

Esso Highlands Limited



Papua New Guinea LNG Project

**KOPEANDA LANDFILL
Resettlement Action Plan**

PGHU-EH-SPZZZ-420002

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ACRONYMS

Acronym	Definition
ANUE	Australian National University Enterprises
BPEA	Best Practices in External Affairs
BSA	Benefit Sharing Agreement
EHL	Esso Highlands Limited
EIS	Environmental Impact Statement
ELC	Environmental Law Centre
FN	Family Number
FRV	Full Replacement Value
GDC	Gigira Development Corporation
HGCP	Hides Gas Conditioning Plant
HGCP RAP	Hides Gas Conditioning Plan Resettlement Action Plan
HGDC	Hides Gas Development Corporation
HHR	Heavy Haul Road
HQ1-3	Hides Quarries Sites 1, 2 and 3
IBD	Interest Bearing Deposit
IFC	International Finance Corporation
ILG	Incorporated Land Group
IPA	In-Principle Agreement (now referred to as an IPCA)
IPCA	In-Principle Compensation Agreement
KAAR	Komo Airstrip Access Road
KLF	Kopeanda Landfill
Lanco	Landowner Company
LBBSA	License-Based Benefit Sharing Agreement
LNG	Liquefied Natural Gas
LR	Livelihood Restoration
M&E	Monitoring and Evaluation
MUAC	Mid Upper Arm Circumference
O&GA	Oil and Gas Act
OIMS	Operations Integrity Management System
OSL	Oil Search Limited
PDLs	Petroleum Development License
PIA	Project Impacted Area
PNG	Papua New Guinea

Acronym	Definition
PNG LNG	Papua New Guinea Liquefied Natural Gas Project
PS	Performance Standard
PRL	Petroleum Retention License
RAP	Resettlement Action Plan
RIT	RAP Implementation Team
RPF	Resettlement Policy Framework
RTC	Resettlement Team Coordinator
SHP	Southern Highlands Province
SIA	Social Impact Assessment
SMLI	Social Mapping and Landowner Identification
UBSA	Umbrella Benefits Sharing Agreement
VG	Papua New Guinea Valuer General
WMA	Waste Management Area

EXECUTIVE SUMMARY

Introduction

Esso Highlands Limited (the Company) proposes to develop the Papua New Guinea (PNG) Liquefied Natural Gas (LNG) Project (the Project) to commercialise the gas reserves within the Southern Highlands and Western Provinces of PNG. The Waste Management Area (WMA) at Hides forms part of this development to receive Project generated waste for activities between Kutubu and Hides.

Resettlement Goal

The Project's overall resettlement goal is to design and implement resettlement in a manner that gives physically and economically displaced persons the opportunity to at least restore their livelihoods and standards of living. This Resettlement Action Plan (RAP) (referred to as the Kopeanda Landfill [KLF] RAP) is consistent with the goals, principles, and processes set out in the Resettlement Policy Framework (RPF) developed for the Project (October 2009).

Institutional and Legal Framework

The resettlement process will comply with all legal requirements and criteria, such as those specified in the Oil and Gas Act, key PNG National Government institution guidelines, legislation of provincial and local governments, and the International Finance Corporation's (IFC) Performance Standards on Social and Environmental Sustainability.

The Social, Economic and Cultural Environment

The Kopeanda Landfill lies wholly within the Komo-Margarima District in the Southern Highlands Province (SHP). The area is inhabited by the Huli ethnic group. As in all other resettlement affected Huli catchments, the Project has relied upon self-relocation programs to produce the best sustainable outcomes for physically displaced people.

Socio-Economic Surveys and Baseline Status

Baseline research has involved a census and assets register, socio-economic, and land-use surveys using geo-referencing to identify households, land ownership and usage patterns. The Kopeanda Landfill site has 47 affected households of which 33 will require physical relocation, and 14 will experience economic displacement. A total of 340 household members were recorded, of whom approximately 280 will require physical relocation.

Forty-five (45) percent of the populace were literate with 57% of school-age children attending school. Forty percent of persons aged 15 years have had no formal education - 27% of males, and 50% of females. Only 8% of surveyed household members had reached Grade 10 or higher.

Unemployment is high at 92% with the remainder being employed as security, drivers, drillers, health assistants and cooks. Levels of reported income generated by royalties, equities, and rental were similar to findings for the HGCP catchment. Patterns of expenditure and income were similar to all other resettlement impacted areas in the Hides-Komo region.

Consultation and Disclosure for the Kopeanda Landfill RAP

Resettlement public consultations commenced in mid 2010 and are on-going. A representative KLF Committee was established, as agreed to by all site residents. Communication mediums included oral presentations, flip charts, booklets and flyers in English, Pidgin and Huli. The Environmental Law Centre (ELC) played an active monitoring and review role as an impartial observer, and also assisted affected people with participation in the resettlement process on an informed basis. A process of disclosure of documents is in place and will include public dissemination and distribution of the KLF RAP, provision of all agreements in Huli and Pidgin, and a Huli translation of the executive summary for public distribution.

Project Impacts

The list below summarizes the principal impacts likely to be experienced by KLF households:

- Thirty-three (33) households will be physically displaced, with 40 structures affected. A further 14 households will be economically displaced. At the time of writing all physically impacted households have identified potential resettlement sites.
- The required land access area totals approximately 42 ha, including 9.7 ha currently under garden cultivation. This includes 112 gardens belonging to 39 households, of which 14 are non-resident. A total of 25,237 trees were also counted in the survey, and will be compensated. The project has committed to applying Full Replacement Value (FRV) rates for all gardens and trees. Resources will be engaged to ensure no affected landowner has been or will be deprived or disadvantaged by a shortfall between the PNG Valuer General (VG) rate - which may have been previously applied - and the newly adopted FRV rates.
- Disruption in social networks is expected to be minimal, as the majority of affected households will likely move small distances away from the landfill.
- Two (2) trade stores within the impacted area will be relocated. No loss of employment is anticipated.
- No community buildings will be impacted by the development. The Project will finance and oversee the construction of paths around the site to compensate for any loss of access. These will be developed as part of a Huli trench (*barat*) that will be constructed around the site as a community project. Relocated individuals will benefit from the region-wide community infrastructure that will eventuate both from the Project discretionary programs and the Government commitments made in the License-Based Benefit Sharing Agreement (LBBSA).
- No water sites occur within the area. However, the Project is currently investigating risks to water resources at all sites and identifying suitable mitigation measures that include the construction of replacement water sites in the form of roof collection tanks at locations agreed with the community.
- Twenty-one (21) minor cultural heritage sites will be impacted by the development.
- Regional population increase and influx may arise due to construction activities, improved services and employment opportunities, but the landfill site is unlikely to be a specific locale that attracts outsiders or settlers as there will be no major construction activity.
- Households which are especially vulnerable to displacement impacts, e.g., the elderly, disabled or landless, will be identified and provided with special assistance.

Compensation and Resettlement Strategy

Those households subject to economic displacement are eligible to receive damage and deprivation compensation as well as livelihood restoration. Those households subject to physical displacement are eligible to receive the same types of compensation as well as a relocated individual assistance package of K51,000, including part cash, and a deposit into an interest bearing and/or a savings account. The Project provides the services of a specialist Compensation and Business Advisor, who will advise and consult with affected people on money management, and potential business and investment opportunities.

Compensation will be paid to clans for damage and deprivation to land. This will include annual rental for well as payments for initial damage/exclusion (42 ha) and permanent damage to surface area (9.7 ha). Clans eligible to receive this compensation are the Taguali, Warabia, Tamea and Hagu clans. The clan leaders are still to agree on the allocation of land between clans.

Once the total amount has been defined by the Project in an in Principle Compensation Agreements (IPCA) with landowning clan leaders and an Agency Agreement is executed firmly establishing the compensation owed, the compensation damage amount is accrued as a liability by the Company until such time as payment can proceed.

Allocation of land between clans is agreed through a process of mapping and consultation. The clan areas are mapped on each site by the Project with the participation of local clan

leaders. When payments are made to the clans, the clans will distribute the compensation in accordance with customary Clan principles to clan members.

Livelihoods Restoration

Apart from compensation payments, livelihood restoration programs will be implemented to give physically and economically displaced persons the opportunity to at least restore their livelihoods and standards of living. These programs include land-based and non land-based activities.

Grievance Management Framework

The objective of the Project Grievance Mechanism is to receive, respond, and address any grievances made to the Project. Grievances will be responded to as quickly and efficiently as possible, avoiding escalation of the issue, reducing negative impacts on the local population and assisting to maintain a positive attitude towards the Project amongst stakeholders.

Organizational Roles and Responsibilities

Responsibility for the planning, implementation, and monitoring of the KLF resettlement program rests with the Company. The Company's Land and Community Affairs (L&CA) team will undertake these activities, and will be supported by the Company's Community Affairs personnel. Adequate resources and effective management will be allocated to ensure that the KLF RAP is developed and implemented with the participation of affected people/communities in a timely manner.

Monitoring and Evaluation

Monitoring and evaluation will provide information on whether compensation, resettlement and development investments are providing positive inputs, and will indicate the need for corrective action that may be required to achieve Project goals. An independent third party will conduct the final completion audit to determine whether the Project's undertakings to give physically and economically displaced persons the opportunity to at least restore their livelihoods and standards of living were properly conceived and executed, and have had the intended outcome measured against pre-resettlement baseline conditions.

Resettlement Implementation Schedule

A schedule of tasks has been developed to implement the major components of resettlement over an expected four month period, with livelihood restoration and monitoring continuing for two years.

Cost and Budget Estimate

The budget has been approved by the Company, and additional budget for contingencies will be made available as needed. The cost of the KLF resettlement is estimated at approximately US\$2.6 million, including In-Principle Compensation Agreement (IPCA) clan payments. In addition the landowning clans will receive an annual rental of K700/ha.

1.0 INTRODUCTION

This Resettlement Action Plan (RAP) focuses on the resettlement of people currently residing on a site known as Kopeanda (Figure 1-1). The site is inhabited by the Huli ethnic group.

The Kopeanda Landfill Site is required to treat waste from Hides operations, particularly the Hides Gas Conditioning Plant (HGCP) and Hides Quarries (HQ1 and HQ3). Land access requirements for the proposed site covers an area of approximately 42 ha, of which approximately 10 ha is required for infrastructure related to the landfill site, with the remaining 32 ha as a buffer area around the site. The buffer zone has been designed in accordance with legal requirements for a 250 meter buffer area around a landfill site, within which residential development is prohibited¹. Air quality modeling results have shown this buffer to be sufficient for potential air quality impacts resulting from the incinerator to be installed onsite.

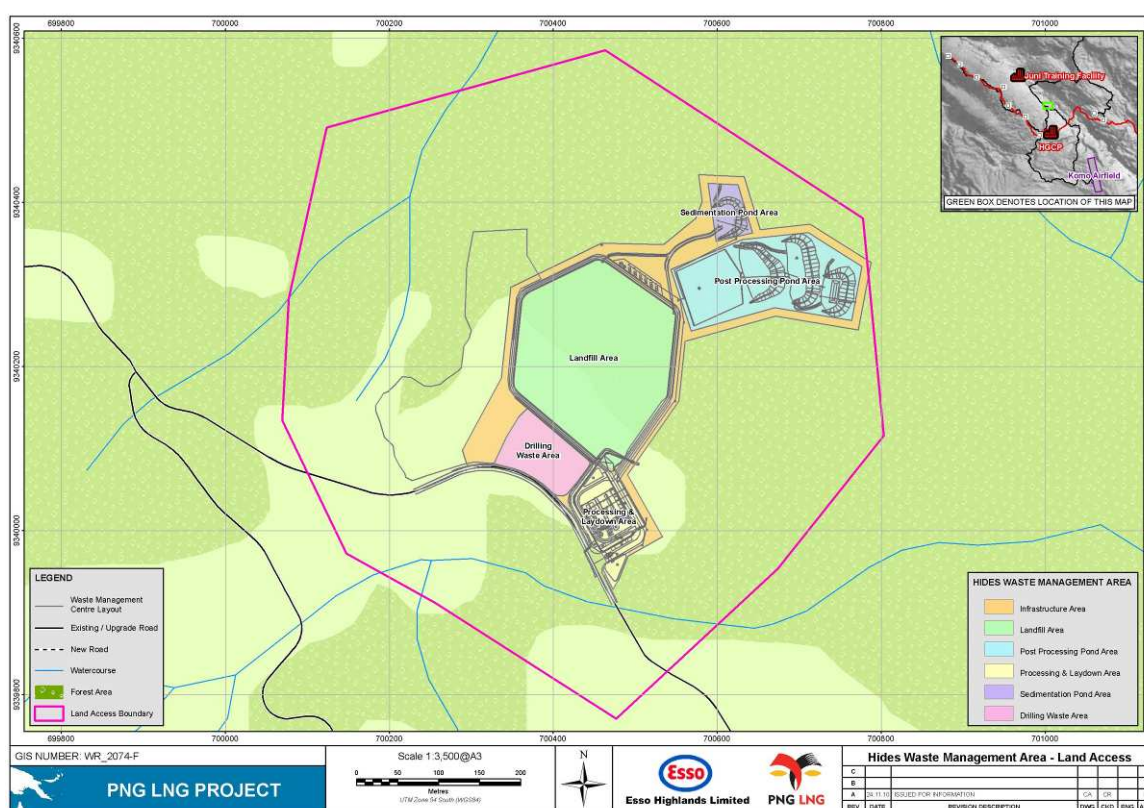


Figure 1-1: Kopeanda Landfill Site – Land access required

1.1 Description of the Project

The Papua New Guinea (PNG) Liquefied Natural Gas (LNG) Project (the Project) will commercialize the gas reserves within the Southern Highlands and Western Provinces of

¹ PNG Landfill Code of Practice is based upon both US EPA and IFC Guidelines. Project compliance with the PNG Landfill Code of Practice is a requirement under the Project Environmental Permit 9th September 2009 (amended 29th October 2009).

PNG. Natural gas will be produced from gas fields at Hides, Angore and Juha, and from existing oil fields feeding production facilities at Kutubu, Agogo and Gobe. It will be processed and then transported via pipeline from these provinces through Gulf Province and the Gulf of Papua to LNG producing and transporting facilities in Central Province.

The Company is the operator of the Project. The Project is to be implemented through a joint venture between licensees representing the following participating interests: Esso Highlands Limited as operator, Oil Search Limited (OSL), Santos Limited, Nippon Oil Exploration Limited, and the Independent State of Papua New Guinea and Mineral Resources Development Ltd representing landowners.

1.2 Resettlement Goals and Principles

The Project's overall resettlement goal is to design and implement resettlement in a manner that gives physically and economically displaced persons the opportunity to at least restore their livelihoods and standards of living.

This RAP is consistent with the goals, principles, and processes set out in the Resettlement Policy Framework (RPF).

1.3 Sources of Information

Key sources of information used in the preparation of this Resettlement Action Plan include:

- IFC Performance Standards (PS) 5 Land Acquisition and Involuntary Resettlement, PS 4 Community Health and Safety and Security, and PS 7 Indigenous People;
- Papua New Guinea Liquefied Natural Gas Project Environmental Impact Statement (EIS) and Social Impact Assessment (EIS SIA Appendix 26) (2009);
- Census and survey results for the affected area;
- Komo Airstrip, Komo Airstrip Access Road (KAAR), HQ1-3 and HGCP RAPs;
- Petroleum Development License (PDL) 1, PRL (Petroleum Retention License) 12 and PRL 02-12 Social Mapping and Landowner Identification studies (SMLIs);
- National Content Plan (outlines workforce development, local business development, investment in strategic community programs);
- Assimilation of lessons learned in other resource developments in PNG and especially adjacent to the Project - e.g., petroleum hubs of Moran, Mananda, Gobe and Kutubu, gold at Kare and Porgera, mining at Lihir²; and
- Company Corporate Elements (Best Practices in External Affairs (BPEA), Company Land Use Standard, Community Awareness element of Operations Integrity Management System (OIMS) on Property Rights and Resettlement, the Company's Policy on Human Rights).

1.4 Site Selection and Avoiding/Limiting Resettlement

1.4.1 Site Selection

A report³ on the Waste Management Area (WMA) landfill selection process is attached as Appendix 1. A brief summary follows.

A short list of five prospective sites within a 5km radius of the HGCP was developed and these are illustrated in Figure 1-2.

² PNG Chamber of Mines & Petroleum (2000), Landowner Compensation in PNG Mining & Petroleum Sectors, which includes comparison of resettlement packages and history for Ok Tedi, Porgera, Lihir, Misima and Panguna.

³ Appendix 1 - Hides Landfill – Site Selection Analysis, October 2010.

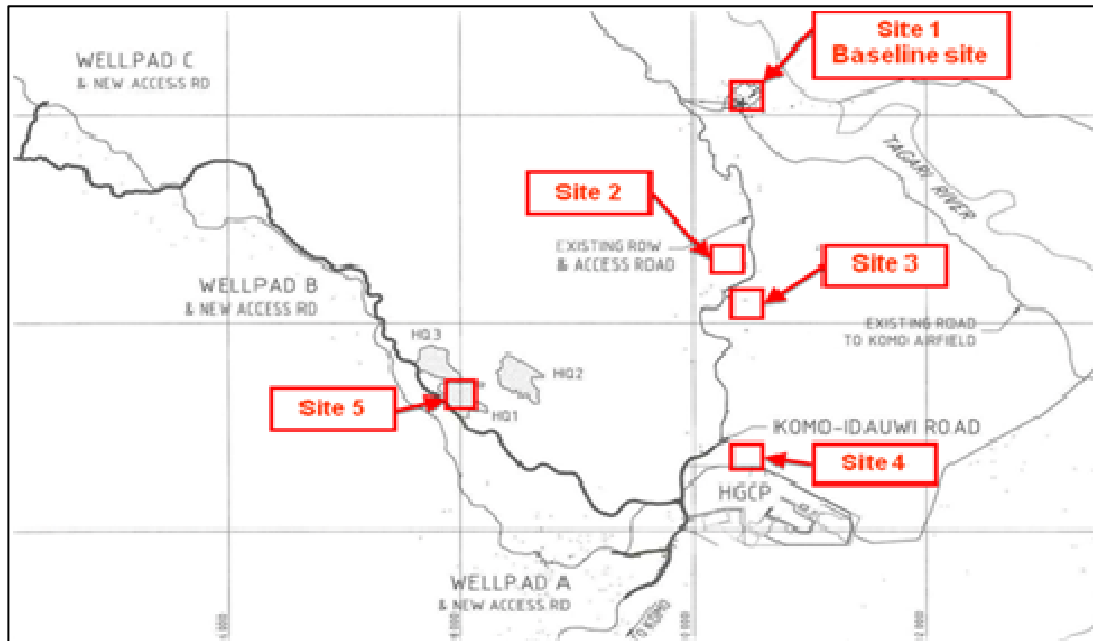


Figure 1-2: Prospective Hides Landfill sites, roads and HGCP infrastructure

From an engineering perspective, of the five potential landfill sites, Site #3 and Site #4 were eliminated following a field investigation which assessed the physical ground conditions as unsuitable. Sites #2 and #5 also posed environmental risks and failed to meet the legal requirements of the PNG Landfill Code of Practice.

As indicated in Appendix 1, whichever locale in this region was selected, there would be an inevitable resettlement impact precisely because all land is under customary ownership. Moreover, when the environmental and logistical conditions are taken into account (PNG legal requirement of a 250 meter buffer zone, relatively flat terrain, an area of approximately 42 ha and proximal distance from HGCP of no more than 5 km) the number of potential and prospective landfill areas in this landscape envelope is extremely limited.

The finding of the site selection process was that Site #1 presented as the best option from an engineering, cost and schedule viewpoint.

1.4.2 Minimizing Resettlement Impacts

During early planning the possibility of allowing ongoing gardening activities in the buffer zone around the KLF site was considered. Such an option would have allowed ongoing use of 4.2 ha of the total 9.7 ha garden area impacted by the landfill development. Subsequent risk analysis based on additional air quality modeling, however, showed that health risks associated with the hazardous waste incinerator to be constructed at the site will make the area unsuitable for ongoing activity within the buffer zone. It was thus agreed that all gardens within the footprint and buffer area must be relocated. This land will be available again following closure of the waste site.

2.0 INSTITUTIONAL AND LEGAL FRAMEWORK

The Land Act (1996) and Oil & Gas Act (1998) are the principal PNG legislation relating to land, compensation and resettlement. PNG does not have a formal resettlement policy or statute. The KLF, as is the case with all other Project RAPs, conforms to the requirements of PS 5 (Land Acquisition and Involuntary Resettlement) of the International Finance Corporation. Further details are available in the Komo and HGCP RAPs (Section 2⁴).

⁴ Esso Highlands Limited PNG LNG Project Komo Airstrip Resettlement Action Plan, November 2009 (revised November 2010), and Hides Gas Conditioning Plant RAP of May 2010 (Revised November 2010).

3.0 OVERVIEW OF KOPEANDA LANDFILL SOCIAL BASELINE RESOURCES

Various baseline studies have been undertaken in the KLF area to provide an understanding of the socio-economic conditions of the area, as well as specific studies on the livelihood assets and activities of the households which will be physically or economically displaced. These are described below.

The pre-resettlement socio-economic baseline survey⁵ as it relates to the KLF area consisted of the following:

- Social Mapping and Landowner Identification studies; and
- Social Impact Assessments including cultural heritage surveys.

The RAP Implementation team and the Census and Survey team undertook further refined studies to obtain more specific and contemporary information about impacted individuals, households, land holdings and attitudes. This research included:

- A land and house assets survey, providing a database of where people live and where they plan to relocate;
- A family and household socio-economic (census) survey of each resettlement household that will assist the Project to monitor the well-being of those who are affected by physical and/or economic resettlement;
- An individual health and malaria survey which provides a baseline for ongoing healthcare, both during and after the resettlement process;
- A physical examination of all affected household people, including: (a) blood testing for malaria parasites and hemoglobin; (b) nutritional status as assessed by body mass index (BMI) for adults; and (c) standard anthropometric height/weight/age measurements for children with the addition of Mid Upper Arm Circumference (MUAC), based on standard World Health Organization techniques; and
- A cultural heritage survey to support the suite of KLF area investigations.

The information from these surveys contributes to the development of options for livelihood support and community development training, agriculture, and health improvement initiatives.

⁵ i.e., what is known before any resettlement associated studies

4.0 THE SOCIAL, ECONOMIC AND CULTURAL ENVIRONMENT

The Kopeanda Landfill area lies wholly within the Southern Highlands Province (SHP) of Papua New Guinea. Within the SHP, the area falls within the Komo-Margarima District.

4.1 Cultural Aspects

4.1.1 Background to the Occupation of the KLF

A detailed history of the Komo area is contained in the Komo Airstrip RAP. The Komo area has a history of relatively recent settlement by numerous fragmented groups and a past characterized by protracted conflict and out-migration. This situation is complicated by multiple layers of occupation by the original non-Huli-speaking clans (collectively referred to as Dugube), by fragments of varying sizes of Huli refugee clans from the north, and by further movements caused by subsequent fighting within the Komo area.

The Kopeanda Landfill site appears to have been settled in the recent past and by people with affiliations to both the HGCP and HQ1-3 areas.

Table 4-1 provides a summary of the principal resettlement clans recorded for the KLF area with a comparison against the 2008 PRL12 Social Mapping and Landowner Identification study (Goldman 2008), the ANUE census and Coffey cultural heritage research.

Table 4-1: Kopeanda Landfill resettlement principal clan listing

ANUE Land Survey	Cultural Heritage Survey	Goldman-SMLI 2008- Main Clans
Hagu	Hagu	Hagu
Warabia	Warabia	Warabia
Taguali	Taguali	Taguali
Honaga		
Wenani		
Yugu		
Dalini		
Tamea		

Eighty (80) percent of the KLF residents are from the Hagu, Warabia, Taguali or Tamea clans, with the majority being from the Warabia and Taguali clans. The Warabia and Hagu, as well as the Taguali and Tamea clans, are resident in similar areas to the east and west of the site respectively, as shown in Figure 4-1.

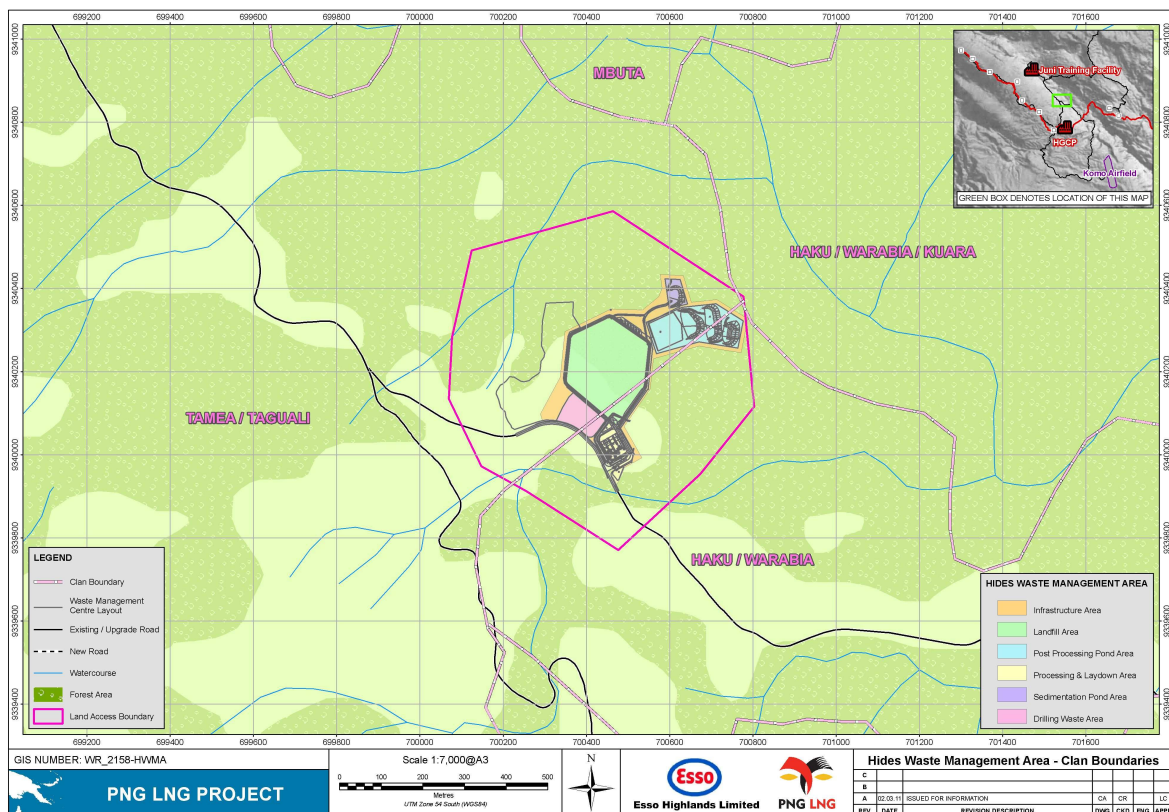


Figure 4-1: Clan distribution in Kopeanda area

4.1.2 Ancestral Land Rights

The KLF site is 'customary' land. Three possible categories of resident occur on any piece of clan land each with attenuated tenurial rights:

- Agnates, or members of the primary landowning clan who trace their descent through males (known as *tene*);
- Cognates, those related through a female ancestor, known as *yamuwini*; and
- Those not related by descent, known as *wali haga*, *tara* or *igiri yango*, who are invited to occupy land or are given permission to do so by *tene* or *yamuwini* members.

Goldman portrays the *tene* clan members as the 'hotel owners' and the *yamuwini* and *wali haga* as 'guests' and/or 'guests of guests'. However, if the guests stay for long enough (a number of generations) they can sometimes attain the status of *tene* members being referred to as 'just like *tene*' (*tene ale dege*). It is not immediately apparent to an outsider who is *tene* and who are *yamuwini* or *wali haga*; and the same person may be *tene* in one territory and *yamuwini* in another and *wali haga* in yet another.

The above characteristics thus explain both why and how KLF residents self-identify from multiple clan groups, many of which have less than ten members in the survey area.

4.1.3 Historic Relationship to Kopeanda Site

Households at Kopeanda have resided in this location for many years, following a general migration of their ancestors from an area higher in the hills over 200 years ago. The group

moved to Kopeanda because their land in the hills was losing fertility, and the climate was colder. More recent residents who moved to the area over the past ten years have been consolidating a trend that was already underway. The reason for living at higher altitudes in the past was to avoid malaria found in the valleys and lower altitudes.

Local leadership is predominantly vested in the Councilor for the area. The group can be considered more closely knit than other communities that have been impacted by Project resettlement to date. The four smaller groups that comprise KLF people acknowledge a common ancestor.

4.2 Demographics and Household Profile of Directly Affected Population

The Census and Survey Team estimates that the Kopeanda site has 47 (FN 501-548) affected households, of which 33 will require physical relocation, and 14 of which will experience economic displacement, losing some of their gardens for which they will be compensated, although not requiring physical resettlement. Figure 4-2 shows the location of impacted houses and gardens in the proposed Waste Management Area.

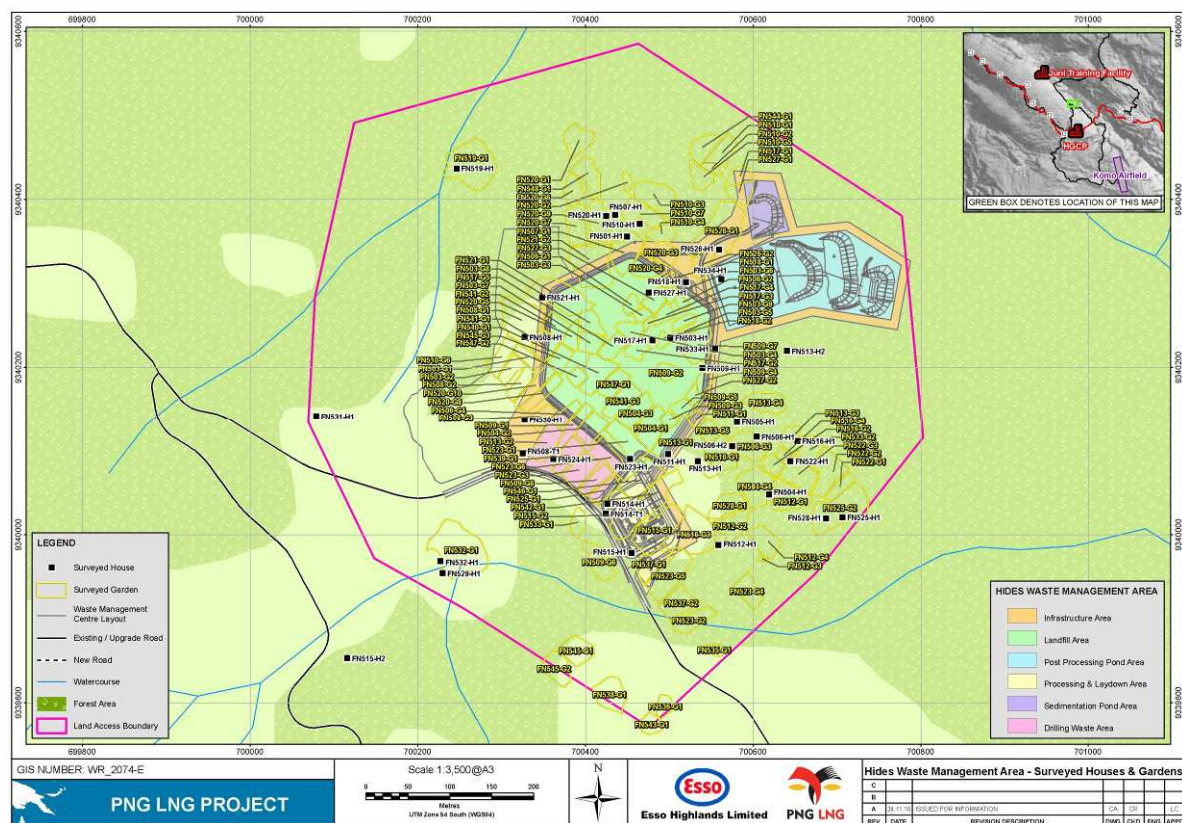


Figure 4-2: Overview of affected households (houses & gardens) at Kopeanda

A total of 340 household members were listed in the social survey form. There are potentially 280 physically impacted persons who require relocation, and 38 structures owned by the 33 impacted families.

Of the 340 household members there was an even divide between male and female. A total of 55% of recorded household members were absent, which is an extremely high absentee

level. Of those absentees 81 (23%) were said to be resident in Tari. The age breakdown of the people recorded is shown below in Table 4-2.

Table 4-2: Age Breakdown of Kopeanda Landfill Household Residents

Age Range	Total	% of Total
0-5	62	18
6-14	54	16
15-19	48	14
20-55	148	44
56+	28	8
Total	340	100

The average family size of 7.9 persons per household is the same figure yielded by the HHR RAP survey and in line with levels broadly known for the Huli area. Fifty-nine (59) percent of respondents had never married, which again seems consistent with results obtained for HHR (59%), HGCP (56%), Komo Airstrip (60%) and the more general Hides catchment (55%) noted in the EIS SIA (2009).

4.3 Economic Profile and Livelihoods

The following sections provide short discussion of the status of livelihoods in the region. The importance of these considerations and the regional catchment comparisons is that they help highlight social issues which are not otherwise captured by direct feedback from landowners, are not revealed by ELC direct interview or focus group discussions, or which affected landowners remain unaware of. For example, understanding that one area may have lower literacy, lower school attendance rates or that income from sale of agricultural produce is higher than in other adjacent areas, can only be revealed by this kind of comparative and metric exercise. Succinctly stated, these analyses go to the crux of understanding 'issues' within the KLF resettlement affected region.

4.3.1 Economic Conditions and Activities/Livelihoods

Income across the province is generally very low with the exception of those landowners who receive royalty and equity benefits. In respect to the Komo-Margarima and Nipa-Kutubu districts, Hanson *et al* (2001:101,104) concluded that "*overall, people in Komo-Margarima District [and Nipa-Kutubu] are seriously/extremely disadvantaged, relative to people in other districts of PNG*". Findings discussed in Section 4.4 of the HGCP RAP (2010) indicate that in the intervening period between 2001 and 2010 some specific areas within these districts have enjoyed increased standards of living.

Agriculture provides the main source of cash income through sales of coffee, fresh market food, and firewood. It is however important to recognize that even this source of cash income is predominantly derived from selling occasional surpluses from what is predominantly subsistence food cultivation. Most of the coffee grown in SHP is east of Nipa. Trade store businesses tend to be short-lived with only those situated close to major roads surviving beyond a 12-month period. Profits get disbursed through customary networks of obligations, and re-supply of store items is hampered by transport and road problems. Wage

employment from the Kutubu-Gobe-Hides oil and gas operations is the main non-agricultural source of cash income.

4.3.2 Income and Employment Activity

The KLF social census recorded 92% of people were unemployed, which is consistent with the HHR rate of 92%. The majority of Kopeanda landowners practice subsistence horticulture so the recorded levels of paid employment do not imply quite the same consequences or values normally associated with industrialized societies. Most people in Kopeanda produce for subsistence rather than sale. Only 7% had full-time jobs and 1% part-time employment; as elsewhere in this region 84% of the actual paid employment reflected male participation. The job profiles were mainly security, drivers, drillers, health assistants and cooks. Employers included PNG Government, Oilmin, Missions and the local landowner company, GDC - 3 respondents said they were employed by the Company, and another by a Company contractor.

Figure 4-3 indicates that across the resettlement impacted areas levels of employment appear to show little variation.

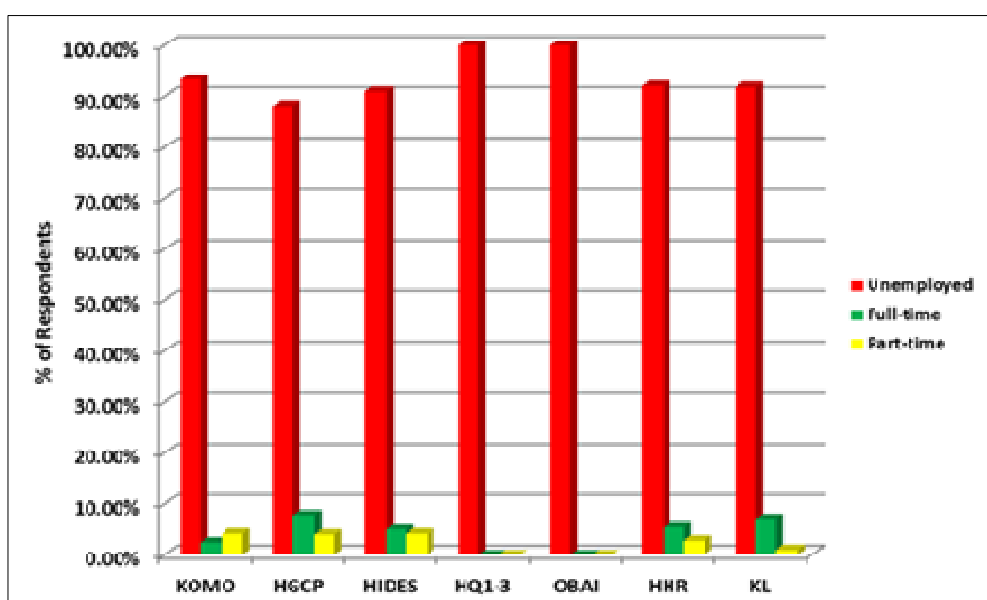


Figure 4-3: Comparative employment levels for Obai, HQ1-3, HGCP, HHR, KLF, Komo and Hides catchments

Longitudinal data from all previous petroleum and gas SIA surveys indicated that bride price, local subsistence activity including fishing and cash cropping, and exchange (e.g., *wantok* gifts) continue to represent the vitality of the traditional economy in the financial lives of the populace. Three families claimed full ownership of trade stores and two families' part ownership, whilst five families reported sale of market goods from their home premises. One respondent noted an interest in a Passenger Motor Vehicle (PMV) business.

Figure 4-4 sets out the principal income sources for the KLF residents and compares this with the results for other resettlement impacted constituencies. The KLF profile is not dissimilar to the HQ1-3 area though appears to evidence less development of business interests.

Declared income from the sale of coffee (72%) - Komo Airstrip (83%), HGCP (91%), KAAR (93%), and HHR (89%) - was amongst the lowest recorded for the region and reflects the noted lack of coffee trees in KLF. This is largely attributed to the fact that this area did not benefit from the OSL or Southern Highlands Rural Development Program seed distributions. Income from the sale of cash (24%) or food crops (97%) was high and above recorded findings from other resettlement impacted areas. This accorded with the general consensus that the KLF land was particularly fertile, and gardens generally presenting as more abundant than elsewhere.

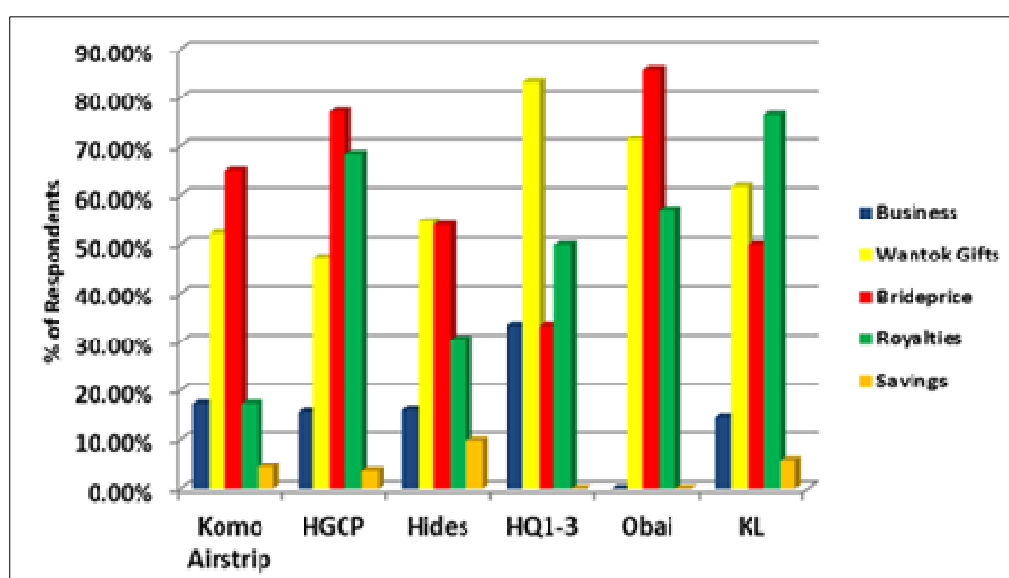


Figure 4-4: Income sources for HGCP, HQ1-3, Obai, KLF, Komo Airstrip and Hides catchments

Table 4-3 depicts income sources across other resettlement impacted areas. The KLF profile is consistent with HHR and KAAR responses - low income levels for sale of livestock only, cash crops only, and fish, but relatively higher for employment (though not business). Along most other income parameters KLF residents do not deviate from the regional means in any statistically important ways.

Table 4-3: Respondent Income Sources for HGCP, HQ1-3, KLF, Komo Airstrip, KAAR and HHR catchments

Source	Resettlement Surveys					
% Household Income ⁶	KLF	HGCP	HQ1-3	Komo Airstrip	KAAR	HHR
Employment	24	9	0 ⁷	22	13	18
Royalties	76	68	50	17	20	50
Business	15	16	33	17	33	17

⁶ Note that, as more than one response was possible, percentages do not add up to 100%.

⁷ There was some discrepancy between the census which recorded nil employment, and the social survey which reported income from employment at 66%. We believe the census figure is the more accurate reflection of the status of employment in the area.

Source	Resettlement Surveys					
% Household Income ⁶	KLF	HGCP	HQ1-3	Komo Airstrip	KAAR	HHR
Cash crops (only)	24	77	67	78	27	4
Livestock only	0	91	100	100	0	0
Fishing	0	9	17	0	0	8
Bride price	50	77	33	65	47	43
Wantok gifts	62	47	83	52	87	64
Savings	6	4	0	0	7	7

This kind of profile comparison indicates not simply the continuity of findings for this area, but also the very few people who derive any income from saving regimes. This presents as a challenge to the Project - how to encourage investment amongst landowners who look for more immediate returns from agriculture and business enterprises.

Consistent with the general picture that emerges of a more traditional based economy, Figure 4-5 indicates that average family holdings of pigs and chickens is relatively good, with a declared pig ownership higher than anywhere else in the region and close to double that of HQ1-3, Obai and Komo general. Again, this may in part reflect the higher yields of sweet potato per garden prevalent in the KLF. Various other households reported having guinea pigs and fish ponds.

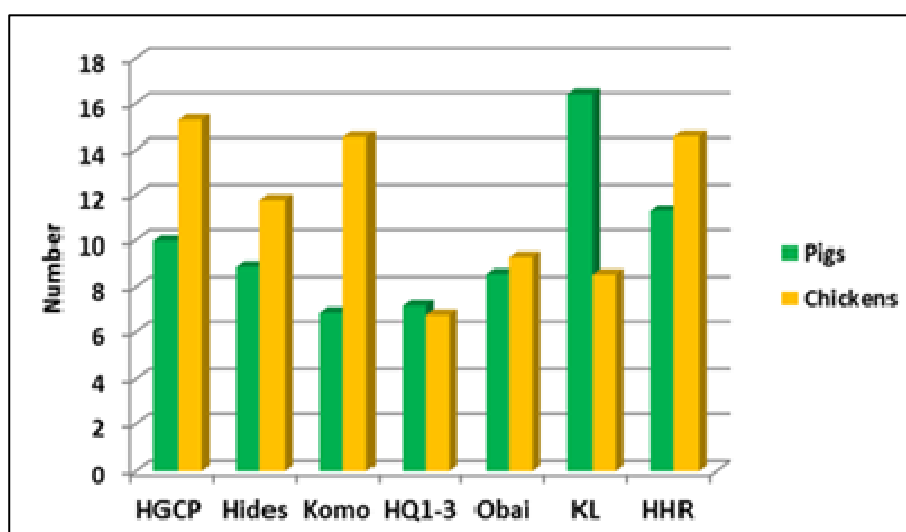


Figure 4-5: Average pigs and chickens per household – Obai, HQ1-3, HGCP, HHR, Hides and Komo catchments

The average (mean) annual income per household for the KLF households which provided data is K20,928, more than double than when calculated by median (K10,070), pointing to a highly abnormal distribution. Closer examination of the data shows that the mean value is greatly inflated by a number of outliers reporting significantly higher incomes than others. The most significant of these include K250,000 reported in compensation income by one individual, and K52,000 reported for one trade store.

4.3.3 Expenditure Activity

The resettlement survey reported an average annual household expenditure of K14,030 and a median of K7,630 for KLF households. This again points to an abnormal distribution, skewed by three households who respectively claimed to spend K50,000 and K31,000 on transport, and K26,000 on trade store purchases.

As noted in previous RAPs, figures on income and expenditure reported in the socio-economic survey should be interpreted with some caution. Even taking potential inaccuracies in income and expenditure reporting into account, the figures reported indicate that the majority of households are not primarily engaged in a cash-based economy, relying largely on subsistence production. The monitoring program will obtain more accurate income and expenditure information over time.

The patterns of expenditure (Figure 4-6) recorded point to the continuity of traditional modes of social exchange through bride price, *wantok* gifts, and funeral donations. The profiles of expenditure are very similar to most other resettlement catchments though a higher contribution of outlays appears to be going to court fines and the local Church.

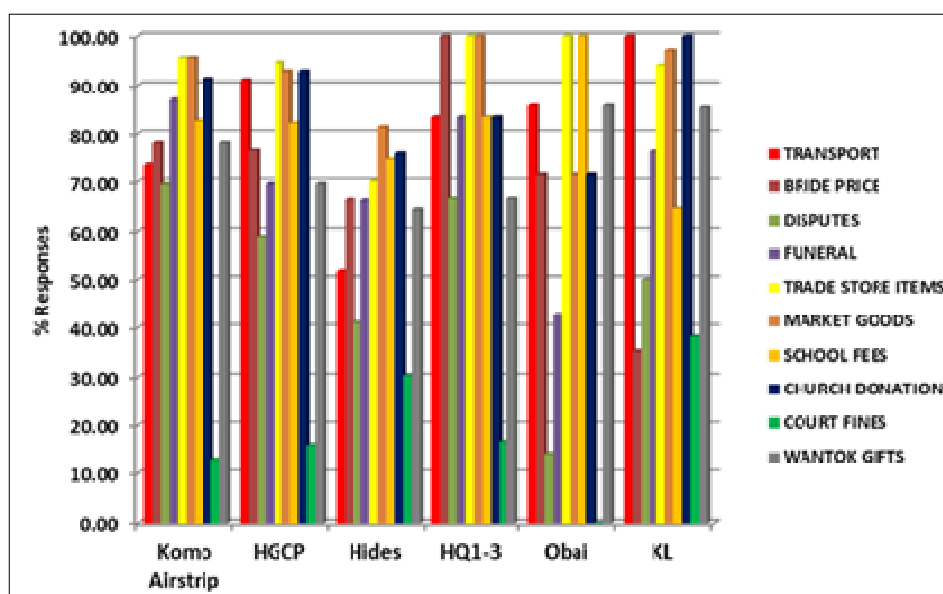


Figure 4-6: Expenditure patterns of Obai, HQ1-3, KLF, and HGCP residents by comparison with Komo Airstrip and Hides catchments

Figure 4-7 illustrates the main purchases listed by Kopeanda households. Items listed by over 60% of households can be seen to primarily address basic needs, including soap, basic food supplies, food supplies, kerosene and garden tools, as well as *buai* (betel nut) and tobacco. Following these items there is a sharp decline in items listed, of which cooking oil and flex cards are included as an example of what can be considered more 'luxury items', listed by only 20% of households. These patterns are typical of 'rural' Huli communities which are less advantaged than the resource hubs of Hides, Moran and Kutubu.

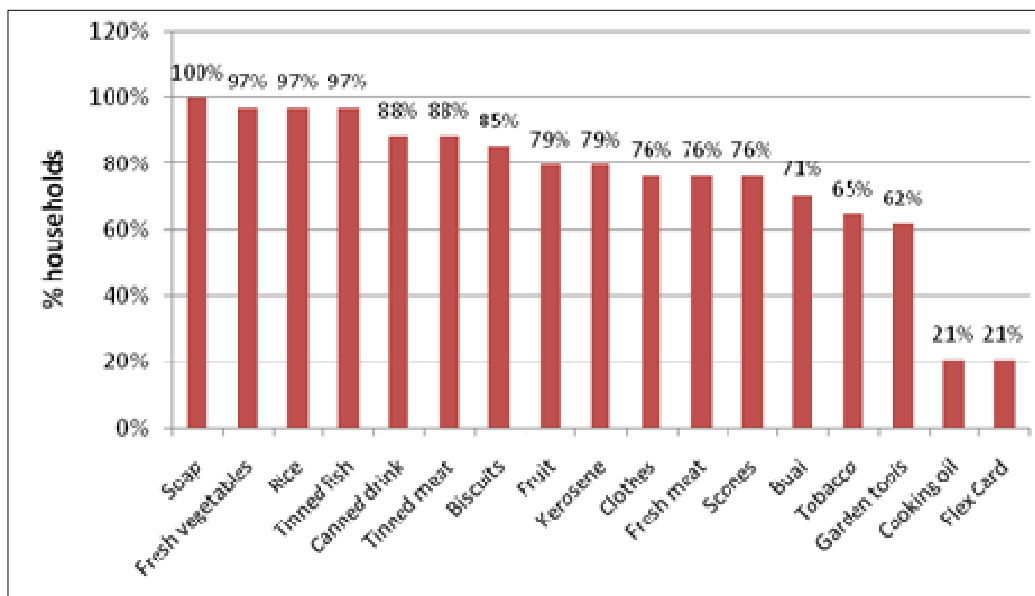


Figure 4-7: Main items of expenditure for Kopeanda households

Travel profiles for KLF households (Figure 4-8) broadly reflect the generalization that residents at KLF represent a more 'rural' enclave. Not one respondent indicated they had travelled overseas and most KLF residents had visited local urban hubs such as Tari and Mount Hagen.

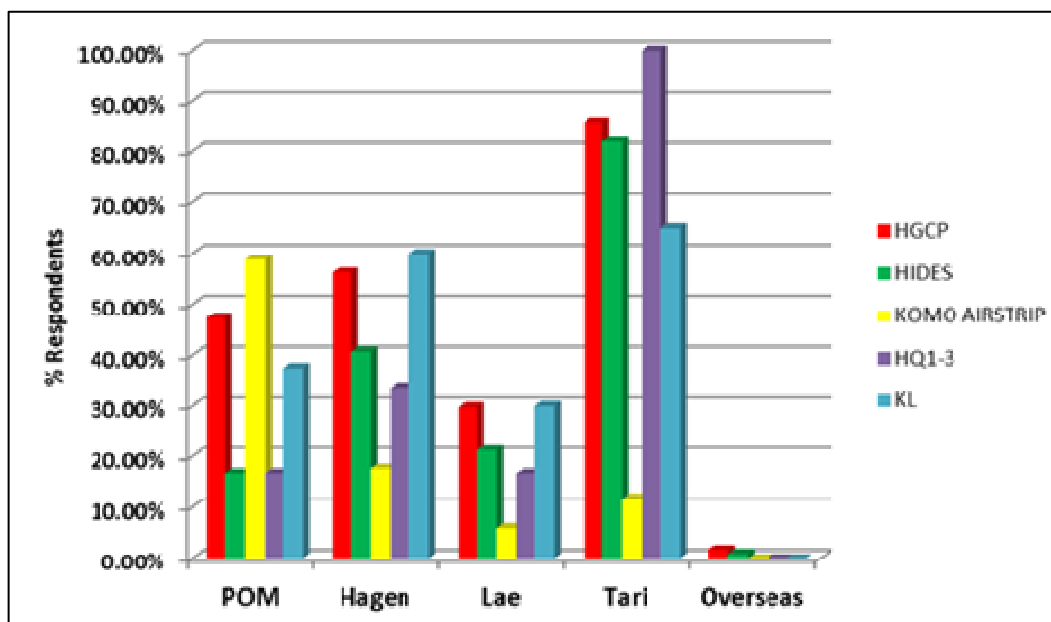


Figure 4-8: Travel profiles for HQ1-3, KLF, HGCP, Komo Airstrip and Hides catchment

Figure 4-9 shows the comparative levels of reported ownership for a range of household assets. We note again the high level of mobile phone ownership (82%), kerosene lamps, cooking pots and blankets.

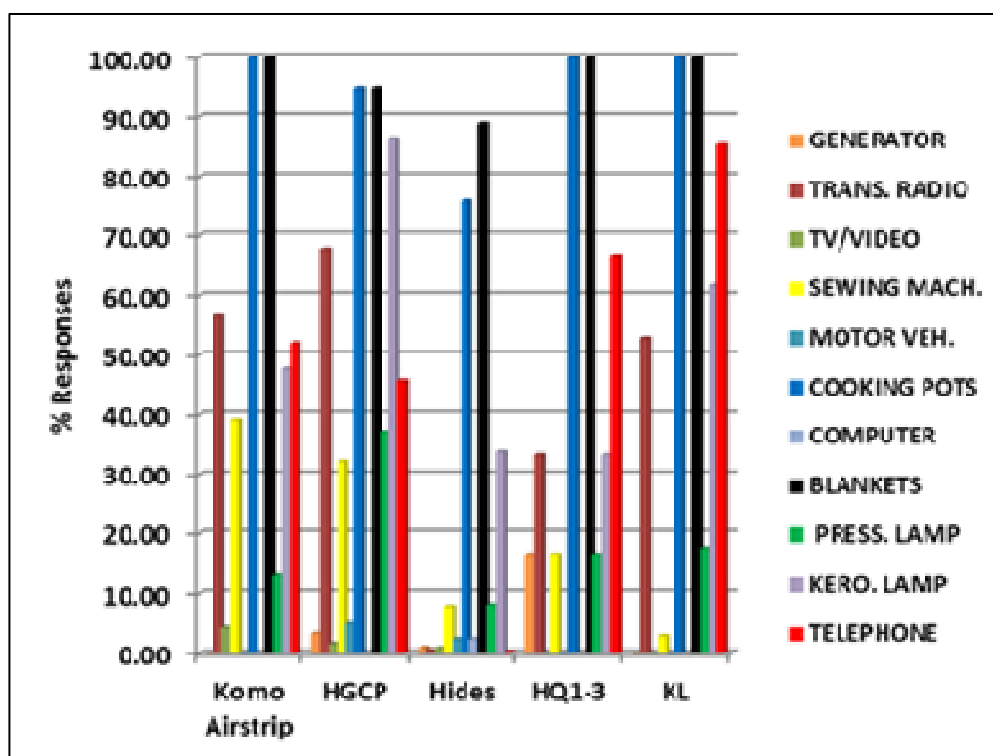


Figure 4-9: Comparative household assets HQ1-3, KLF, HGCP, Komo Airstrip and Hides catchments

4.3.4 Business Activity

Levels of business activity were lower than elsewhere - three families claimed full ownership of trade stores, two families claimed part ownership, and five families reported sale of market goods from their home premises. It is however worth noting that, of the affected structures within the proposed landfill site footprint, only two structures were recorded as trade stores. An independent valuation of affected stores and related infrastructure is currently being undertaken with the assistance of an independent business valuation expert.

4.4 Education Profile

4.4.1 School Attendance

The KLF social survey indicates that 57% of school-age children were attending school which is consistent with levels reported for HGCP (49%) and KAAR (62%), and higher than for the Komo area (30%) or Komo Airstrip (22%). There was no difference between male and female participation rates.

For explanations of non-attendance the families of schoolchildren indicated that the problems were lack of money for school fees (46%), distance (15%) and lack of interest (39%). Notwithstanding these responses and demands by landowners for the Project to assist with school fees, it is unclear that having fees paid will, in the short-term, address non-attendance and school service capacity issues.

4.4.2 Educational Attainment

Forty percent of persons aged 15 years and over recorded in the survey were reported to have had no formal education - 27% of males, and 50% of females. Only 8% of KLF residents aged 15 years and over claimed they had achieved Grade 10. Attainment of higher education qualifications in the PIA is predictably low, with few people having alternative training qualifications. One person reported having attained a university degree; six males and four females reported having obtained vocational certificate training.

4.4.3 Literacy

A comparison of illiteracy rates for those aged 10+ years across some selected Project Impact Area communities⁸ indicate that Huli communities have comparably higher rates of illiteracy than in either the Gobe or Kikori region communities.

Comparison of the above findings with the results of the KLF social survey indicates the accuracy of previous baseline data. Illiteracy rates for 15+ years are approximately 55%, compared with Komo Airstrip (45%) and Komo catchment (50%). As for everywhere in Papua New Guinea, female illiteracy rates (KLF 59%) are always higher than for males, and this is again illustrated in Figure 4-10 where the KLF profile is closest to that recorded for HHR.

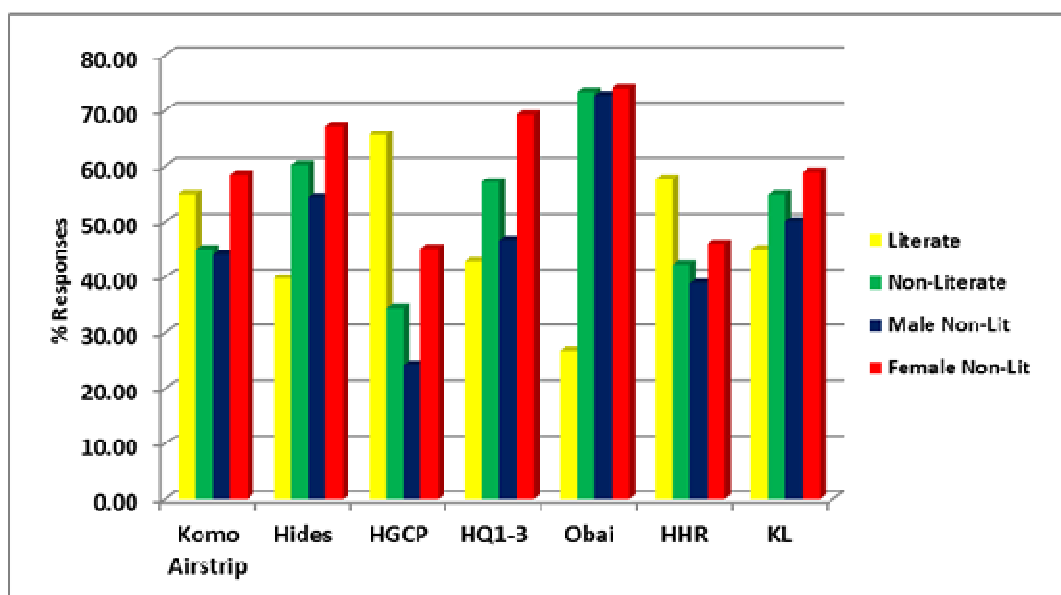


Figure 4-10: Literacy: Illiteracy and male/female illiteracy rates across Hides and Komo resettlement-impacted areas

4.5 Infrastructure

There is no social infrastructure on the Kopeanda Landfill site.

4.5.1 Social Infrastructure

Figure 4-11 illustrates the distribution of social infrastructure in the area. The distance between the Kopeanda site and the closest hub of social infrastructure, around the HGCP area, is approximately 5 km. The increase in walking time is low as most resettled sites are

⁸ These data are contained in HQ1-3 RAP

close to existing sites or located nearer to social facilities. Social infrastructure around HGCP include the existing Para School, which will be relocated by the Project to a site near the currently dormant Para health post, as well as a Catholic mission just south of the HGCP site, where two elementary classrooms are located.

Households have all indicated that they will move to areas that are a) close to their current locations, implying no change in access to social infrastructure, b) closer to the road, implying easier access, c) towards the HGCP area where current plans are to develop the new Para School site, as well as a health post, or d) towards Juni, where access to facilities will also be improved.

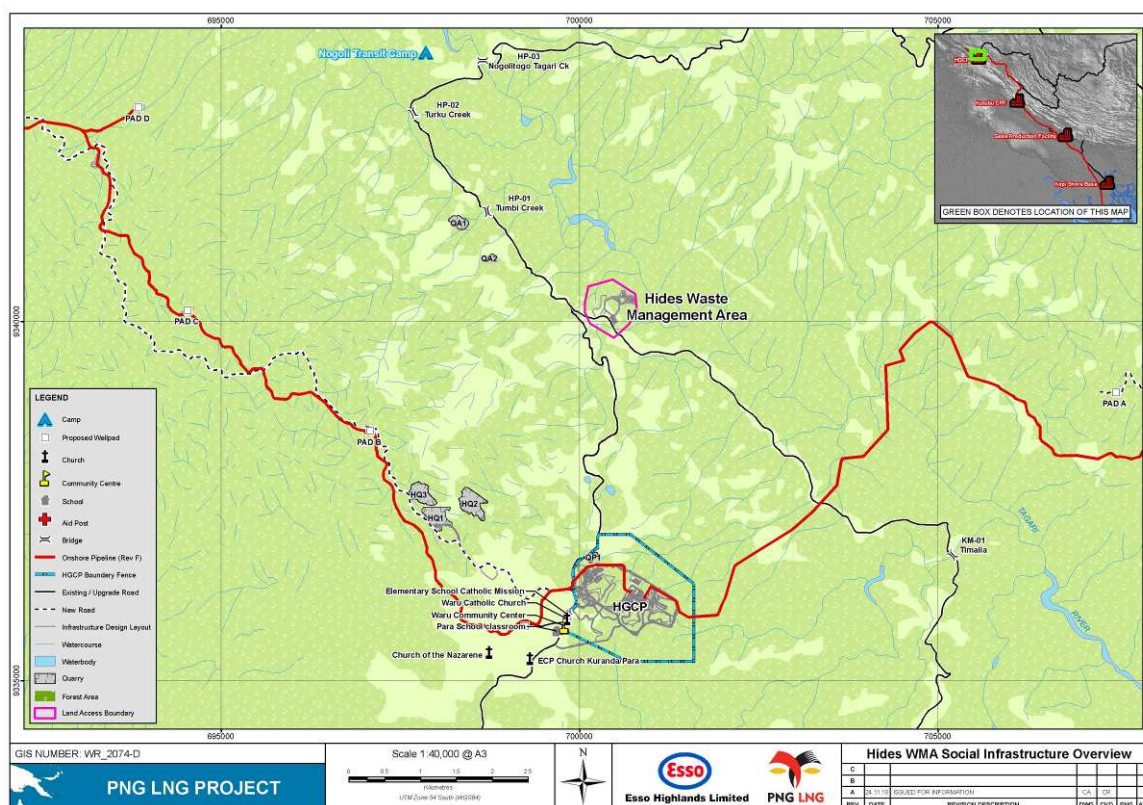


Figure 4-11: Kopeanda Landfill Site in relation to social infrastructure in the Hides Region

4.5.2 Water and Sanitation

Ninety-four (94) percent of survey respondents indicated that they sourced their water either from springs or rivers. There was only one household with a water tank, and only one communal water tank on the site. Average time to collect and return with water was 21 minutes (with a range from one (1) to 90 minutes); with approximately 50% of those who responded to the enquiry reporting that water is available all year round.

Table 4-4 indicates that reliance on customary modes of ablution is particularly high in the KLF environs – as it is elsewhere in the region - and at levels very much consistent with that found in most other resettlement-affected catchments.

Table 4-4: Traditional pit latrine and bush usage at HQ1–3, KLF, HGCP, Komo Airstrip and HHR catchments

	Komo Catchment	Komo Airstrip	HGCP	HQ1–3	KLF	HHR
Bush	13.60%	8.70%	5.26%	66.67%	27.8%	11%
Traditional Pit Latrine	73.6%	91.3%	91.2%	33.3%	72.2%	86%

4.5.3 Sources of Energy

Ninety-seven percent of the KLF households rely on firewood for fuel, which is much the same proportion as found for the rest of the Huli rural population.

4.5.4 Communications

The resettlement survey found that 85% of people had mobile phones, which was comparable with the KAAR level of 93.3%. The only other access to telecommunications is that available at the Nogoli camp.

4.6 Structures

4.6.1 Types of House: Materials Used, Sizes, etc.

Of the 40 impacted structures, 37 were listed as residential houses, two (2) as trade stores, and one (1) as a men's house.

Ninety five (95) percent (38) of the impacted physical structures were constructed of bush-materials - usually woven cane or split timber slabs with a *kunai* (*imperata grass*) thatch roof - 2.5% (one house) of semi- permanent materials, and 2.5% permanent materials.

Figure 4-12 illustrates the location of affected houses within and around the KLF site.



4.7.1 Garden Census

Table 4-5: Average garden size per household

Garden status	Area (ha)	Number of households	Ave ha/ HH	Number of people (adult equiv)	Ave ha/ adult equiv.
Houses and gardens	8	25	0.32	278	0.029
Gardens only	1.7	14	0.12	55	0.031
TOTAL	9.7	39	0.25	333	0.029

Figure 4-13 illustrates the location of affected gardens within the KLF site.

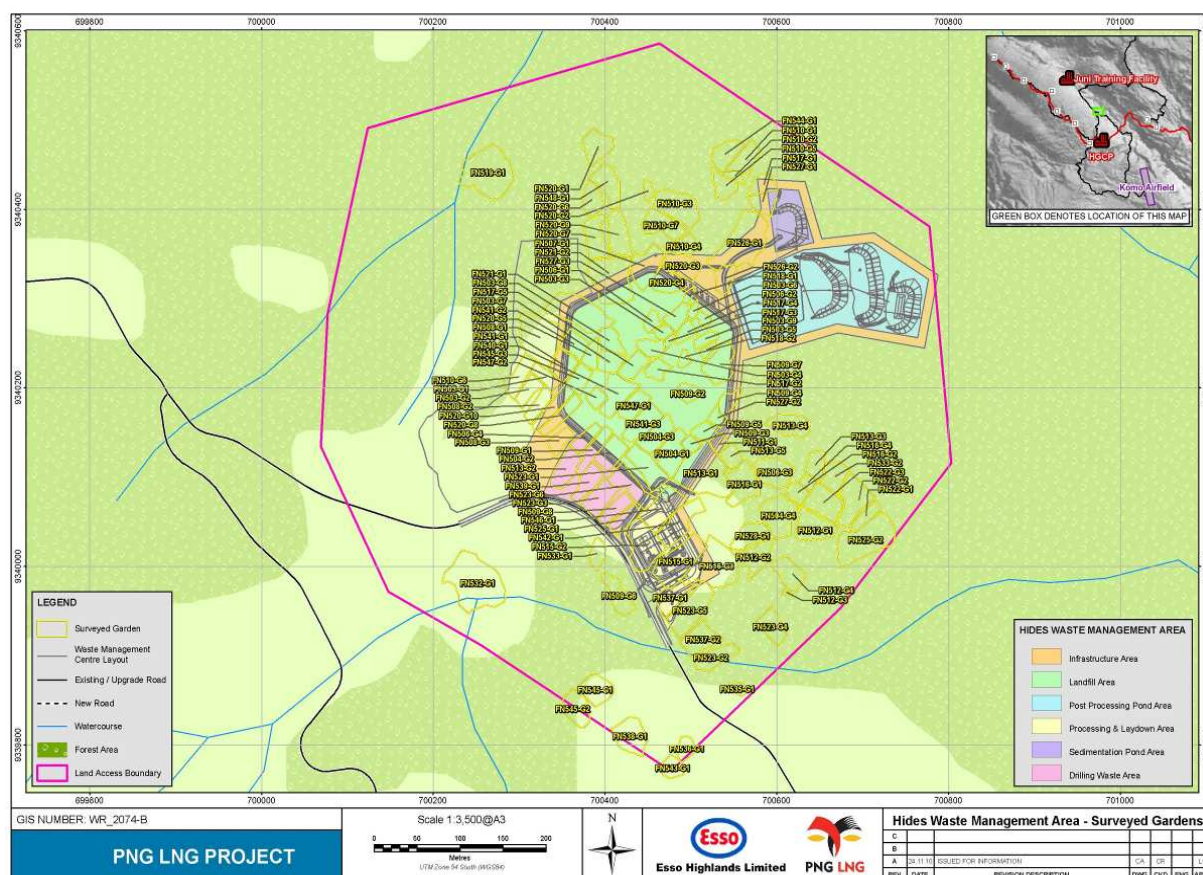


Figure 4-13: Location of Kopeanda Landfill gardens

Households can maintain gardens within the buffer zone during the construction period of the landfill where safe to do so. For practical purposes it has been agreed that households can continue to harvest gardens in the buffer zone until April 2011. All affected gardens will be fully compensated. Consultations are underway with the Kopeanda Committee to construct a Huli ditch to demarcate the buffer area. The rest of the landfill infrastructure area will be fenced.

4.7.2 Field Crops, Trees and Economic Trees

The agricultural survey counted 25,237 trees: 553 avocado, 72 bamboo, 13,504 banana, 540 breadfruit, 1,970 coffee, 400 fig, 4,498 marita, and 120 pine trees. There are no significant differences in agricultural practices between KLF, HHR, Obai, HQ1–3, Komo and HGCP.

A large number of useful trees are planted around gardens, and when gardens are fallowed these trees make up an important component of the fallow vegetation. By far the most important economic tree is *Casuarina (bauwa)*. *Castonopsis (bai)*, a timber tree which also produces edible nuts, is the next most important economic tree. One or two pine trees and limbum palms are also owned by most families.

The Project has committed to applying FRV rates for all gardens and trees. Resources will be engaged to ensure no affected landowner has been or will be deprived or disadvantaged

by a shortfall between the VG rate, which may have been previously applied, and the newly adopted FRV rates.

4.7.3 Livestock

Average livestock per household levels have shown similar spikes over the regional mean for all the resettlement impacted catchments. Figure 4-5 above illustrates levels of pig and chicken livestock ownership for KLF residents and indicates higher than average pig ownership per family.

4.7.4 Use of Natural Resources

Landowners are due to receive compensation for damage to and loss of forest resources.

4.8 **Cultural Heritage Sites**

Preliminary cultural heritage interviews were conducted along the HHR in April 2008, followed in November - December 2008 by an aerial reconnaissance and ground cultural heritage survey. These studies identified 21 minor sites which consisted mostly of burials, dance grounds and sites used for previous oblations to spirits. Seven sites were identified at that juncture as within the proposed KLF area:

- Three (3) ceremonial sites [one (1) dance ground (HD045)];
- One (1) Tege Pulu performance area (HD057);
- One (1) bachelor cult site (HD059);
- Two (2) men's houses (HD042 and HD056);
- One (1) archaeological site consisting of scattered stone flakes and cooking stones (HD018); and
- One (1) ancestral ritual site (HD041).

There were a further five sites located in close proximity to the landfill⁹. A pre-construction cultural heritage survey was subsequently undertaken in KLF from 22 to 24 February 2010. A total of 14 sites were identified during ground survey and cultural heritage interviews within the Hides Landfill survey area. These sites included burials sites, men's house (HE030), a performance ground (HE033) and clan boundary ditches. Figure 4-14 illustrates the distribution of these sites in the KLF catchment.

⁹ Further information about these previously recorded cultural heritage sites can be found in the Project EIS, Appendix 26, Section 4: Cultural Heritage, Section 4.2 pp 4-15 and Table 4.2.2 pp 4-29.

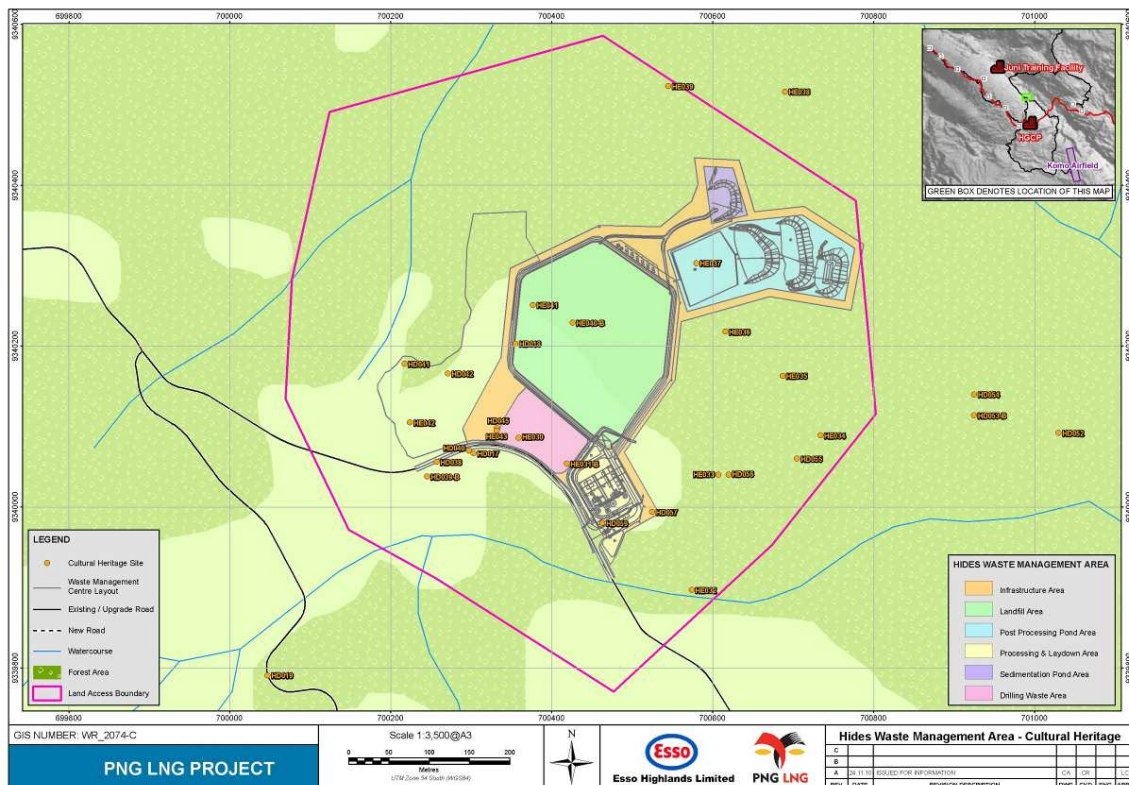


Figure 4-14: Distribution of Kopeanda Landfill cultural sites

The Project's cultural heritage programs and protocols have been developed to deal with both archaeological evidence and secondary burials, and to ensure that, where appropriate, relocation of ritual items occurs in accordance with Huli custom. The Project's preferred management approach for known cultural heritage sites is avoidance. For those sites that cannot be avoided however, appropriate management measures may include sample salvage-excavation and/or salvage through surface collections. Detail on site-specific mitigation measures to be followed for each of the cultural heritage sites identified are included in the Hides Waste Management Area, Preconstruction Survey Results and Mitigation Measures report,¹⁰ and are based on Mitigation Measure 237 of Company's Cultural Heritage Management Plan. Affected landowners provided verbal consent for construction to proceed pursuant to the site-specific mitigation measures outlined in the pre-construction report, which can be summarised as follows:

- Burial sites located within or near the Hides WMA worksite shall be avoided where practical. If they cannot be avoided, these sites shall be moved by the Company prior to disturbance, following appropriate consultation with and consent from the landowner/clan representatives;
- Spiritual sites located within or near the Hides WMA worksite shall be avoided and access thereto prohibited. If they cannot be avoided, the Company shall consult with landowner/clan representative to determine the appropriate mitigation measures (e.g., spirit moving ceremony, compensation for destruction); and

¹⁰ Coffey Environments (2010) "Hides Waste Management Area, Preconstruction Survey Results and Mitigation Measures report".

- All personnel present at the Hides WMA worksite shall be made aware of the cultural sensitivities associated with affected sites.

4.9 Vulnerable Households

The Project will assist all elderly, young, landless, infirm and disabled people affected by involuntary resettlement to ensure that their needs are appropriately met during the physical relocation and re-establishment of houses and gardens.

Some categories of potentially vulnerable households that will be closely monitored include:

- Nine (9) female headed households, particularly one household headed by an elderly woman aged over 60;
- One household with a total of nine (9) children (two (2) girls and seven (7) boys) aged under five should be monitored to ensure the well-being of children post resettlement;
- Thirteen (13) households with elderly members aged over 60. Of these, nine (9) households have elderly women (ten (10) women), and seven (7) have elderly men (10 men). One household, with four (4) elderly members (one (1) woman, three (3) men), in particular, will be monitored to ensure household members are in a position to successfully re-establish their homes and subsistence livelihoods at new sites; and
- Seven (7) households identified members with some form of chronic illness or disability, including three (3) persons who are deaf, or deaf and dumb, one asthmatic, one person with a paralyzed leg, one with a body that tends to swell, and one who is blind in one eye.

ELC is currently compiling a list of vulnerable households and individuals across all resettlement sites, which will be used for ongoing monitoring of these households' progress during and post resettlement.

4.10 Resettlement Sites

Following a meeting with the KLF Resettlement Committee on 8 October 2010, during which the basic housing package to be offered to affected households was presented and accepted, households began identifying their selected resettlement sites. At the time of writing (November 2010) consultation and negotiations with affected households were underway, and most households have identified potential resettlement sites, as shown in Figure 4-15 and Figure 4-16 below. The community formalized agreements and confirmed resettlement sites over a few weeks, which was unusually rapid.

Figure 4-15 shows that almost 40% of households are relocating to sites within less than 1.5 km of their current residences. The remainder of households can be seen from Figure 4-16 to be moving either north towards the Juni area or closer to the HGCP to the south. All but two (2) households moving towards the Juni area have selected sites within approximately 5 km of the Kopeanda site. Approximate walking distance for households to social infrastructure will thus be similar or less when compared to current locations.

Movement in both southerly and northerly directions will bring households closer to social infrastructure, including the new Para School and other proposed infrastructural developments near the HGCP site as shown in Figure 4-16. Numerous households have selected sites closer to roads, which will also improve their access to social and economic infrastructure.

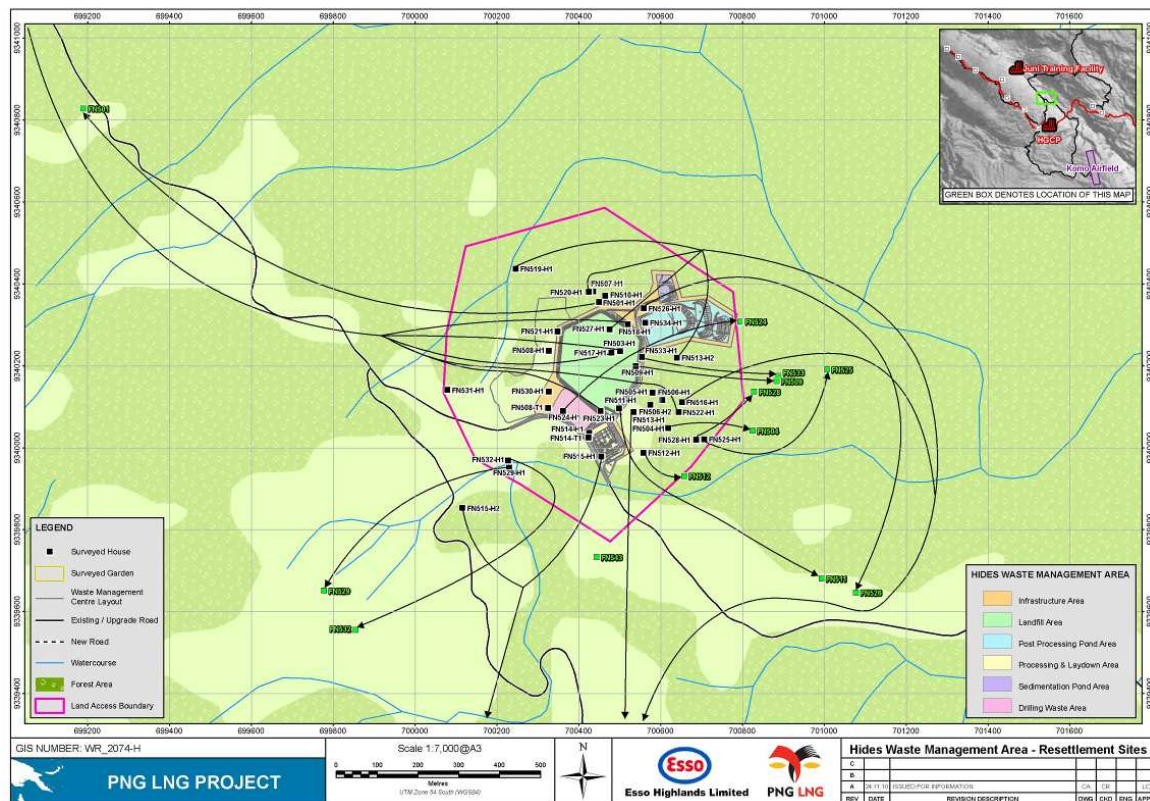


Figure 4-15: Location of resettlement sites identified by KLF households

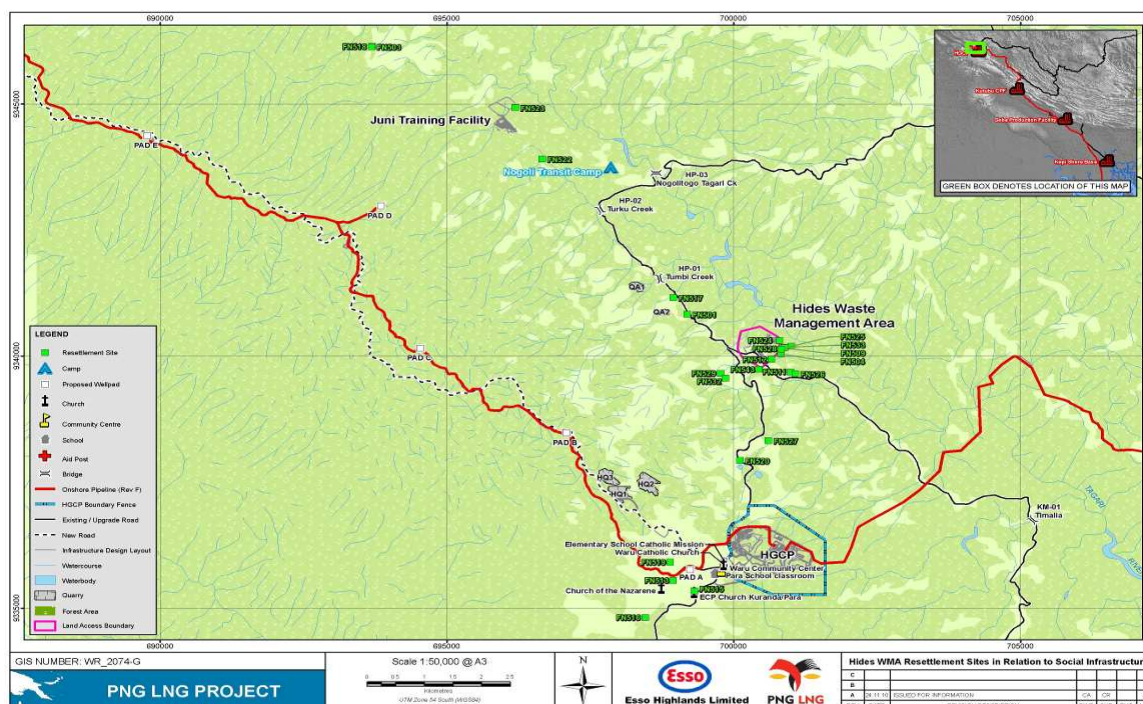


Figure 4-16: Location of resettlement sites identified by KLF households

To the Question I10 of the household survey: *“What is your relationship to this [relocation] land?”*, 52% of respondents said they would move to their father’s land (62% HHR), 31% to their mother’s land, and the remaining 17% to a number of ‘other’ kin or non-kin host lands. In response to Question I11: *“How far is it from your current house?”*, 28% of respondents declared the travel time to the new relocation site was no more than one (1) hour, with 66% estimating a travelling distance of between one (1) and four (4) hours; only two (2) respondents indicated the relocation distance was more than four (4) hours. In most cases the initially declared relocation locales were within close proximity to existing KLF houses and, as indicated above, on land already owned by the resident clans of Warabia, Taguali and Hagu. Most relocated individuals will retain the same tenurial rights on their relocated land as presently enjoyed within the KLF area. With respect to Question I12: *“What do you own there?”*, 9% of respondents said they had both a house and garden, 6% said a garden only, 9% said a house only, and 76% said neither a house nor garden. How accurate this picture is will be revealed at the conclusion of KLF negotiations.

From the sites selection that has subsequently taken place, as shown above, it can be seen that most households have found potential resettlement sites within less than ten (10) km, and the majority within less than five (5) km from their current homes.

4.11 Project Knowledge and Attitude to Relocation

The resettlement family/house social survey recorded comments from KLF-affected resettlement landowners in response to Question I4: *“Are there any aspects of this Resettlement Action Plan that you do not agree with?”* The principal (56% of responses) concerns of respondents were related to the housing component and Interest Bearing Deposit (IBD) arrangements, with the next most frequent complaint that the Project was not supplying Project-built replacement housing. Other issues included the VG rates for sweet potato mounds - in fact the Project compensation rates are some four times that

recommended by the VG - the non-provision of replacement land, the lack of a long-term plan for relocated individuals with guaranteed employment, and lack of understanding of the resettlement process.

In response to the Question I5: *“Are you willing to self-relocate?”* Figure 4-17 illustrates that at the juncture of time the questions were posed the overwhelming majority of the KLF landowners were willing to relocate.

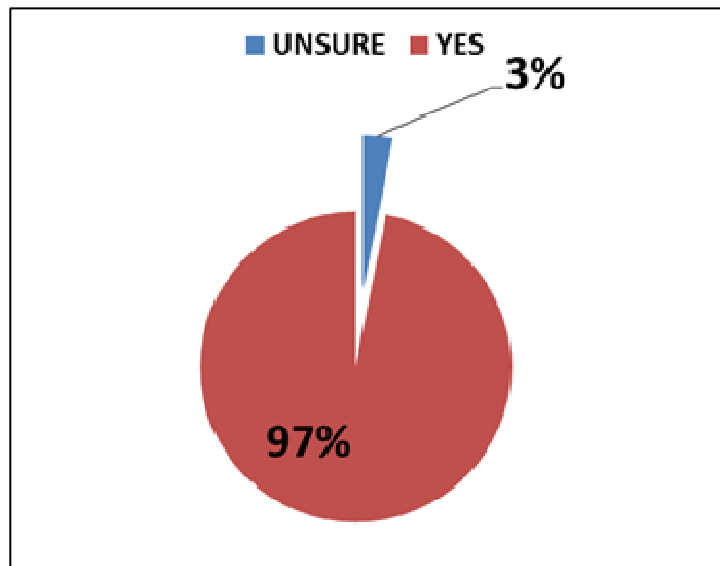


Figure 4-17: KLF respondents' willingness to relocate

In response to the Question I7: *“Do you think your life will be better after the relocation?”* 47% of respondents were “unsure”, 47% answered “yes”, and 6% responded “no”. This relative optimism - by comparison with responses to the same question from other catchments - is consistent with the high level of willingness to relocate. In answer to Question I8: *“Do you think there will be any benefits from the relocation?”*, most affected landowners understood the considerable cash stream benefits but also looked forward to the housing package, social services and jobs (Figure 4-18).

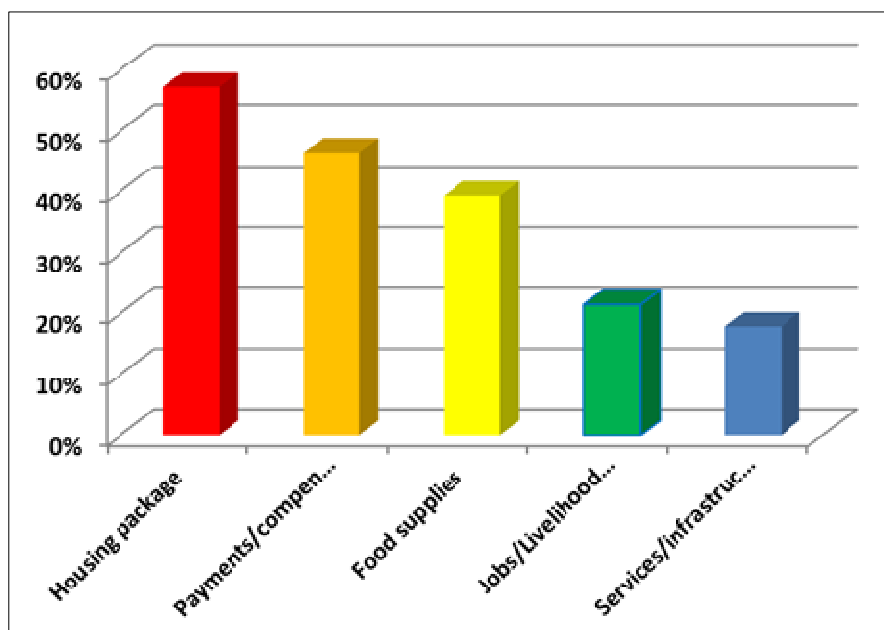


Figure 4-18: Perceived benefits of relocation

Other issues raised by the KLF affected landowners were captured in the open survey Question I13: *“Is there anything else you would like to say?”*, there were few differences in these responses from those captured from other resettlement areas; they included, but were not limited to concerns about replacement house building, replacement land, school fees, jobs, transport for the elderly and adequate rations.

The findings discussed above do not present as atypical in the general context of resettlement in the Hides-Komo region. In the initial phase of disclosure - when these concerns were recorded - landowners voiced all of their anxieties, which over the course of the following months become attenuated as they learned more about the resettlement process, and both strategize and prioritize their demands.

It is important to again indicate that these statistics reflect the responses of affected landowners at the time of the land-use research. As further consultation and disclosure are effected the households become more comfortable with the assistance package and other benefits. That perceived benefits do indeed appear to meet household expectations became clear when, during investigation of alternative sites, Kopeanda residents became increasingly vocal about their expectations that the Project should use their site for the landfill as, having been surveyed, they now expected (and wanted) to be relocated. This was after initial activities around Komo and HGCP had progressed to such an extent that the expected package was well known to others in the broader region, including Kopeanda residents. The readiness with which the Resettlement Committee agreed to the proposed package as acceptable (see Section 5.7), followed by enthusiasm of all affected households to sign housing agreements (unprecedented in other Project affected areas to date), clearly demonstrates this increased level of comfort with what is offered.

5.0 CONSULTATION AND DISCLOSURE FOR THE KOPEANDA RAP

5.1 Overview of Consultation and Disclosure

This section outlines the consultation and disclosure activities undertaken for the preparation of the KLF RAP. The Project RAP Implementation team (RIT) conducted initial consultations in the region in 2009. Subsequent disclosure of the landfill intervention was undertaken in October 2010.

In addition to consultation activities undertaken by the RIT, the Environmental Law Centre (ELC) was also involved in such activities. ELC accompanies the RIT members during group and household consultation sessions in order to provide legal advice to households as well as to the RIT.

In summary, numerous interactions have been held with KLF households and adjoining communities, as presented in Table 5-1.

Table 5-1: Summary of Kopeanda Landfill consultation interactions for affected households and communities

Consultation Type	Date	Number of Meetings	Number of Attendees per Meeting
Public Disclosure Events	October	2	40-50
Resettlement Implementation Team	6-22 October 2010	5 (Committee)	10-12
Resettlement Implementation Team	October - November 2010	25	3-12
D'Appolonia Meeting	11 October 2010	1	40-50
ELC Consultations	October - November 2010	2 Community 33 Households	2 - 48

5.2 How Stakeholders Were Identified for the KLF RAP

The Project established a Committee which represented all KLF residents. This committee held its first three meetings from 6 - 8 October 2010. Initial membership was ten (10) persons which were subsequently increased to twelve (12) with the addition of two (2) female members.

5.3 Consultation and Disclosure Methods Used and Planned For

Verbal information (during community meetings and household meetings) on the proposed KLF location was supported by various materials, provided as appropriate to the stage of the process. Information provided includes:

- The "Resettlement Information Booklet for the PNG LNG Project" (written in English, Huli and Pidgin);
- Flipcharts and A0 vinyl sheets to support verbal presentations during the public meetings;
- A one-page summary of the census/survey data for each household, reviewed with them before the commencement of the individual household meetings;
- A handout of the original draft Resettlement Assistance Package proposed by the Company, presented in both graphic and verbal format, for the information and consideration of household members during and after the individual meetings; and

- A draft copy in Huli and Pidgin of the proposed agreement form.

5.4 Role of the Local Advocate

The ELC plays a monitoring and review role as an impartial observer. Actions include attendance at both public meetings and individual house negotiations. Feedback and clarification were given to the household members on issues where there was evident confusion about either the role of the PNG government or the Project's resettlement process.

5.5 How Stakeholders' Issues and Concerns Were Elicited

During the land use, assets register and household census study, information was disclosed to landowners about the compensation process, and issues raised by landowners were recorded. Responses to issues raised were provided at subsequent meetings.

5.6 Consultation and Disclosure Events

A key method for consultation and disclosure during the KLF RAP was a series of resettlement consultation and disclosure community meetings. These are briefly summarized below.

5.6.1 Awareness of the Proposed KLF Development

Immediately after the first community and consultation meeting the KLF households were consulted to establish their awareness and understanding of the resettlement process. Survey results to assess feedback are summarized in Table 5-2, which shows that continuous public engagement and disclosure is required.

Table 5-2: Awareness of the RAP consultation process

Question No.	Question Posed	Yes	No	Unsure	No Response
11	Did you attend the road-show presentations of the RAP?	88%	12%	0	0
12	Do you think you understand the Resettlement Action Plan?	91%	6%	3%	0
13	Would you like the Project to explain the Resettlement Action Plan to you again?	42%	57%	1%	0

In response to the open ended Question 16: *"What problems do you think relocation will present to you and your family?"*, many people gave multiple answers expressing the following concerns: a projected shortage of food, problems of building another house in a short time-frame, shortage of water and possible sickness (see Figure 5-1).

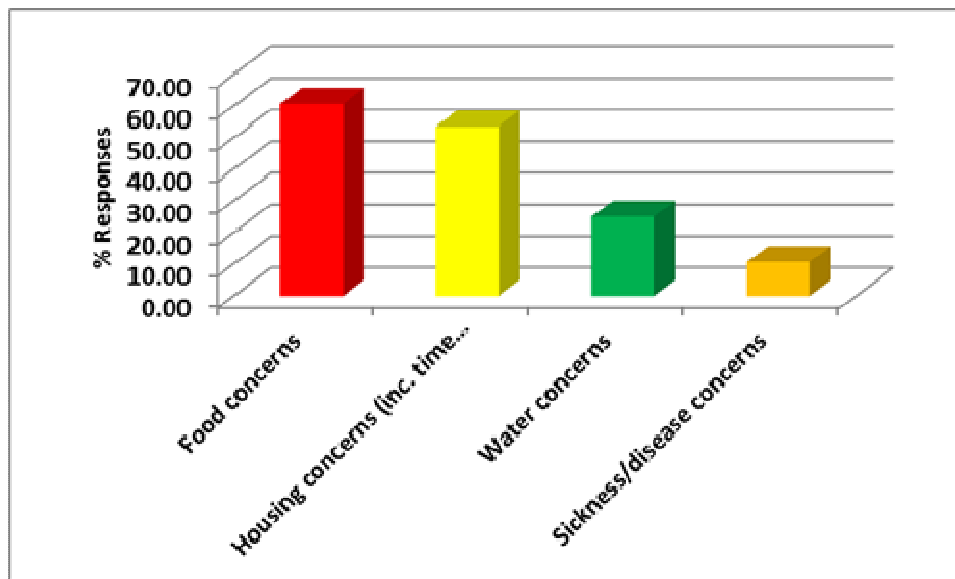


Figure 5-1: Anticipated family problems resulting from resettlement

As discussed previously (Section 4.11), affected households' attitude to relocation improved significantly between the initial survey, when the problems noted here were raised, and more recent consultation during which residents were particularly vocal about their desire to be resettled. Their more positive attitude has been clearly reflected in the In-Principle Agreement on the package offered, by first the Kopeanda Resettlement Committee on 8 October, followed by individual household negotiations with affected households who have all demonstrated great eagerness in signing agreements accepting the proposed package.

5.6.2 Regional Stakeholder Issues

A number of ongoing issues within the wider Hides-Komo catchment area have the potential to impact directly on the progress of resettlement plans and initiatives in the KLF area:

- People in the region want to know about community development projects. A robust plan to address these expectations will need to be rolled out soon;
- Employment is a major concern of most resettlement impacted people and they want to be confident that they have priority consideration in this regard; and
- The newly formed HGDC Lanco is not yet operating as hoped and levels of support for it are variable.

5.7 Kopeanda Landfill Committee Meetings

A series of meetings have been held with the Resettlement Committee established to liaise with the RIT regarding matters pertaining to resettlement. Issues discussed during these meetings have included:

- Information about the landfill site development;
- Information about the resettlement process;
- Roles and responsibilities of the committee;
- Acceptability of the proposed resettlement package (8 October 2010);
- Road realignment associated with the development;
- Potential employment opportunities;

- Education and training opportunities for directly impacted people;
- Potential use of the buffer zone;
- The need for the Census and Survey team to do a recount of agricultural assets, as there is a perception that some of these were missed in the original survey;
- The desire for the resettlement process to be expedited, as this community has been ready for it for a long time; and
- Queries regarding the use of local timber.

5.8 RIT Consultation Summary

Table 5-3 is a sample consultation log record from RIT public engagement and disclosure program. The issues raised concerning employment, census and survey calculations, rations and duration of land deprivation were common to most question and answer sessions in the early phases of KLF landowner engagement and have since been addressed by the RIT.

The list of questions and concerns raised since the commencement of the KLF negotiations runs into the hundreds but some of the more repeated issues and how they were addressed are highlighted as follows:

- All local work inside and around the Kopeanda Landfill must be reserved exclusively for the KLF relocated individuals.

RIT has raised this request with the Contractor so that local KLF residents be given preference by HGDC.

- Landowners want a commitment that if rations ran short after six months the Project would accede to requests to have them prolonged.

During preliminary consultation it was agreed with the KLF committee that rations would be provided for a period of six (6) months. This was subsequently increased to nine (9) months in individual household agreements.

- Many KLF residents said they wanted food and rations for their pigs since the human rations would not stretch to feeding the pigs.

RIT informed the residents that this was not part of the resettlement package in other catchments and that they could not set a new precedent of this nature.

Table 5-3: Sample RIT Kopeanda consultation sheet

Questions / Issues	Gender of person asking question (M=male, F=female)	Main issue (i.e., consultation, benefits, environmental, safety, social, other etc)	Answer	Further action required
I am not sure about the landfill. Will there be fences, buildings and is there work for us?	M	Benefits	Information will be obtained so that I can answer this later.	Obtain information
I support the assigning of land to the Company as a Camp Site and now changed to Landfill.	M	Benefits	More information will be provided.	Obtain information
People are behind the Company if it leaves lights, but if it wants to leave rubbish and dust, then the people are not interested. The people are looking for employment with the Company. Employment is important.	M	Benefits	Not possible to advise exactly what the Company is planning but priority opportunities are available for local people.	See above

I am asking about job opportunities. When will you come back? Also, when will the owners of houses and gardens find out?	M	Benefits	You have waited a long time up until now - propose that a five member Committee be formed and a meeting be held next week and the process can then start.	Organize a meeting
The previous comments were not phrased to stop the Project, but if you come back in one or two it is really too long to wait.	M	Benefits		
Could we have 2 members for the Committee from each clan?	M		Agreed.	Councilor to provide names

5.9 ELC Consultation Summary

The ELC's involvement in the public engagement process is a multi-tasked one. ELC provides guidance in the drafting of agreements; maintains a log record of issues and grievances that remain unresolved following the consultation process. These are then submitted to the RIT and management for further consideration; and advice is given to impacted households of their rights in terms of the Oil and Gas Act and other relevant PNG legislation.

6.0 PROJECT IMPACTS

6.1 Introduction

The construction of the Kopeanda Landfill will mean that people, who currently reside within the locale, or use land and resources within this area, will no longer be able to do so and/or will have to relocate. Table 6-1 below presents a summary of the potential impacts and mitigation measures.

Table 6-1: Summary of impacts and mitigation measures

Impact	Scale	Mitigation – Project Responses
Residential structures affected	<ul style="list-style-type: none"> • 33 households to be physically displaced; • 14 households economically displaced; and • 38 structures affected. 	Package reflects agreed cash and in-kind compensation provisions for affected landowners. Landowner acceptance evidenced and signaled by signed agreements with ELC.
Loss of field and agricultural land	Approximately 42 ha site, 9.7 ha under garden cultivation which includes 112 belonging to 39 households, of which 14 are non-resident	<p>The Company will pay the Landowning clans an annual rate determined in the IPCA for each hectare of land occupied (but otherwise undamaged) by the Company for depriving the Landowner(s) of the use of the surface of the land, for cutting the Landowner(s) off from other parts of their land, and for any loss or restriction of rights of way, in compliance with Section 118(2) (a), (c) and (d) of the Oil and Gas Act.</p> <p>If the surface of any land of Landowning clans is damaged by the Company, the Company will make a one-off compensation payment to the Landowning clans for each hectare of the land surface which is damaged by the Company, in compliance with Section 118(2) (b) of the Oil and Gas Act.</p>
Loss of trees and crops	<ul style="list-style-type: none"> • Total 25,237 trees. 	Landowners are entitled to one-off damage compensation payments.
Loss of land and other economic resources	9.7 ha of garden land and approximately 42 ha in total area loss.	<p>Compensation at market rates is paid for crop losses and temporary rations are provided to assist with subsistence requirements until gardens are re-established.</p> <p>A livelihood restoration program will be implemented to assist affected households with restoring or improving livelihoods.</p>
Disruption in social networks	Limited disruption as the majority of affected households will be moving small distances away from the landfill.	Most households will self-relocate to areas in close proximity. Social networks with respect to exchange relations will continue as these are based on kinship, descent, affinity and friendship ties not related <i>per se</i> to specific locales/areas.

Impact	Scale	Mitigation – Project Responses
Impacts on business and employment	<p>Two (2) trade stores within the impacted area will be relocated. Both of these structures are constructed of cut timber walls with tin roofs but vary in size -17.3 m² and 28.9 m². The larger store is on piles, with windows and a water tank.</p> <p>No loss of employment anticipated.</p>	<p>Impacted business infrastructure will be compensated based on procedures developed during consultation with affected stores.</p> <p>Assistance provided will include compensation payment for the replacement of building and loss of trade, as well as compensation and business advice provided by the project and monitored over a 2-year period until fully re-established.</p> <p>Relocation will be undertaken once agreements have been concluded with each owner and compensation payments completed.</p> <p>Agreements and dismantling are planned to be concluded by January 2011.</p> <p>Compensation will vary according to types of buildings and level of trade, with estimates ranging between K40,000 and K90,000.</p>
Community services and facilities	No community buildings will be impacted by the development.	<p>Households have all indicated that they will move to areas either close to where they are now, implying no change to community facilities, closer to the road, implying easier access, towards the HGCP area where current plans are to develop the new Para School site, or towards Juni, where access to facilities will also be improved.</p> <p>Pathways will be constructed to compensate for loss of north-south access (site is located between a river and road). Pathways will be constructed as part a Huli trench (<i>barat</i>), that will surround the buffer zone, to act as safety barrier. Construction will be financed by the Project, and undertaken as a community project. Construction planned for completion by first quarter 2011.</p>
Cultural Sites	21 minor sites will be impacted.	<p>Compensation schedules for range of cultural heritage sites.</p> <p>Skeletal material to be handled by PNG National Museum. Appropriate rituals to be undertaken by local landowners and caretakers of sites.</p> <p>Sacred stones and artifacts to be relocated by people themselves. Other material to be lodged with the PNG National Museum and overseen by archaeologists as per mitigation measures outlined in Hides Waste Management Area Pre-Construction Survey Report.</p>

Impact	Scale	Mitigation – Project Responses
Influx of migrants	Possible regional population increase and influx due to construction activities, improved services and employment opportunities.	<p>Squatter settlements will be difficult to establish in this area as most of the land is under customary ownership so that migrants without close relatives will find it hard to maintain any subsistence livelihood.</p> <p>A police station already exists at Juni.</p> <p>The Landfill site is unlikely to be a specific locale that attracts outsiders or settlers because there will be no major construction activity.</p> <p>The Project is currently developing Project-Induced In-Migration response plans using a community-based process. The outcomes of these activities will assist in developing an area-specific plan for the Hides area. It is anticipated that these plans will be implemented by mid-2011.</p>
Impact on water sources	Limited. No water sites have been identified within the Project area to date.	<p>The Project is currently investigating risks to all water resources and identifying suitable mitigation measures. This includes review of design parameters and the monitoring of contractors. Remedial measures will be implemented should sources be negatively affected and these include establishment of water collection stations (<i>haus wins</i>) using tanks and roof collection. Provision has been made for the construction of two water <i>haus wins</i>, one to the north and one to the south of the site. The <i>haus wins</i> will consist of tin roofs and water tanks. The structures will be financed by the Project, and be built according to the following dimensions: Roof: 7.7 m x 11 m Base: 5.7 m x 9 m, 3 x 5,000 liter tanks. The location of these sites will be determined in consultation with the community representative committee. Construction to commence in first quarter 2011, and completed by mid 2011.</p>
Social Infrastructure	None	<p>Relocated individuals will benefit from the region wide community infrastructure that will eventuate both from the Project discretionary programs and the government commitments made in the LBBSA.</p>

6.2 Cumulative Impacts

When assessing the impacts of relocation for KLF households, it is important to take into account the fact that this catchment is part of the wider Hides-Komo region in which a number of Project infrastructure interventions will occur. This includes the Komo Airstrip, quarry sites and associated access, landfill sites, well pads, relocated schools, the Heavy

Haul Road, existing and new camps, spelines and pipelines¹¹. Hence, these assessments need to consider cumulative impacts of resettlement in the region, continual availability of suitable relocation sites, as well as increased pressure on available land and natural resource availability.

While we could speculate on a variety of situations accumulating and causing a shortage of available land, experience to date has shown that households do not encounter great difficulty in finding suitable resettlement sites. This has also proven to be the case for the KLF area, with all households ultimately identifying suitable resettlement sites within close proximity to their current residences. The robust livelihood restoration programs will be able to monitor the circumstances of land and food shortage, and based on the case-by-case findings, the Project will respond with further measures where any person or family suffers hardship or is worse off than was the case in the pre-resettlement phase.

¹¹ The HGCP RAP provides further details on the distribution of Project sites and possible cumulative impacts.

7.0 COMPENSATION AND RESETTLEMENT STRATEGY

The Project's overall resettlement goal is to design and implement resettlement in a manner that gives physically and economically displaced persons the opportunity to at least restore their livelihoods and standards of living.

The resettlement options include:

- **Relocation sites** will be self-determined by the affected persons though the Project will assist any relocated individual who does not have another site with supplementary vulnerable case assistance. This approach reflects the customary residence practices, and will obviate the need to construct "resettlement sites" or engage with "host" communities.
- **New housing** assistance will be provided for those who wish to build an improved bush-house; Project commissioned architect plans have already been developed and people will be assisted to locate a suitable builder. Additionally, the Project offers assistance to move housing materials, and provides timber.
- **Livelihood restoration** measures will focus on increasing the productivity of affected people's existing garden land, as well as facilitating the shift from subsistence dependence to non-land based and cash producing income streams. This will include opportunities in terms of employment and small business, cash from rentals and other revenues.

7.1 Eligibility and Entitlements

The RPF provides a full schedule of eligibility criteria for compensation and entitlements that will be adopted for the Project. Once the total amount has been defined by the Project in an IPCA with landowning clan leaders and an Agency Agreement is executed firmly establishing the compensation owed, the compensation damage amount is accrued as a liability by the Company until such time as payment can proceed.

Allocation of land between clans is agreed through a process of mapping and consultation. The clan areas are mapped on each site by the Project with the participation of local clan leaders. When payments are made to the clans, the clans will distribute the compensation in accordance with customary clan principles to clan members. Table 7-1 summarizes eligibility and entitlements relevant to the affected KLF community for statutory damage and deprivation compensation. Compensation will be paid to clans for various categories of compensation required to be paid under the Oil and Gas Act.

Compensation payments will include damage to the surface, damage to trees and wildlife as well as compensation for the clan's loss of use and enjoyment of clan land. Compensation for loss of use and enjoyment is paid annually for so long as the Project uses the land for Project purposes. Damage and deprivation payments will have regard for the customary classification of landowners, landholders and land users with respect to their tenorial status and portfolio of land rights and responsibilities. This includes entitlements to individuals for privately owned assets as well as entitlements to clans for communal resources. Entitlements for communally owned resources are reflected in the IPCA for Area 11, PLAF 11- Dagia to HGCP. Part or all of the land known as Kopeanda falls within the area of IPCA Area 11-PLAF 11 Dagia to HGCP.

Table 7-1: Eligibility and entitlements

Eligibility	Affected Category	Assistance/Compensation	Considerations for Implementation
Houses and other Fixed Assets (Physical Relocation) - Resettlement Assistance Package			
Recognized owners of the assets and structures (identified in the Surveys by the cut-off date)	Category 1 Households with an available relocation home	<p>Housing: The housing package totals K51,000.</p> <p>(a) Component 1: Household has the option of selecting K10,000 either in cash or deposited into a Bank Managed Fund - Interest Bearing Deposit or Savings Account.</p> <p>(b) Component 2: Household will have K10,000 deposited into a Bank Managed Fund - Interest Bearing Deposit.</p> <p>(c) Component 3) Household will receive K30,000 for building and housing materials. Household has the option of selecting this as interest bearing deposit, building materials, or savings account deposits. Up to K5,000 can be used to pay for a carpenter. The following conditions apply: a) A minimum of K10,000 is required to be taken as building materials or IBD with a minimum six month term; b) A minimum of K5,000 must be taken as building materials if household does not have an existing house to move to, as verified by the Resettlement Team.</p> <p>(d) Component 4: For households with multiple wives and houses an additional sum of K10,000 will be provided to the wife of the household, upon completion of her house. The same applies to mature sons or daughters occupying a separate structure.</p> <p>(e) Transit assistance of K1,000.</p> <p>(f) Dismantling incentive of K500.</p>	<ul style="list-style-type: none"> Clearly inform about site development and relocation schedules. Consultation to determine list of options for materials, goods and equipment. Delivery of in-kind packages will be negotiated upon agreement and delivery will start at the moment of relocation.

Eligibility	Affected Category	Assistance/Compensation	Considerations for Implementation
Houses and other Fixed Assets (Physical Relocation) - Resettlement Assistance Package			
		<p>Provided to all households:</p> <ul style="list-style-type: none"> • Transition rations for up to nine months (forty weeks) and beyond on a 'case-by-case' consideration.¹² • Livelihood restoration measures directed at establishing and maintaining subsistence patterns – seeds, two garden cycle assistance; training and production of cash crops. • Access without financial penalty to old house materials. • Replacement garden tools. • Health care program, malaria nets, and medical monitoring of relocated individuals' health. • Provision of Compensation Advisor to assist and advise on investment and business options. 	
	Category 2 Households with no available relocation land	Support will be provided for finding suitable land for relocation. Otherwise as for Category 1 .	As for Category 1 .

¹² During preliminary consultation it was agreed with the KLF Committee that rations would be provided for a period of six months. This was subsequently increased to nine (9) months in individual household agreements.

Eligibility	Affected Category	Assistance/Compensation	Considerations for Implementation
Houses and other Fixed Assets (Physical Relocation) - Resettlement Assistance Package			
Land Deprivation			
Recognized landowners	Clans or other groups (e.g. ILGs) with rightful recognized claim to communal land	<ul style="list-style-type: none"> The primary clans owning land in the Kopeanda area are the Taguali and Warabia, with smaller portions of the site belonging to the Tamea and Hagu clans. The exact extent of land ownership amongst these clans is in the process of being agreed by the clans in order for the Project to process clan payments for land damage and deprivation. Approval has however been granted by clan leaders to continue work on the site while these issues are being resolved. Annual payment for land deprivation as per guidelines set out in IPCA, includes compensation for use of, and damage to surface land, as described below: <ol style="list-style-type: none"> 1. Compensation for the use and enjoyment of the surface of the land. 2. Compensation for land surface damage 	<ul style="list-style-type: none"> Clearly inform about site development and relocation schedules. Clearly inform affected group authorities about site development and land allocation schedules and regulations. Compensation paid at agreed intervals directly and publicly to landowner.
			<ul style="list-style-type: none"> The Company will pay Landowners at a rate per year at equivalent market rates (currently negotiated at K700 but to be verified against market rates) for each hectare of land occupied (but not otherwise damaged) by the Company for depriving Landowner(s) of the use of the surface of the land, for cutting Landowner(s) off from other parts of their land, and for any loss or restriction of rights of way, in compliance with Section 118(2).
			<ul style="list-style-type: none"> If the surface of any land of the Landowner(s) is damaged by the Company, the Company will make a one-off compensation payment at equivalent market rates (currently negotiated at K2,575, to be verified against market rates) to the Landowner(s) for each hectare of the land surface which is

Eligibility	Affected Category	Assistance/Compensation	Considerations for Implementation
Houses and other Fixed Assets (Physical Relocation) - Resettlement Assistance Package			
		3. Compensation for initial damage to naturally occurring bush, vegetation, birds, animals or fish.	<p>damaged by the Company.</p> <ul style="list-style-type: none"> The Company will make a single payment to the Landowner(s) for any damage on their land to the natural bush, birds, and fish at equivalent market rates (currently negotiated at K1,030, to be verified against market rates) for each hectare of land on which the Company damages the natural bush.
	Individual/household landowners for garden land	<ul style="list-style-type: none"> Annual payment for land deprivation as per guidelines set out in IPCA (as above if land individually owned). Compensation for loss of crops and other assets as per Damage to Trees and Crops below. Livelihood restoration measures as above. Provision of Compensation Advisor. 	<ul style="list-style-type: none"> As above for clan land.
		<ul style="list-style-type: none"> Vulnerable individuals and groups including aged, young, infirm and disabled will obtain the following: <ul style="list-style-type: none"> Assisted transit; Provision of enhanced house facilities on request and after consultation; and Other assistance on request and after consideration. 	<ul style="list-style-type: none"> Identify all vulnerable households and the nature of vulnerability prior to resettlement, and monitor closely during implementation to ensure effective.
Damage to Trees and Crops			
Recognized land and resource users and owners	Clans or other groups with rightful recognized claim to communal land	<ul style="list-style-type: none"> Cash compensation based on FRV for trees naturally seeded in affected area as identified in the IPCA, as included above for Land Deprivation. 	<ul style="list-style-type: none"> Clearly inform about site development and relocation schedules. One-off compensation to community (landowners group), directly and publicly to landowner.

Eligibility	Affected Category	Assistance/Compensation	Considerations for Implementation
Houses and other Fixed Assets (Physical Relocation) - Resettlement Assistance Package			
	Individual/household landowners for trees and crops	<ul style="list-style-type: none"> • Cash or in-kind compensation at FRV for affected area for crops and trees planted by individuals (excluding mature crops). • Compensation for agricultural improvements (including trenches and fences). • Assistance to restore livelihoods through economic restoration programs. 	<ul style="list-style-type: none"> • Clearly inform about site development and relocation schedules. • Cash compensation at FRV. Households will assist with the verification of trees to ensure that full market rates are paid. • Cost at replacement of trees considering "lost production" at full replacement value. • One-off compensation or at agreed intervals to individual/household owners directly and publicly. • Replacement or market value of trees and crops in the calculation of compensation amounts. • Compensation will include land and resources not affected by the Project but that will not be accessible due to relocation of owners to distant locations (see reference below: Reduced Access to Land and Resources). • Economic and livelihood restoration programs will have provisions directly targeting affected individuals/households. • Provide compensation at, or prior to, the moment when the land/resource stops being available to the owner. • If a significant portion of land established to gardens is lost then physical relocation will be considered (as included above for Houses and Other Fixed Assets).

Eligibility	Affected Category	Assistance/Compensation	Considerations for Implementation
Houses and other Fixed Assets (Physical Relocation) - Resettlement Assistance Package			
Reduced Access to Land and Resources			
Persons/ Clans recognized as landowners of land to which access is reduced	Clans or other groups with rightful recognized claim to communal land	<ul style="list-style-type: none">• Cash or in-kind compensation at agreed intervals until reduction in access ceases.• Assistance to restore the livelihoods through economic restoration programs.	<ul style="list-style-type: none">• Clearly inform about site development and relocation schedules.• Cash compensation at FRV• “Lost production” compensation will be considered for compensation. This means that if there is interrupted access to land during construction for a short time then affected people will be eligible for compensation for lost production – i.e. what they could have grown or done with the land had they had access.
Persons recognised as landowners of land to which access is reduced	Individual/ household landowners and land users with reduced access to land due to Project activities.		<ul style="list-style-type: none">• One-off payment or compensation at agreed intervals to individual/household owner directly. This will be done publicly.• Economic and livelihood restoration programs will have provisions directly targeting affected individuals/households.• Compensation provided at, or prior to, the moment when access to land/resource takes effect.• If access to land and resources is permanent due to distant relocation, Land Deprivation compensation will apply.
Impacts on Business and Employment			
All affected persons with monetary income through own business or as workers	Individuals with proven revenues from own business	<ul style="list-style-type: none">• Cash payment for proven loss of reasonable profits due to physical displacement.• Cash and assistance to re-establish business or other suitable economic activity.• Training programs and employment related to local content development.	<ul style="list-style-type: none">• Clearly inform about site development and relocation schedules.• Compensation will be assessed in a case-by-case basis.
	Individuals with proven loss of wages	<ul style="list-style-type: none">• Cash payment for proven loss of wages due to physical displacement.	<ul style="list-style-type: none">• Clearly inform about site development and relocation schedules.

Eligibility	Affected Category	Assistance/Compensation	Considerations for Implementation
Houses and other Fixed Assets (Physical Relocation) - Resettlement Assistance Package			
		<ul style="list-style-type: none"> Training programs and employment related to local content development. 	<ul style="list-style-type: none"> Compensation will be assessed on a case-by-case basis.
Impacts on Community Infrastructure			
Owners of public infrastructure	National, Provincial or Local governments, Clans or ILOs with recognized ownership of infrastructure affected by the Project	<ul style="list-style-type: none"> Infrastructure will be replaced to an as-before or higher standard. Alternatively, compensation will be paid at full replacement cost, without allowance for depreciation. 	<ul style="list-style-type: none"> Clearly inform about site development, relocation schedules and potential impacts to infrastructure. One-off payment or assistance to replace infrastructure as appropriate and assessed on a case-by-case basis.
Community social infrastructure	Relocation of community structures, e.g. churches, schools, etc.	<ul style="list-style-type: none"> Full replacement and construction by the Project. Full replacement compensation and constructed by community. If social infrastructure requires relocation, a suitable location will be identified to allow continued access for those affected. 	<ul style="list-style-type: none"> Clearly inform about site development, relocation schedules and potential impacts to infrastructure.

8.0 LIVELIHOOD RESTORATION PROGRAM FOR RESETTLED VILLAGERS IN THE KLF AREA

8.1 Introduction

The livelihoods restoration program to be implemented across the Komo and Hides area was detailed in the HGCP RAP (Section 8). This program will be inclusive of all households affected by resettlement across the Project area, including KLF affected households. This section provides an overview of the program as described in the HGCP, with specific reference to KLF as appropriate.

8.2 Implementation Schedule

Implementation will be phased, with the first phase directed at replacing mainly existing gardens and pilot agribusiness opportunities, and the second phase geared at the introduction of new opportunities, training in non-agricultural skills and diversification. There will be some overlap between phases. The proposed approach and timing is illustrated in Table 8-1.

Table 8-1: Implementation schedule

Time Frame	2010	2011				2012	
Phase/Activity	Q4	Q1	Q2	Q3	Q4	Q1	Q2-4
Phase 1:							
Initial interactions to commence program – all households							
Individual household meetings – identify issues/needs							
Training needs assessment							
Facilitate access to agricultural inputs, particularly planting material							
Monitoring of gardens – household visits							
Collate information on possible agricultural support initiatives							
Establish demonstration projects and plots							
Initiate non-agricultural training programs							
Phase 2:							
Ongoing monitoring of gardens – household visits							
Ongoing group training sessions							
Outreach on fresh food production, animal production and other initiatives							
Implement selected projects							
Non-agricultural training programs							
Monitoring of livelihood restoration program							

8.3 Resources Needed to Undertake the Livelihood Program

The Livelihood Restoration (LR) team will be based at Nogoli and Komo to support all the resettlement projects in the area. Each area will require varying levels of staffing according to their stages of implementation. KLF is the fifth program to be implemented after Komo.

The plan is for each household being resettled to be assisted for two years after they move location. Thus the duration of the program in the KLF area is from the latter part of the fourth quarter 2010 to fourth quarter 2012.

9.0 GRIEVANCE MANAGEMENT FRAMEWORK

9.1 Introduction

The resettlement process for the KLF households will consider grievances through the Grievance Procedure, which will apply across all Project activities. The Grievance Procedure is available to people affected by displacement, other local populations residing in the Project Impacted Area, and other stakeholders directly affected by the Project.

The Grievance Procedure that has been adopted for the KLF RAP has been defined in the RPF. The Project will disclose information about the Grievances Mechanism to the affected KLF community, adjoining landowners and interested persons and organizations. The transparency and fairness of the process will be explained through both verbal (via regular stakeholder meetings) and written (newsletters, website, posters, etc.) updates.

10.0 ORGANIZATIONAL ROLES AND RESPONSIBILITIES

Overall responsibility for the planning, implementation, and monitoring of the KLF resettlement program rests with the Company as specified in the RPF. The Land and Community Affairs team of the Company will be undertaking these activities for the KLF program. Further details of the organizational structure of the Company are provided in the Komo (Section 9) and HGCP (Section 10) RAPs.

11.0 MONITORING AND EVALUATION

The purpose of the Monitoring and Evaluation (M&E) system is to provide Project management, and directly affected persons, households and communities, with timely, concise, indicative information on whether compensation, resettlement and related development investments are on track and achieving Project goals - that physically and economically displaced persons have had the opportunity to at least restore their livelihoods and standards of living and to indicate the need for any course corrections. The Resettlement Team Coordinator (RTC), supported by the Field Implementation Coordinators, will coordinate M&E internal and external implementation.

Preliminary monitoring of implementation activities will commence at the KLF site when RIT and ELC representatives monitor the delivery of rations, and payment of transit allowances to affected households as part of the household consultation and negotiation process. The Project will undertake bi-annual outcome evaluation and impact baseline monitoring for each impacted resettlement site which will culminate with the completion audit after 2-3 years.

Further details of the monitoring process to be implemented can be obtained from the Komo (Section 10) and HGCP (Section 11) RAPs.

12.0 RESETTLEMENT IMPLEMENTATION SCHEDULE

Table 12-1 sets out the tasks required in order to implement resettlement. It should be noted that this schedule is preliminary until final resettlement planning is completed, after which a more detailed implementation schedule will be developed:

Table 12-1: Implementation schedule

Activity or Task	Actions	2010			2011						
		O	N	D	J	F	M	A	M	J	J+
Planning	Completion of RAP										
Approvals	Internal EHL approval of the RAP										
	RAP approval by Lenders' Independent Environmental and Social Consultant (IESC)										
	Internal approval of detailed implementation work plan										
	RAP Summary to community										
	Ration and building material mobilization										
Land Issues	Confirm resettlement sites and water sources										
Confirm and finalize compensation agreements	Carry out final identification of vulnerable households requiring assistance										
	Verify inventories of affected land and assets (incl. special valuations)										
	Finalize entitlement contracts (housing and compensation agreements)										
	Transit allowance, distribution tools and nets										
Compensation payments	Cash Payments										
	Ration distribution										
	Housing package, distribution materials & advisors										
	IBD Deposits										
Relocate households	According to phases of construction										
Graves, spiritual & other cultural sites	Relocate / recover										
Livelihood restoration and development	Replacement of gardens										
	Non-agricultural training and agribusiness programs										
Verification and monitoring	Design and implementation of monitoring and evaluation system (ending Nov 2012)										
	Local advocacy and compensation advisors										
	Internal monitoring (to 2012)										
	External evaluation (including completion audit)										

13.0 COST AND BUDGET ESTIMATE

Table 13-1 provides a summary of costs to replace and compensate assets as defined in the housing and compensation agreements, community assets and mitigation programs to restore and improve livelihoods. In addition, provision is included for the one-off IPCA payments to the clans, who also receive an annual rental payment of K700/ha¹³. Total costs for the KLF resettlement process will be in the order of US\$2.6 million, as summarized below in Table 13-1.

Table 13-1: Resettlement costs

Item	Total US\$ (million)
Asset and garden compensation ¹⁴	1.39
Livelihood and other assistance	0.59
Community development projects	0.53
Other	0.09
IPCA payments	0.03
Total	2.63

¹³ All IPCA payments will be reviewed to confirm equivalence to FRV.

¹⁴ Tree and garden crop compensation payments will reflect FRV.