付録-11 住民移転計画 (PR)



Consulting Services for the Environmental Impact Assessment Studies (EIA) and Abbreviated Resettlement Action Plan (ARAP) of Nacala Corridor Projects – Access Road to the Port of Nacala – Lot A

Contract No 41/DG/360/2016



Abbreviated Resettlement Action Plan (ARAP)

Prepared by:
BETA/NEMUS Consortium
(modification made by JICA Study
Team in consultation with ANE
and BETA/NEMUS)
25 de Setembro Av., No 1509

Phone: +258 21302080 Fax: +258 21302080





TABLE OF CONTENTS

Chapter 1 Introduction	6
1.1 Context	6
1.2 Objectives of the ARAP	6
1.3 Project Description	6
Chapter 2 Results of the Inventory and Socioeconomic Surveys	8
2.1 Methodology	
2.2 Results of the Inventory Survey	9
2.2.1 Summary of Affected Goods	9
2.2.2 Impact on Land	1
2.2.3 Impact on Crops	1
2.2.4 Impact on Valuable Trees	12
2.2.5 Impact on Structures	12
2.2.6 Impact on Religious Places	12
2.2.7 Impact on Public Infrastructure	13
2.3 Results of the Socioeconomic Study	14
2.3.1 General Characteristics of the Project and Surrounding Area	14
2.3.2 Place of Origin and Length of Living	15
2.3.3 Language and Religion	15
2.3.4 Gender	16
2.3.5 Education Level	16
2.3.6 Access to Financial Services	16
2.3.7 Possession of Identification Documents	18
2.3.8 Vulnerability	18
2.3.9 State of Livelihood	19
2.3.10 Possession of Goods and Assets	21
2.3.11 Access to Public Services	22
2.3.12 Information Source and Mechanism for Decision-making and Conflict Resolution	23
Chapter 3 Relevant Legal Framework	25
3.1 The Constitution of the Republic of Mozambique	25
3.2 The Land Act	25
3.3 Land Act Regulation	25
3.4 Regulations on the Resettlement Process resulting from Economic Activities	26
3.5 Resettlement Committees' Internal Regulation and Technical Guidelines for PAR Design	
and Implementation	26
3.6 Spatial Planning Act	27
3.7 The Spatial Planning Act Regulation	27
3.8 Laws for the Evaluation of Goods and Losses and Compensation in Case of Loss	27
3.9 Laws on the Environment	28
3.10 Laws on Social Wellbeing	31







3.11 Applicable International Conventions	31
3.12 JICA Policies on Involuntary Resettlement	33
3.13 World Bank Policies on Involuntary Resettlement	33
3.14 Gaps between the Mozambican Legislation and the Policies of JICA and the World Bank	34
Chapter 4 Institutional Framework for ARAP implementation	38
4.1 Overview of Institutional Framework in Mozambique	38
4.2 Institutional Framework	39
Chapter 5 Compensation Policy and Package	42
5.1 Cut-off Date	42
5.2 Defining Eligibility of the PAPs	42
5.2.1 Loss of Land due to Permanent Acquisition	43
5.2.2 Loss of Crops and Valuable Trees	44
5.2.3 Loss of Structures	44
5.2.4 Loss of Religious Places	45
5.2.5 Loss of Water Sources	45
5.2.6 Additional Assistance to Vulnerable Groups	46
5.3 Entitlement Matrix	46
Chapter 6 Cost for Compensation and Source of Funding	49
6.1 Total Cost for Compensation	49
6.2 Land	49
6.3 Crops	49
6.4 Valuable Trees	51
6.5 Structures	51
6.6 Religious Places	52
6.7 Public Infrastructure	53
Chapter 7 Greivance Redress Mechanism.	54
7.1 Process.	54
7.2 Monitoring and Management of Claims and Complaints	56
Chapter 8 Information Disclosure of the Project and ARAP	57
Chapter 9 Implementation Schedule	58
Chapter 10 Monitoring System	60

ANNEXES

- Annex 1 Questionnaire Used in the Social Survey
- Annex 2 List of Affected People and Goods
- Annex 3 Demonstrative Map of the Affected Areas
- Annex 4 Price Tables of Crops and Plants
- Annex 5 Report on Public Consultation
- Annex 6 Monitoring Forms (sample)







LIST OF FIGURES AND PHOTOGRAPH

Figure A Location of the New Access Road to the Port of Nacala	7
Photograph A Electricity Tower	14
Figure B Identification Documents of the PAPs	18
Figure C Main Source of Income	19
Figure D Monthly Average Expense of the HHs	21
Figure E Environmental Impact Assessment Process, in accordance with Decree No. 54/2015	30
LIST OF TABLES	
Table 1 Summary of Affected Goods	
Table 2 Administrative Division of Nacala-Porto Municipality	14
Table 3 HHs' Educational Level	17
Table 4 Distribution of Income Levels of the HHs	20
Table 5 HHs' Assets	22
Table 6 Source of Water Used by the Project-affected Persons	22
Table 7 List of Categorization based on Decree No. 54/2015	29
Table 8 Comparative Framework of the Mozambican Legislation and the Policies of JICA	
and the World Bank	35
Table 9 Institutional Framework Proposed for the ARAP	39
Table 10 Entitlement Matrix	47
Table 11 Estimated Total Cost of Compensation	49
Table 12 Official Price Table of Project-affected Trees and Crops	50
Table 13 Estimated Compensation Cost for Valuable Trees	51
Table 14 Estimated Compensation Cost for Structures	52
Table 15 Estimated Compensation Cost for Religious Places	52
Table 16 Claim and Complaints Management Process and Deadlines	
Table 17 Summary of main ARAP activities	59
Table 18 Monitoring System during Pre-construction and Construction Stages	







ABBREVIATIONS

ARAP Abbreviated Resettlement Action Plan

HHs Households

EIA Environmental Impact Assessment

ANE National Roads Administration

CVA Cerebrovascular Accident

BCI Commercial and Investment Bank

ID IdentificationHHC Household ChiefROW Right of Way

CITES Convention on International Trade in Endangered Species

CTASR Technical Commission of Resettlement Tracking and Supervision

CTASRD Technical Commission of District Resettlement Tracking and Supervision

DPGCAS Provincial Directorate of Gender, Child and Social Action

DUAT Land Use and Benefit Right

FIPAG Water Supply Investment and Patrimony Fund

GAZEDA Office of Economic Zones od Accelerated Development

GdM Government of Mozambique GPS Geographic Positioning System INAS National Action Action Institute

ARAPI Abbreviated Resettlement Action Plan Implementer

JICA Japanese International Cooperation Agency
MASA Ministry of Agriculture and Food Security

MCA Millennium Challenge Account

MITADER Ministry of Land, Environment and Rural Development

CBO Community Based Organization NGO Non-Governmental Organization

OP Operational Policy

PAP People Affected by the Project RAP Resettlement Action Plan

PGA Environmental Management Plan

QGAS Environmental and Social Management Framework

TV Television

UNICEF United Nations Children's Fund

HIV/AIDS Human Immunodeficiency Virus /Acquired Immunodeficiency Syndrome

ZEEN Nacala Special Economic Zone







CHAPTER 1 INTRODUCTION

1.1 Context

The National Roads Administration (ANE) intends to build an access road to the Port of Nacala, linking the Port to EN 12. This road is important given the economic potential in the area. The recent rehabilitation of the Port of Nacala significantly elevated its handling capacity of different types of cargo. As a result, other types of infrastructure are in urgent need. The construction of a road to access the Port of Nacala is not just seen as a key element in facilitating the movement of people and goods, significantly reducing overcrowding in the only access road currently in use, but it also elevates the quality and volume of investment in Nacala Special Economic Zone.

This abbreviated resettlement action plan (ARAP) was drafted based on a set of laws, regulations and decrees in Mozambique that define the procedures for accessing, using and expropriating the land to give space to the subject project that is in public interest. It has also been prepared in accordance with the safeguard policies of the World Bank and the Guidelines for Social and Environmental Considerations of the Japan International Cooperation Agency (JICA), which is expected to provide financial assistance for the project. It takes into account both the positive and negative impacts that are expected to be derived from implementation of the project on the project-affected persons (PAPs) and their will, views and concerns.

1.2 Objectives of the ARAP

The ARAP is part of a set of social and environmental studies that is required to be carried out before implementing any development project by the national environmental legislation. The objective of the study is to identify the main social and economic impacts on people and goods of the construction of the new access road to the Port of Nacala. The study includes a socioeconomic diagnosis, survey of the people affected by the project, monetary valuation of the goods and assets affected, estimation of the amount of compensation necessary and drafting of an ARAP.

1.3 Project Description

The construction project of the new Nacala Port Access Road is promoted by the National Road Administration (*Administração Nacional de Estradas*, *ANE*) of the Government of Mozambique, with technical and financial support expected from the Japanese Government specifically JICA. It is predicted that the road will link the port to EN12, crossing R702, thus facilitating rapid and direct access to the port and Nacala-Porto city, significantly reducing the economic and environmental costs associated with traffic congestion of heavy vehicles. The new road is approximately 15.2 km in length and 20.5 metres in width, including its roadsides. Apart from the traffic lanes, the road has a reserved road area of 100 metres width (50 metres each side) thus the project-affected area or the right of way (ROW) is planned to be 120.5m. The map below (FIGURE A) shows the outline of the new road signalled with a green line.







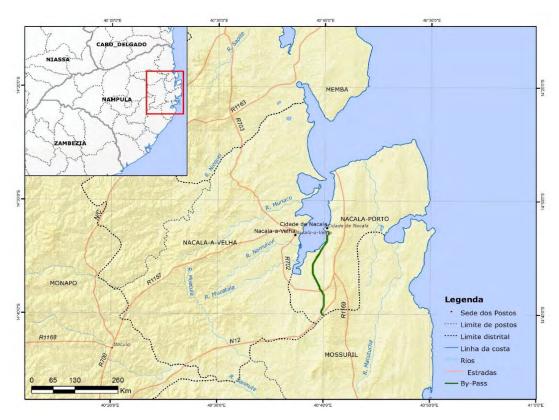


Figure A Location of the New Access Road to the Port of Nacala







CHAPTER 2 RESULTS OF THE INVENTORY AND SOCIOECONOMIC SURVEYS

2.1 Methodology

To identify the people and goods that are to be affected by the project, a census/lost-asset inventory and socioeconomic survey were carried out within the ROW based on a combination of methodologies set forth below:

- Secondary data collection and identification of areas to be investigated;
- Delimitation and inventory of all goods located within the ROW;
- Census or inventory of everything (i.e. people, families, public and private infrastructure, permanent and seasonal crops, trees and so on) within the ROW; and
- Qualitative socioeconomic studies aimed at understanding different aspects of livings of the people living or using, in one way or another, the project area.

Thus, based on engineering drawings and on the ROW defined, a survey of all infrastructure and other goods (farms, trees, etc.) was conducted. For that, a GPS was used to capture the GPS references of each affected good and paint (mark) each good identified in the area of defined intervention. The goods painted served as identification for the socioeconomic team and for the infrastructure and agricultural goods evaluators. This work allowed all goods located within the ROW to be clearly geo-referenced (GPS points) and enumerators/evaluators to focus their work only on goods previously defined. In the beginning, it was assumed that the project would affect:

- (i) The households defined as a group of people who share the basic expenses, mostly food, and who had the potential of having their goods and lifestyles affected. The issue of lifestyles and social cohesion associated was considered as being of particular importance; and
- (ii) Other entities (private, public and other) that were considered to be at risk of losing mostly their goods, but not necessarily their lifestyle.

Based on these assumptions, the socioeconomic census used two main types of data collection methods, namely:

- A questionnaire to the families (Annex 1), which aimed at collecting data on the goods (e.g. infrastructure, farms and crops, trees) that belong to the families and characteristics of the household (e.g. number of members, age, degree and relatedness, spoken languages). This questionnaire was drafted to reflect the main features of the goods affected, in terms of ownership, type, to what extent each good is affected (e.g. partially or totally, the size affected). This questionnaire was used to other entities too.
- The inventory survey aimed at collecting data regarding the goods located in the ROW. These goods had previously been marked by the registration team. Specifically, the collected information included data regarding socio-demographic features of each HH member, including goods, livelihood and life styles, and expectations of the people and families as well as entities involved in the project with an emphasis on the best way to replace what was identified as being affected by the project. It was also







during this exercise that photos of all affected goods were taken including the owner. The same was made in relation to other entities (public and private companies) identified as affected, but for these ones, demographic features were not captured. This measure was taken to gather sufficient data to be used in the definition of quantitative aspects of the resettlement/compensation process.

A team of numerators was recruited and trained to collect the survey data and worked under the management of a supervisor. The research included a questionnaire that was developed with strict consultation with ANE covering all essential data that was collected to clearly identify the affected goods, the owners and their fundamental interests.

In summary, the socioeconomic study used a variety of methods. The main goal was to reflect on the aspects that define the way in which people and communities with interest within the ROW live and be affected by the project. The following methods were used:

- Community identification: identify and give importance to important places for the community (e.g. fields, holy places and cemeteries);
- Identification of families in the neighbourhood: define the relationship with the physical space and identify the important the existing crops and plants;
- Organizations and resources: identify, assign importance to collective organizations, services and resources in relation to others; and
- Income Sources: identify the main sources of survival. Investigate the elements of each value chain of such main sources of income/living

The data resulting from these exercises were used in understanding the quality of life of the affected families. It is also expected to be used in the production and/or improvement of life conditions after compensation has been made for the losses during the monitoring stage.

2.2 Results of the Inventory Survey

2.2.1 Summary of Affected Goods

The construction of access road to Nacala Port's project will directly affect 9,114 people. In total, there are 1,488 HHs affected by the project, which represents an average of six people per household (HH). In addition, two companies, one that run a salt farm and another that runs a transportation company will have their building and fence affected, respectively. The project will affect goods that can be classified into seven: land; crops; valuable trees; structure; graves; places of spiritual value; and fence as shown in the table below. Please refer to Annex 2 for a breakdown of the project-affected assets and Annex 3 for a map that shows the size and location of each affected good.







Table 1 Summary of Affected Goods

Item	Type	Size/Quantity	Location	Remarks
Land	Farmland	1,457,170 m ²	FL1-1358	Only those with DUAT will be
			(*refer to	subject to compensation in
			Annex 3)	general. ANE will provide
			,	support to those without
				DUAT that wish to obtain an
				alternative farmland outside of
				Nacala Municipality.
	Commercial	$17,132 \text{ m}^2$	CL1 (*refer to	Salt farm company
	Land		Annex 3)	
Crops	Cassava	1,210,399 m2		
	Rice	78,510 m2		
	Corn	126,443 m2		
	Sesame	19,103 m2		
	Sweet Potato	14,171 m2		
	Okra	8,544 m2		
Valuable	Banana	12,443 trees		
Trees	Ziziphus	3,369 trees		Chinese Date
	Mauritiana			
	Mango	2,641 trees		
	Cashew	2,695 trees		
	Sugar Cane	1,051 trees		
	Baobab	131 trees		
	Papaya	128 trees		
	Coconut	87 trees		
	Lemon	83 trees		
	Trichilia	50 trees		Natal mahogany.
	Emetica			
	Orange	39 trees		
	Others	254 trees		
Structures	Office	109.7 m ²	Refer to	10.81 m * 10.15 m (length;
			Annex 3	width)
	Fence	160 m	Refer to	
			Annex 3	
Religious	Graves	67	G1-67 (*refer	
Places			to Annex 3)	
	Worship	3	-	
	Places			
Public	Electricity	1	Refer to	It is planned to be removed by
Infrastruct	Tower		Annex 3	March, 2019.
ure	Power Poles	One place (a few)	Refer to	To be relocated through
			Annex 3	dialogue between ANE and
				Electricity of Mozambique
				(EDM)
	Water Pump	1	Refer to	Built and owned by Nacala
			Annex 3	Municipality







2.2.2 Impact on Land

The project-affected area belongs to a special economic zone reserved for industrial expansion. The land title in the area, or DUAT¹, has been issued to the land holders to carry out industrial activities. In reality, however, there has been no industrial activity yet to be seen in the area and a large part has been left unused or used to grow crops. These agricultural activities have been carried out without any official permit.

Most of the farmland affected, or 88.8% (i.e. 1,291 farms) of them, are located in Muanona Administrative Post. Mutiva Administrative Post only shares 11.1% (i.e. 162 farms). Farms share 1,457,170 m² of the land affected. As expected, the largest portion is located in Muanona Administrative Post sharing approximately 88% as opposed to Mutiva whose share is the remaining.

Based on an interview with the PAPs, 49 properties (i.e. land) are those with an official land title (i.e. DUAT). However, this could not be verified during the study as Nacala Municpality, which manages the DUAT, was in a process to update the list of people² with DUAT and hence could not provide the list to the consultants. The interview survey took place in the field which was far away from the residence where the DUATs were said to be kept and hence they could not be checked visually either. In any case, it can be said that most of the people growing crops in the area have no official title over the land they grow crops on and certainly none of them have official rights to grow crops in the area.

2.2.3 Impact on Crops

Six crops have been found to be grown in the project-affected area: cassava; corn; rice; sesame; sweet potato; and okra. Some of the crops are grown in the same plot of land along with others. It is important to note, however, that the survey took place during the dry season, when most of the crops were not readily observable. Measurement of the sizes of each agricultural plot relied on the area claimed by the PAPs, which may lead to an overestimation.

Cassava, being a crop resistant to drought, was the most common crop grown in the area, with 1,140 fields (i.e. 1,210,399 m2 in total). This accounts for approximately 83 % of the area claimed to be growing crops. Corns also share a large part of the agricultural area (i.e. 126,443 m2) followed by rice (i.e. 78,510 m2) and sesame (i.e. 19,103 m2). Most of the HHs (68%) produce these crops for their own consumption, 31.3% produce for both their own consumption and for selling at the market, 0.5 % only sell at the market, 0.1% exchange them with other products and 0.1% did not specify the purpose of their growing. For those that both consume by themselves and sell at the market, most sell approximately half (i.e. 25 to 75%) of their crops at the market.

The sale of these products generates an average annual income of about MZN 7,914.22 per HH. For the transportation of crops, they use different means. 200 HHs transport on foot, 59 HHs by car, 19 HHs by motorbike, 11 HHs by bicycle and 8 HHs using a public transportation. There is a variation with regards to the time needed to transport the crops after

² They were in the process of taking away DUAT from those that have not been carrying out industry activities for a period more than that stated in the DUAT. As of November, 2017, this process has been completed based on an confirmation with Nacala Municipality.







¹ DUAT is a land title that grants the title holder official right to use the land for a specific purpose over a certain period of time.

the harvest. 89 HHs need a time that varies between 1-2 hours on foot, 79 HHs walk between 30 min to 1 hour, 45 HHs between 2-4 hours; 43 HHs between 15-30 min.

2.2.4 Impact on Valuable Trees

A total number of 1,096 HHs are expected to lose their trees. A significant part of them (i.e. 989 HHs) lose their trees that are located in Muanona Administrative Post and 107 HHs have their trees in Mutiva Administrative Post affected. The largest number of trees is banana consisting of approximately 54 % (i.e. 12,443 trees) of the total number of 22,971 trees. Bananas, Ziziphus Mauritianas (i.e. Chinese dates), mangoes and cashews account for over 90 % of the valuable trees affected. Among the native, or naturally grown, trees with an economic value, baobab stands out with 131 trees. The name of 254 trees could not be identified by name. Part of them is medicinal plants with economic value.

2.2.5 Impact on Structures

There is one building and one fence that are located within the ROW and hence expected to be affected. The building is an office built with conventional material of a company involved in salt producing business. The length and width of the building is 10.81 m and 10.15 m, respectively. The fence, on the other hand, belongs to a company that is doing business in the field of transportation and maintenance of vehicles. The length of the fence affected is approximately 160 m.

2.2.6 Impact on Religious Places

Impact on Graves

A number of family cemeteries are located within the area of direct influence of the new road. During the survey, a total number of 67 graves that belong to 67 HHs were found to be located within the ROW.

In addition, there is a non-operational community cemetery known as "Central" located near the Port of Nacala and within the ROW. It dates from the 1960s and was operational until the year 2000. It is estimated that more than 2,000 bodies are buried here. There are rumours that a common grave exists in this cemetery to bury people that died in a railway accident many of whose families cannot be identified.

During the census, in scope of this ARAP, it was not possible to produce a real record of people with graves of their beloved ones in the Central Cemetery located in the surroundings of Nacala. The fact is that many graves are not visible and do not even have a signal. For instance, the field team had to stop the survey for weeks due to the difficulty to locate the graves and a lot of people claiming to have their graves on site. Given the complexity in identifying the rightful persons to be consulted and compensated and the voices raised at the stakeholder meeting held on March 7, 2017, this cemetery has been confirmed by ANE to be left unaffected by the project and hence will not be under scrutiny in the latter part of this ARAP.

Impact on Places of Worship

There are three places located within the ROW where people believe have spiritual value. These places are imminently open areas, mostly under trees, where the communities or small







or extended families go and summon the ancestors to help them cope with difficulties in life and pray for their successes. They are all located in Muanona Administrative Post.

Perception of the PAPs

It is of extreme importance to understand the perception of the people who would have the graves of their loved ones affected by the project. The way in which they are handled should also take into account the local culture and dynamics. As explained above, 67 HHs have been confirmed to have their graves/cemeteries or places of spiritual worship within the project-affected area (i.e. The three PAPs who's worship places are affected also possess graves that are affected by the project).

In the survey questions were asked to find out the need to consult the ancestors for the grave exhumation process. The answer was not conclusive. Only 55 out of 67 HHs provided an answer to this question. Among those that did, 40 HHs consider important to consult with the ancestors and 15 HHs said that there was no need to do so. 45 HHs believe that in case there is a ceremony to exhume the graves, the process should be taken by the family members while 40 HHs believe that such ceremony should be held by the local authorities and the family members should only follow the process instructed by the authorities. The use of the local tradition and the roles of the local leaders in the process were also acknowledged as being of extreme importance.

The answers regarding the destination of the graves to be transferred were also divided. While 28 HHs consider the need to transfer the graves somewhere but close to the ROW, another 28 HHs believe the graves should be transferred somewhere far from the ROW. 34 HHs are in favour of the idea of transferring the graves to a public cemetery while 21 HHs are not. 30 HHs think the destination of the graves should be decided by the families. 47 HHs said that relocation of the graves was easy while seven HHs said they had difficulties in locating the graves of their beloved ones.

2.2.7 Impact on Public Infrastructure

A few infrastructures may be affected by the new road construction project. There is one electric tower located in the ROW that is transmitting electricity inland from Zambia through a ship situated in the bay of Nacala provided by the Turkish government. According to the Nacala District Administrator, it is a three year electricity supply/exchange project made between Mozambique and Zambia that commenced in March 2016 and therefore the ship and tower are expected to be replaced by March, 2019. The electricity tower located within the ROW is shown below.

With regards to the electricity poles, it is considered necessary to be transferred away from the ROW and reinstalled outside of it. ANE would need to talk to the Electricity of Mozambique (EDM) located under the Ministry of Mineral Resources and Energy to make this arrangement. The cost for relocation will be included in the project cost. Since there is enough space, this is considered not to be a problem.









Photograph A Electricity Tower

There is one water pump that has been developed and owned by Nacala Municipality located within the ROW. This water pump is not in use any longer but is considered necessary to be compensated by ANE. ANE would need to compensate for this by providing a new water pump to the municipality.

2.3 Results of the Socioeconomic Study

2.3.1 General Characteristics of the Project and Surrounding Area

The construction and operation of the access road to the Nacala Port project is located within the territory of Nacala-Porto Municipality. Two Administrative Posts belong to Nacala-Porto District, namely Mutiva and Muanona. The table below shows the total number of Nacala-Porto inhabitants by sex per Administrative Post, Locality and Neighbourhood.

Table 2 Administrative Division of Nacala-Porto Municipality

	Total	Men	Women
NACALA-PORTO District	206,449	102,342	104,107
MAIAIA/MUTIVA Administrative Post	172,064	85,751	86,313
MAIAIA/MUTIVA Locality	172,064	85,751	86,313
MUZUANE Neighbourhood	5,497	2,679	2,818
LILI/NAHEREUQUE Neighbourhood	8,937	4,407	4,530
BLOCO 1Neighbourhood	8,499	4,268	4,231
MAIAIA Neighbourhood	14,270	7,288	6,982
MATHAPUÉ Neighbourhood	27,238	13,558	13,680
MOCONE Neighbourhood	26,437	13,241	13,196
NAUAIA Neighbourhood	9,554	4,707	4,847
UTHUPAIA Neighbourhood	25,767	12,677	13,090
RIBAWE Neighbourhood	12,179	5,984	6,195
TRIANGULO Neighbourhood	24,220	12,416	11,804
QUISSIMANJULO Neighbourhood	9,466	4,526	4,940







	Total	Men	Women
NACALA-PORTO District	206,449	102,342	104,107
MUANONA Administrative Post	34,385	16,591	17,794
MUANONA Locality	34,385	16,591	17,794
LOCANE Neighbourhood	3,611	1,756	1,855
NACO Neighbourhood I	969	467	502
MATOLA Neighbourhood	4,859	2,387	2,472
MUPETE Neighbourhood	2,196	1,066	1,130
MUANONA – SEDE Neighbourhood	840	421	419
MAHELENE Neighbourhood	2,367	1,113	1,254
MURRUPULENE Neighbourhood	3,399	1,679	1,720
NAVEVENE Neighbourhood	966	455	511
JOSINA MACHEL Neighbourhood	470	229	241
MUTALANE Neighbourhood	2,945	1,382	1,563
NAMISSICA Neighbourhood	1,986	989	997
MUAMBE Neighbourhood	1,348	654	694
NANARE Neighbourhood	1,536	734	802
NABULUSA Neighbourhood	1,920	854	1,066
25 DE SETEMBRO Neighbourhood	4,139	2,005	2,134
NACURULA Neighbourhood	481	234	247
TETERRANE Neighbourhood	353	166	187

Source: Data from the National Statistics Institute, 2007

Nacala-Porto District has 206,449 inhabitants with a population density of 325 persons/km2. Female population shares a larger part (i.e. 50.4%) of the group. This data is consistent with the national statistics that show a representation of 51% of female population within the total population of Mozambique. Between the two administrative posts in Nacala-Porto, Mutiva is more populated with 172,064 inhabitants, which represents, in relative terms, 83.3% of the inhabitants in Nacala-Porto.

The proposed road project is expected to cross eight neighbourhoods, five of which from Muanona Administrative Post (i.e. Conambia³, Matola, Murrupelene and Lacone) and three from Mutiva Administrative Post (i.e. Triangulo, Maiaia and Uthupaia).

2.3.2 Place of Origin and Length of Living

Most affected HHs (79.8%; 1,187 in number) was born in the neighbourhood of the project. Another 15.9% (i.e. 236 HHs) was found to come from other districts in Nampula province and approximately 1.1% (i.e. 17 HHs) was born in areas outside of the province. Most of those HHs (69.6%; 1,035 in number) have lived in Nacala for more than five years. 23.4% of 348 HHs lived in the area for five years and approximately 5.6% (i.e. 83 HHs) have lived in the area for less than 5 years. 22 HHs or 1.4% of them gave no answer.

2.3.3 Language and Religion

³ Conambia doesn't appear in the national census data because it is not a residential area. People normally come from other neighborhoods, manly Matola, to Conambia to perform farming activities.







Most of the HHs (97.8%; 1,456 in number) has Macua as the main mother tongue. This suggests that Macua should be used to communicate with the PAPs to ensure an effective communication. Islam is their main religion for approximately 89.0% (i.e. 1,324 HHs) of the project-affected households and only 9.5% (i.e. 141 HHs) are Christian.

2.3.4 Gender

The families in the impact area of the access road to the Port of Nacala are mostly (i.e. 86.9%) led by men. Only 13.1% of the HHs has women in the leadership of their families. It is considered important in implementing the ARAP to include women in various meetings and above all in the compensation payment process side by side with their partners (i.e. men).

2.3.5 Education Level

The educational level in the project area is low. Table 4 below shows a detailed disaggregation of the HHs' academic degrees in the project area.

As it can be deduced, 632 HHs (42.4%) of the HHs have at least a family member without academic training. This is a family member who cannot read or write. In specific terms, among the total 9,114 PAPs, approximately half (i.e. 4,513 equivalent to 49.5%), cannot read or write. More than half of this population (i.e. 2,512 equivalent to 55.6%) are children of the HH heads⁴. The second group without education is comprehended by the wives of the HH heads (i.e. 708 people equivalent to 15.6%) followed by the HH heads' grandchildren (i.e. 632 members equivalent to 14%), and the HH heads themselves (i.e. 431 cases equivalent to 9.5%).

Many of those with some sort of academic training have had only primary education up to grade 5 (i.e. 2,737 people). 1,061 PAPs have had education up to the second level (i.e. grade 7). 548 PAPs have had education up to grade 10 and 122 have had education up to pre-university (i.e. grade 12).

The reasons behind the non-school attendance by children at school age are largely economic difficulties. 348 HHs mentioned lack of economic conditions as the reason for not sending their children to school. 75 HHs attributed it to lack of school vacancy. 22 HHs said it is due to the fact that children have chores and hence cannot attend school. Only nine HHs mentioned the distance as being the reason. 58 HHs mentioned other reasons (e.g. refusal to attend school, early marriages and physical disability).

2.3.6 Access to Financial Services

The access to financial services is very low. Most interviewed HHs (92.1%) do not have a bank account. Those with a bank account have it essentially in the following local banks: Mozambican International Bank – BIM (2.6% of the total HHs); Commercial and Investment Bank – BCI (1.7%); Standard Bank (0.7%); Barclays (0.3%), ABC Bank (0.1%) and others (0.2%). The use of financial services is important in implementing the ARAP as payment of compensation is planned to be made by bank transfer as it offers greater safety and credibility to the process. One of the real constraints for the access of financial services is the lack of an ID.

⁴ This includes adults.



BETA Engenharia, Gestão e Ambiente



Table 3 HHs' Educational Level

Total	2,737	1,061	548	122	9	3	9	4,513	115	9,114
Other Family Member s	57	11	5	8	0	0	0	58	0	139
Step Children of HHH	29	22	20	4	0	0	0	79	3	195
Child in Law of HHH	3	3	3	0	1	0	0	2	1	13
Parent in Law of HHH	1	0	0	0	0	0	0	7	0	8
Grand Children of HHH	236	62	18	9	1	0	2	431	14	770
Siblings of HHH	36	35	22	1	1	0	0	58	0	153
Uncle/ Aunt of HHH	10	10	1	0	0	0	0	4	1	26
Grandfa ther/ mother of HHH	0	0	0	0	0	0	0	8	0	8
Father/ Mother of HHH	3	1	0	0	0	0	0	14	5	23
Children of HHH	1,605	524	279	64	3	1	4	2,512	14	5,006
Spouse of HHH	344	149	62	6	0	1	0	708	20	1,293
НН	375	244	138	30	0	1	3	632	57	1,480
	Primary school - Level 1/Elementary	Primary school - Level 2	Secondary School	Pre-universuty	Technical Training - Basic	Technical Training – Medium	High School	Nome	Don't Know	Total







2.3.7 Possession of Identification Documents

The existence of affected HHs' official identification documents is fundamental to ARAP implementation. Apart from facilitating the identification of HHs, it also allows the facilitation of the bank account opening process which should be used when a large amount of compensation (i.e. over MZN 10,000) is made. Based on the survey, it has been found that a majority (i.e. 98.2%) of the PAPs has some kind of identification document. The dominant document is the voters' card (i.e. 55.5%), followed by the identity card (i.e. 32.5%), personal identification document (i.e. 4.9%), ID receipt (i.e. 4.8%), birth certificate (i.e. 0.1%) and other types of documents (i.e. 0.4%). Only 1.2% do not possess any type of identification document.

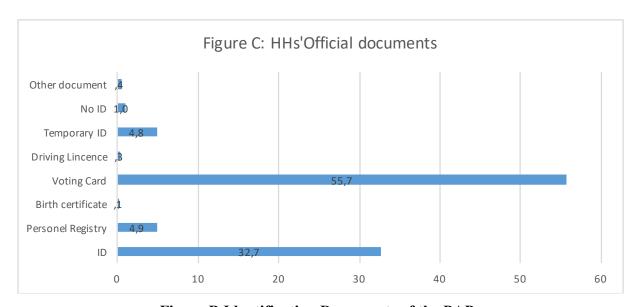


Figure B Identification Documents of the PAPs

2.3.8 Vulnerability

A special attention should be given to certain groups of PAPs that require special support given their condition. According to the survey, approximately 8.3% (i.e. 124) HHs declared that they have a relative with some sort of chronic disease. Diabetes and/or asthma are among the main diseases they have, representing approximately 32% (i.e. 40) of them. Epilepsy is also common with a share of approximately 30% (i.e. 38 HHs). Other diseases, such as Cerebrovascular Accident (CVA), blindness, mental disorders, HIV/AIDS, leprosy, muteness, rheumatism and tuberculosis, have a penetration below 1% (i.e. 1-2 HHs on average).

The physical disability is another element of vulnerability present among the project-affected households. In total, 8.1% of the HHs declared that they have a family member in the HH with some sort of physical disability. About 100 HHs have one member with disability, 15 HHs have two members and two HHs with three members. Widowhood affects 2% of the HHs interviewed, which represents few deaths among couples, and, likewise, with only 1% of HHs who registered the case.

Chronic patients and people with disabilities, just like widows versus orphans and divorced/abandoned women by their respective husbands should deserve a special attention







(i.e. ARAP support and assistance) so there is no perpetuation or worsening of their vulnerable situation.

In addition, 1.2% of the PAPs have been found not to possess any form of identification, an item that is needed for opening a bank account to which compensation that amounts to more than MZN 10,000 is to be channelled. Assistance should be provided to this group of people for creating an identification document and opening a bank account.

2.3.9 State of Livelihood

Income

Dependence on agriculture is one of the main features of the project-affected HHs. More than half (i.e. 55.7%; 825 in number) have agriculture as the main source of living as Figure C below suggests. Surprisingly, the second source of livelihood is *biscato*⁵ (i.e. informal casual work). Indeed, 230 HHs (15.5%) have their income deriving from *biscato*. The prominence of *biscato* work is due, possibly, to the investments that have been made in the Special Economic Zone (SEZ) especially in the areas of industry, tourism and agro-processing⁶. Alternatively, it can be attributed to the seasonality of some railway and port activities in the area. The third biggest source of income is formal employment, which represents approximately 12.7% (i.e. 189) of the HHs interviewed followed by retail trade with 8.3% (i.e. 124 HHs), family batches (2.1%; 32 HHs) and fishing activities (i.e. 1.9%; 29 HHs). The rental, hunting, cattle raising and collection of seafood do not go beyond 10 HHs in each of the cases.

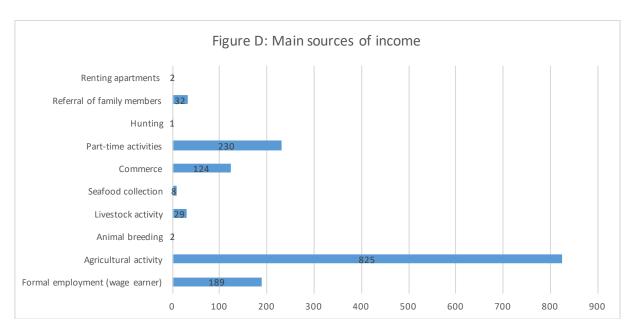


Figure C Main Source of Income

⁶ Salim Taquichande, substitute Delegate at the Office of Economic Zones of Accelerated Development (GAZEDA), declarations to Jornal Notícias, extracted in: http://muliquela.blogspot.com/2011/02/nacala-porto.html



BETA Engenharia, Cestão e Ambiente



⁵ It is work without links recorded at the labour card or equivalent documentation, generally without benefits, such has fixed remuneration or paid salaies

In numeric terms, the HHs enjoy a monthly income up to a maximum of MZN 54,999. Nevertheless, a large part of the group (i.e. 1,008 HHs; 69.3%) have a level of income between MZN 0-4.999. The average income of the project-affected persons was approximately MZN 4,268. This parameter reflects mostly the salary matrix in force in Mozambique, in which most of the workers (in the agriculture sector) receive, as of 2016, a national minimum salary fixed at MZN 3,298. The table below shows the distribution of the number of HHs per income intervals.

Table 4 Distribution of Income Levels of the HHs

Income Level (MZN)	Number of HHs
0 – 4,999	1,008
5,000 – 9,999	333
10,000 – 14,999	66
15,000 – 19,999	21
20,000 – 24,999	8
25,000 – 29,999	4
30,000 – 34,999	8
35,000 – 39,999	2
40,000 – 44,999	1
45,000 – 49,999	1
50,000 – 54,999	2

One of the aspects that became evident through data analysis is that the head of the household (i.e. CFA) was the main bread winner. Thus, when asked whether anyone else, apart from the CFA, had any source of monetary income, the majority (92%; 1.364 HHs) answered that they did not. In other words, only 8% of the HHs has someone else, apart from the CFA, with incomes. The survival of the HHs is largely dependent on the CFA.

Expenditures

The average monthly household expenses of the PAPs are shown in Figure D. It can be seen from this figure that the largest group of the PAPs (i.e. 28%; 398 HHs) spend on average MZN 3,001 to 5,000 in one month. The second largest group (i.e. 19%; 277 HHs) spends MZN 2,001 to 3,000 followed by those that spend between MZN 1,001 to 2,000 that shares approximately 18% (i.e. 252) of the total number of HHs. The expenses are mainly directed to health, education, food and clothing.







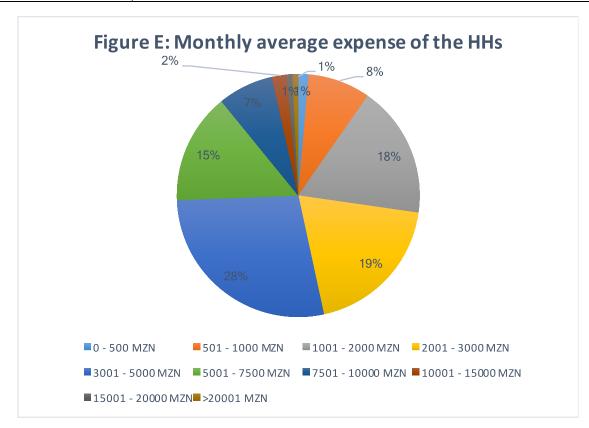


Figure D Monthly Average Expense of the HHs

2.3.10 Possession of Goods and Assets

The wellbeing may be inferred by the type and quality of durable goods the families are in possession of. Based on this perception, the goods and assets in the project-affected households were surveyed with its results shown in Table 5 below. As a result, it was found that 388 HHs have some kind of transportation means (i.e. vehicle, motorbike or bicycle) and 850 HHs have a means of communication (i.e. television or radio) and 761 HHs have a mobile phone.







Table 5 HHs' Assets

Assets	AFs
Small animals	360
Medium animals	52
Big animals	4
Vehicle	20
Motorbike	217
Bicycle	151
Freezer	164
Electric stove	17
Millings	7
Business	166

Assets	AFs
Family place of worship	54
Tractor	5
Cart	18
Mobile phone	761
Radio	500
TV	350
Sewing machine	28
Fridge	19
Air-Conditioner	6
Others	6

2.3.11 Access to Public Services

Drinking Water

Accessing drinkable water remains to be a challenge in Mozambique. According to the United Nations Children's Fund, the coverage of drinkable water is 49% in Mozambique with a large disparity between the urban area (80%) and rural area (35%)⁷. In Nacala-Porto district, drinkable water supply has grown due to the investments made under the scope of the *Millennium Challenge Account* (MCA) Project, which led to the inauguration of Nacala dam in 2015. Nevertheless, it is still an issue to be dealt with in the district. With more than 220 thousand inhabitants, only a third has access to drinkable water rendering many to walk long distances to collect it⁸. In fact, these data match the survey conducted in the project impact area the result of which is presented in Table 6 below.

Table 6 Source of Water Used by the Project-affected Persons

	Sources	Frequency	Percentage (%)
Valid	Running water (FIPAG/ARM) at home	134	9.0
	Neighbour's running water	515	34.6
	Traditional well	513	34.5
	Water borehole	276	18.5
	River	40	2.7
	Other source	1	0.1
	Total	1,479	99.4
Missing	No information	9	0.6
Total		1,488	100

⁸http://www.verdade.co.mz/nacional/49038-agua-potavel-continua-a-ser-uma-miragem-em-nacala-porto







http://www.unicef.org.mz/nosso-trabalho/o-trabalho-do-unicef/water-sanitation-hygiene/

Those people with running water at home comprise less than 10% of the whole population. Many of the people are dependent on running water from the people that live nearby (i.e. 34.6 %; 515 HHs) followed by traditional well with a dependency rate of 34.5% corresponding to 513 HHs. Water borehole, river are also important water sources in the area with a dependency rate of 18.5% (i.e. 276 HHs) and 2.7% (i.e. 40 HHs), respectively.

Running water is not accessible in the project's direct impact area either because people do not live inside the ROW. Nevertheless, many traditional wells and creeks, where the population fetch water for different purposes (e.g. drinking, cooking and washing) can be found.

With regards to the distance from the PAPs' home to the nearest drinking water source, 32.2% (i.e. 479 HHs) have water in a place less than 15 minutes away on foot. 22.2% (i.e. 330 HHs) travel 15 to 30 minutes, 18.5% (i.e. 276 HHs) walk for 45 minutes to one hour, 13.2% (i.e. 196 HHs) walk for 30 to 45 minutes, and 9.7% (i.e. 144 HHs) need more than one hour to reach a drinking water source. 3.6% (i.e. 54 HHs) of the project-affected households has water in their own yard.

Only 18.5% of the total number of HHs interviewed said that they treat the water before consumption, usually, by boiling (7.5%) or by applying a water purifying product known in Mozambique as *Certeza* (7.9%).

When they are on the field (i.e. farm), most of the HHs (76.3%; 1,135 HHs) drink the water brought from their home. About 16.5%, corresponding to 246 HHs, drink the water from traditional wells while 3.1% (i.e. 46 HHs) answered that they drank water from creeks/rivers. In cases where the water is fetched from the plantation areas, the distances are relatively shorter for the majority of HHs, if calculated by the time spent to go and return from the source. For instance, 32% of the HHs, corresponding to 476 HHs, fetch water within 15 minutes of distance; about 13.8% (206 HHs) fetch water from within their own farms; 10.6% (158 HHs) between 15 to 30 minutes away; 7.5% (112 HHs) between 30 to 45 minutes; and finally about 5.8% (87 HHs) between 45 minutes to 1 hour away on foot.

When they are on the field and run out of water, most of the people (i.e. 947 HHs; 63.9%) ask neighbouring people for water. 7.5% (i.e. 111 HHs) said they rely on rain and 5.9% (i.e. 88 HHs) said they use water in the nearby lagoons and creeks.

2.3.12 Information Source and Mechanism for Decision-making and Conflict Resolution

It has been made evident that traditional mechanisms are more common and relied upon for settling conflicts in the area with 1,256 HHs (i.e. 84.4%) of the people choosing the neighbourhood over conventional mechanisms (i.e. courts and tribunals). Police, traditional authorities (*régulos*) and the church have not been considered suitable by a majority of the HHs. Apart from the neighbourhood, the role of the family members was found to be considered suitable for conflict settlement with approximately 8.9% of the HHs (i.e. 133) choosing them.

In terms of PAPs source of information, community leaders play a core role and are considered reliable among many HHs interviewed. Approximately 27.7% (i.e. 412 HHs) trust their followed by their friends (i.e. 20.2%; 300 HHs). The TV has been found to be the third reliable source with approximately 17.6% (i.e. 262 HHs) selecting as the main source of their







information followed by the radio (i.e. 17.2%; 256 HHs) and religious leaders (i.e. 9%; 134 HHs).

The most important means of disseminating information among the HHs, on the other hand, has been found to be mobile phone. Approximately, 96.8% of the HHs chose mobile phones as the main device used for disseminating information. With regards to decision-making, the head of household is the main figure with about 86.6% (i.e. 1,288 HHs) acknowledging their importance.







CHAPTER 3 RELEVANT LEGAL FRAMEWORK

This chapter describes the environmental laws and regulations in Mozambique that are of relevance to the project.

3.1 The Constitution of the Republic of Mozambique

The Constitution of the Republic determines that the land is State property and cannot be sold but the land holders can transfer only the improvements made on the land (e.g. buildings and crops). It also guarantees the population access to, and use of, the land and safeguards women's rights to accessing and use the land.

An important mention is that the Constitution of the Republic does not bring any provision regarding the possible indemnification when the land is expropriated on behalf of public interests. Apart from that, the Constitution of the Republic includes two fundamental environmental pillars, namely: "all citizens have the right to live in a clean environment and the responsibility to protect that right" as well as the acknowledgement of environmental protection as public interest.

3.2 The Land Act

The Land Act (Act No. 19/1997/October 1) presents the basis for the definition of people's land use rights based on customary claims and the procedures for acquisition of land use and benefit titles by the communities and individuals. The Act recommends a process based on consultations that acknowledge the customary rights as means to identify the claims of the community and individual community members with no titles.

3.3 Land Act Regulation

The Regulation recommends compensation in case of loss caused by relocation and resettlement. It stipulates that this compensation be made based on a table produced and updated by the Provincial Directorates of Agriculture. These tables include average amounts, which is said to be based on the market value, given to many seasonal and permanent arboreal crops. In 2016, the National Directorate of Agriculture Services, from the Ministry of Agriculture and Food Security, produced an updated table for the entire country. These tables were used in this ARAP. Two of the gaps/omissions or inconsistencies are regarding (i) the non-inclusion of a certain number of common plants; and (ii) the adoption of extremely low prices when compared to the practice in the Southern Africa region where Mozambique is situated.

In terms of natural resources use rights, Regulation 66/98 provides a basis that allows one to understand the definition of access rights and land use as well as the procedures to be followed in land acquisition and the use by the community and individuals. The same Act and Regulation incorporate crucial aspects defined in the Constitution in relation to land such as land maintenance as a State property and that the land cannot be sold, and the inexistence of a "land market" *per se* across the country. Among other aspects, it defines "areas aimed at satisfying the public interest" as being the public domain. It also protects the customary and community rights to land.

3.4 Regulations on the Resettlement Process resulting from Economic Activities







Mozambique's Regulations on the Resettlement Process resulting from Economic Activities were passed in 2012. The regulations consist of 28 articles which basically formulate the procedures for any resettlement process in Mozambique and especially articulate the assistance required from government during a resettlement process. This legislation was the basis upon which this ARAP and the community engagement procedures were developed and structured. These regulations were also used by the social team to inform the PAPs of their rights with regard to economic displacement, as outlined under Articles 10 and 14. Although all the regulations are highly relevant to the project, the following articles are particular pertinent and were used to structure most of the ARAP procedures at the community level:

- Article 8 identifies the stakeholders that should participate in the resettlement process (for which purposes the Resettlement Committees were established);
- Articles 10 and 14 refer to the rights of the affected population and that of information. It is of pivotal importance for a resettlement project to articulate the constitutional rights of those affected through public meetings. Having knowledge of one's own rights is vital as this enables the PAPs to voice their concerns and/or issues during the process. Article 10 lays down some basic, fundamental human rights as these pertain specifically to resettlement. These rights are elaborated under Article 14. Some of the most important rights include people's rights to: "have re-established their income level, to equal or higher than that before displacement including that of crops; have restored their living standard to equal or higher than before the resettlement; have space to perform their subsistence activities; and give opinion in the whole resettlement process" (2012: p.5).
- Article 12 states responsibilities of central and local levels of government. It delineates
 the responsibilities of the central and local governments. Some of these responsibilities
 include the land use planning sector's responsibility to provide technical assistance in
 implementation fir matters related to land use planning as well as to monitor the
 resettlement process.
- Articles 13 and 22 are concerned with public participation and consultation. Public participation is central to the success of a resettlement project. Both of these articles articulate specific requirements which this ARAP should adhere to.

3.5 Resettlement Committees' Internal Regulation and Technical Guidelines for PAR Design and Implementation

The Regulations on the Resettlement Process resulting from Economic Activities- Decree 31/2012 state in Article 5 and 8 the main stakeholders who guarantee monitoring and supervising of the resettlement process. A Ministerial Diploma No. 155/2014 approves the Internal Regulation for the Committees tasked with monitoring and supervising activities to the resettlement process.

Drawing from Decree No. 31/2012 Article 3c, Ministerial Diploma No. 156/2014 underlines the technical guidelines for the ARAP design and implementation process. This diploma gives detains on:

- The rights of interested parties to have access to information
- Proponent's responsibilities







- Design process and content of the resettlement plan
- Requirement and content of the socio-economic survey
- Public consultation meetings and reporting format
- Implementation of resettlement plan
- Monitoring and Evaluation

3.6 Spatial Planning Act

The Spatial Planning Act (Act No. 19/2007, July 18) confirms that land expropriation driven by reasons of public interest should entail the payment of a compensation that is calculated fairly to indemnify the loss of tangible and intangible goods, productive goods as well as for the social cohesion disturbance.

3.7 The Spatial Planning Act Regulation

Article 68 (No. 2a) of Decree No. 23/2008 (June 1) of the Spatial Planning Act specifies that expropriation for spatial planning reasons is considered for public interest when the end goal is to safeguard the common interest of a community and it involves installing economic or social infrastructure with large positive social impact. Article 70 (No. 1-3) establishes, likewise, that a fair compensation should be made before transfer or expropriation of property and goods and that it should also cover the real value of expropriated goods as well as the damage and loss of profits.

3.8 Laws for the Evaluation of Goods and Losses and Compensation in Case of Loss

Specific aspects of compensation are governed by the Ministerial Order 181/2010. This Order reiterates the provision in Chapter 10 of Decree No. 23/2008, mentioned above, which indicates that the land expropriation for public interest benefit should be made public by the Council of Ministers, under proposal of the entrepreneur. However, the provisions have been developed recently and the Council of Ministers' public announcement is still not a standard practice. There are no clear mechanisms to be followed.

For infrastructure and crops, Ministerial Decree No. 181/2010 establishes the expropriation process related to spatial planning. This Decree takes important measures attempting to fill the existing gap found in calculating the amount of compensation to be made. Nonetheless, this Order has its limitations. Namely, it does not mention "updating the prices".

With regards to infrastructure in particular, a factor that tends to result in lower amount of compensation is the concept of depreciation, which the current legislation and regulations require to be taken into consideration. Nevertheless, current laws and regulations do not give a clear instruction for this and there is ground for different ways of interpretation giving way to different outcome when applied by different resettlement professionals.

With effect, the experience has been proving that the aforementioned tables, either in the agricultural sector or for the public works and housing, are hardly made available, and when they are, they are most of the times outdated. Besides, due to many reasons, the Mozambican market hardly provides trustworthy and consolidated information regarding the prices of acceptable matching or replacing goods. This situation has led professionals of resettlement







actions to seek for alternative ways for calculation and evaluation namely calculating only those of direct and tangible goods affected.

Intangible aspects such as the sentimental bond to affected goods, the proximity to neighbours of relatives, holy places, and aesthetic values should all be sorted out through evaluation and negotiations in consultation with the relevant stakeholders. For the sake of an initial estimation, a factor of 20%, the maximum rate provided in Decree 181/2010, was used in this document as a factor to compensate for the intangible disturbances caused by the project. Adjustments should be made after the levels in which each HH will be disturbed has been made apparent based on more specific evaluation and negotiations.

3.9 Laws on the Environment

Environment Act No.20/97 (October 1) "is intended to define the legal basis of the right use and management of the environment and its components towards the realization of a sustainable development system in the country". The Environmental Act establishes a set of basic legal principles that highlight the principle of rational use and management of the environmental components to better improve the quality of life of the citizens and to maintain biodiversity and ecosystem such as the principle of precaution, according to which the environmental management should prioritize the establishment of systems that aim to prevent the occurrence of negative environmental impacts or irreversible damage, regardless of the existence of scientific certainty of the occurrence of such impacts, and the principle of environmental global and integrated vision as a set of interdependent natural ecosystems that should be managed in a manner to keep its functional balance.

This Act constitutes the basis for the definition of specific laws and regulations regarding the environment, namely:

• The Regulation on the Environmental Impact Assessment Process (Decree no. 53/2015, of 31st December, repealing Decrees no. 45/2004 and 42/2008)

This regulation sets the standards on the environmental assessment process, namely the process of categorizing activities, the level and content of environmental studies required for different categories, public participation process, review process, stages of environmental licensing (provisional, construction and operation licenses), responsibilities, inspections, fees and penalties.

The Environmental Impact Assessment Process is a tool aiming to contribute to the environmental and social sustainability of activities. It begins with Pre-Assessment of activity by the Environmental Impact Assessment Authority (at the national or provincial level). It is based on the information about the proposed activity and about the proposed area for the activity. This information is provided by the proponent in the preparation process to be submitted to the Provincial Directorate of Land, Environment and Rural Development (DPTADER) with jurisdiction in the proposed area for the activity. Following the Pre-Assessment the proposed activity is categorized or rejected. The following Table shows the categories taken into account in the EIA process.







Table 7 List of Categorization based on Decree No. 54/2015

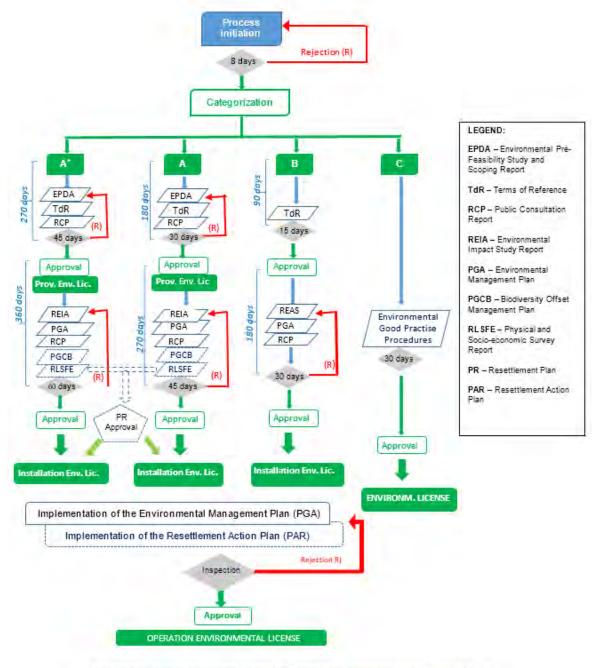
Category A+	Actions which, due to their complexity, location, and/or irreversibility and magnitude of impacts, should not only be subject to high level social and environmental vigilance but also experts should be involved in the EIA process.
Category A	Actions which affect significantly living beings and environmentally sensitive areas, and their impacts are of long term, intensity, magnitude and significance.
Category B	Actions which do not affect significantly living beings or environmentally sensitive areas, compared to activities pertaining to Category A.
Category C	Actions causing negative insignificant and minimum impacts or those likely to be neglected.

The following figure summarizes the process, indicating the studies required by category of activity, the deadlines for submission of documents to the Environmental Assessment Authority and the deadlines for communicating its decision. It should be noted that in cases where there is a need for preparation of resettlement plan, its approval shall precede the approval of the Construction License.









Environmental Impact Assessment Process in Mozambique, according to the Decree 54/2015

Figure E Environmental Impact Assessment Process, in accordance with Decree No. 54/2015

The EIA process is a tool to support the decision on environmental and social feasibility of activities. In any of the process phases prior to issuing a construction license, the Environmental Assessment Authority could question the environmental and social feasibility and request changes to or reject the project.

As mentioned in the introductory chapter, the Project for the Access Road to the Port of Nacala was assigned category B as a result of the ToR approved by DPTADER of Nampula in December, 2016.







During construction and operation phases, through environmental audits (regulated by Decree no. 32/2003) or environmental inspections (regulated by Decree No. 11/2006), the Environmental Authority may supervise the implementation of the Environmental Management Plan and approve or suspend the operation, in case of non-compliance and violations.

• Coastal and Marine Environment Protection and Prevention of Pollution Regulation

The regulation was approved by Decree No. 45/2006 (November 30). The main goal of this instrument is to prevent and limit the pollution resulting from illegal discharges of boats, platforms or land sources throughout the coast of Mozambique and to establish a legal basis for protection and conservation of the sea, lake and rivers, beaches and fragile ecosystems that belong to the public. It also categorizes many activities and determines the levels of its acceptance. It also deals with sources of marine pollution from the land.

3.10 Laws on Social Wellbeing

The National Directorate of Woman and Social Action (DPMAS) and the National Institute of Social Action (INAS) are responsible for the subsidy granted to the poorest and helpless of the population and for ensuring that the rights of the most vulnerable are respected. Although there are no specific legal directives regarding the social aspects of resettlement, the Mozambican ratification of international Conventions on Children's Rights and Human Rights, the Elimination of all Sorts of Discrimination Against Women, the Mozambican Agenda on Human Settlements and the Labour Act define the specific rights based on justice and equality of opportunities, without any discrimination whatsoever, in benefit of companies and private investments.

3.11 Applicable International Conventions

On the other hand, Mozambique adheres to a set of international legal instruments related to protecting and preserving the environment. In line 2 of Article 18 of the Constitution, the rules of international laws have the same value as internal legislations, and as soon as they are ratified by the Parliament and by the Government, they become constitutional normative acts. In light of No. 1 of this article, "the international treaties and agreements, properly approved and ratified, are decreed in the Mozambican laws". Some important international and regional treaties and conventions ratified to date are as follows:

- The United Nations Convention on Biodiversity, ratified through Resolution No. 2/94 (August 24)
 - This Convention aims to preserve the biological diversity, sustainably use its components and distribute with fairness and equity the benefits deriving from the use of genetic resources, namely through adequate access to genetic resources and transfer of relevant technologies, taking into account all the rights to such resources and technologies as well as through adequate funding.
- Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region (Nairobi Convention) ratified through Resolution No. 17/96 (November 26)

This highlights a set of measures aiming to protect and preserve the marine and coastal environment of the Member States, particularly by preventing and combating pollution







and protecting the flora and fauna in the region against growing threats caused by human activities.

 African Convention on the Conservation of Nature and Natural Resources by the Permanent Commission of the Assembly of the Republic through Resolution No. 18/81 (December 30)

This convention aims to ensure conservation, use and development of land, water, forests and wild fauna of the Member States taking into account not only the general principles of nature conservation but also the best interests of the communities themselves.

• SADC Protocol on Wildlife Conservation and its application ratified through Resolution No. 14/2002 (March 5)

This aims to establish common approaches and support to conservation and sustainable use of fauna by effectively applying relevant laws that are in place in the region and in each member state.

• Millennium Development Goals (September 2000)

The Government of Mozambique accepted and reiterated that the development of the country relies on a set of factors that are mutually influenced. Eight objectives were selected that should be achieved until 2015. Health, education, water and sanitation form a core part in its commitments.

Other important international and regional conventions and protocols ratified by Mozambique include:

- The Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer (Resolution No. 8/93/ December 8);
- The United Nations Framework Convention on Climate Change UNFCCC (Resolution No. 1/94/August 24, 1994);
- The Kyoto Protocol (Resolution No. 10/2004/July 28);
- Convention on International Trade of Endangered Species CITES (Resolution No. 20/81/December 30);
- The Cartagena Protocol on Biosafety (Resolution No. 11/2001/December 20);
- The United Nations Convention to Combat Desertification and Drought UNCCD (Resolution No. 20/96/November 26);
- The Stockholm Convention on Persistent Organic Pollutants (POP) (Resolution No. 19/96/November 26, 1996);
- The Basel Convention on the Transboundary Movements of Hazardous Waste and their Disposal (Resolution No. 18/96 November 26, 1996);
- The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Resolution No. 10/2009/September 29. The Convention entered into force in Mozambique in July 2010).







3.12 JICA Policies on Involuntary Resettlement

JICA policy on Involuntary Resettlement establishes the following principles:

- Whenever feasible, involuntary resettlement and the loss of means of livelihood should be avoided or minimized, making use of all the feasible alternatives of the project. If not possible to avoid, measures to minimize the impacts should be taken and the compensation for the lost goods should be made to the affected people.
- People subject to involuntary resettlement and the people whose means of livelihood are affected or lost should be sufficiently supported by the project proponent, in opportune time. An integral compensation of the resettlement costs shall be made before the resettlement. Hosting countries should allow PAPs to improve their living standards, productive opportunities and income generation, or at least ensure the recovering of the living standards prior to pre-project levels. The measures to achieve such objective should include: providing land and monetary compensation for the losses (to cover the loss of land and goods), supporting alternative income generation activities and covering necessary expenses for the movement/resettlement, and reestablishment of local resettlement communities;
- An effective participation of the affected people and their communities should be promoted in the ARAP activities planning, implementation and monitoring processes and measures to prevent losses of their livelihood should be taken. Moreover, an appropriate and accessible conflict resolution mechanism should be established for the affected people and their communities; and
- For projects that result in large-scale resettlement, a RAP should be prepared and made public. By preparing the RAP, consultations with the people and communities shall be undertaken based on the information previously made available. When the consultations take place, explanations should be given in the language and way that are understandable to the affected people.

JICA principles are complemented by the World Bank Policies and Safeguards (OP 4.12) presented below.

3.13 World Bank Policies on Involuntary Resettlement

The World Bank puts in place safeguards to deal with economic and environmental risks associated with involuntary resettlement. The main principles of these policies are as follows:

- Whenever feasible, involuntary resettlement should be avoided or minimized, making use of all the feasible alternatives of the project;
- People resettled shall be provided with an effective and immediate compensation of all
 costs related to the resettlement for the loss of goods associated with the project;
- The resettlement programs should be executed as sustainable development programs;
- The resettled/affected people should be consulted and should have the opportunity to participate in the planning and execution of resettlement programs;







- The resettled people should be supported in their efforts, in an attempt to improve their means of survival and livelihood and living standards, or at least to recover the living standards to the level that had been enjoyed prior to the project;
- The absence of a title of land possession does not prevent the application of the rights outlined in the World Bank Policy;
- Particular attention should be paid to the needs of the vulnerable groups among the
 ones being moved, especially the ones who are below the poverty line, the ones with
 no lands, the elderly, women and children, indigenous groups, ethnic minorities or
 other people being moved who may not be protected by the national legislation on
 land compensation;
- The total costs to support the resettlement activities are included in the project total costs;
- Affected people are identified and recorded at the earliest possible time to allow an establishment of criteria and eligibility through baseline studies; and
- Preference should be given to resettlement based on land to land compensation for those whose survival relies on land.

3.14 Gaps between the Mozambican Legislation and the Policies of JICA and the World Bank

The main gap that existed in the past between the Mozambican laws and the policies of JICA and the World Bank was primarily the fact that Mozambican Laws did not require preparation of resettlement instruments such as resettlement plans or resettlement political frameworks. This gap was resolved by the recent adoption of Decree 31/2012. Decree 31/2012 and the Order 181/2010 bring the content of the Mozambican instruments closer to the principles adopted by JICA and the World Bank with respect to compensation to the people and entities for involuntary resettlement and for impact on their assets. Nevertheless, some differences persist as can be identified in the following table.







Table 8 Comparative Framework of the Mozambican Legislation and the Policies of JICA and the World Bank

No.	JICA/WB Policies	Laws and Regulations in Mozambique	Policy applied to the Project
-	Involuntary resettlement and loss of means of livelihood are to be avoided when feasible by exploring all viable alternatives.	According to Art. 5 of Decree 31/2012, involuntary resettlement is seen as an opportunity to foster socio-economic development. It ensures that PAPs are better off than before resettlement. The importance of avoiding/minimizing resettlement or loss of means of living is not stressed.	Resettlement should be avoided or minimized wherever possible, exploring all viable alternatives.
2	When population displacement is unavoidable, effective measures to minimize the impact and to compensate for the losses should be taken.	Art. 70 of Decree 23/2008 stresses the need for providing a fair compensation to the displaced people. Fair compensation is defined under Art. 70 to be a compensation that covers the current value of the affected goods at the payment date plus compensation for any other damages and the lost profits.	Payment of compensation for affected goods should be made in addition to life restoration measures taking into account the present value of the affected goods.
8	People who must be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported, so that they can improve or at least restore their standard of living, income opportunities and production levels to pre-project levels.	Art. 10 of Decree 31/2012 defines the rights entitled to the PAPs stressing that PAPs should receive a compensation that is equal or above their previous level of income. In addition, Art. 10 stresses the need for supporting PAPs to restore their previous income and to be transported to the new areas of resettlement which should have social infrastructure.	No resettlement is foreseen under the Access Road to Nacala Port Project. PAPs whose means of livelihood will be hindered or lost will be sufficiently compensated and supported with an aim to restoring their livelihood to at least preproject levels.
4	Compensation must be based on the full replacement cost as much as possible.	Chapter 6.10 of Decree 181/2010 defines the procedures for calculating the compensation amounts and stresses that the compensation amount of affected goods should be based on the market price for both crops/trees and structures. The Ministry of Agriculture and Food Security is tasked with the responsibility to approve and update the table of prices for crops/trees. The Ministry of Public Works, Housing and Water Resources (MOPHRH) is tasked with the responsibility to update the price of structures.	PAPs will be entitled to compensation for their assets except for land in goods and/or money at replacement cost, which includes the costs of labour, transport and so on. Land will be compensated in goods (i.e. land) only in accordance with the laws in Mozambique that states land cannot be sold and bought.
5	Compensation and other kinds of assistance must be provided to the PAPs prior to displacement.	Art. 70 No. 2 of Decree 23/2008 stresses that a fair compensation for the lost assets should be delivered to the PAPs prior to displacement reflecting the current value of the affected goods at the payment date.	Compensations and other kinds of assistance will be provided to the PAPs prior to displacement.





CONSTRUCTION PROJECT OF THE NEW ACCESS ROAD TO THE PORT OF NACALA Resettlement Action Plan Report - Final

No.	JICA/WB Policies	Laws and Regulations in Mozambique	Policy applied to the Project
9	For projects that entail large-scale involuntary resettlement, resettlement action plans must be prepared and made available to the public. It is desirable that the resettlement action plan includes elements laid out in the World Bank Safeguard Policy, OP 4.12, Annex A.	Art.15 and 22 and Decree 31/2012 stress the need for preparation of the (A)RAP for any economic activities as part of the environmental impact assessment process.	Large-scale involuntary resettlement is not expected to take place under this project. Nevertheless, an ARAP (i.e. this document) will be prepared under this project.
7	In preparing a resettlement action plan, consultations must be held with the affected people and their communities based on sufficient information made available to them in advance. When consultations are held, explanations must be given in a form, manner, and language that are understandable to the affected people.	Arts. 13 and 23 of Decree 31/2012 emphasis the need of public consultation and community participation from (A)RAP design to (A)RAP implementation processes.	ANE will provide relevant information to the PAPs and their communities through public consultation meetings, focus group discussions or one to one meetings in the local (i.e. Macua) language. A stakeholder meeting was held on March 7, 2017 and three focus group discussions were held on November 2 and 3, 2016.
∞ 6	Appropriate participation of affected people must be promoted in planning, implementation, and monitoring of resettlement action plans. Appropriate and accessible grievance mechanisms must be established for the affected people and their communities.	Art. 10 f) of Decree 31/2012 calls the PAPs to have the right to voice out their opinions in the whole resettlement process. As part of the (A)RAP preparation process, a grievance redress mechanism is to be established and disclosed to the affected communities (see sections 3.1.1 d) and 3.1.2, n) of Ministerial Dioloma 156/2014).	PAPs and the affected communities have been and will be engaged in the ARAP process (e.g. design, implementation and monitoring). A grievance redress mechanism will be established under the project and its details are described in this ARAP.
10	Affected people are to be identified and recorded as early as possible in order to establish their eligibility through an initial baseline survey (including population census that serves as an eligibility cut-off date, asset inventory, and socioeconomic survey), preferably at the project identification stage, to prevent a subsequent influx of encroachers of others who wish to take advance of such benefits.	Art. 20 of Decree 31/2012 stipulates that in preparing the (A)RAP, project proponents should undertake a compressive socio-economic survey which clearly identifies the areas of project interventions, the number of PAPs and their socio-economic profile, inventory/photos of affected assets, identification of preferences of the PAPs, level of vulnerability and so on.	Population census, asset inventory, and socioeconomic survey have been carried out under this study. A cut-off date was set to be the time of the census survey and was announced by a representative from Nacala Municipality at the stakeholder meeting held on March 7, 2017 and also by the consultant to relevant government agencies through three focus group discussions held on November 2 and 3, 2016.





CONSTRUCTION PROJECT OF THE NEW ACCESS ROAD TO THE PORT OF NACALA Resettlement Action Plan Report - Final

No.	JICA/WB Policies	Laws and Regulations in Mozambique	Policy applied to the Project
=	Eligibility of benefits include the PAPs who have formal legal rights to land, including customary and traditional land rights recognized under law, the PAPs who don't have formal legal rights to land at the time of census but have a claim to such land or assets and the PAPs who have no recognizable legal rights to the land they are occupying.	Art. 68 of Decree 23/2008 indicates that expropriation for the purposes of territorial planning shall be deemed to be carried out in the public interest if it has its ultimate objective of safeguarding a common interest of the community and may be declared in the following cases: acquisition of areas for the implementation of economic or social infrastructures with large positive social impact.	Affected people with Land Title (DUAT) are entitled to land to land compensation. PAPs with no land title (despite holding customary and traditional land right recognized under law) and other forms of land occupations will not be compensated by the lost land in principle. However, land will be provided to those that wish to earn a plot of land to grow crops most probably outside of Nacala Municipality.
12	Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based.	The Land Law and the constitution forbid any kind of cash compensation for lost land. In fact, the land is the state property and no one is allowed to sell or buy it. Art. 10 e) of Decree 31/2012 states that the PAPs have the right to be given a new land/space to proceed with its subsistence activities.	Land-to-land compensation will apply only to the holders of land titles (i.e. DUATs) in principle. However, land will also be provided to those without DUAT that wish to earn a plot of land to grow crops most probably outside of Nacala Municipality. All PAPs will receive compensations for improvement made over the land (e.g. crops and trees) if they are lost by the project.
13	Provide support for the transition period between displacement and livelihood restoration.	There is no law or regulation in Mozambique that stipulates the transition period.	Compensation will be made to the PAPs in consideration of the transition period under this project.
14	Particular attention must be paid to the needs of the vulnerable groups among those displaced, especially those below the poverty line, landless, elderly, women and children, ethnic minorities etc.	Art. 20 2 c) and 3 m) of Decree 31/2012 stress the need for identification and support of vulnerable people during (A)RAP design and implementation. This provides that the most vulnerable people are disabled people, elders and household headed by women, widows and children/orphans.	Vulnerable groups will receive additional assistance depending on the difficulties they face.
15	For projects that entail land acquisition or involuntary resettlement of fewer than 200 people, abbreviated resettlement plan is to be prepared.	The law does not mention about the Abbreviated RAP.	An ARAP (i.e. this document) will be prepared under this project.





CHAPTER 4 INSTITUTIONAL FRAMEWORK FOR ARAP IMPLEMENTATION

4.1 Overview of Institutional Framework in Mozambique

The design and implementation of any (A)RAP requires an involvement of different actors both individuals and entities. In this project, ANE is the project owner and the entity that holds primary responsibility for implementing the whole process of ARAP associated with land acquisition including, among others, provision of compensation and other support to the PAPs, responding to claims and complaints that have arisen from the PAPs and making sure that the whole process is carried out in accordance with the set schedule.

Most of what relates to the institutional framework for the ARAP implementation at the project level is depicted in the Resettlement Process Resulting from the Economic Activity (i.e. Decree-Law No. 31/2012, August 8). This Decree defines the main tasks of public organizations that take part in the process. The Ministerial Order No. 155/2014 (September 19) refers to the Technical Commission of District Resettlement Tracking and Supervision (CTASRD), often referred to as the resettlement committee, which also serves as the Grievance Redress Committee at the district level, as the body that plays a particular important role. The committee is, according to this Ministerial Order, composed of the following members:

- Director of Economic Activities within the district government;
- Director of Infrastructure and Planning within the district government;
- Director of Health, Woman and Social Action within the district government;
- Five PAPs and household representatives;
- A civil society representative;
- Three community leaders of the affected communities;
- Two community leaders of the hosting area (in case there is a need to resettle); and
- Two representatives of the private sector

The objective of the committee is stipulated in Art. 18 of the Ministerial Diploma (155/2014) as presented below. While it is said to be responsible for managing the "resettlement" process, it also covers matters related to land acquisition and compensation that do not involve any involuntary resettlement.

- a) To oversee the resettlement process ensuring the rights of the PAPs are secured;
- b) To inform the legal authorities of any illegal doings in the resettlement process;
- c) To receive and address the complaints made by the PAPs and to make sure that unsolved issues are channeled to competent authorities;
- d) To prepare the (A)RAP progress report according to approved plans;
- e) To notify the (A)RAP proponent to give answers to issues of concern during the resettlement;
- f) To mobilize and raise awareness among the PAPs on the resettlement process;
- g) To intervene in the whole process of resettlement as a supervising entity;
- h) To raise awareness of the population over their rights during the resettlement process;
- i) To assess the reports on public consultation process and give their opinion; and
- j) To submit an analysis to the CTASRD information on the effectiveness of the process







4.2 Institutional Framework

Based on the legal provisions presented in the previous section, an institutional framework for implementing the ARAP is proposed as shown in the table below. The responsibility of CTASRD has already been depicted. Among the other entities, ANE, the project proponent, carries the main responsibility for implementing the process of land acquisition, displacement and compensation. In reality, ANE will delegate to a service provider the task of implementing the ARAP. This ARAP implementer can be called ARAPI here. ARAPI can be a non-governmental organization (NGO) or a company and will carry the responsibility to ensure that the ARAP implementation process takes place in an inclusive, participative and transparent manner. From an institutional point of view, the link between the ARAPI and other institutions is crucial for successfully carrying out the process. The table below presents the roles and responsibilities of each actor considered necessary to be involved in the ARAP implementation process. ANE, in cooperation with ARAPI, is expected to make necessary coordination to materialise this institutional arrangement. It should be noted that the tasks described here are by no means intended to replace the ones outlined in the law (i.e. Ministerial Order No. 155/2014, September 19) but instead it is intended to supplement them.

Table 9 Institutional Framework Proposed for the ARAP

Institutions	Main Tasks
CTASRD/Grievance	
Redress Committee	o oversee and supervise the whole process related to implementing the ARAP including land acquisition, compensation, public consultation and grievance
Redress Committee	redress with an aim to ensure that the rights of the PAPs are secured
	o raise awareness of the PAPs on their rights and obligations and on the ARAP
	process
	o request ANE to provide information on the progress and issues of concern
	during the ARAP implementation;
	o receive claims and complaints made by the PAPs and provide
	recommendations to those that could not be solved at the local level before it is
	handled to the District Administrator
	o inform the authorities of any illegal acts observed during the ARAP process
	o prepare an (A)RAP progress report according to approved plans
ANE/ARAPI	As the project promoter and member of CTASRD,
	o carry primary responsibility in carrying out the ARAP process which includes
	implementing environmental mitigation measures, holding public consultation
	meetings with the PAPs and carrying out environmental monitoring in
	cooperation with the consultants and contactors
	o prepare the ARAP and submit it to DPTADER for approval
	o implement the project in accordance with the ARAP approved by DPTADER,
	relevant laws and regulations, and suggestions and recommendations collected
	in due course
DPTADER	o approve or disapprove the ARAP submitted by ANE
	o issue the environmental license for the project after approving the simplified
	environmental report (SER)/EIA report and the PR/ARAP
	o monitor the ARAP implementation process to check if it is in compliance with
	the laws, regulations and guidelines regulating it
	o Provide technical assistance to CTASRD members from a point of view of
N. 1. D. 4	environmental management
Nacala-Porto	As a member of CTASRD,
Municipality Nacala-Porto District	o monitor and supervise the ARAP process including land acquisition,
	compensation and grievance redress o confirm the content of the ARAP
Government	d d d d d d d ADAD
	o prepare land by themselves or make necessary arrangements to provide it to







Institutions	Main Tasks
	the PAPs eligible to receiving it
District Planning	As a body under DPTADER and a member of CTASRD,
Service and	o oversee environmental issues related to the project
Infrastructure (SDPI)	o manage land registration process including that related to DUAT
	o guide and track implantation and development of infrastructure, such as water
	supply, power supply, sanitation, drainage, and opening and improving roads
	to ensure that construction norms are in force
District Economic	As a body under DPTADER and a member of CTASRD,
Activity Service	o provide technical support to the committee in, among others, developing
(SDAE)	agriculture-related income generation projects
Health District	As a member of CTASRD,
Directorate	o provide support to the committee in identifying and providing special
	assistance to the people considered vulnerable
	o assist ANE/ARAPI by providing advices on matters related to health and
	environment sanitation (e.g. transferring graves and exhuming bodies)
Education District	As a member of CTASRD,
Directorate	o provide assistance to the committee in matters related to education (e.g.
- 10 ·	education to the PAPs)
Local Community	As a member of CTASRD,
Leaders	o serve as the interface/ameliorator between the government and the PAPs
	o assist in finalizing the list of PAPs and goods
	o coordinate opinions and decision-making process at the community level in
	matters that require collective decision-makings (e.g. exhuming dead bodies,
Dip in the	performing rituals and transferring graves)
PAPs and Household	As a member of CTASRD,
Representatives	o exclusively represent the PAPs and participate in the ARAP planning and
Common dunked bund	implementation

Source: drafted based on consultations and information outlined on the Ministerial Order 155/2014 (September 19) and the Decree-Law No. 31/2012 (August 8).

Specific activities to be implemented by the ARAPI should include the following:

- Establish a grievance redress mechanism/committee in the affected communities to provide assistance in the compensation process as per recommended in the ARAP;
- Inform the HHs of the compensation payment process through public meetings;
- List/Check the HHs to be compensated including how they will be compensated;
- Ensure that HHs have all documentations needed to perform bank transactions;
- Support HHs in obtaining documents needed to open a bank account;
- Compensate all HHs in accordance with the ARAP;
- Track and find missing HHs;
- After compensation, recover materials that can be reused, demolish the remaining structures, and clean and prepare the place for the project activities;
- Monitor if HHs are leaving the project site after being compensated;
- Monitor the project site (i.e. total area of the ROW) after the HHs have left the area to see if there is any new occupation;
- Maintain communication with the PAPs throughout the entire ARAP implementation process; and
- Monitor and record the progress and ARAP implementation.







ARAPI must support ANE through coordination with the bank preferably one that is close to the HHs in order to open bank accounts that will be used by the ARAP implementing agent to pay the compensation amounts. Banks with branches in Nacala-Porto City and Nacala-à-Velha should be contacted to facilitate the process whenever needed. ARAPI should facilitate the process, directly working with the selected banks, to ensure that the activity is performed as quickly as possible, without taking more than two months. In this end, ARAPI must perform the following tasks:

- Organize meetings in the communities to start with the process of opening bank accounts in each one of the ARAP critical areas, in the Administrative Posts of Muanona e Mutiva and neighbourhoods;
- Carry out more meetings and timely communication with the HHs regarding the implementation process (e.g., inform the HHs 15 days before the meeting date);
- Provide facilitation in meetings; and
- Implement follow-up activities of the actions discussed in the meetings.







CHAPTER 5 COMPENSATION POLICY AND PACKAGE

National laws and the best international practices (e.g. JICA Environmental Guidelines and World Bank's Policies) require project proponents to compensate and/or provide adequate support to the PAPs based on a set of criteria that defines their eligibility to receiving such support. As explained in "Chapter 3 Relevant Legal Framework", JICA Environmental Guidelines and the World Bank's Safeguard Policies are no different in its substance with regards to matters related to land acquisition and compensation. Under this ARAP, the PAPs' eligibility has been formed based on the laws, policies and regulations in Mozambique with reference to JICA and the World Bank's Safeguard Policies.

5.1 Cut-off Date

A cut-off date is the date before which residents' or users' occupation or use of the defined area of the project is considered valid and them eligible to receiving compensation and other assistance due to the involuntary taking of their land, goods and other assets. By establishing the cut-off-date, one can differentiate those that have genuine claim over their land and assets that would be lost by the project from those that enter the area unlawfully in seek for receiving compensation. It is a means to avoid providing compensation and support to unlawful 'rent-seekers' and also to avoid an influx of such people to the project-affected area.

The cut-off date has been set to be <u>October 12, 2016</u> under this project, the effective date of the socioeconomic survey. This date was announced by the consultant to relevant government agencies (e.g. Head of the Administrative Post of Muanona, Neighbourhood Secretary, representatives of Nacala Municipality and health officer of Nacala-Porto District) through three focus group discussions held on November 2 and 3, 2016. In addition, it was announced at the stakeholder meeting held on March 7, 2017 by a representative from Nacala Municipality. The community members in the project direct impact areas and its surrounding areas (i.e. Nacala-Porto City and Ncala-à-Velha Village) can hence be considered to be aware of it. Nonetheless, ANE should issue an official letter to ensure, with support from the municipal authorities and local leaderships, that no new structure should be built within the ROW nor new plants or trees be planted. It is considered just from a humanitarian point of view, however, to allow farming until a reasonable time before commencement of the implementation stage of the project.

5.2 Defining Eligibility of the PAPs

The land and goods affected by the project have been presented in 'Chapter 2 Results of the Inventory and Socioeconomic Surveys' and applicable laws and regulations have been explained in "Chapter 3 Relevant Legal Framework" including JICA Environmental Guidelines and World Bank Safeguard Policies. Based on these understandings, this section will clarify the types of such loss and put forward a policy and concrete package for the compensation. The types of loss of the PAPs can be categorized into the following each of which will be depicted in the sections that follow:

- Loss of Land due to Permanent Acquisition
- Loss of Crops
- Loss of Valuable Trees
- Loss of Structures (i.e. office and fence)
- Loss of Religious Places (i.e. graves and worship places)





• Loss of Water Sources

5.2.1 Loss of Land due to Permanent Acquisition

This project has eminent impacts on a large area of land that is used by the local people some with DUAT and some with not. Most of the area is used as a farmland and the project will not incur any involuntary resettlement. As explained in "Chapter 3 Relevant Legal Framework", the Mozambican law establishes "the power of eminent domain so that the right of land use can be reacquired by the State in case the land is necessary for projects that serve the public interest". As such, the PAPs can only be compensated by law for the existing "improvements" made to the land (i.e. crops grown and structures built) but not for the land *per se*.

On the other hand, JICA Environmental Guidelines as well as the World Bank's Safeguard Policies consider it necessary that the land be also compensated at the total replacement value in kind or money provided that the land user has formal ownership or acknowledged customary use rights over the land on top of any improvements, disturbances or transportation costs. JICA and World Bank Policies place particular importance on impacts of land acquisition on vulnerable groups, particularly in case their livelihood depends on the land. In these cases, state these Policies, efforts should be made towards ensuring that the lost land is replaced by land.

Taking into account the above understanding and requirements, this ARAP adopts the following principles:

- No payment will be made in cash for the loss of land (or use of land) as the national law clearly prohibits any buying or selling of the state-owned land;
- There will be no land-to-land compensation/indemnification either yet with some exception. PAPs with DUATs over the land they use will receive land-to-land compensation within the district of Nacala Port in addition to compensation for the lost/affected goods (*Land title holders in Nacala Port were awarded such title in the SEZ in order to develop industrial/economic projects)⁹.
- PAPs that do not possess formal right (i.e. DUAT) over the land they use could be fit in the customary use rights where their housings and agriculture fields are fit. However, these agriculture fields are located within the Special Economic Zone reserved for industrial expansion and providing a land within the area will not guarantee their possession into the future. If the land-to-land compensation option, recommended by JICA and the World Bank, is to be applied, the land to be provided would be in an area far from the affected land, most probably in Nacala Velha District. While it is not considered the best option for the PAPs, this option will be made available to them taking into consideration the policies of JICA and WB. It should be noted though that Decree No. 23/2008 (Art. 68-2-a) grants the Mozambican State the prerogative to expropriate the land under public interest, in this case, construction of the access road to Nacala Port¹⁰.

¹⁰ ANE understands that it is difficult to look for a land in the vicinity of the project-affected area due to the reasons stated above and alternative land, if any, needs to be explored outside of Nacala-Porto District such







⁹ No agreement has been made between ANE and Nacala Port District to date with regards to the district providing land to the PAPs.

• A just indemnification will be paid before the transfer or expropriation of land and assets. The payment does not cover only the real value of the expropriated goods but also the damages and losses of profit, if any.

5.2.2 Loss of Crops and Valuable Trees

JICA and the WB Policies both require compensation for project-affected crops and trees to be made at full replacement cost taking into account, among others, the costs that had already been borne by the PAPs for land preparation (in case of economic trees and some perennial crops), the production period and remaining production years. Just like with other subsistence activities, these Policies also recommend support for the transition period until they can start earning an income from those agricultural activities.

The Ministry of Agriculture and Food Security under Nampula provincial government produces and disseminates price tables to be applied for compensation of crops and trees. In accordance with Chapter 6.10 of Decree 181/2010, this table is said to be based on the market value of the crops and trees and hence this table is adopted in this study to determine the unit price of each affected crops and valuable trees. The latest table, used in this ARAP, was reviewed and published in July 2016.

5.2.3 Loss of Structures

In case of loss of houses, the Mozambican legislation allows monetary compensation to be made at the replacement cost, according to the type of construction, cost of materials and other factors such as location, construction quality and age (i.e. depreciation). While there is no house to be affected by the subject project, one office that belongs to a salt farm company will be affected and so will a fence in Muanona Administrative Post made of shark net and metal that belongs to a vehicle transportation and maintenance company. Their value will be measured applying this method.

JICA and the World Bank's policies require buildings to be replaced, taking into account associated attributes such as the location (e.g. proximity to schools, markets, health facilities and so on), or compensated by money at the total cost of replacement including all associated transaction and registration costs. Similarly, compensation for facilities and structures should be made in kind or in cash reflecting the true value of the goods affected. Under this ARAP, compensation for the affected office and fence is proposed to be made in cash taking into account the material and labour costs required to rebuilding/repurchasing them. Some of the materials used for building the office-to-be-affected may also be used to build a new one. Since there is enough space to rebuild the office outside of the project-affected area and closer to the salt farm, rebuilding it is considered not to be a major concern.

The provisions in JICA and the World Bank's Policies indicate that the loss of domestic infrastructures (e.g. fences, houses and restrooms/latrines) will be compensated in cash at the total cost of replacement including material and labour without depreciation deductions or recovery/reuse of materials.

as in Nacala-Velha. ANE is clear that compensation for the land cannot be made in forms of cash compensation as it is in violation of the fundamental understanding in Mozambique that land cannot be sold. Having said so, they also understand that the livelihood of the PAPs that grow crops in the area may be hindered if compensation is provided to them to cover their assets lost (i.e. crops).







5.2.4 Loss of Religious Places

As explained in "Chapter 2 Results of the Inventory and Socioeconomic Surveys", 67 graves and three places of worship will be affected by the project. While the existing law does not provide a clear guidance for the exhumation, transfer and reburying of dead bodies from the graves or for dealing with worship places, past experience and consultations made during the survey point to the importance of involving in the process all relevant stakeholders.

Graves

The primary stakeholder for dealing with the graves is obviously the family members. The exhumation process of the graves should be discussed with the families until an agreement has been reached on their transfer, place of reburying and the financial implications of the exercise. It is also important to involve the municipal authorities to make sure that the location to rebury the dead bodies chosen by the family members will not cause any legal or other issue in the society. It is also important to involve the health authorities to ensure that the process is undertaken in a hygienic and safe manner. The local and traditional authorities should also be involved to ensure the traditional legitimacy.

In this ARAP, it is proposed that a set amount per grave be provided to each family whose family members' graves are affected as a disturbance subsidy and to cover the costs of the ceremony. Details including the procedures and actual amount of compensation are recommended to be discussed and agreed with the PAPs and other stakeholders in the ARAP implementation stage. A contingency of 10% on the ARAP amount is included to cover possible increase in the cost.

Places of Worship

Places of worship are imminently open areas, mostly under trees where the communities or small or extended families go and summon the ancestors so that the ancestors can help them cope with life adversities. Therefore, the local structures, or families, owners of these places shall be approached to facilitate the dismantling process and proceed with deciding the necessary way of compensation.

The three places of worship identified in the study are all located within Muanona Administrative Post. The families affected are proposed to receive a compensation for the disturbance caused and to cover the costs associated with conducting the ceremony to transfer the spirit to a place chosen by the family in coordination with the local leaders.

5.2.5 Loss of Water Sources

Against the water pump developed and owned by Nacala Municipality located within the ROW, it is recommended that ANE provides a new water pump to the municipality in Murrupulene neighbourhood from which people have been found to come to collect water. Since the existing water pumps are not in use at the moment, the number of pumps to be provided may be fewer than the number affected. Rather than the number affected, focus should be more on the number needed to meet the demand of the villagers that use the water pump based on the discussion between ANE and Nacala Municipality.







5.2.6 Additional Assistance to Vulnerable Groups

The following assistance will be provided to vulnerable groups in consideration of their situation.

- Transportation or fee for transportation to those that have physical difficulties in movement
- Oral or visual communication to those that have difficulties in seeing or listening
- Explanations, consensus buildings and so on by paying a visit to those that cannot leave their houses (e.g. single mother with small children)
- Support in acquiring ID cards and setting up a bank account for those that do not have them

5.3 Entitlement Matrix

An entitlement matrix that summarizes the compensation and support recommended to be provided to each entity is presented in the following table. It serves as a guiding framework for providing compensations in the implementation stage of this ARAP.







Table 10 Entitlement Matrix

Additional Assistance to Vulnerable Groups	 Transportation or fee for transportation will be provided to those that have physical difficulties in movement. Oral or visual communication 	•	•	cut cash	ials
Other Assistance	N/A	Transportation or fee for transportation will be provided to the people that wish to receive a plot of land provided that he or she wishes to move into the area as a result of it.	An additional amount of 20% of compensation will be provided to the PAPs in cash as a disturbance fee.	 PAPs may use the trees cut for firewood. An additional amount of 20% of compensation will be provided to the PAPs in cash as a disturbance fee. 	PAPs may use the materials
Compensation Policy	Provision of land in the vicinity of the project site within Nacala Municipality that is equivalent or more favourable than the land lost measured in market value	Land will be provided to those that wish to earn a plot of land to grow crops most probably outside of Nacala Municipality (e.g. Nacala-Velha).	Cash compensation for the lost crops based on the list of crop price set by the provincial government of Nampula (2016) taking into account the transition period (e.g. time and cost for preparing the land to grow crops)	Cash compensation for the lost trees based on the list of tree price set by the provincial government of Nampula (2016) taking into account the transition period (e.g. time and cost for preparing the land and growing trees until they start bearing fruits)	Cash compensation at full
Eligible Entity	People with DUAT over the land in the ROW	People without DUAT yet with customary rights ¹¹ to grow crops on the land in the ROW	People that grow crops in the project-affected area	People that grow valuable trees in the project-affected area	People that own the
Type of Loss	Loss of Land due to Permanent Acquisition		Loss of Crops	Loss of Valuable Trees	Loss of Structures (i.e.

11 It is usually considered that cusomary rights exist if the person is growing the crops consinuously for a period of five years based on judicial judgements carried out in the past in Mozambique.





CONSTRUCTION PROJECT OF THE NEW ACCESS ROAD TO THE PORT OF NACALA Resettlement Action Plan Report - Final

Additional Assistance to Vulnerable Groups		h 	9 L	
Other Assistance	from the affected infrastructures before	 demolition. An additional amount of 20% of compensation will be provided to the PAPs in cash as a disturbance fee. 	 An additional amount of MZN 6,000 per grave will be provided to the PAPs in cash as a disturbance fee. Local leaders and government authorities including health authorities will be involved in deciding the appropriate way of handling the issue, performing necessary rituals and transferring the bodies. *Details to be decided in further study 	N/A
Compensation Policy	material, transportation and registration costs, if any	Cash compensation at full replacement including labour, material and transportation costs, if any	Cash compensation that is sufficient to cover all the costs associated with their relocation including cost for coffins, transportation and healer service	Installation of water well in the village from which people come to collect water (i.e. Murrupulene neighbourhood)
Eligible Entity	project-affected area	People that own the fence located in the project-affected area	People that have been recognized to be the rightful owner of the graves located in the project-affected area	Nacala Municipality (indirectly the people that use the river water running in the ROW)
Type of Loss			Loss of Religious Places (i.e. graves and worship places)	Loss of Water Sources





CHAPTER 6 COST FOR COMPENSATION AND SOURCE OF FUNDING

For the implementation of the ARAP, Mozambique has a set of laws and regulations as well as a creative use of directives stemmed from major development agencies such as the World Bank, African Development Bank, IFC and so on. The compensation covers the people and assets affected by the project including facilities, land, crops, trees and others. It is noteworthy that the content of such compensation must be adjusted to the specific context on ground.

The budget necessary for compensation will be requested to the Road Fund by ANE upon approval of the ARAP by DPTADER. The budget will be requested by November or December and the budget will reach ANE by April the following year after Road Fund has consulted with the Ministry of Economy and Finance.

6.1 Total Cost for Compensation

The total cost for compensation is estimated to be MZN 88,627,651 including the disturbance fee calculated to be 20% of the affected goods. In addition, a 10% contingency fee has been added to cover any unpredicted incidents rendering the compensation amount to reach MZN 88,627,651. A summary of the total cost is shown below followed by a more detailed breakdown under each affected good.

Disturbance Subsidy Affected Items Quantity Unit Total Amount (20%) m^2 1,457,170 51,000,950 10,200,190 61,201,140 Crops Trees 22,971 10,478,280 2.095,656 12,573,936 trees 2 3,794,000 758,800 4,552,800 Structures structures Graves 67 2,010,000 402,000 2,412,000 graves 12,000 Worship Places 3 60,000 72,000 places Water Pump 20,000 4,000 24,000 pumps Subtotal 67,142,160 13,428,432 80,570,592 Contingency (10%) 8,057,059 **Total** 88,627,651

Table 11 Estimated Total Cost of Compensation

6.2 Land

As explained in "5.2.1 Loss of Land due to Permanent Acquisition", no payment will be made in cash against the loss of land (or use of land) as the national law clearly prohibits any buying or selling of the state-owned land. PAPs with DUATs over the land they use will receive land-to-land compensation within the district of Nacala Port. In general, there will be no land-to-land compensation/indemnification for those PAPs without DUAT. However, they will also be allowed to earn a plot of land to grow crops most probably outside of Nacala Municipality (e.g. Nacala-Velha) if they wish to take this option. Hence, there will be no monetary cost involved in making compensation for the land.

6.3 Crops

The latest table updated in 2016 of the unit prices to be paid to the PAPs for project-affected crops and trees, shown in Annex 4, was collected during the fieldwork from the local authorities (i.e. Provincial Directorate of Agriculture and Food Security in Nampula). This table was used







to the project for calculating the amount of compensation to be paid for crops and valuable trees. According to ANE, the list is used for different projects across the country including those funded by the World Bank.

Table 12 Official Price Table of Project-affected Trees and Crops

Trees and Crops	Price of the Crops (MZN/m²)	Price of the trees (MZN/unit)	Trees and Crops	Price of the Crops (MZN/m²)	Price of the trees (MZN/unit)
Acacia tree		110	Jamboeiro		330
Peanuts	36		Orange tree		900
Ateira		720	Lemon tree		900
Banana tree		240	Maçaniqueira		330
Sweet potatoes	18		Mafura tree		480
Cashew nut		1,500	Cassava	24	
Coconut		1,800	Mango tree		480
Beans	24		Corn	30	
Eucalyptus		2,310	Moringa tree		990
Sesame	42		Other trees		330
Guava		900	Pawpaw tree		720
Vegetables	60		Tangerine tree		900
Okra	60				

In calculating the amount of compensation to be provided to the PAPs, an average price of the five main crops in the area (i.e. corn, cassava, sesame, okra and sweet potatoes) was used as the unit price for all affected crops instead of strictly applying the above prices to each crop. This is because it was difficult to apply individual prices as some crops were grown together with other crops. The average price of the five crops was MZN 35.

With regards to the size of the land on which crops were grown, it should be noted that the survey was conducted during the dry season when the boundary of agricultural fields was difficult to be observed. The data regarding crops is based upon the boundary claimed by each PAP to be growing crops. However, the communities themselves often did not have a record of the areas normally used for growing crops.

The total area covered with crops is approximately 1,457,170 m2, which amounts to approximately 84% of the total area occupied by the road of roughly 1,747,250 m2. Applying the average price of the five major crops (i.e. MZN 35/ha), the estimated value of the crops for the whole area and hence the amount of compensation comes to MZN 51,000,950. Adding the 20% disturbance subsidy, the result is a total compensation of MZN 61,201,140 for the loss of crops. This amount is apparently high reflecting, on the one hand, the large area affected by the project, and on the other hand, the difficulties the consultants faced in making estimation during the dry season where there was no crop readily observable. The ARAPI should verify and make any necessary revision during the ARAP implementation phase.







6.4 Valuable Trees

As for the trees, the above table shows prices per type or group of trees. However, some omissions were noticed regarding baobab, Zizyphus mauritania and Trichilia emetica, which were not included on the table. For the effects of calculation, prices obtained from other projects undertaken in Mozambique by the Millennium Challenge Corporation (https://www.mcc.gov) were used as shown below. It is known that baobab and Zizyphus mauritania are plants whose fruits are consumed by the local population. Traditional alcoholic beverages are also produced from these fruits used for own consumption or sale.

- Baobab MZN 1,800
- Trichilia emetica MZN 900
- Zizyphus mauritania MZN 330

A total number of 22,971 trees of different types are found to be affected by the project. Applying the unit price for each tree, the value of them is estimated to be MZN 10,478,280. Adding the disturbance fee, the value becomes MZN 12,573,936 as shown below.

Table 13 Estimated Compensation Cost for Valuable Trees

Tree Type	Number	Unit Price	Amount (MZN)
Banana	12,443	240	2,986,320
Ziziphus Mauritiana	3,369	330	1,111,770
Mango	2,641	480	1,267,680
Cashew	2,695	1,500	4,042,500
Sugar Cane	1,051	330	346,830
Baobab	131	1,800	235, 800
Papaya	128	720	92,160
Coconut	87	1,800	156,600
Lemon	83	900	74,700
Trichilia Emetica	50	900	45,000
Orange	39	900	35,100
Others	254	330	83,820
		Total	10,478,280
	Total (includi	ng disturbance fee)	12,573,936

6.5 Structures

As per mentioned earlier, very few structures will be affected by the project. Only an office that belongs to a salt company and a fence that belongs to a vehicle transportation and maintenance company is expected to be affected. The salt pan itself is located out of the project-affected area. In case the turning of land implies the paralysation of the salt activity, due to the dust, the impact shall be assessed and compensated.

The calculation of the amount of these infrastructures was made based on the type and areas of the structures affected and according to the Ministerial Order 181/2010, from November 3, which establishes the calculation of the compensation amounts. It should be noted, however,







that this is to be applied in Maputo and not necessarily in Nacala. Compensation is estimated to be MZN 4,552,800 for structures including the disturbance subsidy as shown in the table below.

Table 14 Estimated Compensation Cost for Structures

Structure	Area	Unit Price	Estimated Amount	Disturbance Subsidy (20%)	Total (MZN)
Office	109.7 m^2	20,0001	2,194,000	438,800	2,632,800
Fence	160 m	10,000	1,600,000	320,000	1,920,000
Total			3,794,000	758,800	4,552,800

¹ based on the unit price issued by the Ministry of Public Works (2017) for a building that is 1 floor, made of brick and cement with a roof made of zinc sheet in Maputo.

6.6 Religious Places

Graves

The community leaders interviewed during the survey all considered that the owners of the graves deserve a monetary compensation yet without specifying the amount of compensation they consider appropriate. Previous data collected on site indicate that apart from covering the ceremony expenses (e.g. costs for coffin, transportation, food and traditional healer services) the family directly affected by the project should receive MZN 6,000 per affected grave. The estimated cost for this ceremony is approximately MZN 30,000 including procurement of coffin, ceremonial expenses and compensation fee.

A total number of 67 graves were identified to fall within the planned road and therefore are subject to exhumation and transfer to outside of the project-affected area. Applying the estimated price of MZN 30,000 per grave, the result is a total value of MZN 2,010,000. Adding the disturbance subsidy, the value reaches MZN 2,412,000.

Places of Worship

There are also costs associated with the transfer of places of spiritual worship. The cost is proposed to be MZN 20,000 including ceremonial expenses and monetary compensation to the families directly affected. The resettlement of places of worship, in total three, would entail a total cost of MZN 60,000 which comes to MZN 72,000 after adding the disturbance subsidy. The breakdown of the amount to be paid to those whose grave and worship places are affected is presented in the table below.







Table 15 Estimated Compensation Cost for Religious Places

No.	Description	Grave	Worship
NO.	Description	Unit Price	Unit Price
1	Coffin	7,000	ı
2	Transportation	3,000	3,000
3	Food	10,000	8,000
5	Healer services	4,000	3,000
4	Subsidy	6,000	6,000
	Total (MZN)	30,000	20,000

6.7 Public Infrastructure

An un-operational water pump and traditional wells (i.e. naturally dug wells) were found in the ROW. It is considered the responsibility of ANE to provide alternative water sources to the affected population. The water pump has been developed and owned by Nacala Municipality located within the ROW. This water pump is not in use any longer but is considered necessary to be compensated by ANE by providing a new water pump to the municipality. The cost is estimated to be MZN 10,000. However, since there are also a number of streams that will be affected by the road from which people collect water, it is considered preferable that ANE install the same kind of water pump in the villages from which people are believed to have been coming to collect the water (i.e. Murrupulene Neighbourhood). Since the area where people have been found to collect water from the stream is confined to the area between Conambia and Murrupulene with most of the streams concentrated in Murrupulene, two water pumps are considered sufficient. According to Nacala Municipality, the cost for installing a new water pump costs approximately MZN 10,000/pump (i.e. MZN 20,000 for two pumps).

With regards to the electricity poles, it is considered necessary to be moved away from the ROW and reinstalled outside of it. ANE will need to talk to the Electricity of Mozambique (EDM) located under the Ministry of Mineral Resources and Energy to make this arrangement. The cost for relocation will be included in the project cost. Since there is enough space, this is considered not to be a problem.







CHAPTER 7 GREIVANCE REDRESS MECHANISM

Given the complexity and sensitivity of the activities involved in any resettlement project, it is natural that claims and complaints come up during project implementation. Invariably, the PAPs' claims and complaints will include those related to the perception of undervaluation of their affected assets, their concerns over the process or transparency of ARAP implementation or others not expected or foreseeable at the planning stage. There may also be concerns related to the PAPs' perception of not having been consulted enough of the possible options to take.

The legal configurations in Mozambique ¹² do not offer a useful guideline for effectively managing the claims and complaints deriving from the PAPs in this regard. In order to cover this legal deficiency, it has been recommended under this project to establish an internal monitoring mechanism for ARAP implementation. This mechanism should ensure that all project stakeholders, particularly those affected, have access to a simple and opportune process for the treatment of their claims and complaints. It is important to note that this mechanism is not intended to replace the judicial mechanism in Mozambique. Instead, it is expected to compliment it by allowing the PAPs to utilize a channel whereby their voices and complaints can be heard and properly dealt with in a more cost-effective and less time-consuming manner than resorting to the court for settling the conflict.

7.1 Process

The claim and complaint treatment processes for the project has been formulated based on the normal process that it goes through in Mozambique with some adjustments made to better conform to the specific socio-economic conditions in the subject project area. It has also been prepared with reference to the best practices and procedures used in Mozambique and beyond. The main steps to be taken are described below.

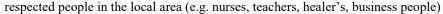
STEP ZERO

Claims are submitted through the neighbourhood secretary or directly to the ARAP implementer, normally a consultant or an NGO in Mozambique hired by ANE (i.e. ARAPI), using a standard form filled by the claimant. The form includes information on: the name of the project; the date when the claim has been issued; location of the claim; name of the claimant; and subject of the claim. The claims can also be submitted directly to ANE through a social and environmental expert in Nampula if he or she wishes to do so. The neighbourhood secretary as well as the ARAP implementer shall keep a logbook of the claims received.

STEP ONE

Since the ARAPI is designated by ANE to manage the claims on behalf of ANE, it will first discuss the issue directly with the claimant and try to solve it by itself based on the ARAP. In doing so, ARAPI is required to keep a record of all the actions it has made in this regard for ANE's review in the future. If the ARAP implementer cannot reach an agreement with the claimant, then it will forward the claim to the Resettlement Committee (i.e. Grievance Redress Committee) formed at the beginning of the project at the local level¹³. The committee will review the claim, accept, reject or propose an alternative solution to it. The committee's

¹³ The law doesn't provide for the members but it normally consists of the following members: local community leaders; representatives of civil society working in the affected communities; head of neighborhoods; representative of PAPs; and









¹² mainly, the Regulation on the Resettlement Process resulting from Economic Activity, the Territory Planning Law 19/2007 and its respective regulations as approved by Decree 23/2008

CONSTRUCTION PROJECT OF THE NEW ACCESS ROAD TO THE PORT OF NACALA Resettlement Action Plan Report - Final

decision must be delivered to the claimant within seven working days from the date the committee has received the claim. If such decision cannot be made within the said period of time, a notice must be given to the claimant within the period of time notifying the time needed to deliver its decision.

In case the solution proposed by the committee is accepted by the claimant, he or she will sign a claim form stating that there has been an agreement. The claims record will be updated to reflect the conclusion and the case will be filed.

STEP TWO

If the claimant is not satisfied with the decision made by the local level Grievance Redress Committee, the claimant's intention to resort to the next step must be communicated through either the neighbourhood secretary, to the ARAPI or directly to ANE who will keep a record. The ARAPI, by registering the recurrence, will forward it to the Head of the Administrative Post with all the details attached to it. It will also notify the claimant of the date, time and place of the meeting to be held between the claimant and the Head of the Administrative Post. If the claimant is satisfied with the decision made at the meeting, he or she will sign a claim form, the claims record will be updated to reflect the conclusion and the case will be closed.

STEP THREE

In case the claimant is not yet satisfied, the ARAPI will forward the complaint to the Resettlement Committee (Grievance Redress Committee) at the district level, which is a standing committee with all details attached to it. This is done after the claimant submits a notice to the neighbourhood secretary, the ARAPI or to ANE expressing his or her intention to resort to the next level and the claim has been recorded. The ARAPI shall also notify the claimant of the date, time and place when the case will be heard and judged by the committee. Similarly to the other steps that have been explained thus far, if the claimant agrees with the decision made within the committee, he or she signs a claim form, the claims record will be updated and the case will end.

STEP FOUR

In case the claim has not yet been resolved, the claimant must submit a notice to the neighbourhood secretary, the ARAPI or to ANE expressing his or her intention to resort to the next level. The ARAP implementer records this and forwards the case to the District Administrator with the details. It will also notify the claimant of the date, time and place where the case will be heard and judged at the meeting between the claimant and the District Administrator. Again, if the claimant agrees with the decision made at the meeting, the case will close after he or she signs a claim form and the claims record has been updated.

STEP FIVE

If the claimant is not satisfied with the decision made by the District Administrator, he or she may resort to the District Court and then to other courts at a higher level.

¹⁴ According to Art 16 2) of Ministerial Diploma, the committee (i.e. CTASRD) is composed of the following members: Director of the District's Infrastructure and Planning Services; Director of the District's Economic Activities Services; Director of the District's Health, Women and Social Actions; five representatives of the affected population; one representative of the civil society; three community leaders from the affected population; two community leaders from the hosting area (in case there is resettlement); and two representatives from the Private sector.







7.2 Monitoring and Management of Claims and Complaints

As part of the grievance redress mechanism, the ARAPI shall record the dates when the complaint were submitted along with the actions taken. A representative of the ARAPI should monitor and document the progress of the claim and complaint treatment on a weekly or monthly basis as per defined by the ARAP implementer.

Despite the differences in complexity and magnitude of the claim and complaint, it is important that all claims and complaints are handled within a set timeframe. The table below presents the deadlines for claim and conflict resolution recommended for the proposed project. It is important to mention that the ideal and predicted scenario in this ARAP is that all claims and complaints are solved locally (i.e. at the district level). The timeframe suggested below may be adjusted by the ARAPI based upon the specific circumstances.

Table 16 Claim and Complaints Management Process and Deadlines

Steps	Activity	Responsible Entity	Period
1	Registration of the claim/updating the log book	ARAPI, ANE or neighbourhood secretary	1 working day
2	Dialogue between ARAPI and claimant	ARAPI and claimant	3 working days
3	Forward the claim to Grievance Redress Committee (local, district), Head of Administrative Post or District Administrator	ARAPI	1 working day each
4	Consideration within Grievance Redress Committee (local, district)/Meeting between claimant and Head of Administrative Post or District Administrator	Grievance Redress Committee (local, district), Head of Administrative Post, or District Administrator and claimant	5 working days each
5	Resort to court	claimant	-





CHAPTER 8 INFORMATION DISCLOSURE OF THE PROJECT AND ARAP

Stakeholder meeting of the project was held on March 7, 2017 at the Nacala Secondary School located in the Administrative Post of Mutiva – Muanona. Approximately 1,000 people came to participate including the PAPs, local community leaders, government officials including representatives from ANE, DPTADER, Nacala Port District and Nacala Port Municipality, private companies, academics and an NGO. Details of this meeting are shown in Annex 5.

The ARAP will be submitted to DPTADER for its approval. Following this, ANE will coordinate for its disclosure. This process shall follow the procedures stipulated by the Mozambican Law regarding the public participation process defined in the Decree 54/2015 (December 31) and the Ministerial Order 130/2006 (July 16) regarding the environmental impact assessment process and public participation, respectively. According to Decree 54/2015, dissemination must be made through the most popular media, indicating the place, date and objective of the meeting. Additionally, the ARAP should be made available in public locations prior to public revision meeting and before the meeting date.

The main objective of the meeting will be to inform the stakeholders of the process of the new access road construction project, its socioeconomic impacts on the communities and how such impacts will be minimized through implementation of the ARAP. The meetings will emphasise the need to observe the cut-off date announced in a letter disseminated at the level of the communities covered by the project, the eligibility criteria, description of the different PAP categories, explanation of the table or matrix of rights to compensations, description of different categories of people affected, explanation of the rights to compensations, the importance of the creation of resettlement committees at local, district and municipal levels and the claim submission mechanism.

Additionally, the compensation options will be shared with the stakeholders, emphasising the right use of compensations for the benefit of the families. Finally, the compensation agreement to be signed by the PAPs and ANE or ARAPI must be disseminated, stressing the need to have signatures from both the husband and spouse in case they are married to ensure that the payments are directed to support the recovery of goods lost by the family as a whole and that the payments do not only benefit one member of the family. After being explained how the project intends to minimize the negative impacts through design, the PAPs will be requested for their ideas and inputs for increasing the effectiveness of the ARAP process.

The public participation process will provide the stakeholders with an opportunity to actively participate in the ARAP process by expressing their concerns, expectations and comments on the project and its associated impacts on the community. Stakeholders' contributions will be used to inform the ARAP implementation process as well as the subsequent monitoring stage. Women's participation should be encouraged and, if necessary, focal groups organized for women affected by the project in order to allow women to freely express their opinions about the ARAP implementation process.







CHAPTER 9 IMPLEMENTATION SCHEDULE

The schedule below shows the expected time required under each of the main activities to be carried out in implementing the ARAP after the ARAP (PR) and the IEE report (SER) have been approved by DPTADER. The total length of time required until completion of land acquisition is estimated to be approximately 24 months.







Table 17 Summary of main ARAP activities

ANE ANE ANE												Ž	Month									
ion of Grievance Redress ARAPI/ANE nism/Committee sure of ARAP (incl. stakeholder ARAPI/ANE gs) mation of Project-affected Persons ARAPI ods gg Alternative Land for ARAPI/ANE nsation and Agreement on ARAPI/ANE nsation Package nce Redress re of Compensation (i.e. Road Fund API) rr of Compensation (i.e. ARAPI to PRI rr of C		Activities	Responsibility	-			H	∞	6	10	1	12	13	14	15	16	17	18	19	20		4
ion of Grievance Redress ARAPI/ANE aure of ARAP (incl. stakeholder ARAPI/ANE gs) mation of Project-affected Persons ARAPI ods ag Alternative Land for ARAPI/ANE nsation and Agreement on ARAPI/ANE ation of List of PAPs ation of List of PAPs are of Compensation (i.e. Road Fund API) are of Compensation (i.e. ARAPI to PAI) are of Compensation (i.e. ARAPI to PAI) are of Compensation (i.e. ARAPI to AI)	Pro	curement of ARAPI	ANE																			
aure of ARAP (incl. stakeholder are and are bench of Project-affected Persons and and are alion and Agreement on are RAPI/ANE ation of List of PAPs ation of List of PAPs are of Compensation (i.e. Road Fund API) are of Compensation (i.e. ARAPI to are	Fo	levance																				
nation of Project-affected Persons ods lg Alternative Land for ARAPI/ANE nsation and Agreement on ARAPI/ANE nce Redress nce Redress ation of List of PAPs ation of List of PAPs r of Compensation (i.e. Road Fund API) r of Compensation (i.e. ARAPI to PRI) lg Project Area and ARAPI/ANE ARAPI are of Compensation (i.e. ARAPI to PRI are of Compensation (i.e. ARAPI to PR	E D	sclosure of ARAP (incl. stakeholder eetings)																				
ng Alternative Land for ARAPI/ANE nsation ation and Agreement on ARAPI/ANE nsation Package ation of List of PAPs ation of List of PAPs c Bank Accounts (incl. obtaining PAP/ARAPI) ar of Compensation (i.e. Road Fund API) ar of Compensation (i.e. ARAPI to PRI API) ar of Compensation (i.e. ARAPI to API) ar of Compensation (i.e. ARAPI to API) are of Compensation (i.e. ARAPI to API)	ar C	onfirmation of Project-affected Persons id Goods																				
ation and Agreement on nsation Package nce Redress ation of List of PAPs g Bank Accounts (incl. obtaining or of Compensation (i.e. Road Fund API) rt of Compensation (i.e. ARAPI to are of C	S O	Alternative Land ation	ARAPI/ANE Nacala M&D																			
ation of List of PAPs g Bank Accounts (incl. obtaining ar of Compensation (i.e. Road Fund API) rr of Compensation (i.e. ARAPI to ar of Compensation (i.e. ARAPI to ar of Project Area	20	and Agreement on Package	ARAPI/ANE																			
ation of List of PAPs g Bank Accounts (incl. obtaining or of Compensation (i.e. Road Fund API) rr of Compensation (i.e. ARAPI to or of Compe	5	rievance Redress	ARAPI/ANE																			
g Bank Accounts (incl. obtaining rr of Compensation (i.e. Road Fund rPI) rr of Compensation (i.e. ARAPI to rg Project Area	Œ	nalization of List of PAPs	ARAPI																			
API) ar of Compensation (i.e. Road Fund API) ar of Compensation (i.e. ARAPI to ag Project Area		pening Bank Accounts (incl. obtaining)																				
er of Compensation (i.e. ARAPI to ng Project Area	T 3	ransfer of Compensation (i.e. Road Fund ARAPI)	Road Fund																			
oject Area	П	ransfer of Compensation (i.e. ARAPI to APs)	PRI																			
	Š	ecuring Project Area	ANE																			
	2	lonitoring	ARAPI/ANE																			







CHAPTER 10 MONITORING SYSTEM

It is important to make sure that necessary compensation and support are provided to the PAPs in a timely manner and, after they have been delivered, that their livings are restored. It will be a slow and potentially distressing process for the PAPs and hence it is essential to constantly check the state of the progress and that of PAPs' livelihood and adopt any corrective measure as found necessary in order to alleviate the tension of the PAPs throughout the process that is expected to last for approximately 24 months. The monitoring system is also expected to better ensure involvement of the parties, especially the PAPs.

The main subject of monitoring can be considered to be: a) state and progress made in the process for compensation and support to the PAPs; and b) socio-economic and mental conditions of the PAPs. The former will be carried out before compensation and other assistance have been delivered to the PAPs while the latter will take place after they have been made. The items to be covered in the former includes: the number of PAPs that have received the compensation and support; amount of compensation made to the PAPs (to confirm that each of them have received the right amount); level of information disclosed to the PAPs during the process; voices and complaints heard from the PAPs; and the state of the project site (i.e. whether the land has been cleared). The items to be monitored in the latter should include: the level of income; state of access to essential services; and level of satisfaction of the PAPs.

The monitoring system proposed by the consultant is simple and hence easily implementable and cost-effective. Monitoring to be carried out in the pre-construction stage, with an aim to understand the progress made, will be carried out by the ARAPI on behalf of ANE. That during the construction stage, aimed at monitoring the socio-economic and mental conditions of the PAPs after compensation, on the other hand, will mainly be carried out by the contractor and consultant, on behalf of ANE. It should be noted, however, that PAPs' socio-economic conditions should be monitored from the time they have been compensated, which may well fall under the pre-construction stage for some people, and hence ARAPI is expected to also monitor such people's state. The table below presents the methods of monitoring, responsible organizations and expected cost of monitoring. Sample forms to be referred to in the ARAP implementation stage for monitoring are presented in Annex 6.

While the frequency in drafting the monitoring reports should be agreed between ANE and the ARAPI, it is suggested here to be biweekly and quarterly during the pre-construction stage and biannually in the construction stage. While the biweekly report covers the progress made, the quarterly report covers, in addition to the progress, the socio-economic conditions of the PAPs. The biannually report prepared in the construction stage will only cover the socio-economic conditions of the PAPs. A final report should be produced after 24 months. These reports will be drafted by ARAPI during pre-construction and by the contractor during construction and submitted to ANE which in turn shall be shared with the funding agency of the project, which is expected to be JICA.





ANNEXES

Annex 1 Questionnaire Used in the Social Survey

Annex 2 List of Affected People and Goods

Annex 3 Demonstrative Map of the Affected Areas

Annex 4 Price Tables of Crops and Plants

Annex 5 Report on Public Consultation

Annex 6 Monitoring Forms (sample)

Annex 1 – M&E Questionnaire

PROJECT OF CONSTRUCTION OF ACCESS ROAD TO THE PORT OF NACALA EVALUATION AFTER RESULTS, MONITORING

A) Identification								
1. PAP's Name								
2. PAP's adress								
PostoAdministrative	1-Muanona	2-Mutiva	3-Other (specify)					
Mark with X								

3. Sex:

Sex of PAP	1-Male	2-Female
Mark with X		

4. Age_____ (years old)

Age	1) <25	2) 26-35	3) 36-45	4) 46-55	5) 56-65	6) >66
Mark with X						

5. Marital Status:

Marital Status	1-Officially married	2-living with husband or wife	3-Single	4-Widow	5- Other(Especify)
Mark with X					

6. How many people in your family and how many children go to school

People in your	1-Men	2-Women	3-Total	4-Children at	5-Children not	6-Totally
familiy				school	going to school	of children
Number						

7. What is the PAP relationship with the householder?

Situation	of	1-PAP is the householder	2-PAP	is	spouse	of	3-Other	relationship
the PAP			househol	lder			(Especify)	
Mark with X								

B) Evaluation of compensation

1. What assets did you lose due to the project?

Nr.	Affected assets	Write down X	Specify (type and number) of affected assets
1	House/Office		
2	Busness		
3	Cultures/ plantation		
4	Trees		
5	Others (especify)		

2. Where were located the affected assets?

Administrative Post	1-Muanona	2-Mutiva	3-Other (Especify)
Mark with X			

3.	Do	you	think	the	amount	of	compensation	is
fa	ir?							

Compensation	1-Fair	2-Unfair
Mark with X		

(Justify your answer)		

4. Do you think the information regarding the process of compensation and resettlement was clearly available? Mark with $\, X \,$

1-YES	2-NO

5. How do you and resettlemen	the proces	s of negot	iation and	payment o	of compensation	ns
					_	
					_	

C) IMPACT AFTER RESETTLEMENT AND COMPESATION

1. How do you evaluate your life after receiving compensation or resettlement?

		1-Better	2-Worse	3-Not changed	4-Justify your answer
Mark	with				
X					

2. What you did spend the received compensation on?

Nr.	Options (multiple, possible answers)	Mark with an X
1	I built/rebuilt my house	
2	I started new busness	
3	I expanded my old business	
4	I paid my debt	
5	I bought a household appliance	
6	I made deposit in long term	
7	I used for my current expenses	
8	I helped someone from family	
9	Other (especify)	

3. Do you think the payment of compensation in cash money was a good option?	1-YES	2-NO
Mark with X		
(Justify your answer)		

4. What are the negative aspects this compensation Money brought to you and your family?

Nr	Option	Mark with an X
1	None	
2	Lack of understanding between my spouse and i	
3	Divorce	
4	I was robbed	
5	Not good management of the amount	
6	Persecutions by the leaders	
7	Others (especify)	

5. What is your opinion in general about this process of ARAP implem do you recommend for the next process in future?	entation? What

Annex 2 - List of Affected People and Goods Power Poles Electricity Tower Fenoe Commerio al Land/Offi Worship places Graves Other type of trees Trichilia emetica tree Coconut Sugar Baobab Banana tree Mango Cashew Lemon Orange tree Papaya Sweet okra S <u>8</u>6 Maize 500 624 624 2,813 148 245 1,124 4,670 803 7,348 216 3,789 500 3,453 559 439 357 1,541 613 431 1,309 1,587 847 Name of the CAF (Hidden) Residential District | MATOLA | M Locality Administrative Post

Power Poles																																																																						
Electricity Tower																				1					l		l						Ī																																					Ī
Fence															Ì					1																Ī																	Ì							Ì										
Commerio al Land/Offi	8															ľ				1					l		l						Ì			l																						1												Ħ
Worship places L																l				1					l		l									l									1						l		Ì																	Ħ
Farmland			FL4	14	-33	FL37	-62	-82	-91	001-	FL112	-121	128	-146	170	185	FL214	-239	FL258	262	-269	284	304	307	309	316	342	366	367	-380	-386	-403	406	414	432	434	-442	-467	-475	4/6	493	521	-525	-547	-554	FL563	566	-571	-595	614	FL617	-620	-625	649	-651	-652	-654	-673	929	879	6/9	684	685	712	-721	-722	728	735	FL738	742
Graves F					Œ	E 0		Œ	Œ i	I I		H	正	Œ i			Œ	Œ	Œ							Œ		ū		E	Œ	Œ i					G24 FI	E		625			H	G28 FI				E		332 FI		G33 FI		G40		H	Н	E	Œ			<u> </u>			G41 FI				1 1	Œ
Other type of trees			60	5			-			-	5					l				1					l		l				7		6				2 G		-	5				Ö						5		Ö	Č	5 0	5	3	-	1							Ġ	Ğ	Ξ			
Trichilia emetica tree	-															l				1					l		l						1																	σ	0							1												
Coconut																l				1	L	n			l		l									l									1																									
Sugar					H			H								l				1					l		l									l																						1							H		70	Co	66	
Baobab							-	H									-								l		l							-										-				T					14	0				1										0	1	H
Ziziphus mauritiana tree	-	2		76		-		21	-	,	- 9		-			l	က			2	23				25	3		33	8				-	7	-		2	es .	3	c	7	33	10	10	9 9	91	2		11	01	2		_	4				2	e .	2	4	65	2	2		ŀ	-	4	t 60	
Banana n	-			4		Ę	3	7												ľ	4	o 5	7		l		Ī	129			146					Ī		9							•	2	14			ď	0				10		100			00+	200	6	7				90	ec.		Ī
Mango	7						-		8						l	l			4	-		c	2		l	2					120	9	•	7	6		3		33		LC.	2	7		6									~	>		-			-		65	2 0	,		ŀ	1		18	
Cashew	00						-							-				-	2	Ī	4						4		2	2		2				l							9			c			3	α	0		L	o «	>		7									Ī	1	c	,	
Lemon																				1						2																																												
Orange																																																					9																	
Papaya		2																		1														o	,																																96	07		
Sweet																				1																																																		
Sesame																																	Ī																					285	204															
Okra																																							1,248																															
Rice					П									1,066		Ī									Ī		Ī																							162															П					
Maizo					П	070	2																	2.084			Ī								1.500	201						438			212						869							1		614	4				П					
Cassava			2061	538	4,690	310	915	1,853	802	2,494	1.012	2,318	112	1,7	240	617	302	165	748	897	1,062	0.174	971/8	470	1 089	366	1.352	1.885	2.262	406	335	1,534	334	2 283	2007	198	865	4,330	001	202	486	200		191		378	1018	384	2,182	146	2,167	445	000	20	186		448	888	2,882	532	815	1551	822	537	422	757	1,084	801	871	1,486
Name of the CAF (Hidden)																																																																						
Residential N			MBIA	WBIA	MBIA	MBIA	WBIA	MBIA	VBIA	MBIA	MRIA	VBIA	MBIA	VBIA	WBIA	MBIA	MBIA	MBIA	MBIA	MBIA	MBIA	VIRIA	MBIA	MBIA	MBIA	MBIA	MBIA	MBIA	VBIA	MBIA	MBIA	MBIA	MBIA	VBIA	MBIA	MBIA	MBIA	WBIA	MBIA	WRIA	MBIA																													
			CONAMBIA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	ANOC	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA	CONA										
Locality	LOCONE	LOCONE	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MIANONA	MUANONA	MILANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MILANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUNIONA	MUANONA	MIANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MINDINA	MUANONA	MUANONA																							
Administrative Post		Ш	MUANONA		Ш			Ш					-			ı									ı		l									П							Ш					П								П									Ш					Ш

Power Poles																																																																								
Electricity																			l																																		l																			
Fence																			l												İ																	Ī					l											l								П
al al/Offi					1											1			l						1				1									1															l											l								П
Worship places Lar														l		1			l												1							1					l					T					r		1									l								
Farmland V	746	FL758	770	171	783	790	FL805	810	865	998	873	882	FL895	968	89.7	868	916	938	963	FL969	926	FL978	979	983	984	686	392	966	666	1003	2101	8101	1028	1059	1082	1089	1098	1102	1129	1134	138	1151	FL1152	1153	1169	1189	1103	1202	1203	1207	1212	1213	1227	1230	1232	1233	1243	1246	124/	220	1960	1963	1978	FL1281	1328	1353	1355					
Graves	교	교	14	F	료	2 11	급 i	1 0	2 4	4	교	<u> </u>	2 0	I E	చ	리		2 6	Ē		ď	료		<u> </u>	<u> </u>			료		댇	김	2 0		12	교	교	교	티	텔	<u> </u>	1 11	<u>.</u>	교	H	교	립	2 6	4 4	14	료	료	1 6	2	교	교	ď		<u> </u>	_	- 0	2 6	2 6		14	4 4							
Other type of trees		2																		G48																				ď	0												GS													G62						
Trichilia emetica tree																			l						1																												l																			-
Coconut or tree					+									ŀ					ŀ						1																l												ŀ																			-
Sugar Co					9	2		20			-	-				+							+				\dagger		+			c	2					+												H		6			\parallel		+								20				41			
Baobab S tree		1			+							1				+			ŀ																													-					-		\parallel				1							-						-
Ziziphus mauritiana tree	20		2	9	,	2	8	- 0	7	-	3	e ,	2	3		•	2		ŀ	-	2	4		,	8		17	-		ω ,	0 0	07	3 8	-	20	3	2	0	-					2	8		-	-	8	9		n	22		2	2		7	;	- 9	0	7.6	77	-	21		4		53	12		8
Banana Mai				7	Ļ	2	8	20			10		0	9		•	n -	- 62	22.				9			;	=	12			ľ	,	t es					6			~	173	9	2	2					198	12	۰ ۵	29	2				6				1.0	2	120	21		20		31	91		_
Mango B tree							8	4		-		က				+		4						2			80	-									2	+			~	,	6		7		c	2 6	,		12	o	ŀ	2				4	e 6	0	0	0	-	H		4			40	16	4	_
Cashew h			2	10	+	~								2		•	n Ç	2 2								9	15	-	-	,	-		4					+	•	7	4	-				-		6	>	-	12	- 0		2	2		4	6 ;	4 0	n 4	0 9	o				3				12		
Lemon C																			25																																		l																			
Orange L tree																			l						1																												l																			
Papaya					+									ŀ					l																																		ŀ					œ !	-					l								
Sweet P.																+													1									+															ŀ																			
Sesame																																																																								
Okra																			l																					688													l																			
			ŀ									1		l						200			+				+			089						2,977							H								102		H		\parallel		+	0.00	200					ŀ								_
Maize		1			+		938		391			1				2,023			l										+																								212		\dashv			370	1											1		
Cassava	326	3,339	1.025	740	1,254	368		202	\$	1,389	1,745	326	1407	439			197	660	445		417	619	200	414	308	242	200	158	284		1.438	1,044	8162	148	2,872		135	682	2,736	661	643	200	814	913	649	2,136	104	358	1,590	177		320	9	1,132	1,500	170	301		100	07.6	277	345	280		808	725	2,421					
Name of the CAF (Hidden)																											1		1																												1															
를 썼	ΥĮ	M V	4	IA AI	<u>≰</u> :	A I	Y.	Y Z	A I	ΙĄ	ΑĮ	M.	IA I	. ₹	AI/	<u></u>	AIS 1	1	Į.	¥	ΥI	ΑĮ	ΑĬΑ	Y.	; ږٍ	M.	Z.	IA.	yj.	Ψį;	<u>چ</u> ;	AIA 1	1 A	¥	AI.	Į.	ΑŢ	<u>₹</u>	Y.	Z Y	4	IA I	Ϋ́	II.A	ΑĮ	AJ:	¥ 2	Y A	<u> </u>	ΙĀ	AI's	A P	. A	IA AI	ΑŢ	IIA	ΑĬΑ	Y.	<u>s</u> ;	A N	¥ 2	4	1 A	. ₹	. ₹	Ϋ́	ΙĮ	ΑŢ	ΑI	¥	II.	¥
Residential District	CONAMBIA	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMBIA	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAME	CONAMB	CONAMB	CONAMB	CONAMB	CONAME	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAME	CONAME	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAME	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB	CONAMB
Locality	AUANONA	MUANONA	1UANONA	AUANONA	MUANONA	MUANONA	MUANONA	MUANONA	4 I ANONA	MUANONA	AUANONA	MUANONA	MUANONA	AUANONA	AUANONA	MUANONA	MUANONA	4 I ANONA	ALIANONA	MUANONA	#UANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	NOANONA	MUANONA	MUANONA	MUANONA	MUANONA	4 I IANONA	4UANONA	MUANONA	AUANONA	AUANONA	MUANONA	MUANONA	MUANONA	4 I ANONA	MIANONA	AUANONA	#UANONA	AUANONA	MUANONA	MUANONA	4 I ANONA	MUANONA	#UANONA	MUANONA	MUANONA	4UANONA	AUANONA	AUANONA	NOANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUNIONA	4 I IANONA	AUANONA	MUANONA	AUANONA	AUANONA	4UANONA	AUANONA	AUANONA	AUANONA	AUANONA
<u>\$</u>							MUANONA							L					L		П		-											l									Ш							Ш			L		П		-													П		

Power Poles																																																																									PP1
Electricity Tower	Ī																																															П							1			Ī													Ī		
Fence							Ī																																																			İ													r		1
Commerio al Land/Offi	8																																																									Ī													Ī		1
Worship places L																																																										Ī													r		1
Farmland												8 5	119	FL17	L18	L21	756	FL27	67.1	FI 38	L43	44	L49	L55	L56	L61	FL65	L70	L74	FL76	FL77	L84	L85		FL87	1 00	96	F 88	667	L101	705	106	FL 114	[117	1118	119	L120	L122	L124	FL129	130	L133	L141	L148	L149	L155	158	FI 160	165	L169	L172	L178	L184	L183	L186	L188	L189	1000	FL 203	1.206	1207	L208	
Graves			364										Ц	_ [1	-	ш	ш	1	- 6	L	L	_	L	ш	ш	7 F	ш	F	F	L	ш	ш	ш	4	L	- 14	L	L	ш	ш	4		L		L		ш	L	ш	<u>L</u>	<u>. u</u>	L	L	ш		G11	L	. 1	L	_	ш	ш	ш	12 F	L	4		1 0	- 14	·	L	L	
Other type of trees			G																							G				-										2																5		Ī						5							Ī		
Trichilia emetica tree																																																7										Ī													Ī		1
Coconut													Ī																																					Ī								Ī													Ī		
Sugar		H	007	20						37																						1		1																								İ													ľ		1
Baobab																																		1		c	7				•	7								80								İ													İ		1
Ziziphus mauritiana tree	2	2			7	2			6	46		÷	2 0	2								10	8	7	7	2								2	1	- 7.	*				r	,						2		0			4			Ī	4	Ī	4		9		9				Ī	4			Ī		
Banana		101	9	60 %							2	-	23	67											18									20			98	6								100	3	42		4	96							Ī		14			10			Č.	20	150	22	16	Ī		
Mango			10,	8		2	2	-	10	48	4	c	2				2	2	1			80	4	2										4	00	13	2 -	-		2		4								12		-	4			•	7	7	4		9	-	4			2		o -	- 2	1-	Ī		
Cashew					6	2	-				3	c	2	-			2	-	7			2	2	7	9			4		2					00	7.	*				•	2								9		-	4	2		•	n -	- 65	,	14	9	2	10	3		•	2	7	e	4	Ī		
Lemon																																																										Ī													Ī		
Orange																																																										Ī													Ī		
Papaya																																																										Ī												2	Ī		
Sweet																																																										Ī													Ī		
Sesame																					1.555								2,642												I																	Ī												2,343			1
Okra																																																										Ī															
Rice																		116																																								Ī				421											
Maize																						9																		1,459																		Ī					343							249			
Cassava												1028	500	705	222	456	284		601.	4 0 4 2			226	596	406	916	333	2,336		221	229	1,064	5,530	399	263	1 760	562	373			4,130	1,029	322	1.531	2,421	858	403	323	172	348	1086	262	089	283	830	1,538	4,185	207	145	372	285			260	176	2,599	470	450	106	2	390	213	
Name of the CAF (Hidden)																																																																									
Residential N. District		BIA	BIA	SIA SIA	SIA SIA	BIA	BIA	SIA	BIA	BIA	BIA					101							100	100		101				111	111																		111					101							100		111						1			1.0	
Resid	CONAM	CONAM	CONAM	CONAM	CONAMI	CONAMBIA	CONAM	CONAMI	CONAM	CONAM	CONAM	LOCON	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCON	LOCOL	LOCONE	LOCONE	LOCONE	LOCONE	LOCON	LOCONE	LOCON	LOCONE	LOCONE	LOCONE	LOCON	LOCON	LOCON	LOCON	LOCON	LOCON	LOCOL	LOCONE	LOCONE	LOCON	LOCON	LOCON.	LOCON	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCON	LOCON	LOCONE	LOCONE	LOCONE	LOCONE	LOCON	LOCON	LOCON	- DOON	LOCON	LOCONE	LOCONE	LOCONE	LOCON	LOCONE	LOCON	LOCON	LOCON	LOCON	LOCOL	LOCONE	LOCONE	LOCONE	LOCON
Locality	TUANONA	IUANONA	IUANONA	HANONA	TUANONA	MUANONA	MUANONA	IUANONA	IUANONA	IUANONA	IUANONA	MUANONA	MANONA	IUANONA	IUANONA	IUANONA	IUANONA	IUANONA	MOANONA	ILIANONA	IUANONA	1UANONA	IUANONA	MUANONA	MANONA	ILANONA	IUANONA	IUANONA	IUANONA	MONONA	MUANONA	HANONA	IUANONA	IUANONA	TUANONA	IUANONA	IUANONA	IUANONA	IUANONA	HIANONA	IUANONA	IUANONA	IUANONA	IUANONA	MONONA	HANONA	IIIANONA	MONALI	1UANONA	IUANONA	IUANONA	IUANONA	IUANONA	IUANONA	MANONA	MONONA	MUANONA	HIANONA	ILIANONA	1UANONA	IUANONA	IUANONA											
Administrative Post		Ш								Ш																						1		1												ı		Ш					П											-							П		
Admir	MUANC	MUANC	MUANC	MOAN	MUAN	MUANONA	MUAN	MUAN	MUANC	MUANC	MUANC	MUANC	MOAIN	MUANC	MUANC	MUANC	MUANC	MUANC	MOAN	MIAN	MUANC	MUANC	MUANC	MUANC	MUANC	MUANC	MUANC	MUANC	MUANC	MUANC	MUANC	MUANC	MUANC	MUAN	MUAN	MIAN	MIANC	MUANC	MUANC	MUANC	MOAN	MOAIN	MIAN	MUAN	MUANC	MUAN	MUANC	MUANC	MUANC	MUAN	MUAN	MUANC	MUANC	MUANC	MUAN	MUAN	MOAN	MIAN	MIJAN	MUANC	MUANC	MUANC	MUANC	MUANC	MUANC	MUAN	MUAN	MOAN	MIAN	MUANC	MUANC	MUANC	MUAN

Power Poles																																																															
Electricity																									l																																						
Fence																																																															
Commerio al Land/Offi	8																																																														
Worship																																																															
Farmland	FL209	FL210	FL235	FL236	FL245	FL251	FL254	FL263	FL265	FL274	FL279	FL282	FL287	FL292	FL296	FL290	FL302	FL303	FL310	FL314	FL315	FL318	FL321	FI 333	FL334	FL338	FL355	FL356	FL363	FL368	FL370	FL372	FI 377	FL378	FL379	FL383	FL391	FL393	FL394	FL395	FL402	FL405	FL407	FL409	FL411	FL412	FL420	FL428	FL436	FL441	FL445	FL446	FL448	FL452	FL458	FL461	FL462	FL469	FL473	FL478	FL4/9	FL494	FL495
Graves																																																															
Other type of	_																																																														
Triohilia emetica tree																																																															
Coconut					4																				L																																						
Sugar															3																																																
Baobab tree			3	9		m	Ц						20 44												0			10	2 2			2			20 1	0						2				2				16							0					9	10
Ziziphus mauritiana tree						13		4					0	9	6				7	2			67	0	Ĺ						36								3			12			0			10										0					
Banana tree	6		3	8	2	-			41			,		156	10			•	7	4		2	7	152				2 2	7		8		110		4	4						2		40	5 20	4		2		~	2 60			-			80 0	2 3				3	
w Mango	6	2	3		2	-				n					10				-	2		4		6					2			0	2		33	2		3				3	2		13	2	-	2			9		-			-	4 0	3 8				2	6
Cashew																	Ц																							-					-	4																	
Lemon														L											L																					4																	Ц
Orange tree														L											L																			L		4						L			L			7					
t o Papaya										358				H											L																		_			4						L											H
Sweet Potato							Ц			8		-		H											L		4								1				-							4				-		L		-			_						Н
Sesame														H											L		-																			4						L											H
Okra							Н							H			Н								L		-							870	+							1,074	1,045			4						,054				448	+						H
- Rice					2,414	328								H	100	406				144	981			164			+										949				L	1,1	=	ŀ		+				491	174	=			L		+		399				H
Cassava Maize	573	1,035	22	229			854	3,876	169	6/9	3,898	196	2804	200	3,902		842	288	3.913				940			773	363	1 500	1011	1,235	1,440	921	3.589		253	1.000			219	1000	349		647	151	2,876	279	258	366	974	139	445		247	357	587		131	1,6,1		510	524	654	573
Name of the CAF (Hidden)																																																															
Residential District	LOCONE	COONE	CONE	DCONE	LOCONE	CONE	CONE	CONE	CONE	COONE	COONE	SCONE	CONE	COONE	DCONE	CONF	CONE	SCONE	CONE	COONE	CONE	SCONE	COONE	CONF	LOCONE	CONE	SCONE	OCONE	LOCONE	COONE	OCONE	LOCONE	CONF	CONE	DCONE	COONE	CONE	OCONE	SCONE	CONF	LOCONE	CONE	SCONE	COONE	CONE	SCONE	CONF	COONE	OCONE	COONE	CONE	COONE	CONE	LOCONE	COONE	OCONE	DCONE	LOCONE	OCONE	OCONE	CONF	CONE	OCONE
Locality					MUANONA		Ш				Ш			Ш			Ш										ı											Ш			П					П																	
Administrative Post					MUANONA MU		Ш				Ш			Н			Н			l					L					П								Ш			П					П			П			L											

Power Poles																																																																									
Electricity		Ī																			1																																																			Ħ	
Fence		ı														t					1											l						ı			l																									l						Ħ	
al al/Offi		T																			1																								1														T													H	
Worship places Lar																l																									l				1														l							l						H	
Farmland V	496	FL501	202	609	FL513	527	528	535	536	537	538	544	545	546	552	559	292	564	573	575	280	584	080	286	/ 90	200	282	/600	200	000	810	612	919	621	622	624	631	644	046	855	629	993	992	999	699	029	07.0	2/0	FL686	889	693	69.5	969	269	669	200	701	90/	111	91.0	61/	793	724	FL729	731	737	748	749	751	752	757	FL759	
Graves Fr	F	교	-	F	40	ď	4 0		교	4	ط اه	4 6	1 4	료	료	1 11	1 11	료	Н	료	디			1	7 0	2 6	2 6			2 6	1 11	4		교	F	료			2 0	-	Ē	교	료	F	료	료	2 6	4 4	12	교	d :	4 6	Ē	료	료	교		디	<u> </u>		2 6	4 4	<u> </u>	12	1 2	12	교	4	F	4		<u>.</u>	
Other type of C										-												8	3															238																																			
Trichilia emetica tree		H																			1																																						1													H	
Coconut el		H														l					1																				l	20			+														1							l						H	
Sugar Co		\parallel							H			-										+	+		1							H				3									+			l		H			l				+				1	-				ŀ					4	H	
Baobab S tree		H					,	-	2			-										2	1									H																		H	-		3				+															H	
Ziziphus Be mauritiana t		\parallel	7	6	c	-			H			ıc				ıc	,		8	15	4	80	•	9	1		6	200	D			H															٥	l	2	H	Ş	2 %	4	10	3	9	+		23	20	ç	2 9	,	7		ŀ						\parallel	
Banana Mai		H	Ť.	!	6		2			·	4 -	-						80			1			Ì		7	-				-	ł		2		200					00	17			+				က		6	RZ								Ļ	0					ŀ					4	-	
Mango Ba		•	7 6	7			c	2	2	-		7				6	7	-	7	4	8	10	,	- 0	20 0	0	c	7	o	°	2	65	,			9		20			ŀ					,	n				c	7)		10	4	4				12	,	4 1				2	-					-	
Cashew M			4	7			2 0	0 9	2	-		ıc	,			-	^	2	-	3	8	10		-	- 0	2		c	0 0	7	~	2		4							ŀ		4		+		20			8	e •	4			3	5			m ;	0 0	7 0	2 6	-			7				2	ı	H	
Lemon																					1																				ŀ																		1														
Orange L tree																					1																				l																		1			9	>										
Papaya		H																			1																				ŀ				+																					ŀ							
Sweet Potato		+																			1																				ŀ																		1							ŀ							
Sesame S		+																																							ŀ				+																					ŀ							
Okra		H																																									Н		+																												
Rice		\parallel			491																		1		1							t																t		H							+				1		374	5		l						H	
Maize		1,438			1					144											3,080	684	1										250				311	4	340				1,185		453					1,711																1.074						\parallel	
Cassava	321	100	100	396	191	723	270	533	997		374	855	576	2,210	144	807	5574	169	2,312	3,016			77.	133	38	000	2420	1,000	000	990	1579	142	292	246	538	254		827	0 40	433	295	4,120		539		2,172	200	161	247	120	118	3 2 3 9	9/	5,159	265	890	754	2,552	405	800	878	4660	2001	342	555	3	1,324	136	726	1,125	139	382	
Name of the CAF (Hidden)		H										1											1									t																l		H																l						H	
		H			+							-										1	1		1							1																		H							+				1									_		H	
Residential District	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	COCONE	LOCOLE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	COOKE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	COCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	COCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	
Locality					MUANONA																1		ı																				Ш							Ш			l				ı		ı													Н	
					MUANONA	П			П										П		-		ı									ı											Ш							Ш			ı		П		-							ı				l		l		Ш	

Power Poles																																																																											7
Electricity																																																	1			l																						Ī	1
Fence	l																															l																				l				Ì																		Ī	1
al al offi	+																																																			l				Ì																		Ī	
Worship places Lar													l						t			l										l															l				l	l							l															Ī	1
Farmland V	760	FL761	FL762	760	772	FL773	775	781	782	784	FL787	791	194	FL809	811	819	820	770	550	831	832	834	836	837	845	850	851	855	860	863	874	877	878	883	891	893	894	920	925	930	931	932	936	93/	939	942	943	FL945	947	948	92	896	970	972	973	FL981	202	200	200	1000	1007	1011	1013	FL1015	L1021	1025	1026	1030	1033	10.36	1030	1039	1040	FL1049	700
Graves Fe	교	료	급		14	II.	4 6	4 4	교	교	교	4	2 11	14	ᆸ	료	<u> </u>	2 0	1 0	1 11	<u> </u>		<u> </u>	Ē	ū	ū	<u>.</u>	Ē	ū	ū	ū	1 11	<u>.</u>	4	교	FL	료	료	료		4	<u>تا</u> ز	2 0	2 6	2 4	1 2	<u> </u>	료		d :	1 11	14	교	교	료	7 0	4 6	1 0	1 11	ū	<u></u>	료	교	F	FL	F	리	d :	7 0		긷	7 .	로 :	4 0	-
Other type of trees			-																				21																												7																							Ī	1
Trichilia emetica tree																																																				l																						İ	1
Coconut el													l						t			l										l															l				l	ŀ		-					l															İ	1
Sugar Oc		H																																	2														+			ŀ															+							t	1
Baobab S		H										-					1																	-						1												H		$\frac{1}{1}$			-		-					3										-	1
Ziziphus mauritiana tree	7	H	9	7 01	2								4	-																	σ	,	2			86	4	3							0.1	2 00	-	19	13			ŀ			4	ł			7				3	28										İ	1
Banana ma tree	18	е	107	144	<u> </u>	4		73		52				2		80		g	27				80							ç	2	ıc	,			200	69				13	ლ ,			36	3			160	9	œ	,			0	52 5	2		20	2	300							2	ac	30	c	27	L	C	
Mango B tree	2	е		4		2		2	2			c	7 -	- 6		3			-			l			2	4						œ	,	-		105	-	-		2					4	r 00	,	6		-	ŀ	80					ď	- c	- σ	,	4			17		-				-	-		•	7	
Cashew N			9								3	-		2										2		8	>				e	,	c				-	Ξ			-	-				2		2		2		80					ç	2	σ	,			2	14		-	e .	-		c	7)		•	e -	-
Lemon																																																				6																						l	
Orange L tree																																																				l																						I	
Papaya			ŀ	4																																									9	>						l																						İ	1
Sweet P							2,240																																			, 00.	1,794						1			l							l															İ	1
Sesame																																						266											1			l																						İ	1
Okra																																																				l																							
		$\ $											t				1												597			l																				l		\forall					l													07.	718	I	1
Maizo		H			250						172						1							1,570	604																									200	282	l		\forall					l															T	
Cassava	188	903	336	1 005	200	328	2222	1,283	256	557		2,615	501	371	2,138	1,004	239	300	1086	1921	100	2.795	186			729	1351	1050		1971	717	1445	2253	818	2,818	934	999		344	1,958	191	525	100	93	1817	119	512	5,318	375	1,962	526		290	1,136	56	2,405	301	0.00	4838	100	137	623	4,487	969	1,220	1,589	1,654	4,722	1,901	2,047	377	330	9	1,500	20
Name of the CAF (Hidden)		H															1																																1										f															İ	
		H															1																							+		+							+			H		$\frac{1}{1}$					-								+						1	+	1
Residential District	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	POCONE	POCONE	LOCONE	OCONE	POCONE	POCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	OCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCOLIF
Locality		MUANONA																				l		l				l		l										1							ı					L							l		l														
		MUANONA																		ш		ı						l		l				l						1							L					L							L		ı														

Power Poles																																																																										ĺ
Electricity					Ī																													l																																							П	ĺ
Fence E		H																																l																						1																		
al al/Offi		H			Ī						Ì												Ì											l																						1																	ı	ĺ
Worship places Lar		H			1						1						ľ																	l																						2																		ĺ
Farmland	1053	1058	1061	1063	FL1064	1070	1071	10 /8	1080	FL1084	1087	1002	FL1093	1107	1110	FL1111	1116	1117	FL1118	1119	1121	FL1122	11.24	11.25	1731	1135	11.06	1130	1130	11.41	1144	11.47	FL114/	1155	1159	1162	1164	1166	1172	1173	1174	9/11	1104	FL 1185	1187	FL1199	1200	1214	1223	1224	1229	1231	1241	FL1244	1245	1252 WF	1253	1255	1258	1262	1266	126/	1208	6071	2/2	1004	1285	1280	1203	1205	1006	1297	FL1298	
Graves Fe	F	급	4		교	14	료	<u> </u>	14	ᆸ	디	2 0	12	Н	료	4	4 11	4	료	교	료	<u> </u>	1	1	7 0	2 0			1	2 0			2 0	<u>.</u>	ď	H	교	F	료	료			2 6	2 6	4 11	1 2	교	료	료	-		<u></u>	료	료			교		디			7 1		2 6		2 6		1 11	4 11	1 11	2 0	2 1	14	
Other type of trees											1																															222				2										G56					12 G57													
Trichilia emetica tree		+									1																																																															
Coconut etree		H			1						1						l																	l					-																																			
Sugar Co		H															l																	l																						1									99	90								
Baobab Stree		\parallel															1					1	1																																				-	$\frac{1}{2}$													H	
Ziziphus mauritiana tree		•	3	>		2					2	0			2		91	2	6			56	c	~	c	2		r	\ \	c								18			2					9			4						က						100			r	,					Ç	2		H	
Banana me		18	V	-	1									7		,	ł	20											,			,	4	l				13					c	D												1	8				180		ç	2		o	n	26	00				H	
Mango E tree			4	2	6					-	en e	າ			3	-		က	Ξ		-	2		4 (٥			Ţ	4 5	0		c	0 0					6		8	4					7			c	20	2		2			1	2	-	വ		21	,	-	-		,	4			œ	Þ	6	4	
Cashew	2	ı	2	9			,	-			2 0	10			2				10	2	4	œ ·	- 0	η,	4 c	7		c	٦ ٢	,			-	l		-				-	က	c	20			9			c	7		2				1		-	9			•	ς,		c	7	Ľ	2		0 4	+	-		ĺ
Lemon		H																																l																																								1
Orange											1																					- 0	D.																																									ĺ
Papaya		•	9		T						Ì																					-	D	l																																								ĺ
Sweet F		H			1						Ì		2,256																					l				2,226																		1																		
Sesame		H								484							l								Ì									l																										1														ĺ
Olcra 8		H																																																																								ĺ
Rice		H												269			2.309								l			l																												7,356				1				l									H	
Maize		H					783						1,253										1		ĺ	l			1					l	115													208							4,048			1		2.718		007	99	ĺ	848	040							H	
Cassava	1,178	545	1150	1,577	1,500	2	9	100	738		462	2 6.40	600		244	222	+00	384	3,086	1,305	4,195	751	100	282	30	2000	200	3	177	144	1494	97.01	0/0'	375		2,591	6,829		614	1,842	236	316	06	253	564	290	366		261	232	473	1,294	62	1,004		1,734	1,306	1,156	1,085	1	225	882	001	737	000	2102	3,132	1174	2243	1 700	07.6	270	1,401	
Name of the CAF (Hidden)		H																					1		ĺ				1																													1		1				ĺ									H	
		\parallel															-					1	1		1				1																																	1		1									H	
Residential District	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCOLE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	I OCONE	LOCONE	I OCONE	LOCONE	LOCONE	LOCONE	
Locality																					1		ı																																	١		ı		1													MUANONA	
														П			L		П		-		ı											ı						- 1							П					L				1		-		1													MUANONA	l

Power Poles																																																																										
Electricity															1																																																											I
Fence															1		Ì																																						l								Ì		Ì					l		l		П
al d/Offi	3														1																																								l						1													H
Worship places Lan				Ī											1																																					H			l															l		l		Ħ
Farmland F	1303	FL1304	1307	1308	1312	1318	1319	FL1324	1325	1331	1332	1338	1343	FL1346	1350	1351	FL1352	1356	2																																			-	2	36	41	52	94	222	221	223	477	7/7	283	230	35.7	359	358	440	459	470	FL497	512
Graves Fa	4	2	F	<u>تا</u> ا	2 6	F	ב נ	12	교		교			교	립	교 :	7 6	1 11	-														2																					ū	2 11	. 5	FL41		3	교	<u>۳</u>		FL224			FL288	2 6	1 12			3	12	ì	E
Other type of trees										G60		190	3		1																		395												,	7				795		H			l			G5			5		215	3	9 5				125	1				H
Trichilia cometica the															1																																					H			ŀ																			H
Coconut en															1									+																1																					1									l				H
Sugar Co					9																			+																1																					1		+						-	H		-	,	H
Backab S														10	1								-				-																,	-	-								2								1													H
Ziziphus Bamauritiana tree	-			Ŀ	0				9				22		1	12			8				80	က		2		3			-				3		Ξ		2	2		9				8	,							4	2		27	4	10			30			c	ກ	~	,		ŀ		ŀ		-
Banana Ziz				91	0						9	22			1		Ę	2			18															40				79	180						37							061	07						75								-			ŀ		H
Mango By tree				Ŀ	0	-	2		4		- 0	9	S		1	4	7		4				-	4				2		-									2	1						8	,	7	-	-	2		-		ł		3	5			2					=	+			ŀ		-	_	3
Cashew M	4			•	2		က	9	2				4		1	က	20		8			-	2	2						- 1	2								2	1	-		2 0	7	-	2			-				2		ŀ						4				•	7	6	4		ŀ		-		9
Lemon															1																																														1													H
Orange L tree							L	0							1																																														1													H
Papaya															1																																								ŀ						1									ŀ		ŀ		H
Sweet Potato															1									+																															ŀ						1													H
Sesame																																																													1													H
Okra															1																																								l																			H
- Rice							1070	7747					1.946		1																																														1													H
Maizo											685				1		283																																																		2624	170.7						H
Cassava	1:031	789	310	681	839	869	1,000	200	442	940	,	1,261	2	1,139	208	348	1 040	753	8																										l							H		6000	9000	3,424	151	342	539	376	1,059	357	7442	/67	5,224	757	/6/	421	326	421	173	456	8,723	340
Name of the CAF (Hidden)													l																																							H			l															l		l		H
																																																				H			+										1									H
Residential District	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	COCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	LOCONE	MATOLA	MATOLA	MATOLA	MATOLA	MATOLA	MATOLA	MATOLA	MATOLA	MAIOLA	MAIOLA	MAIOLA	MATOLA	MATOLA	MATOLA	MATOLA	MATOLA	MATOLA	MATOLA	MATOLA	MATOLA
Locality	AUANONA	Ш																		l				-		-		1																			l					Н									١													MUANONA
<u>\$</u>		Ш													-					l		П		١		-		1						l								-					L		- 1			Н			L				П		1													MUANONA

Power Poles																																																																						
Electricity		Ī			Ī																	l								Ī																									l															
Fence					Ī																	l																		Ī															l															
Commerio al Land/Offi		I			Ī						Ī								Ì			l								Ī				L																					l															
Worship places L			WP1								1											l								Ī																									l															
Farmland	594	П	FL601 W	618	-627	638	FL639	299	674	2.29	704	741	FL754	755	9//-	803	818	FL821	823	835	FI 887	912	918	929	-964	1029	_1035	1042	1060	1067	1072	10/3	FI 1109		1126	FL1194	1216	1220	1221	1961	1277	1286	FL1299	FL1334	_1335						FL438	FL998		7 - 1	22	9	Ξ	-19	FL20	-22	23	FL 24	87	31	32	39	-40	-42	FL45	48
Graves	Ш		G31	ш	ш		G36 FI		L L	ш.	H		ш	Œ j	I	. 1	Œ.	Œ		245		ii.	G46 FI		Œ	Ш	H	Œ.	Œ	l	351 F	L			II.	G54 FI	<u></u>	Œ i	_ 0	. L	ii.	II.	E	Ш	Œ.	263	8					G49 FI				ū.	3	Ш	ш	Œ				i ii	E				H	<u> </u>
Other type of trees		ľ	5			0	G					5								C	5	l	9								5					5				l							3					g		5	5		G										G4			
Trichilia emetica tree		I			Ī						1					2						l								1																	9								l															
Coconut		-									1											l																																	l															
Sugar												6	4		-		П				-	T					1			1												2					Ī		04						ľ									İ						
Baobab		Ħ				2					1						-													1			ŀ							-																														
Ziziphus mauritiana tree		15						12	O		30	35	3				35									9		7	12	80						9									Ξ				77																					
Banana	24					25			43	32		6	40		-	100		42			38	3		170		9	-	74								10	9					2							40	2007					2															
Mango		2						- c	7		Ī			-								F								2						7							9				Ī								3		2							LC.	-				3	
Cashew		2	-	-		96					10						-	2	ç	2						9										2				9			9					-			3		7			-	2	2	-	2	2	c	7	4	-		3	-	3	
Lemon																																																																						
Orange																																																																						
Papaya											10																																																											
Sweet																																																																						
Sesame																																																																						
Olora																																																																						
Rice																7.494			000	280										1,408														173																								202		
Maize						126								2,211					382						190								1 838				446														277								2,540							1,219				
Cassava	556	2,206	1,865	348	412	855	607	2,326	151	6,257	2,858	2 943	200		1 255	00.7	2,311	457		282	1096	981	150	4364	302	275	812	224	308		1,045	350	197		1.015	410		448	696	1130	200	96	622		100							995	000	200	224	652	1889	647		200	475	852	1010	1214	833		236		155	429
Name of the CAF (Hidden)																														1																																								
Residential Ne																							_			-			_									_							7						¥	¥	A in	YEL ANE	ZELANE	PELANE	3ELANE	PELANE	PELANE	PELANE	PELANE	SE ANE	ZELANE ZELANE	JEI ANF	ZELANE	ZELANE	PELANE	PELANE	PELANE	PELANE
Resid	MATOLA	MATOL	MATOLA	MATOLA	MATOL	MATOLA	MATOLA	MATOL	MATOLA	MATOLA	MATOLA	MATOLA	MATOLA	MATOL	MATOL	MATOLA	MATOLA	MATOLA	MAIOL	MATOL	MATOL	MATOLA	MATOLA	MATOLA	MATOLA	MATOL	MATOLA	MATOLA	MATOLA	MATOLA	MATOL	MAIOLA	MATOLA	MATOLA	MATOLA	MATOLA	MATOL	MATOL	MAIOL	MATOLA	MATOLA	MATOLA	MATOLA	MATOL	MATOLA	MATOLA	MATOLA	MATOLA	MATOLA	MATOLA	MUANO	MUANO	MUANO	MURRUM	MURRUF	MURRUF	MURRUF	MURRUE	MURRUF	MURRUR	MURRU	MURRU	MURRU	MIRRIE	MURRUF	MURRUF	MURRUE	MURRUF	MURRUPELANE	MURRUF
Locality	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MILANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MILANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MIANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MIANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MILANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA
E C		П					MUANONA				П			- 1			Ш					L		l																							L					-			L				П											

Power Poles																																																																										7
Electricity Tower					Ī																																																																					1
Fence											1					ı																		l						l		l							l					l																			İ	1
al d/Offi	8				1						1																1				1		Ī									l												l										1		1								1
Worship places Lar											1																						l																					l																		1		1
Farmland	-50	23	7.5	33	34	38	71	7. 7.	262	30	88	8 8	FL95	97	104	801	19	123	125	126	134	FL136	137	139	144	143	145	53	54	191	162	163	164	00	/01	90	173	174	175	176	179	180	FL181	182	FL187	190	FL191	261	194	195	961	197	200	211	216	FL218	219	220	L225	226	228	232	237	238	240	241	244	248	249	253	255	526	FL257	528
Graves Fa	FLI	FL53	7 6	I.I.	26	1 2	2	FL/3	1 1	E	FL88	1 6		E	교	4	4 5	1 1	14	교	급	교	립	3	ı			H		2		H	료	2 0	2 5	2 0		1 11	ū	1 11		4	교	교	교	H	4	2 6	1 11	H	긥	4	7 6			3	7	E	E	FL	FL228	교	Ę	3	근	교	3	교	교	급	근	교	1	7
Other type of trees					1		4 G8																			G10					1													H																														1
Triohilia cometica ty					1						1																																											l										1								+		1
Coconut en		Н			+						1																						1									ŀ		Н										l										1		1								1
Sugar Co				2	+																										+													Н																				+				1				+		1
Baobab S tree											1																															ŀ																						+		+				1		+		1
Ziziphus Be mauritiana tree											1											7											1					-				ŀ																						1	4	+			2	4		+		1
Banana mau			n	2	30	67					1																1				1											ŀ							l	4		10	6	•										1								+		1
Mango Ba tree t	1	Н			2	-				2	-	c	2			•	7		4		2	7			-	-			1		e !	17	+			u	o			9	o es		21	Н			-					2	4 -	-						9		2		0	4	+		1	3	Ξ		+	,	=
Cashew Ms		-	-	-	က	4	10				+		2		3	-	-	-	4	8	9	9			9	-		23	1		9 !	17	e .	0					ıc	ם נכ	2		21		-		- 0	n -	- 22	,	-	e •	4	9	10	2	2	3	2	2	2	-		+	3	1	3	+	3	9	-	-	2	4
Lemon Ge					+																																																											+				1				+		1
Orange Le					+						1																															l																						+								+		1
Papaya t																							+		+																																					+		+				1				+		+
Sweet Pa					+						+														+								+									ŀ		Н										l								1		+		+		1				+		-
Sesame Po					+			404			+																						+									ŀ												ŀ								$\frac{1}{1}$		+		+		+		+		+		1
Okra											1																															ŀ							l		1			ŀ										1		1						+		1
Rice			308																																							l																						+					280			+		+
Maize					1,673						283			1,931									+		+						1																9	740							494			1,705				+		+		+		1				+		1
Cassava		609	7,322	887	003	570	304	V6.9	2381	1,086	100	1067	818		1,236	103	1 1 64	1037	1,234	474	2,262	624	1,147	1,499	1,944	542	2,255	1,045	/33	931	1,850	164	174	000	74 A	1 201	1,301	1 99	878	100	219	914	397	586	208	129	264	2 9 60	468	689	824	869	973	7.670	699	226	1,146		290	583	345	2,375	4,372	303	1,027	782	1,506	495		783		000	2,599	/10
of the F Cas		H				H					+					1			L				+		+				$\frac{1}{1}$																				ŀ		\parallel			L										+		+				-		-		$\frac{1}{2}$
Name of the CAF (Hidden)	E	삦	<u> </u>	Щ	¥ ¥	<u> </u>	y	<u> </u>	4 4	Щ	الإ	<u> </u>	ıщ	¥	삘	الإ	<u> </u>	ų u	Щ	W.	Щ	삘	y	y.	y)	및 및	الإ	9	ارس	Щ	الإ	9	الإ	4	يا پا	4	<u> </u>	1 4	1 11	4 4	ш	Щ	Щ	ÿ	빌	끶	9	<u> </u>	ш	Щ	삘	ا لِا	<u> </u>	ų ų	Щ	ų.	Щ	Ä	Ä	Ä	삘	삘	¥	삘	삘	삘	및	삘	삘	삘	삘	y)	<u> </u>	<u></u>
Residential District	IRRUPELAN	MURRUPELANE	IRRUPELAL	IRRUPELAN	JRRUPELAN	IRRUPELAN	JRRUPELAN	DE DE AN	IRRUPEL AN	JRRUPELAN	RRUPELAN	DDI IDEI AN	IRRUPELAN	JRRUPELAN	IRRUPELAN	JRRUPELAR	DDI IDEI AN	IRRII PEI AN	IRRUPELAN	IRRUPELAN	JRRUPELAN	IRRUPELAN	JRRUPEL AP	JRRUPELAR	JRRUPEL AP	JRRUPEL AP	JRRUPELAR	JRRUPELAR	RRUPELAR	JRRUPELAN	JRRUPELAR	JRRUPELAR	JRRUPELAR	DE LOS	IPPLIPE AN	DE LOS	DDI IDEI AN	IPPLIPEL AN	IRRIIDEI AN	BRIDEI AN	IRRUPELAN	IRRUPELAN	IRRUPELAN	MURRUPELANE	JRRUPELAN	JRRUPELAN	MURRUPELANE	DDI IDEI AN	IRRUPELAN	IRRUPELAN	IRRUPELAN	JRRUPELAN	IRRUPELAL	IRRUPELAN	IRRUPELAN	IRRUPELAN	IRRUPELAN	IRRUPELAN	IRRUPELAN	IRRUPELAN	JRRUPELAN	IRRUPELAN	JRRUPELAN	JRRUPELA!	JRRUPELAN	JRRUPELA!	IRRUPELAN	IRRUPELAN	JRRUPELAN	JRRUPELA!	JRRUPELAN	IRRUPELAN	MURRUPELANE	JRKUPELAI
		Ш																	L				- 1		- 1		ı		1		ı											ı		Ш										L		l						-		-		- 1				-1				
Locality	MUANON	MUANONA	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MIANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MINON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MOANON	MUANON	MUANON	MONALIM	MIANON	NONALIM	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON	MUANON
Administrative Post	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MIANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MIANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MIANONA	MIANONA	MILANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUNIONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA

Power Poles				T										П							I							1							Ī																					Γ															T				T						7
Electricity Po																																																																																	-
Fence Eleo		+														1																																																																	-
Commeric al Land/Offi ce		+														1							l											l																																															-
Worship places Lan		+										ŀ				1														_				L																				l		ŀ											1														+
Farmland Wo	30	10.5	96	66	0 92	77	_ 	98	06		7.0	66	-	_	7	02	22	24		200	26	2 2	2.0	2	- 5	2	4	12	91	00	51	53	24	0	24	1 1	000	2 -	7.3	2 5	1 2	2 -	33	26	200	000	200	90	20	77	76	2 0	0 0	2 12	9	6	22	23	97	27	30	-	2.2		200	1 0		00		23	100	/ /	202	80.5	7:	4 :	. ;	31	32	34	33
Graves Fan	FL26	FL261	FL26	FLZ		FL270	FL281	FL28	FL290	I S	FI 20	FL299	FL30	FL311	FL3.	FL3	FL3	FL324	2 2	200	E1 33	FI 335	ı	TL337		1 1	FL3	FL3	FL3	FL3	FL35	FL3	FI 35	E1 36	E1 36	2012	L 260		FI 373	FL3	FL3/4	2 1	1 1	200	FI 397	3 6	2 2	FI 390	2 2	2 2	FL397	¥ .	יו לי	F1 4.	FI 4:	FL4	FL4	FL4	FL45	FL4	FI 43	FI 4	7 13		4 4	114	1	FL4	H.4	F.L4	4 4	FL4:	FL4	FL4:	4	F.L4.	FL4	FL48	FL48	FL484	
Other type of Gr		+			Ç	5						ŀ				1		1			l	C.	9	ç	500	220								665			ccc	025														l		ŀ		ŀ					2						1													- 60	G26
Triohilia O emetica tyr		+										ŀ				1		1			l																															l		ŀ		ŀ											1														+
Coconut en		+										ŀ				1										1								l																				l		ŀ																					+				+
Sugar Co		+	,	+												1																																								ŀ											c	20													+
Baobab S tree		+														1						-																																					-										,	-											1
Ziziphus Be mauritiana tree		+										ŀ	2			1					l																		ď	o	C	707	c	7			c	7				l	l					23									1										•	9			-
Banana mau tree		+				6		,		4						2		007	90		l		Ca	00														1	,		46	P P							14	4	ç	2					251										90,	100													-
Mango Ba	2	2 0	e -	+				,	- u	٥			9		2	1					l			,	4 0	n (13					7							3	2	-			t c	2	,	4 c	7				l	l	-	0	9		9			ıc	6	0 0	7		c	7						,	-	c	2		7			-
Cashew M	3	ε,	-	L	c			- 0	7			-	2	-	2	1	-	-	-	-		5	2 4	n ç	0	n ș	10	12		က	8	7		,		c	7		13	7 1	2 5	2 :	- 0	2 0	2 5	2 0	2 0	0 4	t «	0			c	2 6	2 6	2		7		2	10	7	. V	-	7		7	,		n o	ກ -	-			,	4		4	-		+
Lemon C																1																														Ľ	n	6	7																																-
Orange L tree		1										l				1																																																																	+
Papaya C		1																					l											l																																	1														+
Sweet P		†														1																																							999												l														-
Sesame																																																								l																									1
Okra S		1														1																																																																	-
Rice		1			100	200						3.119				1							l	1010	3,79	l														010	0/7			V 22	±00									461	2					2.220				l	l		l	, , ,	294		071	/48									1
Maize		1									326	070				1			4/0		l															404	474															l	l					1,447									1			,,,		000	1,062							Life to	1,075
	2,710	791	246	1.03/	ž.	911	1,074	409	600	623	674.7		561	841	807	1,055	1,781		6703	0,793	456	755	000	007	450	450	818	1,248	561	390	371	295	260	1 7 9 1	1765	20.7	000	200	9715	2,713	ç	200	233	607	1 5 4 6	0 1 30	21.30	4160	1.500	000,	320	587	200	500		377	313		1.656		583	156	714	7 20	107	200	117	649	7	400			000	296	848	2,43/	124	200	464	404	-
Name of the CAF (Hidden)				ĺ																			l			1								f																				l													1		1		ĺ				ĺ						+
	LANE	LANE:	ANE	ANE	- ANE	ANF	LANE	LANE	ANE	ANE	ANF	ANE	LANE	LANE	LANE	LANE	LANE	ANE	LANE.	JANE.	ANE	ANE	ANIE .	J. WILL	TANE.	ANE.	ANE	ANE	LANE	LANE	LANE	ANE	ANE	AME	ANE	1144	JANE.	ANE .	ANE	TANE.	JANE.	JAN.	ANE	TANE.	ANE.	ANG	ANE.	ANE	ANF	LAINE .	ANE	- ANE	ANE .	ANE	ANE	ANE	ANE	CANE	LANE	ANE	ANF	- ANF	ANE	JAN.	ANIE	TANE.	JAN.	ANE	ANE	ANE	ANE	ANE	ANE	ANE	ANE	ANE	ANE	ANE	ANE	ANE	ANE
Residential District	MURRUPELANE	MURRUPE	MURRUPELANE	MURRUPE	MURRUPE	MIRRIPE	MURRUPE	MURRUPELANE	MUKKUPE	MURRUPE	MURRUPE	MURRUPELANE	MURRUPE	MURRUPE	MURRUPELANE	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MURROLL	MIPPIPE	MORNOR	MURRUPE	MURRUPE	MURKUPE	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MIRRIPE	MIRRIDE	MIRRIDE	MONYOUR	MORROPE	MURRUPELANE MIDDIDEI ANE	MIRRIDE	MURRUPE	MORROPE	MONYOR	MIDDING	MUNNUM	MURROPE	MUDDIDE	MURRUPE	MIRRIPELANE	MURRUPE	MURRUPE	MURRUPELANE	MURROPE	MURROPE	MIRRIPE	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MURRUPEI ANF	MIDDIDE	MONION	MORROLL	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MURKUPE	MURRUPE	MURKUPE	MURRUPE	MURRUPE	MURKUPE	MURRUPE	MURRUPE	MURRUPELANE	MURKUPE
≱														Ш		1							ı					1						ı		ı																				l		l				l																	1		
e vi								MUANONA				ı		П		-							ı					1						ı		ı															MUANONA			ı				MUANONA				l		ı																MUANONA	
Administrative Post	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	HIANONA	MUANONA	MUANONA	MUANONA	MUANONA	MINONA	MANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUNNONA	MUANONA	MINONA	MINONA	ANOMALIA	MUANONA	MUNICIPAL	MUANONA	MUANONA	MONAN	MUANONA	MUANONA	MUANONA	MUANONA	MINONA	MINONAL	MINONAL	A I A D I A D I A	MUANONA	MONNONA	MIANONA	MUNNONA	MUNNONA	A LANGUAGE	MINNONAL	ANOMAN	MONNONA	ANONALIA	MUANONA	#INDIAN ONA	MINONA	MUANONA	MUANONA	MINNONA	MONNONA	4 IANONA	4LANONA	4UANONA	MUANONA	MUANONA	MUANONA	AUANONA	MIANONA	4UANONA	MIANONA	MINONAL	MONIONAL	MUANONA	MUNINA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA

Power Poles																																																																							7
Electricity Tower		Ī																												1					l																																				1
Fence															Ī				Ì			l								1					l											l												1			l										1
al al A	8	Ħ				Н								1								l													l											l					H							1			l						1				1
Worship places Lar						H																l													l											l					H							1			l						1				1
Farmland V	485	FL486	490	491	500	503	506	514	515	217	218	523	FL524	526	532	541	542	543	249	55.1	553	FL555	556	228	260	561	569	576	278	579	583	880	200	296	266	009	604	909	209	613	619	623	628	629	FL633	635	640	642	643	647	648	656	000	664	682	687	689	692	869	20/	705	707	708	715	717	718	726	727	733	FL739	/4n
Graves Fe	급	4	12	FL			<u>.</u>		F	교		12	H	4	1 6		Я	급 :	7 0	10	2 6	1 2			교	R	FL	4	2	리	2 1	7 0	-	ū	1 11		ď	교	FL	2	료	= i	7 6	2 6	2 10	12	H	F	2 0			2	2 6	1 11	2	F	교	료	4	2 6	1 11		FL	F	FL	H	d i	E i	d i	= i	킬
Other type of C		H				G27					c	7		က	l							l	G29												l											l				623	H							1			l					9	1				1
Trichilia emetica tree																						l													l											l					H							1			l						1				1
Coconut tree		t																				l													l											l					H							1			l						1				1
Sugar C						H											3					l																								l					H										l										1
Bachab		H																				l													l																							1									1				1
Ziziphus mauritiana tree		Ħ							H				2					4	0 0	2														6																	Н							1										,	-		-
Banana m		•	- c	09		15						20		1		4			Ì		e	,				17			10	1		Ì			l						89					l												1			l	3					Ì				1
Mango E tree	2	-	,			9	-						-		-	-			,	4		Ξ				4	1	9	12	1			- 6	,	l								c	7			6					က	c	, ~	•	7		1	-		l	2			3	-					-
Cashew	2	2	,		-	2			2		n c	7	-	m	7 -	-			c	2		e	9			2	2	7	12	2	2	c	7 6	13.	-	· e			4	80				-	- 6	1	80	2	_	4		3	c	4	က	9	-	1	4		-	3			2	3	7	-	-		1
Lemon																																																			Н							1									1				
Orange																						l													l																							1									Ī				-
Papaya																	-		Ì		6						2								l											l					H							1			l						Ī				1
Sweet		T																	1			l								1					l																										l										-
Sesame								3.543						1	Ī				T			ľ								Ī		T			l											l					1,351							1			Ī						Ī				
Okra																		2,219	Ì			l													l																							1									1				1
Rice																			Ì			l													l																																				1
Maize		Ī			2,074	149							258		1 698	200	230		ı			l				1,048									l											l			100	7,100									175		ı			2,761			ı				1
Cassava	142	632	3,543	293	721	247	1,500	7/0"	187	146	3,257	1.253		282	400	717	3,469		100	1358	215	166	352	669	398		729	369	945	930	819	1,06/	596	553	006	697	298	376	1,205	365	1,000	2,122	988	393	9,164	1.004	2,405	791	1,134	2.313		412	98	99	191	422	267	389	0007	9,005	534	204	329		1,500	252	226	560	656	6,256	7/0
Name of the CAF (Hidden)															Ī							l													l											Ī																									1
	ELANE	ELANE	ELANE	FLANE	ELANE	ELANE	ELANE FI ANE	FLANE	'ELANE	ELANE	FLANE	FLANE	PELANE	EL ANE	FI ANF	ELANE	ELANE	PELANE	E ANE	E ANE	FI ANF	JEL ANE	ELANE	JEL ANE	PELANE	FLANE	FLANE	ELANE	ELANE	EL ANE	SELANE	E ANE	FI ANF	FI ANE	YEL ANE	ELANE	'ELANE	PELANE	ELANE	ELANE	ELANE	PELANE	E ANE	ELANE	FI ANF	FLANE	ELANE	FLANE	ELANE	ELANE	ELANE	ELANE	FLANE	FI ANF	ELANE	ELANE	FLANE	ELANE	ELANE ANIE	ELANE ANG	FI ANF	ELANE	FLANE	PELANE	ELANE	ELANE	EL ANE	SELANE	ELANE	ELANE	FLANE
Residential District	MURRUP	MURRUPELANE	MURRUP	MURRUF	MURRUP	MURRUP	MURRUF	MURRUP	MURRUP	MURRUF	MUKKUF	MURRUP	MURRUP	MURRUF	MURRUP	MURRUP	MURRUP	MURRUF	MURKU	MURROR	MIRRID	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUF	MURRUF	MURRUF	MURRUF	MURRUF	MIRRID	MIRRIP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUF	MURRUF	MURRUF	MURRUPELANE	MURKUF	MURRUPELANE MURRUPELANE	MURRUP	MURRUP	MURRUF	MURRUF	MURRUP	MURRUP	MURRUF	MURKUL	MIRRIP	MURRUP	MURRUP	MURRUF	MURRUF	MURRUF	MURRUF	MIRRID	MURRUP	MURRUP	MURRUP	MURRUF	MURRUF	MURRUF	MURRUF	MURRUF	MURRUPELANE	MURKU
Locality	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MIANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MIANONA	MIJANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MIANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA
Administrative Post		MUANONA				Ш			П								Н			ı		L		l									ı		ı											L					Ш			L		П		-			ı				П						

Power Poles																																																																								
Electricity Tower																																																														l										
Fence																					1																																																			П
Commerio al Land/Offi																Ì	l				1					l								ı																l					1							l										П
Worship places L					22												l				1					l		l						İ																1					1							l										
Farmland V	743	744	753	763	FL769 WI	778	780	786	789	FL792	795	797	FL801	804	814	815	817	826	FL827	830	833	838	929	040	842	843	844	847	848	853	856	198	862	864	898	998	871	872	875	976	879	980	884	268	FI 900	90.1	902	903	904	902	906	919	921	922	924	926	927	933	920	940	946	949	950	928	096	962	965	996	296.	971	FL977	086
Graves Fr	F	П	E				립		12	교	료	4		ī	료	4 6			ď	긥		70	2 6		2 6	10	ī	ū	ū	Ē	교	교	ď	d i	1	1 6		ď	료	료	디	료	4 6	7 0	<u> </u>			I I	H	<u> </u>	4		Ē	ď	디		료	-	2 6		ū	14	교	교	교	교	교	교	교	FL	교	<u> </u>
Other type of trees					G44											t					1																						Ì					3							1							l										П
Trichilia emetica tree																Ì	l				1				t	l								ı							1							l							1				t			l										Ī
Coconut tree																Ì					1				t	l								ı							1							l							1				t			l										П
Sugar O																t					1																																		1																	П
Baobab																					1																						c	7.											1							l					-					
Ziziphus mauritiana tree	-							-													1					l								1									o	20											1					9	>	l										
Banana m				2	-		61		17							Ì		-	2	10	1														;	=					-	9	20																			l			4	6						
Mango	4				12	S			8		9					2	l	-	-		1					l					-				20 5	0 4	-	=		5		9	٢	,			e		2	1				-	1	4	9		o	0 1		2	1				Ξ					2
Cashew	5	-			00 T	7		77	S		4	Ī	4 9	-		4 -			2		1			,	4 0	101	· ~	,	c	8	-	3	9	0 '	c	,	٠		19		-	2		4			es		9	•	m c	2 2			9	7	2		_	4 _	٠.	3		2			Ξ	4		9	3	2
Lemon																					1																																		1							l										П
Orange																	l									l								٠	20																				1							l										П
Papaya																					1			I		l								Ī																												l										П
Sweet																Ì	Ī				1					l								Ī																												l										П
Sesame														2,177							1																																		1							l										Ī
Okra																																		Ī																												Ī										П
Rice																								ı		Ī		l						Ī															5,434													Ī										Ī
Maize																Ì		1.614																883	9	318	932																		396		1,736					Ī	639						1,055			П
Cassava	384	200	3,288	P.	695	1.024	287	2,467	1,152	337	242	275	1,458		3,327	1,909	284	2	894	2,291	214	525	468	433	1.564	619	172	1917	2214	1,338	341	742	653	į	421	010	2 4	178	1,610	513	2,902	571	2,412	170	183	347	1.607	657			0440	140	163	372		139	007,	750	330	2099	479	1.496	1,133	1,721	1,426	3,039	528				413	210
Name of the CAF (Hidden)		Ħ																										l									ĺ																		1							l										
	SLANE	ELANE	ELANE	FLANE	ELANE	FLANE	ELANE	- ANE	FLANE	ELANE	ELANE	ELANE	LANE	FLANE	ELANE	ELANE	- ANF	FLANE	FLANE	ELANE	ELANE	ELANE	I ANE	TI AND	T ANE	I ANE	EL ANE	=I ANF	EL ANE	FLANE	ELANE	FLANE	ELANE	ELANE	LANE	I ANE	=I ANF	FLANE	FLANE	ELANE	ELANE	ELANE	ELANE	LANE	E ANE	T ANF	FLANE	TANE	ELANE	ELANE	ELANE	FLANE	FLANE	ELANE	ELANE	ELANE	ELANE	LANE	I ANE	I ANE	=I ANF	FLANE	SLANE	FLANE	ELANE	FLANE	ELANE	FLANE	ELANE	FLANE	ELANE	ELANE
Residential District	MURRUPE	MURRUPL	MURRUPI	MURRUPE	MURRUPELANE	MURRUPE	MURRUP	MURKUP	MURRUPE	MURRUP	MURRUP	MURRUP	MURRUPE	MURRUPE	MURRUP	MURRUP	MURRUPE	MURRUPE	MURRUP	MURRUPL	MURRUP	MURRUP	MORROP	MORNOW.	MURRUP	MIPPIDE	MURRUPE	MIRRID	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MURRUP	MURRUPI	MURKUP	MURRUP	MIRRIIPE	MURRUPE	MURRUP	MURRUPL	MURRUPL	MURRUPI	MURRUPELANE	MUKKUP	MURRUPELANE	MIRRIPE	MURRUPE	MURRUPE	MURRUP	MURRUP	MURRUP	MURRUPE	MURRUPE	MURRUPL	MURRUPL	MURRUP	MURRUP	MURKUP	MURRUP	MURRUP	MIRRIDE	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MURRUPE	MURRUPL	MURRUPL	MURRUPELANE
Locality		Ш			MUANONA						- 1			Ш			ı		Ш		۱							L		ı									П		-							L					П	П	-		1					L								Ш		
Administrative Post		Ш			MUANONA						- 1			Ш			ı		Ш		۱							ı		l									П									L					П	П	-		1					L								Ш		Ш

Power Poles																																																																				
Electricity		Ī																																																							1										Ī	
Fence		Ī																																																							1										T	
al al/Offi							H																																													Ì															T	
Worship places Lar																								l																										H							1										f	
Farmland V	986	FL987	993	1001	1002	FL 1005	1008	1010	1017	1019	1022	1031	1032	1037	1048	1050	1051	1055	1057	1065	9901	1054	10.75	FL 1076	7701.	1081	1083	1085	1086	1090	FL1097	1099	1100	1101	1103	1104	1105	90	1113	1114	1133	1140	FL1143	1145	11.46	1149	1150	1156	1158	1163	1165	FL1167	1170	1175	1178	FL1179	1180	1181	1190	1195	1196	8611	1201	1206	8071	1209	FL1215	
Graves Fe	H	4 4	료	4 -	14	4 6	4	4	4	<u> </u>	d :		료	d 0		교	<u>.</u>		₫	료	7 0	7 0	1 11	1 11	교	F	H	리	d :	7 6	14	교			립	료 :	로 6		7 11	1 4	4	교	4	디	-	12	교	₫ ;		교	료	4 6	14	교	Н	료	리	4 0		F	교	료	d :	로 :	7 .	1 0		
Other type of trees																																		G52						-	-											٣	,														H	
Trichilia emetica tree		Ī					H																																																												f	
Coconut e tree		t					H																																											H							1	c	7			1					f	
Sugar O.		t								Н																																																									H	
Baobab S			H				\prod			H						H																			1												H			\parallel							+										H	
Ziziphus mauritiana tree		6	H			2				H				ď	0	H							7					2	Ξ																		H	12		H					\parallel		+			2							H	
Banana me tree		-				2						22					46						-	F		2			,	-																Ξ				2												-				-	- 80	
Mango E tree		9		-	-	7 2		L	n		4 0	9		c	7	2	0				r	,	- «	· "	-			7	6	7		2		9	4		1						-		6	7		7		H				7			•	2	-	2		- !	12	^			3	
Cashew	-	4 -		4 0	10	- 5		c	۰,	00	4	9		- ~	o		0 °	20	Ξ	2	r	,	4 rc	0	-			9	7	7	8	2		2	2		2 0	7	- 4	-	-			e -	- ıc	n m		20	7		3	-		00	-	-				1		-		e 0	m c	20	-	
Lemon		T																																																																	Ħ	
Orange		t																																																																	f	
Papaya		Ť																			Ì																																				1										f	
Sweet							H			П																																		Ì								Ì	884				1										T	
Sesame							H																																													Ì															T	
Okra																																																																010	3,252		T	
														303	7,631		070	0/7						l								1,255										669								4,299							230										T	
Maize																					İ		İ	l					157							241															1,433	ı			255		ı						379				Ī	
Cassava	219	1,360	1,181	1794	462	338	923	208	1.566	469	773	661	417	138		783	126	189	657	518	07/	1,381	740	671	1,770	158	629	4,913	165	497	163		281	7	412		3,737	040	247	36	184		624	5,626	3,620	330	139	2,110	540			1,040	200	1,805		308	101	1000	417	561	378	249	1,246	246	100	109	1,043	
Name of the CAF (Hidden)			H							H																																																									Ħ	
antial Na	ELANE	ELANE	ELANE	EL ANE	ELANE	EL ANE	ELANE	ELANE	ELANE	ELANE	ELANE	ELANE	ELANE	ELANE	ELANE	ELANE	ELANE	ELANE	ELANE	ELANE	ANE	ELANE	FI ANF	EI ANE	ELANE	ELANE	ELANE	ELANE	ELANE	ANE	ELANE	ELANE	ELANE	ELANE	ELANE	ELANE	ANE	ELANCE OF THE	EL ANE	ELANE	ELANE	ELANE	ELANE	ELANE	EL ANE	ELANE	ELANE	ELANE	ELANE	ELANE	ELANE	ELANE	ELANE	ELANE	ELANE	ELANE	ELANE	E ANE	FLANE	ELANE	ELANE	ELANE	ELANE	ELANE	FLANE	EL ANE	ELANE	
Residential District	MURRUP	MURRUPEL ANE	MURRUP	MURRUP	MURRUPI	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURKUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MUKKUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP,	MURRUP	MURRUP	TOWNOW I	MURRUP	MURRUPELANE	MURRUP	MURRUP	MURRUPELANE	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURRUPE	MURRUP	MURRUP	MURRUP	MURRUP.	MURRUP	MURRUPE	MURRUP	MURRUP	MURRUP	MURRUP	MURRUP	MURKUP	MURRUP	MURRUPELANE	
		MUANONA	Ш				Ш			Н			П			Ш			Ш					L		П	Ш						П		-							Ш					Ш			Ш			ı		П												Ш	
		MUANONA	Ш				Ш			Ш						Ш			Ш			ı		L			Ш						П		-							Ш					Ш			Ш			ı		П												Ш	

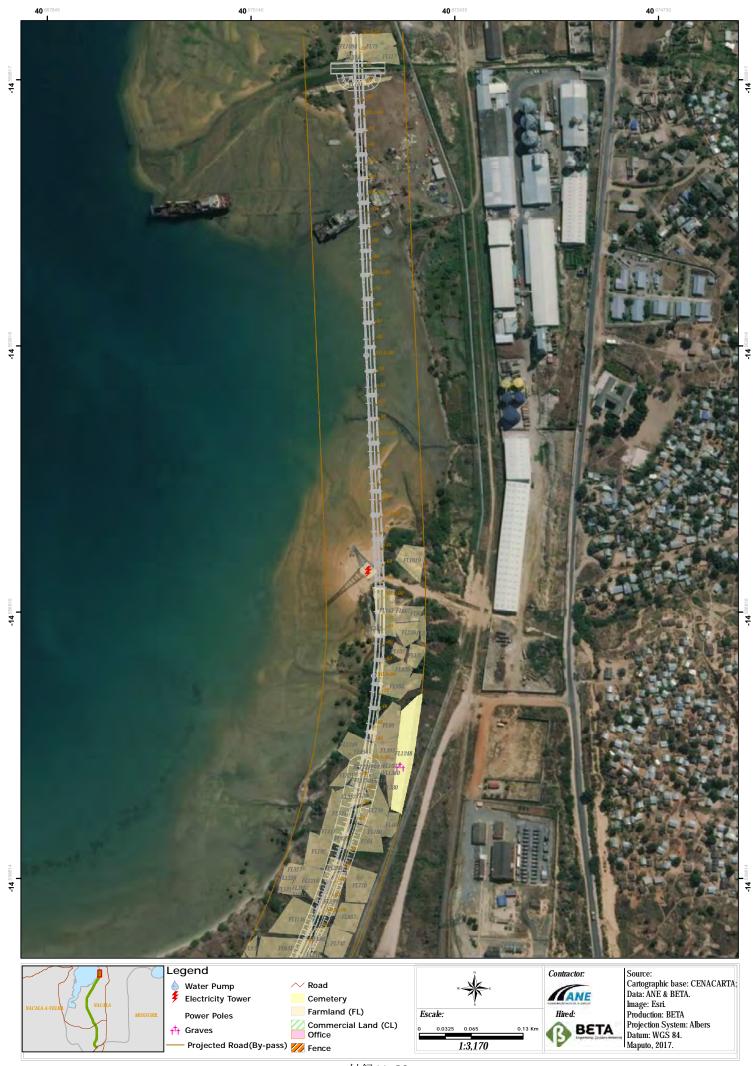
Power Poles																																																																1				
Electricity					Ħ																		l																																				Ī								Ħ	
Fence					I																		l																							Ī									Ī				Ī								H	
Commerio al Land/Offi	8																						Ī																																l				İ								H	
Worship places L																							l																							Ī									Ī				Ī								Ħ	
Farmland	L1217	L1218	FL1219	L1234	L1235	L1237	FL1238	1239	L1242	FL1248	1249	L1254	FL1257	1264	L1270	FL1276	L1282	1288	FL1290	L1292	FL1300	1307	1306	FL1310	L1311	L1313	L1314	L1315	L1316	L1317	FL1320	1322	FL1320	1333	L1339	L1340	L1341	L1344	1345	1347	FL1349	L1357	L1358			Ī									l				İ								H	
Graves	<u> </u>	ш	L	LL	L I	LL	L	<u>. u</u>	ш	ш	ш	L	L		L	L	L		L	L	L	L	ш	L		ш	Ш	L	F	ш	ш		L	ľ	ш	4	ш	L	L L		- L	L	ш										995														H	
Other type of trees				-																																																	S						İ								H	
Trichilia emetica tree	_																						Ī															1																	Ī				Ī								Ħ	
Coconut																		Ī					Ī																																l				Ī							8	77	
Sugar												Ī											ľ																																				İ								H	
Baobab																							Ī																														-						Ī								Ħ	
Ziziphus mauritiana tree																	c	D																					17								10								l												Ħ	
Banana					7		2								-	7		6															Ç	2					0					2							ıc	0			Ī											7	П	
Mango			e -	-	3		2		6				3		4		5	7 -		3			4	f				2											2 9	2	co	· e			es	>	9		Ī		4 0	2			Ī				I	4	-	3	4		•	2	I	
Cashew	14	-	2	2 62	2				6	3	ιo.	2	2				15	e e	2	2	0	n	6	1	2		8	2			-		6	4 -				24	B C	7	ıs	2	80	က	2	4	3	c	7		4 5	9		4 -				-	,	- 6	2	2	3	2	9	2	Ξ	
Lemon					П																																																						Ī								П	
Orange					П																																																		Ī				Ī								П	
Papaya																																																																			П	
Sweet																																																																			П	
Sesame													100	294																																																					П	
Okra																																																																				
Rice																																									150		299																									
Maize	754									3,977																				847			2 2 8 8	2,200	606	404																																
Cassava		485	1,096	1,489	876	861	634	305	1,074	1,030	245	260	10	3.436	388	949	1,052	2931	1,254	300	1,403	911	491	627	983	1,036	3,287	2,983	100		481	1,673	760	238			1,291	200	212	114	-	099																										
Name of the CAF (Hidden)																																																																				
Residential Ne District	PELANE	PELANE	PELANE	ZELANE	PELANE	PEL ANE	PELANE	ZE ANE	JELANE	PELANE	PEL ANE	PELANE	PELANE	ZELANE	ZELANE	PELANE	FLANE	YEL ANE	3ELANE	PELANE	PELANE	JEL ANE	JEI ANF	ZELANE	2ELANE	PELANE	2ELANE	PELANE	PELANE	PELANE	JELANE	SE ANE	YEL ANE	7FL ANE	PELANE	PELANE	PELANE	JELANE	SEL ANE	ZEL ANE	ZELANE	PELANE	PELANE	PELANE	JE ANE	ZELANE	PELANE	SEL ANE	ZELANE	PELANE	PE ANE	ZELANE	PELANE	FLANE	YEL ANE	PELANE	PELANE	PELANE	PELANE	JEL ANE	7ELANE	PELANE	PELANE	PELANE	PELANE	FLANE	PELANE	
Resid	MURRUF	MURRUF	MURRUE	MURRUF	MURRUF	MURRUF	MURRUPELANE	MURRUI	MURRUF	MURRUF	MURRUI	MURRUF	MURRUF	MURRU	MURRUF	MURRUE	MURRU	MURRUE	MURRUE	MURRUF	MURRUI	MURKU	MIRRIE	MURRUF	MURRUF	MURRUF	MURRUF	MURRUF	MURRUF	MURRUF	MURRUR	MURRU	MURRUM	MURRUF	MURRUF	MURRUF	MURRUE	MURRUF	MURKU	MURRU	MURRUPELANE	MURRUF	MURRUF	MURRUR	MURRUF	MURRUF	MURRUF	MURRUI	MURRUF	MURRUPELANE	MURRUI	MURRUF	MURRUE	MURRUI	MURRUF	MURRUF	MURRUF	MURRUE	MURRUI	MURRUF	MURRUF	MURRUF	MURRUR	MURRU	MURRU	MURRU	MURRUPELANE	
Locality	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MIANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUNIONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUNIONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	
Administrative Post		Ш			Н		MUANONA		П			Ш						ı		Н			L		ı						- 1												Ш			L						ı					П					Ш						l

Power Poles																																																																									
Electricity Tower		T																			1																					1																			l								1				
Fence E		Ī															l														1																												l		l												1
Commerio al Land/Offi oe		T																											1		1																														l												1
Worship places 1		Ī															l						ı								1		Ì																			Ī				İ			ı		l												1
Farmland						016	FL35	1.280		FL913	FL127	1177	FL348	L1205	6/7/3	FI 46	1.47	FL58	.F29	997	777	FL105	L107	L109		L138	1140	1151	198	1705	212		1215	677	1242	1.246		L250	L268	1.278	L319	L325	1326	L331	1347	FL396	1404	L417	L421	L429	L433	1 454	17466	L471	L487	1498	1.540	1 510	1 520	1.548	1267	L568	L570	L574		1.581	L582	L602	L630	.L636	L641	L650	L658
Graves								ш.		L I			ш		605			G6 F		ш	٦	ш						T)	_									ш	ш		G17 F								ш.	ш														ш	ш	ш					337 F		
Other type of trees								3	,																						Ī										Ŭ																		ı												J		
Trichilia emetica tree																																											ę	02																													
Goconut tree													5												-		ı	c																											2	1															=		
Sugar															ĺ										1			,								-			-		2		000	200					-								I				2											5	1
Baobab																		-									•	7																				-													2		13										
Ziziphus mauritiana tree	-										2 2		7					3			9		4									01	9	d						3	10			200					20			80		8	2											20						-	
Banana tree	4	8															20			ŀ	300	13	32	1	115	10		,		120				-	- 15	-			1	-	90		15	150	83	0		12	-			8			4,	12				200	2			28		2		15	20			-	
Mango tree	2	1			4					l.										10	3													-														4				4	-						-								2	2					
Cashew tree	2		3	2	7			- 8	3	2																																						4																		2		9	2				
Lemon																																																																									
Orange tree																																																																									
Papaya																																				٣																														2			2				
Sweet																																																																		95							
Sesame								3,623																																																																	
Okra																																			0																						000	400															
Rice																										3,216																																			L												
Maize		Ц					,			9	7 522		7					-	2	٠								2		3		3	0				-	4			6		0	9009					_	773		953			0,	<u></u>									~			457		2	_	10	
Cassava						631	947			159	137	43:	1,027	49.	500	576	62%	2,516	915	275	1,80	253	44	91,	88		1,949	316	60	670		393	3,64	27.6	1 000	1.83	989	28.	262	791	58	1.75	155	28	525	201	1.194	1.63	62:		100	60	470	570	1.71.	283	/8/	450	403	30.	726	1,500	37	3,526	24.		421		910	83	543	2,84	
Name of the CAF (Hidden)																																																																									
Residential District	MURRUPELANE	MURRUPELANE	MURRUPELANE	MURRUPELANE	MURRUPELANE	TRIANGIII O				VE MURRUPELANE	AAIAIA	MAIAIA	MAIAIA	MAIAIA	TELANOLII	TRIANGILLO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	RIANGULO	RIANGULO	KIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TDIANGILO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TENANGULO	TEINIGUE	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	HIANGULO	TRIANGULO	PENNICILLO	TPIANGIIIO	TRIANGLILO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO	TRIANGULO
Locality	AUANONA	MUANONA	AUANONA	MUANONA	MUANONA	ALIANONA	AUANONA	MUANONA	AUANONA	MURRUPELANE	AUTIVA	AUTIVA	MUTIVA	MUTIVA	WOLIVA WITHYA	MULTIVA	ı				1				ı				l	MUTIVA										MUTIVA						MUTIVA			Ш				MUTIVA																				
ţ		MUANONA							П			Ш																	l																	MUTIVA																											

Power						П							П			П			П																																		Γ															7
Electricity P. Tower P																																																		+			ŀ				+											-
Fence Ele													H																																								l															-
Commerio al Land/Offi										l																																								1			l				1											1
Worship places La						I			1				H																																					1			l															-
2	-661	-680	FL691	-709	FL710	-714	732	-747	-765	-799	-806	FL808	846	-849	858	-859	/98-	FL889	-890	FL908	908	914	929	-934	FL953	954	955	190	066	FL1016	1020	-1027	FL1045	1046	1047	1094	-1120	-1123	-1128	FL11//	1186	1197	1204	-1251	1271	FL1274	1280	1283	FL1294	FL1305	1321	1337					1											1
Graves	Œ	Œ 10	Ш	Œ		正 i		Œ	Œ 1		Œ		Œ	Œ i		Œ	I 0		Œ	Œ i	I 0	<u> </u>		FI	Œ			145	<u> </u>	Œ	正	Œ		000	<u> </u>		H	<u> </u>		<u> </u>			<u> </u>	正	正	E 11	8	Œ	H		I 0						1											1
Other type of trees						Ī							ı															5						5												ď	3						l				1											
Trichilia emetica tree														,	-																																			Ī			l															1
Coconut								9																												-							-						-	Ī			Ī									-				9		1
Sugar	-	-										-		,																												-											Ī								c						-	1
Baobab												4																							-												-					-								1.0	2							
Ziziphus mauritiana tree					7	3					3	20						3		9	01	0			-								-	0														2	4	2	4				9	4	3			- «	2							
Banana tree	-	1 12	2	,	16	110	32	15	40			- α			35	35	45	ř										7	,	-	29	-			10	120		2	9	7	60	00	87					18			9		200	5			7				5	35					1	20
Mango																											-	0 4	2		-	-								~		-	2										2													3		
Cashew												7		,									6							5					6					ıc	0		2										4													7		
Lemon																																																																				
Orange tree																																																					L															
Papaya								2																											6																		L															
Sweet																																															869						L															
Sesame																	98	5												8																							L															
Okra																Ц			Ц											288																																						
Sign Sign Sign Sign Sign Sign Sign Sign							7				7				٥				Ц					1										0		L														6			L															
a Maizo	24	96 2256		92	23 22	Ц	1,867	09	00 00		937	09	25		0 0	7		4.	00	7	90 61	2 0	0.00	1,811	96	33	22	0 9	2 52	2	90	=		900		6	69	88	= 2	4 0	0 0	22.53	7.	74	96	7 6	2	6		929	2 9		L															
ి	16	76	1,988	2,55	333	2,63	26	15	28	342		1066	65	41	41.1	217		274	580	1,01	35	44	12		296	40	38 6	1 75	3.36		20	1,461	2,	9	125	6	959	30	47	1110	14	88	32	1,60	75	1,317	5	6,72	888		9,528	Ď.	L															-
Name of the CAF (Hidden)													Ц			Ц																																																				
Residential District	RIANGULO	NGULO	NGULO	NGULO	TRIANGULO	NGULO	NGULO	NGULO	NGULO	NGULO	NGULO	TRIANGULO	NGULO	NGULO	NGULO	NGULO	NGULO	NGULO	NGULO	NGULO	NGULO	NGILO	NGULO	NGULO	NGULO	NGULO	NGULO	NGULO	NGIIIO	NGULO	NGULO	NGULO	NGULO	NO.	NGIII O	NGULO	NGULO	NGULO	NGULO	NGULO	NGIIIO	NGULO	NGULO	NGULO	NGULO	TRIANGULO	NGULO	NGULO	NGULO	TRIANGULO	NGULO	NGIII O	NGULO	NGULO	NGULO	NGULO	NGULO	NGULO	NGULO	TRIANGILO	NGULO	NGULO	NGULO	NGULO	NGULO	NGULO	NGULO	NGULO
	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TDIA	TRIA	TRIA	TRIA	TDIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TDIA	TRIA	TRIA	TRIA	TRIA	TRIA	AIGH VIGH	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	IRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA	TRIA
Locality	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MULIVA	MUTIVA	MUTIVA	MUTIVA	MULIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MULIVA	MITIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MOLIVA	MITTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MULIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MULIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA	MUTIVA
strative					MUTIVA								П																																	MUTIVA		Ш									l											

5 0													
ty Power													
Electricity Tower													
Fence													
Commerio al Land/Offi													
Worship places													
Graves Farmland		FL539	FL1160	FL199	FL609	FL779	FL1091		FL295	FL305	FL1009	FL911	FL572
Graves													
Other type of trees													
Trichilia emetica tree													
Coconut													
Sugar													
Baobab			1										
Ziziphus mauritiana tree							10						
Banana ree	12						18						
Mango						-	11		2				23
Cashew			1	3		5	2		9		1	1	
Lemon													
Orange tree													
Papaya													
Sweet													
Sesame													
Okra													
Si Se													
Maize													
Cassava		707	1,261	731	393	1,045	362		433	8,036	378	4,124	584
Name of the CAF (Hidden)													
Residential District	TRIANGULO	LOCONE	LOCONE	MUANONA	MUANONA	MUANONA	MUANONA	MUANONA	MURRUPELANE	MURRUPELANE	MURRUPELANE	TRIANGULO	MUTIVA
Locality	MUTIVA T	٧						_					
Administrative Post	MUTIVA M	NACALA PORTO MUANON.	NACALA PORTO MUANONA	NACALA PORTO MUANONA	NACALA PORTO MUANONA	NACALA PORTO MUANONA	NACALA PORTO MUANONA	NACALA PORTO MUANONA	NACALA PORTO MUANONA	NACALA PORTO MUANONA	NACALA PORTO MUANONA	NACALA PORTO MUANONA	NACALA PORTO MUTIVA

Annex 3 Demonstrative Map of the Affected Areas





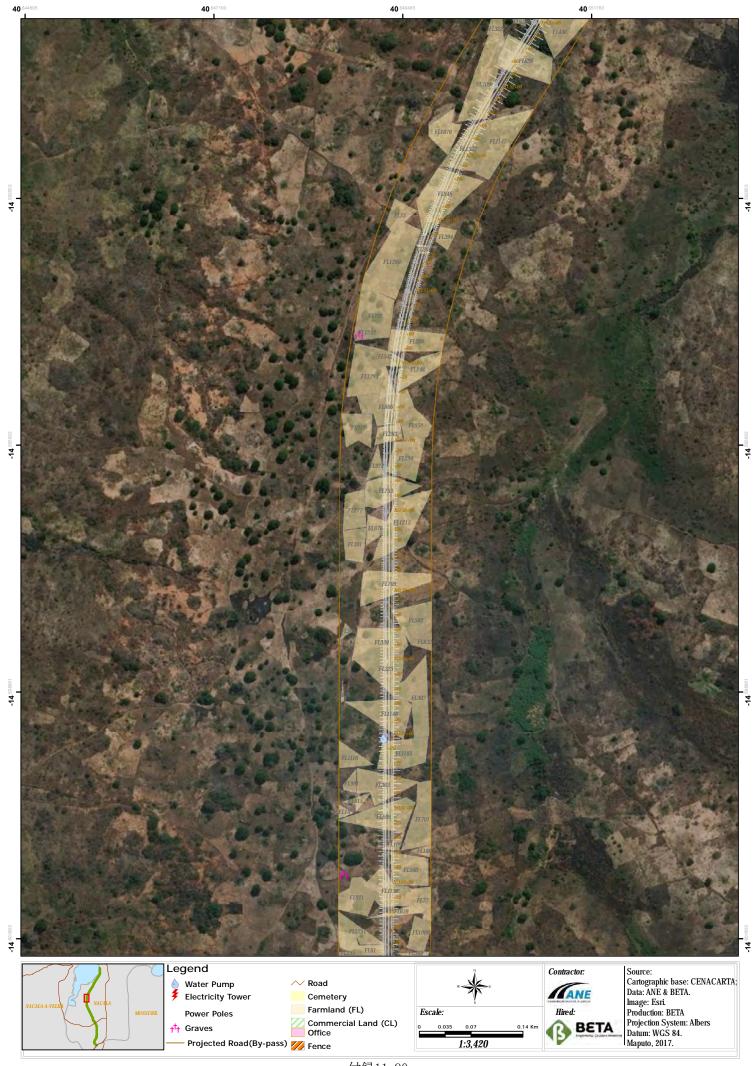
付録11-87



付録11-88



付録11-89

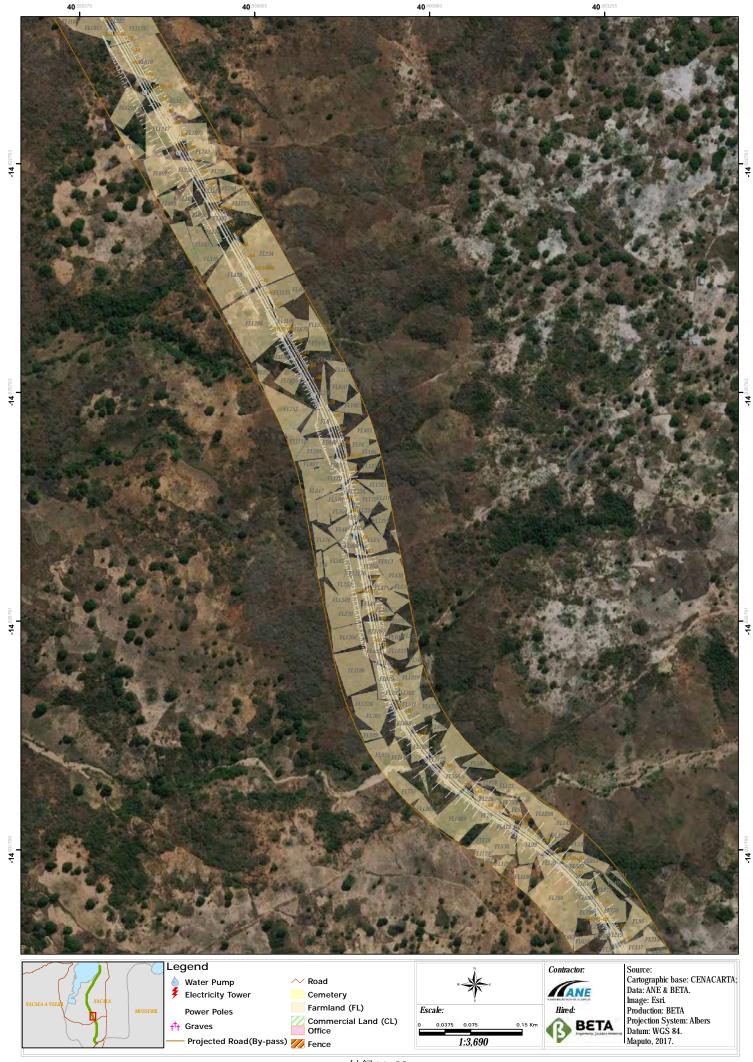




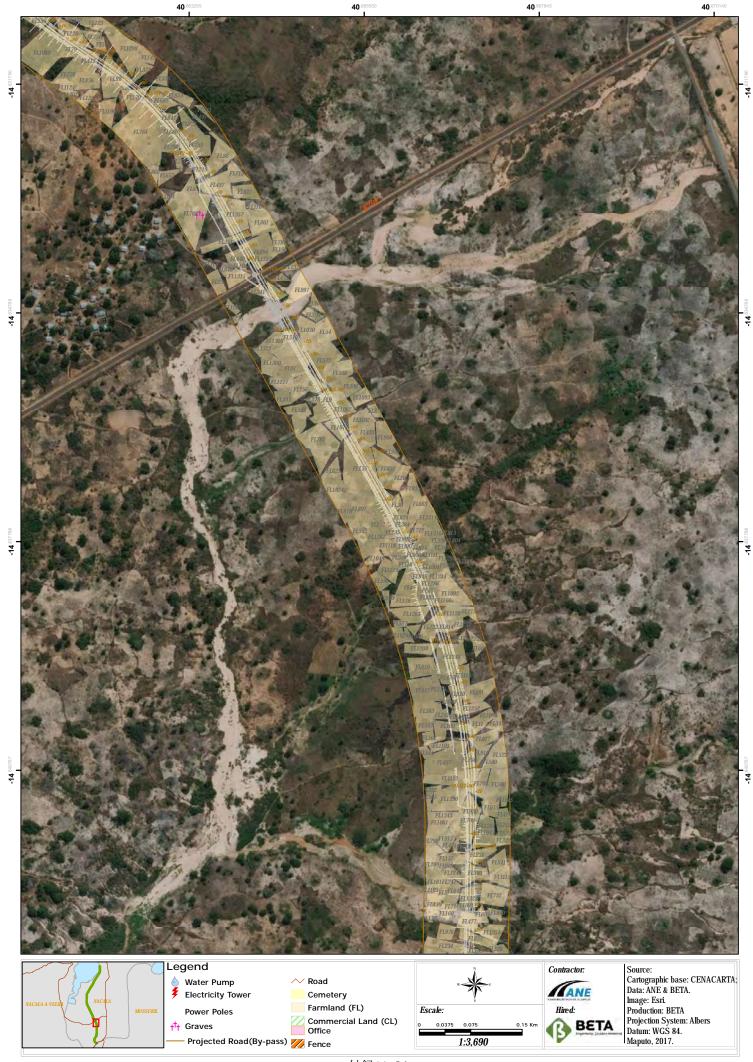
付録11-91



付録11-92



付録11-93

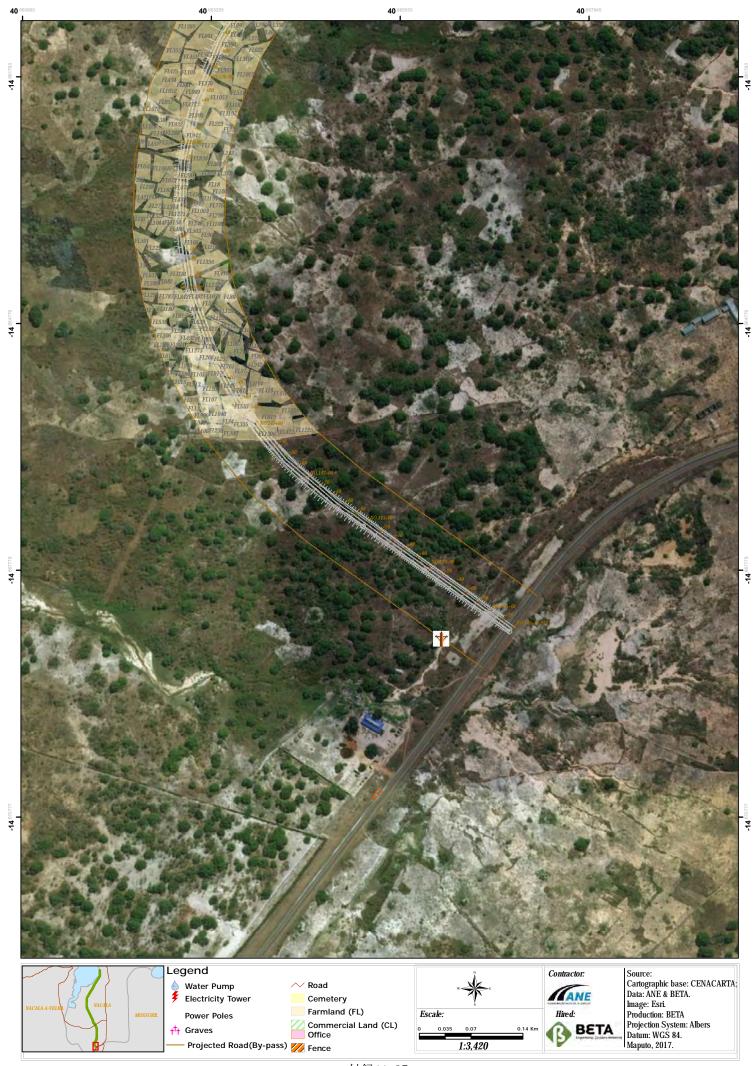


付録11-94



付録11-95





付録11-97

Annex 4 Price Tables of Crops and Plants



REPÚBLICA DE MOÇAMBIQUE GOVERNO DA PROVINCIA DE NAMPULA

DIRECÇÃO PROVINCIAL DE AGRICULTURA E SEGURANÇA ALIMENTAR SERVIÇOS PROVINCIAIS DE AGRICULTURA

Ao

Nª/REF. NºC.3. /SPA/DPAN/2016

Nampula, aos 29 de Fevereiro de 2016

ASSUNTO: Envio de Tabela actualizada de Compensação de Culturas

Junto se envia a Tabela actualizada de Custo de Culturas Alimentares e de Rendimentos para compensação pela perda de colheitas.

Neste contexto, pede-se a V.Excia para divulgar nas instituições do estado, privado e nas comunidades da vossa jurisdição.

Sem outro assunto de momento, esperamos a Vossa colaboração

(Técnico Superior de Agro Pecuário N1)



REPÚBLICA DE MOÇAMBIQUE

GOVERNO DA PROVÍNCIA DE NAMPULA DIRECÇÃO PROVINCIAL DE AGRICULTURA SEGURANÇA ALIMENTAR

TABELA DE CUSTOS DE CULTURAS ALIMENTARES E DE RENDIMENTO PARA COMPENSAÇÃO PELA PERDA DE COLHEITAS EM METICAIS

1. Fruteiras

Plantas	Cada planta nova	Cada planta em reprodução	Cada Planta velha (não produz e seca)
Cajueiros	1.200.00	1.500.00	600,00
Mangueiras	360,00	480.00	180,00
Bananeiras	180.00	240.00	120,00
Citrinos	600,00	900,00	
Litcheira	1.320,00	1.800,00	360,00
Paqueira	300,00	600,00	840,00
Pereiras / Abacateiros	600,00	900,00	240,00
Papaieiras	360,00	720,00	360,00
Coqueiros	1.200,00	1.800,00	240,00
Goiabeiras	600,00	900.00	600.00
Caramboleiras	600,00		360,00
Ateira	360,00	900,00	360,00
Trepadeira	360,00	720,00	240,00
Videira		720.00	240.00
Pessegueiro	+ 420,00	900,00	300,00
Ananaseiro	600.00	1.080.00	480.00
	30,00	60,00	18.00
Morangueiro * * Avaliado o custo por me	60,00	120.00	36,00

* Avaliado o custo por metro quadrado (m²)

2. Cereais e Oleaginosas.

Colheitas	Por metro quadrado (m²)
Arroz	24,00
Milho	30,00
Mapira	30,00
Amendoim	
Gergelim	36,00
Feijões	42,00
Feijão manteiga	24,00
Girassol	30,00
Ricino	42,00
	30,00

3. Vegetais e legumes

Colheitas	Por metro quadrado (m²)
Repolho, Cenoura, Beringela, Tomate, Quiabo, Abobora, Cebola, Alho, Pimenta, Couve, Alface, Pepino, Beterraba, Amarantos, espinafre e outras.	60.00

4. Raízes e Tubérculos

Colheitas	Cada estaca	Cada estaca
Mandioca	6.00	24 00
Batata-doce *	18,00	15440
Batata reno *	48,00	1,00
Inhames	12,00	18.00

^{*} Avaliado o custo por metro quadrado (m²)

5. Outras culturas

Tabaco Colheitas	Por metro quadrado (m²)
Sisal	18.00
Cana sacarina *	60,00
	18.00
Algodão Eucalipto **	9,00

* Avaliado o custo por estaca: ** Avaliado por planta



Direcção Provincial de Agricultura e Seguranda Lamentar – Nampula – Av. Josina Machel nº 1124. CP nº 36. Tel.: (26)213308. Fax: (26)214177

Annex 5 Report on Public Consultation



CONSULTING SERVICES FOR ENVIRONMENTAL IMPACT ASSESSMENT STUDIES (EIA) AND ACTION PLANS FOR RESSETTLEMENT (PAR) FOR THE NACALA CORRIDOR PROJECTS – ACCESS ROAD TO THE PORT OF NACALA

MEMBA MEMBA MIASA CAPO_DELGADO NACALA-PORTO RISZ NACALA-VELHA Superior

Contrato Nº 41/DG/360/2016

Public Participation Report for the Project of Access Road to the Port of Nacala

Prepared by:

Consórcio BETA/NEMUS

Av. 25 de Setembro, No 1509

Telefone: +258 21302080

Fax: +258 21302080









Public Participation Report for the Project of Access Road to the Port of Nacala

1	Introduction	. 1
2	Report Structure	. 1
3	Objectives of the Public Participation Process (PPP)	. 1
4	Public Participation Methodology	. 2
	4.1 Notification of the Meeting	. 2
	4.2 Place of Public Consultation	. 3
	4.3 Consultation Period	. 3
	4.4 Language Used	. 3
	4.5 Collection of Opinions and Suggestions	. 3
5	Minutes of the Public Consultation Meeting	. 3
	5.1 General Aspects	. 5
	5.2 Questions and Answers Session	. 7
	5.3 Main Issues Discussed	12
	5.4 Synthesis and Conclusions	13
6	Attachment	14





1 Introduction

This document is the report on the meeting of the Public Consultation for the presentation of the Simplified Draft of the Environmental Impact Study Report and the Abbreviated Resettlement Action Plan prepared for the Nacala Port Access Road which aims to connect the port of Nacala to the N12 road between Nacala and Chiponde, whose Proponent is the National Road Administration, with financing expected from the Government of Mozambique and the Japan International Cooperation Agency (JICA).

The meeting took place on 7 March 2017 at the Nacala Secondary School, at the Administrative Post of Mutiva - Muanona. Beta-Engeharia, Gestão e Ambiente in partnership with Nemus Africa, was the consulting firms contracted by the Proponent to carry out the study in question.

2 Report Structure

This report focuses on the objectives and needs of Public Participation, the issues addressed and discussed as well as the minutes of the meeting, including the questions addressed by the participants, their responses and actions to be followed for the implementation of the Project.

The report presents:

- ≠ Objectives of the Public Participation Process (PPP);
- ≠ Public Participation Methodology;
- ≠ Minutes of the Public Consultation Meeting;
- ≠ Main Issues Discussed;
- ≠ Conclusion; and
- ≠ Attachment

The following documents are annexed to the report:

- a) Agenda of the Meeting;
- b) List of Interested Parties (i.e. individuals formally invited to the meeting);
- c) Announcement published in *Jornal Noticias* (newspaper);
- d) Invitation Letter;
- e) Attendance List, and
- f) Photographs

3 Objectives of the Public Participation Process (PPP)

The Public Participation Process was carried out in accordance with the General Directive for the Public Participation Process (Ministerial Diploma no. 130/2006 of 19 July) and aims to ensure a objective, consistent and coordinated approach as well as enables interested and affected parties to be informed about the Project and they have the opportunity to present concerns and issues related to the project and take them into account in both environmental and social studies as well as in the preparation of the Engineering Project and its implementation.

In general PPP allows:





- ≠ Promote a good perception of the project in question;
- ≠ Understand the expectations of all stakeholders;
- ≠ Manage expectations and clarify doubts and misunderstandings;
- ≠ Capture the perception of stakeholders and collect inputs;
- ≠ Generate a process of mutual learning;
- ≠ Dialog and share ideas; and
- ≠ Assign responsibilities and include those affected as an integral part of the project

Transmitted information is related to:

- ≠ The Project and its components;
- ≠ Environmental and Social Studies and Project Impacts;
- ≠ Environmental and Social Management Plan; and
- ≠ Presentation of the Results of the Abbreviated Resettlement Action Plan

The Public Participation process was organized and facilitated by Beta/Nemus, with the participation of environmental and social experts with the technical support of the project proponent and local representatives, namely, Nacala Porto Municipality and Local Government.

4 Public Participation Methodology

4.1 Notification of the Meeting

According to Decree 54/2015, dated December 31st and Ministerial Diploma 130/2006, Public Consultations must be announced at least 15 days before the event. The announcement of the meeting should be published appropriately.

In order to publicize the Consultation, the following steps were followed:

- ≠ Launching of an advertisement in Jornal Notícias for two days (02/20/2017 and 02/21/2017)
- ≠ The invitation was addressed to the various government institutions at the provincial and district level (see attached list);
- ≠ Supporting documents have been made available in duly indicated locations to allow better information about the proposed project;
- ≠ Dissemination of the meeting at local level through telephone calls and verbal information:
- ≠ In the context of the meetings with the Focal Groups, there was also an opportunity to disseminate the Public Consultation;
- ≠ The reports have been made available on the Internet at the following addresses:
 - 1. http://www.beta.co.mz/publico/EAS Nacala DraftFinal 16Fev.pdf
 - 2. http://www.beta.co.mz/publico/RNT para a Consulta Publica.pdf
 - 3. http://www.beta.co.mz/publico/RAP_RNT%20para_Consulta_Publica.pdf
 - 4. http://www.beta.co.mz/publico/Anexol Mapas Ruido.zip





4.2 Place of Public Consultation

The Consultation took place at the Nacala Port Secondary School. The choice of location depended on several factors: location and accessibility to other stakeholders, room availability, weather, room capacity and convenience.

The best alternative would be to hold the meeting in a place equidistant for all affected and interested parties, but due to the weather forecast and flexibility in the organization, it was selected as an alternative, the School Pavilion that accommodated about 1000 people.

Transportation was made available to those affected people after coordination with local leaders. Beta/Nemus supported all transport costs. Refreshments and snacks were served during and after the Consultation.

4.3 Consultation Period

The consultation took place within a period of six (6) hours starting on time at 9:00 am. The forecast for the duration was three (3) hours, but due to the massive adherence and exchange of ideas and opinion between the affected population and the main panel, the meeting was extended for a longer time, but did not cause any embarrassment to the participants. Registration of the participants started at 8:00 am.

4.4 Language Used

For a better perception by all participants in the meeting, the presentations took place in two languages, Portuguese and Macua. Translation from Portuguese to Macua and vice versa was done with the help of a translator nominated by the District Government and with adequate translation experience at community meetings.

4.5 Collection of Opinions and Suggestions

The method for collecting inputs from the people primarily consisted of making all Beta/Nemus contacts available through letters of invitation to the indicated institutions and persons (Annex 2 and 3). On the website where the electronic version of the documents for the consultation was made available, the contacts for sending comments were also indicated.

As described in the minutes of the meeting, following the presentation of the Project, there was a period in which participants were given the opportunity to ask questions, make comments as well as provide suggestions. The questions and comments presented by the participants have been integrated into a table that contains the corresponding answers and/or observations.

5 Minutes of the Public Consultation Meeting

Location: Nacala Secondary School Pavilion, Date: 03/07/2017 Time: 9:00 AM

No of participants: approximately 1,000

Participants	Institution
Director Economic Activities	Nacala Port District
	Nacala Port District
	Government Directorates:
	1. Directorate of Health, Women and Social Action,
	2. Directorate for Education and Culture, Youth and Technology,
Administrator Representative	3. Directorate of Agriculture,





	4. Planning and Infrastructure Directorate
	Local Leaders: 1. Muanona Distrital Post Leader,
	Mutiva Distrital Post Leader
Representative	North Logistic Corridor (private company)
Representative	TDM (telecommunication public company)
Representative	EDM
Representative	FIPAG (water public company)
Representative	Régulo Muxilipo (local leader)
Representative	Régulo Suluhu (local leader)
Representative	Queen Suluhu (local leader)
Representative	Locone Secretary
Representative	Matola Secretary
Representative	Conambia Secretary
Representative	Maiaia Secretary
Representative	ASTRA (transport private association)
Representative	Business person
Representative	Representatives of Cristian Religion
Representative	Representatives of Muslim Religion
Representative	UP (University of Pedegogica)
Representative	Politécnica (University of Pedegogica)
Representative	INSCIG (Institution of Commerce, Transport and Management)
Representative	UCM (University of Mozambique)
Representative	NGO
Representative	National Council of HIV/AIDS
Representative	Associations (transporters, contractors and others)
Representative	Traffic Police
Rachide Aliasse	Nacala Port Municipality- Studies and Projects
Tacinae Masse	Nacala Port Municipality Nacala Port Municipality
	Councilmans: 1. Urbanism, infrastructure, housing and environmental sanitation, 2. Education and Culture, Youth and Technology, Sport and Recreation, 3. Health, Women and Social Action, 4. Transport and communications, 5. Industry, trade, tourism, markets and fairs, 6. Agriculture, Fisheries and Community Development Cabinetes: 1. Studies and Projects 2. Communication and image 3. Internal inspection and control Council Directorates: 1. Department of Inspection and Municipal Police 2. Department of Health, Women and Social Action 3. Department of Land Registration, Construction and Infrastructure Services, 4. Department of Industry, Trade and Tourism Services,
Representative	5. Department of Urban Services and Equipment,6. Department of Transport, Public Roads and Transit.
Eng.º Baúque	ANE Representative (Project Coordinator-Projects Directorate)
Representative	Provincial Directorate of Women and Social Action
Representative	DPTADER
110probolium 10	DI TIMBER





Representative	Provincial Directorate of Public Works, Housing and Water Resources	
	Department of Inspection and Municipal Police	
Nampula Delegation	ANE Representative at Provincial Level	
Eng.º Leonel	ANE (Monitoring Department)	
Eng ^a Deolinda Nunes	BETA- Engineering, Management and Environment	
Dr. Eduardo Macuacua	BETA- Engineering, Management and Environment	
Nelma Mapanga	BETA- Engineering, Management and Environment	
Auditorium	approximatley 1,000 affected population and stakeholders	

5.1 General Aspects

On March 7th of the year two thousand and seventeen, by 9:00 am the representatives of the consortium Beta/Nemus, the Government representatives, representatives from ANE, the affected and interested parties, in a number of approximately 1,000 people, attended the pavilion of the Secondary School of Nacala Port, to participate in the Public Consultation for the Nacala Port Access Road Project.

With all the necessary elements in mind to begin the meeting, the master of ceremonies presented the agenda and invited the Director of Economic Activities on behalf of the District Government to formally open the ceremony. The Director began by welcoming all the representatives of the Government and then delivered the speech beginning with praise for the initiative of the Project and the work carried out by the Consulting Company. He also mentioned that projects of this nature bring positive results to society in general and particularly to Nacala, which in turn contribute to social integration and enable the promotion of job creation.

Also in his speech, the Director of Economic Activities emphasized the accelerated development that is emerging in Nacala, including that induced by the Nacala Corridor and its financing, emphasizing the importance of Public Consultation in project processes and the need for participation of all. The Director requested the affected parties to adhere the "Cut-Off Date" notice of 12 October 2016 which is established for this RAP and coincides with the date of the start of the socio-economic survey. This date was announced by the consultant and is known from all members of the communities, in the direct impact areas of the project and surroundings (Nacala-Porto city and Nacala-a-Velha). He referred to the Public Consultation meetings that were currently underway in Nacala, in parallel, among which one referring to the installation of a Food Oil Factory and its importance to the communities regarding the generation of employment and economic development. He welcomed the process carried out for the definition of the Access Road to the Port of Nacala and ended his speech desiring the collaboration of all for the rapid realization of the project that will be very useful for the development of the Port of Nacala, adjacent regions and the country In one whole.

Next, was the turn for Mr. Baúque to introduce all ANE representatives, who presented the technical component of the project, highlighting the start of the activity by JICA Consultants, where the work started with the Feasibility Study that analyzed and defined the different alternatives of the project and the most viable alternative was proposed after direct consultations with the local institutions, among them the Nacala Municipal Council and the Administration. Mr. Baúque stated that the first phase of the feasibility study ended in 2015, when the conditions of the route were defined and subsequently given the need to deepen the environmental and social assessment of the planned route. Beta/Nemus was selected through a Public Tender, to carry out the Simplified Environmental Study and the preparation of the Abbreviated Resettlement Plan for the Project.





Continuing his intervention, the representative from ANE stated that the need for the new road arises with the development that is foreseen along the Nacala Corridor (CDN) that implies in an increase in the volume of traffic, to access the Port of Nacala on the current road and the new alignment is essentially aimed at diverting heavy traffic to and from Porto. He concluded by stating that the Simplified Environmental Impact Study and the Abbreviated Resettlement Action Plan represent the culmination of the first phase, as they will help on the estimation of costs required for the implementation of the Project and consequently the demand for financing. He also mentioned that the Beta/Nemus conducted the Environmental and Social Studies and the results would be presented in the meeting. Mr Baúque also stated about the importance of the cut-off-date already explained by the government representative.

Then the company Beta/Nemus was invited to present the technicians and make their intervention. Deolinda, as an introductory presentation made the presentation of the Beta/Nemus and the staff, followed by the overall presentation of the Simplified Environmental Impact Study. The presentation included the background of the study, the process of preparation of the Terms of Reference for approval by MITADER, the need for the study, the draft report and the importance of Public participation in the process with a view of the feasibility and sustainability of the Project. At the end of her speech, Deolinda summarized the conclusions and recommendations of the study and therefore asked the participants to present their doubts, questions and opinions on the study for the implementation of the project in question.

Following, Dr. Eduardo Macuacua, also representing Beta/Nemus, presented the socio-economic aspects of the project, the abbreviated Resettlement Action Plan and its results.

Eduardo Macuácua began his presentation explaining the objectives of the Resettlement Plan, which essentially aims, to Identify and mitigate the main economic and social impacts on people and their assets, that will result from the construction of the new road. Explained about the roadmap for compensation of people affected by the project and ensured that they will not be in disadvantage position comparing with previous situation, especially with regard to their means of survival.

Also in his explanation, Eduardo Macuacua explained about the process of data collection and identification of the areas to be investigated, the demarcation and inventory of all assets located in the Corridor of Impact, the registration of people, public and private infrastructures, cultivated fields, temporary and permanent crops, trees, etc. He also explained about the socio-economic study of the project area to understand the social dynamics of affected people. Eduardo Macuacua explained in a clear and summarized way the entire resettlement process, its different phases and finally presented the results related to the identification of the main impacts and the compensatory measures designed to be analyzed together to strengthen the discussions and future help in decision-making process of the project.

Following the presentations, the question and answer session was guided and moderated by the Director of Economic Activities.





5.2 Questions and Answers Session

Question	Answer/observation
Verónica António	Beta-Nemus
Despite the poor state of conservation of the graves, since they are very old and some, already without signaling, we went there to clean and register our names. I want to know if we are eligible for compensation or not.	In relation to the Central Cemetery, our survey team had difficulties in taking the process to the end because we realized that we were registering many people, without being able to confirm whether or not they had relatives on that location. The survey was stopped when we had registered more than 200 people and there were still a lot of people waiting to be registered. Under these conditions we felt that this registration process should be well done, with clear identification criteria involving not only the affected but local leaders, elders and municipal/governmental structures.
Julieta Omar	Beta-Nemus
During the survey, we went to the field twice, having managed to register only my mother once the family has graves in the area where the road will pass. At this moment my mother is not here, because she finds herself sick and is in my responsibility. How will be the payments of compensation under this situation?	The ARAP has a provision for vulnerable people including sick, elderly people, orphans, the disabled, widows and other people who have difficulty in following this process properly. These individuals have the right for special treatment and support by the ARAP interveners to ensure that no affected person/family leaves the process impaired.
Florêncio José Portugal	Beta-Nemus
The project to build the new access road to the port of Nacala will affect a part of the tombs of our relatives, leaving out other graves. He says that only a part of the tombs were collected and recorded. So my question is: how are the tombs not registered? Is it possible to move machines while building the road without interfering with the graves of my relatives?	It has been clarified that the road corridor of impact is calculated to be about 120 m wide, and if the tombs are outside this corridor we do not see how the road works will interfere with the remaining tombs, the 120m the road will be in the central part occupying only 20.5 m being the 100 m reserve of the road, enough space for the movement of the machines.
	However, during the implementation of the PAR additional impacts will be monitored to prevent any PAPs from being impaired.
<u>Luís Muassembe</u>	Beta-Nemus
There are two plots of arable land one distant from the other where they are also impacted by the Project. My concern is: what will be the method of payment for compensation? Am I entitled to one or two payments separately, with both parcels being registered on my behalf?	It was clarified that the PAR ensures direct compensation for all assets found within the Corridor of Impact. If you have two plots, the two plots will be compensated and the corresponding amounts will be sent to your bank account.
Ângela Mário Cossa, do bairro Murupelane	ANE
When the compensation process will begin? The population is expecting soon.	It was clarified that this was a multi-stage process. The project started with the feasibility study to define the most appropriate route. This was followed by the Environmental and Social Studies phase and the preparation of the Resettlement Action Plan. After this phase in which we have identified the impacts and the value of the compensation, the report will bet analyzed and appreciated by Government/ANE for approval process and then the mobilization phase of funds both for the payment





Question	Answer/observation		
	of compensation and for the construction of the road itself.		
	It is not possible to proceed with the payment of compensation without having secured the funds for the construction of the road. The two components have to be Synchronized.		
	To alleviate hunger it is recommended that populations continue to do their agricultural activities. However, without plant trees or build infrastructures on the corridor of impact.		
I am old enough and have never had an identity	The ARAP has a provision to support PAPs without identity card and without bank accounts, to regularize their situation. For that, people can approach the local civil registry and the banks to inform themselves and treat as soon as possible the Ids and the opening of bank canteens.		
card or personal ID. How can I do to treat them?			
Sonade Alexandre do Bairro Murupelane	Nacala Municipality		
Solidade Alexandre do Danto Murupelane	It was clarified that the Nacala Porto region, although the		
According to this intervener, the Municipal Council of the City of Nacala does not have spaces available for farming for those affected by the Project. I wonder to where our plots will be transferred?	basis of its economy was agricultural a few years ago, the reality today has changed. It is a special economic zone with great attraction for industrial projects. The construction of the new road will attract many industrial enterprises and there will		
To what extent can compensation payments have	not be enough space for farming activity.		
negative repercussions?	People will be compensated for the loss of the assets (as mandated by the Law) and may want to scale the neighboring districts that still own land to those who want to practice agriculture.		
	It has also been clarified that the payment of compensations can become nightmares for some families with the possibility of destruction of homes, so it is recommended that both spouses sign the compensation agreements and are in the process.		
Fátima Sulemane	Beta-Nemus		
He praised the work of the consultancy and praised the initiative of the Project. He recommended that "older" people and residents of the area covered by the Project should be part of the following surveys because they claim to have more knowledge of the area, as well as the affected	It was clarified that in the implementation of the ARAP, local committees will be created to monitor and supervise resettlement, local leaders, representatives of the various sectors of society and the PAPs themselves. This is an opportunity for the involvement of older, knowledgeable people in the area. In case of an anomaly, these committees have the prerogative to correct it.		
people and assets, minimizing in this way the irregularity in some information.	It was clarified that the ideal would be to transfer all the graves inside the impact corridor to a municipal cemetery in		
In the area of Locone I have a family cemetery where the remains of my mother and uncle are deposited. I wonder to where they will be transferred?	order to avoid that every time a project is carried out, it will resettle the same fields that had already been affected by other road projects.		
Jorge José do Bairro Triangulo	Beta-Nemus		
The inquirers arrived at my farm and I told them that I had 2 plots of banana and cane fields and said they would register if considering as a single farm adding the areas I would agreed. Later I found	It was clarified that the negotiation of contract for the payment of compensation is only between two entities ANE and PAP. No one else will know how much each PAP received unless PAP goes around spreading it.		





Question	Answer/observation
someone who told me that they would not have done it because the value would be high and I fear being persecuted. How can I articulate this situation?	On the other hand the value goes directly to the bank account and in this way is safer and no risk of persecution.
Amido António João, Bairro triangulo	Beta-Nemus
When the tombs were registered of in the Central Cemetery, I was at the work. I do not know what to do because I have family graves.	It has been clarified that absence in such proceedings is normal and this cannot constitute a reason for non-compensation. There are mechanisms for correcting omissions provided for in the RAP itself. However, the case of Central Cemetery no graves were considered given the reasons explained above.
José Macupir, do Bairro Triangulo	Not answered (by mistake)
His concern is that he was raised from a field near the saline and was labeled one of his cashew trees "B38 register", but he was not interviewed. Want to know: How can I apply for an interview?	
Abacar Chande	Beta-Nemus
It appeals to the population in general so that there is no ignorance in this Project because it is sure that it will bring a development to the city of Nacala. He says he has been working the land since 1972 and has a tomb of a minor son in the affected area but has not been identified. So, wants to know: Am I entitled to any compensation?	It has been clarified that all assets affected by the road project, i.e. within the impact corridor, are entitled to compensation. However, these assets must be identifiable and in the case of the fields indicating the area where the remains lie to be removed.
Melonencia Rosário	Beta-Nemus
She reports that she had a plot inherited from her father in the zone of influence of the Project, but due to her lack of time and availability, the farm was given on loan to a neighbor. At the moment of registration of the affected field, the group of inquirers had contact with the neighbor because she was in the field at the moment, and affirms that the neighbor did not tell the truth that it was in that area for loan thus giving the data of her as being the owner. I want to know: how can I go beyond this and pass the registration in my favor?	In this case it was clarified that one of the eligibility criteria is compensation for crops and plants. The land itself, as we have said, will not be compensated under the Law when it comes to public utility projects. Here it depends if the trees and crops on the farm falls short. The owner of trees and crops is entitled to compensation. The resettlement committee should review this case during the implementation of the ARAP.
Second Part	

Guanania Abudo Beta-Nemus During the RAP implementation this situation of lack of photo will be corrected. In fact, the RAP implementation process itself will confirm the affected persons and assets before payment and if necessary photos will be taken.

I should proceed?





Question	Answer/observation		
Salambi Mussagy My field was demarcated almost at the elbow. In the area where they will do maneuver will affect a larger area of the farm.	Beta-Nemus Areas outside the corridor of impact could not be considered. If impacts are affected more areas than expected, these impacts will be taken into account and the affected persons compensated.		
Armando Mateus The brigade appeared in the cemetery and I took the opportunity to register the graves of my relatives When I returned home, I informed the family. They were upset and questioned the fact that I only registered the names alone and how would the value of the compensation be divided? I even received threats from family members and I want to know how to calm these moods?	Beta-Nemus It was clarified that in the cemetery surveys we were faced with a situation of legitimacy. Among the members of the same family there are those who have more right to receive compensation for graves than the others. Eventually the father and mother of the deceased. This will be a matter for decision in the resettlement committees. However it was clarified that the herds are registered through a single member of the family to avoid duplication of registration.		
Alberto Adelino do bairro Mutupoaia Every neighbors was registered and I was not. Three days later I found the people who were registering and they said they could not go back. I have not been registered yet. How is my situation?	Beta-Nemus PAPs absent in the survey process will be considered in the implementation phase. But your eligibility will have to go through the scrutiny of the local committee.		
Luísa Américo It has been said that the graves of the Central Cemetery were not visible. That is pure truth. We did cleaning, but at one point we were told by the authorities to stop cleaning because of erosion. On the other hand, there was a machine that knocked down the baobab in the Tapão zone and the mounds disappeared. When the lifting phase arrives it is recommended the involvement of the leaders.	Beta-Nemus It has been said that a good note has been made and all stakeholders will be involved.		
António Rodrigues When the survey team was registering, I was not in my place. I came after the survey team work. I was following them and they advised me to leave my name with the local leader. I left my name without ID and the photo. I have doubts that I have actually been registered. So, what my situation will be? Lúcia Augusto When the brigade was registering the assets	Beta-Nemus It was clarified that all those who were absent during the survey, in the implementation phase of the RAP, could approach to clarify and correct any omissions on the ground.		
affected, I was on live of disgust and did not register. I know, however, that the road crosses my farm. I am requesting support for my registration.			





Question	Answer/observation
Mauricio Abudo	
I found some cashew trees on the road alignment, and when I asked the population, they told me that the brigade had returned to Maputo and had to wait for the second route. Then I was not registered.	
Chale Alberto do bairro Conambia	Beta-Nemus
Asked why to exhume bodies. Why not compensate the families and then let the road go over the road. Exhume bodies creates problems for the family, says the Lord. On the other hand, during the survey, some received a code and some did not receive it. I would	It was clarified that the process of road construction includes earthworks and could, in some cases, bring the stones out. It is advisable to exhume and transfer to a safe place. It has also been clarified that all of the PAP has a identification number that is in the survey and facilitates the quick and unique identification of the affected person.
like to clarify the relevance of these codes.	
Maria Mário	Beta-Nemus
I have been registered by the brigade, without identification document. I want to know what I will do when I receive the compensation check.	You should seek for your ID. The ARAP service provider, as we have already mentioned, will support people to obtain the necessary documentation.
Muageira Patrício do Bairro Triângulo	Nacala Municipality
Our fields were registered on the beach last week. It was registered where the machine went to discharge water on the beach. They said they registered where the machine went, and another part does not matter. Our farms was taken by the roads that passes in the middle.	This case has nothing to do with the construction of a new access road to the port of Nacala.
Gilberto Faira	Beta-Nemus
I am worried because I have an arable land with 470 banana trees and all of them are inside the area of direct influence of the Project. The field was registered, but I disagree with the total number of banana trees that the inquirer put in my registration form, since he saw that the Banana trees were so many and estimated a number that does not meet the reality of the 470, which seems to be sad situation. I want to know how I should act to complain and have in my registration form the real number of banana trees?	It was said that this is a failure of the inquirer because the orientation is to register all affected assets without increasing and without decreasing. This should be verified and corrected by the RAP implementation team, ensuring that all assets affected at the time of the investigation are cleared. For this there are photos and from the photographs can also confirm the number of banana trees affected.
Momad Muarica	Beta-Nemus
I have two affected farms in Locone and Murupelane all registered and I want to know how they will be compensated?	It was clarified that all the improvements affected in the two farms are eligible for compensation.
Muanisse Paieira	Beta-Nemus
I am admired to hear that we can still cultivating the	At no time was the project's orientation to stop people from cultivating land within the corridor of impact. What has been





Question	Answer/observation		
farms. It had been said that we could not be there. So, what should we do if the rains are coming to the end. We ask that compensation to be paid immediately because families are suffering from hunger.	said and we are emphasizing again is that trees should not be planted, infrastructures or fields should not be implanted, since everything placed there after "Cut-Off-Date", other than crops, would not be considered for compensation.		
Ofélia Lindo	ANE		
We are anxious to see the access road to the Port of	We are in a phase of public consultation to inform the affected population about the Project in general.		
Nacala built, as it will monetize working time a lot, and in this way, I want to know when will it be?	The project began in 2014, where in 2015 the alignment was defined. In 2016, the crops were registered and the value of		
Omar Marenjane	compensation calculated. The stage of mobilization of funds is followed to give shape to the project.		
Reinforces the need to indicate the timetable for the implementation of the RAP. Because we have children and family responsibilities. We ask for government support.	Therefore, it is a process. In this case it is always advisable for people to continue their agricultural practice so as not to go hungry until the compensation payment phase arrives.		
Vitorino Francisco Lauwia	Beta-Nemus		
I would like to have a clear answer on the graves from Central Cemitery - What will happen from now? If they have found many graves or few, the important thing is how the process will close.	It has been clarified that the situation of the Central Cemetery is quite delicate. In conversation with municipal authorities we understood that the cemetery is from 1950s and was closed in the 2000s. Therefore, there are more than 2,000 graves in the central cemetery. There are reports of the existence of common trenches at the site resulting from the burial of people from the railway accident.		
	Therefore, we leave this subject to a deep reflection involving the proponents of the project, the affected ones and the government/municipal authority.		

There being nothing else to mention among the participants in the Public Consultation, the master of ceremony invited the Government representative to make the last considerations and close the meeting.

The Director of Economic Activities made the last considerations, emphasizing the need of collaboration of all, with a view to the implementation of the project. He thanked the participants, closed the meeting, and left the room.

5.3 Main Issues Discussed

In order to summarize the main aspects addressed at the Public Consultation meeting, the major concerns are:

- **≠** Sacred Places to be properly considered;
- ≠ Graves at Central Cemetery: some situations of totally destroyed and unidentified graves inside the project area;
- ≠ Compensation methodology: concerns about the mode of compensation to be received, dates and method of payment;
- ≠ Persons affected but not registered: the concern of not being registered and requesting information on how to proceed;
- ≠ Alignment alternative proposal for the Central Cemetery: most of the concerns presented are related with exhumations in the Central Cemetery and other places. One possibility is the revision of the alignment in this area of the project.





As a final recommendation, the affected population was informed that the issues raised will be addressed in depth at the completion of the EIS and the RAP, with particular emphasis on the analysis of alternatives for obtaining livelihoods and income from PAPs.

5.4 Synthesis and Conclusions

This report summarizes the process of Public Consultation related to the Simplified Environmental Impact Study (EIS) and the Abbreviated Resettlement Action Plan (ARAP) conducted for the Nacala Port Access Road Project.

The process followed all the legal provisions, and made it possible to collect comments and suggestions for the referred studies.

The population has shown to be participative and receptive to the implementation of the Project, since the implementation of this project will add value to the local and regional transport system thus developing the opportunities of the residents in the corridor and in the surroundings, as well as in the regulation of the traffic In and out of Porto.





6 Attachment



Environmental Impact Assessment (EIA), Resettlement Action Plan (RAP) of Access Road Project to Nacala Port.

Contract No. 41/DG/360/2016

PUBLIC CONSULTATION MEETING AGENDA

MARCH 7, C2017

00.00.00.00	D : 4 4: CD 4: : 4	D.
08:00 - 09:00	Registration of Participants	Beta
09:00 – 09:10	Welcome	Facilitator Administrator of the District of Nacala / Representative of the Municipality of Nacala Porto
09:10 - 09:20	Presentation of the Agenda Presentation of Participants	Facilitator
09:20 – 09:45	Presentation of the Project ≠ Location ≠ General description	ANE
09:45 – 10:00	The EIA Process and Public Participation: Problems and Proposals	Beta
10:20 – 10:45	TdR and Draft EIA ≠ Biophysical and Socio-economic aspects ≠ Environmental Management Plan ≠ Description of expected impacts and mitigation measures.	Beta
10:35 – 11:00	TdR and Draft PAR ≠ Social aspects ≠ Description of expected impacts and mitigation measures;	Beta
11:00 – 11:30	Questions and Concerns Session ≠ Potential project impacts that need to be deepened for final EIA and PAR.	Everyone
11:30 –11:45	Final Considerations and Closing	Facilitator Administrator of the District of Nacala / Representative of the Municipality of Nacala Porto



INVITATION ADVERTISED IN THE NOTÍCIAS NEWSPAPER

Invitation

PUBLIC PARTICIPATION PROCESS FOR THE PROJECT OF ACCESS ROAD TO THE PORT OF NACALA- 14.5 KM

The National Roads Administration (ANE) has contracted the Beta / Nemus Consortium for the elaboration of the Simplified Environmental Impact Study (EIA) and the Preparation of an Abbreviated Resettlement Action Plan of the Nacala Port Access Road Project. Within this context of Work, Beta-Engenharia, Gestão e Ambiente Ltda in association with Nemus África in the name of ANE hereby announces the holding of the public consultation in Nacala-Porto, Nampula province.

The purpose of the public consultation is to present the Draft Report of the Simplified Environmental Impact Study and the Abbreviated Resettlement Action Plan with a view of collecting all the concerns, comments and opinions related to the abovementioned project.

Thus, ANE is pleased to invite interested and affected parties to participate in the Public Consultation Meeting to be held in Nacala, at the Nacala Secondary School, on March 7, 2017, beginning at 9:00 am.

The draft report of the study will be available for consultation at the following locations:

Maputo

<u>Nampula</u>

- ≠ National Roads Administration (ANE)
- ≠ Beta-Engeneering, Management and Environment.
- ≠ Provincial Directorate for Land, Environment and Rural Development Direcção (DPTADER)
- ≠ Nacala Municipal Council
- ≠ Nacala PortoAdministration
- ≠ ANE Delegation-Nampula

In case of questions contact Beta-Engenharia, Gestão e Ambiente through the following contacts:

Beta-Engenharia, Gestão e Ambiente

Tels: +258 21083631; +258 843140763

Email: geral@beta.co.mz



nemus *



Exmos Senhores: Governo do Distrito de Nacala Att: Sr. Administrador Nacala

DEPARTAMENTO DE

MONITORIA

Sua Referência

Sua comunicação de Nossa referência

Nossa referência

ANE/ 9 4 /DIPRO/DEM /2017

Nossa comunicação de 27/02/2017

ASSUNTO: Convite para a Reunião de Consulta Pública para a Apresentação do Rascunho do Relatório do Estudo Ambiental e Social Simplificado e Plano de Acção de Reassentamento Abreviado do Projecto de Estrada de Acesso ao Porto de Nacala.

Exmos Senhores,

A Administração Nacional de Estradas (ANE), contratou o Consórcio Beta/Nemus para a elaboração do Estudo do Impacto Ambiental Simplificado (EIAS) e do Plano de Acção de Reassentamento Abreviado do Projecto de Construção da Estrada de Acesso ao Porto de Nacala.

Assim, a ANE tem o prazer de convidar as partes interessadas e afectadas a participarem na Reunião de Consulta para a apresentação do "Rascunho" do Relatório do Estudo de Impacto Ambiental Simplificado e do Plano de Acção de Reassentamento Abreviado com vista a recolha de todas as preocupações.

A reunião terá lugar na Escola Secundária de Nacala, no dia 7 de Março de 2017, com início as 9:00 horas, conforme a agenda anexada.

O rascunho do relatório do referido estudo estará disponível para consulta nos seguintes locais:

Maputo

- Administração Nacional de Estradas (ANE)
- Beta-Engenharia, Gestão e Ambiente

Nampula

- Direcção Provincial da Terra, Ambiente e Desenvolvimento Rural (DPTADER)
- Conselho Municipal de Nacala
- Administração de Nacala Porto
- Delegação da ANE em Nampula





nemus •

Os documentos estão também disponíveis no endereços electrónicos abaixo:

1. www.beta.co.mz/publico/EAS Nacala DraftFinal 16Fev.pdf 2. www.beta.co.mz/publico/Anexo1 Mapas Ruido.zip

Para mais informações contacte:

Beta-Engenharia, Gestão e Ambiente Tels: +258 21083631; +258 843140763

Emails: vehichungo@beta.co.mz; nmapanga@beta.co.mz

Os nossos maiores e respeitosos cumprimentos,

/ Marco Vaz dos Anjos / (Técnico Superior de Obras Públicas N1)



4.2. Modelo de carta para participação nas reuniões de Participação Pública

List of Interested Parties

At Nacala Level

1. Nacala City Council

Councilmans:

- 1. Urbanism, infrastructure, housing and environmental sanitation,
- 2. Education and Culture, Youth and Technology, Sport and Recreation,
- 3. Health, Women and Social Action,
- 4. Transport and communications,
- 5. Industry, trade, tourism, markets and fairs,
- 6. Agriculture, Fisheries and Community Development

Cabinetes:

- 1. Studies and Projects
- 2. Communication and image
- 3. Internal inspection and control

Council Directorates:

- 1. Department of Inspection and Municipal Police
- 2. Department of Health, Women and Social Action
- 3. Department of Cadastre, Construction and Infrastructure Services,
- 4. Department of Industry, Trade and Tourism Services,
- 5. Department of Urban Services and Equipment,
- 6. Department of Transport, Public Roads and Transit,

Government Directorates:

- 1. Directorate of Health, Women and Social Action,
- 2. Directorate for Education and Culture, Youth and Technology,
- 3. Directorate of Agriculture,
- 4. Planning and Infrastructure Directorate

Local Leaders:

- 1. Muanona Distrital Post Leader,
- 2. Mutiva Distrital Post Leader





Others:

- 1. North Logistic Corridor
- 2. CFM,
- 3. TDM,
- 4. EDM,
- 5. FIPAG,
- 6. Régulo Muxilipo,
- 7. Régulo Suluhu,
- 8. Queen Suluhu,
- 9. Locone Secretary,
- 10. Matola Secretary,
- 11. Conambia Secretary,
- 12. Maiaia Secretary
- 13. ASTRA
- 14. Economic Agents
- 15. Representatives of Cristian Religion
- 16. Representatives of Muslim Religion
- 17. UP
- 18. Politécnica,
- 19. INSCIG
- 20. UCM
- 21. ONGs
- 22. National Council of HIV/SIDA
- 23. Associations (transporters, contractors and others)
- 24. Traffic Police



4.3.Lista de registo de participantes na Reunião Pública



Avaliação do Impacto Ambiental (AIA), Plano de Acção de Reassentamento (PAR) do Projecto de Estrada de Acesso ao Porto de Nacala Loté A.

Contrato No. 41/DG/360/2016

Participante	Instituição Rairio	Contacto	Email	1
Jamas Jamas	Triangulo			
Jacinta Angquet	Triangula			
too Muineque	Naveveno			1
Menina Carlos	Tridingulo			1
Filipe A. Sozial	1)			
Glabriel, C. Alymone	B. Maiaio	840640179		
Lucia Antonio	Ontugala	DI WYOTT		
Aging Assami	11			
Kasalina Antohis	11			
raulino Saldo	Tagangulo			
Mariamo Amiese	11			
anoling Connente	Commbia			
Tario Mucamisse	Conambia			
engastre Antolno				
Luis Mantinho	1)			
Luciano Cassimo	11			
Fose Damia	11			
Endin Alberto	Majaja	247441776	Sacamba 1981 Dam	of me
Maria Payola	Locare		J. C. C. C. YIII	1.09
lisio b. A. Quante		824592886		
Fidelia Charien	11	843 8 197fo		
ataning Manuel	Trigngulo	3/30/1440	7-	
	11=1			
		- 4		











Contrato No. 41/DG/360/2016

Participante	Instituição Brisso	Contacto	Email
Participante	Hatala		
Hamada Auti	Ma to la		
Sunava Awad	MATOLD	24263519	
Mas 14 100 1100	TOAQUIM		
AS DO GLOUID	MINTELA	847603889	
JUSE MA 1EU JU	MURRUPELANS	1 4001	
FMANCISCO Malias	Munnyalane	82,0347968	
GRACTNON AGOSTINHO	KANGULA	842311981	
BENJAMIM MARIO	V	8683162	
ARAM ATTAM	MUNDELANE	0203:00	
MARTA AMPRO	MUNDECAME	LUISINGES	
Nome São Vedro	Triangul	84444000	
Delling Abibo	Triangello	01110022917	
VAULINIA CELESIINO	TRIANGUL-O	84400 1 111	
Paroles Hugananius	Rado Conunitar		
Fritz Agostinla	Raider wortains	84 52 8310 1	0
to la Viera	patupaga	84706317	D
March		4	
			A:
•			









Contrato No. 41/DG/360/2016

Participante	Instituição Bair 10	Contacto	Email
Abilio A. Tacinto	miangulo		
Josi to SiAmad	1 1 11		
	ncisco Triangulo	844454197	
lina Guinand	Miciangulo	848391076	
State la Touran	D A A A A	844069209	
Natalia da Silv	4	847852584	
me Almeida	1)	84835087	-
The stage	Mocone	844519323	
African Fiche	1 0.0	84746327	
Curi de dans	Mocord	84059097	
Marcia Tsauf	o Trigngulo		
1 1 1	many ()		
Amandia Teru	Page 1	84376655.)
Mamade Same	THE STATE OF THE S		
Ansa Charle	n Trigingalo	84452096)
Saroingw Muss	L. Correction		
Paulino Amore		-	
Ana R. Franis		X-	
Vinns Amade	Trugngulo		
Mary Micare	Do 11		
Tacinto Vau liv	0 Tridique		
Pedico Glonsal	1 1 1	84615680	6
Has Mulia	1 1 0 1 2	84570809	
tias many	Tidding seed	1	
		- 14	









Contrato No. 41/DG/360/2016

Participante	Instituição Barro	Contacto	Email
Amisse GElai	re TRAMquelo	2011/15/1	
Dawlo Gum	0 Triangalo	86441564	9
Anifa lope	MOTOLA		
Rasia Momai	de		
Culete	Marila		
Momade Mar	richa		
Me Saide	TRian gul	000 5460	54
	him Mayola	875/158	16 866770196
~	10 MATOLA	866 470 0	NO XONTFUI LE
Mukono 799	rutto MADOLA	875661	<i>t10</i>
	relie MAIOCA	00000000	0.0
Eduarda jan		8723672	
Luisa Ussen	e Mugusna	8456445	
0			
	- "	C 1	
	•		,









Contrato No. 41/DG/360/2016

Participante	Instituição Beiro	Contacto	Email	
Mariana Zed	a natola			
Taurindo A	i tratola			
Atil Victor	natola			
Paulo Très	natola			
USSELL Rans	idone hatola			
Daniel Fraz	icises cocour			
Sengio Istel	col mangu	-0		
Omnan way	Jene ratols			
Abibo tenter	riso organis		1	
Antonio Joa	sse travola	1		
CHEMAL HOU	STE VIGUELIANA			
Amins total	De De Soton	bro		
Mary o De Ass		28		
nouvi Massic	ls 25 00 set			
Palno Fenon	ina Triange	yo		
In man do Ma	teus Injurati	No.		
Anfonso gu	lis Ribang			
Loan Dita	Triangul	2		
Bassimo At	i oughous			
Welchig Mach	1041 25 00 Se		1-	
Mussa Franc	isto 28 De Sex	3		
Assane nom	and 25 de set.			
Abaçar Magi	60 Muanbus			
nughita gas	100 200 Sol			
Manianteser	To as ou set			
Amondo ASSI	is McInlo			
Aris nunan	ifo 25 & Seton	1		









Contrato No. 41/DG/360/2016

Participante	Instituição Rivio	Contacto	Email
francisco man	4- 177	248996447	
DII DMAR	TRIANGULO	864319017	
BABANGE CHA	WHAR LOCONE		
DINBA ABUDO	LOCONE		
SIFONIO FEBRUA	TO MUANONA	874175394	
ADUMANT ALEXA	NDS MATOLH	847370077	
NEDSTINIHO BIBEI	BO MATOLA	Let'L' L' L' L'	
TTOS OCINBIC	VBIANGULO	82,5463842	
JOUMA OMAR	TRIAN GULO	846/83/73	
AMISSE PASSIM	O MATOLA	874680538	
ABDUL LOSE	MATOLA	846/45043	
108GE JANUA	BIO TRIAGULO	849559198	
FATIMA LUIS	MATOLA	- 1100 50	
ADELIA 10AO	MATOLA	845878359	
HELENA FELECI	ANO TRIANGULO		
EUGENIO COLOS	SE LOCONE		
MOS SAGNIFO AND	METOLA	1	
ASSELATE SAIX		1	
ABOStinho 17	un un un un un un un un un un un un un u	48	
nania Alber	to This uguldo		
Alsenting fai	me Triangule	>	
nomade Alba	no Trigugale		
Pains Angel	und Trigugul		
Snisting Au	samo Triangul	L	
Gontino A	nuqueb 25003	0	
			-
		•	









Contrato No. 41/DG/360/2016

Participante	Instituição Baino	Contacto	Email
DAMINO AINE VIAGE		846195690	
Alide Niuroloups	Mualbus	827394823	
LATIFO ANTONIO	MUANDNA	846150861	
Maries Alv	Musnens	845752515	
MAMUTO QUAM		849065376	
rolde Muhiem	Musnous	876538928	
1192in Marria	Locone	84589655	
CebastianAdrian	p Trigulo	849064121	
N, chubati Hoomis	Trugulo	865607136	
Juma Apito	Mugnons	- (5	
Melia Linds		84908363	1
Flating Francise	Trianguto		
Refaring Bernare	to busingula		
Latifa consolve	Mangula		
Manuel Jaime	25 de Setember		
Hariamo romak	25 de setembro		
Lucis MUSIS	Triangulo		
Fatima Ali	Mangulo		
Lucia Radmundo	Triguegulo		
1 auro 10, Sime	trianguls		
Mariamo Stones A	1 trangul		
Alberting Alvar	Mangua		
Aming Victor	tronguis		
1:00 a Amade	manguto		
Win all Dr D Scard	0 25 de Setundo	86968497	-)
Monia R. Seman	o Drangue		
Fatima Padusu	es 28 de sitembre		
TO Chan MOUDING	7 Cde Sellenso		
enling R. Douds	25 de Sileuntos	0 84413765	2
Dalazina smade	25 de Sellins	0	
Fating Alinna	trangulo	8467981	+3





Contrato No. 41/DG/360/2016

Participante	Instituição Pairo	Contacto	Email	
Antonio Rul	ia Triangulo			
Carlos Sir	plletriangulo			
Acrosting Ru	Palat riangue			
Antonio Mon	nud Triangult			
tavier lean	te Triangul			
Bosilio 1. Mar	ico Triangula			
Carlo Agosti	na Finangulo			
Harto my Sne	utoriangulo			
Cenation Klas	tindometupano			
Pydro Burnor	de Mariora			
Jaime V. AS	sanot riarigues			
Carolina R	Swhinnefull			
forige some	mangue			
Amido Alleg	right Calour			
Kosa Bur	mino Triangulo			
Antonio 34	mine mangico			
Maria + Rode to	ial Triangulo		Til .	
Amara Jun	0 7 0			
Junia Mor	Misul Triditulo	-		
Panacia Da B	obeste Triansach	2		
The dia Anie	rica Triangul	8		
91000	Eacasing Triangel			
	rico Maiala			
Alia Amade	Triangule	,		
Tanudrica.	Cika Malola			
Dodro Usten	098 100			
Mecon or a for	isco Triangulo			
Hanchala M	talone · Triangu	6		









Contrato No. 41/DG/360/2016

	Instituição Bains	Contacto	Email
Participante	Mr. Tugaia	840598006	
Helasis Faria Andre	Marane	849146126	
Raimando Jose frapista	Matila		
Maghauri Malola	Triangulo	879896607	
Manual Il		865290328	
M Warmade Mulle	Matola	863676944	
Juma Magite	Muanona	949058851	
Juma faide	Muanona	867145521	
Remark Manuel	Maraia	8447825/0	
Tito Gonsalves	mang no	840181545	
1:10 Amade	10		30
Assumane Emis	Murrupelend		
Deefina Pedro			
Joaquim felva	la Nanari		
Johna Cavarice	Muanona		
Nene Elidio			
Mariamo Asaca		86512827	3
Mariano Rodrig	0 1		
Benedito Ldua	D. 7 20-12 (2)		
Omar Masejor	1 1 1	el.	
Juma Amich	who Muanons		
Tacinta Alexan	25 de delend	10 84753988	72
faida Luis	111	2 - 272	
Ancha Franci	0		
Lucas Macia			
Jualete Oma	11		
Alupaia Moli	The state		
		rul	
MomadeMi	jarina Merrupela Inadacia Merrup	selane	
Muan uma A	nagaen pulving		*









Contrato No. 41/DG/360/2016

Participante	Instituição Bairo	Contacto	Email	
Anabela Matsinh	01			
Tospes Tose Osi	11 25			
Julio Hannel	Trigngulo	847448659		
Atina Buans	Triangulo			
assimo Omar	1)			
Momade Ali	Ontupaia			
Jasana Mithon	1 Matola			
Janfan Alu	Trigngulo			
Manuel Consul	R L			
Elisa Sodons	Matola			
Alima Kali	Magnora			
TO STORIES (1	2		
Kimia Bernan	as Muanong			
180010 Carcon	11			
Jamila Carl	ito II			
Jamila lan	el Trianguli	3		
Ting Soming	1 1 N			_
Maria Matias				_
1 (00)	box Triangulo)		
Mi Abacan	11			
Too C. Sime	5. 11			
The Jona Dani	0) 11			
Planuola Am	11 988 11			
Trusso Anza	Ontu paig			-
Maria A. N. To	wa Matola		14	
Anifa Glabais				
Braino Amis	SSP OntuPaig			
Pacilo Rumelo	Triangulo			









Contrato No. 41/DG/360/2016

Participante	Instituição Rajiu	Contacto	Email
	ino Triangula	845483807	
Amina chall	March	823996790	
Zacanias Albe	olupasist de	848281978	
Abarali Alex	Do 25 do setembr	848988686	
Lilipe M. Tage		843616765	
Masine OBout	e Muanona		
Cassiano Sai	do Triangulo	829703168	
Casnino Salates	tre 11		
Ancelma Amo	ado Trigngulo		
C Talan	act The state of		
Setuma furr	200	-	
Tulial land	ingo Ontu Raig		
Allalata FOSE	Triangulo	8652.73.461	
Al Corya Jose	20 21	42589066	
Call Can	00 11		
Alzina Alac	20 11		
110110111	2001		
Mariamo Ala	icia Maiaia		
DIO GRAGO TEL	ningos 11		
Kosayna bon	Triangul	J	
Moang one sa	to to to		
Rosa Morar	111120011	0	
VE NOTICA TAM	tonia I wanta		
Hilomena 59	Shup Managa		
The history	Lawid Muanona	5	
Belanminat	rinish Triangul	N .	
Lidia 13dp			
Teruza Matx	yPO "		
Maria Migle	N CI		
Mayassa Hou	ate 11		









Contrato No. 41/DG/360/2016

Participante	Instituição Bairio		Email
0A2 A-010 1124876	PRINCED GURD	845340145	
AL LAND TO THE PARTY OF THE PAR	An TRANGUES	863/67227	
AIMUNDO RIDDUES MIRAN	IN TRIANGACO	2601991735	
Unione Islas	3 TOD ACOLD	347827 St	-
REJERION BASI	10 FRIANGUIO	842216790	
to ADQUENE FERNA	NO TRIANGULO	\$16083431	
FORD AMADE	TRANGULO	348427 131	
HINDER ABOVE	La TRANGULO	8-178-3-121	
MUSSA DMARC	TRIAXI 940	W-6273(P)0	
HAWE ROOMS	FIRMEULO	3483447	
LURA ADMIN	0/2/4/94/0	844131351	*
ABEL BASIL	O CRANGULO	84449431	*
Soliano Lokes Ma	ida Mangulo	82566005	
XITONIO AUGUST	D 124N9410	847203191	P p .
APES Seliano	Los Triandul	8945643	59
Aming Mathan	Coula focom	×	
gusto Abdala	Mateler		A .
Lucia Benfic	a Malala,	84811140)
Carlitos Eusy	his Outerhoung	X	
Nifains Cusy	Sis la suran Ful	9 ^	
Exizipio man	ta Tricument	o X	
Arutina from	citco, lo Com	+0	
Firakha Joa	6 locom	-	
Sita Vistia	Sycom	1	
Indua Amis	38 to Coul	8424069	20
Barilio Cass	us lacous A	8424067	19
Amelia Muas	the /ridu Ful	8635517	92
Rozinlia Ago	orto A	8032517	76
Auira Fati	lino cocom		











Contrato No. 41/DG/360/2016

Participante	Instituição Barro	Contacto	Email
MARINAID TOSE	TRIANEULO	847234986	
Luis Jatio	TRIANGULO	845373429	
Alemane painend	tainsu la	84049889	
Themio on C. Albio	Tringillo	RAG151485	
SIMO ASSANE	TRIA Nguto	847408337	
MUSSA FRANCISCO	TRIANGULO	843827922	
Julia AlliEBCO	TRIANGULO	846538118	
AMISSI Mussa	ontuhãa	S4FF13952	
MINISS Warse	RADCONI	8 F12 F 3487	
Abdul Rajonundo	Triangulo	842908983	
FATIMA OMAR ASSAUS	- // /		
ALBERTINA LOURENS	OTRIAN GULO	84942489	
JUBITE A. HUSSO MUSSA	TRIANGULD	844429222	
AMINIA CASSIMO	-11-	878944532	
LUPOES MOMASE	_1/-	847234980	
MAPIANO COBRE	_1	840357526	
ZINHAL- JOAQUIM		84860774	/
FLISA ALBERIO	4-		
AGIRA CASSIMO	_11	844587513	
CAROLINA SOAGUM	_11	844790944	1
ARMINAA AMISSE	_1/_	878944532	1
AGIBA MANUEL	MOCONE	828357966	>
LUCIA ASSUATE	ONTO PAIA	868666993	
LUCIA AUGUSTO	TRIAN GULD	878332752	2
LAURINDA JOÃO		84743307-	F
MAURICIO ABUSO	MULANDNA	844579616	
DSSAIL TAPITE	1	878838857	ŧ.
MOMADE MARCELINI	DONTUPAIA	876483088	
SAMUEL ALI	TRIANGUL	845373429	3









Contrato No. 41/DG/360/2016

Participante	Instituição Bairo	Contacto	Email
Hiante Alias	Matola		
Targarida Dmi	R Trignyulo		
Birankai Chayu	1 1 1		
Fuma Mustaf	a locons		
Mualurata Mus	sai Cavambia	Ţ.	
Anika Logginia	niriangulo		
Maria Sailo	Macons		
Filismina lour	inco Triangulo		
Cecilia Nali	29 11		
Aby An Lindo	LOCON		
Momado Mast	o Conambia		
leonardo Mon	role Locon		
Costadio Sebas	stial Matola		
Aging Seleps	up conombia		
Is rezinto Am	rade ?!		
Losa domin	ps Matola		
Agira Momo	do 11		
Kabia Lasia			
Lidia Sanona	in Matola		
Muaila Josti	vim 1		
A Ja Antonji	2 1		
11-100	stainin)1		
Muamino Am	71		
Saturna thum	ant !!		
Aliona Johan	mo 1)		
The Mass	m 11		3-4
launa Anton			
11 1 11	110 25 do Setembr		
Abudo Aly	rivariona	,	+









Contrato No. 41/DG/360/2016

Participante	Instituição Burro	Contacto	Email
Mussa Sualeh	Triangualo		
Tulias Narcens	u Triangulo		
Carlotos luis	Triangulo		
Mustaka Tama	1 Onturaya		
Gilberto Fair	a Matola		
Mondes Said	Triangulo		
Adamo Victori	no Conambia		
1 braismo Sual	pho Conambia		
Baisse Ingci	o Conambia		
Abacar Essian	9 11		
Molde Silvan	0 11 0		
Mauricio Anto	inio riangulo	1	
Jedro Inacio	Matold		
Florences To	se Matola		
Amisse Magrid	0 1		
Tilisoning Telus	Shorto Optuparia		
Alina Lugian	10 Bloco 1		
Tation selow	am Murapolano		
Kaulino Anma	nto Matola		
Mussa Agy	Ontupaia		
	rio 11		
Lidia Jensan	Matola		
Amado Nordi	no Mugnona		
Nordino Muba	uing 1)		
Mario Chow	9 11 2.9		
Amina Ameid	g Triangulo		
Ancha Magara	27-1-1-		
Mussagn Hay	Matola		
Jaulino 16di	to Muxupelans		









Contrato No. 41/DG/360/2016

Participante	Instituição/Paulio	Contacto	Email
Amade H. Minans		842648571	
Tuliate Martes	condan Sia		
taginging Gustave	((845010019	
Fatime Mapite	11		
Muaqui Assahl	pousoida	0100	
Anila Maria	Towngula	865308176	
Raivoso V. Antonia	Javan gula	846844763	
Musse Tacute	mignane	842427635	
Maria Ali	lacohe		
Juliates M. Raquit	a Mica June		
Johns ussenl	2) otrock		
Maria Raises	Muahous		
clans Nivetiu	Triangula		
Gillo P. Malaunt	6 Vinter Cina	9	
Dolfing Toathing	Janangula	84595566	
Amisse A. Flico	Mata to	84658665	
Tuis C. Amal	Onterprise	8461865 846725743	
Tucas Daniel	Madela	0497(2)775	
prila pinto	Triange to		
Atiga A. Carlo	Jurah Jule	R4867320	1.
Raming Ali	1100010	843714893	
Dedicosigo F. Will	matela	8440639	
Jourstino A. Mani	e mater	044000	
Johns N. Nacust	n Matolo		
Maria Mario	Conambic		
Ramanatana Hagu	4		*
Capo Durindo	P Townson	0	
HIMING HOUSE	1 112		
Amade Alexanda	1 Mathapus		









Contrato No. 41/DG/360/2016

Participante	Instituição Bair		Email
Marsanda Luis	1) Trianch	86299720	
Technolo casa 19	+ Margareda Lu	1821622516	
Munuel Mussa	Hurubelane		
ABING PURZE	Thangulo	872639184	
Anida Antonio	ines Triangulo	842465546	
Luciano Ringu	ota Tuanquelo	10 (20000)	
Ana tranvarto	Triangulo	848383875	
Teresa faria	Triangulo		-
Manuel Ali	Hantepais	876699902	
Ana Hermini	o Trishquelo	34512559	
Graca Alries	Triangulo		
Rosto Drawin	a Triangulo		
Luxitana Zign	V 1		
Aurera costa	Triangulo		
Holong Saide	Triangulo		
Aloxadrina Chi	co Baco-1	diamana	
Colice Antonio	Triangule	849081817	
quilermina ya	na Triangulo		
Agiga Memad	Triangulo		
Artinda Mpah	is Triangono		
Jangia yaque	to matela		
Julieta Aimo	triangulos	71 201	
Janermina Za		346508276	
Olausinda Hil	aio Matola		
Notalia Prass	e matela		
Propalina Lati		077021.131	
Elnira Amado	Quanari	677124424	
Lidia Amade	Cenamari	846872974	
Soborstão Casam	e hocone	863464418	•









Contrato No. 41/DG/360/2016

Participante	Instituição Baino	Contacto	Email
Isobel Yarrine	Triangulo		
Guilherming AFa	of Triangulo		
Cataring Alberto	Chanasi		4
Arpina dazid			
Anifa numa	Trianguto		
Alberto Privare	Drimonto		
Santonane Mais			
him Mucanse	Trianguto	845797 454	
Messé Moaguin	Migniona		
Amina yelas	i antegaia	82919628	
Etima Mussa	Granas	348677816	
Abiba Amine	anari		
Horan mlan Amin	e Clnemani		
Momade Israis	us Matala		
Filemena Ma	Materia		
More Helias	onterfacio		
Prosalina Ali	Sancare		
Aliga Adamo	Sancare		
Adiza Hernesto	Triangulo		
varia Mussa	Matiela		
Rosita sponso	Triengulo		
Bestina Miguel	Triangulo		
Snakhe Scuide	Maticla		
Alima Nasser	Ocanompia		
Ingeio Papito	Conangia		
Agrina Dracie	Cononic		
Laurenda Trac	io Conangia Matola		
Louis Daminge			
Fillamena Drane	gisco Mortala	1	









Contrato No. 41/DG/360/2016

Participante	Instituição Bairo	Contacto	Email
Rabia Alfredo	Miangalo		
Ersilis AMARC	oniopaig		
Traque Antônio M	000-		
1 2 cde	TRANGULD		
Laurinda Joog u	e TREATIGNED		
SAling brenco	JR12ngalo		
CARida Eduranto	1 Riginal	845313826	
trum Adamoge	Matolo	84221000	D
Sisila Danto	Majola		
SAterna Juna	Triangue	846238420	
Anselmo Amad	1 Margus	848308171	
CITO	ma Triongub	24.82001A	
Alfredo Anacorela		842006736	
ARRUVALO F	IRIAngulo	54200796	,
Deslinda Manuel	Tenangula		
ROSA SAJama	Triangulo		
Ali Juma	TOTATOEO		
Alima Stide	PriAngula		
KOSA TOAD	181Avgulo		
Albertind SAha	51 17110		
António Mayo	SANGANE		
Alvaro gado	1 14110 (6)		
Pilache Jose-	Alosam		
AMAde	1 5000		
KOSA KILA HO	National States		
Fatima SAId	e 1/4/0/A	27511581	-9
CRACIANO NIR	ALAM	151011	
Das umpuelt	DAIOIA		
#SSin A'MUSSA	1 / 10 / 0 0 0		









Contrato No. 41/DG/360/2016

Participante	Instituição Barro	Contacto	Email
	nio Bounnisia		
Mide no Ramo	6 2		
7 0 to Pedo	a Triangula		
1000 TOSE	Katolo	8667766	7
Buling Jas	e Matela		
Adia Took	racom Treacque	0 068/09839	
Dialaiso Pad	no Onterpara	848948605	
Januario F. M	putero Ontuparo	84035742	
Razauna To	ma Toiangula	\$ 848 632800	
Hennestine Par	cool Triansque	0 8479	4
Asserve V- Doy	ars Trion Ill	0 86531736	
Massin Asse	and I	84486925)
Jama Amo	ale II	84391796	1
Tuma Son	idl Capambia	00 - 10 2 2 a Y	8
+ Mancisco Gi	whole Thisfole	84760388	
Jose A. Male	Malole,		
Pulleto Ma	les Coham no		
Maria Ryal	the Conampia	849Cb 7419	
Ancha Jav	of Butulano	8692200	
Juliete Tan	Qua the leles	21.15-2000	1
Cabala About	an Onlyperio	8440 X 880	-1
Generala Ma	was antibara	8756(987	C
Antohia Jos	ige Untiperio	00 8 7361767	2
Jeong Mags	mo wounder		
Amisse Tor	ge Total gul	8792952	2/1
Chanford Viet	enus Malols	86/13531	λ
Antonio Jac	into Malots	84604721	?
Miguel M. As	searce Onderpeus		
Oman blise	a ana fair	0104414	









Avaliação do Impacto Ambiental (AIA), Plano de Acção de Reassentamento (PAR) do Projecto de Estrada de Acesso ao Porto de Nacala Lote A.

Contrato No. 41/DG/360/2016

REUNIÃO DE CONSULTA PÚBLICA LISTA DE PRESENÇA 7 de Março de 2017

Participante	Instituição Bairro	Contacto	Email
Ugzir Abacor	Murripela	184247675	6
Chuming of wo	Murripulare	844792171	3
Squate Panus	Mu velipa	(963457783	
Amade Rabilly	Turkelm	845900902	
Angelas M. Coss	3 Murrupusu		
Manuel Amios	Mustingelow	84538446	3
Jacq MASERY	Migngulo	84270016	7
Davolon Comas	Triengulo	84773852	8
Muor Path Bugnar	nade 25/setansa	84816023	2
GUNTONO WHERE	Musuole - Sec	4 84221200	K
Abdela Lahamad	20 25 de Setembr	844108100	
pesola Ali	Lorone		
Parlito Snalis	1 25 de Setudos	0 84227087	†
Atola Cristalla	Mocone	82297190	16
Laurinas Jaim	1 Ontupais	84658821	₹B
Mualua UGBUR	Mughous - Ses		
Fatima Rachide	Mushong 11		24
Magtalia Daan	Mus none 41	84614708	0
Mugnacha Above	of Mugnons 11	511111511	
Manuel Abouer	con inpairs	844105413	
Abudo Abacar	- congin bia	8474066	30
Abudo Abacar	ontopois	2/0	ro i
Rosalina Luis	nocohe	8222768	1
Mariamo Mum	9 Mugnone -S	a 84615081	13
Alima Masufi	Mushone -S		279
gorafins Diedal	ON LOPONE	8490607	73
Zatiba Alfane	Mnrupolan	(
relie chanta	2		
ofemia goro	trangal	0	









Avaliação do Impacto Ambiental (AIA), Plano de Acção de Reassentamento (PAR) do Projecto de Estrada de Acesso ao Porto de Nacala Lote A.

Contrato No. 41/DG/360/2016

REUNIÃO DE CONSULTA PÚBLICA LISTA DE PRESENÇA 7 de Março de 2017

Participante	Instituição Paigo	Contacto	Email
	quim unio. Politecnia	144	
Source A. Joseph	Co Visto e Cibro		
senite fair	cisco Vinte a cinca		
Ancha proiv	1 a Municipa Doiles	84613/15/	/
Juma Agosto	and the Marie of	FALLS APCS by	
Advino Pasa	na langera reach	8460341141	
Duciana Moss	C. VILLE	000	
Tapecho Moto	tra partota	841192478	
Sounder Du	DUDGLOUD C	1000	
Mariana Andr	and Muahana		
Aging M.	Knin Towarque		
A COLUMN TO THE PARTY OF THE PA	0 0 0 0	849384539	1
Paulino Jan	and Manage	P. 136413	()
			1
		•	









4.4.Registo Fotográfico dos participantes da Reunião Pública













Annex 6 - Monitoring Forms (sample)

V	onitoring Fo	isition>					
Z O	o. Activity	Progress (tasks completed)	Description of the Situation (incl. any necessary actions)	CD (plan)	6 5	S	Recorded by
<u>.</u>	Formation of Grievance Redress	%					
	Mechanism/Committee	%					
		%					
7	. Disclosure of ARAP (incl.	%					
	stakeholder meetings)	%					
		%					
3.	. Confirmation of project-affected	%					
	persons and goods	%					
		%					
4	. Finalization of Compensation and	%					
	Support	%					
		%					
δ.	. Negotiation and Agreement on	HH /HH					
	Compensation Package	HH /HH					
		HH /HH					
		HH/HH					
9							
	obtaining ID)	HH/HH					
		нн /нн					
		HH/HH					
7.	. Transfer of Compensation (i.e.	%					
	Road Fund to ARAPI)	%					
		%					
∞	. Transfer of Compensation (i.e.	%					
	ARAPI to PAPs)	%					
		%					
9.	. Acquisition of Land	m2/ m2					
		m2/ m2					
		m2/ m2					
		m2/ m2					
-							

*CD: completion date; RD: recorded date; HH: household

lic Consultation>	Content including Q&A		
<monitoring consultation="" for="" form="" public=""></monitoring>	Participants		
	Venue		
	Time and Date		
	No.	 7	κ

付録-12 調査団から ANE に提出された環境調査の TOR (案)

TERMS OF REFERENCE

FOR

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT SURVEY FOR

THE PREPARATORY SURVEY

ON

THE NACALA-CORRIDOR ROAD NETWORK DEVELOPMENT PROJECT

IN

REPUBLIC OF MOZAMBIQUE

TS.1 GENERAL

The JICA Survey Team, comprising a consortium of Oriental Consultants Global Co., Ltd., has been conducting the preparatory study for the project, namely, The preparatory survey on the Nacala-corridor road network development project in Republic of Mozambique (hereinafter referred to as "the Project") from March 2015. This Terms of Reference shall be applied to the works for preparation of Environmental and Social Impact Assessment Plan (hereinafter referred to as "the Work") to be done by the contractor in charge of the Work (hereinafter referred to as "the Contractor") for this preparatory survey.

TS.2 BACKGROUND

Will be filled out in bidding stage

TS. 3 OBJECTIVES OF THE SURVEY

The Project is to carry out all the requirements necessary to execute the Project in Japanese ODA Loan, such as defining the project objectives, and preparing project summary, project cost, implementation schedule, implementation method (procurement, construction), implementation plan, operation and maintenance management system, environment and social considerations, etc.

JICA requests Project proponents (Government of Mozambique) to pay appropriate environmental and social considerations when implementing an ODA projects, based on the "JICA Guidelines for Environmental and Social Considerations (April 2010) (hereinafter referred to as "JICA Guidelines").

The objective of the Work to be entrusted to the Contractor is to implement environmental and social impact assessment study (hereinafter called "ESIA") and obtain Environmental clearance from relevant organization for the Project while meeting the requirements of the "JICA Guideline for Environmental and Social Considerations (2010 April)".

TS.4 PROJECT AREA AND COMPONENT

The target project is composed of 3 sub-projects. The tentative subject areas are as shown in the Figure-1, Figure-2 and Figure-3.

The prioritized alignment and project component including crossing point of new bridges, length and location of the approach road, numbers of lane and so on will be provided based on the results of alternative analysis to be done by the JICA Survey Team. The followings are the prioritized project at this moment.

(1) Nacala: Port Access Road

1) Activities: Construction of new bypass road

2) Total length: 13.5km

3) Number of lane: 2 lanes for each direction (Total: 4 lanes)



Figure-1 Study Area

(2) Nampula: Southern-Bypass Road

1) Activities: Construction of new bypass road

2) Total length: 32.5km

3) Number of lane: 2 lanes for each direction (Total: 4 lanes)

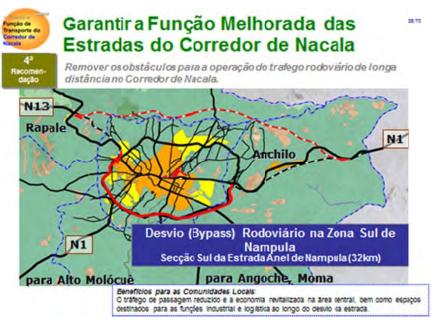


Figure-2 Study Area

(3) Cuamba: Bypass Road

1) Activities: Construction of new bypass road

2) Total length: 11km

3) Number of lane: 1 lanes for each direction (Total: 2 lanes)



Figure-3 Study Area

TS.5 SCOPE OF THE WORKS

The Contractor shall implement the study for EPDA (Estudo de Pré-Viabilidade Ambiental e Definição do Âmb). Subsequently, environmental and social impact assessment or simplified environmental study for 3 components shall be implemented

as shown below, and required environmental permit from environmental authorized agency of Government of Mozambique shall be obtained. The detail of the scope for ESIA shall be decided based on the result of EPDA.

Draft Table of Contents for ESIA Report (based on JICA Guidelines)

- 1. Executive Summary
- 2. Project background and objectives
- 3. Description of the project
- 4. Baseline of natural and social aspect (based on literature data)
- 5. Policy, Legal, and Administrative Framework
- 6. Alternative analysis (including Zero option (without project case))
- 7. Scoping (insert scoping Matrix and reasons)
- 8. Result of site survey based on Scoping
- Anticipated Environmental and Social Impacts and Evaluation
 (anticipate impacts with mitigation measures when the result of anticipated impact without mitigation measures exceeds evaluation criteria such as environmental standards)
- 10. Environmental Management and Monitoring Plan (EMMP)
- 10-1 Mitigation measures, budgeting and responsible agency
- 10-2 Monitoring Plan (Item, frequency, budgeting and responsible agency)
- 11. Consultation (at least twice for a component: Scoping stage and draft ESIA stage)
- 12. Conclusions and Recommendations

TS.6 STUDY PERIODS

A tentative study period is shown below.

Each ESIA or IEE study shall be started when the Consultant notify it on written instruction.

The study period is starting from March of 2015 to March of 2016 as shown in TS.14.

TS.7 BASELINE DATA FOR EXISTING ENVIRONMENT

The Contractor shall carry out the tasks as listed below through interpreting secondary data, site reconnaissance and interviewing to related administrative office.

- (1) Social Environment
 - Concise socio-economic profile of the project area
 - Numbers of affected households by the project
 - Local economy such as employment and livelihood, etc.
 - Land use and utilization of local resources
 - Social institutions and local decision-making institutions
 - Existing social infrastructures and services

- Demographic characteristics
- Culture heritage
- Present uses of surface water including water supply
- Sanitation
- Any flood problems, if any
- Hazards (Risk) and Infectious disease such as HIV/AIDs
- Poor/Indigenous people/Gender
- Others

(2) Natural Environment

- Climate inventory and analysis, especially, observed record of WDR (World Development Report) for the year
- General topography and geology and the project area
- Hydrological situation
- Flora, Fauna and Biodiversity
- Rare, endangered and endemic species in the project area and its vicinity
- Landscape
- Others

(3) Living Environment (Pollution)

- Impact on Air pollution
- Impact on Water pollution
- Waste
- Impact on Noise and Vibration
- Impact on Ground subsidence
- Offensive odor
- Bottom sediment
- Accidents
- Others

TS.8 MEASUREMENT SURVEY ON ANTICIPATED IMPACTS

The measurement survey will be conducted as follows. The Contractor shall clarify the measurement methodology including measuring equipment, methods of analysis and analytical instruments information in the implementation plan (referred to <u>TS.11</u>).

Note that the specification of the measurement survey including measurement parameters, measurement locations and so on, might be modified based on the results of meeting with MICOA (Ministry of Coordination of Environmental Affairs) (referred to TS.11).

Table-1 Site Measurement Item

Category	No	Impacted Item on JICA Guidelines	Sampling/Site Me	asurement Survey					
	1	Air pollution	(1) Site measurement 17 points (Component-1:5points, Component-2:7po (2) Item CO, NO2, SO2 and TPM (3) Frequency One time Note) Collection of Secondary data, if any	ints, Component-3:5points)					
	2	Water pollution	(1) Site measurement 15 points (Component-1:3points, Component-2:7po (2) Item BOD, pH, SS, T-Coliform, temperature (3) Frequency Twice (rainy and dry season) Note) Secondary data collection, if any	ints, Component-3:5points)					
	3	Waste	Sampling site survey is not required						
ttion	4	Soil contamination	Sampling site survey is not required						
Pollution	5	Noise and Vibration	Noise (1) Site measurement 17points (Component-1:5points, Component-2:7points, Component-3:5points) Note) In the selection of the measurement location have to give priority to the sensitive facilities of noise impact, such as schools, hospitals, residential area, so on. (2) Item LAea, 10min 24hr/weekday, traffic volume and speed (3) Frequency One time Note)Secondary data collection, if any	Vibration (1) Site measurement 17points (Component-1:5points, Component-2:7points, Component-3:5points) Note) In the selection of the measurement location have to give priority to the sensitive facilities of noise impact, such as schools, hospitals, residential area, so on. (2) Item $L_{v10} \end{tabular} \begin{minipage}{0.5\textwidth} L_{v10} (3) Frequency One time Note) Secondary data collection, if any$					
	6	Ground subsidence	Sampling site survey is not required						
	7	Odor	Sampling site survey is not required						
	8	Sediment quality	Sampling site survey is not required						
	9	Protected area	Sampling site survey is not required						
fatural environment	10	Ecosystem	(1) Site survey (2) Item Fauna and flora, ecosystem, considerable species such as listed species on IUCN list (3) Frequency One time Note) Secondary data collection, if any						
Natı	11	Hydrology	Sampling site survey is not required						
, .	12	Topography and geology	Sampling site survey is not required						
	13	Involuntary resettlement	Refer to RAP survey						
	14	The poor	Refer to RAP survey						
	15	Indigenous and ethnic people	Refer to RAP survey						
onment	16	Local economy such as employment and livelihood	Refer to RAP survey						
Social environment	17	Land use and utilization of local resources	Refer to RAP survey						
9 1	18	Water usage	Sampling site survey is not required						
	19	Existing social infrastructures and services	Refer to RAP survey						
	20	Social institutions	Sampling site survey is not required						
		such as social infrastructure and							

Category	No	Impacted Item on JICA Guidelines	Sampling/Site Measurement Survey
		local decision making	
		institutions	
	21	Misdistribution of benefit and damage	Sampling site survey is not required
	22	Local conflict of interests	Sampling site survey is not required
	23	Cultural heritage	Refer to RAP survey
	24	Landscape	Refer to RAP survey
25 Gender			Refer to RAP survey
	26	Right of children	Refer to RAP survey
	27	Infectious diseases such as HIV/AIDS	Sampling site survey is not required
	28	Labor environment	Sampling site survey is not required
	29	Accidents	Collection of traffic accident data from police station
Others	30	Cross boundary impacts and climate change	Refer to RAP survey (land use and tree species shall be confirmed)

TS.9 CONSULTATIONS

JICA Guidelines encourages project proponents etc. to consult with local stakeholders about their understanding of development needs, the likely adverse impacts on the environment and society, and the analysis of alternatives at an early stage of the project planning.

In order to meet the above requirement of JICA Guidelines, the stakeholders meeting (SHM) will be held under initiative of ANE in the course of this study. The assistance for the SHM by the Contractor shall conduct for following items.

(1) Notification of SHMs

The notification for SHM is done in accordance with the regulation of Mozambique.

(2) Draft Agenda for SHM

- 1) 1st SHM (June, 2015) for Scoping Stage
 Project outline, predicted positive and negative impacts, survey items and
 methodology, project schedule and exchange opinions
- 2) 2nd SHM (November, 2015) for Draft ESIA stage Project outline, analyzed positive and negative impacts, mitigation measures and monitoring plan and exchange opinion.

(3) Record of SHM

The Contractor shall prepare the Minutes of Meeting (MM) for SHM with attendant list with signature and photo.

Note that all documents shall be prepared in Portuguese and English

(4) Supporting of JICA Environmental and Social Consideration Advisory Committee

The Contractor shall support and prepare material for JICA's environmental committee upon request if required.

TS.10 ORGANIZATION OF THE STUDY TEAM

In order to complete the tasks successfully within the period mentioned above and conduct the study effectively, the Contractor shall organize the survey team for comprising sufficient number of experts not limited to but including as follows:

- 1) Project Manager (who has enough knowledge of natural and social environment and has similar survey experience more than 15 years or more than 7 projects)
- 2) Environmentalist (who has enough knowledge of natural environment especially protected species and has similar study experience more than 10 years or more than 5 projects)
- 3) Sociologist (who has enough knowledge of social environment and interview method and has similar study experience more than 10 years or more than 5 projects)
- 4) Pollution Analyst (who has enough knowledge of pollution control on water, air and and has similar study experience more than 10 years or more than 5 projects)
- 5) Socio-economist
- 6) CAD/GIS Expert (who has enough knowledge and experiences of CAD/GIS)
- 7) Field Surveyors

Note that adequate number of staff and assignment period of the team members of the Contractor should be proposed as a part of the implementation plan (refereed to TS.11).

Especially, regarding the pollution measurement survey, the Contractor shall propose optimum team structure to complete all tasks within the prescribed study period with consideration for the analysis period.

TS.11 IMPLEMENTATION PLAN

The Contractor shall submit the implementation plan for the study based on the scope of work mentioned above to JICA Survey team within one (1) week after conclusion of the contract. The plan should include the explanation on the methodologies adopted in the study, work schedule and so on.

The "Preliminary Meeting with relevant parties" will be held as at Environmental Agency for discussing the proposed methodologies and applied TOR. The Contractor shall finalize the implementation plan based on the results of the meeting.

TS.12 WEEKLY MEETING

The Contractor shall make a report to the JICA Survey Team on the following items at the regular weekly meeting:

- · Information on the type and amount of work completed in the previous week.
- Details of any delays and other special circumstances affecting the progress of work.
- The work schedule for the following week.
- · Others

TS.13 REPORTING

(1) Submission of Report

The Contractor shall submit the following reports to the JICA Study Team, in proper forms approved by the JICA Survey Team. The report shall be written in English. The reports submitted by the Contractor shall be the property of the JICA Study Team. The expenses for the data arrangement will be included in the Contract Amount.

- Inception report (ICR): schedule of survey in 1 set of hard copy and 1 set of soft copy
- Interim Report (ITR) in 3 sets of hard copy and 1set of soft copy
- Draft final report (DFR) in 5 sets of hard copy and 1 set of soft copy
- Final report (FR) in 5 sets of hard copy and 1 set of soft copy

(2) Schedule of Submission Report

1) Inception ESIA Report

The Local Consultant shall submit Inception report to JICA Study Team by the beginning of April 2015. The report shall contain schedule of survey.

2) Interim ESIA Report

The Local Consultant shall submit Interim report to JICA Study Team by the middle of May 2015. The report shall contain EPDA.

3) Draft Final ESIA Report

The Local Consultant shall submit draft final report by the middle of October 2015. The report shall contain all of results of ESIA.

4) Final ESIA Report

The Local Consultant shall submit the final ESIA report by the end of November 2015.

TS.14 TENTATIVE WORK SCHEDULE

The tentative work schedule for the ESIA study is shown in the below table.

Year/ Month					20)15						2016	
Work Item	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
[EIA]													
Kick-Off Meeting with Relevant Parties (Inception Report Explanation)													
Survey and preparation of EPDA, prparation of TOR for ESIA and authorization													
3. The 1st SHM (Scoping stage)													
Survey and preparation of ESIA report													
5. The 2nd SHM (Draft EIA Stage)													
6. Reporting		ICR	П	R				DFR	F	R			

TS.15 OTHERS

Even if the period of the contract will be finished, the Consultant shall respond sincerely to the request for further explanation or investigation on the results of the ESIA Study.

TS.16 GENERAL REQUIREMENTS

The Contractor shall exercise great care during the progress of the investigation to avoid any accident on the site, and will be responsible for any faults during the investigation. Accordingly, no claims will be accepted by the JICA Survey Team.

The Contractor shall acquire all permits or licenses required for the ESIA Study from appropriate government or private agencies at his own expense.

TS.17 MEASUREMENT AND PAYMENT

Payment will be based on quantities measured as mentioned in TS.17 "Bill of Quantities". The payment shall include full compensation for all machinery for the study, including equipment, tools, labor, materials, and other incidentals required to complete record and present the results. The time spent on re-surveying because of the Contractor's deficiency or failure shall not be subject to measurement and payment.

TS.17 BILL OF QUANTITIES (BOQ)

	NT-	D	T.L. * 4	0	Unit Rate	Amount
	No	Description	Unit	Quantity	(USD)	(USD)
1		Remuneration				
	1.1	Professional				
		Project Manager	M/M	5		
		Environmentalist	M/M	6		
		Sociologist	M/M	3		
		Pollution Analyst	M/M	3		
	1.2	Supporting Staff				
		Socio-economist	M/M	1		
		CAD/GIS Operator	M/M	3		
		Field Surveyor	M/M	6		
2		Other Costs				
	2 1	Field Survey				
	2.1	Water quality	point	15		
		Air Quality	· •	17		
		Noise	point point	17		
		Vibration	point	17		
		Fauna & Flora	unit	1		
	2.2	Stakeholder Meeting	um	1		
	2.2	Venue Venue	Venue	6		
		Notification of SHM	times	6		
	2.3	Transportation Transportation	tilles	0		
	2.3	Vehicle Transportation	veh/month	6		
		Airplane Transportation	set	1		
	2.4	Accomodation	set	1		
		Reporting	301	1		
	2.5	Inception Report	set	1		
		Interim Report	set	3		
		Draft Final Report	set	5		
		Final Report	set	5		
		Stakeholder Meeting Report	set	2		
	2.6	Meeting Meeting Report	550	2		
		Meeting with ANE, MICOA				
		etc.	times	10		
		Meeting with Local	times	6		
	2.7	Government Data Collection	L.S.	1		
	2.1		L.S.	1		
2		Sub Total Overhead (V9/)	aat			
3		Overhead (X%)	set			
4		Total before TAX				
4		TAX (X%) TOTAL AM	set			

TERMS OF REFERENCE

FOR

PREPARATION OF RESETTLEMENT ACTION PLAN

FOR

THE PREPARATORY SURVEY

ON

THE NACALA-CORRIDOR ROAD NETWORK DEVELPMENT PROJECT

IN

REPUBLIC OF MOZAMBIQUE

TS.1 GENERAL

The JICA Survey Team, comprising a consortium of Oriental Consultants Global Co., Ltd., has been conducting the preparatory study for the project, namely, The preparatory survey on the Nacala-corridor road network development project in Republic of Mozambique (hereinafter referred to as "the Project") from March 2015. This Terms of Reference shall be applied to the works for preparation of Resettlement Action Plan (hereinafter referred to as "the Work") to be done by the contractor in charge of the Work (hereinafter referred to as "the Contractor") for this preparatory survey.

TS. 2 BACKGROUND

Will be filled out in bidding stage.

TS. 3 OBJECTIVES OF THE WORK

The Project is to carry out all the requirements necessary to execute the Project in Japanese ODA Loan, such as defining the project objectives, and preparing project summary, project cost, implementation schedule, implementation method (procurement, construction), implementation plan, operation and maintenance management system, environment and social considerations, etc.

JICA requests Project proponents (Government of Mozambique) to pay appropriate environmental and social considerations when implementing an ODA project, based on the "JICA Guidelines for Environmental and Social Considerations (April 2010) (hereinafter referred to as "JICA Guidelines" see <u>Appendix.1</u>).

The objective of the Work to be entrusted to the Contractor is to prepare Resettlement Action Plan (hereinafter called "RAP") for the Project while meeting the requirements of the "JICA Guideline for Environmental and Social Considerations (2010 April)" and WB OP.4.12.

TS. 4 PROJECT AREA AND PROJECT COMPONENT

The tentative subject areas are shown in the Figure-1.

The prioritized alignment and project component including crossing point of new bridges, length and location of the approach road, numbers of lane and so on will be provided based on the results of alternative analysis to be done by the JICA Survey Team. The followings are the prioritized project at this moment.

(1) Nacala: Port Access Road

1) Activities: Construction of new bypass road

2) Total length: 13.5km

3) Number of lane: 2 lanes for each direction (Total: 4 lanes)



Figure-1 Study Area

(2) Nampula: Southern-Bypass Road

1) Activities: Construction of new bypass road

2) Total length: 32.5km

3) Number of lane: 2 lanes for each direction (Total: 4 lanes)

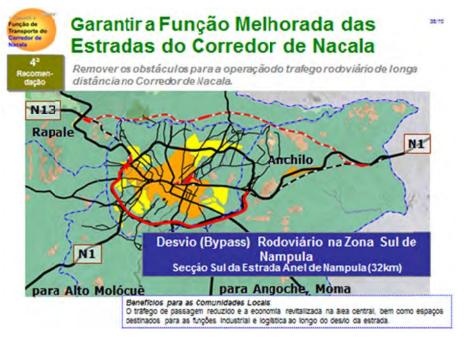


Figure-2 Study Area

(3) Cuamba: Bypass Road

1) Activities: Construction of new bypass road

2) Total length: 11km

3) Number of lane: 1 lanes for each direction (Total: 2 lanes)



Figure-3 Study Area

TS. 5 SCOPE OF THE WORKS

The RAP shall cover the elements as shown below.

- (1) Description of the project (General description of the project and identification of the project area)
- (2) Potential impacts
 - (a) the project component or activities that give rise to resettlement;
 - (c) the alternatives considered to avoid or minimize resettlement; and
 - (d) the mechanisms established to minimize resettlement, to the extent possible, during project
- (3) Objectives (Main objectives of the resettlement program)
- (4) Socioeconomic studies (Findings of census survey and other studies)
 Note) including fishing ground survey, if the project area is located in fishing ground. Survey sheet will be provided
- (5) Legal framework (Findings of an analysis of the legal framework)
- (6) Institutional Framework (Findings of an analysis of the institutional framework)
- (7) Eligibility (Definition of displaced persons and criteria for determining their eligibility for compensation and other resettlement assistance)
- (8) Valuation of and compensation for losses

- (9) Resettlement measures (Description of the packages of compensation and other resettlement measures)
- (10) Site selection, site preparation, and relocation (Alternative relocation sites considered and explanation of those selected)
- (11) Housing, infrastructure, and social services (Plans to provide housing, infrastructure and social services)
- (12) Environmental protection and management for establishment of resettlement sites
- (13) Community participation (Involvement of resettlers and host communities)
- (14) Integration with host populations (Measures to mitigate the impact of resettlement on any host communities)
- (15) Grievance procedures
- (16) Organizational responsibilities (The organizational framework for implementing resettlement)
- (17) Implementation schedule
- (18) Costs and budget
- (19) Monitoring and evaluation

Note that the detailed requirements of WB OP.4.12 shall be referred to "Involuntary Resettlement Sourcebook" (World Bank).

TS. 6 WORK PERIODS

The Work shall be started when the JICA Survey Team notifies it on written instruction. The Work will start from March of 2015 to March of 2016 as shown in <u>TS. 14</u>.

TS. 7 RAP PREPARATION

The Contractor shall prepare RAP based on the approved "Framework of RAP (FRAP)" using the following procedures:

- (1) The Contractor shall support Executing Agencies (herein after referred to as "EA") to conduct "Socialization" for conducting field survey which is necessary for the RAP preparation. The Contractor shall support that EA declare the Cut-Off Date and explain the compensation policy prior to a series of filed survey at the meeting.
- (2) The Contractor shall conduct <u>Gap Analysis</u> to identify the gaps of resettlement policy between the government of Mozambique and JICA guideline, and propose appropriate mechanism or framework to fill the gaps.
- (3) The Contractor shall undertake <u>Socio-Economic Survey</u> including census survey and <u>Inventory of Loss (IOL) survey</u> for all Affected Persons (herein after referred to as "APs") living inside of the affected areas.
- (4) The Contractor shall undertake a <u>Replacement Cost Survey</u> for various types of affected assets including lands and structures as a basis for determining compensation rates at replacement cost.
- (5) The Contractor shall prepare the draft RAP with time-bound implementation

- schedule, procedures for grievance mechanism and monitoring and evaluation, and a budget.
- (6) The Contractor shall finalize the project RAP and translate the summary in local language.
- (7) The Contractor shall disclose the draft and final RAP in accordance with JICA's policy on public communications to the affected communities. The draft RAP will be disclosed to APs prior to submission to JICA.

TS. 8 GAP ANALYSIS ON RESETTLEMENT POLICY

The Contractor shall identify the gaps of resettlement policy between the government of Myanmar and JICA guideline, and propose appropriate mechanism or framework to fill the gaps. The result of gap analysis shall be summarized in the form shown below.

No.	JICA Guidelines (A)	Laws and Guidelines of the Mozambique (B)	Gaps between (A) and (B)	Project Policy
1	Involuntary resettlement and loss of means of livelihood are to be avoided when feasible by exploring all viable alternatives. (JICA GL)			
2	When population displacement is unavoidable, effective measures to minimize impact and to compensate for losses should be taken. (JICA GL)			
3	People who must be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported, so that they can improve or at least restore their standard of living, income opportunities and production levels to pre-project levels. (JICA GL)			
4	Compensation must be based on the full replacement cost as much as possible. (JICA GL)			
5	Compensation and other kinds of assistance must be provided prior to displacement. (JICA GL)			
6	For projects that entail large-scale involuntary resettlement, resettlement action plans must be prepared and made available to the public. (JICA GL)			
7	In preparing a resettlement action plan, consultations must be held with the affected people and their communities based on sufficient information made available to them in advance. (JICA GL)			
8	When consultations are held, explanations must be given in a form, manner, and language that are understandable to the affected people. (JICA GL)			
9	Appropriate participation of affected people must be promoted in planning, implementation, and monitoring of resettlement action plans. (JICA GL)			
10	Appropriate and accessible grievance mechanisms must be established for the affected people and their communities. (JICA GL)			
11	Affected people are to be identified and recorded as early as possible in order to establish their eligibility through an initial baseline survey (including population census that serves as an eligibility cut-off date, asset inventory, and socioeconomic survey), preferably at the project identification stage, to prevent a subsequent influx of encroachers of others who wish to take advance of such benefits. (WB OP 4.12 Para. 6)			
12	Eligibility of benefits includes, the PAPs who have formal legal			

No.	JICA Guidelines (A)	Laws and Guidelines of the Mozambique (B)	Gaps between (A) and (B)	Project Policy
	rights to land (including customary and traditional land rights recognized under law), the PAPs who don't have formal legal rights to land at the time of census but have a claim to such land or assets and the PAPs who have no recognizable legal right to the land they are occupying. (WB OP 4.12 Para. 15)			
13	Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based. (WB OP 4.12 Para. 11)			
14	Provide support for the transition period (between displacement and livelihood restoration). (WB OP 4. 12, para.6)			
15	Particular attention must be paid to the needs of the vulnerable groups among those displaced, especially those below the poverty line, landless, elderly, women and children, ethnic minorities etc. (WB OP 4.12 Para. 8)			
16	For projects that entail land acquisition or involuntary resettlement of fewer than 200 people, abbreviated resettlement plan is to be prepared. (WB OP4.12 Para.25)			

TS. 9 SOCIO-ECONOMIC SURVEY AND IOL SURVEY

The Contractor shall conduct the Socio-Economic Survey to collect information from APs.

The purpose of the Socio-Economic Survey is to provide baseline data on APs to assess resettlement impacts, and to confirm if proposed entitlements are appropriate, and to utilize for resettlement monitoring. The scope of data to be collected includes;

- (1) Household head: name, gender, age, livelihood or occupation, income, education and ethnicity;
- (2) Household members: number, livelihood or occupation, school age children and school attendance, and literacy, disaggregated by gender;
- (3) Summary data on Affected Houses (AHs), by ethnicity, gender of head of household, household size, primary and secondary source of household income, income level, whether household is headed by women, elderly, disabled, poor or indigenous peoples;
- (4) Living conditions: access to water, sanitation and energy for cooking and lighting, ownership of durable goods;
- (5) Legal status of affected land and structure assets, and duration of tenure and ownership;
- (6) AP's knowledge of the project and preferences for compensation and, as required, relocation sites and rehabilitation measures;
- (7) Identify whether affected land or source of income is primary source of income;

The Contractor shall also conduct IOL survey to collect the data on the affected assets of APs based on the preliminary design to be provided by JICA Survey Team.

The data collected during the IOL will constitute the formal basis for determining AP entitlements and levels of compensation.

For each AP, the scope of the data will include:

- (1) Total and affected areas of land, by type of land assets;
- (2) Total and affected areas of structures, by type of structure (main or secondary) including wells and cemeteries;
- (3) Quantity and types of affected crops and trees;
- (4) Quantity of other losses, e.g., business or other income, jobs or other productive assets; estimated daily net income from informal shops;
- (5) Quantity/area of affected common property, community or public assets, by type

The tentative format for the Socio-Economic Survey and IOL Survey is referred to **Appendix.2.** (to be provided later)

Note that the Contractor shall propose the final format with discussion with related agencies including JICA Survey Team in the implementation plan.

TS. 10 REPLACEMENT COST SURVEY

The Contractor shall conduct the replacement cost survey in parallel with Socio-Economic Survey and IOL surveys.

Replacement cost is the method of valuation of assets which helps determine the amount sufficient to replace lost assets and cover transaction costs. In applying this method of valuation, depreciation of structures and assets should not be taken into account. For losses that cannot easily be valued or compensated for in monetary terms (e.g., access to public services, customers and suppliers; or to fishing, grazing or forest areas), attempts are made to establish access to equivalent and culturally acceptable resources and earning opportunities.

(1) Replacement cost for houses and structures

Replacement cost is the market cost of the materials to build a replacement structure, plus the cost of transporting building materials to the construction site, plus the cost of any labor and the Contractor's 'fees, plus the cost of any registration and transfer taxes. (The cost of the land upon which the house or structure sits is considered in Replacement cost of land).

Replacement cost can be calculated based on the following:

- 1) The schedule of rates should be obtained from the related government office.
 - Department of Valuation will have a schedule of rates for preparing estimates for construction projects, which agencies themselves use to assess costs for construction materials and labor. When applied to calculation of replacement cost, rates current for the period of actual replacement must be used; and
- 2) The rates quoted by the Contractor for similar structures in other construction projects /programs:

Where rate schedules do not exist or re out of date, recent quotations by the Contractor for similar types of construction in the vicinity of the project can be used for calculating replacement cost. In projects offering the options of cash compensation or alternative accommodation, the construction cost estimates for alternative accommodation could be used for calculating cash compensation payable.

(2) Replacement cost for land

For agriculture land, replacement cost is the pre-project or pre-displacement, whichever is higher, market value of land or equal potential or use located in the vicinity of the affected land, plus the cost of land preparation to levels similar to those of the affected land, plus the cost of any registration and transfer taxes.

For land in urban areas, replacement cost is the pre-displacement market value of land equal size and use, with similar or improved public infrastructure facilities and services and located in the vicinity of the affected land, plus the cost of any registration and transfer taxes

Note that if land acquisition/resettlement has already done by Government of Mozambique, the Contractor shall conduct surveys to clarify the detailed process including compensation procedure, compensation standard, explanation process to community people, and confirm whether the process fills the requirement of JICA Guidelines.

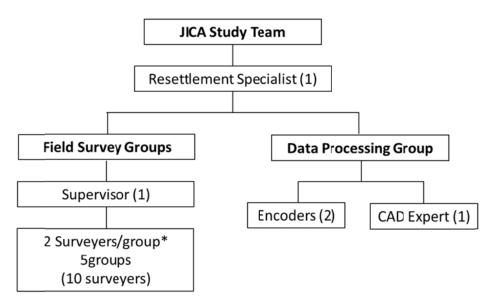
TS. 11 ORGANIZATION OF THE WORK TEAM

In order to complete the tasks successfully within the period mentioned above and conduct the Work effectively, the Contractor shall organize the survey team for comprising sufficient number of experts not limited to but including as follows:

- 1) Resettlement Specialist: Resettlement Specialist should have enough knowledge of involuntarily resettlement and has similar study experience more than 15 years or more than 7 projects)
- 2) Supervisors: Supervisors should be mainly responsible for field survey, training and supervising surveyors. They will prepare survey plans and work assignment schedule for surveyors, and give appropriate instructions to them;
- 3) Surveyors: Surveyors should visit household in the assigned areas and conduct interviews with the household member as indicated in the survey forms;
- 4) Encoder: Encoder should assist Resettlement Specialist in the course of the data processing. He/she should know how to check the data logically by using PC well:
- 5) CAD Expert (who has enough knowledge and experiences of CAD/ GIS)

Note that adequate number of staff and assignment period of the team members of the Contractor should be proposed as a part of the implementation plan (referred to TS. 12).

The expected team structure for the RAP preparation is as shown below (tentative).



4HHs survey/day/group *5groups *15days =300HH

TS. 12 IMPLEMENTATION PLAN

The Contractor shall submit the implementation plan for the Work based on the scope of work mentioned above to JICA Survey team within one (1) week after conclusion of the contract. The plan should include the explanation on the methodologies adopted in the study, work schedule and so on.

TS. 13 WEEKLY MEETING

The Contractor shall make a report to the JICA Survey Team on the following items at the regular weekly meeting:

- · Information on the type and amount of work completed in the previous week.
- Details of any delays and other special circumstances affecting the progress of work.
- · The work schedule for the following week.
- Others

TS. 14 REPORTING

(1) Submission of Report

The Contractor shall submit the following reports to the JICA Study Team, in proper forms approved by the JICA Survey Team. The report shall be written in English. The reports submitted by the Contractor shall be the property of the JICA Survey Team. The expenses for the data arrangement will be included in the Contract Amount.

- Inception report (ICR): schedule of survey in 1 set of hard copy and 1 set of soft copy
- Interim report (ITR): Framework of RAP (FRAP) in 3 set of hard copy and 1 set of soft copy
- Draft final report (DfR) in 5 sets of hard copy and 1 set of soft copy

• Final report (FR) in 5 sets of hard copy and 1 set of soft copy

(2) Schedule of Submission Report

1) Inception Report

The Contractor shall submit inception report to JICA Study Team by the beginning of April 2015. The report shall contain schedule of survey.

2) Interim Report

The Contractor shall submit the interim report by the end of May 2015. The report shall contain Framework of RAP (FRAP).

3) Draft Final Report

The Contractor shall submit draft final report to JICA Survey Team by the middle of October 2015. The report shall contain all of results of the RAP.

4) Final Report

The Contractor shall submit the final RAP report by the end of November 2015.

Note that the Contractor shall translate into "Portuguese" for information disclosure after finalization of the RAP report.

TS. 15 TENTATIVE WORK SCHEDULE

The tentative work schedules for the RAP preparation are shown in the below table.

Year/ Month					20	15						2016	
Work Item	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
[RAP]													
Kick-Off Meeting with Relevant Parties (Inception Report Explanation)													
Preperation Framework of RAP and authorization													
Socialization for RAP survey, Census, Inventory of Loss Assets, Scoio-ecomic survey amd replacement cost study													
Preparation of RAP report and authorization by implementation agency													
6. Socialization and Consensus of RAP													
7. Reporting		ICR	П	R				DFR	F	R			

TS. 16 OTHERS

Even if the period of the contract will be finished, the Contractor shall respond sincerely to the request for further explanation or investigation on the results of the Work.

TS. 17 GENERAL REQUIREMENTS

The Contractor shall exercise great care during the progress of the investigation to avoid any accident on the site, and will be responsible for any faults during the investigation. Accordingly, no claims will be accepted by the JICA Survey Team.

The Contractor shall acquire all permits or licenses required for the Work from appropriate government or private agencies at his own expense.

TS. 18 MEASUREMENT AND PAYMENT

Payment will be based on quantities measured as mentioned in TS.17 "Bill of Quantities". The payment shall include full compensation for all machinery for the Work, including equipment, tools, labor, materials, and other incidentals required to complete record and present the results. The time spent on re-surveying because of The Contractor's deficiency or failure shall not be subject to measurement and payment.

TS. 19 BILL OF QUANTITIES

No	Description	Unit	Quantity	Unit Rate	Amount
110	Description	Omt	Quantity	(USD)	(USD)
1	Remuneration				
	Resettlement Specialist	M/M	5		
	Supervisor	M/M	3		
	Surveyors	M/M	30		
	Encoders	M/M	4		
	CAD/GIS Operator	M/M	3		
2	Other Costs				
2.1	Socialization Meeting		6		
	Venue	venue	6		
2.2	Notification of SHM	times	6		
2.3	Transportation				
	Vehicle Transportation	veh/month	6		
	Airplane Transportation	set	1		
2.5	Accomodation	set	1		
2.5	Reporting				
	Incepion Report	set	1		
	Interim Report	set	3		
	Draft Final Report	set	5		
	Final Report	set	5		
	Meeting Report	set	2		
2.6	Meeting				
	Meeting with Counter Part, etc.	times	10		
	Meeting with Local Government	times	6		
2.7	Data Collection	L.S.	1		
	Sub Total				
3	Overhead (X%)	set			
	Total before Tax				
4	TAX (X%)	set			
	TOT	AL AMOUNT	Γ		

付録-13 環境社会配慮助言委員会のコメントとナカラ港アクセス道 路事業に対する調査団の対応

助言委員会からの助言の内容	調査団の対応
スコーピング・マトリックス	
計画路線上に、また沿道・周辺地域にどの民族・ 部族が居住しているのか、何人が影響住民となる のか等については住民移転計画(以下、RAP)の 人口センサス調査の中で検討すること。	事業対象地やその周辺に少数民族等、特別な配慮を要する民族、部族は確認されない。調査を通じて特定された社会的弱者に対しては、通常の補償内容に加え、その特性に合わせ、追加的な支援が提供される予定にある(※「付録-9 住民移転計画(PR)」中、エンタイトルメント・マトリクス参照)。
環境配慮	
本事業対象地域は、洪水、海岸浸食など気象に起因する自然災害リスクが高いことからそれらへの対策を十分検討すること。	カルバートを設置することで水流を確保し、川の氾濫や洪水を 抑制する、路線の選定においては沢筋を避ける、法面の保護の ためマットを設置する、といった洪水、浸食対策を検討、提案 している。なお、本道路は海岸近くを通過するものの、湾内で あることから波は高くなく、大規模な海岸浸食は想定されな い。また、道路による海岸の浸食や浸食による道路への影響も また想定されない。
これまで「モ」国でも生じている主要道路周辺に おける森林破壊や乱伐の状況に鑑み、必要に応じ 本事業路線周辺での森林破壊防止対策を講じる こと。	事業対象地周辺に森林は確認されていない。
本事業対象地は自然災害のリスクが高く道路の崩壊等も予想されることから、概略設計時にその対策として、(1) できる限り河川から離して路線を計画する、(2) 河川に護岸工を建設する、(3) 道路高を洪水位より高くする、(4) 道路法面勾配を安定勾配で計画する、(5) 道路法面保護工を建設する、こと等を検討すること。	 (1) (2) 路線は道路崩壊、土壌浸食のリスクも勘案して選定されている(※区間-1 における代替案-2 (赤線)、代替案-4 (緑線)は浸食のリスクが高いと判断され、選定されていない(※「7.5 代替案の評価結果及び路線の選定」参照)。なお、事業対象地内には小規模な河川しかない。同じ理由から、護岸工の必要性は乏しいと判断される。 (3) 道路高は洪水位より高い形で設計している。 (4) 道路法面勾配は安定勾配で設計している。 (5) 法面保護用のマットを設置する等、法面保護工を検討、計画している。
風水害等の災害が頻発していることから災害時 に道路が放水路的の役割を担うことも考えられ ることから、排水路や側溝の整備等の配慮を検討 すること。	排水系統図の作成、流量の計算、土質の確認等を踏まえ、排水 施設、側溝の設置を計画している。
ベースキャンプから発生するゴミ・下水等による 自然環境への影響を最小限にするための措置を 検討し、確認すること。	「付録-8 簡易環境報告書(SER)」に記載の通り、以下に挙げる措置が計画されている。 ・廃棄物の管理に係るルールや手順の作成 ・海岸から250m以内の距離での工事現場の回避 ・作業者の数に十分見合った衛生施設(トイレ等)の設置 ・衛生施設からの排水を含む工事現場からの排水の濁度、汚染度、影響に応じた適切な排水処理と排水 ・再利用、処理、廃棄される前の廃棄物の適切な保管、管理 ・種類に応じた廃棄物の表示、分別と土壌、水質、大気の汚染に繋がりかねない状況、環境下での保管の回避 ・作業場付近で採取、調達された資材の容器等での適切な保管

	・コンクリートミキサー車や廃棄物の洗浄水の直接的な放流の
	禁止
社会配慮	
生計手段の喪失等、被影響者の職業・業種や家族	生計手段の喪失等、被影響者の職業・業種や家族構成について
構成の調査については RAP の社会経済調査にお	はRAP の社会経済調査を通じて確認、評価されている。
いて具体的に評価すること。	
本事業での詳細な道路ルート選定に当たっては	石油パイプライン、墓地、井戸、Worship Place といった重要な
石油パイプライン、墓地、井戸等、重要な社会イ	社会インフラや文化施設は調査を通じて特定され、路線選定に
ンフラや文化施設を極力迂回するよう配慮する	当たってはこれらへの影響の回避、低減に向けた検討がされて
こと。	いる(※石油パイプラインや大規模な共同墓地についてはこの
	結果、影響が回避されている)。
ステークホルダー協議・情報公開	
ステークホルダー協議に関して、民族の分布や特	ステークホルダー協議の実施回数、会場、周知方法、言語等は
性に考慮して実施回数、会場数、周知方法、開催	事業対象地周辺に住む人々の社会経済的特性(民族、生活、言
言語等を考慮すること。	語等)や ANE 等関係者の意見、JICA 環境社会配慮ガイドライ
	ンを踏まえ、「モ」国の法制度に従って決められた。
農地喪失に伴う生計の補償について、パブリッ	農地の喪失に伴う生計の補償を含む補償方針については住民
ク・コンサルテーションに含めるよう、実施機関	説明会に含めるよう、調査団から ANE 及びローカルコンサル
に申し入れること。	タントに申し入れている。また、こうした内容は2017年3月7
	日に開かれたステークホルダー協議で説明された。