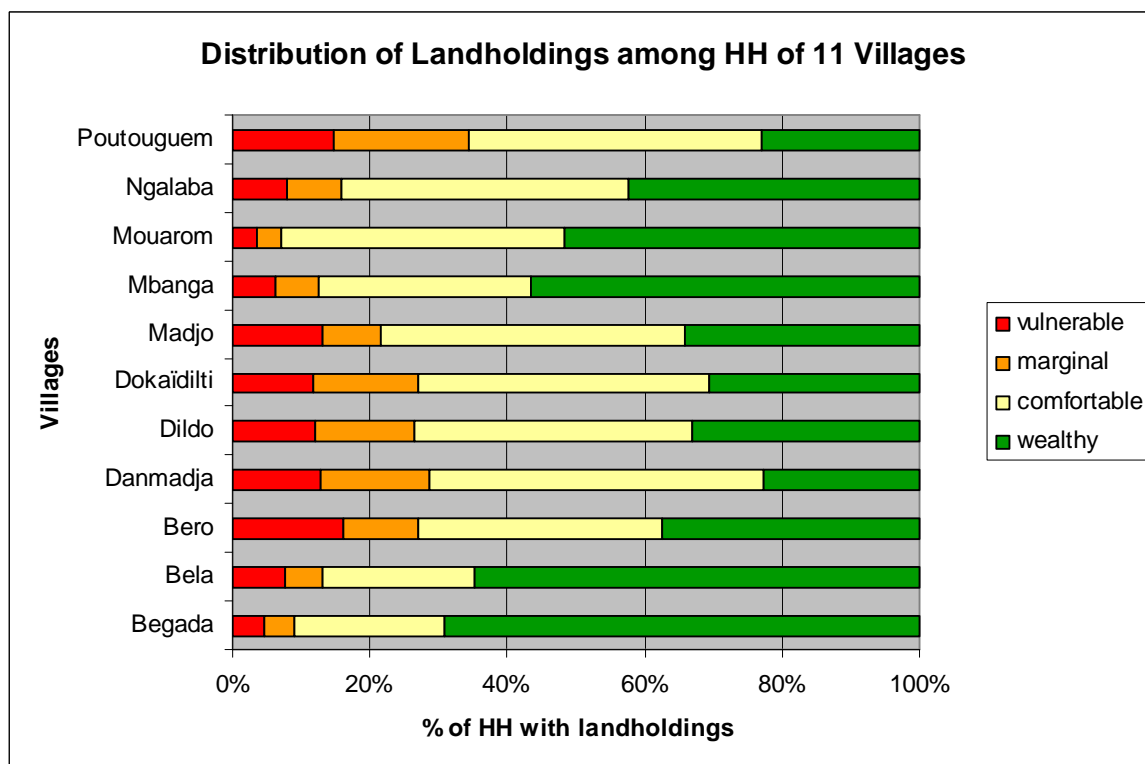
- **As a village, Poutouguem is not in a vulnerable state.** There is still plenty of land and the average viability factor per capita is quite high:

**Status of Average Poutouguem HH**

Pre-project		June 2010	
Avg Land/HH	Avg fct/HH	Avg Land/HH	Avg fct/HH
9.24 c.	1.81	7.44 c.	1.46

- Poutouguem's ratio of the number of HHs to village population is similar to other villages.





- More HH in Poutouguem are simply comfortable rather than wealthy landholders.
- Like Danmadja, Dildo, Dokaidilti and Madjo, Poutouguem has more vulnerable HH judged by the landholding criterion alone than the mainly agricultural villages like Mbanga or Begada:

Skewed Land Holdings in 10 Villages vs Poutouguem				
Agricultural Sustainability	Vulnerable	Marginal	Comfortable	Wealthy
Resettlement factor	0 - 0.67	0.68 - 0.99	1.00 - 2.49	2.5 +
% HH in villages at factor	10	9	37	44
% HH Poutouguem at factor	15	20	42	23

- **Considered as Households**, upon completion of the village survey in June 2010
  - 9 HHs are below the agricultural viability level of 2/3 corde per HHM; 2 FHHH and 7 Male HHH (MHHH)
  - The total number of individuals in these HHs is 64
  - 3 of these HH were never affected by Project land take
  - 6 of the compensated nonviable are MHHH and 1 is FHHH

- The total number of individuals in these Project-affected Non Viable HH is 57.
- Considering Non-Viable HH that have never surrendered land to the Project:
  - 1 FH HH never affected by the Project, she is 42 years old and her HH contains 3 individuals.
  - 2 MH HH never affected by the Project (36 and 29 years old) with an average of 5.5 individual HHM.
  - The total number of individuals in the non-viable but never compensated HHs is 14 people.
- Considering project-affected non-viable HH (6 HH):
  - 2 FH HH with an average of 5.5 dependants, they are 28 and 59 years old,
  - 4 MH HH:
    - 1 is young (late 20s) and has 9 HHM.
    - 2 are middle age (39 and 40) with an average of 10 HHM
    - 1 is older (early 50s) and has 10 HHM
- 10 project-affected Marginal HHs in Poutouguem, representing 54 people (10 of the 12 Marginal HH are project affected)
- 26 Comfortable HH with 147 HHM.
- 14 Wealthy HH with 38 HHM.

Land Distribution among HH (green = mode)						
	OFDA	Dokaidilti	Dildo	Ngalaba	Danmadja	Mouarom
cordes	1995 HH	2007 HH	2008 HH	2008 HH	2008 HH	2008 HH
0	see < 1	0.00%	1.80%	1%	0.00%	1.20%
< 1	4.70%	1.20%	1.10%	0%	1.00%	1.20%
< 2	10.50%	2.40%	9.10%	4%	5.90%	1.20%
< 3	12.10%	9.40%	8.00%	4%	9.90%	1.20%
< 4	16.00%	8.20%	8.40%	5%	8.90%	4.70%
< 5	14.80%	4.70%	8.70%	7%	11.90%	4.70%
< 6	9.30%	8.20%	7.30%	9%	7.90%	2.40%
< 7	8.00%	4.70%	6.90%	6%	5.00%	4.70%
< 8	5.10%	8.20%	4.40%	4%	9.90%	5.90%
< 9	6.80%	11.60%	3.30%	4%	2.00%	4.70%
< 10	2.30%	5.90%	5.50%	5%	4.00%	7.10%
> 10	8.20%	36.00%	35.30. %	41%	33.70%	61.20%

Land Distribution among HH (green = mode)							
	OFDA	Begada	Bela	Mbanga	Madjo	Bero	Poutouguem
cordes	1995 HH	2009 HH	2009 HH	2009 HH	2009 HH	2009 HH	2010 HH
0	see < 1	1%	0%	0%	2%	7%	0%
< 1	4.70%	1%	0.70%	0.40%	21%	1%	0%
< 2	10.50%	3%	2.10%	4.10%	32%	6%	4%
< 3	12.10%	3%	5.60%	3.00%	14%	5%	13%
< 4	16.00%	3%	5.60%	8.20%	12%	5%	10%
< 5	14.80%	2%	2.10%	4.80%	7%	6%	25%
< 6	9.30%	3%	4.90%	3.30%	1%	4%	5%
< 7	8.00%	4%	0.70%	4.10%	2%	4%	9%
< 8	5.10%	3%	3.50%	3.00%	5%	5%	5%
< 9	6.80%	4%	6.30%	3.70%	1%	4%	7%
< 10	2.30%	5%	3.50%	4.50%	2%	4%	2%
> 10	8.20%	69%	65.30%	61.10%	2%	49%	22%

The 1995 HH data used is “declared” rather than topographical measurements of the number of cordes per HH.

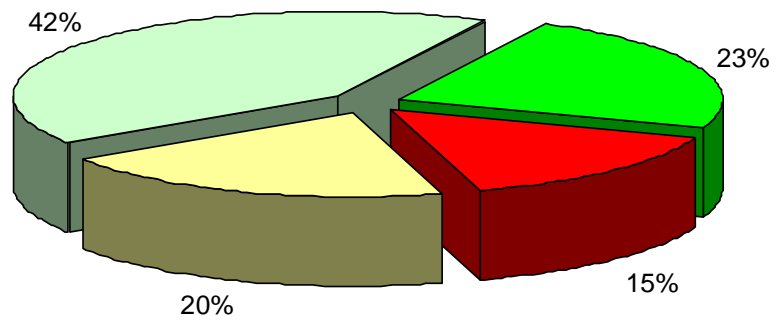
- The modal land holdings in Poutouguem is less than 5 cordes, like Dildo, another fishing village; at Dokaidilti and Danmadja fishing villages the mode is 3-4 cordes
- 11 of the top landholding households have more than 10 corde of land for the entire HH (**not** Per HHM )
- The landholdings per HHM are as follows:

**All Poutouguem HH Land Categories**

HH viability factor	Total # current HH	% HH in land category
<2/3	9	15%
<1	12	20%
<2.5	26	42%
2.5 +	14	23%



### Land distribution among all the Households of Poutouguem



Eligibility Factor (Corde/Dependant)

0.000 - 0.667

0.668 - 0.999

1.000 - 2.499

> 2.500

### Land Available to Villages

	Dokaidilti	Dildo	Ngalaba	Danmadja	Mouarom	Begada	Bela	Mbanga	Madjo	Bero	Poutouguem
Village Area in Hectares	686	1887	2118	480	1352	3321	2200	3068	2148	5786	562
Settlement area in Hectares (% village)	24 (3%)	46 (2%)	97 (5%)	34 (7%)	23 (2%)	56 (2%)	35 (2%)	62 (2%)	27 (1%)	145 (2.5%)	28 (5%)
Project Perm. Land Take + Temp. No Returned in Hectares (% village)	79 (12%)	185 (10%)	253 (12%)	61 (13%)	149 (11%)	288 (7%)	172 (8%)	189 (6%)	135 (6%)	617 (10.5%)	51 (9%)
Available Land inside the village limit in Hectares (% village)	583 (85%)	1656 (88%)	1768 (83%)	385 (80%)	1180 (87%)	2977 (90%)	1993 (91%)	2817 (92%)	1986 (92%) incl 483 of Flooded Area	5024 (87%)	483 (86%)
Available Land Density inside the village limit (Hectares/Person)	1.09	1.23	1.34	0.68	2.64	2.32	2.38	1.88	2.34 1.77 excl Flooded Area	1.3	1.6
Cultivated (Field) or Owned (Fallow) outside the village in Hectares (% of total land of the residents)	40 (8%)	106 (6%)	69 (4%)	122 (23%)	217 (26%)	76 (3%)	73 (4%)	70 (3%)	114 (10%)	614 (11%)	7 (3%)
Total Cultivated (Field) or Owned (Fallow) of the residents in Hectares (% of total land of the residents)	490	1561	1601	487	850	2763	1666	2270	1110	5499	238
Available Land Density inside and outside the village limit (Hectares/Person)	0.92	1.16	1.21	0.85	1.90	2.15	1.99	1.51	1.88 1.31 excl. Flooded Area	1.42	0.78

### Use of Available Land per Village

	Dokaidilti	Dildo	Ngalaba	Danmadja	Mouarom	Begada	Bela	Mbanga	Madjo	Bero	Poutouguem
Cultivated (Field) or Owned (Fallow) by non-residents inside the village limit in Hectares (% of available land inside village limit)	121 (21%)	141 (9%)	141 (8%)	17 (4%)	531 (45%)	272 (9%)	389 (20%)	577 (20%)	504 (25%)	553 (11%)	249 (52%)
Cultivated Field Farmed by Resident inside the village limit in hectares (% of available land)	302 (52%)	668 (40%)	1043 (59%)	241 (63%)	291 (25%)	1190 (40%)	755 (39%)	1122 (40%)	443 (22%)	2004 (40%)	152 (31.5)
Fallow Owned by Resident inside the village limit in hectares (% of available land)	149 (26%)	792 (48%)	553* (31%)	124 (32 %)	342 (29%)	1497 (50%)	838 (42%)	1078 (38%)	553 (28%)	2414 (48%)	79 (16.5)
Ratio Fallow/Field	0.49	1.19	0.53	0.51	1.18	1.26	1.11	0.96	1.25	1.20	0.52

\* 63 Ha of bush included in fallow

### Demography of Villages

	Dokaidilti	Dildo	Ngalaba	Danmadja	Mouarom	Begada	Bela	Mbanga	Madjo	Bero	Poutouguem
Nbr of Residents	534	1346	1324	570	447	1285	837	1501	848	3867	306
Men	243	657	668	284	216	608	434	718	418	1923	155
Women	291	689	656	286	231	677	403	783	430	1944	151
Avg Age in Years	19	20	20	19	19	19	18	18	17	18	18.7
Nbr HH	85	275	250	101	85	259	144	269	133	611	61
Avg. HH size	6.3	4.9	5.3	5.7	5.3	5.0	5.9	5.6	6.4	6.4	5.1
Avg. cordes Land per HH inside and outside village	11.3	11.2	12.6	10.3	19.6	20.7	22.8	16.6	16.0	13.7	7.4
Avg. Resettlement Factor (Based on all land inside and outside village)	1.80 corde/HhM	2.29 cordes/HhM	2.39 cordes/HhM	1.8 Corde/HhM	3.69 cordes/HhM	4.17 cordes/HhM	3.88 cordes/HhM	2.95 cordes/HhM	2.5 cordes/HhM	2.16 cordes/HhM	1.46 cordes/HhM
% Area cultivated or owned by women out of total area "owned" by village residents inside and outside village	15%	17%	29%	22%	14%	30%	12%	22%	28 %	18.5%	19%

## **Project Impact on Poutouguem**

### **Compensation**

Compensation affected the village as follows:

- 43% of Poutouguem's productive inhabitants (older than 20 years old = 131 individuals) were compensated
- 52 (85%) of Poutouguem's households were compensated
- 61% of the individuals compensated were men, in contrast to 39% of the women who received compensation:

Age	Nbr Individual	Nbr Men	Nbr Women	Nbr Compensated Individual	Nbr Compensated Men	Nbr Compensated Women
0-9	89	40	49	0	0	0
10-19	85	50	35	3	3	0
20-29	72	37	35	33	23	10
30-39	25	11	14	21	10	11
40-49	18	7	11	13	7	6
50-59	7	3	4	5	2	3
60-69	6	4	2	4	3	1
70-79	2	1	1	2	1	1
80-89	1	1	0	1	1	0
N/A	1	1	0	0	0	0
Total	306	155	151	82	50	32

### **All Poutouguem HH at Resettlement Factor**

HH viability factor	Total # current HH	Male HHH		Female HHH	
		51		10	
		before	now	before	now
<2/3	9	3	7	1	2
>2/3 and <1	12	4	10	2	2
>1 and <2.5	26	27	23	4	3
2.5 +	14	17	11	0	3

As noted above in discussing Declared versus Measured Data, the latter is far more accurate in identifying vulnerable HHs and is used in the following table:

### All Compensated HHs in Poutouguem

Resettlement Factor	Nbr HH	Nbr Individuals	% All HH	% of Population
0.000 - 0.667	6	53	15.5 %	22.5 %
0.668 - 0.999	10	54	22 %	21 %
1.000 - 2.499	21	128	44.5 %	47 %
2.500 - ...	8	25	18 %	9.5 %
Total	45	260	100 %	100 %

- Among the 6 Non-Viable HHs affected by the Project nobody were correctly identified as Non-Viable on the basis of their declarative data and offered a resettlement option.
- Of the 6 HH uncovered by the Village Land survey, 5 are currently enrolled in the 2011 resettlement promotion. 1 will be enrolled in the 2012 resettlement promotion.

### Change in social status

#### Social Impact 1998 through 2009 in Poutouguem

Social Situation	#	%
All HH	61	100%
All Compensated HH	45	74%
Compensated HH Situation remains the same	43	70.5%
Landholding Situation Changed	19	31%
No land	0	0%
Non-Viable with some land	4	6.5%
HH dropped to Marginal	8	13%
Wealthy HH reduced to Comfortable	6	10%

- Of the 10 nonviable HH in Poutouguem, only 5 of them were made non-viable by Project land acquisition; all the others were already nonviable before the Project.
- 8 HH fell from being comfortable landholders to marginal ones.
- Out of the 26 comfortable HHs in Poutouguem today, 6 used to be wealthy land holders.
- The total social impact of the Project on changes in HH situation is 18 HH/61 HH, or 29.5%.

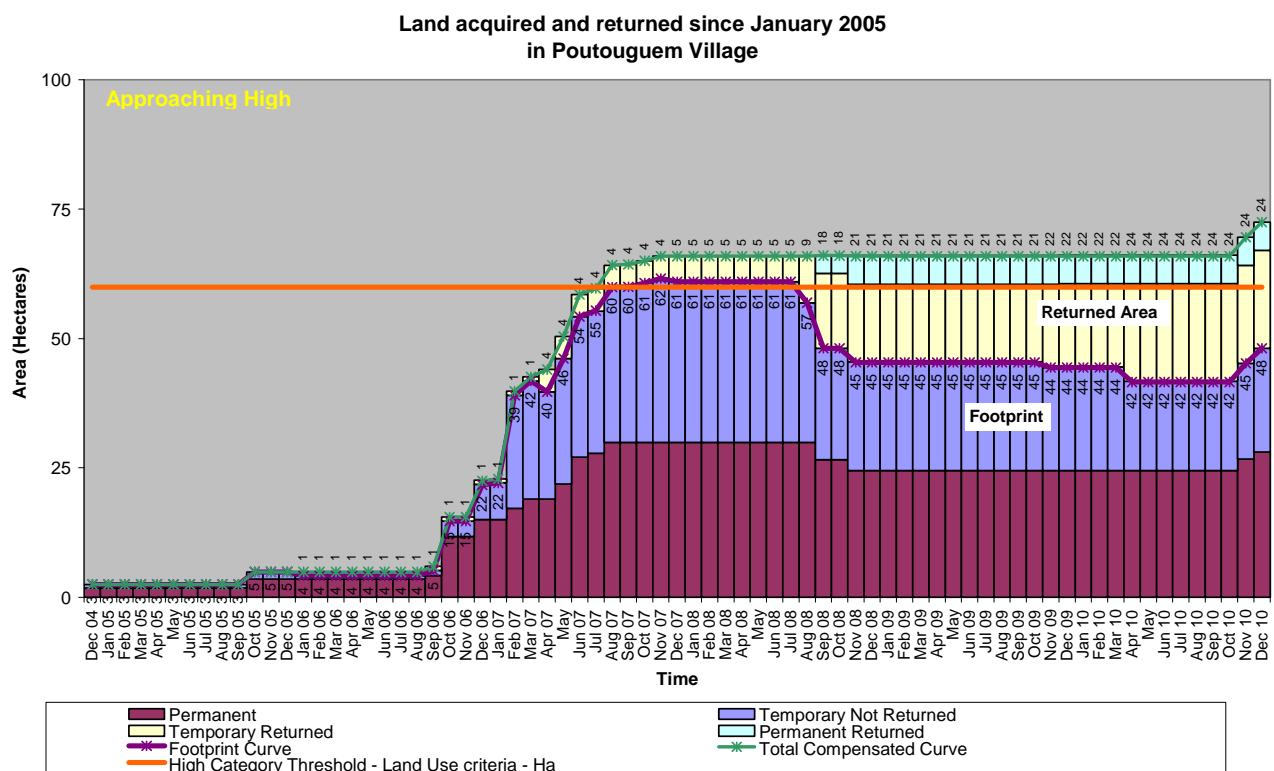
### Resettlement Program Impact on Poutouguem

- The Poutouguem resettlement eligible HHH are enrolled in the 2011 resettlement promotion.

## Land Return

### No HH Became Viable Through Project Land Return

- Most of the land acquired in Poutouguem was for road access (15ha) and electric lines (12ha). The area needed for electric lines is useable land as for subterranean installations (6 ha) – land which can be returned to agricultural use with only mild restrictions – and well pads (10 ha) of which about half can be returned for farming.
- Land return to nonviable HH will not move any of them above the viability factor.



- Significant amounts of land were returned to Poutouguem in mid-2008 (temporary use and permanent use lands).

### ***First Time Community Compensation***

Poutouguem will receive first time Community Compensation in 2011. The village will go through the Participatory Rural Assessment process and then select their compensation projects from the EEPCI Community Compensation Catalog.

The Community Compensation catalog for Maikeri and its neighbor Poutouguem will have eight (8) options to select from as they proceed through the MARP Process (Participatory Rural Appraisal) to match up their prioritized needs to the options available. The options are:

<b><u>Option</u></b>	<b><u>Description</u></b>
1	Three Classroom School Building with Furniture for each classroom
2	One Classroom School Building with Furniture <b>PLUS</b> Water Well <b>PLUS</b> Flour Mill
3	Community Granary Building <b>PLUS</b> two (2) Water Wells <b>PLUS</b> Flour Mill
4	Community Granary Building <b>PLUS</b> Water Well <b>PLUS</b> Karite Seed Mill (Shea butter extraction)
5	Five (5) Water Wells
6	Three (3) Water Wells <b>PLUS</b> Karite Seed Mill (butter extraction)
7	Three (3) Water Wells <b>PLUS</b> Flour Mill
8	One Classroom School Building with Furniture <b>PLUS</b> Water Well <b>PLUS</b> Karite Seed Mill (shea butter extraction)

The village will have 2 calendar years to make their selection of project option.

### **Poutouguem's Current Needs and Resources**

- The amount of land needed by those compensated families at risk to become economically viable is 4.2 ha.
- The amount of land needed by the other non-viable families untouched by the project to be economically viable is 0.3 ha.
- The total land shortage for needy HH in Poutouguem is 4.5 ha.
- Poutouguem's arable land = 483 ha; they also have 7 ha of farmland in other villages.
- 22% of HH are holding more than 10 cordes of land apiece and 14% have more than 2.5 cordes per HHM.

### **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).

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

- 6 project-affected HH are non-viable; 5 of them will be offered resettlement options in the class of 2011. First they will participate in Basic Business Skills training in 1Q 2011 and then implement their option.
- If these options do not succeed during the 2 year's of monitoring, then the HH will be offered land replacement.

The following table describes each option and its relevance to the At Risk Households in Poutouguem as per the CRCP, LMM procedures and Management of Change to the LMM currently in place:



### Site Specific Actions for Poutouguem

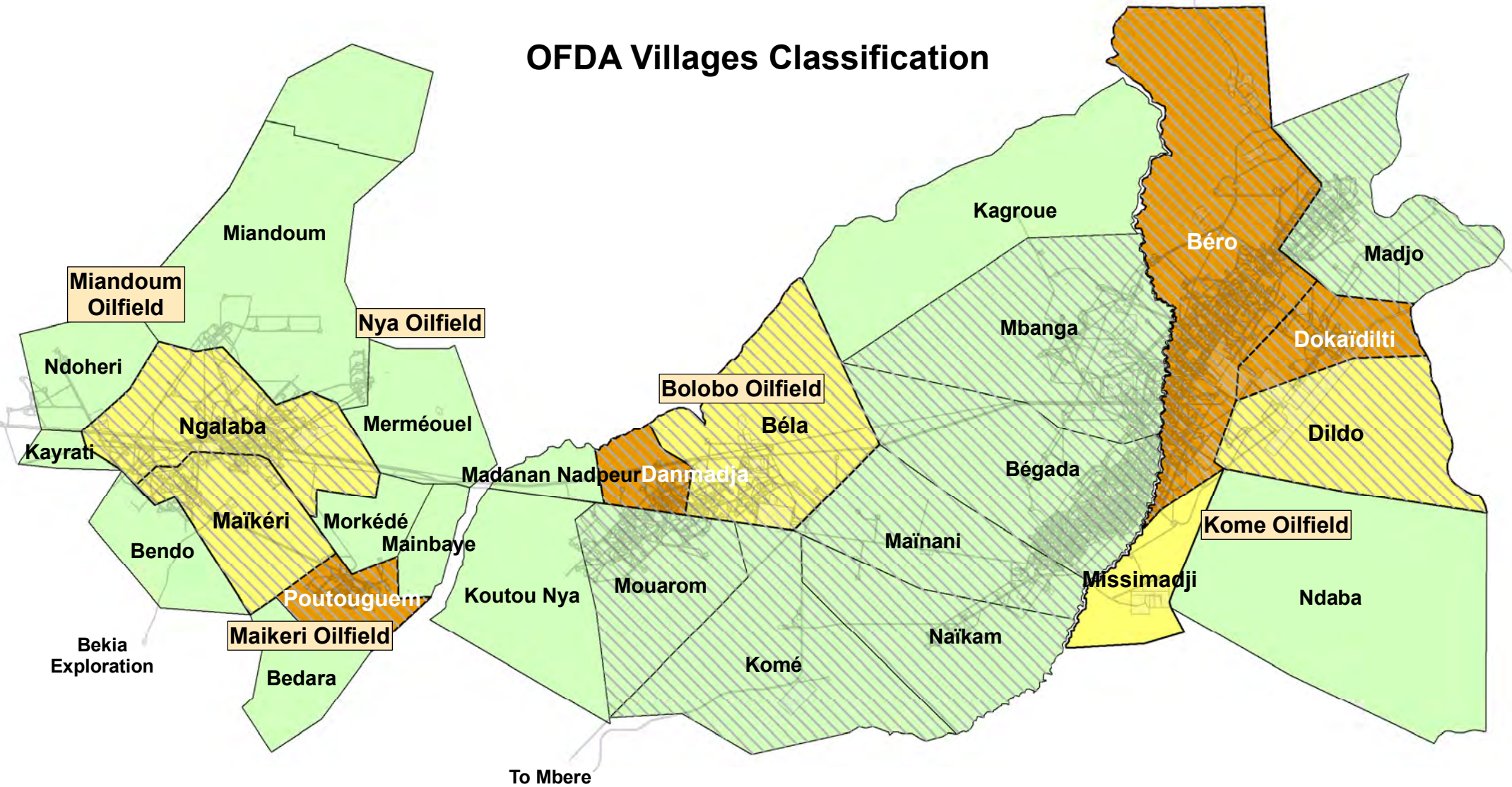
<b>CRCP/LMM Resettlement Option</b>	<b>Description</b>	<b>Desirable Option (Yes/No)</b>	<b>Comments</b>
Land Reclamation & Return	Reclaim land and return to community & former users; free land targeted to vulnerable HH	No	Parcels of land too small to raise any project affected person to above threshold.
Physical Relocation Individuals	Physically move at risk household to new location outside of current village	Yes	Possible however, no one in Poutouguem 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 depending on Third Party Compensation occurring.
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.
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	Starts 1Q2011.
	Phase 2: Oversee implementation; Create management committee	Yes	Could begin as early as 4Q2011.

### **Site Specific Plan Implementation Timeline**

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

<b>Action</b>	<b><u>Timeline</u></b>
Land and social surveys completed	June 2010
EEPCI offers Basic Business Skills and Improved Agriculture Training to first time resettlement eligible farmers.	June 2011
Participatory Rural Appraisal process.	June 2011
Poutouguem makes selection of project.	June 2011 – March 2013
Construction of Poutouguem Community Compensation Projects	June 2011 – December 2013

# OFDA Villages Classification



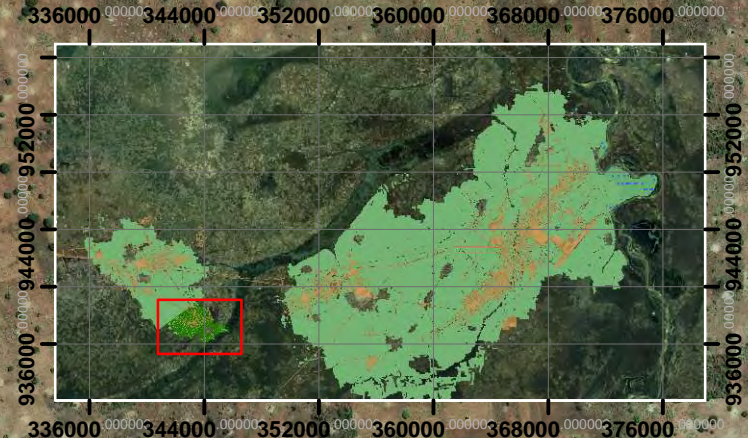
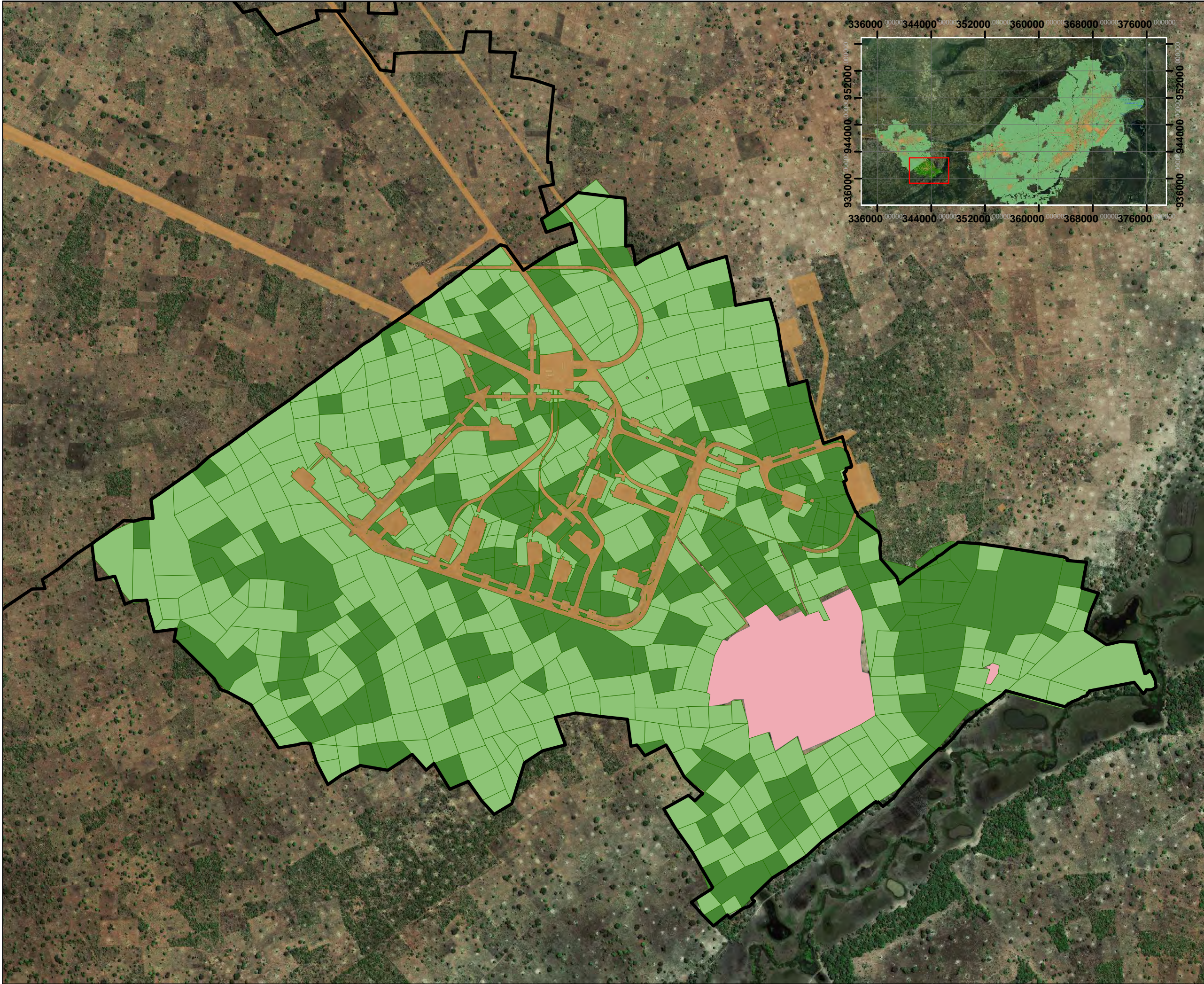
- High Category
- Approaching High Category
- Other Villages
- Village Survey Methodology

Source : EEPCI EMP  
As of End of December 2010

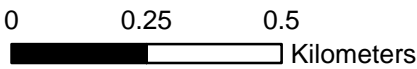
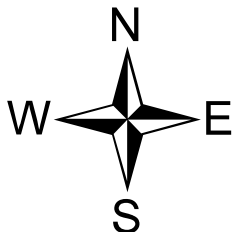


EEPCI - Esso Exploration & Production Chad Inc.  
EMP, Environmental Management Plan





# Poutouguem Survey



Source : GEOEYE 2009, EEPCI EMP and Construction Survey Department

## Legend

### Farmland

- Field
- Fallow

### Non-tillable land

- Flooded zone
- Settlement and protected area
- Facility

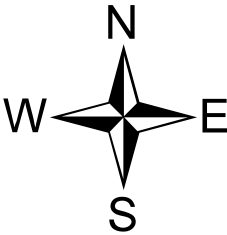
- Fault Block
- Village limit



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# Poutouguem Land cover & Land Use



0 0.25 0.5  
Kilometers

Source : GEOEYE 2009, EEPCI EMP  
and Construction Survey Department

## Legend

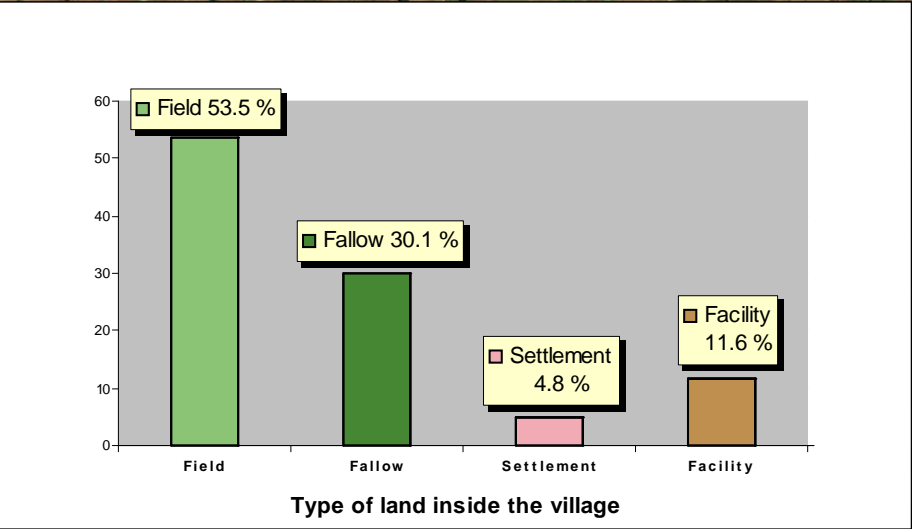
### Farmland

- Field
- Fallow

### Non-tillable land

- Flooded zone
- Settlement and protected area
- Facility

- Fault Block
- Village limit

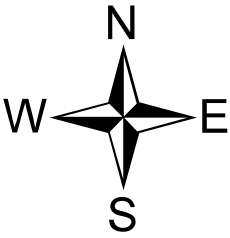


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# Poutouguem survey and arable land



0 0.25 0.5  
Kilometers

Source : GEOEYE 2009, EEPCI EMP  
and Construction Survey Department

## Legend

### Fallow Duration

- 2 years
- 3 - 5 years
- 6 - 10 years
- 11 years +

- Field
- Village limit
- Land cultivated (field) or owned (fallow) by outsiders
- Permanent and not returned facilities
- Flooded zone
- Settlement and protected area

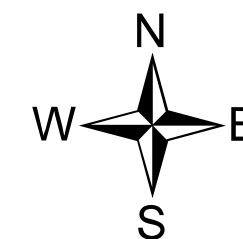


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# Owner's Gender in Poutouguem



0 0.25 0.5  
Kilometers

Source : GEOEYE 2009, EEPCI EMP  
and Construction Survey Department

## Legend

### Gender of cultivator

- Man (43 ha - 88%)
- Woman (6 ha - 12%)
- Land cultivated or owned by outsiders

- Flooded zone
- Permanent and not returned facilities

- Settlement and protected area
- Village limit



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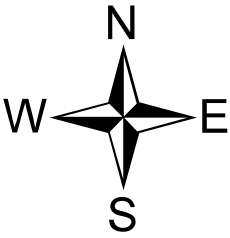
Date : 2010-10-05

Author : EMP-IS

Map : Poutouguem\_OwnerGender.mxd



# Farmer's Residence in Poutouguem



0 0.25 0.5 Kilometers

Source : GEOEYE 2009, EEPCI EMP and Construction Survey Department

## Legend

- Residency village of farmers
- Poutouguem (243 ha - 48.6%  
7 ha outside the village)
  - Mainbaye (86 ha - 17.6%)
  - Morkede (52 ha - 10.7%)
  - Mermeouel (13 ha - 2.7%)
  - Maikeri (9 ha - 1.8%)
  - Miandoum (7 ha - 1.4%)
  - Other villages (84 ha - 17.2%)

- Settlement
- Village limit
- Flooded zone
- Permanent and not returned facilities

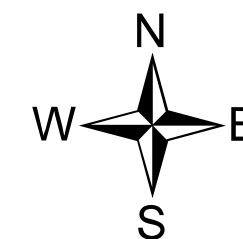


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# At Risk Households in Poutouguem



0 0.25 0.5  
Kilometers

Source : GEOEYE 2009, EEPCI EMP  
and Construction Survey Department

## Legend

Resettlement eligibility  
factor (corde/dependant)

- $\leq 0.67$
- 0.68 - 1.00
- 1.01 - 2.50
- $> 2.50$

- Land cultivated or  
owned by outsiders
- Flooded zone

- Settlement and  
protected area
- Permanent and  
not returned facilities
- VillageLimit



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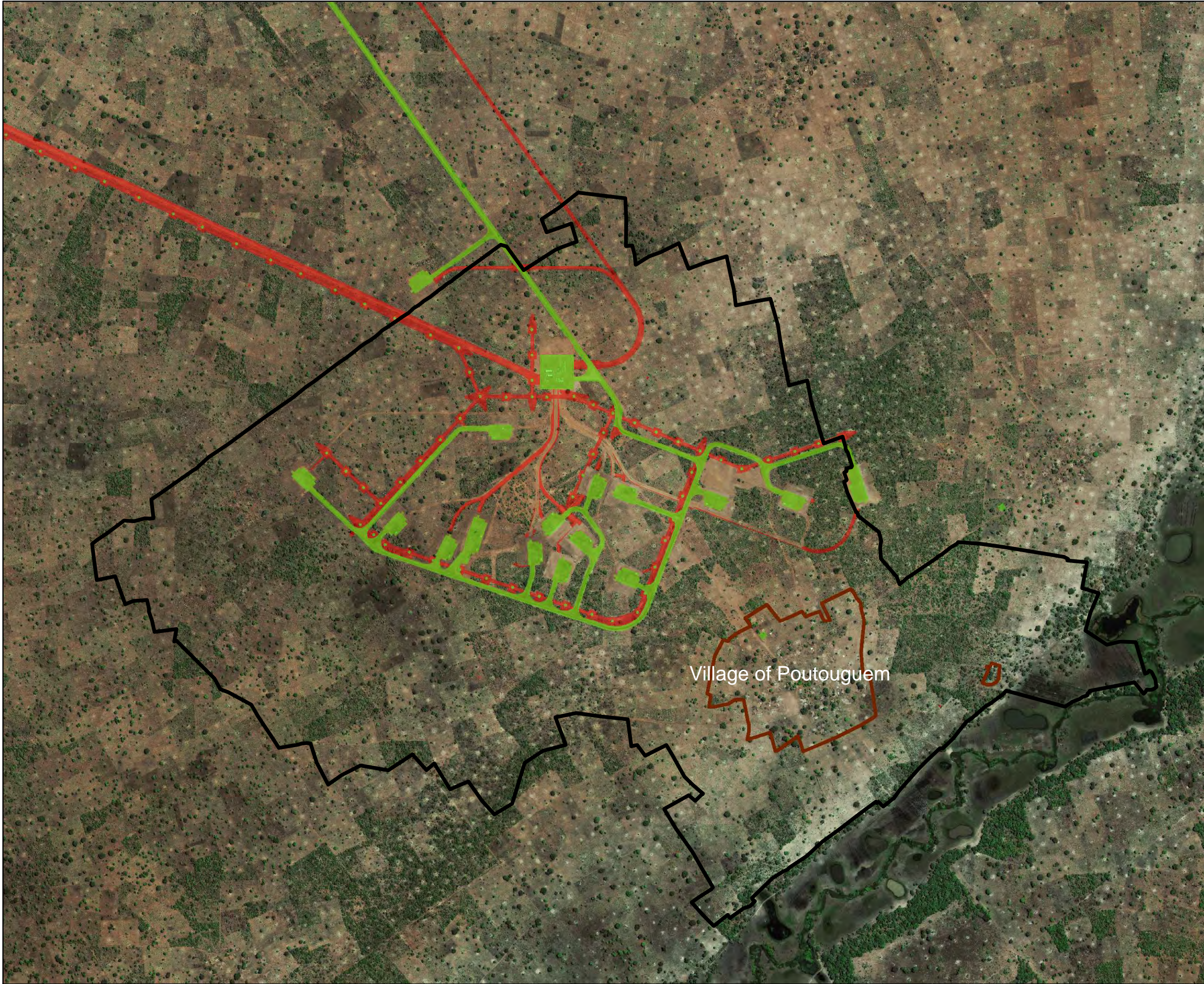
EEPCI - Esso Exploration & Production Chad Inc.  
EMP, Environmental Management Plan

Date : 2010-10-05

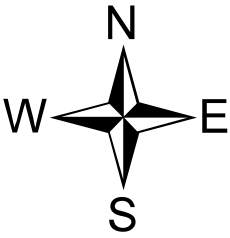
Author : EMP- IS Team

Map : Poutouguem\_AtRisk\_Households.mxd





# Poutouguem facilities





0 0.25 0.5 Kilometers

Source : GEOEYE 2009, EEPCI EMP and Construction Survey Department

## Legend

### Facilities

-  Permanentes facilities
-  Temporary facilities

### Limits

-  Village limit
-  Settlement

