

# Resettlement Plan

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March 2016

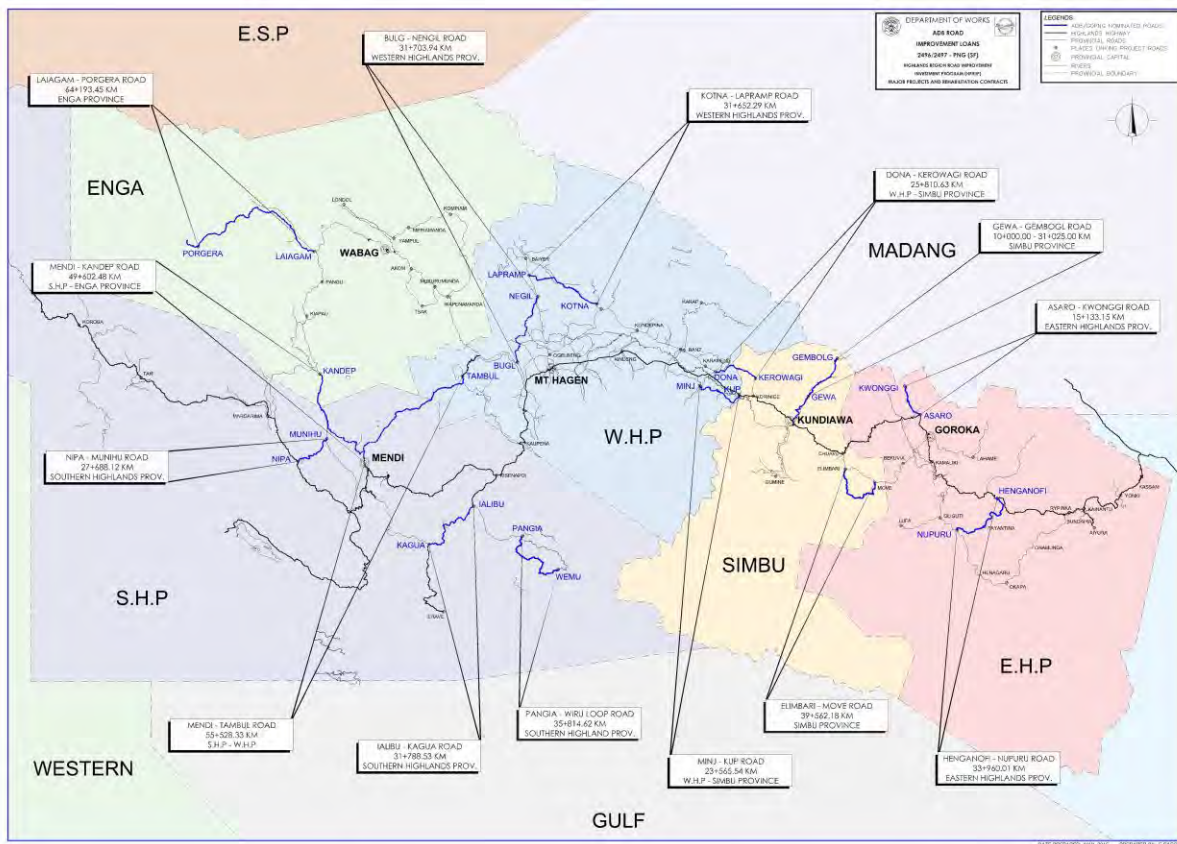
## PNG: Highlands Region Roads Improvement Investment Program, Tranche 3

Prepared by the Government of Papua New Guinea's Department of Works for the Asian Development Bank.

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# HIGHLANDS REGION ROAD IMPROVEMENT INVESTMENT PROGRAM



## NIPA-MUNIHU SUB-PROJECT RESETTLEMENT PLAN

**FINAL REPORT  
JANUARY 2016**

**CURRENCY EQUIVALENTS**

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**ABBREVIATIONS**

ADB	–	ASIAN DEVELOPMENT BANK
AP	–	AFFECTED PEOPLE
COA	–	CERTIFICATE OF ALIENABILITY
DA	–	DISTRICT ADMINISTRATOR
DH	–	DISPLACED HOUSEHOLD
DLO	–	DISTRICT LANDS OFFICER
DLPP	–	DEPARTMENT OF LANDS AND PHYSICAL PLANNING
DMS	–	DETAILED MEASUREMENT SURVEY
DOW	–	DEPARTMENT OF WORKS
DBST	–	DOUBLE BITUMEN SURFACE TREATMENT
EHP	–	EASTERN HIGHLANDS PROVINCE
ESSU	–	ENVIRONMENTAL AND SOCIAL SAFEGUARDS UNIT
GoPNG	–	GOVERNMENT OF PAPUA NEW GUINEA
GRC	–	GRIEVANCE REDRESS COMMITTEE
HRMG	–	HIGHLANDS ROAD MANAGEMENT GROUP
HRRIIP	–	HIGHLANDS REGION ROADS IMPROVEMENT INVESTMENT PROGRAM
IMO	–	INDEPENDENT MONITORING ORGANIZATION
ISS	–	INTERNATIONAL SOCIAL SPECIALIST
LIR	–	LAND INVESTIGATION REPORT
LLCM	–	LOCAL LAND COURT MAGISTRATE
LLG	–	LOCAL-LEVEL GOVERNMENT
LSD	–	LANDS AND SURVEY DIVISION
MFF	–	MULTI-TRANCHE FINANCING FACILITY
M&E	–	MONITORING AND EVALUATION
MOA	–	MEMORANDUM OF AGREEMENT
NARI	–	NATIONAL AGRICULTURE RESEARCH INSTITUTE
NGO	–	NON-GOVERNMENTAL ORGANIZATION
NRA	–	NATIONAL ROADS AUTHORITY
NSS	–	NATIONAL SOCIAL SPECIALIST
NTDP	–	NATIONAL TRANSPORT DEVELOPMENT PLAN
PA	–	PROVINCIAL ADMINISTRATOR
PLO	–	PROVINCIAL LAND OFFICER
PMV	–	PASSENGER MOTOR VEHICLE
PNG	–	PAPUA NEW GUINEA
PWM	–	PUBLIC WORKS MANAGER
RCS	–	REPLACEMENT COST SURVEY
RF	–	RESETTLEMENT FRAMEWORK
RP	–	RESETTLEMENT PLAN
RIZ	–	ROAD INFLUENCE ZONE
SP	–	SUB-PROJECT PROFILE
SQM	–	SQUARE METER
T3	–	TRANCHE 3

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## I. EXECUTIVE SUMMARY

1. This is the Resettlement Plan (RP) for Nipa – Munihu (27.73km) road section under the Tranche 3 (T3) of the Highlands Region Roads Improvement Investment Program (HRRIP) for Papua New Guinea to upgrade, rehabilitate and maintain roads in the Highlands Highway Network in Papua New Guinea (PNG). This RP is based on the assessment of possible impacts based on the detailed engineering design for this sub-project road.

2. In accordance with the HRRIP eligibility criteria for sub-project roads, every effort has been made to minimize impacts on land acquisition and resettlement for this road section. The engineering design for road upgrading and rehabilitation has been formulated to minimize the need to acquire additional land outside of the existing road alignment, to the extent feasible and consistent with agreed design standards and good engineering practice. Among the technical solutions applied to minimize resettlement impacts were (a) shifting the road alignment to the opposite side of the potential affected structure, (b) narrowing of the road shoulders in front of the potential affected structures, and (c) adjustments on the drainage component.

3. The summary of impact is in Table 1. The results of the resettlement impact assessment indicated that the existing road carriage occupies a total of 10.84 hectares of customary land owned by 11 tribes and their respective clans. The upgrading and rehabilitation of the road will require an additional 22.66 hectares of customary land for the whole road section. In total, the sub-project will require a total of 33.50 hectares of customary land which is the subject matter of the Memorandum of Agreement (MOA) between the Department of Works (DOW) and the customary land owners.

4. In addition to the customary land, there are 30 affected assets namely, 16 residential houses and 14 trade stores. The former has an aggregate area of 167 sq.m. whilst the 14 houses have an aggregate area of 182 sq.m.

5. There are also 21,823 crops and trees to be removed. Other assets to relocate include 35 graves and 78 fences, the latter with an aggregate length of 2,838 meters. Each affected house will be given several allowances such as shifting, transport and temporary accommodation while the trade store owners will be given an allowance to compensate business losses, in addition to the shifting and transport allowance.

**TABLE 1: SUMMARY OF IMPACTS**

Types of Affected Asset	Unit	Affected Area
Customary Land	Hectare	10.84 hectares existing road + 22.66 hectares strips of additional land
House	Number of houses (total sqm)	16
Trade stores	Number of trade store (total sqm)	14
Graves	Number of graves	35
Fences	Meter	3,004
Trees & Crops	Number of crops and trees	21,823

Source: DMS/Socio-Economic Survey, July 2015

6. Thirty five households who own the affected graves will receive a relocation and reburial allowance to compensate for the traditional rites for transferring the graves and other related expenses. Affected households whose crops and trees will be affected by the project will receive additional assistance to compensate for the loss of crops and trees.

7. Furthermore, there are 20 elderly headed households, 15 women-headed households and 3 disabled headed households. Moreover, there are 22 households whose monthly income falls under the poverty line of 130 kina a month. Five households have reported more than one count of vulnerability. All of these households are vulnerable who will receive allowances to mitigate the disproportional effects of resettlement on them. The cut-off date for this sub-project is September 7, 2015, the day after the DMS was completed.

8. The Safeguard Policy Statement (SPS) requires resettlement plans for projects having resettlement impacts commensurate with the extent and degree of the impacts. The degree of impacts shall be determined by (i) the scope of physical and economic displacement, and (ii) the vulnerability of the displaced persons (DPs). Based on the degree of impacts and vulnerability of tribes and clans living along this road sub-project, a resettlement plan was prepared which is presented in this report. This sub-project's resettlement category is Category B as the number of affected persons who will suffer major impacts defined as physically displaced and losing 10% or more of productive assets is expected to be less than 200 persons. Several consultations in the sub-project area have been undertaken by DOW through the Highland Road Maintenance Group (HRMG), Provincial Works Office (PWO) in coordination with both Provincial and District Administration Offices, Local Level Government (LLG) presidents and ward councilors. The DPs have already been informed about their rights to file complaints and/or queries on any aspects of compensation and resettlement. Different techniques of consultations with stakeholders were used during the sub-project preparation such as in-depth interviews, public meetings and focus group discussions.

9. Consultations were held in different villages inclusive of tribal, clans and sub-clan leaders. Public disclosure have been undertaken to disseminate the resettlement plan to DPs, communities and different national and local government agencies.

10. Tribal leaders and councilors have signed the copies of the MOAs for the use of customary land in exchange of public road. The sub-project entitlements included in the MOA were explained and discussions followed the information dissemination of HRRIP program policies. In addition, public disclosures on the resettlement plan was also conducted with provincial and district leaders.

11. This RP has been developed as per ADB's Safeguard Policy Statement (SPS) and the pertinent laws of Papua New Guinea. Where the laws of PNG are not clear, a program specific set of resettlement principles consistent with ADB policy has been adopted. The SPS's policy principles on involuntary resettlement are as follow: (1) Screen early and assess resettlement impacts; (2) Carry out consultations with DPs and develop a grievance redress mechanism; (3) Improve/restore livelihoods of DPs through land-based strategies, replacement of lost assets, compensation at replacement cost, and additional benefits, as appropriate; (4) Provide appropriate assistance to physically displaced APs; (5) Improve living standards of poor DPs and other vulnerable groups; (6) Develop transparent procedures for negotiations; (7) Provide assistance and compensation to non-titled DPs for loss of non-land assets; (8) Prepare RP; (9) Disclose RP to DPs and other stakeholders and document the consultation process; (10) Conceive and execute resettlement as part of the project; (11) Deliver entitlements to DPs

before their physical or economic displacement; and (12) Monitor and assess resettlement outcomes.

12. Based on the consultations with stakeholders, special community infrastructure projects focusing on social benefits for households inclusive of women living along the road section were identified and are adopted in this RP. These infrastructure projects involve the construction of three bus bays and three waiting sheds located in strategic areas that will serve as roadside vending and waiting areas with temporary storage facility in support of the affected households.

13. The DOW as the executing agency has overall responsibility to manage the planning, implementation and monitoring of the sub-project. The HRMG as the Implementing Agency (IA) for HRRIP has the overall responsibility delegated by the DOW to implement resettlement activities, as required. In doing so, the HRMG coordinates with Provincial and District Administrations in the implementation of this RP, following approval by ADB. A timeline for RP implementation and post implementation activities has been prepared.

14. The involvement of local government units is vital in the implementation of the RP. The Provincial Works Manager (PWM), Provincial and District Administrators will closely collaborate with HRMG to plan, implement and monitor all resettlement activities for this sub-project.

15. Grievances will be addressed adequately at all stages of sub-project development. An internal grievance mechanism will be installed at the provincial level with the primary objective of facilitating conflict resolution in a timely manner and minimizing court cases. It will also provide affected people with a forum to air their objections and address their issues and concerns adequately. An unsatisfied AP may take the grievance to the PNG Judicial System.

16. The resettlement cost estimate for this sub-project includes compensation for assets, crops and trees, graves, fences, rehabilitation allowances and income restoration measures and support costs for RP implementation. The EA will ensure timely allocation of funds and availability of resources for compensation and assistance to the affected households. DOW will plan in advance and include in their budget its counterpart funding for this sub-project. The total estimated cost of resettlement for the Nipa – Munihu is estimated to be Kina 898,340. The cost and resettlement plan will be validated prior to implementation. The RP budget does not include the cost of Independent Monitoring as this activity is already funded from a separate source.

17. The implementation schedule for this RP has been based on the overall sub-project implementation. All related resettlement activities are planned to ensure that issues are resolved prior to displacement and commencement of civil works. Public consultations, internal and external monitoring will be undertaken intermittently throughout the sub-project duration.

18. The RP implementation will be closely monitored to provide DOW with an effective basis for assessing resettlement progress and identifying potential difficulties and issues. During the implementation of the RP, the HRMG assisted by the Environmental Social Safeguards Unit (ESSU) will prepare semi-annual safeguard monitoring reports and submit these reports to ADB in addition to regular quarterly progress reports as part of sub-project performance monitoring. The independent monitoring organization (IMO) already recruited by DOW will undertake external monitoring. The IMO will prepare bi-annual monitoring reports; and, conduct post-resettlement evaluations twelve (12) months after compensation is completed for each sub-project. All IMO reports will be submitted to HRMG, DOW and ADB.

## II. PROJECT DESCRIPTION

### A. Project Overview

19. The HRRIP is intended to upgrade, rehabilitate and maintain roads in the Highlands Region Core Network (HRCN) in Papua New Guinea (PNG). The Investment Program will focus on the Highlands' core road network of around 1,400 kilometers (km) of major national and provincial roads. The Government of Papua New Guinea (GoPNG) will undertake this program through the Department of Works (DOW) with assistance from the Asian Development Bank (ADB).

20. The Highlands Region is a major contributor to PNG's economy through its mineral and agricultural exports. It is also home to around 40% of the country's population who rely almost exclusively on the road network for movement of people and goods. The road network is vulnerable to damage because of the mountainous terrain, seismic activities, and heavy rain. The goals of the HRRIP are to support economic growth by improving rural access to market centers, leading to increased exports and integration of the Highlands Region and its population into the mainstream economy of PNG; and, to facilitate access to social and education facilities in the region. The economic and social benefits of a comprehensive road transport network will contribute to poverty reduction in the Highlands Region.

**FIGURE 1: LOCATION MAP OF THE NIPA-MUNIHUSUB PROJECT**



## **1. Existing Road Conditions**

21. The Nipa to Munihu road is located in the Southern Highlands Province and was surveyed to be 27.73 km in length. The road connects the two districts of Nipa-Kutubu and Mendi-Munihu, all located in the Southern Highlands Province. The sub-project traverses two local level governments (LLGs) of Nipa Rural LLG and Lai Valley LLG. Their common border is located at km 21+545.

22. The existing road traverses through hilly and mountainous terrain with the highest point located at km 13+290 (Elevation: 2283m) and the lowest point located at the km 22+550 (Elevation: 1806m). The road alignment is generally reasonable but minor adjustments will be required in some sections.

23. The road pavement sub-grade comprises mainly of silty clay material covered with a gravel layer consisting of poorly graded limestone material which presents a rocky and rough running surface. There are also several sections where the sub-grade has been exposed with no gravel layer. The road width varies from 3m to 8m thus giving an average road width of 4 meters.

24. There are no adequate drainage systems in terms of culverts and side ditches and erosion of cut slopes deposits material on the carriageway reducing the effective width. There are bedrocks outcropping at certain sections of the road, high vegetation growth on the road sides and the carriageway, scouring in the middle of the carriageway and very soft sub-grade at some locations.

25. There is a large number of culverts in the existing road. While some culverts were found to be in good condition, others were found to be exposed, rusted, distorted, blocked, and inadequate to drain off high storm water run-off. Many creeks along this road do not have culverts but only log bridges to cross. However, at present, traffic flows through the entire road in the dry season. Two (2) are Compact Bailey Bridges which are in reasonable condition and the remainder are all log bridges. The Bailey bridges will require minor rehabilitation while the log bridges will be replaced with Bailey bridges.

## **2. Proposed Works**

26. It is proposed to upgrade the road 5.5 meter wide carriageway sealed with Double Bitumen Surface Treatment (DBST) and 0.25 meter wide shoulders. The proposed total width is 12.00 meters that includes a minimum of 3.0 meter wide (both sides) strip for visibility. Earthworks will be required to widen the existing road bench to accommodate the final formation width and roadside drains as well as to provide for local improvements to the vertical alignment. Approximately 3,600 linear meters of retaining wall will be required at various locations to provide adequate formation width and avoid extensive embankment construction.

27. The shoulders will be sealed in selected locations to minimize scour from drainage run – off. The vertical and horizontal alignments will follow the existing alignments with improvements to horizontal and vertical curves to provide the minimum requirements in terms of stopping single distance.

28. At several locations where erosion or scouring is evident in the side drains, consideration should be given to provide erosion protection to the drains. Where the erosion is present in the drains located at the base of the cut embankments or unstable areas not subject

to surface movement stone pitching cement and stone lining or scour breaks may be used. In areas where some surface movement may be likely Reno mattress or rock scour breaks may be utilized.

29. A total of 30 additional culverts are proposed in addition to the replacement of 56 existing culverts which are of inadequate capacity (typically 450mm diameter). Approximately 28,000 meters of lined roadside drain will be provided to cater for surface run off from the road and adjacent slopes.

30. The entire road works will take place within the existing road corridor and resettlement impacts are expected between the edge of the existing road and the construction limits. In addition there are some cut works on the mountainsides that are required to further improve the slope and turning geometry. In these areas, the road widening may exceed 5m, depending on either the width of the cut or fill in a particular road section.

31. The entire road is situated on customary land, the use of which has been agreed in consultation with the clans and communities that jointly own the land. In order to expedite implementation of the sub-project, the use of customary land required to upgrade the road have been agreed by clans and communities through Memoranda of Agreement (MOAs) (See Annex 5 Memorandum of Agreement) permitting the use of customary land for public infrastructure. This resettlement plan (RP) covers the land acquisition impacts from the edge of the existing road up to the construction limits including road clearance, and other infrastructure (e.g., drainage and culverts).

## **B. Minimizing Land Acquisition**

32. The resettlement framework provided for eligibility criteria for sub-project roads in order to qualify for inclusion in the HRRIP. Among the eligibility criteria are provisions that are intended to minimize the land requirements such as (a) it is an existing or former road, that is, the road bench exists and restitution of a trafficable road does not require major earthworks or the construction of structures; (b) the proposed works avoid the displacement of residential structures or other, permanent structures; (c) the candidate road is on State-owned land (as per the Land Act), or there is a negotiated agreement with affected communities and landowners to use customary land.

33. The engineering design for road upgrading and rehabilitation has been formulated to minimize the need to acquire additional land outside of the existing road alignment, to the extent feasible and consistent with agreed design standards and good engineering practice. Based on this principle, the area subject to involuntary resettlement starts at the edge of the existing road (both sides) and ends at the boundary of construction limit. The construction limit is defined as the area that is included within the formation width, covering carriage width, shoulders, drains and sometimes an area to improve road visibility.

34. On July 18-21, 2011, the team initially established rapport with the communities and conducted sub-project information dissemination and initial public consultations. It started to assess the assets and other land improvement impacts of the sub-project. Another series of public consultations were conducted on January 5-6, 2012 with the same purposes.

35. These two initial assessments resulted in the identification of assets that were located within the construction limits. Around 63 items such as residential houses, trade stores, graves, fences, crops and trees were estimated to be impacted by the proposed road project.

36. The design had been back to the drawing board twice to make the necessary adjustments to try as much as possible to avoid if not reduce the number of assets affected. The re-adjusted road alignment was checked in the field on August 10, 2014. It was repeated on April 16-17, 2015. After the re-adjusted road alignments were adopted, a detailed measurement survey was conducted from August 26-September 6, 2015. The results showed that the re-alignments not only reduced the customary land needed but also the number of affected assets. The number of affected assets was reduced from 63 to 30, through design changes.

37. On August 15, 2015, the Memorandum of Agreements between the customary land owners and DOW were signed permitting the use of the existing road carriage and the additional land required to upgrade and rehabilitate the sub-project road. The additional land required to upgrade and rehabilitate the road totaled 22.66 hectares.

### **C. Objectives of the Resettlement Plan**

38. The depth and scope of this resettlement plan commensurates with the minimal resettlement impacts arising out of this sub-project road. The purpose of this resettlement plan (RP) is to document and address the affected customary land, estimated at 22.66 ha and compensate the owners of the affected assets, crops and trees, graves, fences, and households who will suffer other economic losses and provide for income restoration measures and rehabilitation assistance.

39. The other objective of this RP is to establish baseline socio-economic conditions of displaced persons (DPs) for future monitoring and to present details of the public consultations and disclosures conducted along the sub-project road, including issues, concerns, grievance redress mechanism in cases of complaints from (DPs). The policies and framework on resettlement for the HRRIP will also be presented to ensure that the implementers have clear policy guidelines. The institutional framework for participation and implementation and responsibilities for monitoring during implementation will also be presented in conformity with the resettlement framework for HRRIP.

## **III. SCOPE OF LAND ACQUISITION AND RESETTLEMENT**

40. In the Nipa – Munihu sub-project, the DOW, local leaders and residents along the road indicated that the whole existing road is located on customary land that has not been alienated to the State as per the Land Act. The classification and locations of customary and state lands were confirmed by the provincial and district personnel who were consulted on the classification of affected lands.

### **A. Scope of Land Acquisition**

#### **1. Land Impacts**

41. The whole length of the Nipa–Munihu road is customary land. The first 21.545 km of the sub-project road is located in Nipa Rural LLG in Nipa/Kutubu District while the next 6.185 km is located in Lai Valley Rural LLG in Mendi/Munihu District, both in Southern Highlands Province. The existing road occupies 10.84 hectares while the additional land required to upgrade and rehabilitate the sub-project road is 22.66 hectares. The rehabilitated road will occupy a total of

33.50 hectares of customary land with an average width of 12.08 meters. The details are shown in the following Table 2: Breakdown of Existing Road and Additional Land Required.

**TABLE 2: BREAKDOWN OF EXISTING ROAD AND ADDITIONAL LAND REQUIRED**

LLG	Classification	Length (Meter)	Existing Road (Ha)	Additional Land (Ha)	Total (Ha)
Nipa Rural	Customary Land	21.545	8.64	17.12	<b>25.76</b>
Lai Valley Rural	Customary Land	6.185	2.20	5.54	<b>7.74</b>
<b>Total</b>		<b>27.73</b>	<b>10.84</b>	<b>22.66</b>	<b>33.50</b>

Source: Design Consultant's Computation

42. In the Nipa-Munihu road section, there was no previous land survey undertaken and the determination of tribal/clan lands was estimated during the community consultations by tribe and clan leaders who accompanied the team and pointed out their land boundaries. The sub-project road will start at Egenda 1, and proceed to Egenda 2, Egenda 3, Shumbi 1 and Shumbi wards, Nipa Rural LLG, Nipa/Kutubu District and further proceed to Maip 1, Maip 2 and Nera wards, Lai Valley LLG, Mendi/Munihu. There are 11 affected tribes who own the customary land in the sub-project road. The details are shown in the following Table 3: Breakdown of Affected Tribes/Clans and Their Impacts.

**TABLE 3: BREAKDOWN OF AFFECTED TRIBES/CLANS AND THEIR IMPACTS**

No	Tribe	Chainage	Length (Km)	Affected Area (sqm)	Affected Households	Affected Members
1	Nipa/Milapore	0+ 000-2+300	2.3	18,794.81	69	365
2	Nipa/Towens	2+300-5+500	3.2	26,149.30	30	163
3	Hopol	5+500-7+100	1.6	13,074.65	33	193
4	Hinn	7+100-9+200	2.1	17,160.48	31	186
5	Nipa/Tee	9+200-11+300	2.1	17,160.48	17	91
6	Hal	11+300-12+500	1.2	9,805.99	0	0
7	Inzapere	12+500-13+100	0.63	5,148.14	0	0
8	Pint	13+100-14+200	1.1	8,988.82	0	0
9	Kopol	14+200-18+600	4.4	35,955.28	0	0
10	Maip	18+600-23+500	4.9	40,041.11	0	0
11	Kupin	23+500-27+700	4.2	34,320.95	0	0
	<b>Total</b>		<b>27.73</b>	<b>226,600.00</b>	<b>180</b>	<b>998</b>

43. In terms of the number of households affected, the Nipa/Milapore Tribe is the most affected with 69 households with 365 members. This is followed by Hopol Tribe with 33 affected households with 193 members; Hinn Tribe with 31 affected households with 186 members; Nipa Towns Tribe with 30 affected households with 163 members and Nipa/Tee with 17 affected households with 91 members. In summary there are 180 affected households with a total of 998 household members in the sub-project.

44. Each tribe has its own portion of land within the customary land base. The tribe from its huge land base allocates land to each household depending on their needs. Any household that does not have enough land or one who is displaced from the allocated land is eligible to receive land from the tribe. In such circumstances, the tribe taps into the unallocated land bank to provide the land to its tribal members. Accordingly, the severity of Land Impacts on Tribal members is expected to be minimum. The relevant issues are further discussed elsewhere.

45. GoPNG has encouraged the registration of customary land since the early 1980s but the efforts were unsuccessful. It enacted two laws, the Land Group Incorporation (Amendment) Act and Voluntary Customary Land Registration Act to lay the groundwork for customary land registration. These Acts were brought into effect in 2011, following recommendations from the National Land Development Task Force. The Acts recognize the corporate nature of customary groups and allow them to hold, manage and deal with land in their customary names, and for related purposes. These acts also facilitate the voluntary registration of customary land, to be known as “registered clan land”, and make that land available for development through the use of Incorporated Land Groups (ILGs).

46. These two laws were generally ignored by the customary landowners for fear that land registration would become the basis for the assessment of real property tax or other taxes related to land holdings. Other customary landowners feared that government might use the land registration to usurp their land. Hence, very few customary lands are registered. In the areas where HRRIP has sub-projects, there is no report of any affected customary land that is registered under existing laws.

47. During the DMS, the team tried to establish if there are any documents where the land areas of the tribes can be ascertained. The tribal leaders stated that they have no documents or are unaware if any office where data on their land holdings is available. In addition, tribal leaders also do not know the area of customary land. What they know are locations of trees, bamboo clumps, rivers or ridges that are the outer boundaries of tribal land. They know the boundaries but not the land area within.

48. Tribal land ownership is not absolute and only reflects the social system of PNG. Ownership and boundaries of land can never be fixed for all time but reflect changes in power and authority. Land rights are best perceived from the center, rather than having fixed boundaries. This means that greater clarity of tenure occurs at the center of customary land, with less distinction at the boundary.

49. Land rights are held in common with other members of the tribe. The relationships between tribes influence the assertion of land rights and subsequent tenure. Land tenure is not absolute but is repeatedly tested by competing tribes. Disputes over land are never lost; rather the loser will regroup for a further claim.

50. It is in the above context the team attempted to estimate the tribal land holding through a survey. However, the tribal elders warned the team that determining the exact areas in square meters will most probably re-ignite boundary issues that would probably lead to a war with the neighboring tribes because of the high possibility that the neighboring tribes will not agree on the boundaries set by another because of past conflicts.

51. With the high risks of resurrecting bad blood between the affected tribes, the team had to be contented with measuring the affected areas of tribal land. The boundaries are

approximations where it is quite possible that the neighboring tribes point to different boundaries, the difference is divided and this point becomes the common boundary. These are the reasons why this report cannot present the severity of impacts on land because of the impossibility to establish the total tribal land holdings.

#### **a. Severity of Land impacts**

52. Every tribe has a demarcated area of land which is allocated among its clans. The clan in turn allocates such land to its families to benefit from. Normally, tribal land is not occupied by any member outside the designated tribe. However, if there are encroachers on tribal lands, it is the sole duty of every member to drive the trespasser away even if this will involve tribal warfare. The real owners of the tribal land are the clan members. Hence, in determining the number of affected persons, the tribe is treated as a unique entity with its own distinct clan members each of whom has several land parcels.

53. A household has several plots located in different parts of their tribal land area. Some lands are currently used as food gardens while others are undergoing fallow period during which it is given a rest to regain the lost fertility after farming continuously for 4-10 years. In some cases, the use of food gardens after fallow is given to other members of the tribe, which is entirely a person-to-person arrangement. In the case of this sub-project, tribesmen whose lands are permanently affected will seek some redressal from their leaders by either allocating vacant lands or early activation of fallow lands to the affected households.

54. The assessment of impacts to determine whether the loss of land is significant or not, should be on the tribal level as a whole and not on individual, as determined by the unique customary laws that prevail in the Highlands Region.

55. The land impact of the project is expected to trigger the release of idle tribal lands as substitute lands in favor of the affected households. The location, size and fertility of the substitute lands will be determined by the tribal elders and leaders, taking into consideration the conditions and sizes of the affected land.

56. The determination of the percentage of their affected productive assets had been problematic because the affected households have multiple areas. Further investigations revealed that each household in a tribe has an average of at least 4 productive food gardens with the majority for household consumption while the rest are cultivated for their potential cash income.

57. In the case of trees, the person who planted it becomes the owner regardless of where it is planted. The ownership of natural grown trees goes to the household who owns the plot of land where such trees are present. The tribal leaders will be consulted in determining the ownership of trees since some may be regarded as owned by the entire tribe.

### **2. Asset Impacts**

#### **a. Residential Houses**

58. The sub-project will require the relocation of 16 houses with a total floor area of 178 sq.m. The types of houses and other details are presented in Table 3. Fourteen out of 16 houses are made of non-durable materials such as grass, straw, bamboo, etc. while 2 are made of a mixture of both non-durable and permanent materials such as corrugated sheets, timber

frames, planks, cement. Only one affected house is permanent-built where durable materials have been used in the construction of roof, walls and the floor.

59. The major cost of constructing residential houses is the cost of harvesting, hauling, cutting and installation of materials. The frequently used materials are pitpit grass for thatching, shrub sticks, elephant grasses, tree bark and or pitpit stalks as walls. A typical house made of non-durable materials is round or square shaped with an average area of around 6 to 10 sq.m. Because of the cool temperature prevailing in the highlands all year round, windows made of non-durable materials are seldom seen.

60. Traditionally, the perception of the structures made of non-durable materials is only temporary, the duration of which is co-terminus to the durability of the bush material used. Seldom will structure owners undertake major repairs because culturally, they will just wait for the structure to deteriorate and construct a new structure in lieu of the dilapidated structure because it would be more onerous to build a new house in light of the availability of materials in their areas for free.

61. Without the project, replacement is at their own expense as the house becomes old and dilapidated. However, because their houses are affected by the road project, they will be compensated at full replacement costs, and in some cases, even if the remaining lifespan of the affected house is less than a year.

62. In summary, if the affected house is new, the compensation is approximately equal to the cost of building. The older the affected house is, more advantageous to the affected owner is because there is greater difference between the compensation due and the present worth of the house.

#### **b. Trade Store**

63. Among APHs are 14 trade stores, 4 of them large while the rest are small. The difference between a large and a small trade store is in the area of the unit. A large trade store provides enough room for customers to go inside and pick up what they want by themselves. In the case of a smaller trade store, customers wait at the window while the owner serves them upon request. The owners of 5 trade stores use part of the building as their residences. The construction of a trade store is either non-durable or permanent materials. The trade stores sell basic commodities such as flour, cooking oil, salt, sugar and other basic items. The owners of trade stores will be compensated at full replacement costs. In addition, they will receive a shifting allowance, transport allowance and an allowance to compensate for the losses whilst in transit. The compensation was estimated through discussions with the affected business owners. Additional discussions of allowances provided to trade store owners are found under the section on Compensation.

64. The details of houses and trade stores affected by the project are shown in the following Table 4: Summary of Affected Residential Houses and Trade Stores.

**TABLE 4: SUMMARY OF AFFECTED RESIDENTIAL HOUSES AND TRADE STORES BY SEVERITY OF IMPACTS**

Asset	Non-durable Material	Permanent Materials	Total	Affected Area < 20%	Affected Area > 20%	Total
House	14	2	16	6	10	16

Trade Store	2	12	14	4	10	14
<b>Total</b>	<b>16</b>	<b>14</b>	<b>30</b>	<b>10</b>	<b>20</b>	<b>30</b>

Source: DMS/Socio-Economic Survey, August-September 2015

65. In terms of severity of resettlement impacts, all will lose greater than 10% of the area of the asset. Hence, all items will have to be relocated.

66. The owners of affected assets have to reconstruct them a few meters (average of around 5 meters) away from the road inside their tribal land. There is more than enough space to accommodate the new construction where the tribal elders have stated that there will be no problem with these relocations. In addition to compensation at full replacement costs, the owners of the 16 affected houses, are also entitled to a other allowances such as *moving, transport and temporary accommodation allowances*.

67. Economic displacement caused by the sub-project is in respect of 14 trade stores. The owners will be assisted to re-build lost assets away from the construction limit. The DPs will be compensated at full replacement costs, a *shifting allowance, transport allowance, temporary accommodation allowance and an allowance for business losses*.

68. The resettlement team consulted the engineers in the design team and DOW and they both are in the opinion that shifting or reconstructing the affected asset will entail the preparation of the new site by leveling the earth and preparing the floor and this activity will take a maximum of two days including slightly elevating the footprint of the structure and providing for a small canal around the new structure location. The next step to gather the necessary materials for roofing and external walls, usually pitpit grass, elephant grass, sticks from shrubs, wooden planks and vines for tying the materials together. These materials are readily available and harvesting and/or gathering will take around three days. The next step is to assemble the house frame by burying the wooden planks in the soil indicating the outside perimeter of the structure. Then, the top cord of the roof truss is put in place completing the complete frame of the house. This will take another two days. The roofing materials (grass tied together in bundles) are now placed on the roof and the external wall composed of either grass or bamboo slats are put in place. A wooden barrier is placed to serve as the door of the structure. Used straw sacks are used as internal wall for added insulation against cold weather. This will take another two days. In summary, two persons will take around nine days to build a replacement house made of bush materials.

### **c. Affected Grave Yards**

69. Based on customs and traditions in the Highlands, there is no western concept of a cemetery or memorial park which would contain the human remains of the dead in a certain political jurisdiction. In the Highlands, the dead are buried within their customary land, usually very near the residences of the deceased, wherein the spirits of the dead would watch and protect their living relatives. The nearest similarity to the western concept of a cemetery is a grave site within the customary land where the dead of a specific clan within a tribe are all buried. The interment of the members of the tribe within their customary land strengthens and reinforces their attachment to the land. The graves served as monuments to their tribal history including their victories and defeats. Customary land is usually not sold. In cases of territorial conflicts with the adjacent tribes, the locations of the graves are strong evidences of their boundaries and would support their claims in a land dispute.

70. The relocation of graves and grave sites is influenced by the cultural beliefs in the project area. It is believed that the spirits of the dead are still in the area and if there is no proper showing of respect for the dead through the celebration of proper rituals, the dead will become angry with the living relatives and bad things might happen to them. The relatives of the dead that will be relocated because of the project have insisted that these rituals including sacrificing pigs to appease the dead should be properly observed.

71. The materials used in a grave indicate the social status of the deceased and the nature of his/her occupancy over the land. Permanent graves with features indicate that the deceased had occupied high social position such as tribal leader, Parliament Member or government official when they were still living. The simpler the materials used in a grave usually indicate a lower social status of a deceased. Unmarked graves usually indicate the temporary occupation of land, usually during tribal warfare when there is no time to construct elaborate graves.

72. In summary, the loss of graves and grave sites has cultural significance because the graves are their connections to their ancestors. In the face of changing socio-economic and political environments and their consequential anxieties, their connections with ancestors are the stabilizing factor that holds their tribe together. The graves also serve as their testimonial to the commonality of ancestry between the clans and sub-clans.

73. In the sub-project, there are 35 affected graves broken down into 3 permanent graves with features; 1 permanent grave and 31 unmarked graves. In addition to the compensation rates provided for under the Valuer General's listing, each affected household will be provided with *relocation and reburial assistance* to compensate for the ceremonial costs, exhumation, cost of coffin and reburial expenses of the affected graves. The details are shown in the following Table 5: Summary of Affected Graves.

**TABLE 5: SUMMARY OF AFFECTED GRAVES**

Type of Grave	Number
Permanent w/features Grave	3
Permanently Marked Grave	1
Unmarked Grave	31
<b>Total</b>	<b>35</b>

Source: DMS/Socio-Economic Survey, August-September 2015

74. The study team had difficulties in confirming the unmarked graves. For graves that are permanently marked, there is a customary practice in the Highlands Region to put up cenotaphs (commemorative plaques and/or tombs) in memory of the dead, the actual human remain, buried elsewhere. The only time these graves can be validated is when the graves are exhumed and the human remains are found and counted.

#### **d. Fences**

75. In the western concept, fences usually indicate the extent of one's ownership to a property. In the Highlands, the prevailing property regime is communal ownership. The tribes are the owners of the land and the members of a tribe occupy a certain portion of the tribal land in the similar concept of beneficial occupancy from the tribe.

76. The primary purpose of fences in the project area is not to delineate ownership but to prevent farm animals in entering the garden and destroying food crops. Garden crops is the

primary source of food for the affected households. Most of the time, the fences are made out of shrubs, bush materials, make-shift materials and pig wire, indicating impermanence of the fences. In comparison, fences of schools and churches in other parts of the project area are made of permanent materials, usually cyclone wires or hallow blocks. If the food gardens are in the fallow state, allowing the land to recover its fertility, the fences that protect these food gardens are abandoned because the fences had already served their purpose.

77. The sub-project impacts 78 fences with a total length of 3,004 meters. Out of this total, 74 are made of tree branches and shrubs with a total length of 2,814 meters while there are 4 affected wooden fences with a total length of 190 meters. The details of the affected fences are shown in the following Table 6: Summary of Other Affected Assets.

**TABLE 2: SUMMARY OF OTHER AFFECTED ASSETS**

Type of Fence	Number	Length
Plants/Shrubs	74	2,814
Wooden	4	190
<b>Total</b>	<b>78</b>	<b>3,004</b>

#### **e. Crops and Trees**

78. Annual crops are defined as plants and shrubs whose edible parts can be harvested within a year. The example of crops include all varieties that are cultivated in food gardens in the sub-project area. It is a policy of the project to permit as much as possible the harvesting of the garden produce before the possession of land for construction. In this instance, there will be no compensation paid because there was no loss where the crops having been harvested and made use of by the owner before the land is taken over by the contractor.

79. It is a tradition among households to plant crops in several food gardens where the land productivity is different. A garden that has been cultivated continuously for 4-5 years is at the verge of losing its productivity whilst a newly-created garden has its fertility at the highest level. The concept of multiple garden is also a survival strategy to ensure a continuous supply of food in the event that there is crop failure in 1-2 gardens. Hence, in the event that the road project has affected one garden, the household enjoys food collected from other gardens.

80. The affected trees can be subdivided into fruit trees and timber species. The compensation rates for the loss of trees (depending on the species, age and/or diameter) has been determined by the Valuer General's Schedule Compensation (2013). However, there is a provision in the Resettlement Framework, wherein, if the rate provided is below the current market price, an additional grant will be provided to compensate for the difference between what is provided in the schedule of compensation and the current market price, even though the rates in the schedule are about 2 years old. The comparison of prices in the schedule with the actual market price of Mendi, the capital of SHP reveals that the Valuer General's rates are still current.

81. Timber trees are viewed as a mechanism of household saving similar to bank deposits. The households in the sub-project area let trees to grow on their landscape until such trees attain a commercial value in the future, ready to be cut down and sold. The money generated from the sale of timber is an important source to spend on eventualities such as enrollment in schools or the payment of bride price or for medical expenses. The loss of timber trees has no

immediate effect on household income but would adversely affect their financial capacity during emergencies. Inversely, during tribal conflicts, timber trees are targeted by the opposing tribe which either cut and/or burned down to deprive their enemies of these assets, a process that prolong the economic recovery after the conflict.

82. The classification of crops and trees are provided in the Valuer General's Schedule of Compensation for Trees and Plants (August 2013). The classification of sizes for Forest and Other Large Trees (Category D) are as follows; (a) Trees with a diameter 6 cm to 15 cm shall be deemed to be small trees; (b) Trees with diameter 15cm to 60 cm shall be deemed as medium tree; (c) Trees with the diameter greater than 60cm shall be deemed as mature trees; (d) Trees that do not reach a height of 2.00 meters shall not be subject to compensation claims.

83. Trees under Categories A and C shall be assessed as follow; (a) Trees less than 1 year old, or less than 6 cm diameter, 1.00 meter above the ground level shall be deemed to be seedling; (b) Trees past seedling stage up to 2 years shall be deemed as small trees; (c) Trees over 2 years up to bearing age shall be deemed as medium trees; (d) Trees that are fully grown and bearing fruit shall be deemed as mature trees.

**CATEGORY A (EDIBLE FRUITS AND NUTS) ARE TREES AND PLANTS CULTIVATED IN SPECIFIC AREA FOR THE PURPOSE OF CASH INCOME (COMMERCIAL CROPS) OR FOR CONSUMPTION. THE MOST AFFECTED CROP IS PANDANUS KARUKA (1,304 TREES). THE OTHER DETAILS ARE SHOWN IN THE FOLLOWING:**

84. Table 7: Affected Category A Crops which presents the affected crops in this sub-project.

**TABLE 3: AFFECTED CATEGORY A CROPS**

Category A (Edible fruits & nuts)	Seedling	Small	Medium	Mature	Total
Avocado	24	62	102	139	327
Banana	0	65	199	122	386
Betel Pepper vine	0	44	103	176	323
Bread Fruit Edible	0	3	2	14	19
Guava	0	9	10	10	29
Mango	0	0	6	2	8
Pandanus (Karuka)	1	178	443	682	1,304
Pandanus (Marita)	0	0	4	0	4
<b>Total</b>	<b>25</b>	<b>361</b>	<b>869</b>	<b>1,145</b>	<b>2,400</b>

85. Category B contains garden plants that grow as clumps or vines. The small, medium and large categories refer to the size or diameter of the clump or vine growth. Small is <0.75 m; medium 0.75-1.50 m and large is >1.50m. The two most affected crops are sugar cane (554 plants) and sweet potato (467 hills). The other details of affected Category B crops are shown in the following Table 8: Affected Category B Crops.

**TABLE 4: AFFECTED CATEGORY B CROPS**

Category B (Garden plants)	Small	Medium	Mature	Total
Bean	20	25	23	68
Black kumu	36	15	30	81
Broccoli	0	50	0	50
Cassava	12	11	26	49
Chinese Cabbage	0	6	0	6
Choko	0	7	16	23
Corn	20	30	50	100
Edible Pitpit	25	138	126	289
Local Green	0	4	22	26
Onion	10	0	0	10
Passion fruit	0	0	12	12
Pawpaw	0	2	2	4
Pineapple	0	1	0	1
Pumpkin	0	11	8	19
Round Cabbage	65	25	0	90
Sugarcane	220	144	190	554
Sweet Potato	42	98	327	467
Taro	40	70	31	141
Taro Kongkong	85	135	214	434
Yam	0	40	26	66
<b>Total</b>	<b>575</b>	<b>812</b>	<b>1,103</b>	<b>2,490</b>

86. Category C contains other economic plants. Similar to previous categories, where plants grow as clumps or vines, the small medium and large categories refer to the size or diameter of the clump or vine growth. The most affected is targets or Cordyline (10,870), a kind of fern and casuarinas trees (2,945). The total crops and trees under this category totaled 14,468. These two types of plants do not have commercial value as they are almost entirely being used for cooking (leaves), decorations (mature leaves) and stems in building fences. The details of affected Category C crops are shown in the following Table 9: Affected Category C Crops.

**TABLE 5: AFFECTED CATEGORY C CROPS**

Category C (Other economic plants)	Seedling	Small	Medium	Mature	Total
Bamboo	0	15	2	5	22
Casuarina	165	641	1162	977	2,945
Coffee	28	31	62	157	278
Fern	0	61	28	84	173
Laportia		0	20	36	56
Orchids		15	51	48	114
Pandanus (Non-edible)	0	9	0	1	10
Targets (Cordyline)		525	2939	7406	10,870
<b>Total</b>	<b>193</b>	<b>1,297</b>	<b>4,264</b>	<b>8,714</b>	<b>14,468</b>

87. Category D contains forest and other large trees. There are 2,465 trees included in this category. The most affected Category D trees are classified under “other trees” with 978 trees and trees under “lesser known useful species” with 707 trees. The details are shown in the following Table 10: Affected Trees.

**TABLE 6: AFFECTED TREES**

Trees (Forest & other large trees)	Small	Medium	Mature	Total
Hard Wood	8	53	84	145
Gum Tree	13	37	70	120
Semi Hardwood	14	56	84	154
Lesser Known Useful Species	213	303	191	707
Red Cedar	0	9	8	17
Oak Tree	0	0	2	2
Semi Hardwood	76	41	91	208
Other Trees	260	354	364	978
Pine Tree	43	70	21	134
<b>Total</b>	<b>627</b>	<b>923</b>	<b>915</b>	<b>2,465</b>

Source: DMS/Socio-Economic Survey, August-September 2015

88. In summary, there are 218 seedlings, 2,860 small, 6,868 medium and 11,877 mature trees and plants in four different categories affected by the project. The total affected crops and trees amounted to 21,823. The other details are shown in the following Table 11: Summary of Affected Trees and Plants.

**TABLE 7: SUMMARY OF AFFECTED TREES AND PLANTS**

Tree/Plant Category	Seedling	Small	Medium	Mature	Total
Category A (Edible fruits & nuts)	25	361	869	1,145	2,400
Category B (Garden plants)	0	575	812	1,103	2,490
Category C Other economic plants)	193	1,297	4,264	8,714	14,468
Category D (Forest and other large trees)	0	627	923	915	2,465
<b>Total</b>	<b>218</b>	<b>2,860</b>	<b>6,868</b>	<b>11,877</b>	<b>21,823</b>

89. As discussed earlier, the identification of the degree of impact of assets such as trees and plants is problematic and cannot be ascertained accurately. However, to ensure that AHs are not worse off than before resettlement, this RP is adapting an additional 20% amount as severity impact allowance for productive assets based on the value of affected crops and trees which is payable to all AHs losing trees and plants.

#### **f. Vulnerable Displaced Households**

90. The vulnerable displaced households are those who will experience severe impacts than others because of their unique status. ADB policy requires that vulnerable displaced persons are targeted by a project and that they are provided with additional measures in order to reduce impacts on them. The intent of the policy is to ensure that project's adverse impacts are not disproportionate on the vulnerable people who should share the benefits and opportunities of the development equal to others.

91. The sub-project will assist the following vulnerable households: (i) AP household heads whose age is 65 or older; (ii) female-headed household heads; and (iii) household heads who are physically incapacitated (disabled). The vulnerability allowance is equivalent to two weeks minimum wage per count of vulnerability for each qualified household.

92. Based on the assessment, there are 20 households headed by elderly persons, 15 women-headed households, 3 households whose head is physically handicapped and 22 households below the poverty line. These households will receive vulnerability allowances because the resettlement impacts on them are likely to be greater owing to the physical and economic reasons attributable to such households. There are 5 HHs who have experienced more than one-count of vulnerability who will accordingly qualify for additional counts. No households will fall under poverty as a result of voluntarily donating the land by the clan/tribes through MoA. This is because the tribal leaders will allocate unused land from the customary land base for those who have lost their land. The details of vulnerable people are shown in the following Table 12: Summary of Vulnerable Households.

**TABLE 8: SUMMARY OF VULNERABLE HOUSEHOLDS**

Vulnerable Households	Number
Elderly Headed Households	20
Female Headed Households	15
Physically Handicapped Headed Households	3
Households below Poverty Line	22
<b>Total</b>	<b>60</b>

Source: DMS/Socio-Economic Survey, August-September 2015

### 3. Resettlement Category

93. The sub-project is categorized as Category B. The total affected land is 33.50 hectares where 10.84 hectares are the existing roads in the project area and additional 22.66 hectares to be acquired for road widening and other improvements. There are 180 households belonging to 11 tribes/clans who will be impacted at varying degrees. There are only 30 households (110 persons) who will suffer major resettlement impacts due to loss of houses and trade stores. There are 21,823 trees and crops that will be affected along with 35 graves and 78 fences with a total length of 3,004 meters.

94. In terms of the impacts on land, the overall land occupied by the affected tribes should be the basis of assessing the impact and not at the household or individual level since a decrease in the landholdings of affected clan member will be addressed by the clan/tribe through releases of idle lands. Some households are also considered affected by virtue of their membership to the tribe/clan and not necessarily considered significantly impacted from economic and physical displacement. The clan/tribes confirmed that they have sufficient lands to release for the affected households and voluntarily agreed to enter into a Memorandum of Agreement with the Government.

95. The determination of the percentage of affected productive assets, including loss of crops and trees, is problematic in a customary-owned land context. However, the assessment revealed that a household normally owns multiple plots or gardens located in several areas which minimize the impact of loss of crops from the project. Most of the affected plants such as targets, are not considered as commercial crops but are naturally grown. The leaves are used

in cooking and decorations whilst stems as fencing material. The ownership of forest and large trees are not always clear-cut since tribes may claim certain rights or benefits especially for old trees located within the customary-owned land.

96. In terms of affected structures, 14 out of 16 houses are made of non-durable/bush materials such as grass and bamboo. The clan perceived these houses as temporary where replacement is easily made using the same materials freely available in their area. Two out of 12 trade stores are made of non-durable materials.

## **IV. SOCIO-ECONOMIC PROFILE**

### **A. Sources of Data**

97. Primary data was generated by the DMS and socio-economic survey conducted from August 25 to September 6, 2015. All affected households were included in the DMS. Public consultations were also conducted in July 18-21, 2011, January 5-6, 2012, August 8-25, 2014, April 16-17, 2015 and August 25 to September 6, 2015.

98. Secondary data analysed were the Papua New Guinea District and Provincial Profile (March 2010) published by the National Research Institute and the results of the National Census conducted in 2011.

### **1. Secondary Socio-Economic Information**

99. The proposed sub-project road starts from Nipa Rural LLG in Nipa/Kutubu District and ending in Lai Valley Rural, Mendi/Munihu District, both in Southern Highlands Province. The sub-project road traverses 5 council wards in Nipa Rural LLG and 3 council wards in Lai Valley Rural LLG.

100. **Nipa Kutubu District**-- covers the Wage, Nembi, Mubi, Digimu and Hegigio valleys. Lake Kutubu is in the northeast and Mt Bosavi is in the southwest. Average annual rainfall ranges from 2700 mm to over 4500 mm, increasing from north to south. Altitude varies from 100 m in the lower Hegigio Valley, to over 2500 m on Mt Bosavi. Most people live between 600 and 2200 meters.

101. Based on the 2011 National Census, the population in Nipa Kutub district is 147,005 persons. There are 22,682 citizen households and the average household size is 6.48 persons per household. There are 75,426 males against 71,579 females.

102. The highest population density is on the Nembi Plateau with 200 persons/km<sup>2</sup>. The Nembi Valley has 80 persons/km<sup>2</sup>. The Mubi, Digimu and Hegigio valleys and the Kutubu area have densities of 50 persons/km<sup>2</sup>, while the Wage Valley and Bosavi area have 20 persons/km<sup>2</sup>.

103. Nipa Kutubu District has 55 elementary, 11 community, 25 primary, 1 provincial and 1 vocational schools to service the whole population. The gross enrolment rate is 31.4% while the net admission rate is 25.1%. The literacy rate in the district is 32.3%.

104. There are 11 health centers in the district and 20 aid posts. There are 29 nursing officers.

105. The primary source of income in the district is agriculture of which the dominant activity is coffee cultivation practiced by 79% of total households. The cultivation of food crops is mostly for home consumption. Livestock is raised by 58% of households of which 55% raised it for cash.

106. Agriculture in the Nembi Valley and on the Nembi Plateau is dominated by high intensity sweet potato cultivation. There are 4–10 consecutive plantings before a fallow period of 1–3 years. Production is maintained through the use of composting, tillage, drainage and bedding. People in the Wage Valley cultivate low intensity sweet potato gardens. In the Kutubu area, Bosavi area, and the Hegigio, Mubi and Digimu valleys, sago is the most important food and is supplemented by low intensity mixed staple gardens.

107. Mendi/Munihi District -- covers the upper Mendi, Lai, Imilhama, and Nembi valleys. Mt Giluwe dominates the east of the district. Average annual rainfall ranges between 2,200 and 2,800 millimeters. Altitude varies from 1,700 m in the Mendi Valley, to over 4,300 m on Mt Giluwe. Most people live between 1,700 and 2,500 meters.

108. Based on the National Census of 2011, the population in the Mendi/Munihi District in the year 2011 is 144,629 persons. There are 23,236 citizen households and the average household size is 6.22 persons per household. There are 74,865 males against 69,764 females.

109. The Mendi Valley has the highest population density at 120 persons/km<sup>2</sup>. The Lai and Imilhama valleys have densities of 100 persons/km<sup>2</sup>, while the upper Nembi Valley has 80 persons/km<sup>2</sup>. The upper slopes of Mt Giluwe are unoccupied. The Mendi area has significant in-migration as people look for better access to services, wage employment in the town and other opportunities.

110. Incomes are very low to low in the entire district. People in the Imilhama, upper Lai and Mendi valleys sell potato, fresh food and firewood. Those in the upper Nembi and lower Lai valleys sell coffee and fresh food. Agriculture in the Imilhama, upper Lai, upper Nembi and Mendi valleys is dominated by high intensity sweet potato cultivation. Potato is an important crop in higher altitude areas.

111. Cultivation is continuous in the Imilhama and upper Lai valleys and production is maintained through the use of composting and mounding. People in the Mendi Valley make more than 20 consecutive plantings before a fallow period of 5–15 years. Production is maintained through the use of drainage, composting and mounding. People in the Lai Valley cultivate moderate intensity sweet potato gardens.

## **2. Primary Socio-Economic Information**

112. The following sections contain the results of the DMS covering the total 180 DHs and a socio-economic survey that represents a sample of 28% of the total DHs. In addition, data were also collected via Focus Group Discussions, meetings and other types of consultations with the APs.

### **a. Demographic Information**

113. There are 180 households interviewed in the DMS. Out of this total, 165 are men-headed while 15 are women-headed households. Of the total 180 AHs, 137 are nuclear families whilst 43 are extended families. The total population is 998 persons or an average household size of 5.54 persons. Out of the total of 998 members, 504 are males while 494 are females. The average household size is 5.55 persons for men-headed whilst the same figure for women-headed household is 5.53 persons.

114. There are 15 women-headed households composed of 12 nuclear households and 3 extended households. The total population of these HHs is 83, split as 43 males and 40 females. The average household size is 5.53 persons. The details are shown in the following Table 13: Breakdown of Type, Age and Gender Distribution of Household Members.

**TABLE 9: BREAKDOWN OF TYPE, AGE AND GENDER DISTRIBUTION OF HOUSEHOLD MEMBERS**

Type of Household	Nuclear	Extended	Total	%	Population (number)			Ave HH Size
					Male	Female	Total	
Men-Headed Household	125	40	165	92	461	454	915	5.55
Women-Headed Household	12	3	15	8	43	40	83	5.53
Total	137	43	180	100	504	494	998	5.54
Percentage	76	24			50.50%	49.50%		

Source: DMS/Socio-Economic Survey, August-September 2015

115. There are 564 persons in the economically productive age (15 – 65 yrs old) broken down into 287 male and 277 females. There are 357 young dependents broken down into 184 males and 173 females while there are 77 old dependents broken down into 33 males and 44 females. In total, the young and old dependents totaled 434 persons. There are 77 dependent persons for every 100 persons in the economically productive age. (Age Dependency Ratio -- is the ratio of persons in the “dependent” ages (generally under age 15 and over age 65) to those in the “economically productive” ages (15-65 years) in the population.

116. The men-headed households have 516 persons in the economically productive age group split down into 259 males and 257 females. There are 328 young dependents (<15 yrs) split down into 171 males and 157 females while there are 71 old dependents where there are 31 males and 40 females. In total, the young and old dependents totaled 399 persons. The dependency ratio is 77 dependents for every 100 persons in the economically productive age group.

117. The women-headed households have 48 persons in the economically productive age group, split down into 28 males and 20 females. The young dependents are 29 (<15 yrs) of which 13 are males while 16 are females. There are 6 old dependents where 2 are males and 4 females. In total, the young and old dependents totaled 35 persons. The dependency ratio is 73 dependents for every 100 persons in the economically productive age group. The details are shown in the following Table 14: Breakdown of Household Members by Gender and Age Group.

**TABLE 10: BREAKDOWN OF HOUSEHOLD MEMBERS BY GENDER AND AGE GROUP**

Type of Household	<15 Years		15-65 Years		>65 Years		Total	%
	Male	Female	Male	Female	Male	Female		
Men-Headed Household	171	157	259	257	31	40	915	92
Women-Headed Household	13	16	28	20	2	4	83	8
Frequency	184	173	287	277	33	44	998	100
Percentage	18	17	29	28	3	4		

Source: DMS/Socio-Economic Survey, August-September 2015

**b. Education and Literacy**

118. In general, PNG has low levels of educational achievement and adult literacy. Since 2000, there has been an improvement in the literacy rate; it is estimated to be 57.3% in 2005 (UNDP, 2007), compared with 51.7% in 2000 (NSO, 2003). The adult literacy indicates that 57% of men are able to read and write but only 46% of women can. The proportions of adult men and women who have ever attended school are 51% for men and 42% for women; however, among people who have ever attended school, only 43% of men and 33% of women completed the primary level.

119. In terms of educational attainment of the APs, 20% do not have children whilst 13 % have no formal education. There are 289 persons (29 %) who are in the primary level while 262 persons (26 %) are in the secondary level. There are 104 persons (10 %) in the high school level while there are only 20 persons (2%) in the college level. The breakdown of their educational attainment based on gender is shown in the following Table 15: Educational Attainment by Gender.

**TABLE 11: EDUCATIONAL ATTAINMENT**

Category	Male	Female	Total	Percentage
Not of School Age	95	102	197	20
No Formal Education	70	56	126	13
Primary	131	158	289	29
Secondary	136	126	262	26
High School	59	45	104	10
College	13	7	20	2
Total	504	494	998	100

Source: DMS/Socio-Economic Survey, August-September 2015

120. Disaggregating the data on educational attainment by gender, the evidence points to a higher level achieved by women-headed households. The number of persons without formal education is higher for men-headed than the women-headed households. Thirty-three percent of members in women-headed households have primary education whilst the same figure for men-headed households is 29%. The exception is that the proportion of men-headed households that have reached college education is higher compared with women-headed households. The details for women-headed households are found in the following Table 16: Educational Attainment for women-Headed Households.

**TABLE 12: EDUCATIONAL ATTAINMENT FOR WOMEN-HEADED HOUSEHOLDS**

Category	Male	Female	Total	Percentage
Not of School Age	7	4	11	13
No Formal Education	2	6	8	10
Primary	11	17	28	34
Secondary	17	10	27	33
High School	5	3	8	10
College	1	0	1	1
Total	<b>43</b>	<b>40</b>	<b>83</b>	<b>100</b>

Source: DMS/Socio-Economic Survey, August-September 2015

121. Literacy is generally defined as the ability to read, write and comprehend the meanings of written words and signs that are expressed in any language. There has never been a national literacy survey in PNG. The estimate of 56 per cent of people being literate is based on a question in the national census in 2000: 'Are you able to both read and write with understanding a short simple statement in your day to day life? This means that around 56% of the country's total population can read, write and understand basic things in either their own languages or in any of the country's common languages such as English, Motu and Tokpisin. In Nipa/Kutubu and Nipa/Munihu Districts, the literacy rate is 32.3%, well below the national literacy rate of 56%.

### **c. Economic Activities**

122. The APs in the Nipa – Munihu road section were asked about their main economic activities. Almost all of AHs (93 %) are involved in agriculture. Fifty seven households are involved in roadside vending while 28 households have members who are engaged as paid labor.

123. Subsistence agriculture in this region is based on moderate-to- high intensity cultivation of sweet potato. Other common crops include beans, corn, greens, cabbage, sugarcane and peanuts. Households use techniques such as composting and mounding to maintain the productivity of their land; in areas of moderate intensity cultivation, gardens are left fallow for up to 15 years after 2-5 plantings.

124. Most households continue to raise small livestock such as pigs and poultry. Among surveyed households in the RIZ, the sale of pigs as a source of cash income is evident and the income derived from this activity ranges from K500 to K1,500 per year.

125. Coffee is the main crop sold for cash whilst the sale of pigs is the other main source of income. Nearly 90% of coffee growers sell directly to traders.

### **d. Household Income and Expenditure**

126. The DHs have a total annual income of 596,824 kina. The average annual household income is 3,316 kina or 276 kina per month for an average household size of 5.54 persons. Agriculture remains the foundation of their economic activities in the sub-project and is being practiced by 92.78% of DHs. Income from agriculture contributed 272,454 kina a year representing 45.65% of total annual household income.

127. The second largest source contributing to household income is roadside vending practiced by 57 households (32 %) where the contribution is 11 % of total annual household income. The third largest source of household income is wage employment contributing 9 % of total annual household income. However, this is being practiced by only 8 households, meaning that wage employment is the source of the largest income of AHs. Another interesting feature of household income is remittance from relatives and tribal members. This is a source of additional income for 94 households and contributes 8 % of total annual household income. The majority of income from other sources comes from raising poultry and livestock to be sold to buyers. The other details are shown in the following Table 17: Source of Annual Household Income.

**TABLE 13: SOURCE OF ANNUAL HOUSEHOLD INCOME**

Income Source	Number of Household	Percentage	Total Income	
			Value (Kina)	Percent
Agriculture	167	92.78%	272,454.00	46
Roadside Vending	57	31.67%	65,865.00	11
Wage Employment	8	4.44%	54,700.00	9
Remittance	94	52.22%	48,730.00	8
Business & Trading	13	7.22%	26,560.00	4
Hunting & Gathering	44	24.44%	18,530.00	3
Small Enterprises	9	5.00%	17,800.00	3
Paid Labor	28	15.56%	15,185.00	3
Transport Business	4	2.22%	13,150.00	2
Other Sources	106	58.89%	63,850.00	11
<b>Total</b>			<b>596,824.00</b>	<b>100</b>

Source: DMS/Socio-Economic Survey, August-September 2015

128. The sources of annual household income of the 15 women-headed households were disaggregated from the rest of the DH income for comparison. The results indicate that these households have a total annual income of 61,370 kina a year. This amount translates to 4,091 kina per year per household or an average monthly income of 341 kina per month, average of 5.53 persons per household.

129. The ranking of the sources of household income has some variations compared to the aggregated results. Agriculture remains the biggest source of household income with 31 % while wage employment comes second with 18 %. Income from small enterprises comes third with 11 % while it is only seventh in the aggregated results. The other details are shown in the following Table 18: Sources of Annual Household Income for Women-Headed Households.

**TABLE 14: SOURCES OF ANNUAL HOUSEHOLD INCOME FOR WOMEN-HEADED HOUSEHOLDS**

Income Source	Number of Household	Percentage	Total Income	
			Value (Kina)	Percent out of total income
Agriculture	13	86.67%	18,920.00	31
Wage Employment	2	13.33%	11,200.00	18
Small Enterprises	2	13.33%	6,800.00	11
Remittance	9	60.00%	6,020.00	10
Business & Trading	2	13.33%	5,520.00	9
Roadside Vending	3	20.00%	4,150.00	7
Paid Labor	4	26.67%	1,880.00	3
Hunting & Gathering	2	13.33%	1,550.00	3
Other Sources	6	40.00%	5,330.00	9
<b>Total</b>			<b>61,370.00</b>	<b>100</b>

Source: DMS/Socio-Economic Survey, August-September 2015

130. The men-headed households earn an average of 270 kina a month while women-headed households earn an average of 341 kina a month. This suggests that women-headed households earn 71 kina more a month than men-headed households.

131. Household Expenditure – The total annual household expenditure for the DHs amounted to 481,227.00. This is equivalent to 2, 643 kina per year for each household or 223 kina per household per month. Food is the largest expenditure item reported by all households that accounted for 34.27% of total expenses. The expenditure on food is likely to be under-reported because of the availability of food from their gardens for free.

132. The transport expense was the second largest expenditure item accounting for 15 % of total annual expenses. Field observations show that there were very few passenger motor vehicles (PMVs) plying either the Nipa or the Munihu road section. There are no PMVs that ply from Nipa to Munihu as the road is not passable by PMVs. Third largest expense was education accounting for 11 % of total household expenses while clothing was fourth largest with 9 %. The other details are shown in Table 19: Breakdown of Annual Household Expenditure.

**TABLE 15: BREAKDOWN OF ANNUAL HOUSEHOLD EXPENDITURE**

Expenditure	Households	Percentage	Total HH Expenditure	
			Value (Kina)	Percent out of total expenditure
Food	180	100.00%	164,928.00	34
Transportation	153	85.00%	74,398.00	15
Education	125	69.44%	52,172.00	11
Clothing	121	67.22%	43,257.00	9
Social Function	93	51.67%	39,686.00	8
Communication	117	65.00%	35,272.00	7
Health	115	63.89%	26,725.00	6
Agricultural Inputs	68	37.78%	20,809.00	4
House Fuel	78	43.33%	18,170.00	4
Electric Power	2	1.11%	350.00	0.07%
Others	34	18.89%	5,460.00	1
<b>Total</b>			<b>481,227.00</b>	<b>100</b>

Source: DMS/Socio-Economic Survey, August-September 2015

133. The annual household expenditure of the 15 women-headed households was disaggregated from the rest of the results. The total annual expenditure for women households amounted to 46,544 kina. This is equivalent to 3,103 per household per year or 259 kina per household per month. The largest expenditure is food representing 33 % of total expenditure followed education (15 %) and transportation with 14 %). The other details are shown in the following Table 20: Annual Household Expenditure of women-Headed Households.

**TABLE 16: ANNUAL HOUSEHOLD EXPENDITURE OF WOMEN-HEADED HOUSEHOLDS**

Expenditure Source	Households	Percentage	Total Expenditure	
			Value (Kina)	Percent
Food	15	100.00%	15,540.00	33
Education	13	86.67%	7,000.00	15
Transportation	14	93.33%	6,560.00	14
Communication	10	66.67%	3,322.00	7
Clothing	9	60.00%	3,116.00	7
Health	12	80.00%	3,092.00	7
Social Function	10	66.67%	3,000.00	6
Agricultural Inputs	10	66.67%	2,734.00	6
House Fuel	8	53.33%	1,580.00	3
Others	4	26.67%	400.00	0.86%
Electric Power	1	6.67%	200.00	0.43%
<b>Total</b>			<b>46,544.00</b>	<b>100</b>

Source: DMS/Socio-Economic Survey, August-September 2015

134. Comparing the household expenses between men-headed and women-headed households, there is a significant difference. The total average monthly household expenses of

men-headed households amounted to 220 kina while the same figure for women-headed households amounted to 259 kina or a difference of 39 kina a month.

135. Comparing the income and expenses between men and women-headed households, the former earn an average of 270 kina a month and spend an average of 220 kina or a net monthly savings of 50 kina. The women-headed household earns 341 kina a month and spend an average of 258 kina or a net savings of 83 kina. In summary, women-headed households are earning more, spending more and save more than men-headed households.

#### **e. Poverty**

136. The highest poverty rates occur among households that have little or no cash incomes, that is, families that rely primarily on subsistence agriculture, hunting, gathering and fishing to meet household consumption needs. However, farmers that grow and sell tree and other crops have high income levels. Altogether, people involved in the agricultural sector account for 86% of all poor.

137. Among the affected households, 22 are poor. Out of poor, 4 are also women-headed and 1 is headed by an elderly person. The poor households do not have animals and their land is also smaller compared to the non-poor. The poor also do not have trading, vending and other small-scale income activities. All poor people also do not have accessory housing units. They cook, live and sleep in the same unit.

#### **f. Housing Information**

138. Based on the sample size of 50 DHs, the major source of domestic water is from nearby streams accounting for forty seven households. There are two families that source their domestic water from springs while one household has piped water. The main toilet type is the pit-latrline owned by almost all (49) households while only one has the flush-type. Forty nine households use wood while the remaining one household electricity as their household fuel. There are forty nine households using kerosene as their lighting fuel while one household uses electricity. The lighting source for 18 households is kerosene, 30 use pit-pit plants while one household uses electricity from a private generator.

139. Over 97% of households own their houses where all are constructed using non-durable materials, i.e., wood frames with woven bamboo walls and straw/grass thatch roofs. Few have “modernized” their traditional houses with windows and front porches have been fixed. The better-off households have used a combination of non-durable and durable materials in the construction of their houses. Only one of the AH is permanent-built where permanent materials has been utilized in the construction of all three components namely, roof, walls and the floor.

#### **g. Migration**

140. There are generally four types of migration in PNG, (a) rural to urban, (b) rural to peri-urban, (c) rural to rural and (d) rural to resource projects. These movements are associated with the ability to earn cash incomes in particular provinces, with most migrants moving from provinces where incomes are lowest, to provinces where incomes are highest. In many parts of PNG people are moving from areas they perceive as disadvantaged to areas they perceive as advantaged. That is, from poor quality land with poor access to markets and services, to higher quality land with better access to markets and services and with increased chances to engage in the cash economy.

141. The DHs were asked if they or any member of the family migrate for work outside of their district. There are no out-migrants members in the 50 households interviewed in the socio-economic component of the DMS in the Nipa-Munihu subproject road. It should be noted however that 94 DHs (52.22%) reported remittance as a source of household income. Remittance contributed 48,730 kina per year (8.16%) to the total annual household income of the 180 DHs.

#### **h. Status of Women**

142. The 50 DHs in the socio-economic component of the DMS were asked what kind of activities the female members of their families are engaged in. The question can have multiple answers. The female members of the families are responsible for the cultivation of their food gardens (88%). This is a very important source of food in their families and women are responsible for their continuous production. The household works, which is a traditional domain of women, are being done by women in 44 households (88%). Other activities are shown in Table 21: Women's Participation in Economic Activities.

**TABLE 17: WOMEN'S PARTICIPATION IN ECONOMIC ACTIVITIES**

<b>Economic Activity of Women</b>	<b>Total Responses</b>	<b>Percentage</b>
Agricultural Cultivation	44	88
Household Works	44	88
Services	12	24
Agricultural Labor	11	22
Collection/Sales of Forest Products	11	22
Household Industries	11	22
Others(poultry, piggery)	10	20
Allied Activities	1	2
Trade and Business	1	2
Non Agricultural labor	0	0.00

Source: DMS/Socio-Economic Survey, August-September 2015

143. The same 50 AHs were also asked about female participation in decision making in the family. Based on the results of the study, the women in the study area have mainstreamed in generating income to augment family income. In addition, the female participation in decision making process on family matters is apparent in that women in this sub-project have very high participation rate. Table 22: Summary of Female Participation in Decision Making presents the summary of the female participation in decision making in the study area.

#### **i. Transport Use**

144. The AHs were asked to rate the physical condition of their existing road based on their perceptions. Only 2DHs said that their road is good, 12 DHs said that their road is average. Thirty six DHs rated their road negatively with 8 DHs saying that their road is poor while 28 DHs said that their road is very poor. The details are shown in the following Table 23: Condition of the Existing Road.

**TABLE 18: SUMMARY OF FEMALE PARTICIPATION IN DECISION MAKING**

Female Participation on Decision Making	Total Responses	Percentage
Day to Day Activities	47	94
Financial Matters	46	92
Health Care of Child	45	90
Education of Child	43	86
On Social Functions and Marriages	40	80
Purchase of Assets	20	40
Others	11	22

Source: DMS/Socio-Economic Survey, August-September 2015

145. The DHs were asked about their willingness to pay toll tax to develop and improve their road. Eighty four DHs (87.50%) were willing to pay toll tax to improve their road. The average monthly transportation expense was around 49 kina a month.

## **V. DISCLOSURE, CONSULTATION AND PARTICIPATION**

### **A. Consultations during Project Preparation**

146. In compliance with GoPNG and ADB policies and priorities, the HRRIP will ensure a transparent and accountable process for land acquisition as required in upgrading, rehabilitating and maintaining roads in the Highlands Highway network. Dissemination of information and consultation with stakeholders has occurred at different points in the preparation and implementation of the Nipa – Munihu road sub-project to ensure that displaced people (DPs) and other stakeholders have timely information about land negotiation. The DOW through its consultants working in collaboration with Provincial and District Administrations and local authorities had organized consultation activities and disseminated sub-project information and elicited their issues and concerns as well as their opinions regarding the sub-project.

147. The project team composed of DOW consultants and staff held consultations in SHP with provincial and district authorities, as well as representatives of Provincial and District Women's Councils, development enclaves, private business houses, local radio stations, NGOs and community organizations. Community consultations and women's focus groups were conducted in several villages on each of the T3 roads including the Nipa – Munihu road section.

### **B. Consultations with Affected People**

148. All of the 180 AHs were consulted through the DMS exercise that assessed their losses. In addition, the APs were consulted using several other methods such as individual HH contacts of 50, focus group discussions with 10 and meetings with 32 APs. The focus of such consultations was to understand how APs cope-up with resettlement impacts, adequacy of resettlement assistance and to seek their views on additional assistance needed to mitigate impacts.

149. The majority of APs contacted stated that they will significantly benefit from the rehabilitated road. According to their view, such benefits are available for the entire community regardless of assets donated. However, the 22 poor APs in particular, are feeling the gravity of resettlement impacts by having to relocate to another site, donating their cultivated land.

Although they acknowledge resettlement assistance already proposed, suggested that the project considers to provide them with some special assistance to reduce impacts. The resettlement program is viewed as a strategy to support their life with less resource endowment compared to what they commanded prior to resettlement. APs pointed out that their overall socio-economic status is likely to be lower than other households in the community that do not have to sacrifice their houses and other assets. The women APs were uncertain whether they could start a new life that is better than what they enjoy now. The 13 APs who undergo physical relocation were doubtful whether the new house location is comfortable compared to where they are now. This issue will be further verified at the time of RP validation and in subsequent monitoring. If the situation of APs is found to have not improved based on the results of investigations, corrective actions will be proposed.

150. Out of the 180 households who loose crops, the majority were uncertain whether their new agricultural plots are going to be as productive as their current farms. According to them, the loss of crop output resulting from infertile land is an issue where they may continue to suffer in the future. They suggested the project to consider some way to reduce the impact on them from loss of productive agricultural land.

151. These consultations raised the need for additional assistance that should be included in the RP which are in four main areas. First, there is a necessity to assist APs in establishing and maintaining their food gardens. Their current gardening knowledge is based on traditional skills and experiences. The women in particular raised that they are willing to listen to agricultural extension staff to learn about new methods, practices and materials that are applicable to this area. Second, many of them suggested that they are given improved seeds and planting materials. They suggested that the traditional varieties have the capacity to produce less compared to the improved cultivars. Providing assistance to improve AP's agriculture is vital as all of them will have less land area to cultivate, having donated part of it to the road. Agriculture is also the main contributor to household income as shown earlier. Third, assistance to start a business came from several of them. After listening to their suggestions, business training is the starting point to provide them with some basic knowledge on business options, in setting up a business and its management.

152. Finally, many suggested that they are going to lose several trees from their land and expressed whether the project is able to provide some assistance in tree planting. They also appreciated new knowledge on tree growing if this can be sourced for their benefit. A total of 2,465 trees will be lost due to the project. The resettlement assistance package proposed under this RP has incorporated above suggestions. The additional measures are reflected in the resettlement budget.

153. The direct consultations with the APs also revealed the necessity to monitor the implementation of resettlement program. Here their suggestion was the project to examine how well the APs are coping with the resettlement impacts after the initial assistance is provided through. They also suggested that additional ways to assist them is discussed at that time should their living standards is found to be lower than prior to resettlement. This aspect is built into the monitoring section of the RP.

### **C. Consultations during RP Preparation**

154. Based on the assessment of the sub-project, the key provincial stakeholders identified for Nipa – Munihu road sub-project include the Member of Parliament for the district, Provincial Governor, Provincial Administrator and DOW Provincial Works Manager. In the district and LLG

levels, the key people identified include the District Administrator, Local Level Government (LLG) Council Presidents, Ward Councilors, Village Court Officials, Women and Youth Leader Representatives, Church Groups, Civic and NGO organization groups.

155. The public consultations for the candidate sub-project —Nipa – Munihu road were initially held in July 18-21, 2011 and January 5-6, 2012 with the twin objectives of: (i) informing the public that the Government of Papua New Guinea (GoPNG) through the Department of Works (DOW) will implement HRRIP and the –Nipa – Munihu Road in their area is a candidate road of the program and (ii) get the opinions, concerns and issues of the stakeholders for consideration in the design of the sub-project. The Annex 8 presents list of people who attended consultations.

156. The Project Team presented the proposed scope of works and explained the needs for the rehabilitation of the said roadway. The participants were informed of the possible positive and negative social impacts of the sub-project and the requisite mitigating measures that will be established to enhance the positive impacts and minimize, or if at all possible eliminate the adverse impacts of the proposed development. Issues and concerns were also elicited from the participants and perceptions were properly noted by the Project Team.

157. The third community consultations were undertaken from August 8-25, 2014. The team distributed project leaflets in English and Pidgin to households along the sub-project road containing project information and HRRIP policies on resettlement. Discussions on the content of the leaflet were undertaken in populated areas along the villages and many of the households.

158. The team went to the sub-project road to conduct the fourth public consultations on April 16-17, 2015 and fifth public consultations from August 26 to September 6, 2015 while conducting the DMS. During this period, while the enumerators were interviewing the DHs, it was inevitable that affected households would ask questions on what would happen to their assets. Hence, the team found this as an opportune time to re-explain the compensation policies of HRRIP. The residents of the sub-project road all agreed on the need for the upgrading and rehabilitation of their road.

159. The team also conducted consultations in Nipa District Office on the day of the signing of the Memorandum of Agreement on August 15, 2015 on the use of customary land by DOW for the sub-project road. On this occasion, all the ward leaders and LLG presidents as well as the tribal and clan leaders were present. The principles governing the MOA on the use of customary land and the compensation on the affected assets were reiterated to the signatories and participants in this occasion. The LLG council presidents, ward councilors and political luminaries residing in the district attended and all gave their approval to the proposed sub-project by signing the MOA.

160. Overall, the project team discussed with the participants of the various public consultations the likely social impacts that will arise from the implementation of the sub-project. In the short-term, the rehabilitation will create employment to the people as workers will be required in civil works and ancillary activities. The rehabilitation will also need skilled workers for specialized works. Over the long-term, it will increase farmers' income due to improved road network, provide better access to basic services including necessary health services for women, children elderly, and people with disabilities (PWD), enhance transport of goods and services, trigger improved economic activities and trade and eventually uplift their living standards.

161. The project team clarified with the participants of the various public consultations that additional land will be required for the sub-project despite the fact that the rehabilitation works will be undertaken within the existing road carriage of the current roadway. The Project assured the DPs that there is a provision for assistance under the HRRIP and will be extended only to eligible DPs who are documented as of the cut-off date.

#### **D. Wider Public Consultations during RP Preparation**

162. The sub-project road was constructed in the mid 1970's and has not been well maintained. The tribes and clans being serviced by the existing road had long clamored for the repair and maintenance of their road. The improvement of some roads in the SHP connecting to the Highlands Highways especially the Mendi - Kandep sub-project in Tranche 1 which is very near to this sub-project has added to the frustrations of residents because road development has not reached their area.

163. During this time of neglect of their road, DPs had related that some of members of their tribes have died on the road going to the nearest hospital because they have to carry the sick in hammocks to be brought to the nearest point where PMVs are available. During rainy season, schools frequently had no teachers or were undermanned because of the inability of teachers to go to their respective schools.

164. During consultations, participants were telling the team their hardships in carrying their agricultural produce to the markets. Women took the brunt of the suffering because they are the ones who carry the products to the market. The hardship that these tribal members have to endure has resulted in planting crops just enough for their household needs. They are discouraged to plant surplus crops because of the extreme difficulty in bring their products in the market. In buying their supplies from the market, they have to suffer the same hardships that are experienced in bringing their products to the markets. As a result, they just buy the basic commodities like sugar, flour, cooking oil, soap, matches, kerosene and others. The majority have to be content to eat what they grow in their food gardens. In the meantime, the continuous promises from some quarters to rehabilitate their road have heightened their expectations to have their road repaired as soon as possible.

165. The consultation and other activities regarding the sub-project were often delayed because district and ward officials were very busy in other activities. The study team often had to wait for months for the confirmation of consultations and the scheduling of the DMS. However, when they learned that the HRRIP is closing in 2018, suddenly these local officials became readily available for the activities of the sub-project.

166. Despite the three public consultations, the queries coming from the participants seem to indicate that there is a need to conduct additional consultations in certain sections of the sub-project. Hence, a fourth public consultation was conducted. In addition, information dissemination about the project was also conducted on the day of the MOA signing.

167. There was a participant who asked what government will do if they do not permit the use of their customary land. It was pointed out that under the Land Act, government may exercise its power of expropriation to purchase the subject land to be used for road construction. However, based on one of the criteria of HRRIP, the road should be on state land or there is an agreement on the use of the customary land, otherwise, the project cannot proceed and other candidate roads would be considered in lieu of this project. The person who asked this question

was booed by his tribesmen because it was pointed out that their suffering should end as soon as possible and the value of the affected land is nothing compared to their sufferings.

168. The question of who should receive the compensation on graves surfaced again in this project after they were informed that a relocation and reburial allowance will be given to owners of the affected graves. Who among the siblings will receive the compensation for the affected graves of their parents? The decision of who among the siblings will receive the compensation is better left to the wisdom of the elders of the tribe and not to DOW.

169. A question regarding who will receive compensation on affected forest trees was raised in one of the public consultations. It was explained that compensation will be paid for all affected assets including forest trees. The general principle is that the owner of the tree should receive compensation. However, the tree is growing on customary land owned by the tribe. It would be better if the tribe decide on who shall receive the compensation because the tribe will know whether the tree was planted by the occupant or it grew naturally without anybody planting the tree. Hence compensation for forest trees would be subject to the decision of the tribe because it owns the land where the tree grew.

170. Another question was about compensation on affected orchids. It was pointed out that based on the Valuer General's Schedule of Compensation, affected orchids will only be compensated if these are cultivated. Hence, natural occurring orchids which have not been cultivated are not compensatable. It was also pointed out that seedlings will only be included in the DMS if the seedling is hand planted or tended as per the schedule of compensation. The team left a copy of the Valuer General's Schedule of Compensation (2013) to the elders of the tribe for their perusal.

171. The project involves the widening of certain portions of the road section, will the cutting of the mountainside to widen the road make the area prone to landslides which may endanger residents and other travelers? The slope angle in cutting the mountainside will be constructed taking into consideration the type of soil in the area. The engineering design will take this into consideration and will propose mitigating measures to stabilize the slope and make the road safer. There is also a construction supervision team that will ensure that the approved design is implemented according to the specifications by the contractor.

172. The other sub-projects had requested the construction of bus bays and waiting sheds and these concepts were floated to the DHs to gauge their reactions. Leaders said that they are very concerned about the possibility of loss of income once the road is sealed. There were many requests if it is possible for them to have a permanent selling area as one of the benefits of the rehabilitation of the sub-project. These are the reasons that support the construction of bus bays as a part of the sub-project for the benefit of the affected community.

173. It should be pointed out that the bus bays are not included in the original road design but part of additional measures to assist community to cope-up with disturbances caused. The construction of bus bays and waiting sheds emerged from the community consultations.

174. The summary of the rest of the questions, comments and concerns raised during the series of public consultations is presented in the following Table 24: Summary of Public Consultation Proceedings.

**TABLE 19: SUMMARY OF PUBLIC CONSULTATION PROCEEDINGS**

Questions/Comments and Concerns	Remarks
What is really the project and how long is the road?	The proposed project will start at the junction of Nipa and will end at Munihu at km 27.73. The project will entail the upgrading and rehabilitation of the existing road. To ensure continuous use of the completed road, there is a maintenance component of 3 years that will be also undertaken by the winning contractor.
How wide is the proposed road and what assets will be affected by the road project?	The existing road has an average width of 4 meters and it will be improved to around 12 meters. Hence, there is a need to use an additional of 8 meters or around 4 meters of each side of the existing road. All assets within the average of 4 meters each side and called the construction limits will be affected by the project.
What is the construction limit?	The construction limit is the width required to upgrade and rehabilitate the road. This will include the road carriage, shoulders, drainage and set back. There may be cases wherein the impact of construction will be beyond the construction limits as in heavy equipment placed beyond. In these cases, affected assets will be properly compensated. Hence, there will be a provision for compensation in case assets outside of the construction limits will be affected.
What will happen to our customary land, will government pay for the land?	The project is negotiating for the use of the land required with the tribes and clans who own the required land needed for the project. Ownership will still be retained by the tribes by the use will now be open to the public. If the negotiations are successful, there will be no payment for the affected land (MOAs have been signed).
How about our houses, trade stores, graves, fences, and crops and trees, will we be paid and how much?	A detailed measurement survey (DMS) will be conducted to determine assets within the construction limits. Affected structures will be paid based on replacement costs. This means that if the structure will be constructed as of today, how much it will take to construct a similar structure as present prices. Graves, fences, crops and trees will be paid based on <u>full replacement cost or</u> the Valuer General's rates of 2013 <u>if still application to the current market rates</u> .
The tribes who own the customary land have agreed as evidenced by the signed MOAs to permit DOW to use the land for the road. We assure DOW and ADB of our full cooperation because we need badly the road.	The team thanked the speakers who promised full cooperation for the construction of their road. Their comments and needs for a sealed road will be noted and communicated to the proper authorities.

What can we do if we do not agree with the compensation being offered for our affected assets?	The rates are replacement rates based on present prices or according to the Valuer General's rates. If you do not agree with the amount of compensation, there is a grievance redress mechanism wherein you can file your complaints and grievances.
What are the steps in filing a complaint with the GRM?	File the complaint with the PWM who will investigate and decide the merits of the case. If the complainant is not satisfied with the decision, the case can be elevated to an arbitration panel composed of district administrator, LLG president, representatives of HRMG, religious sector and civil society. If the complainant is still not satisfied with the decision, the case can be elevated with the proper courts. Anytime, the complainant can go directly to the proper court.
How do you know the real owners of the affected assets?	The ward leaders and elders of the tribe are welcome to also participate during DMS so that they can already inform the survey team the real owners of the affected properties. In addition, there is also a validation survey wherein before the actual payments, representatives from HRMG will visit the chainages of the affected assets to confirm the results of the DMS and ensure that the real owners will be paid the necessary compensation.
We saw the rates for affected graves and it is too low to reimburse our expenses. Is there any additional assistance from the project?	The project will provide for relocation and reburial assistance for households whose graves will be affected by the project. The amount will be computed based on actual expenses. (The project is allocating an additional amount of 1,000 kina per affected grave for expenses for exhumation and reburial plus cost of coffin.)
What is the cut-off date?	After the completion of the DMS, new improvements including structures, crops and trees, graves, fences and other assets introduced inside the designated construction limits will no longer be compensated. This will prevent speculators to unnecessarily earn at the expense of the project.
The proposed project will be of great assistance to bring our farm products to the markets, help in educating our children and facilitate the delivery of health services to our families. What are we supposed to do to hasten the construction of our road?	Your utmost cooperation will be needed to have your permission for the use of your customary land. In addition, please observe the cut-off date wherein newly introduced improvements will not be compensated. Avoid building structures and/or planting crops and trees because after the cut-off date, new improvements will not be compensated.
Who will construct the road? Are the bridges included?	The sub-project will undergo an international bidding process and the winning bidder will be awarded the construction contract. The rehabilitation of all bridges is included in the proposed works. Local contractors are encouraged to apply

	with the winning contractor as sub-contractors to ensure that residents can partake in the employment and livelihood opportunities arising out of the sub-project.
Can we participate in the road construction as workers so that we earn additional income?	Qualified and willing tribal members are encouraged to apply and work in the project. It is a policy of both DOW and ADB to encourage active participation of residents along the sub-project. Interested members may apply directly with the winning contractor or any authorized sub-contractor.
Are there benefits that women will get out of the project?	The sub-project will benefit men and women alike. In addition, women are encouraged to apply for work in the project. Aside from this, there are also proposed roadside vending areas to be funded by the project located in strategic position along the road. Considering that almost all of the roadside vendors are women, this project will specifically for the benefit of women.
Considering the socio-economic benefits that we will derive from this road project and the funds will come from the government and our only contribution is our customary land, we unanimously approve and support the proposed road project.	The team thanked the participants in a series of consultations and their approval and full support will be communicated with the pertinent authorities.

175. The series of public consultations and sub-project disclosures conducted in several places along the sub-project road were held in accordance with ADB's Public Communication Policy (2005). The DPs and other stakeholders were given leaflets and several opportunities to air their issues and concerns and express their opinions regarding the proposed sub-project.

#### **E. The Memorandum of Agreement Process**

176. Based on the resettlement framework, land acquisition impacts of the upgrading, rehabilitation and maintenance of the Highlands Highway network of roads may include one or more of the following (i) permanent use of customary land, as required to permit upgrading and rehabilitation of the road; (ii) temporary use of customary land, as required to establish construction camps; and, (iii) damages to crops, trees and/or structures on affected lands and/or due to ancillary works. The MOA covers only the permanent use of customary land to permit the upgrading, rehabilitation and maintenance of the sub-project. The Annex 5 provides signed MOAs.

177. After the team computed the minimum land required to upgrade and rehabilitate the sub-project based on the detailed engineering design, the team started to conduct public consultations to inform the stakeholders and elicit their comments, issues and concerns. The mechanics of the MOA was one of the major topics in every public consultation because it affects their customary land. The actual area for each tribe and council ward was determined first in the plans and was confirmed during the actual measurements in the field.

178. The ward leaders and tribal elders were also mobilized to assist in explaining to their members the implications of such a MOA. Then these leaders and elders notify the district administrator who inform HRMG that they are ready to sign the MOA. Copies were given to the Member of Parliament, Provincial Governor, District Administrator and the Provincial Works Manager of SHP among others, before the actual signing of the MOA.

179. The signing of the MOA is an occasion for the leaders of the area to meet together with the Member of Parliament, other officials of national government agencies who are from the sub-project, local leaders and tribe members. During the actual signing, leaders speak in support of the project pointing at community benefits. The Land Officer of the province, if present, is tasked to explain for the last time the consequences of their signing of the MOA, otherwise this task done by the District Administrator.

180. It should be noted that during the signing of the MOA in Nipa District, leaders of two wards did not immediately sign the MOA but requested additional time to really understand the contents of the MOA. These ward leaders went to the district office the following day and met with the leaders of the district including the Parliament Member and a high ranking officer of the Department of Transport who is from this district. It was explained to them that the MOA has nothing to do with the contractor who will be awarded the construction project but only involves the grant of permission to DOW to permit the use of the land for the upgrading and rehabilitation of the road. After a lengthy discussion and assurance that the road contract will undergo an international bidding process, the leaders of the two wards signed the MOA. Many leaders in the district were of the opinion that the road is only a collateral matter and the real reason is the intensity of politics in the district.

181. The MOA process is witnessed by a third-party verifier engaged by DOW, whose role is twofold. First, it validates that the assets that will be lost were properly assessed, the applicable compensation rates were applied and the price offered is a fair reflection of what it costs to replace the lost assets. Second, the verifier observes the actual signing process and determine whether it is fair, open and transparent. He also observes whether there is threat, intimidation or duress exerted on the signatories or if the signing of the signatories are based on their own free will by listening to speeches and observing the demeanor of the participants. In some instances, the independent verifier approaches certain speakers to interview them about their speeches. This role is normally undertaken by a Magistrate or another senior officer/ retired person or an independent organization employed for this purpose by HRMG. In the case of the present sub-project, MOA process undertaken in the Lai Valley LLG and Nipa Basin LLG has been verified by Carter Education Management Consultancy which is an independent organisation. The third-party verification is attached to the relevant MOA itself.

182. The MOA negotiations started in Tranche 1 and through the years the MOA has been amended and refined by results of the many discussions with stakeholders. There are provisions in the MOA that were the results of discussions with the tribes such as the integration of the compensation policy of HRRIP, the reversion of possession of the land to the tribe subject of the MOA if the government abandons the road, the annulment of the MOA in case the road is not included in the HRRIP. In short, the MOA is the result of various consultations starting from Tranche 1 and not a contract of adhesion wherein one party prepares the agreement and the only participation of the other party is to agree or disagree with the terms and conditions. It is a bilateral agreement wherein both parties took active part in the formulation of the terms and conditions.

## **F. Public Disclosure of RP**

183. This RP will be properly endorsed and disclosed by DOW to concerned national and local government agencies, communities and to directly displaced persons before DOW's submission to ADB. After the approval of this RP by ADB, it will be posted in ADB web site.

184. The compensation amounts and costs of the RP will be verified just before compensation is paid out. The validation ensures that all APs are duly and adequately compensated for their losses. The validation will also involve the -re-assessment of whether the livelihood measures already proposed are adequate. Whether the APs are likely to improve their standards of living will also be assessed at validation. Additional measures including costs revision will be proposed based on the validation exercise. This will be done by safeguard specialists attached to the ESSU.

185. The HRMG staff and local resettlement specialists have conducted meetings with the DPs, tribal leaders, provincial, district and ward officials as well as the relevant government agencies as part of the disclosure process to acquaint them of the substance and mechanics of the RP. These HRMG staff and local consultants will assist in the actual implementation of the resettlement plan.

## **VI. GRIEVANCE REDRESS MECHANISM**

### **A. Legal and Traditional Grievance Redress Mechanism in PNG**

186. Land and land-related disputes are common to all regions of Papua New Guinea and cause social and economic disruptions. PNG's Land Disputes Settlement Act 1975 created a three-tiered structure for settling disputes--mediation, arbitration and appeal--based on a combination of Melanesian customs, principles and practice, and formal law of British origin. Papua New Guinea's system for settling customary land disputes provides clear benefits from using existing customary norms and institutions as well as emphasising local expertise and decentralising decision making.

187. The Land Disputes Settlement Act sets out three stages for the attempted settlement of disputes over customary land. Stage one is compulsory mediation by a land mediator, an appointed local person-in practice always a male-who the local community agrees possesses the knowledge required. If mediation does not settle the dispute, stage two allows for the dispute to be taken to a Local Land Court for arbitration. A Local Land Court comprises a Local Land Magistrate as chairman and either two or four land mediators. The court has wide powers under the Act to reach a settlement between the parties, but if no agreement can be reached, it can impose settlement.

188. In general, disputes cannot be taken further than the Local Land Court, but the Act does allow a limited right of appeal (against a Local Land Court's decision) to the Provincial Land Court (stage three). Grounds for appeal are confined to errors of jurisdiction, decisions made contrary to natural justice or cases of manifest injustice.

189. Mediated settlements are evidence of land rights but they do not bind the parties (unless approved by a Local Land Court), whereas arbitrated settlements do bind the parties. The Local

Land Court is also authorised to deal with other matters ‘inextricably involved’ with the land dispute before it.

190. The Act is largely administered by the Provincial Land Disputes Committee for the province concerned, lawyers are in general excluded from appearing in Land Court hearings and the Land Courts are not bound by any laws other than the Act itself or any other Act expressly applied to them. In special circumstances under Section 4 of the Act, the national government may declare that a land dispute should be settled by some means other than those provided by the Act. Such special circumstances include that the dispute is longstanding and previous attempts at mediation have failed, or the dispute has already resulted in serious breaches of the peace. This section of the Act was included as a ‘safety valve’ to help resolve intractable cases.

191. Papua New Guinea’s Land Disputes Settlement Act was designed by Melanesians for a Melanesian society. Its structure of mediation, arbitration and appeal is based on a combination of Melanesian customs, principles and practice, and formal law of British origin. The mandatory involvement of the disputing parties in mediation is based on the principle that a resolution by consensus is more permanent than one imposed by authority. The system is decentralised to district level to bring it closer to the community it is designed to serve.

## **B. Grievance Redress Mechanism for HRRIP**

192. Based on the experiences learned in Tranche 1 of the HRRIP, a grievance redress mechanism (GRM) has been established in the 2 provinces. The aim of the mechanism is to provide displaced persons (DPs) with the opportunity to seek redress of their complaints and grievances in a timely and satisfactory manner. The lessons will be useful to make the GRM works better for this sub-project.

193. In Tranches 1 and 2, an AP may file his/her complaint directly with HRMG which is based in Mt. Hagen, WHP. Upon receipt of the complaint, HRMG will send its personnel to the site to investigate on the complaint. It is a discouragement to APs to air their grievances because of the long travelling time and the expenses involved in visiting HRMG.

194. At the same time, the investigations of the complaints by HRMG were often delayed because of limited personnel who were busy doing their regular tasks. The HRMG personnel who were tasked to investigate are often not familiar with the prevailing tribal system in place, including boundaries, relationships among and sub-clans and historical perspective of the location of the complaint because they come from different areas and provinces.

195. Based on lessons learned in Tranche 1, the GRM mechanism has been improved. The up-graded GRM entertains both complaints arising from the implementation of this RP as well as environmental grievances. It encourages APs to lodge grievances within the province. The PWM receives the complaint that makes it more convenient for APs lodge the complaint. It is easier for the PWM to resolve the issue. A grievance redress committee (GRC) is established in the province. The GRC has 5-6 members, four from the district or province where the sub-project is located. The members from the district or province are District Administrator (chairperson), LLG President (deputy chair), PWM (secretary), representative of APs and a church nominee. The representatives of HRMG are the Community Relations Officer and Environmental Officer.

196. DPs can initiate a project related resettlement complaint by filing a written or oral complaint addressed to the Provincial Works Manager (PWM). Within 10 days upon receipt of complaint, the PWM shall furnish a written summary of the complaint to the DP, his/her tribe/clan and to HRMG as the implementing agency of the RP with a notice of a mediation meeting not later than 10 days from the receipt of the written summary of the complaint of the complainant.

197. During the mediation meeting, the PWM will receive, clarify and simplify the issues involved and would try its best efforts to resolve the issues involved which would be acceptable to both to the DP and HRMG. If there is meeting of the minds between the DP and HRMG, a written agreement will be signed summarizing the points of agreements. If there was no such agreement, the matter is presented to the GRC.

198. The GRC meets at short intervals subject to the number of grievances to resolve. Both parties may re-negotiate the offer made during the first hearing and may introduce new arguments and evidences to support their respective positions. After the summation of their respective positions, the GRC shall make a decision based on the policies governing HRRIP, prevailing laws of PNG and customary laws of the place where the dispute arose.

199. If the AP is not satisfied with the decision of the GRC, s/he may take the grievance to the PNG judicial system. In this case, HRMG will hold the compensation amounts in escrow. Compensation will be paid in full upon final resolution of the case in the courts or in any other fora, in accordance with the entitlements of the affected person as decided by the court of competent jurisdiction.

## **VII. LEGAL FRAMEWORK**

200. The policy framework and entitlements for land acquisition/resettlement are based on the laws, regulations and policies of the Government of Papua New Guinea (GoPNG) and the ADB safeguard policy. The principal PNG laws include: (i) the 1975 Constitution; (ii) the 1996 Land Act; (iii) the 2000 Land Disputes Settlement Act; (iv) Fairness of Transaction Act (1993) (v) Land Group Incorporation (Amendment) Act (2009), and (vi) Customary Land Registration Act (2009).

201. While Tranche 1 (T1) was prepared under the ADB Policy on Involuntary Resettlement (1995), all subsequent tranches including Tranche 3 where the Nipa-Munihu road section is included will follow ADB's Safeguard Policy Statement 2009 (SPS).

202. In the HRRIP, Tranche 3 sub-projects including this sub-project and subsequent tranches will be governed by the SPS. In addition, land acquisition, compensation and resettlement for all HRRIP sub-projects will be carried out in compliance with ADB policies for gender and development (1998), accountability (2011) and public communications (2011).

### **A. PNG Legal Framework**

203. Majority of the lands in PNG are classified as customary lands wherein specific territories are owned or vested on the clans. Clan members or "primary right holders" are co-owners of their customary lands with the right to use but not to alienate or sell the lands. They own/possess these lands as stewards for future generations. Land ownership and use is an

integral part of the identity, the sustenance and the social relations of clans; property rights are inherited from ancestors and maintained in trust for future generations. The State has no authority over customary land other than the provisions of the Land Act to acquire customary land for public purposes.

204. During the colonial administration, the 1963 Customs Recognition Act stated that “custom shall be recognized and enforced by, and may be pleaded in, all courts...” (Art. 3(1) (a)). Following independence, these principles were reaffirmed in the Constitution and subsequently elaborated in the 2000 Underlying Act. Customary law is defined as the rules, rights and obligations pertaining to an individual or group by custom and tradition; and, according to the 2000 legislation, shall apply and be recognized by the courts where written and underlying laws do not apply and except as it is inconsistent with written law.

### **1. PNG Constitution**

205. The 1975 Constitution explicitly provides for the adoption of custom as part of the underlying law of PNG (Schedule 2), thus recognizing the property rights attached to customary land. During the colonial administration, the 1963 Customs Recognition Act stated that “custom shall be recognized and enforced by, and may be pleaded in, all courts...” (Art. 3(1) (a)). Following independence, these principles were reaffirmed in the Constitution and, subsequently, in the 2000 Underlying Act. Customary law is defined as the rules, rights and obligations pertaining to an individual or group by custom and tradition; and, according to the 2000 legislation, shall apply and be recognized by the courts where written and underlying laws do not apply and except as it is inconsistent with written law.

206. The Constitution also guarantees the right of PNG citizens to protection from unjust deprivation of property (Art. 53). No land or interest in land may be acquired compulsorily by the State except as it is required for public purposes or other justifiable reasons. Moreover, in the event of expropriation of land, “just compensation must be made on just terms by the expropriating authority” (53(2)).

### **2. 1996 Land Act**

207. The Land Act (No. 45 of 1996) sets out the conditions and procedures for the State to acquire customary land required for public purposes such as roads, tracks, bridges, culverts and quarries. These legal provisions and procedures apply to the acquisition of land and assets by the State, legally owned/leased by other parties (persons) than the State. PNG does not avail of any national, provincial or local government policies for relocating and resettling people. Acquisition of land and assets by the State for public purposes and the related legal procedures, compensations, and the legally defined procedures for appeals, grievance redress, etc are all arranged for under the Land Act 1996 (See additional pertinent provisions in Annex 3 Salient Provisions of the 1996 Land Act).

### **3. Land Dispute Settlement Act**

208. The Land Disputes Settlement Act (No. 10 of 2000) was initially adopted in 1975. It sets out rights and procedures related to the resolution of disputes involving customary land. It recognizes as parties to these disputes, customary kinship groups, customary descent groups and customary local groups or communities (S2). It also requires that proceedings take into account relevant customs (S35 (1) (d)). The Act provides for the establishment of a Provincial Land Disputes Committee, as well as Land Courts at the local (LLG), district and provincial

levels. The Committee can appoint land mediators for specified land mediation areas where disputes occur; a mediator may be the Local Land Court Magistrate (LLCM), a Village Magistrate, a Local Councilor or other senior person of good standing with the litigants. The Act promotes a process for resolution of land disputes through (i) a first step of mediation; if mediation fails, it is followed by (ii) arbitration, and (iii) appeal to the designated courts. The mediation and arbitration processes are based on the principles of traditional dispute settlement in PNG.

#### **4. Fairness of Transaction Act of 1993**

209. The Fairness of Transaction Act of 1993 relates to the effect of certain transactions, to ensure that they operate fairly without causing undue harm to, or imposing too great a burden on, any person, and in such a way that no person suffers unduly because he is economically weaker than, or is otherwise disadvantaged in relation to, another person. The purposes of this Act are to (a) ensure the overall fairness of any transaction which (i) is entered into between parties in circumstances where one party is for reasons of economic or other advantage predominant and the other is not able to exercise a free choice; or (ii) for one reason or another, without attaching any evil design or bad faith, appears to be manifestly unfair or not to be genuinely mutual; and (b) allow for the re-opening and review of any transaction irrespective of fault and validity, enforceability or effect of any agreement; and (c) ensure the fair distribution and adjustment of rights, benefits, duties, advantages and disadvantages arising out of a transaction. Transaction means any contract, promise, agreement, dealing or undertaking of an economic or commercial nature whether supported by consideration or not entered into between parties, and includes (a) an informal, complete or incomplete transaction; and (b) a transaction governed by customary law.

#### **5. Protection of Transport Infrastructure Act, 2010**

210. The Protection of Transport Infrastructure Act was enacted unanimously by PNG Parliament to protect all types of roads and road reserves from unlawful entry, occupation or use when ordered to do so. It also penalizes anyone who stops people from using transport infrastructure by blocking them, and/or destroys or damages any transport infrastructure. It also prohibits the demand for compensation and other related payments and the use of threats to induce any compensation and other related payments regarding the use of transport infrastructure. In addition, it also punishes any person who fails to stop members of his family or other people from committing an offence under this act.

211. This Act applies to all roads built on land acquired by the State or built on land yet to be acquired by the State. If the land has not been acquired by the State and roads have been built on them, the owners cannot block the roads or damage the transport infrastructure. The legal remedy is to file complaints or grievances with the proper courts and not undertake these prohibited acts enumerated in the law.

#### **6. Land Group Incorporation (Amendment) Act and Voluntary Customary Land Registration Act**

212. These Acts were brought into effect in 2011, following recommendations from the National Land Development Task Force. The Acts recognize the corporate nature of customary groups and allow them to hold, manage and deal with land in their customary names, and for related purposes. These acts also facilitate the voluntary registration of customary land, to be known as “registered clan land”, and make that land available for development through the use

of Incorporated Land Groups (ILGs). These laws encourages (a) greater participation by local people in the national economy by the use of the land; (b) better use of such land; (c) greater certainty of title; (d) better and more effectual settlement of certain disputes; (e) legal recognition of the corporate status of certain customary and similar groups, and (f) conferring on them, as corporations, of power to acquire, hold, dispose of and manage land, and of ancillary powers; and (g) encouragement of the self-resolution of disputes within such groups.

## **B. ADB Safeguard Policy Statement (SPS)**

213. The Safeguard Policy Statement (SPS) became effective and applicable in January 2010. The SPS was formulated to address the emerging challenges of development, respond to lessons learned from experience with its previous safeguard policies, and adapt to new lending modalities and financing instruments. Under an MFF arrangement such as the HRRIP, if the management review on any tranche is done after the effectivity of the SPS, the tranches are governed by the SPS. This means that the applicable ADB involuntary resettlement policy for tranche 3 (T3) and subsequent tranches will be the SPS.

214. The SPS, Safeguard Requirements 2: Involuntary Resettlement aims to avoid or minimize the impacts on people, households, businesses and others affected by the land acquisition required by a sub-project. The scope of the policy includes physical and economic displacement as a result of (i) involuntary acquisition of land, (ii) involuntary restriction on land use and (iii) involuntary restriction of access to legally protected areas. The objectives are to: (i) avoid involuntary resettlement wherever feasible, and minimize involuntary resettlement through assessing sub-project alternatives and alternative project designs. (ii) enhance or at least restore the livelihoods of all affected people (DPs) in real terms relative to pre-project levels and improve the standards of living of the affected poor and other vulnerable groups.

215. The SPS's policy principles on involuntary resettlement are as follow: (1) Screen early and assess resettlement impacts; (2) Carry out consultations with DPs and develop a grievance redress mechanism; (3) Improve/restore livelihoods of DPs through land-based strategies, replacement of lost assets, compensation at replacement cost, and additional benefits, as appropriate; (4) Provide appropriate assistance to physically displaced DPs; (5) Improve living standards of poor DPs and other vulnerable groups; (6) develop transparent procedures for negotiations; (7) provide assistance and compensation to non-titled DPs for loss of non-land assets; (8) Prepare RPs; (9) disclose RPs to DPs and other stakeholders and document the consultation process; (10) conceive and execute resettlement as part of the sub-project; (11) deliver entitlements to DPs before their physical or economic displacement; and (12) monitor and assess resettlement outcomes.

## **C. Gaps between PNG Laws and ADB's SPS**

216. The gaps between the PNG laws and ADB SPS requirements on land acquisition and resettlement have been identified and necessary gap-filling measures developed to meet the requirements of ADB's SPS. The following Table 25: Gaps and Gap Filling Measures shows the gaps identified between the PNG legal framework and the ADB Safeguard Policies.

**TABLE 20: GAPS AND GAP FILLING MEASURES**

<b>PNG Laws</b>	<b>ADB SPS Requirements</b>	<b>Gap-Filling Measures</b>
There is neither provision for persons who lost their land they occupy partially or entirely and who have neither the legal rights nor any recognizable rights to such land.	ADB SPS provides for payment of compensation for all affected assets, except payment of occupied land, including non-title holders.	RP will include payment of compensation for affected assets of all DPs including non-title holders and provide provisions to improve or at least restore livelihood. (There are no non-title holders in this particular subproject).
There are no provisions to prepare RP based on meaningful consultations with DPs, including the poor, the landless, elderly, women, and other vulnerable groups	ADB SPS requires that RPs must be prepared based in consultations with DPs, and that poorer and vulnerable people are also consulted and informed of their entitlements and resettlement options	RPs will be prepared in consultation with DPs, including vulnerable groups, and uploaded on ADB website; translated or summary versions will be available at the provincial, district and local level. Local clan leaders whose members are affected will also receive a copy of the summary RP or brochure with relevant information.
There are no provisions to improve or at least restore the livelihoods of all DPs	It is needed to improve or at least restore livelihoods of DPs by a range of strategies targeted at DPs	RPs will include measures for improvement or at least restoration in living standards of DPs to pre-subproject levels
Very limited provisions to provide assistance/ compensation to DPs who lose access to non-land assets (e.g. Valuer General has 2013 Schedule for valuation).	Requires that DPs are compensated for all losses, including non-land assets, at full replacement cost	The sub-project will follow the principle of replacement cost for compensation of affected assets. DOW will conduct a replacement costs survey to update compensation rates. Valuer-General will provide updated schedule for valuation of sub-project affected assets
There is no requirement for the monitoring and assessment of resettlement outcomes.	It requires that resettlement outcomes be monitored and assessed.	RPs will include indicators and baseline data to monitor impacts on living standards of DPs. The monitoring reports will also be disclosed including to DPs.

#### **D. Resettlement Principles for the Project**

217. This RP has been developed as per ADB's Safeguard Policy Statement (SPS) and the pertinent laws of Papua New Guinea. Where the laws of PNG are not clear, a project-specific set of resettlement principles consistent with ADB policy has been adopted. The resettlement principles of this RP consistent to the resettlement framework are as follow:

- I. Land acquisition and resettlement will be avoided or minimized through careful engineering design.
- II. DPs will be consulted meaningfully and effective mechanisms will be established for hearing and resolving grievances.
- III. Social assessment will be undertaken and RPs will be prepared for roads involving land acquisition/resettlement.
- IV. DPs will receive compensation at full replacement cost for their loss of assets and necessary assistance to ensure that they will be as well off as without the project.
- V. Loss of assets may be compensated through cash compensation or in kind compensation commensurate to actual losses, at the option of the DPs;
- VI. Such compensation will be paid to DPs prior to commencement of civil works.
- VII. Absence of formal title will not be a bar to compensation or assistance. Particular attention will be paid to women, the elderly and other vulnerable people.

- VIII. Land acquisition and resettlement will be conceived of as part of the sub-project and related costs will be included in and financed out of the project cost.
- IX. Resettlement impacts, including any unforeseen losses that may occur during construction will be monitored and remedial steps taken as required.

## VIII. ENTITLEMENT, ASSISTANCE AND BENEFITS

218. Usually, the unit of loss determines the unit of entitlement. In PNG, 97% is customary land owned by the tribes and clans. For lands and other communal properties required to implement this sub-project, the units of entitlement are the tribes and clans who own the affected lands needed by the sub-project. For individually owned properties such as structures and other land improvements, the units of entitlement are the owners of these individual affected properties. The background information on compensation in PNG is provided Annex 4: Compensation in Papua New Guinea.

219. In the Nipa – Munihu road section, land acquisition impacts in the rehabilitation and upgrading activities include the following; (i) permanent use of customary land, as required to permit upgrading and rehabilitation of the road; and (ii) temporary use of customary land, as required to establish construction camps and other construction facilities.

### A. Negotiation for Use Rights of Customary Lands

220. For most public works in PNG, the government authorities often consult with landowners who claim an interest in the land and obtain land through negotiation. The sub-project will continue this tradition of negotiation. When an HRRIP sub-project involves a road that is located on customary land, the HRMG will collaborate with the Provincial and District Administrators and Provincial Works Managers in order to enter into negotiations with landowners to acquire the right to use additional land required to upgrade and rehabilitate the road or on a temporary basis to accommodate other activities related to the HRRIP (See Annex 2 HRRIP Approach in Obtaining MOA).

221. The use of customary land needed to upgrade or rehabilitate the road has been negotiated through a Memorandum of Agreement (MOA) with the community leaders and affected landowners (See Annex 5 Memorandum of Agreement). The subject matter of the MOA covers the (a) existing road carriage and (b) the additional land between the edge of the existing road carriage and the construction limits. This is the minimum additional land required to upgrade and rehabilitate the Nipa – Munihu road section. There are no private affected lands in the whole sub-project road.

222. The MOAs did not cover land improvements such as trees, crops, etc. located in the affected area. Full compensation will be paid to owners of these improvements who will experience physical and/or economic displacement because of the project based on full replacement cost or the latest Valuer General's Compensation Schedule for Trees and Plants (All Regions) if applicable to existing market rate. These will be paid before any civil works will be undertaken in this road section.

## **B. Compensation for Affected Assets**

### **1. Houses and Trade Stores**

223. There are 16 houses, 4 large trade stores and 10 small trade stores that have been constructed within the construction limits. It will be necessary to shift or reconstruct these assets outside the construction limits in order to upgrade the road. The owners are entitled to compensation at full replacement cost and several other allowances. In addition, the owners of the assets will be entitled to a temporary accommodation allowance of up to a maximum of two weeks whilst the owners of trade stores are eligible for an allowance to cover their business losses. The business loss allowance is for two weeks.

### **2. Crops and Trees**

224. Crops and trees planted within construction limit will be damaged or lost due to the civil works. DPs who own crops and trees that will be damaged or lost are entitled to compensation to replace these assets based on existing market rates or the Valuer General's rates (August 2013) if applicable to the existing market prices. The compensation rates and amounts shall be determined in the following manner:

#### **a. Annual Crops**

225. In the first instance, DPs will be encouraged to harvest annual crops; the clearance of the additional land will be timed, to the extent possible, to enable DPs to harvest. In this case, no compensation will be paid for crops because DPs will be able to use the crops to meet household consumption needs and/or to generate cash income.

226. If DPs are unable to harvest prior to clearance of the land, compensation will be paid at replacement cost based on existing market rates or current Valuer General's Rates of 2013 if applicable to existing market prices.

#### **b. Perennial Crops and Trees**

227. For perennial crops and fruit trees, DPs will be encouraged to harvest the current year's crop; the clearance of the additional land will be timed, to the extent possible, to enable DPs to harvest. In this case, no compensation will be paid for the current crop because DPs will be able to use the crops to meet household consumption needs and/or to generate cash income.

228. Compensation for lost plants and/or trees will be paid at replacement cost based on existing market rates or Valuer General's rates of 2013 if applicable to existing market prices. The HRRIP will also pay an additional grant equal to the lost income for the period of time until new perennial plants or fruit trees produce a yield similar to the lost plants and trees. For example, in the case of mature coffee trees, the lost income would be incurred over a 3- or 4-year period. If DPs have not been able to harvest the current year's crop, the grant for lost income will take this into consideration.

229. For timber trees, DPs will be required to cut the trees prior to clearance of the additional land; they will be permitted to harvest the trees and sell the timber.

230. The owners of affected crops and trees will also be compensated equivalent to 20% allowance of the value of their affected crops and trees for severity of impacts on affected assets.

### 3. Compensation for Fences

231. For permanent fences made of metal or concrete, the compensation rate will be equal to the current market price (per meter) for similar fencing materials, as determined in the sub-project area plus labor costs. For vegetation fences, the compensation will be paid in accordance with the Valuer General's rates for the dominant type of plant material used or their commercial value plus labor costs, whenever applicable. Trees used as fences or part of fences will be compensated separately as fruit or timber trees.

### 4. Compensation for Graves

232. In the first instance, compensation will be paid in accordance with the provisions of the 2013 Valuer General's rates (unmarked grave site K130; permanently marked grave site K330; with permanent features K1, 300). As necessary, the HRRIP will pay an additional grant of 1,600 kina per grave to ensure that the owners are able to conduct a proper re-burial including ceremony as appropriate.

### 5. Calculation and Payment of Compensation

233. All compensation rates and the amount of the compensation for damaged crops, trees and structures will be based on ~~Valuer General's rates (August 2013) or full replacement costs or Valuer General's rates (August 2013) if applicable to existing market rates if the damaged assets are not included in the compensation schedule.~~ APs are entitled to payment of all compensation based on the DMS prior to clearance of land and start of civil works. DOW will ensure that all procedures are followed to facilitate payment of APs prior to the start of civil works.

## C. Income and Livelihood Restoration Measures

234. As discussed earlier in this RP, the loss of agricultural land and trees is felt by many APs, the vulnerable households in particular. They suggest that new income restoration measures are implemented for the benefit of those who lost their assets, mainly land. Hence, the following income restoration measures aim to mitigate income losses for APs. All activities will be coordinated by HRMG.

#### a. Assistance to Improve Agriculture

235. Agriculture contributes heavily to the household income of APs. The loss of agricultural land will have a negative impacts on the livelihood of APs. The discussions with APs have suggested that measures such as the free issue of seeds and planting materials with appropriate technical advice is provided to them. Accordingly, this RP has proposed several measures to assist APs. Each of 125 APs will be given free seeds and planting material with a total value of Kina 100 up to 2 years. The project will also arrange two visits by an agricultural technician (each costed at Kina 5,000) from the National Agricultural Research Institute (NARI) to provide technical advice to APs. The visit is planned to coincide with the issue of seeds and planting materials which is fully-funded by the project. The technician will conduct AP training on the establishment of gardens in new locations and on improved crop husbandry methods, among other topics suggested by them.

#### b. Business Development

236. Income from small businesses is a significant contribution to the household economy. The majority of interviewed APs suggest that they are given an orientation to business development and management with subsequent assistance to initiate business of their choice. There are few organizations (such as ANIS based at Lae) that can provide business training and assist APs to start their businesses. A block sum of Kina 50,000 is proposed in the RP to be utilized for the development of business skills among APs.

#### **c. Assistance to Tree Planting**

237. It is estimated that the clearing of road alignment will remove about 2,500 trees from AP's land. Although the APs will receive compensation for such losses, they are concerned that lack of trees will cause other impacts on their settlements. APs will be given 3,000 saplings for free for planting on their unaffected land. Together with the issue of seedlings, a technician from the PNG Forest Authority will be sponsored to provide technical advice to APs. The cost of seedlings is calculated as Kina 6,000 and the visit by forest technician is priced at Kina 10,000.

#### **D. Design Measures to Assist Communities**

238. The following additional measures are proposed to mitigate non-measureable effects such as the presence of construction crews and their equipment and temporary inconvenience arising out of the construction activities on their customary land through provisions for the construction of bus bays and waiting sheds in favor of affected communities which would enhance their household income.

239. It should be pointed out that in the design plans or in any document for the project, there are no provisions for the construction of bus bays and waiting sheds. These are not design measures included in the project. These ideas were the results of consultations with the DHs and they have recommended the construction of these facilities to take advantage of the anticipated increase in traffic brought about by the upgrading and rehabilitation of the sub-project and earn additional household income. Construction of these infrastructures will ensure no environmental impacts according to the approved EMP.

##### **a. Construction of Bus Bays**

240. The construction of bus bays is included as an income restoration measure because road side vending is an important economic activity for the DHs. These bus bays are included in the RP to provide vending facilities to road side vending, an income generating activity mostly involving women who sell directly to passers-by their garden produce. It seeks to create a substantial mass of roadside vendors to encourage more buyers to go to these areas rather than buy fruits, vegetables and other food from isolated sellers along the road.

241. Bus bays (loading and unloading areas of public motor vehicles) with provisions for roadside vending will be constructed in at least 3 locations as income restoration measures for women who traditionally sell their own agricultural products to have cash for their families. These proposed bus bays are usually located in village centers/ markets or in the vicinity of important junctions connecting interior villages to the Nipa Munihu sub-project road. Safety provisions will be incorporated in the design to ensure that these roadside vendors have adequate protection from wayward vehicles.

242. The host tribes or clans of these proposed bus bays will have the responsibility to supply the required additional land to accommodate the bus bays and the vending area free of charge

so that their tribesmen or clansmen would have opportunities to sell and earn additional income. This is a precondition for the establishment of bus bays with provisions for roadside vending and will be presented in details under the sub-section on costs of income restoration measures.

### **b. Construction of Waiting Sheds**

243. The construction of waiting sheds is an income enhancement measure that seeks to augment the income of DHs and other stakeholders living within the RIZ. There are interior roads which are not part of the sub-project but connect interior villages to the sub-project road. Stakeholders living in these interior villages carry on their backs their agricultural produce going out of the sub-project road to the markets by bringing them first to the junctions. Depending on the volume of their produce, they make several trips. After they bring all of their produce to these junctions, this is the only time that they hail PMVs to bring all of their produce together to the markets.

244. Returning home, they carry their house supplies from the market to their homes by unloading these supplies in the junctions and carrying them back to their houses. In both trips, these junctions serve as temporary areas to consolidate their products and supplies. Presently, these junctions also serve as vending areas of DHs of household goods targeting the immediate area to buy from them. The construction of these waiting sheds with temporary storage facilities will provide the anchor activity which would attract additional businesses to develop in these junctions. In effect, these junctions will provide vending opportunities for the DHs for a residents living in these interior villages. The stakeholders from the RIZ may also vend in these junctions, saving transportation costs going to the markets. Buyers and transporters of agricultural products will also be encourage to set up buying activities in these areas because of availability of storage spaces.

245. Based on the several consultations conducted around these junctions, residents living in the interior villages were desirous of having some sort of waiting sheds that can also serve as temporary storage areas for their agricultural produce and household supplies. The details are shown under the sub-section on costs of income restoration measures. Waiting sheds with provisions for temporary storage facilities will be constructed on at least 3 locations within the sub-project road.

246. Both the construction of bus bays and waiting sheds will be undertaken by DOW through HRMG and will be constructed during the rehabilitation of the road. The timing of the construction will be just after the sealing of the particular road section where these facilities will be located to ensure that these facilities will be undertaken in coordination with the whole road sub-project.

### **c. Project Employment**

247. People affected by permanent or temporary loss of land or by damage or loss of crops, trees or structures will be given priority for employment by contractors for civil works and/or maintenance works on the road, assuming qualifications to do the work. The implementation of this priority for employment will be the responsibility of DOW as the executing agency. Provisions will be made to include this priority for employment in the contract with the winning contractor. This employment provision will also be encouraged through local sub-contractors as appropriate.

#### **d. Employment Opportunities for Women**

248. DOW will encourage women to form associations or use existing ones so that they can take advantage of the opportunities in the construction camps of the contractor. The contractor will require janitorial services, management of dormitories, operations of kitchens and mess halls and maintenance of the camp perimeter and these associations will be contracted by the contractor as part of the sub-project's income restoration measures.

249. Arrangement would be made between DOW through the contractor to source the food that will be used in the kitchens from the nearby food gardens of the DPs. This arrangement will be mutually beneficial because farmers would avoid the transportation costs in transporting their products and save time while the contractor will receive fresh produce at more reasonable prices.

#### **E. Entitlement to Rehabilitation Assistance**

250. In addition to customary land, there are also some physical and economic displacements in the sub-project. In addition, there might be some assets that are located outside of the construction limits that may be affected during civil works. In these events, the HRRIP will support DPs to restore their living conditions and will provide assistance in the following situations:

##### **1. Business Loss Allowance**

251. All DPs whose trade stores must be shifted or reconstructed a short distance to a location outside the construction limits of the sub-project road are entitled to a daily allowance of 250 kina for a large store and 150 kina for a small store to cover the loss of business income from the removal to the installation of the store in a new location.

##### **2. Shifting Allowance**

252. DPs who will shift or reconstruct their structures are entitled to a shifting allowance to cover the costs of shifting of possessions, temporary storage and then to the permanent accommodation in the new location. This allowance will be paid to all owners of affected houses and trade stores.

253. At the time that the shifting allowance is paid, the structure owner will sign an agreement with HRMG and/or DLO regarding the date by which the structure will be removed from the land required to upgrade/rehabilitate the road.

##### **3. Subsistence Allowance**

254. All owners of 21 affected residential houses (16 houses and 5 trade store owners who sleep within) will receive a daily subsistence allowance of 100 Kina per HH for a maximum period of two weeks to assist their daily expenses while shifting or reconstructing their affected structures in the new locations.

##### **4. Transport Allowance**

255. Each affected house and trade store owner will be given a transport allowance calculated as follows: 100 Kina for a residential house or a small trade store and 150 Kina for a

large trade store. They can also use part of this allowance to transport building materials to the new site.

## **5. Relocation and Reburial Assistance**

256. In the sub-project, there are affected 35 graves, broken down into 3 permanently marked with features, 1 permanently marked and 31 unmarked graves. In addition to the compensation rates provided for under the Valuer General's listing, each affected household will be provided with relocation and reburial assistance amounting to 1,600 per grave to compensate for the ceremonial costs, exhumation, costs of coffin and reburial expenses of the affected graves.

## **6. Severity Impact Allowance for Productive Assets**

257. In the earlier discussions on severity of impacts on displaced households, the difficulty of determining the severity of impacts on their productive assets was discussed. In this sub-project, there is no way of really determining severity of impact on productive assets. However, to ensure that DHs are not worse off than before the project, this RP is adapting an additional 20% amount as severity impact allowance for productive assets based on the value of all affected crops and trees of DHs as income restoration allowance for severe impacts on productive assets.

## **7. Vulnerable Allowance**

258. The vulnerable are individuals or groups who will experience adverse impacts from a proposed project more severely than others because of their vulnerable status. ADB policy requires that vulnerable displaced persons be targeted with measures that ensure that a project's adverse impacts do not fall on them disproportionately and that they share the benefits and opportunities of the development equally with others.

259. The proposed sub-project will assist the following vulnerable households: (i) DPs with household monthly income of less than 130 kina (i.e., the country's national poverty threshold or US\$60, the international poverty threshold); (ii) DP household heads whose age is 65 or older; (iii) female-headed household heads; and (iv) household heads who are physically and/or mentally incapacitated (disabled). DHs earning less than 130 kina a month will receive a one-time vulnerability allowance of 240 kina while elderly headed households, women-headed households and physically incapacitated headed households will all receive a onetime vulnerability allowance of 240 kina.

260. There are 5 DPs who fall into more than one of these vulnerable groups. They are therefore eligible to receive the allotted entitlements for each count of vulnerability. Nearly all households in the Highlands are headed by men and those headed by women are among the poorest.

## **F. Indigenous People**

261. Following the ADB definition of Indigenous People "as those with a social or cultural identity distinct from the dominant or mainstream society which makes them vulnerable to being disadvantaged in the processes of development", the sub-project will not need an Indigenous People Plan because while DP's may fall under different tribal/linguistic groups, they are considered as part of the mainstream society and of the population living in Highland areas which generally characterizes PNG.

262. Inspection of the sub-project areas and interaction with the people in the proposed sub-project sites reveals that the people experience the same social problems and opportunities as other tribes and linguistic groups. Social divides are more pronounced in clans and sub-clans, and living in urban or rural areas rather than by tribe or linguistic group.

263. The last PNG census figures for the year 2011 show that the population was just over five million. Approximately 95 per cent of people are Melanesians. There is no particular ethnic group that dominates another. Given this backdrop, there is no indigenous or ethnic minority peoples as “those with a social or cultural identity distinct from the dominant or mainstream society, which makes them vulnerable to being disadvantaged in the processes of development.” As such, it is not deemed necessary to prepare separate IP related documents. The RF and the RP address the issue of use of customary land for road widening.

### G. Entitlement Matrix

264. The following Table 26: HRRIP Entitlement Matrix summarizes the entitlements to compensation, income restoration measures and rehabilitation assistance for the Nipa – Munihi road section under the HRRIP.

**TABLE 21: HRRIP ENTITLEMENT MATRIX**

Type of Impact	Entitled Person	Entitlement	Expected Results	Implementation
<b>Affected Land</b>				
Temporary use of land	Customary land:  Land users as recognized by clan leaders	Use of the land will be acquired through negotiated lease with landowners. Rent as negotiated under the lease.  In the case of extraction of materials (e.g., gravel) from the land, the civil works contractor will negotiate directly with the landowner to reach agreement regarding the payment of royalties.	Compensation (in form of land lease) for use of land.	The agreement to use customary land whether temporarily or permanently will be negotiated based on the following conditions: a) landowners agree to support the upgrading and rehabilitation of the road; b) landowners are consulted and make informed decisions regarding agreements to use land; and c) landowners guarantee on behalf of all clan members that they will not disrupt the sub-project in other ways. In the case of customary land used temporarily, the cost of restoration of the land following its use will be the responsibility of Contractors as part of
	State-owned land:  Users or occupants	No compensation will be paid for use of the land.  Cash compensation at replacement cost will be paid for any damaged crops and trees		
Permanent use of land	Customary land:  Land users as recognized by clan leaders	Use of the land will be acquired through a negotiated Memorandum of Agreement with landowners.	Memorandum of agreements on use of customary land.	
	State-owned land:  Users or	No compensation will be paid for use of the land.  Cash compensation at		

Type of Impact	Entitled Person	Entitlement	Expected Results	Implementation
	occupants	replacement cost will be paid for any damaged crops, trees, fences or other structures on sub-project-affected land (see below).		their Contracts.
<b>Other Affected Assets</b>				
Annual crops	Owners of the crops	<p>Compensation for loss of or damage to annual crops on sub-project-affected land as follows:</p> <p>DPs given notice to harvest crops before clearance or removal from required land;</p> <p>OR, if DPs are not able to harvest</p> <p>b) cash compensation calculated at replacement costs based on local market price;</p> <p>c) Seeds and planting material cost of Kina 100 as a grant for a period up to 2 years from resettlement.</p>	Compensation for damage to or loss of standing crops to ensure income restoration	<p>DOW will compensate at replacement cost based on market prices.</p> <p>All compensation rates and amounts will be verified and approved by the office of the Valuer General.</p>
Perennial crops and trees, including timber trees	Owners of crops and trees	<p>Compensation for losses or damages as follows:</p> <p>a) DPs given notice to harvest crops before clearance or removal from required land; AND,</p> <p>b) cash compensation for lost plant or tree calculated at replacement cost based on market prices.; AND,</p> <p>c) in the case of perennial crops and trees, a grant equal to the lost income for the period of time until new plants or trees produce a yield similar to the lost plants/trees; OR</p> <p>d) in the case of timber trees, DPs will be permitted to harvest trees and sell the timber.</p> <p>c) Free issue of tree seedlings at the rate of Kina 2 per poly-plant. 3,000 poly-plants to be distributed among APs</p>	Compensation for damage to or loss of perennial crops and trees to ensure income restoration.	<p>All compensation assessed according to the DMS shall be paid in full prior to the beginning of civil works. If further damage or loss occurs during civil works, HRMG will carry out supplementary assessments and take steps to get approvals for and payment of additional compensation to which DPs are entitled as rapidly as possible.</p> <p>All compensation shall be paid to the owners of the affected assets.</p>
Graves	Closest relative of the dead person	Compensation based on Valuer General's Schedule of Compensation (2013) and;	Compensation for damage for graves	

Type of Impact	Entitled Person	Entitlement	Expected Results	Implementation
		Additional compensation of kina 1,600 for the costs of ceremony, exhumation, coffin, and reburial of the dead		
Fences	Owner of the affected fence	Compensation based on replacement costs of the affected fences	Compensation for affected fences	
Income Restoration Measures				
Loss of crops and income	All APs who loose crops	a) A total grant of Kina 100 to purchase seeds and planting material for 2 consecutive seasons b) Participation in agricultural training course conducted by an agricultural technician c) Opportunity to purchase improved seeds/planting materials from NARI	APs able to cope-up with loss of agricultural land	HRMG will coordinate visit and monitor Business development work is to be handled by a competent organization
Loss of trees	All APs and tribes who loose trees	3,000 poly-plant seedlings will be distributed among all APs and tribal leaders for planting in their gardens and tribal lands respectively. A forestry technician to visit twice and provide advice on tree planting / management	Loss of trees from community is compensated	
Loss of income / livelihoods	All APs who are willing to learn about business management	Business development agency to visit and advise APs on establishment / management of small-scale business. Two subsequent follow-up visits to assist / monitor business development	APs are given an opportunity to enhance their livelihoods that may be lost by resettlement	
Communal Assets	Members of affected tribes, clans and sub-clans.	Construction of bus bays with road vending stalls Construction of waiting sheds with temporary storage areas in strategically located junctions	Creation of livelihood opportunities and additional support for marketing	HRMG will be responsible for the construction, timed after the sealing of the particular road section.
Project Employment	Members of affected tribes, clans and sub-clans.	Priority for paid work for civil works and/or ongoing maintenance for sub-project road, assuming qualifications to do the work.	Provision for additional household income	Part of the conditions in the procurement process for contractors
Generation of Livelihood opportunities	Members of affected tribes, clans and sub-	Focused for women's participation to provide services and food supplies to address the needs of contractors	Creation of livelihood opportunities	Part of the conditions in the procurement process for contractors

Type of Impact	Entitled Person	Entitlement	Expected Results	Implementation
	clans.			

Rehabilitation Allowances				
Shifting back of Semi permanent and temporary units	Owners of structures	Shifting allowance of Kina 100 and handling/transport cost of Kina 100 for owners of each affected house/business. Owners of residential buildings will be given Kina 100 per day for their temporary accommodation allowance per HH for a maximum period of 2 weeks until fixing the house/business in new location. Cost for house forming ceremony calculated as Kina 500 per unit.	Restoration of livelihood /economic activities.	The allowances for shifting structures and loss of business income will be assessed by a valuer based on the duration of impacts, e.g., to shift a structure and the loss of income.
Disruption of business activities due to civil works	Owners of trade stores and other roadside businesses	Full-replacement cost of the structure at market value Shifting allowance of Kina 100 per business Transport allowance of Kina 100/150 per small/large trade store A disruption allowance equal for the number of days that business is disrupted due to lack of access or other consequences of civil works calculated as Kina 150/250 for a small/large trade store per day for 2 weeks	Restoration of livelihood / economic activities	The shifting allowance will be paid to the owner of the trade store based on the duration of the disturbance.
Relocation of housing	Owners of residential structures	Full-replacement cost at market value as assessed A moving allowance of Kina 100 per APH to cover the costs of moving personal possessions, paid in cash or in kind (e.g., provision of transport). Temporary accommodation grant of Kina 100 per HH per day for a period of 2 weeks until the new house becomes inhabitable	Restoration of living conditions.	
Vulnerable DPs	Vulnerable household determined during the social surveys	Additional one-time cash grant of Kina 240 to head of DP household according to severity of impacts and vulnerability.	Livelihood restoration, poverty reduction and social development	
Sub-project	Members of	Contractor specifications for	Poverty	

affected people	affected tribes, clans and sub-clans.	provision of HIV/AIDS awareness and prevention programs in construction camps and surrounding communities Extensive community relations and participation program involving women linked to different aspects of sub-project preparation and implementation Long-term participatory social monitoring study to track benefits among different road user groups	reduction measure and social development	
Unforeseen Impacts	Unforeseen impacts will be documented and mitigated based on the principles agreed in this RP and ADB SPS.			

265. In instances where there is a gap existing between GoPNG laws and regulations and the policies of the ADB, for HRRIP road sub-projects that require land negotiation/acquisition from customary landowners, the provisions and principles adopted in the Resettlement Framework will take precedence over the provisions of relevant laws and procedures currently in force in PNG.

## **H. Eligibility for Compensation and Rehabilitation Assistance**

266. General eligibility is defined as, “people who stand to lose land, houses, structures, trees, crops, businesses, income and other assets as a consequence of the sub-project road as of the formally recognized cut-off date i.e. September 7, 2015 will be considered as sub-project displaced persons (DPs). All DPs who settle in affected areas after this date and who cannot prove that they are displaced from the affected plots will not be eligible for compensation. Any person or group that occupies or uses land required for upgrading and rehabilitation of the road after the cut-off date will not be eligible for any compensation and/or rehabilitation assistance; they will be required to remove from the land as per the provisions of the Land Act. DOW has informed local communities regarding this cut-off date through the provincial, district and local wards and through the relevant local government agencies.

267. DPs entitled to compensation or at least rehabilitation under the sub-project are:

- i. All Owners of crops and plants;
- ii. All Owners of structures and other facilities and other objects attached to the land disregarding their land occupancy status; and
- iii. All DPs losing business, income, and salaries disregarding their land occupancy status.

## **I. Payment of Compensation**

268. The HRRIP adopts the principle that all compensation for affected assets will be paid at replacement cost based on current market prices. The office of the Valuer General will verify and approve (i) all compensation rates established through RCS and negotiation for each HRRIP sub-project, (ii) the total amount of compensation to be paid.

269. If payment of compensation is delayed, compensation rates will be updated regularly based on inflation rates to ensure that DPs receive compensation at replacement cost at the time of compensation payment. Changes to compensation amounts will be verified and approved by the office of the Valuer General.

#### **J. Coordination of Land Acquisition Activities with Civil Works**

270. All land acquisition activities will be coordinated with the civil works schedule. Civil works contractors will not be issued a notice of possession of the site until (i) compensation and relocation of DPs have been satisfactorily completed; (ii) agreed rehabilitation assistance is in place; and, (iii) the site is free of all encumbrances.

### **X. RESETTLEMENT BUDGET AND FINANCING PLAN**

#### **A. Sources of Funding for Land Acquisition and Compensation**

271. All costs for the HRRIP related to land acquisition, compensation and allowances, operation and administration costs, surveys, monitoring and reporting will be financed by GoPNG using counterpart funds.

272. In the case of designated national roads as with this Nipa – Munihu sub-project, DOW will request the National Executive Council (NEC) to allocate and disburse funds for compensation and allowances related to additional land required to upgrade and rehabilitate this sub-project.

273. In all instances, the HRMG acting on behalf of the DOW, the HRRIP EA, will monitor the process to ensure that there are minimum delays in the allocation, disbursement and payment of compensation funds.

#### **B. No Costs to Acquire Additional Land to Upgrade Roads**

274. DOW has negotiated and entered into a Memorandum of Agreement (MOA) with all affected tribes and clans for the free use of the minimum additional land required to rehabilitate and upgrade the Nipa – Munihu road. The list of affected tribes and clans are contained in Table 2: Breakdown of Affected Tribes/Clans and Their Impacts. There are no direct costs to secure the use of the required lands for the sub-project. Documentation expenses for these MOAs will be taken care under administrative expenses of the sub-project.

#### **C. Costs of Compensation for Damages to Assets**

##### **1. Cost of Affected Structures**

275. The sub-project affects 30 assets comprising of 16 houses 14 trade stores (4 large and 10 small). Out of this total, 16 are made of non-durable materials whilst 14 are built using permanent materials. The total area of the 30 units is 345 sq.m. The compensation rates for assets reflect the current prices of materials, labor and other costs. The total amount of compensation for the affected 30 units is 91,865.00 Kina. The details are shown in the following Table 27: Costs of Different Structures.

**TABLE 22 COSTS OF HOUSES AND TRADE STORES**

Type of Materials	Units	Area	Rate	Amount (Kina)
Non-durable Material	16	178	K138/sq.m	24,564.00
Durable Materials	14	167	k403/sq.m	67,301.00
<b>Total</b>	<b>30</b>	<b>345</b>		<b>91,865.00</b>

276. There are 35 affected graves, 3 permanently marked with features, 1 permanently marked and 31 unmarked graves. The adopted rates were taken from the Valuer General's rates. Permanently marked graves with features is valued at 1,300; permanently marked at 330 and unmarked grave at 130 kina per grave. The total amount of compensation for the 35 affected graves is 8,260.00 kina. The details are shown in the following Table 28: Costs of Affected Graves.

**TABLE 23: COSTS OF AFFECTED FENCES**

Type of Fence	Number	Length	Rate/meter	Amount (Kina)
Plants/Shrubs	74	2,814	K2.50	7,035.00
Wooden	4	190	K6.00	1,140.00
<b>Total</b>	<b>78</b>	<b>3,004</b>		<b>8,175.00</b>

## 2. Cost of Crops and Trees

278. The total compensation for category A (edible fruits and nuts) is 40,273.00 kina. The details are shown in the following Table 30: Compensation for Category A (Edible Fruits and Nuts).

**TABLE 24: COMPENSATION FOR CATEGORY A (EDIBLE FRUITS AND NUTS)**

Category A	Seedling	Small	Medium	Mature	Total	Amount (Kina)
Avocado	24	62	102	139	327	4,854.00
Banana	0	65	199	122	386	6,181.50
Betel Pepper vine	0	44	103	176	323	726.50
Bread Fruit Edible	0	3	2	14	19	430.00
Guava	0	9	10	10	29	206.00
Mango	0	0	6	2	8	102.00
Pandanus (Karuka)	1	178	443	682	1,304	27,753.60
Pandanus (Marita)	0	0	4	0	4	20.00
<b>Total</b>	<b>25</b>	<b>361</b>	<b>869</b>	<b>1,145</b>	<b>2,400</b>	<b>40,273.60</b>

279. The total compensation for category B (garden plants) is 11,738.95 kina. The details are shown in the following Table 31: Compensation for Category B (Garden Plants).

**TABLE 25: COMPENSATION FOR CATEGORY B (GARDEN PLANTS)**

Category B	Small	Medium	Mature	Total	Amount (Kina)
Bean	20	25	23	68	51.15
Black kumu	36	15	30	81	30.90
Broccoli	0	50	0	50	65.00
Cassava	12	11	26	49	86.70
Chinese Cabbage	0	6	0	6	3.90
Choko	0	7	16	23	78.00
Corn	20	30	50	100	89.50
Edible Pitpit	25	138	126	289	806.25
Local Green	0	4	22	26	96.00
Onion	10	0	0	10	1.50
Passion fruit	0	0	12	12	15.60
Pawpaw	0	2	2	4	9.20
Pineapple	0	1	0	1	2.60
Pumpkin	0	11	8	19	35.10
Round Cabbage	65	25	0	90	74.75
Sugarcane	220	144	190	554	4,132.00
Sweet Potato	42	98	327	467	4,002.60
Taro	40	70	31	141	461.60
Taro Kongkong	85	135	214	434	1,517.00
Yam	0	40	26	66	179.60
<b>Total</b>	<b>575</b>	<b>812</b>	<b>1,103</b>	<b>2,490</b>	<b>11,738.95</b>

280. The total compensation for category C (other economic plants) is 53,596.10 kina. The details are shown in the following Table 32: Compensation for Category C (Other Economic Plants).

**TABLE 26: COMPENSATION FOR CATEGORY C (OTHER ECONOMIC PLANTS)**

Category C	Seedling	Small	Medium	Mature	Total	Amount (Kina)
Bamboo	0	15	2	5	22	253.50
Casuarina	165	641	1162	977	2,945	35,496.50
Coffee	28	31	62	157	278	2,782.50
Fern	0	61	28	84	173	297.50
Laportia		0	20	36	56	19.40
Orchids		15	51	48	114	304.50
Pandanus (Non-edible)	0	9	0	1	10	31.40
Targets		525	2939	7406	10,870	14,410.80
<b>Total</b>	<b>193</b>	<b>1,297</b>	<b>4,264</b>	<b>8,714</b>	<b>14,468</b>	<b>53,596.10</b>

281. The total compensation for forest and other large trees is 19,101.00 kina. The details are shown in the following Table 33: Compensation for Category D (Forest and other Large Trees).

**TABLE 27: COMPENSATION FOR CATEGORY D (FOREST AND OTHER LARGE TREES)**

Trees	Small	Medium	Mature	Total	Amount (Kina)
Hard Wood	8	53	84	145	2,925.00
Gum Tree	13	37	70	120	2,385.50
Semi Hardwood	14	56	84	154	1,806.00
Lesser known Useful Species	213	303	191	707	3,946.50
Red Cedar	0	9	8	17	250.00
Oak	0	0	2	2	40.00
Semi Hardwood	76	41	91	208	2,042.50
Other Trees	260	354	364	978	2,346.00
Pine Tree	43	70	21	134	3,359.50
<b>Sub-Total</b>	<b>627</b>	<b>923</b>	<b>915</b>	<b>2,465</b>	<b>19,101.00</b>

282. In summary, there are 21,823 of crops and trees in different stages of development and different categories based on the Valuer General schedule that will be affected by the sub-project road. The total amount of compensation for the affected crops and trees is 124,709.65 kina based on Valuer General's schedule 2013 which was assessed to still reflect current market value. The details are shown in Table 34 Costs of Affected Crops and Trees.

**TABLE 28 COSTS OF AFFECTED CROPS AND TREES**

Tree/Plant Category	Seedling	Small	Medium	Mature	Unit	Amount (Kina)
Category A	25	361	869	1,145	2,400	40,273.60
Category B	0	575	812	1,103	2,490	11,738.95
Category C	193	1,297	4,264	8,714	14,468	53,596.10
Trees	0	627	923	915	2,465	19,101.00
<b>Total</b>	<b>218</b>	<b>2,860</b>	<b>6,868</b>	<b>11,877</b>	<b>21,823</b>	<b>124,709.65</b>

#### **D. Costs of Income Restoration Measures**

283. The loss of land will be addressed by the tribes by allocating lands in fallow to the affected households. This was confirmed by the community leaders that was also referred to by the LLG officials in their speech made at the MOA signing ceremony. The affected households will continue to subsistence farmers, cultivating their several food gardens located at different parts of their customary land. All DPs will be able to continue to be farmers because tribal lands are available when needed.

284. However, there are some impacts on the customary landowners and other APs that are difficult to measure but nevertheless adversely affect them. As discussed earlier in this RP, the loss of agricultural land and trees is felt by many APs, the vulnerable households in particular. They suggest that new income restoration measures are implemented for the benefit of those who lost their assets, mainly land. Hence, the following income restoration measures aim to mitigate income losses for APs. All activities will be coordinated by HRMG.

##### **1. Assistance to improve agriculture**

285. Agriculture contributes heavily to the household income of APs. The loss of agricultural land will have a negative impacts on AP's livelihoods. The discussions with APs have suggested

that measures such as the free issue of seeds and planting materials with appropriate technical advice is provided to them. Each of the 125 APs will be given free issue of seeds and planting material valued at Kina 50 per season for 2 years (total of Kina 100/HH). The project will also arrange two visits by an agricultural technician (each costed at Kina 5,000) from the National Research Institute to provide technical advice to APs. The visit is planned to coincide with the issue of seeds and planting materials which is fully-funded by the project. The technician will conduct training for APs on the establishment of gardens in new locations and on improved crop husbandry methods, among other suggested topics by the APs.

## **2. Business development**

283. Income from small businesses is a significant contribution to the household economy. The majority of interviewed APs suggest that they are given an orientation to business development and management with subsequent assistance to initiate business of choice. There are few NGOs that can provide business training and assist APs to start their businesses. The National Research Institute expressed its interest in supporting the APs in this area. A block sum of Kina 50,000 is proposed in the RP to be utilized for the development of business skills among APs.

## **3. Assistance to tree planting**

284. It is estimated that the clearing of road alignment will remove about 3,000 trees from AP's land. Although the APs will receive compensation for such losses, they are concerned that lack of trees will cause other impacts on their settlements. APs and tribal leaders will be given 3,000 saplings for free for planting on their unaffected land. Together with the issue of seedlings, a technician from the PNG Forest Authority will be sponsored to provide technical advice to APs. The cost of seedlings is calculated as Kina 6,000 and the visit by forest technician is priced at Kina 10,000.

285. The total income and livelihoods restoration cost is Kina 88,500 which is included in the budget of RP.

## **E. Cost of Design Measures**

286. To help communities, three typical bus bays with provisions for roadside vending will be built in strategic areas along the sub-project road. The locations are will be finalized through a meeting specially convened for this purpose.

287. The cost estimate for a typical bus bay (paved) is 170 kina per sqm including provisions for slightly elevated stalls and 200 kina per sqm for the waiting shed. A typical bus bay has a dimension of 50 meters X 3 meters or 150sqm. At 170 per sqm, a typical bus bay will amount to 25,500 kina or a total amount of 76,500 kina for the three proposed bus bays.

288. The cost estimate for a typical waiting shed with provisions for a temporary storage area is 200 kina per sqm. The proposed floor area is around 100 sqm and at will amount to 20,000 kina or a total amount of 60,000 kina. The total cost is 136,500 kina. The details are shown in the following Table 35 Costs of Bus Bays and Waiting Sheds.

**TABLE 29 COSTS OF BUS BAYS AND WAITING SHEDS**

Income Restoration Measures	Unit	Rate/infrastructure	Amount (Kina)
Bus Bays	3	25,500.00	76,500.00
Waiting Sheds	3	20,000.00	60,000.00
<b>Total</b>			<b>136,500.00</b>

**F. Costs of Rehabilitation Assistance**

289. There are 4 large and 10 small trade stores that will be affected. The owners are entitled to a business loss compensation allowance (one-off) calculated as 250 Kina for a large and 150 Kina for a small trade store. This allowance is calculated for each day without business payable for a maximum period of 2 weeks. The total business loss allowance is 35,000 kina.

290. The 16 houses and 14 trade stores are entitled for a shifting allowance calculated as 100 Kina for a house, 100 Kina for a small trade store and 150 Kina for a large trade store. It is an one-time allowance the purpose of which is to compensate dismantling and re-fixing cost of the assets. The total amount of the shifting allowance is 3,200 kina.

291. Each owner of 30 assets will also receive a transport allowance of 100 Kina per unit. It is an one-time allowance to transport salvaged building materials and/or new building materials to build their house or trade store. The total cost for this allowance is 3,200 Kina.

292. The owner of every house will receive a temporary accommodation allowance of 100 Kina per day for a maximum period of 2 weeks. The 5 trade store owners whose family share part of this facility as their residence are also entitled to this allowance. It can be utilized to pay for accommodation cost either for paid accommodation or to pay when staying with their extended family or relatives. The total cost of temporary accommodation allowance is 29,400 kina.

293. The owners of the 35 affected graves will receive the cost of construction of graves in accordance with the Valuer general's table. In addition, the affected parties will be given grave relocation and reburial assistance to cover the ceremonial rites in exhumation of the grave and reburial at Kina 1,000, costs of coffin of Kina 500, transport cost of Kina 100, all amounting to 1,600 kina per affected grave. The total amount for the grave relocation and reburial assistance is Kina 56,000. Discussions with community leaders reveal that when a deceased person is buried at present, the cost of the ceremony is comparatively much higher than the actual cost of burial itself. A similar pattern is seen in the case of reburial. The details are shown in the following Table 36 Costs of Rehabilitation Assistance.

**TABLE 30 COSTS OF REHABILITATION ASSISTANCE (KINA)**

Rehabilitation Assistance	No of Units	Rate	Amount (Kina)
Shifting Allowance			
a) For Houses	16	100	1,600.00
b) For Trade Stores (large)	10	100	1,000.00
c) For small Trade Store	4	150	600.00
Transport Allowance			
a) For House/ Small trade Store	26	100	2,600.00
b) For Large Trade Store	4	150	600.00
Subsistence Allowance	21	100 x 14 days	29,400.00
Business Loss Allowance			
a) Large Trade Stores	4	250 x 14 days	14,000.00
b) Small Trade Stores	10	150 x 14 days	21,000.00
Grave Relocation/Reburial Assistance	35	1,600	56,000.00
Severity Impact Allowance for Productive Assets	183	20% of Affected Crops and Trees	24,941.93
<b>Total</b>	<b>352</b>		<b>151,741.93</b>

294. The 180 households whose crops and trees are affected by the sub-project will receive an additional amount equivalent to 20% of the value of their affected crops and trees as severity Impact allowance for productive assets to ensure that DHs are not worse off than before the project. The total amount is 24,941.93 kina.

295. There are 60 vulnerable households broken down into 20 elderly headed households (65 and above); 15 women-headed households; 3 physically incapacitated household heads. In addition, there are 22 households earning a monthly income below 130 kina a month, the poverty threshold in PNG.

296. Each household will receive a vulnerability allowance equivalent to 240 kina, one-time assistance. Households whose monthly income falls under the poverty line will receive a vulnerable allowance of 300 kina. The 5 HHs who are experiencing 2 counts of vulnerability will be given additional allowances. The total amount for vulnerable allowances is 16,920 kina. The details are shown in the following Table 31: Breakdown of Vulnerable Allowances.

**TABLE 31: BREAKDOWN OF VULNERABLE ALLOWANCES**

Vulnerable Households	Number	Rate	Amount (Kina)
Elderly Headed Households	20	240.00	4,800.00
Female Headed Households	15	240.00	3,600.00
Handicapped Headed Households	3	240.00	720.00
Households below Poverty Line	22	300.00	6,600.00
Two counts of Vulnerability	5	240.00	1,200.00
<b>Total</b>	<b>60</b>		<b>16,920.00</b>

## G. Cost of Resettlement Budget

297. The total cost of this resettlement plan for the Nipa - Munihi sub-project amounted to 898,340 kina. This budget includes compensation for the different affected structures, crops and trees, income restoration measures, rehabilitation allowance, physical and price contingencies, administrative expenses and cost for external monitoring. The details are shown in Table 38: Summary of Costs Estimates and RP Budget.

**TABLE 32: SUMMARY OF COSTS ESTIMATES AND RP BUDGET**

Resettlement Costs	Unit	Amount (Kina)
Houses and Trade Stores	30	91,865.00
Graves	35 graves	8,260.00
Fences	78 fences	8,175.00
Crops and Trees	21,823 crops & trees	124,709.65
Income and Livelihoods Restoration	180 DHs	88,500.00
Design Measures to assist community	3 bus bays & 3 waiting sheds	136,500.00
Rehabilitation Allowances		
Moving (Transport) Allowance	16 houses+14 trade stores	3,200.00
Shifting Allowance	16 houses+14 trade stores	3,200.00
Subsistence Allowance	21 households+5 trade stores	29,400.00
Business Loss Allowance	14 trade stores	35,000.00
Grave Relocation & Reburial Allowance	35 households	56,000.00
House ceremony (move into new house/open trade store)	30	15,000.00
Severity Impact Allowance on Productive Assets	183 households	24,941.93
Vulnerability Allowances		
Multiple-counts	5 households	1,200.00
Elderly headed households (65 yrs & Above)	20 households	4,800.00
Female headed household	15 households	3,600.00
Physically challenged HH Heads	3 households	720.00
Households below poverty line	22 households	6,600.00
<b>Sub-Total – A</b>		<b>641,671.58</b>
Physical Contingency (20%)		96,250.73
Price Contingency (10%)		64,167.15
<b>Sub-Total – B</b>		<b>160,417.90</b>
Administrative Expense (15%) - C		96,250.73
<b>Grand Total (A+B+C)</b>		<b>898,340.21</b>

Source: Design Consultants' Computations.

Note: Cost of IMO is excluded as it is already funded directly by ADB.

298. The RP cost will be re-visited at the time of validation to ensure compliance to existing market rate and all cost including livelihood restoration items will be adjusted if necessary. This will be done by the ESSU prior to implementation commencing.

## **X. INSTITUTIONAL ARRANGEMENTS**

### **A. Department of Works**

299. As Executing Agency (EA) for the HRRIP, Department of Works (DOW) has overall responsibility to manage the planning, implementation and monitoring related to acquiring use rights for additional land to implement HRRIP sub-projects, compensation for damages on project-affected assets and implementation cost (See Annex 6 Organizational Arrangements).

### **B. Highlands Region Maintenance Group**

300. The Highlands Region Maintenance Group (HRMG), as the Implementing Agency (IA) for HRRIP sub-projects to upgrade and rehabilitate roads, has the responsibility delegated by the DOW to carry out the planning, implementation and monitoring for land acquisition/resettlement activities, as required. These include but may not be limited to the following:

- I. Collaborate with and assist PLO and/or DLO to carry out their work in compliance with the HRRIP policies and ADB requirements;
- II. Provide qualified personnel to conduct and/or assist PLO and/or DLO to carry out surveys including fieldwork to support the sub-project screening and preliminary assessment of additional land requirements; and, as required, a census of displaced people, the detailed measurement survey (DMS) and socio-economic baseline survey;
- III. Collaborate with PLO and/or DLO for negotiations regarding Memoranda of Agreement (MOA) and leases for use of land;
- IV. Coordinate and carry out consultations with affected communities, including leaders, displaced people and other interested community members; and, ensure that all stakeholders are informed in a timely manner about the sub-project, its policies and procedures; ensure that all requirements are carried out concerning public disclosure of the provisions for land acquisition and compensation; and, oversee and monitor the grievance redress process;
- V. Review and endorse the draft RP as prepared by HRMG and/or its consultant prior to submitting it to DOW and, subsequently, to ADB for approval, making sure that all matters related to land acquisition/resettlement are complete and properly reported;
- VI. Monitor the process of allocation and disbursement of funds for compensation at both the national and provincial levels, and ensure that funds are available and compensation is paid in a timely manner as per the provisions of the RF;
- VII. Carry out all other activities related to internal monitoring of land acquisition activities and collaborate with and support the work of the independent monitoring organization;
- VIII. Coordinate with civil works contractors to ensure that required land is cleared in a timely manner, that unforeseen damages and losses are recorded and compensation paid and that all other steps and measures are taken to complete the civil works in an efficient manner.

### **C. Environmental and Social Safeguards Unit – DOW**

301. The Environmental and Social Safeguards Unit (ESSU) of DOW has been expanded through the provision of an International Social Specialist (ISS). A National Social Specialist (NSS) will soon be recruited. The additional staff is needed to provide support to the HRMG in ensuring compliance with social safeguards in project implementation.

302. The ISS and other staff of ESSU are conducting training HRMG to build capacity in the following areas: (i) GoPNG policies and procedures for acquisition of customary land, including MOA; (ii) ADB policies and procedures for land acquisition and compensation; (iii) applying GoPNG and ADB policies and procedures to the requirements of the HRRIP; and, (iv) other technical support related to, among others, surveys and data collection to prepare a detailed measurement survey (DMS) and Land Investigation Report (LIR), community consultations and awareness programs and the preparation of reports.

303. The training also involves people from contractor, DOW and HRMG, provincial and district lands officers in HRRIP sub-project areas, relevant staff of the Valuer General and any other organizations involved in land acquisition and compensation activities. The HRRIP support will continue to include technical and financial support to strengthen the resources of DOW, HRMG and provincial and district lands offices. This support will take the form of assessment and recommendations to increase staffing, developing terms of reference for work related to land acquisition and compensation activities and providing financial support for the work related to fieldwork, for example, to carry out sub-project resettlement plans, detailed measurement surveys (DMS), Replacement Costs Survey (RCS), and/or prepare Land Investigation Reports (LIR) and RPs.

#### **D. Provincial Administrations**

304. The Provincial Land Officer (PLO) will collaborate with HRMG to plan, implement and monitor land activities for HRRIP sub-projects in the province and/or delegate responsibility to the relevant District Land Officers (DLO). The PLO responsibilities include:

- I. Conducting surveys of land required permanently or temporarily for the sub-project;
- II. Negotiating and signing a Memorandum of Agreement for permanent use of customary land with the leaders and affected landowners in communities;
- III. negotiating and signing leases for temporary use of land required for the sub-project; and,
- IV. Consulting with and advising affected communities about the HRRIP, the policies and procedures when additional land is required and the rights and responsibilities of displaced people and other stakeholders.

305. The Provincial Governor and/or Provincial Administrator (PA) in coordination with DOW are responsible to ensure that funds are allocated and disbursed to pay compensation and allowances for provincial (and/or district) roads that are included in the HRRIP.

#### **E. District and LLG Administrations**

306. The District Land Officer (DLO), as delegated by the PLO, will collaborate with HRMG to plan, implement and monitor land activities for HRRIP sub-projects in the district, including:

- I. Conducting surveys of land required permanently or temporarily for the sub-project, and preparing LIR;
- II. Negotiating and signing a Memorandum of Agreement for use of customary land with the leaders and affected landowners in communities will land is affected;
- III. negotiating and signing leases for temporary use of land required for the sub-project; and,

- IV. Consulting with and advising affected communities about the HRRIP, the policies and procedures when additional land is required and the rights and responsibilities of displaced people and other stakeholders.

307. LLG Council Presidents will be effective participants in all consultations with local communities, displaced people and other stakeholders. They will be responsible for collaborating with HRMG to organize and carry out these consultations.

#### **F. Institutional Capacity for Land Acquisition Activities**

308. The National Department of Lands and Physical Planning (DLPP) and the Lands and Survey Division (LSD) situated within the DOW are well-organized to assist the EA to oversee and manage the land acquisition and compensation process; and, in particular, to support the work of the IA and others with respect to identification of land tenure, review and endorsement of procedures and plans, as well as facilitation of requests for allocation and disbursement of funds to pay compensation.

309. As the Implementing Agency (IA), the HRMG has good experience in dealing with issues related to community consultations and negotiation of Memorandum of Agreements (MOA) for additional land required to upgrade and rehabilitate national and provincial roads, as well as other aspects of compensation for lost and damaged assets as per the GoPNG procedures. Similarly, the personnel of the PLO and DLO in most jurisdictions also have experience with MOA and compensation issues.

310. The HRRIP will provide training for land acquisition activities and involuntary resettlement through the Environmental and Social Safeguards Unit for other DOW, HRMG and PLO and DLO staffs. The training program will be spearheaded by the International Social Specialist supported by the National Social Specialist.

### **XI. IMPLEMENTATION SCHEDULE**

311. DOW will begin the implementation process of RP immediately after its approval by the ADB. A timeline for the implementation and post implementation of the RP implementation has been prepared in accordance with different steps covered under this RP and presented in Table 39: RP Implementation Schedule (2015/2016).

**TABLE 33: RP IMPLEMENTATION SCHEDULE (2015/2016)**

Main Resettlement Plan Activities	Responsibility	Dec	Jan	Feb	Mar	Apr	May	June
Translation of RP into Pidgin	DOW/HRMG							
Distribution/Consultation of RP and information pamphlets in Pidgin	DOW/HRMG							
Submission of RP to ADB for approval	DOW/ Consultants							
Allocation of financial resources for land acquisition	DOW/National Executive Council							
Up-dating RP	DOW (executed by ESSU)							
*Construction of Bus Bays and Waiting Sheds	DOW/HRMG							
Disputes/objections (complaints/grievances)	DOW/HRMG/ Court							
Confirmatory letter to ADB for completion of all payments	DOW/ADB							
Confirmation and verification of completion of deliverables by Independent Monitoring Organization	ADB							
Issuance of no-objection for commencement of civil works by ADB	DOW/ADB							
Commencement of civil works	DOW/ Contractor							
Quarterly Progress Reporting and semi-annual safeguard monitoring reports to ADB	DOW/HRMG							
Independent evaluation of RP program (After 3-months of the RP Implementation)	IMO							

\*Note: The timing of the construction of bus bays will be just after the sealing of the particular road section where these facilities will be located to ensure that these facilities will be undertaken in coordination with the whole road sub-project.

## **XII. MONITORING AND REPORTING**

312. RP activities in the Nipa – Munihu road sub-project will undergo both internal and external monitoring. Internal monitoring will be conducted by HRMG assisted by the Environmental Social Safeguards Unit (ESSU). External monitoring will be undertaken by an Independent Monitoring Organization (IMO) already recruited by DOW, and approved by ADB.

### **A. Internal Monitoring**

313. The HRMG assisted by the ESSU will monitor all activities associated with resettlement implementation and payment of compensation to APs. The scope of internal monitoring includes: (i) compliance with the agreed policies and procedures for land acquisition; (ii) prompt approval, allocation and disbursements of funds and payment of compensation to DPs, including supplemental compensation for additional and/or unforeseen losses; (iii) the availability of other resources and efficient, effective use of these resources; (iv) requirements for remedial actions; (v) grievance redressal program; and (vi) AP consultation.

314. During the implementation of the RP, the HRMG will prepare semi-annual safeguard monitoring reports and submit these reports to DOW and ADB in addition to regular quarterly progress reports as part of project performance monitoring. HRMG will also submit a sub-project land acquisition completion report to DOW and ADB when compensation has been paid and request approval to proceed with civil works.

### **B. External Monitoring**

315. The DOW has already recruited an independent monitoring organization (IMO) to conduct external monitoring for HRRIP subprojects that require resettlement. The purpose of external monitoring is to conduct an independent validation of all resettlement and livelihoods restoration activities. It will also focus on the social impacts of the subprojects and whether DPs are able to restore, and preferably improve, their pre-project living standards, incomes, and productive capacity. The TOR for IMO is presented in Annex 7.

316. The IMO will prepare bi-annual monitoring reports; and, conduct post-acquisition evaluations twelve (12) months after compensation is completed for each sub-project. All IMO reports will be submitted to HRMG, DOW and ADB.

## **Annex 1: Issues on Acquiring Customary Land**

In the Highlands region, the social structure of tribal groups is patriarchal and clans include people who can share a common ancestry through their father's lineage. Each clan has a specific territory; sub-clans or extended family groups are granted rights to use some of the clan territory to meet their basic needs for housing and gardens. Primary rights are reserved for people who are recognized as members of a clan (or its sub-clans); other people may earn secondary rights to a clan's territory through marriage. In all cases, clan territory cannot be alienated.

Access to land is a fundamental and defining asset in the livelihood and cultural traditions of the Highlands people. Land is, first and foremost, the basis of subsistence agriculture that provides for the needs of rural households. It is common practice to produce small surpluses that are distributed in kind or in cash (after sale of crops at local markets) to members of the house line or sub-clan; this represents repayment into the social capital of the group (Rivers, 2004). The land is where sacred sites are located; and, where people bury their dead, often at visible locations in order to venerate a community leader who has passed away. Allegiance to one's clan territory remains strong among people who migrate from their communities for short or longer periods. Land is what a family transfers to its next generation as the basis for the continuing cycle of social reproduction.

As PNG develops, the difficulties inherent in how to mobilize customary land for new economic and physical development become more and more apparent. With respect to works to upgrade road networks, several approaches have been employed. These are identified here as background to the proposed HRRIP approach that is discussed in the next section.

- The implementation of the ADB Loan 1709-PNG DOW negotiated a Memorandum of Agreement (MOA) with affected communities and landowners to acquire the use of customary land without payment of compensation for the upgrading of national and provincial roads.
- In consultations during the preparation of the HRRIP, people and communities in the Highlands region strongly supported proposals to upgrade and rehabilitate roads, recognizing that this is a necessary condition to improve accessibility and living conditions.
- Most people in the region consider that existing roads are located on State land, whether or not there has been a formal process to alienate customary land. However, there were some stakeholders who insisted that these roads are located in customary land and are still unpaid when these lands were first used as roads. The intensity of this view of unpaid land varies between provinces in the Highlands Region and is less noticeable in provinces (Morabe and Madang) near the coastal areas.
- Moreover, in consultations during preparation of T1 and T2 roads for the HRRIP, provincial and district authorities as well as communities along the roads repeatedly indicated their willingness to contribute additional land without any financial considerations to enable roads to be upgraded.
- However, there have been some complaints about the past road upgrading and rehabilitation activities regarding outstanding issues on affected improvements which may influence the acceptability of projects and/or impede the rehabilitation of roads in the HRRIP. These should be reviewed very carefully because the demand for unfounded or obsessive compensation has become an emerging cottage industry and has unnecessarily delayed infrastructure projects in the Highlands Region.

## **Annex 2: HRRIP Approach in Obtaining MOA**

HRMG with assistance from the Provincial Administrators and District Administrators, Provincial Works Managers will organize a series of community consultation with local officials (LLG Council Presidents and Ward Councilors), community leaders, displaced people (DPs), other community members and other stakeholders; DPs include all individuals and families that have rights to use land and/or own crops and structures affected by additional land requirements to upgrade or rehabilitate the road.

The purpose of the consultation is that all DPs and other stakeholders are fully informed about the HRRIP sub-project, the scope of road improvements, the benefits that this will bring to individuals and the community and the strategies to acquire use of land to permit road rehabilitation to proceed, including the use of the MOA; and, the policies and procedures that will apply to the establishment of a public road reserve.

During consultations, the community leaders and affected landowners will be asked whether they agree that the use of this land for road improvements (a) is directly linked to benefits they and their community will receive and (b) does not severely affect their living conditions, livelihoods and incomes; and, they are satisfied that (c) community sanctioned measures are in place to replace any land losses such as (1) release of customary land in fallow, idle or reserved in favor of DPs living along the road corridor, (2) adjustments of sub-clan boundaries to mitigate the road impacts, other similar communal mitigating measures.

The agreement will be confirmed by a Memorandum of Agreement (MOA) that waives the customary interest in the land (right to exclusive use of the land or permission to use customary land as a public road) in lieu of the public infrastructure. The MOA enumerates the duties and responsibilities of both the government and the customary land owners including the compensation principles for affected assets of displaced persons. An example of an MOA is included in Annex 5.

The MOA will be entered into by the Department of Works as the authorize representative of the Independent State of Papua New Guinea and the customary land owners. The customary land owners will be represented by the local level government (LLG) council president, and all of the ward councillors as duly representatives of the affected tribes, clans and sub—clans. The MOA will be verified by an independent third party such as a designated non-government organization or legal authority. The signed MOA will be submitted to the pertinent government agencies for proper disposition.

The HRMG through its community relation officers (CROs) and the Provincial Works Managers will reiterate and explain fully the HRRIP grievance redress mechanisms which were previously mentioned in the MOA. Displaced persons or persons with an interest in the sub-project will be advised to clarify or file their complaints and/or grievances related to the MOA or other aspects of the HRRIP (see section regarding grievance redress mechanisms) for mediation and arbitration processes as provided in the mechanisms and avoid prohibited activities enumerated in the Protection of Transport Infrastructure Act of 2010.

### **Annex 3: Salient Provisions of the 1996 Land Act**

The Minister may acquire land through a) agreement or b) compulsory purchase, including acquisition of developments to or improvements on the land (Art. 7 and 8). Improvements on land include, among others, buildings, fences, wells, reservoirs, gardens, plantations or fixtures constructed to manage or use land and/or to raise livestock.

Acquisition of customary land by agreement shall be on the terms and conditions agreed between the Minister and the customary landowners. However, the Minister may not acquire land that is required or likely to be required by the customary landowners. Further, if the land is likely to be required in the future by customary landowners, the Minister may lease the land (Art.10).

In the case of compulsory purchase, the date of acquisition is the expiration of a two month period following the publication of a notice to treat in the National Gazette (Art. 12). The notice to treat must also be served to all landowners or such of them as can, after diligent inquiry, be ascertained; prior to the end of this period, landowners are required to provide particulars regarding their interest in the land, as well as the amount requested to sell their interests to the State (Art. 13). The National Land Commission (NLC) shall hear landowners and shall determine and recommend to the Minister the amounts to be paid.

The value of compensation for land acquired under compulsory purchase shall take into consideration a) the value of the land at the date of acquisition, b) the damage (if any) caused by the severance of the land from other land in which the claimant has an interest and c) the enhancement or depreciation in value of the claimant's interest in other land adjoining or severed from the acquired land by virtue of the purpose for which the land is acquired. This enhancement or depreciation in value shall be deducted from or added to, as the case requires, to the amount of compensation otherwise payable (Art. 23).

The value of compensation to be paid shall be determined a) by agreement between the Minister and the claimant prior to or after the acquisition (Art. 25 and 26) or b) by arbitration as per the procedures of the Arbitration Act, as agreed by the Minister and the claimant (Art. 27).

It is an offence punishable by fines and/or imprisonment of persons who trespass on or unlawfully enter, occupy or use State or customary land, or who refuse to leave that land within 14 days of being notified to do so (Art. 144-146).

The procedures for compulsory acquisition of land for major highways (e.g. Highlands Highway) as implemented by the Department of Works (DOW) include:

When the road design is complete, the Lands and Survey Division (LSD) of DOW commissions a private surveyor to determine the boundaries of the land to be acquired as well as the location, sizes and areas of affected customary land. The completed surveys are submitted to the Surveyor General for registration.

Upon receipt of the registered survey plans, the DOW requests the Department of Land and Physical Planning (DLPP) to issue an instruction to the relevant Provincial Administration (PA) to carry out a land investigation for the proposed acquisition.

The relevant Provincial Land Officer (PLO) (and/or District Land Officer (DLO)) conducts the land investigation and prepares a Land Investigation Report (LIR) including ownership genealogy, rights and interests held in the land; and, an assessment of the value of improvements to land prepared in accordance with the Economic Trees and Plant Price Schedule.

The LIR is submitted to the PA for his/her recommendation for alienation of the land. A copy of the LIR is sent to the Office of the Valuer General to conduct a valuation of the land and improvements.

A copy of the LIR is also sent to the Department of Provincial Affairs that prepares Certificates of Alienability (COA). The COA certifies that there is no impediment to the acquisition of the customary land; it is signed by the Secretary for Provincial Affairs, as well as representatives of affected Local-Level Governments (LLGs).

DOW receives the valuation report and COAs, raises cheques based on the valuation amounts and prepares purchase documents that are forwarded to the Secretary of DLPP for his/her signature. The signed documents and cheques are sent to the PA for execution and payment to landowners.

The DLO, with all relevant forms, makes the offer to the landowners. If accepted, the forms are executed and the money is handed over in accordance with the requirements of the landowners. If rejected, it then goes to the Minister of Lands for a negotiated settlement.

## **Annex 4: Compensation in Papua New Guinea**

Papua New Guinea, as a developing nation, is adjusting itself to the dual system of laws; the formal (government laws) and the informal (traditional or customary laws), which are practiced in Papua New Guinea. The formal laws are superior to the customary laws, however the constitution and the numerous legislation, which are currently in force do not state as to what extent. There is no clear demarcation between the government's legislation and the customary laws.

The informal law is an unwritten law governed by the principles of traditional norms and values where each ethnic group in Papua New Guinea exercises, to address problems (land disputes, marital issues, children fighting, rape cases, stealing of crops, domesticated animals, cutting of timbers on someone's land, killing of a person during disputes, murder etc.) at the village (hamlets) level. The traditional-customary laws are only exercised by people with the same traditional norms and values and who have the same local language and customs, and practice by other people (through marriage, or adoption) who understand the traditional norms and values of a particular ethnic group, and recognize and accept them as laws. Customary laws have been in existence and practiced by the common group of people for thousands of years.

The application of customary law is problematic if people of different ethnic groups living in the same location (settlements) are involved such as Port Moresby, Lae and Madang. It is very difficult to apply customary/traditional laws to sort out problems amongst these multiple groups of people.

Payment of compensation is part of customary law especially in the Highlands region. Amongst the various societies in Papua New Guinea, compensation takes many forms, including: cash; pigs; traditional shell money; glass beads and rings (in Vanimo, West Sepik Province); gifts of food; eating together at feasts (small or large) held for the occasion; and handshakes.

### **Customary Practices Regarding Compensation**

Customary compensation payment as a means of settling disputes stems from the traditional form of retribution of restoring sociological- equilibrium in societies by the principle of a life for a life. The practice of compensation occurs at a level of cultural development of a people when mutual and peaceful co-existence has been recognized. It replaces the primitive form of retribution by a life for a life.

Compensation is involved with the exchange of material wealth, goods or even with people. When a person is said to be responsible for an act, wrongful or otherwise, to another person and he is required to pay over a certain amount to the person aggrieved, the settlement is said to be made by compensation. The institution is a cultural expression of maintaining, adjusting, restoring, redefining, or creating the numerous relationships that hold society together. Relationships are marked by the payments, or are at least the indispensable medium in terms of which relationships are based.

Compensation of injuries or for the damage or loss of properties is a form of restitution. But together with restitution, compensation also expresses more important values. It mends, restores and strengthens relationships so that society is back in order. Further, compensation also provides an element of retributive sanction for breaches of norms. It is a very powerful

institution of social control and there would be no equivalent traditional institution to replace it that would perform the same functions of knitting society together.

The people's sense of justice is in fact conceptually based on group responsibility which is a fact of life in PNG society at this stage of cultural evolution. When an offence is committed it is a wrong against the group or community to which the victim belongs. Likewise responsibility for the wrong done is not only imputed to the individual offender himself but simultaneously to the clan or group from which he comes. This is how traditional order has been effectively maintained in an individual if is reluctant and constrained to commit an offence that he knows full well would place his group in jeopardy. Not only that but that he knows he would have to meet double penalties both from the aggrieved party and also from his own group.

Compensation includes the giving of what are sometimes referred to as 'gifts'. Giving compensation reflects the principle of reciprocity which places emphasis 'on the relationships of the parties. Compensation for a death caused by warfare is wealth which directly replaces the lost man and which can be used to obtain a new group member, for example, by payments for a new bride who will bear children for the kin group which has received the compensation. Reciprocity between people is thus expressed by wealth goods which 'represent' people,

Custom Law: (Restorative Justice) is the process, which concentrates on mending the broken relationship that brought about the crime and brings a peaceful solution of healing back to the village. This is done when the offender is confronted with his action, which has brought harm to others. The confrontation brings shame to the offender and so that questions can be asked for forgiveness and agreement to restitution. The offender can now be reunited with the victim and the community through a ceremony of forgiveness.

Custom law is used when one person commits an offence against another. Many traditional methods are very good, (a meal for reconciliation) checkpoints are also used as preventative measures this is done through extended families. Hence if there were a conflict in the family, a relative would pay visits to check there is normalcy.

Restorative justice in a Melanesian way uses three processes by their dealings with one another. Consensus is the need to talk about the matter, provide all stakeholders with a chance to express their views and come to a decision which provides some benefits for all.

Win –Win Mediation is the concept used when two parties are in conflict over a matter such as a difference of opinion over land, property, children, or family differences between churches, these are best settled by win-win mediation. Mediation must avoid shame otherwise to save face in the sight of the community the losing party will be generally obliged to find some way of payback. To Melanesians a win-lose decision is abhorrent.

The third process is appeal wherein one or both parties are not amendable to the results of mediation and would seek redress from a higher authority.

**Annex 5: Memorandum of Agreement****DEPARTMENT OF WORKS**

P O Box 1108  
BOROKO, NCD  
Papua New Guinea

Tel: (675) 324 1114  
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**MEMORANDUM OF AGREEMENT**

This **Memorandum of Agreement** entered into by and between;

The Independent State of Papua New Guinea as represented by the Department of Works;

---AND---

The council wards of Maip1, Maip2, and Nera, District of Mendi, Province of Southern Highlands represented by its wards leaders, district leaders, leaders of clans and sub-clans, the names of which are enumerated at the end of this document;

---WITNESSETH---

**Whereas**, the State through the Department of Works is formulating, administering and implementing the Highlands Region Roads Improvement Investment Program (HRRIP), an ADB funded program for the upgrading, rehabilitation and maintenance of selected roads in the Highlands Region Road Network;

**Whereas**, one of the qualification of a road for the HRRIP is that it is an existing or former road, that is, the road bench exists and restitution of a trafficable road does not require major earthworks or construction of structures and the local population as well as district and provincial administrators have clearly stated their support for upgrading and rehabilitation of the pre-selected road;

**Whereas**, the Nipa – Munihu road section has been pre-selected by the State through the Department of Works (DOW) and approved by the Asian Development Bank (ADB) based on certain assumptions including two conditions namely that the right to use (a) existing road carriage has been negotiated in the past when such road was constructed, and (b) additional land to be required for the HRRIP project has been negotiated with the customary owners;

**Whereas**, after diligent searches and inquiries from the relevant government agencies, the existence of a writing document on the agreement for the use of customary land in the past cannot be ascertained and that the agreement may not have been put into writing;

**Whereas**, the absence of any proof of the existence of previous agreements for the use of the existing road carriage and the use of additional road width for the HRRIP project by the government require a written agreement for the continued inclusion of the selected road to the HRRIP because the previous assumptions of the existence of these documents for the use of existing road and additional land may not be defensible;

**Whereas**, there is an urgent need to have a written agreement on land use for the eligibility of the selected Nipa – Munihu road section with the HRRIP and avoid any future conditions that would give rise to misunderstandings, resentments and possible conflicts on the right to use the customary lands;

**Whereas**, the clans and communities who jointly own the customary land are fully aware of the benefits of an ungraded and rehabilitated road for their communities such as faster travelling time and cheaper

transport costs, better access to health and educational facilities, increase economic activities, better access of farm products to markets among others;

**Whereas**, the clans and communities, who jointly own the affected customary land that will be needed by the government for road improvements, are fully supportive of the proposed project to improve the existing road section passing through their communities, wards and districts;

**Whereas**, the clans and communities, who jointly own the affected customary land are desirous for the road section which is located in their customary land, to retain its status as a pre-selected road of HRRIP subject to a feasibility study including qualifications of the project's eligibility criteria and detailed engineering design;

**Whereas**, there is an urgent need for a close public – tribal partnership between the Independent State of Papua New Guinea as represented by the Department of Works who has the legal mandate to undertake infrastructure development in the country and the clans and communities who jointly own the customary land where the proposed road development will be constructed;

**NOW, THEREFORE**, for and in consideration of the foregoing premises and covenants hereinafter stipulated, the Independent State of Papua New Guinea, represented in this Memorandum of Agreement by the Department of Works (DOW) and the clans and communities who jointly own the customary land where the existing road carriage is located and the additional land that will be required to improve the existing road have entered into this agreement as follows:

#### 1.0 Identification and Location of Road Section

1.1 DOW has considered the road section from Nipa to Munihi as a pre-selected road for the HRRIP. This road section has a length of around 27.72Km and will start at chainage 0+000 located at Nipa and will end at chainage 27+717 at Munihi.

1.2 We certify that we, as individuals and representatives of our communities and clans, are the exclusive customary owners of the road section that is a pre-selected road for the HRRIP. The particulars of our customary land are described below;

Road section: Nipa - Munihi  
Chainage: From 21+545 to 27+717  
Wards: Maip1, Maip2 and Nera  
District/Province: Mendi, Southern Highlands

#### 2.0 Additional Land Requirements

The upgrading and rehabilitation of this pre-selected road will require additional customary land and that based on the existing road and the proposed road, both described below, the preliminary estimate of the DOW for the additional land requirement is 5.54 hectares,

Existing Road	Proposed Road
Carriageway 3.00 meters Formation width 3.20 meters Total width 3.57 meters, to outside of drainage structures Total area 2.20 hectares of existing road within the customary land.	Carriageway 6.00 meters Formation width 6.50 meters Total width 12.54 meters of construction limits Total area 7.74 hectares of proposed road
<b>Difference of area between existing road and proposed road: 5.54 hectares</b> (additional land required)	

### 3.0 Agreement

#### 3.1 Responsibilities and Commitments of Clans and Communities

1. We, members and representatives of the clans and communities who jointly own the customary lands on the above mentioned road section agree to permit the Independent State of Papua New Guinea (State), as represented by DOW, to use our additional customary land for the upgrading, rehabilitating and maintaining the road section described above exclusively under the HRRIP and guarantee the unimpeded use of the road by the public;
2. That in recognition of the fact that the road project which will provide development and livelihood opportunities for our communities, we voluntarily waive our rights to compensation for the following two types of trees/crops listed in the 2013 Valuer General's Compensation Schedule, whose economic value is not significant: timber trees identified under Category D and crops measured based on area.<sup>1</sup>We will harvest our affected trees/crops before the road construction and will use the produce for household needs or sell it and retain the sale proceeds with ourselves.
3. Except for the minor trees/crops mentioned above, the government will provide compensation for other major crops/trees as well affected structures and assets (see section 3.2 below).
4. That we enter into this agreement on the basis of our free and prior informed choice and consent, having been provided with full information by the State through the DOW and DLPP about the HRRIP project and are fully aware of the consequences for our tribes, clans/sub-clans and communities and waive any and all customary interests over the additional lands in lieu of public infrastructure;
5. That we are aware that the State will be using public funds for the improvement of roads situated in customary lands and if the issue of land use is not properly addressed now, future generations of customary owners may restrict and limit public and private vehicles from using the improved road that may cause conflict and unrest in our communities and villages;
6. That our full permission for the State to use the additional land is premised on the existence of the said road and in the event that the use of our customary land as a road is discontinued for any cause, our permission will also cease and the use of the land will revert to the former owners and users of the land at the time of taking;
7. That we are validating and reiterating the permission given by our ascendants to permit the State through the DOW, to use our customary lands where the existing road carriage is located and in the event that the use of our customary land as a road is discontinued for any cause, our permission will also cease and the use of the land will revert to the former users of the land at the time of taking;
8. In the event that the State will seek to use or establish a public road reserve beyond the actual construction limits of the proposed road under the HRRIP, the required additional lands is not included in the subject matter of this MOA and will require a separate agreement with the customary land owners;
9. That if there are any dislocations on land use that will be caused to any member of our clans and community because of the additional land requirement of the road, in considerations for the positive effects of the project, our clans and communities involved will address this issue based on our customs and traditions and provide for adequate land replacement;
10. That we are representing all the clans and communities that jointly owned the land as described in Section 2 of this agreement and that we will all be jointly responsible to control and supervise our ranks in complying with the terms and conditions of this agreement.

<sup>1</sup>Crops identified by area in the 2013 Valuer General Compensation Schedule are the following: Green vegetable (mixed), Oenanthe, rice, sorghum, watercress, wheat, wild scrambling bamboo, kunai grass, mat weaving plant, sago (wild) and other similar crops.

11. That we are guaranteeing the State on behalf of all members of this community and its clans that there will be no land claims or grievances on the existing road as well as on the additional land required and that there will be no disruption and/or disturbance of the civil works to upgrade and rehabilitate the road;
12. That in the event that there is disruption and/or disturbance of data gathering for planning, surveys and during the implementation of civil works of the above road section, the clan and/or community involved will be jointly liable for the appropriate remedies and the erring person who may be criminally liable, be surrendered to the proper authorities for the appropriate legal measures.

### 3.2 Responsibilities and Commitments of the State through the Department of Works

1. The DOW has minimized as far as possible additional land requirements for the improvement of the existing road based on existing road standards to ensure the safety of passengers and vehicles using the improved road. However, there are instances that improvements in the hairpin curves sections, relocation of some bridges and improvement in the drainage system will result in using more lands than expected which are unavoidable but necessary to improve the safety of the existing road carriage.
2. DOW has conducted a detailed measurement survey to determine the additional land required to upgrade, rehabilitate and maintain the above mentioned road section based on the detailed engineering design and has a list of all the affected persons (APs) and their affected assets such as annual crops, perennial plants and trees, fences, structures, and graves and these will all be compensated based on the 2013 Valuer General's Compensation Schedule (hereinafter referred to as the Schedule);
3. The clans and communities will ensure that after the detailed measurement survey, there will be no new structures built or crops, plants, trees planted within the construction limits. Structures built and improvements planted or made after the detailed measurement survey (cut-off date) will not be compensated.
4. *Temporary Use of Land* – The road contractor will negotiate with customary land owners for the temporary use of customary land for the construction camps, motor pools, stockpile areas for aggregates, etc. The road contractors will be responsible for the restoration of the area after the completion of the road as part of their contract.
5. *Compensation for Loss of Annual Crops* -- APs will be encouraged to harvest their annual crops specified under Category B of the Valuer General's Compensation Schedule; in this case, no compensation will be paid. However, if the annual crops under Category B are not yet harvestable by the time of land taking within 6 months period from the DMS, compensation will be based on the Valuer General's 2013 Compensation Schedule. In all cases, if the land taking is more than 6 months from the detailed measurement survey (DMS) that has been notified to APs as a cut-off-date, standing annual crops under category B are presumed to have been planted after the DMS (cut-off date) and shall not be compensable.
6. *Compensation for Loss of Perennial Plants and Trees* -- Compensation for lost plants and/or trees will be paid based on the Valuer General's 2013 Compensation Schedule except otherwise provided for in the Schedule.<sup>2</sup>
7. *Compensation For Loss of Timber Trees* – For timber trees identified under Category D (forest trees) of the 2013 Schedule, APs have agreed to cut their affected forest trees, use the produce for household needs or sell them and keep the proceeds of the sale.
8. *Compensation For Loss of Fences* -- Fences constructed of wood or metal will have a compensation rate equal to the current market price (per meter) for similar fencing materials, as determined in the subproject area. For vegetation fences, the compensation will be based on the Schedule for the type of plant material used.

<sup>2</sup>All natural occurring trees with a diameter of less than 6 centimeters at a height of 2.00 meters or natural occurring trees less than 2 meters in height shall not be subject of compensation claims as provided by the 2013 Compensation Schedule.

9. *Compensation for Loss of Semi-Permanent or Temporary Structures* -- Semi-permanent or temporary structures may be located close to the road and it may be necessary to shift these buildings back in order to upgrade the road. In this instance, APs will be provided with a shifting allowance to cover the costs of this activity. If such structures cannot be moved, APs are entitled to compensation at replacement cost for the materials and labor to repair or reconstruct a similar structure.
10. *Compensation for Loss of Graves* -- Compensation will be paid for the affected graves based on the Schedule. In addition, HRRIP will pay an additional grant to ensure that compensation received is equal to the costs for reburial and construction of new grave.
11. *Construction Employment* -- People affected by permanent or temporary loss of land or by damage or loss of crops, trees or structures will be given priority for employment by contractors for civil works and/or maintenance works on the road, preferably on road sections where they own the customary land, provided that these applicants are qualified to perform the work required.
12. *Shifting Allowance* --The value of the shifting allowance will be calculated based on the provincial minimum wage as established by the Minimum Wage Board for a maximum period of two months. At the time that the shifting allowance is paid, the landowner will sign an agreement with DOW and/or DLO regarding the date by which the structure will be removed from the land required to upgrade/rehabilitate the road.
13. *Business Disruption Allowance* -- APs that own a temporary or semi-permanent structure that is used as a trade store or for other business purposes that must be shifted a short distance to a location outside the area designated for the road are entitled to an allowance to cover the loss of business income while the structure is being shifted calculated based on the provincial minimum wage as established by the Minimum Wage Board for a period equal to number of days of disrupted business.
14. *Time for Valuation of Assets* -- The valuation of assets will be made at the time of the detailed measurement survey (DMS) conducted following completion of detailed engineering design calculated based on the Valuer General's Compensation Schedule and assessing the requirement for additional grants and the grant amount based on existing conditions in the subproject area.
15. *Delayed Payment* -- If payment of compensation is delayed, compensation rates will be updated regularly based on inflation rates to ensure that APs receive compensation at replacement cost at the time of compensation payment.
16. *Full Payment of Compensation* -- APs are entitled to payment of all compensation based on the DMS prior to clearance of land and start of civil works. DOW will ensure that all procedures are followed to facilitate payment of APs prior to the start of civil works. In the case of affected crops, trees and structures, the compensation owed will be paid directly to the person who owns these assets.
17. All land acquisition activities will be coordinated with the civil works schedule. Civil works contractors will not be issued a notice of possession of the site until (i) compensation and relocation of APs have been satisfactorily completed; (ii) agreed rehabilitation assistance is in place; and, (iii) the site is free of all encumbrances.


#### **4.0 General Conditions**

1. If the negotiated agreement for the use of the customary land as roads, both for the existing road and for the whole road section as described earlier have not been attained for any cause, both parties agree that this memorandum of agreement will become null and void and unenforceable to any or both parties; In this case, the State through the DOW will inform in writing the clans and communities through their leaders and representatives about this development and this is sufficient notice for the State to invoke the unenforceability of the MOA;


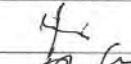
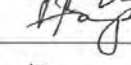
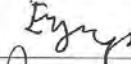

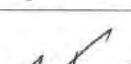

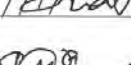
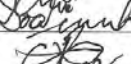

2. The State through the DOW and its consultant together with the provincial, district and ward administrations will conduct periodic consultations and encourage active participation of affected clans and communities covered by this road section to inform and update all stakeholders of the development of the project;
3. The State through the DOW in collaboration with the provincial and/or district land officer will institute a grievance process based on the accepted practices of mediation to address any complaint or issue regarding the valuation of asset or any resettlement related matter. If the complaint or issue is not resolved in this level, the HRRIP will adopt procedures to refer matters to the system of land courts as set out in the Land Disputes Settlement Act;
4. In the event of grievances that cannot be resolved through mediation at the local level, the State through the relevant authorities will hold the compensation amounts in escrow. Compensation will be paid in full upon final resolution of the case in the courts or other forum, in accordance with the entitlements of the affected person;
5. This MOA repeals and/or supersedes any written or verbal agreement for the use of customary land on the existing road carriage and the proposed road referred to in Section 2 of this MOA issued previously by either the DLPP, DOW and the customary land owners;
6. No amendment or additional terms and conditions to this MOA shall be deemed binding between the parties unless mutually agreed upon by them in writing.

IN WITNESS WHEREOF, we have hereunto affixed our signatures this 14 day of 09 2015.

By and on behalf of the Independent State of Papua New Guinea

  
\_\_\_\_\_  
**David Werek**  
Secretary, Department of Works


**NIPA – MUNIHU ROAD PROJECT  
LAI VALLEY LOCAL LEVEL GOVERNMENT COUNCIL**

No	Name Of Leader & Status:	Council Ward:	Village:	Clan & Sub Clan:	Signature:	Date:
1	Cr. Robin Pu	MAIP1	NAUTAKIL	HuiSowi		15/08/15
2	Cr. Joel Hape	MAIP2	KAKU	Ka-Kupim		15/08/15
3	Cr. Malaki Yap	NEGIA	MEYA	NegiaHorop		15/08/15
4	Ipopi Esem	MUNHIU STATION		Hombrop		15/08/15
5	Piso Solo	LLGC MANAGER				15/08/15
6	James Embiap	DISTRICT ADMINISTRATOR				15/08/15
7	Cr. Francis Pesul		Kuyanda	Kombrop		15/08/15
8	Jack Soal	LLGC PRESIDENT				15/08/15
9	Cr. Robert Oleyol		Sopa 2	Mai		15/08/15
10	Cr. Towong Pules		Tumia	Kol		15/08/15

**Witness:**

I, ROBIN KOPAL, a Provincial Lands Office of Southern Highlands Province, a public servant of Papua New Guinea, do hereby certify that the contents of this Agreement were read over by PAUL NOMSKI in the \_\_\_\_\_ language that is understood by the signatories to this Agreement and I further certify that to the best of my knowledge and belief the contents of this Agreement are understood by the signatories hereto.

Dated at 17/08/2015 this \_\_\_\_\_ day of \_\_\_\_\_

Signature:  Designation: S.H.P.A LANDS ADVISOR



### Third Party Validation Letter

I/We provide the independent verification for the Memorandum of Agreement (MOA) signed on \_\_\_\_\_ (insert date) between the Government of PNG represented by the Department of Works and Landowner Clans of **District of Mendi, Lai Valley Local Level Government (LLG)** whose wards are enumerated in the first page of the MOA on the use of **5.54 hectares** of land for the upgrading and rehabilitation of the Nipa -- Munihu subproject road under the Highlands Region Road Improvement and Investment Program (HRRIP); that (i) the landowners support the upgrading and rehabilitation of the road and have agreed to provide the use of the affected land; (ii) consultations and negotiations with landowners have been undertaken meaningfully, freely and in good faith and the landowners have made informed decisions on the use of customary land, and (iii) terms and conditions of the MOA have been explained to the landowners and they fully understood and agreed to all the terms and conditions of the MOA.

I/We have reviewed the documentation on the identification of affected landowners and the consultation and negotiation processes leading up to the signing of the MOA and have found them to be regular, transparent and acceptable. This third party verification is based on our independent validation of the following;

- That public consultations with landowners have been undertaken and that they were provided with relevant project information as per HRRIP resettlement framework.
- That the Memorandum of Agreement is voluntary (free from coercion) and that the landowners have fully understood and agreed to the MOA terms and conditions;
- That the landowner representatives signing the MOA are authorized and duly represent the landowners;
- That the contribution of the land to the project by the customary landowners will not cause undue hardships to any of them or to any third party or individuals;
- That the loss of all assets on land (structures, trees, crops, etc.) have been identified and sufficiently addressed for compensation in the resettlement plan (RP).
- That the schedule of compensation for the loss of assets on land included in the RP represents a fair and reasonable replacement cost based on market prices; and
- That the MOA is in compliance with applicable laws of PNG, including the Fairness of Transaction Act of 1993 as well as all safeguard requirements stipulated in the RP.

This Third Party Verification Letter is an attachment and forms part of the signed copies of the MOAs.

Signature:

Date:

Name of Magistrate

Official Stamp:



## Third Party Verifier of the HRRIP

## Third Party Verification Letter

I/WE provide the independent verification of the Memorandum of Agreement (MOA) signed on 17/08/15 (insert date) between the Government of PNG represented by the Department of Works and landowner clans of **DISTRICT OF MENDI, LAI VALLEY LOCAL LEVEL GOVERNMENT** whose Wards are enumerated in the first page of the MOA on the use of **5.54 hectares** of land for the upgrading and rehabilitation of the **NIPA – MUNIHU** subproject road under the Highlands Regions Roads Improvement and Investment Program (HRRIP); and that (i) the landowners support the upgrading and rehabilitation of the road and have agreed to provide the use of the affected land; (ii) consultations and negotiations with landowners have been undertaken meaningfully, freely and in good faith and the landowners have made informed decisions on the use of customary land; and (iii) terms and conditions of the MOA have been explained to the landowners and they fully understood and agreed to all the terms and conditions of the MOA.

I/WE have reviewed the documentation on the identification of affected landowners and the consultation and negotiation processes leading up to the signing of the MOA and have found them to be regular, transparent and acceptable. This Third Party Verification is based on my/our independent validation of the following;

- That public consultations with the landowners have been undertaken and that they were provided with relevant project information as per the HRRIP Resettlement Framework (RF);
- That the MOA is voluntary (free from coercion) and that the landowners have fully understood and agreed to the MOA terms and conditions;
- That the landowner representatives signing the MOA are authorized and duly represent the landowners concerned;
- That the contribution of the land to the project by the customary landowners will not cause undue hardships to any of them or to any third party or individuals;
- That the loss of all assets on land (structures, trees, crops, etc) have been identified and sufficiently addressed for compensation in the Resettlement Plan (RP);
- That the schedule of compensation for the loss of assets on the land included in the RP represents a fair and reasonable replacement cost based on market prices; and
- That the MOA is in compliance with applicable laws of PNG, including the Fairness of Transaction Act of 1993 as well as safeguard requirements stipulated in the RP.

This Third Party Verification Letter is an attachment and forms part of the signed copies of the MOAs.

Signature of Verified Officer: \_\_\_\_\_

Date: 17/08 /2015

Name of NGO or Magistrate: \_\_\_\_\_

Official Stamp





### Third Party Verifier of the HRRIP

#### DEPARTMENT OF WORKS & ASIAN DEVELOPMENT BANK FUNDED HIGHLANDS REGIONS ROAD IMPROVEMENT INVESTMENT PROGRAM (HRRIP) Third Party Verification Site Visits Notes – Nipa Munihi Road

ROAD PROJECT NAME	Nipa to Munihi, Southern Highlands Province
LENGTH	27.717km of road from Munihi to Nipa, SHP
HECTARES	17.12 + 5.54 = 22.66 hectares of additional land required
DATE AND TIME OF SITE VISIT	17 <sup>th</sup> August, 2015

#### 1. Background

Unlike in previous signing of MOAs between the State through the Department of Works and the Landowners, the signing of this road project for Nipa to Munihi Road occurred in two different locations where people gathered by their Local Level Government Councils. Two Teams from Mt. Hagen (DOW/ADB and Renardett SA) were dispatched to the two different locations; one in Munihi Station and the other to Nipa Station. The Third Party Verifier had a follow up meeting with the officers concerned both at the District level and the ADB/DOW and Renardett SA in reviewing the documents that were signed off by the concerned parties – Landowners and the State representatives.

#### 2. People witnessing the signing of the MOA

- District Administrators (Munihi and Nipa Districts)
- Presidents of the two LLGs (Lai Valley LLG and Nipa Basin LLG)
- Staff of DOW/ADB and Renardett
- Respective Members of Parliament for Mendi Munihi, Honourable De Kewanu and Nipa Kutubu, Honourable Jeffery Komal
- Respective District Administrators,
- Deputy Secretary for Transport, Mr. Philip Hapon.
- Community Leaders and
- Ward Councillors

#### 3. Documents Signed:

- 3.1. The two MOAs signed between the Independent State of Papua New Guinea represented by the Department of Works and the respective Landowner Representatives were;
  - (a) Landowners of Council Wards of Egenda 2, Egenda 3, Shumbi 1, and Shumbi 2 of Nipa District, Nipa Basin LLG, Southern Highlands Province;
  - (b) Landowners of Council Wards of Maip 1, Maip 2 and Nera of Mendi District, Lai Valley LLG, Southern Highlands Province.
- 3.2. The MOAs have been signed by Councillors of the two LLGs, District Administrators, Council Managers, as well as LLG Presidents of the concerned road Project – Nipa Munihi Road.



### Third Party Verifier of the HRRIP

- 3.3. The signing of the Two MOAs were witnessed, signed and sealed by the Southern Highlands Provincial Lands Officer, Robin Kopaul as testimonial evidence.
4. **Recording of the Signing of the MOAs**  
The reports pertaining to the signing processes, including the speeches by representatives who gathered at the two events are testimonial to the actual signing of the two MOAs by the concerned parties.
5. **Letters of Validation/Verification**  
Verification of the Signing of the two Memorandum of Agreements are as per the two separate Third Party Validation Letters being attached to this brief.

Signature:  
Joseph Poimb Kata  
Verified Officer

Official Stamp:



Date: 21/08/15



## DEPARTMENT OF WORKS



P.O. Box 1108  
BOROKO, NCD  
Papua New Guinea

Tel: (675) 324 1114  
Fax: (675) 324 1102

## MEMORANDUM OF AGREEMENT

This Memorandum of Agreement entered into by and between;

- The Independent State of Papua New Guinea as represented by the Department of Works;

---AND---

The council wards of Egenda1, Egenda2, Egenda3, Shumbi1 and Shumbi2, District of Nipa, Province of Southern Highlands represented by its wards leaders, district leaders, leaders of clans and sub-clans, the names of which are enumerated at the end of this document;

---WITNESSETH---

**Whereas**, the State through the Department of Works is formulating, administering and implementing the Highlands Region Roads Improvement Investment Program (HRRIP), an ADB funded program for the upgrading, rehabilitation and maintenance of selected roads in the Highlands Region Road Network;

- **Whereas**, one of the qualification of a road for the HRRIP is that it is an existing or former road, that is, the road bench exists and restitution of a trafficable road does not require major earthworks or construction of structures and the local population as well as district and provincial administrators have clearly stated their support for upgrading and rehabilitation of the pre-selected road;

- **Whereas**, the Nipa – Munihu road section has been pre-selected by the State through the Department of Works (DOW) and approved by the Asian Development Bank (ADB) based on certain assumptions including two conditions namely that the right to use (a) existing road carriage has been negotiated in the past when such road was constructed, and (b) additional land to be required for the HRRIP project has been negotiated with the customary owners;

- **Whereas**, after diligent searches and inquiries from the relevant government agencies, the existence of a written document on the agreement for the use of customary land in the past cannot be ascertained and that the agreement may not have been put into writing;

- **Whereas**, the absence of any proof of the existence of previous agreements for the use of the existing road carriage and the use of additional road width for the HRRIP project by the government require a written agreement for the continued inclusion of the selected road to the HRRIP because the previous assumptions of the existence of these documents for the use of existing road and additional land may not be defensible;

- **Whereas**, there is an urgent need to have a written agreement on land use for the eligibility of the selected Nipa – Munihu road section with the HRRIP and avoid any future conditions that would give rise to misunderstandings, resentments and possible conflicts on the right to use the customary lands;

- **Whereas**, the clans and communities who jointly own the customary land are fully aware of the benefits of an ungraded and rehabilitated road for their communities such as faster travelling time and cheaper

- transport costs, better access to health and educational facilities, increase economic activities, better access of farm products to markets among others;
- **Whereas**, the clans and communities, who jointly own the affected customary land that will be needed by the government for road improvements, are fully supportive of the proposed project to improve the existing road section passing through their communities, wards and districts;
- **Whereas**, the clans and communities, who jointly own the affected customary land are desirous for the road section which is located in their customary land, to retain its status as a pre-selected road of HRRIP subject to a feasibility study including qualifications of the project's eligibility criteria and detailed engineering design;
- **Whereas**, there is an urgent need for a close public – tribal partnership between the Independent State of Papua New Guinea as represented by the Department of Works who has the legal mandate to undertake infrastructure development in the country and the clans and communities who jointly own the customary land where the proposed road development will be constructed;
- **NOW, THEREFORE**, for and in consideration of the foregoing premises and covenants hereinafter stipulated, the Independent State of Papua New Guinea, represented in this Memorandum of Agreement by the Department of Works (DOW) and the clans and communities who jointly own the customary land where the existing road carriage is located and the additional land that will be required to improve the existing road have entered into this agreement as follows:

#### 1.0 Identification and Location of Road Section

- 1.1 DOW has considered the road section from Nipa to Munihu as a pre-selected road for the HRRIP. This road section has a length of around 27.72Km and will start at chainage 0+000 located at Nipa and will end at chainage 27+717 at Munihu.
- 1.2 We certify that we, as individuals and representatives of our communities and clans, are the exclusive customary owners of the road section that is a pre-selected road for the HRRIP. The particulars of our customary land are described below;
- Road section: Nipa - Munihu
- Chainage: From 0+000 to 21+545
- Wards: Egenda1, Egenda2, Egenda3, Shumbi1 and Shumbi2
- District/Province: Nipa, Southern Highlands

#### 2.0 Additional Land Requirements

- The upgrading and rehabilitation of this pre-selected road will require additional customary land and that based on the existing road and the proposed road, both described below, the preliminary estimate of the DOW for the additional land requirement is 17.12 hectares,

Existing Road	Proposed Road
Carriageway 3.5 meters Formation width 3.70 meters Total width 4.01 meters, to outside of drainage structures Total area 8.64 hectares of existing road within the customary land.	Carriageway 6.00 meters Formation width 6.50 meters Total width 11.95 meters of construction limits Total area 25.76 hectares of proposed road
<b>Difference of area between existing road and proposed road: 17.12 hectares</b> (additional land required)	

### 3.0 Agreement

#### 3.1 Responsibilities and Commitments of Clans and Communities

1. We, members and representatives of the clans and communities who jointly own the customary lands on the above mentioned road section agree to permit the Independent State of Papua New Guinea (State), as represented by DOW, to use our additional customary land for the upgrading, rehabilitating and maintaining the road section described above exclusively under the HRRIP and guarantee the unimpeded use of the road by the public;
2. That in recognition of the fact that the road project which will provide development and livelihood opportunities for our communities, we voluntarily waive our rights to compensation for the following two types of trees/crops listed in the 2013 Valuer General's Compensation Schedule, whose economic value is not significant: timber trees identified under Category D and crops measured based on area.<sup>1</sup>We will harvest our affected trees/crops before the road construction and will use the produce for household needs or sell it and retain the sale proceeds with ourselves.
3. Except for the minor trees/crops mentioned above, the government will provide compensation for other major crops/trees as well affected structures and assets (see section 3.2 below).
4. That we enter into this agreement on the basis of our free and prior informed choice and consent, having been provided with full information by the State through the DOW and DLPP about the HRRIP project and are fully aware of the consequences for our tribes, clans/sub-clans and communities and waive any and all customary interests over the additional lands in lieu of public infrastructure;
5. That we are aware that the State will be using public funds for the improvement of roads situated in customary lands and if the issue of land use is not properly addressed now, future generations of customary owners may restrict and limit public and private vehicles from using the improved road that may cause conflict and unrest in our communities and villages;
6. That our full permission for the State to use the additional land is premised on the existence of the said road and in the event that the use of our customary land as a road is discontinued for any cause, our permission will also cease and the use of the land will revert to the former owners and users of the land at the time of taking;
7. That we are validating and reiterating the permission given by our ascendants to permit the State through the DOW, to use our customary lands where the existing road carriage is located and in the event that the use of our customary land as a road is discontinued for any cause, our permission will also cease and the use of the land will revert to the former users of the land at the time of taking;
8. In the event that the State will seek to use or establish a public road reserve beyond the actual construction limits of the proposed road under the HRRIP, the required additional lands is not included in the subject matter of this MOA and will require a separate agreement with the customary land owners;
9. That if there are any dislocations on land use that will be caused to any member of our clans and community because of the additional land requirement of the road, in considerations for the positive effects of the project, our clans and communities involved will address this issue based on our customs and traditions and provide for adequate land replacement;
10. That we are representing all the clans and communities that jointly owned the land as described in Section 2 of this agreement and that we will all be jointly responsible to control and supervise our ranks in complying with the terms and conditions of this agreement.

<sup>1</sup>Crops identified by area in the 2013 Valuer General Compensation Schedule are the following: Green vegetable (mixed), Oenanthe, rice, sorghum, watercress, wheat, wild scrambling bamboo, kunai grass, mat weaving plant, sago (wild) and other similar crops.

11. That we are guaranteeing the State on behalf of all members of this community and its clans that there will be no land claims or grievances on the existing road as well as on the additional land required and that there will be no disruption and/or disturbance of the civil works to upgrade and rehabilitate the road;

12. That in the event that there is disruption and/or disturbance of data gathering for planning, surveys and during the implementation of civil works of the above road section, the clan and/or community involved will be jointly liable for the appropriate remedies and the erring person who may be criminally liable, be surrendered to the proper authorities for the appropriate legal measures.

### 3.2 Responsibilities and Commitments of the State through the Department of Works

1. The DOW has minimized as far as possible additional land requirements for the improvement of the existing road based on existing road standards to ensure the safety of passengers and vehicles using the improved road. However, there are instances that improvements in the hairpin curves sections, relocation of some bridges and improvement in the drainage system will result in using more lands than expected which are unavoidable but necessary to improve the safety of the existing road carriage.
2. DOW has conducted a detailed measurement survey to determine the additional land required to upgrade, rehabilitate and maintain the above mentioned road section based on the detailed engineering design and has a list of all the affected persons (APs) and their affected assets such as annual crops, perennial plants and trees, fences, structures, and graves and these will all be compensated based on the 2013 Valuer General's Compensation Schedule (hereinafter referred to as the Schedule);
3. The clans and communities will ensure that after the detailed measurement survey, there will be no new structures built or crops, plants, trees planted within the construction limits. Structures built and improvements planted or made after the detailed measurement survey (cut-off date) will not be compensated.
4. *Temporary Use of Land* – The road contractor will negotiate with customary land owners for the temporary use of customary land for the construction camps, motor pools, stockpile areas for aggregates, etc. The road contractors will be responsible for the restoration of the area after the completion of the road as part of their contract.
5. *Compensation for Loss of Annual Crops* -- APs will be encouraged to harvest their annual crops specified under Category B of the Valuer General's Compensation Schedule; in this case, no compensation will be paid. However, if the annual crops under Category B are not yet harvestable by the time of land taking within 6 months period from the DMS, compensation will be based on the Valuer General's 2013 Compensation Schedule. In all cases, if the land taking is more than 6 months from the detailed measurement survey (DMS) that has been notified to APs as a cut-off-date, standing annual crops under category B are presumed to have been planted after the DMS (cut-off date) and shall not be compensable.
6. *Compensation for Loss of Perennial Plants and Trees* -- Compensation for lost plants and/or trees will be paid based on the Valuer General's 2013 Compensation Schedule except otherwise provided for in the Schedule.<sup>2</sup>
7. *Compensation For Loss of Timber Trees* -- For timber trees identified under Category D (forest trees) of the 2013 Schedule, APs have agreed to cut their affected forest trees, use the produce for household needs or sell them and keep the proceeds of the sale.
8. *Compensation For Loss of Fences* -- Fences constructed of wood or metal will have a compensation rate equal to the current market price (per meter) for similar fencing materials, as determined in the subproject area. For vegetation fences, the compensation will be based on the Schedule for the type of plant material used.

<sup>2</sup>All natural occurring trees with a diameter of less than 6 centimeters at a height of 2.00 meters or natural occurring trees less than 2 meters in height shall not be subject of compensation claims as provided by the 2013 Compensation Schedule.

9. *Compensation for Loss of Semi-Permanent or Temporary Structures* -- Semi-permanent or temporary structures may be located close to the road and it may be necessary to shift these buildings back in order to upgrade the road. In this instance, APs will be provided with a shifting allowance to cover the costs of this activity. If such structures cannot be moved, APs are entitled to compensation at replacement cost for the materials and labor to repair or reconstruct a similar structure.
10. *Compensation for Loss of Graves* -- Compensation will be paid for the affected graves based on the Schedule. In addition, HRRIP will pay an additional grant to ensure that compensation received is equal to the costs for reburial and construction of new grave.
11. *Construction Employment* -- People affected by permanent or temporary loss of land or by damage or loss of crops, trees or structures will be given priority for employment by contractors for civil works and/or maintenance works on the road, preferably on road sections where they own the customary land, provided that these applicants are qualified to perform the work required.
12. *Shifting Allowance* -- The value of the shifting allowance will be calculated based on the provincial minimum wage as established by the Minimum Wage Board for a maximum period of two months. At the time that the shifting allowance is paid, the landowner will sign an agreement with DOW and/or DLO regarding the date by which the structure will be removed from the land required to upgrade/rehabilitate the road.
13. *Business Disruption Allowance* -- APs that own a temporary or semi-permanent structure that is used as a trade store or for other business purposes that must be shifted a short distance to a location outside the area designated for the road are entitled to an allowance to cover the loss of business income while the structure is being shifted calculated based on the provincial minimum wage as established by the Minimum Wage Board for a period equal to number of days of disrupted business.
14. *Time for Valuation of Assets* -- The valuation of assets will be made at the time of the detailed measurement survey (DMS) conducted following completion of detailed engineering design calculated based on the Valuer General's Compensation Schedule and assessing the requirement for additional grants and the grant amount based on existing conditions in the subproject area.
15. *Delayed Payment* -- If payment of compensation is delayed, compensation rates will be updated regularly based on inflation rates to ensure that APs receive compensation at replacement cost at the time of compensation payment.
16. *Full Payment of Compensation* -- APs are entitled to payment of all compensation based on the DMS prior to clearance of land and start of civil works. DOW will ensure that all procedures are followed to facilitate payment of APs prior to the start of civil works. In the case of affected crops, trees and structures, the compensation owed will be paid directly to the person who owns these assets.
17. All land acquisition activities will be coordinated with the civil works schedule. Civil works contractors will not be issued a notice of possession of the site until (i) compensation and relocation of APs have been satisfactorily completed; (ii) agreed rehabilitation assistance is in place; and, (iii) the site is free of all encumbrances.


#### **4.0 General Conditions**

1. If the negotiated agreement for the use of the customary land as roads, both for the existing road and for the whole road section as described earlier have not been attained for any cause, both parties agree that this memorandum of agreement will become null and void and unenforceable to any or both parties; In this case, the State through the DOW will inform in writing the clans and communities through their leaders and representatives about this development and this is sufficient notice for the State to invoke the unenforceability of the MOA;

2. The State through the DOW and its consultant together with the provincial, district and ward administrations will conduct periodic consultations and encourage active participation of affected clans and communities covered by this road section to inform and update all stakeholders of the development of the project;
3. The State through the DOW in collaboration with the provincial and/or district land officer will institute a grievance process based on the accepted practices of mediation to address any complaint or issue regarding the valuation of asset or any resettlement related matter. If the complaint or issue is not resolved in this level, the HRRIP will adopt procedures to refer matters to the system of land courts as set out in the Land Disputes Settlement Act;
4. In the event of grievances that cannot be resolved through mediation at the local level, the State through the relevant authorities will hold the compensation amounts in escrow. Compensation will be paid in full upon final resolution of the case in the courts or other forum, in accordance with the entitlements of the affected person;
5. This MOA repeals and/or supersedes any written or verbal agreement for the use of customary land on the existing road carriage and the proposed road referred to in Section 2 of this MOA issued previously by either the DLPP, DOW and the customary land owners;
6. No amendment or additional terms and conditions to this MOA shall be deemed binding between the parties unless mutually agreed upon by them in writing.

IN WITNESS WHEREOF, we have hereunto affixed our signatures this 14 day of 09 / 2015.

By and on behalf of the Independent State of Papua New Guinea

  
**David Wereh**  
Secretary, Department of Works

**NIPA – MUNIHU ROAD PROJECT  
NIPA BASIN LOCAL LEVEL GOVERNMENT COUNCIL**

No	Name Of Leader & Status:	Council Ward:	Village:	Clan & Sub Clan:	Signature:	Date:
1	Cr. Peter Rum	EGENDA1	NIPA	Paretyupol		16/8/15
2	Cr. Tip Saguro	EGENDA2	WOLIM	Hopol		16/8/15
3	Cr. YalolKobol	EGENDA3	EGENDA	Pint-Toens		16/8/15
4	Cr. David Puirol	SHUMB1	HIP	Hip-Opol		
5	Cr. Lipia Awe	SHUMB2	WAI	WaiHijamess	X His Made	15/8/15
6						
7	Joe Periap JOHN HANIS	DISTRICT ADMINISTRATOR				17/8/15
8	David Pal Kelap	LLGC MANAGER				16/08/2015
9						
10	John Titus Elep	LLGC PRESIDENT				15/8/2015
11						

**Witness:**

I, ROBIN KOPHEL, a Provincial Lands Officer of Southern Highlands Province, a public servant of Papua New Guinea, do hereby certify that the contents of this Agreement were read over by PAUL NOMBRI in the \_\_\_\_\_ language that is understood by the signatories to this Agreement and I further certify that to the best of my knowledge and belief the contents of this Agreement are understood by the signatories hereto.

Dated at 17/08/2015 this \_\_\_\_\_ day of \_\_\_\_\_

Signature:

Designation: S.A.P.A LANDS ADVISOR

SOUTHERN HIGHLANDS  
PROVINCIAL  
ADMINISTRATION  
DIVISION OF LANDS AND PHYSICAL PLANNING  
P.O. Box 249, MENDI, S.H.P.  
Ph: 5491011 / 51871320  
Email: robin.kopel@sgp.gov.pg

ADVISOR'S OFFICE  
17/08/2015



## Third Party Verifier of the HRRIP

## Third Party Verification Letter

I/WE provide the independent verification of the Memorandum of Agreement (MOA) signed on 17/08/15 (insert date) between the Government of PNG represented by the Department of Works and landowner clans of **DISTRICT OF NIPA, NIPA BASIN LOCAL LEVEL GOVERNMENT** whose Wards are enumerated in the first page of the MOA on the use of **17.12 hectares** of land for the upgrading and rehabilitation of the **NIPA – MUNIHU** subproject road under the Highlands Regions Roads Improvement and Investment Program (HRRIP); and that (i) the landowners support the upgrading and rehabilitation of the road and have agreed to provide the use of the affected land; (ii) consultations and negotiations with landowners have been undertaken meaningfully, freely and in good faith and the landowners have made informed decisions on the use of customary land; and (iii) terms and conditions of the MOA have been explained to the landowners and they fully understood and agreed to all the terms and conditions of the MOA.

I/WE have reviewed the documentation on the identification of affected landowners and the consultation and negotiation processes leading up to the signing of the MOA and have found them to be regular, transparent and acceptable. This Third Party Verification is based on my/our independent validation of the following:

- That public consultations with the landowners have been undertaken and that they were provided with relevant project information as per the HRRIP Resettlement Framework (RF);
- That the MOA is voluntary (free from coercion) and that the landowners have fully understood and agreed to the MOA terms and conditions;
- That the landowner representatives signing the MOA are authorized and duly represent the landowners concerned;
- That the contribution of the land to the project by the customary landowners will not cause undue hardships to any of them or to any third party or individuals;
- That the loss of all assets on land (structures, trees, crops, etc) have been identified and sufficiently addressed for compensation in the Resettlement Plan (RP);
- That the schedule of compensation for the loss of assets on the land included in the RP represents a fair and reasonable replacement cost based on market prices; and
- That the MOA is in compliance with applicable laws of PNG, including the Fairness of Transaction Act of 1993 as well as safeguard requirements stipulated in the RP.

This Third Party Verification Letter is an attachment and forms part of the signed copies of the MOAs.

Signature of Verified Officer: \_\_\_\_\_

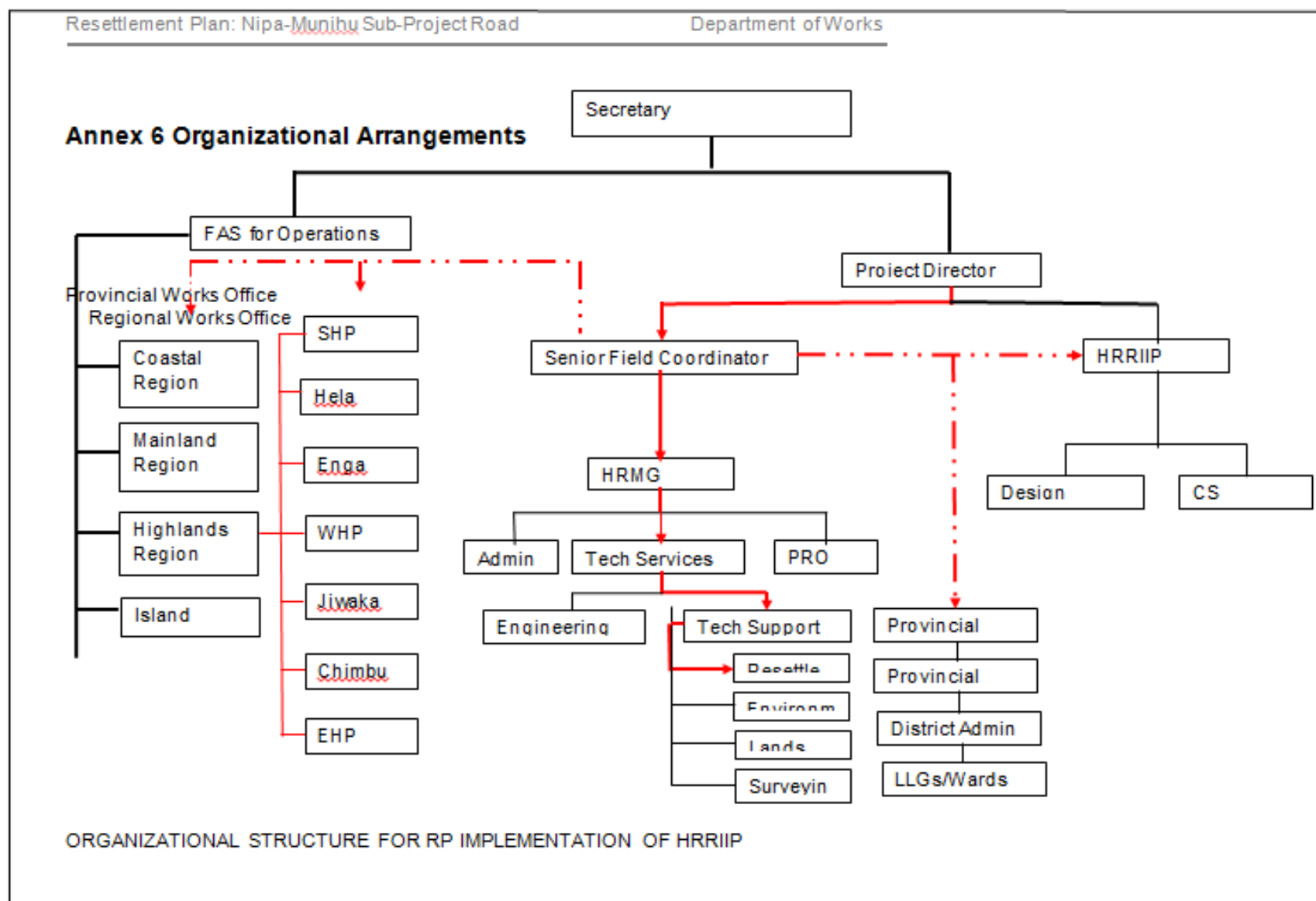
Date: 17 / 08 / 2015

Name of NGO or Magistrate: \_\_\_\_\_

Official Stamp



1 | Page



\* Revised on 21 Oct 2015

**Annex 7: Terms of Reference**  
**Independent Monitoring Organization**  
**For the Highland Region Road Improvement Investment Program**

**A. External Monitoring Objectives**

1. The objectives for external monitoring are to provide an independent review and assessment of (i) the achievement of Highland Region Road Improvement Investment Program (HRRIP) resettlement objectives and principles, (ii) the effectiveness, impact and sustainability of the resettlement process including all types of assistance, (iii) propose a corrective action plan if required, to address significant remaining resettlement issues and (iv) to identify strategic lessons for future policy formulation and planning.
2. The assessment should be undertaken objectively and independently in close consultation with the Department of Works (DOW) as the execution agency (EA) and Highlands Region Maintenance Group (HRMG) as implementation agency (IA). The principles that govern the basis for independent monitoring are contained in Asian Development Bank's (ADB) Safeguards Policy statement (SPS) of 2009.

**B. Team Composition and Timeline**

3. The Independent Monitoring Organization (IMO) will be a two-member team, one specialized in socio-economics and evaluation whilst the other in social anthropology. The socio-economist will be the team leader. Both should have adequate experience in resettlement monitoring for international agencies.
4. The task of IMO is to conduct independent monitoring of resettlement activities in respect of completed and on-going subprojects covering Tranche 1 through to Tranche 3 under HRRIP. The resettlement activities for Tranche 1 subprojects have already been completed whilst the same activities in other 3 subprojects (Tranche 2) are in the process of being approved or just about to be implemented. The actual number of subprojects to be monitored by the IMO depend on how many subprojects are completed by the mid-year 2018. Accordingly, the scope of work for IMO will commence by January 2016 and will be completed by June 2018.

**C. Monitoring and Evaluation Parameters**

5. Among the parameters that will be monitored and evaluated by the IMO are:
  - (i) Public consultation and disclosure. This activity has been completed for all subprojects in Tranche 1. Consultations in the process of preparation of RP have also been completed for all subprojects in Tranche 2 and 3. However, such consultations in Tranche 2 and 3 are yet to be organized in respect of up-dating RP and grievance redress. IMO is expected to conduct a desk review in respect of already completed activities whilst it will conduct observations on at least 2 such activities for each subproject in Tranche 2 and 3.

- (ii) Identification of APs, their entitlements, assessment and valuation of assets. These activities have been completed for all 13 subprojects in Tranche 1 to 3. The project team will validate APs, their entitlements and the valuation process just prior to mobilization of contractors in respect of subprojects in Tranche 3. The IMO is expected to conduct a desk review in respect of all subprojects in Tranche 1 and 2 whereas it will make observations on the validation process to be implemented by project staff for subprojects in Tranche 3. For observations, one such meeting per subproject at the minimum will be selected by the IMO.
- (iii) Payment of compensation. This activity has been partially completed in all Tranche 1 subprojects whilst it is in progress for all other subprojects. The IMO will verify the process and the degree of completion for all subprojects, using available records cross-checked through a sample of AP interviews.
- (iv) Co-ordination of resettlement activities with construction schedule. The IMO will verify the level of coordination achieved between resettlement with construction schedule for Tranche 1 subprojects. This will be conducted through a desk review combined with interview of selected stakeholders. For all other subprojects, the IMO will conduct field verification of this activity whenever it is implemented. It is expected that each subproject in Tranche 2 and 3 is visited to conduct this verification.
- (v) Income restoration and livelihood activities. The IMO will verify the extent to which APs have restored their income levels and livelihood activities after resettlement. It is believed that APs have restored their income and livelihoods to pre-settlement stage in the case of completed subprojects. For other subprojects, this will happen sometime in the future, after completion of resettlement activities. Apart from discussions with different stakeholders, it is expected that IMO visit each subproject in Tranche 2 and 3 to verify this activity. The manner of accomplishment including details of methodology are to be provided in the inception report.
- (vi) The level of satisfaction of APs on various aspects of the resettlement process will be assessed for Tranche 1 subprojects. The IMO will coordinate with the client to determine when this could be assessed in respect of other subprojects in Tranche 2 and 3. The IMO in consultation with DOW will determine and propose in their proposal the best approach (includes sampling details) to verify AP's satisfaction .
- (vii) The grievance redress mechanism (GRM) has been established and is well under execution for Tranche 1 subprojects. It is yet to commence in respect of all other subprojects. The IMO whilst reviewing the GRM process for completed subprojects will coordinate with the client to determine when this could be assessed in respect of subprojects in Tranche 2 and 3. The timeline and methodology for such assessment will be proposed by the IMO.

(viii) Monitoring of RP is nearing completion in respect of Tranche 1 subprojects. It is yet to commence for all other subprojects. It is expected that IMO propose the method and other details to explain how they propose to undertake this activity.<sup>6</sup> It is required that IMO review each RP to identify all monitoring parameters that have been proposed. It is necessary to develop indicators and methods as appropriate in order to ensure the task of independent monitoring is comprehensive and thorough. These matters will be reported in their proposal and further elaborated in the inception report.

#### **D. Methodology**

7. The general methodology for undertaking the independent review is briefly presented below. The IMO is expected to provide a detailed methodology in their inception report for review and approval by DOW.

##### **i. Desk Review**

8. The resettlement activities in respect of all completed subprojects will be assessed through a desk review. The IMO is required to consult project staff in order to identify all documents and data files to conduct this review. All data sources and documents reviewed will be listed in their reports.

##### **ii. Interviews**

9. The IMO will conduct interviews with all stakeholders including the APs to conduct relevant assessments and validations. In doing so, the process, instruments utilized and capturing a representative sample of the affected population will be explained in the inception report. Special attention should be paid so that women, elderly persons and other vulnerable target groups are not overlooked from interviews.

##### **iii. Participatory Techniques**

10. The independent monitoring organisation will conduct participatory rapid appraisals (PRA) to consult various stakeholders (local government, implementing agencies, social organizations, community leaders and APs). Among the specific techniques to be employed are:

- (i) Key informant interviews with selected local leaders at village, LLG and district levels;
- (ii) Informal discussions with APs, vulnerable groups, women and other stakeholders;
- (iii) Focus Group Discussions (FGDs) with the affected population including vulnerable APs;
- (iv) Structured direct field observations;
- (v) Case studies; and
- (vi) Attend public consultations to assess the process, participant invitation, views of participants, feedback by project staff, etc.

**E. Staffing**

11. The input schedule by the two-member team is as follows:Position	Field (months)	Home-office (months)	Total (person months)
Socio-economist	9 (3 months each in 2016, 2017 and 2018)	0.50 (1-2 weeks after each field visit)	9.50
Social Anthropologist	4 (1 month in 2016, 2 months in 2017 and 1 month in 2018)	0.50 (1 week after field travel in 2016 and 2017)	4.50
Total	13	1.00	14.00

12. The two specialists will provide their inputs on an intermittent basis between 2016 and 2018 June. It is required that the two specialists organize their mobilization with a good overlap so that the monitoring and reviews are conducted as a team.

**F. Reports**

13. The IMO is required to produce reports as listed below:

Deliverable	Description	Timeline	Remarks
Inception report	Contains proposed methodology, work plan, personal schedule including resources required and time plan	To be provided within one month of commencement of work	One report for each Tranche. Inception reports for subprojects in T 2 and T 3 to show lessons learnt from previous Tranches and incorporate such lessons into current work
Progress reports	<p>Issues to address include, but not limited to:</p> <ul style="list-style-type: none"> <li>• Progress of work undertaken</li> <li>• Proposed work including recommendations for the attention of the client</li> <li>• Deviations, if any, from the provisions in RP and an explanation thereof</li> <li>• Identification of problem issues and recommended solutions so that implementing agencies are informed about the ongoing situation and can resolve problems in a timely manner</li> <li>• Progress of the follow-up of problems and issues identified in the previous report</li> </ul>	Twice a year	Not necessarily based on each subproject. IMO is expected to propose the best approach
Final report	Three final reports, one for each Tranche. Each report contain methodology, outcome of monitoring, evaluation of process and outcomes 6-12 months after completion of all resettlement and compensation activities for each subproject, lessons learnt, findings, conclusions and recommendations for subprojects under the relevant Tranche.	Report to cover subprojects that are in various stages of construction	3 individual reports

## G. Presentations

14. The IMO will conduct a seminar to highlight work undertaken, main findings, recommendations and lessons learnt. The presentation may follow the submission of bi-annual monitoring reports to discuss and resolve issues that are not conducted satisfactorily. The suggested participants for this event are HRMG, contractor, DOW and ADB.

**Annex 8 List of Participants and Photographs****05 JANUARY 2012****NIPA DISTRICT HEADQUARTERS**

	<b>NAME</b>	<b>GENDER</b>	<b>OCCUPATION/DESIGNATION</b>
1	Peter Hurum	M	LLG councilor
2	Pip Sanguro	M	LLG councilor
3	Yalol Kopol	M	LLG councilor
4	Andrew Kusal	M	Village court magistrate
5	Ebokone Parep	M	Village court magistrate
6	Iswe Melam	M	Village leader
7	Walin Kont	M	Village leader
8	Malo Solo	M	Village leader
9	Ebi Lep	M	Village leader
10	Huku Haben	M	Village leader
11	Heyo Kep	M	Village leader
12	Emmanuel Pane	M	Village leader
13	Kom Dopolo	M	Village leader
14	Mesai Somolo	M	Village leader
15	Eki Pesep	M	Village leader
16	Vincent Hatou	M	Village leader
17	Philip Pal	M	Village leader
18	Margaret Tono	F	Women leader
19	Yopi Tilo	M	Subsistence farmer
20	Willy Huk	M	Subsistence farmer
21	Peter Huk	M	Subsistence farmer
22	Tomoyap Wapu	M	Subsistence farmer
23	Ronny Ipis	M	Subsistence farmer
24	Alex Sap	M	Subsistence farmer
25	Daniel Pip	M	Subsistence farmer
26	Jacob Peter	M	Subsistence farmer
27	Sorowe Pip	M	Subsistence farmer
28	Jenny Andrew	F	Women leader
29	Pengial Sonpip	M	Subsistence farmer
30	Mondowa Wandu	M	Subsistence farmer
31	Hul Pep	M	Subsistence farmer
32	Dul Heben	M	Subsistence farmer
33	Meniku Lep	M	Law & Order committee Coordinator
34	Stanly Galop	M	Subsistence farmer
35	Simon Iswe	M	Subsistence farmer
36	Tirwal Isem	M	Subsistence farmer
37	Mogen Sowi	M	Village court magistrate
38	Kewa Kopeap	M	Subsistence farmer
39	Otma Yakiol	M	Subsistence farmer
40	Pale Sanguro	M	Subsistence farmer
41	Sopaik Hont	M	Subsistence farmer
42	Robin Pip	M	District Administrator
43	Fred Thomas	M	Attorney General (retired)
44	Joseph	M	Assistant Dist. Administrator

**06 JANUARY 2012****EGENDA 3 COUNCIL WARD**

	<b>N</b>	<b>GENDER</b>	<b>OCCUPATION/DESIGNATION</b>
1	Pr. Mathew Panu	M	Local Church Pastor
2	Robert Sakor	M	Community Leader
3	Jennet Agon	F	Housewife
4	Jennifer Pules	F	Housewife
5	Ester Larold	F	Subsistence farmer
6	Melendi Panu	F	Student
7	Freddy Senis	M	Subsistence farmer
8	Billton Sodnomi	M	Subsistence farmer
9	Rutha Panu	F	Subsistence farmer
10	Sarah Panu	F	Housewife
11	Mal Hep	M	Subsistence farmer
12	Linbin Kepsi	F	Student
13	Moses Pore	M	Leader
14	James Tro	M	Community leader
15	Billy Sodnomi	M	Student
16	Bruce Sodnomi	M	Community Leader
17	Tibe Egeldo	M	Subsistence farmer
18	Inock Pesop	M	Subsistence farmer
19	Mathew Pules	M	Subsistence farmer
20	Benny Sindowe	M	Subsistence farmer
21	Jeffry Sondowe	M	Subsistence farmer
22	George Alu	M	Subsistence farmer
23	Anela Kuskus	F	Youth
24	Babra Pore	F	Youth
25	Rosa Beny	F	Housewife
26	Catharine Sondowe	F	Student
27	Lucy Jack	F	Student
28	Bonex Bruce	M	Subsistence farmer
29	Towi Larol	F	Subsistence farmer
30	Kepsi Munol	M	Subsistence farmer
31	Joseph Wapu	M	Subsistence farmer
32	Bruce Hepi	M	Community Clerk (KIAP)
33	Selais Hep	M	Subsistence farmer
34	Jesica Bruce	F	Women's leader
35	Paul Waka	M	Subsistence farmer
36	Wari Sap	M	Subsistence farmer
37	Sodme Klom	M	Former Councilor

**07 AUGUST 2014****NERA COUNCIL WARD**

	<b>Name</b>	<b>Gender</b>	<b>Occupation/Designation</b>
1	Nagapu Puluma	M	Sub-Farmer
2	Kita Busu	M	Sub-Farmer
3	Aglus Mana	M	Sub-Farmer
4	Amon Waria	M	Sub-Farmer
5	Max Yama	M	Sub-Farmer
6	Rose Anton	M	Teacher
7	Erimanda Kurupu	F	Housewife
8	Benjamin Yarepeya	M	Student
9	Stephen Rambuli	M	student
10	Koni Molo	M	Youth leader
11	Mark Busu	M	Church leader
12	Patama Mark	M	Housewife
13	Luk Rambuai	M	Student
14	Mankel Isopu	M	Student

**17 APRIL 2015****SHUMBI 1 COUNCIL WARD**

	<b>NAME</b>	<b>GENDER</b>	<b>OCCUPATION/DESIGNATION</b>
1	Mosumbia Kindup	M	Community elder
2	Nalomem Peter	M	Ex-LLG councilor
3	Koropol Em	M	Subsistence farmer
4	Makon	M	Subsistence farmer
5	Warop	M	Youth
6	Homolpi	M	Subsistence farmer
7	Mathew Tongla	M	Community leader
8	John	M	Youth
9	Peter	M	Youth
10	Thomas	M	Youth
11	Jut	M	Youth
12	Mannuel	M	Youth
13	Su	M	Youth
14	Petrus	M	Youth
15	Haret	M	Subsistence farmer
16	Noraris	M	Subsistence farmer
17	Helen	F	Subsistence farmer
18	Kang	M	Subsistence farmer
19	Sepnong	M	Subsistence farmer
20	Lowi Sowi	M	Subsistence farmer
21	Semin	M	Youth
22	Geli	M	Youth
23	Sen	M	Youth
24	Ban	M	Youth
25	Kope	M	Youth
26	Noah	M	Subsistence farmer
27	Henry Yacob	M	Young community leader
28	Mosen	M	Subsistence farmer
29	Topei	M	Youth
30	Robert	M	Youth
33	Grace	F	Subsistence farmer
34	Misheal	M	Subsistence farmer
35	Malcolm	M	Subsistence farmer
36	Wit	M	Subsistence farmer
37	Joseph	M	Subsistence farmer
38	Luke	M	Youth
39	Mathias	M	Village elder
40	Tomo	M	Villager elder
41	Cathy Sowi	F	Housewife
42	Oliap Konpes	M	Subsistence farmer
43	Eli Yacob	F	Mothers representative



Public consultation in Nipa District office where the project description and policies of HRRIP were presented to the participants.



Public consultation conducted in Egenda 2, Nipa Rural LLG. The participants were very happy upon learning of the upgrading and rehabilitation of their road.



Group photo of some of the participants of a concluded public consultation in Shumbi 1 council ward, Nipa Rural LLG. Notice the children (left) with their older siblings and mothers attending this gathering.



Public Consultation along the road in Maip 2, Lai Valley LLG. Participants listened intently to a memr of the team who was explaining the project coverage and compensation policies.



Tribe and clan members of Nipa Rural LLG witnessing their leaders and elders signing the Memorandum of Agreement permitting DOW the use of their customary land.



Tribe and clan members of affected wards in Lai Valley Rural in Mendi/Munihu District witnessing the signing of their MOA permitting DOW to use the customary land.