

Resettlement Plan

March 2016

PNG: Highlands Region Road Improvement Investment Program

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

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K1.00 = US\$0.3605

US\$1.00 = 2.77 K

ABBREVIATIONS

ADB	–	Asian Development Bank
COA	–	Certificate of Alienability
DA	–	District Administrator
DLO	–	District Lands Officer
DLPP	–	Department of Lands and Physical Planning
DH	–	displaced household
DMS	–	detailed measurement survey
DOW	–	Department of Works
DP	–	displaced person
DBST	–	Double Bitumen Surface Treatment
ESSU	–	Environmental and Social Safeguards Unit
HH	–	Highlands Highway
HRMG	–	Highlands Road Management Group
HRRIP	–	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
NGO	–	nongovernmental organization
NARI	–	National Agriculture Research Institute
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
SHP	–	Southern Highlands Province
SP	–	sub-project profile
T3	–	Tranche 3

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I. EXECUTIVE SUMMARY

1. This document presents the Resettlement Plan (RP) for Pangia-Wiru Loop (31.4 km) road section under the Tranche 3 (T3) of the Highlands Region Roads Improvement Investment Program (HRRIP) for Papua New Guinea (PNG). The purpose of HRRIP is to rehabilitate and maintain roads in the Highlands Highway (HH) network in the country. This RP is based on the assessment of possible resettlement impacts based on the detailed engineering design of 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 rehabilitation has been formulated to minimize the need to acquire additional land outside of the existing road alignment, to the extent feasible and to be 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 to minimize resettlement impacts.

3. The results of the resettlement impact assessment indicated that the existing road carriageway occupies a total of 14.91 hectares of customary land. The rehabilitation of the road will require an additional 18.38 hectares of customary land for the whole road section. In total, the sub-project will occupy a total of 33.29 hectares of customary land which is the subject matter of the Memorandum of Agreement (MOA) between DOW and the representatives of customary land owners.

4. Summary of Impact is in table below. In addition to the customary land, there are personal assets affected and will require both physical as well as economic displacement. The technical solutions adopted have reduced the number of affected assets to 18 (14 houses made of non-durable materials, 2 houses and 2 trade stores made of a mixture of both non-durable and permanent materials), 22,098 of crops and trees, 4 grave sites, 2 fence lines and one ceremonial ground. 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. The various resettlement impacts are discussed in the section of asset impacts. The cut-off date for this sub-project is August 1, 2015, the day after the Detailed Measurement Survey (DMS) was completed.

TABLE 1: SUMMARY OF IMPACTS

Types of Affected Asset	Unit	Affected Area
Customary Land	Hectare	14.91 (existing road carriage) + 18.38 (strips of customary land along the existing roads)
House	Number of houses (total sqm)	16 (14 made of bush materials and 2 semi-permanent materials)
Trade stores	Number of trade store	2 (both semi-permanent)

Graves	Number of graves	4
Fences	Square Meter	10
Ceremonial Ground	Square meter	608
Crops	Number of crops	21,191
Trees	Number of trees	

Source: DMS/Socio-Economic Survey, July 2015

5. 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 APs. Based on the degree of impacts and vulnerability of tribes and clans living along this road sub-project, a resettlement plan was pre-pared.

6. Several consultations in the sub-project area have been undertaken by DOW through the Highland Region Maintenance Group (HRMG), Provincial Works Office (PWO) in coordination with both Provincial and District Administration Offices, Local Level Government (LLG) presidents and ward leaders. The displaced people (DPs) have already been informed about their rights to file complaints and/or queries on any aspects of resettlement and compensation. The resettlement team has utilized a variety of techniques such as in-depth interviews, public meetings, focus group discussions, etc. for consultations with APs and other stakeholders during the sub-project preparation.

7. Consultations were also held with the provincial, district and local ward officials and leaders, tribal, clans and sub-clans leaders and the local communities. Public disclosure have been undertaken to disseminate the resettlement plan to APs, communities and different national and local government agencies.

8. Local Level Government officials, ward councilors and tribal leaders have signed the MOAs for the use of customary land in exchange of public infrastructure. The sub-project entitlements included in the MOA were explained and discussions followed the information dissemination of HRRIP program policies and entitlements. In addition, public disclosures on the resettlement plan was also conducted with provincial and district leaders.

9. 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 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 project; (11) Deliver entitlements to DPs before their physical or economic displacement; and (12) Monitor and assess resettlement outcomes.

10. The in-depth discussions with DPs have raised the need for special program to assist them to reduce resettlement impacts. Among such programs adopted in this RP are a program to improve agriculture, free distribution of seeds and planting materials for 2 seasons, planting trees as the resettlement plan will remove about 1,000 trees from DP's land, education of DPs on tree planting and management and, to assist DPs develop business activities that generate income. The above activities are in addition to the full compensation payment for lost houses, trade stores, other structures and loss of crops, trees and other items attached to the affected land.

11. Based on the consultations with stakeholders, special infrastructure projects to provide benefits to the community including women living along the road section were identified and are adopted in this RP. Three bus bays and three waiting sheds located in strategic areas will serve as roadside vending and waiting areas with temporary storage facility. This is in recognition and appreciation of DOW to the permission granted by customary land owners for the free use of their customary land for this road sub-project and for the un-measurable adverse effects on the tribes and clans such as the presence of construction crews and their equipment and temporary inconvenience arising out of the construction activities on their customary land.

12. The DOW as the Executing Agency (EA) has overall responsibility to manage the planning, implementation and monitoring related to acquiring use rights for additional land to implement the sub-project. The Highlands Region Maintenance Group (HRMG), as the Implementing Agency (IA) for HRRIP has the responsibility delegated by the DOW to carry out the planning, implementation and monitoring for resettlement activities, as required.

13. The involvement of local level government (LLG) 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 resettlement activities for this sub-project.

14. Grievances will be addressed adequately at all stages of sub-project development. An internal grievance mechanism has been established for the HRRIP at the provincial level with the primary objective of facilitating conflict resolution in a timely manner and minimizes court cases. It will also provide affected people with a forum to air their objections and address their issues and concerns adequately. If the DP is still not satisfied with the ruling of the grievance redress committee, the DP may take the grievance to the PNG Judicial System.

15. The resettlement cost estimate for this sub-project includes compensation for a total of 56 affected households (282 APs) comprising of 16 residential houses, 2 trade stores, owners of crops and trees, graves, fences and 1 household losing its ceremonial ground, rehabilitation allowances, income restoration measures and, support costs for RP implementation. The RP will also support rituals that are customary in the HR in the case of reburial and moving into a new house. 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 for resettlement for the Pangia – Wiru Loop is Kina 600,214.40. The resettlement plan will be updated by Environmental and Social Safeguards Unit (ESSU) of DOW prior to implementation. The RP budget does not include the cost of Independent Monitoring as this activity is already funded from a separate source.

16. The implementation schedule for this RP has been scheduled based on the overall sub-project implementation. All related activities for land acquisition and resettlement 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.

17. 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 and 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 DOW has already recruited an independent monitoring organization (IMO) to undertake external monitoring of all sub-projects (include Wiru-Loop) under the HRRIP. 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

18. The Highlands Region Roads Improvement Investment Program (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 will undertake this program through the Department of Works (DOW) with assistance from the Asian Development Bank (ADB).

19. 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 PANGIA-WIRU LOOP SUB-PROJECT

20. The existing road in Pangia-Wiru Loop was constructed in the mid 70's and the road has never been satisfactorily maintained in the past 35 years. Generally, the road carriage way and formation width have disappeared over the years. The formation width varies from 3.8 to 9 meters, and has an acceptable alignment although several tight horizontal and vertical curves exist in the roadway. There are several steep slopes along the alignment where possible shift of the road to the opposite side may be required.

21. The current alignment is a single vehicular road with silty clay basement. The existing road purely traverses on earth pavement with brown/reddish clay sub-grade soils. Similar type of sub-grade material covers the total length. The road traverses through rolling and hilly landscape with generally secondary growth and grassland. Most part of the road are potentially wide and within the absolute maximum gradient will suite the designed pavement width of 5-8 meters, grades and design speed.

22. The road works will consist of widening the existing formation to provide a 9.0 meter wide sealed carriageway with 1 meter wide gravel shoulders. 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.

23. 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.

24. In several sections of the road where the instability of the existing slopes will necessitate the installation of retaining structures. The existing drainage is in poor condition and all of the existing culverts will require replacement together with the installation of roadside drainage. There are three existing bridges, all of which are in fair condition and maintainable while improvements will be required at three existing spillways.

25. The sub-project 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.

26. The whole existing road with a length of 31.4 km is situated on customary land, the use of which has been agreed through Memoranda of Agreement (MOAs) signed between representatives of land owners and DOW, attested by district officials (See Annex 5 Memorandum of Agreement) permitting the use of customary land for public infrastructure. This resettlement plan (RP) covers the resettlement 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

27. 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.

28. 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 outer edge of the construction limits. The construction limit is defined as the area from the edge of the existing road up to the edge of the proposed formation width (9.0 meters) for the Pangia-Wiru Loop road. The construction limit for the road is 17.31 meters.

29. On May 21 to 23, 2014, the resettlement team initially established rapport with the communities and conducted sub-project information dissemination, public consultations and estimated the structures and other land improvement impacts in the sub-project. Another series of public consultations were conducted on November 18-20, 2014 with the same purposes.

30. On June 29, 2015, the Memorandum of Agreements between the representatives of 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. Two MOAs were signed, one for the East Pangia Rural LLG and the other for the Wiru Rural LLG. The additional land required to upgrade and rehabilitate the road totaled 18.38 hectares.

31. These two initial assessments in May and November 2014 resulted in the identification of affected assets. It was estimated that around 60 assets would be affected. The DMS conducted in the last week of July 2015 resulted in only 18 structures and the number of other affected assets was reduced to the minimum to enable the road to be upgraded and rehabilitated.

C. Objectives of the Resettlement Plan

32. The purpose of this RP is to identify who will be affected by rehabilitation and upgrading of the sub-project, to what degree they will be affected (i.e. what type of loss they will suffer) and how they will be compensated to ensure that they are not adversely affected by the project or left in a worse situation compared to a “without project” scenario. In all cases, the overall aim is to at least restore, if not enhance, the livelihoods of DPs. The primary objective of the RP is to provide necessary details for compensation, resettlement and rehabilitation by identifying (i) the extent of losses; (ii) the policy and framework for compensation payments and relocation; (iii) institutional framework for participation and implementation, and (iv) responsibilities for monitoring during implementation.

III. SCOPE OF LAND ACQUISITION AND RESETTLEMENT

33. In the Pangia–Wiru Loop sub-project, the DOW, clan and community 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 lands were confirmed by the provincial and district personnel who were consulted with regard to affected lands.

A. Scope of Land Acquisition

1. Land Impacts

34. The whole length of the Pangia–Wiru Loop road is customary land. The first 3.40km of the sub-project road is located in East Pangia Rural LLG while the next 28 km is located in South Wiru Rural LLG, both in Pangia District, Ialibu Pangia Electorate in the Southern Highlands Province. The existing road occupies 14.91 hectares while the additional land required to upgrade and rehabilitate the sub-project road is 18.38 hectares. The rehabilitated road will occupy a total of 33.29 hectares of customary land with an average width of 10.60 meters. The details are shown in the following.

TABLE 2: BREAKDOWN OF EXISTING ROAD AND ADDITIONAL LAND REQUIRED

LLG	Classification	Length (Meter)	Existing Road (Ha)	Additional Land (Ha)	Total (Ha)
East Pangia Rural	Customary Land	3,400	1.95	1.61	3.56
South Wiru Rural	Customary Land	28,000	12.96	16.77	29.73
Total		31.400	14.91	18.38	33.29

Source: Design Consultant's Computation

36. In the Pangia – Wiru Loop 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 Kauwo 1, and proceed to Kauwo 2, Kauwo 3 wards in the East Pangia Rural LLG, and further proceed to Poloko 1, Koyapu, Laro 1, Kalane, Kulawe 1. Kulawe 2, Wriko, Maubinin, Kerapali, Tunda and Timbari 1 wards in the South Wiru Rural LLG. From there, the road traverses into Wala and ends at Kaborini creating a loop. The second section of the loop road of 32 km is not part of the scope of the proposed sub-project road. The sub-project road will connect and service the 3 wards of East Pangia Rural LLG and 11 wards of South Wiru Rural LLG (population 1,957 HHs).

37. There are 11 affected tribes and clans who own the customary land in the sub-project road. The total affected HHs is 56 with 282 affected people (AP). There are no tenants, sharecroppers or leaseholders or persons associated with the affected customary land. Neither are renters, leaseholders or employees of the affected establishments.

38. The details are shown in Table 2: Breakdown of Wards, Tribes/Clans, Villages and LLGs by Location.

TABLE 3: BREAKDOWN OF WARDS, TRIBES/CLANS, VILLAGES AND LLGs BY LOCATION

No	Chainage	Tribe/Clan	Ward/ Village	Number of APHs and AP	
				Affected HHs (number)	Affected People (number)
1	0+ 000-2+500	Muni	Kauwo 1	8	32
2	2+500-4+100	Pupu	Kauwo 2	1	3
3	4+100-7+300	Paiyoiya	Kauwo 3	6	30
4	7+300-12++000	Kawirene	Poloko 1/ Koiyapu	10	50
5	12+000-14+700	Yowai	Laro 1	0	0
6	14+700-18+000	Kambiri	Kalane/Kulawe 1	0	0
7	18+000-21+200	Tawindi	Kulawe 2	0	0
8	21+200-24+800	Kaimari	Weriko	0	0
9	24+800-26+500	Alue	Maubinin	4	18
10	26+500-30+600	Peri	Kerapali/Tunda	31	143
11	30+600-31+400	Yumbiri	Timbari 1	2	6
	All			56	282

Source: Field Investigation, Design Consultants

39. 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 the permanent use of customary land to permit the upgrading, rehabilitation and maintenance of the Pangia - Wiru Loop road.

40. After computing the minimum land required to upgrade and rehabilitate the sub-project based on the detailed engineering design, the resettlement team started to conduct public consultations to inform the affected people and elicit their comments, issues and concerns. The idea of the Memorandum of Agreement (MOA) was one of the major topics in every public consultation because it affects their customary land.

41. 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.

42. The signing of the MOA is a significant occasion for clan chiefs, community leaders and the community of the area to meet together with the Member of Parliament, officials of the

provincial administration and national government agencies. The ceremony is conducted in a grand style where all APs and other community members actively participate. During the actual signing of MOA, speeches from the leaders are always delivered in support of the project because of the benefits that they will derive from the sub-project. The land officer of the province, if present, is tasked to explain for the last time the consequences of their signing of the MOA.

43. During the whole proceedings, the independent verifier observes and takes notes of the whole proceedings. He observes whether there is threat or duress exerted on the signatories or if the signing is on their own free will by listening to speeches and observing the demeanor of the participants. Based on personal information, the independent verifier issues the certification of fairness and transparent nature of the MOA process.

44. From the beginning, project information has been communicated to customary land owners and the need to use a portion of their customary land for the sub-project has been highlighted. The whole process went from the tribal leaders and members up to their local leaders who are supported by their national leaders. It is fully transparent because it has already undergone the process of full disclosure and was thoroughly discussed in the tribal level. The informed consent was prior to the signing of the MOA and based on transparent information provided by HRMG and the design consultants of the sub-project.

45. It should be noted that initially, the sub-project had a length of 35.81 km. It was on this basis that the MOA was prepared and signed. After the signing of the MOA, DOW shortened the length because the last village along this section ends at 31+400. The original length was shortened by 4.415 km and as a result, two wards and two tribes will no longer be affected by the sub-project. However, the signed MOA still reflects the original length and, the two tribes which are no longer included in this RP.

46. The divisions of the road section based on tribal ownership are not absolute and only reflect the social system of PNG. Ownership and boundaries of land can never be fixed for all time but reflect upon changes in power and authority. Land rights are best perceived from the center, rather than land having fixed boundaries. This means that greater clarity of tenure occurs at the center of customary land mass, with less distinction towards the boundary of such land.

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

48. 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.

49. 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

50. 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 each of whom is eligible for an undemarcated portion of the tribal land mass. 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.

51. 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.

52. 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.

53. 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 as well as the socio-economic status of the household.

54. 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.

55. 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. Houses and other Structures

a. Houses

56. The sub-project will require the relocation of 16 houses and will impact 74 persons, with a total floor area of 281.80 sqm. The resettlement impact on all houses is greater than 20% of the floor area as such the entire house has to be removed. The type of houses and other details are presented in Table 3. Fourteen out of 16 houses are made of non-durable materials such as straw, grass, bamboo while 3 houses are made of a mixture of both non-durable and permanent

(corrugated iron roofing sheets, timber walls, cement floor) materials. Each of the affected household will receive several types of assistance detailed in section VIII for moving their houses and possessions to their new locations.

b. Trade stores

57. There are 2 trade stores with a total area of 14.64 sqm. The total floor area of trade stores is affected by road rehabilitation. The construction of trade stores is out of permanent materials. The trade stores sell basic commodities such as flour, cooking oil, salt, sugar and other basic items to the communities. The owners will be compensated at full replacement costs of the whole trade store who will also be eligible for other allowances such as shifting, transport and to compensate for business losses. The business loss is calculated as Kina 250 per day for a maximum period of two weeks before the trade store is built again in a new location and the business is back into operation. This was estimated through discussions with the affected business owners. Additional discussions of allowances are found under the section on Compensation. The owners of these trade stores will receive various types of assistance to cover their business losses from the time business operations are interrupted until they resume their selling operations in the new premises.

TABLE 4: SUMMARY OF RESETTLEMENT IMPACTS ON AFFECTED HOUSES AND TRADE STORES

Structure	Number of Affected Units	Construction Materials	No. Affected Persons	Affected Area > 20%
Houses	16	14 Bush materials/non-durable and 2 permanent	74	256.8
Trade Store	2	Durable/permanent	9	39.64
Total	18		83	296.44

Source: DMS/Socio-Economic Survey, July 2015

c. Grave yards

58. There are 4 graves owned by 4 households, one permanently marked while the 3 are unmarked. 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 exhumation costs, transport, coffin and reburial ceremony. The exhumation and reburial costs were determined through discussions with the affected households and community leaders.

d. Fences

59. There are 2 affected fences owned by two households with a total length of 100 meters. The fences are made of local material such as wood, tree branches. etc. The full replacement cost will be paid to the affected HHs. The cost of materials will not be deducted from their compensation but HHs are allowed to make use of such materials for free.

e. Ceremonial ground

60. There is one affected ceremonial ground with minor improvements with an area of 608 sqm located in chainage km 29+120. The structure is owned by the Peri Tribe and is represented in the RP by Peter Benny family. The ceremonial ground is used to conduct community rituals, tribal functions including bride price ceremony. Though owned by one family, it is available for similar activities organized by all tribes. The ground is grass whilst there are some mature trees to provide shade to people using this facility.

3. Crops and Trees

61. There are 22, 098 crops and trees that will be affected by the sub-project. Out of this total, 10,435 are coffee trees and 907 are other trees. The balance of the crops and trees are food crops composed mainly of vegetables and plants. The other details are shown in the following Table 3: Summary of Resettlement Impacts on Crops and Trees.

TABLE 5: SUMMARY OF RESETTLEMENT IMPACTS ON CROPS AND TREES

Tree/Plant Category	Number of Affected Crops and Trees
Coffee	10,435
Category A (fruit plants)	370
Category B (food crops)	5,500
Category C (economic plants)	3,836
Category D (forest trees)	1,050
Large Trees	907
Total	22,098

Source: DMS/Socio-Economic Survey, July 2015

Note: Multiple impacts on APHs

4. Vulnerability

62. In terms of vulnerability, there are 2 elderly headed households, 5 female-headed households, 2 physically handicapped headed households and 15 households below the poverty line. These households will receive vulnerability allowances because the resettlement impacts will be greater on them compared to normal households. It is to be highlighted that no affected persons fall under poverty as a result of the voluntary land donation by the tribe. This is because the tribal leaders have made arrangements to allocate unused land under tribal ownership to those whose allocated land has been donated to the sub-project. The customs in the Highland Region are also such that there is communal support to any member of the tribe who is devoid of resources due to donation.

TABLE 6: SUMMARY OF VULNERABLE HOUSEHOLDS

Vulnerable Households	Number
Elderly Headed Households	2
Female Headed Households	5
Physically Handicapped Headed Households	2
Households below Poverty Line	15
Total	24

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

f. Resettlement Category

63. The sub-project is categorized as Category B. The total affected land is 33.29 hectares where 14.91 hectares are the existing roads in the project area and additional 18.38 hectares is to be acquired for road widening and other improvements. There are 56 households belonging to 11 tribes/clans who will be impacted at varying degrees. There are only 18 households (83 persons) who will suffer major resettlement impacts due to loss of houses and trade stores. There are 22, 098 trees and crops that will be affected along with 4 graves, 10 sq.m. fences and 608 sq.m. ceremonial ground.

64. 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 through releases of idle lands. Some households are also considered affected by virtue of their membership to the clan and not necessarily considered significantly impacted from economic and physical displacement. The clan 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.

65. 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 either from the project or other natural calamity. Most of the affected crops, such as coffee, are owned by non-poor households as revealed by the socio-economic survey. 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 forest areas of customary-owned land.

66. 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. Both trade stores are made of semi-durable materials.

IV. SOCIO-ECONOMIC PROFILE

A. Sources of Data

67. Primary data was generated by the DMS conducted from July 21-31, 2015 for all households whose assets are within the construction limits. Extensive discussions were conducted with the affected people in the last week of July. Public consultations were also conducted in May 21-23, 2014, November 18-20, 2014 and June 15-17, 2015 in the East Pangia Rural LLG and South Wiru Rural LLG.

68. 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

69. The proposed candidate road starts from East Pangia Rural LLG, passing through South Wiru Rural LLG, both in Pangia District, Ialibu/Pangia Electorate, Southern Highlands Province.

70. Ialibu Pangia District covers the Kaugel, Poru and Tua Valleys and the Poru Plateau. Mount Ialibu lies in the centre of the district. Ialibu-Pangia District covers the Iaro, Poru, upper Kagua, Kaugel and Tua valleys. The Poru Basin, Poru Plateau and Mt. Ialibu dominate the center of the district. Average annual rainfall ranges between 3200 and 4000 millimeters. Altitude varies from 400 m at the junction of the Tua and Iaro rivers, to over 3700 m on Mt. Ialibu. Most people live between 1200 and 2400 meters.

71. The estimated rural population in the year 2011 is 63,478 Persons. The population density in the district is relatively even. The upper Kagua Valley has the highest density of; 80 persons/km², while the upper Iaro Valley, Kaugel Valley, Poru Plateau and Poru Basin have 60 persons/km². The slopes of Mt. Ialibu and the lower Iaro and Poru valleys are unoccupied.

72. Ialibu Pangia District has 87 elementary, 4 community, 21 primary, 1 provincial and 2 vocational schools to service the whole population. The net admission rate is 24.5%. The gross enrolment rate is 109.9% while the net admission rate is 82.4%. The literacy rate in the district is 45.7%. There are 5 health centers in the district and 16 aid posts. The health personnel are composed of 1 health officer and 34 nursing officers.

73. Incomes are moderate in the Poru Plateau and Poru Basin and are derived from minor sales of coffee, fresh food and cattle. People in the rest of the district earn very low incomes from minor sales of coffee and fresh food.

74. Agriculture in the upper Kagua Valley is dominated by high intensity sweet potato cultivation. People make 2–4 plantings before a fallow period of 1–4 years. Production is maintained through the use of composting, tillage, drainage and bedding. People in the upper Iaro and Kaugel valleys cultivate moderate intensity sweet potato gardens and use composting and mounding. Those on the Poru Plateau and in Poru Basin make low intensity sweet potato gardens.

2. Primary Socio-Economic Information

75. The following sections contain the results of the socio-economic information collected between July 21-31, 2015 from the 56 AHs. The results are disaggregated by gender to determine differences between male headed and female-headed households.

a. Demography

76. Out of the 56 households interviewed, 51 households (91.07%) are men-headed while 5 (8.93%) are women-headed households. There are 54 nuclear households (96.43%) while 2 (3.57%) are extended households.

77. The HH population is 282 that works out to an average household size of 5.04 persons. Women-headed households have an average of 4 persons while male-headed households are larger with 5.14 persons.

78. The interviewed HHs are 147 males compared with 135 females or a gender ratio of 109 females for every 100 males. The men-headed households have a gender ratio of 111 females for every 100 males whilst the women-headed households have a ratio of 122 females for every 100 males. The details are shown in the following Table 4: Type, Age and Gender Distribution of Household Members.

TABLE 7: TYPE, AGE AND GENDER DISTRIBUTION OF HOUSEHOLD MEMBERS

Household Type	Family Status		Population (number)		Household Size
	Nuclear	Extended	Male	Female	
Men-headed	49	2	138	124	5.14
Women-headed	5	0	9	11	4.00
All	54	2	147	135	5.04

Source: DMS/Socio-Economic Survey, July 2015

79. There are 107 members (65.85%) in the economically productive age (15 – 65 years old) with males comprising 35.56% while female accounted for 30.28%. There are 79 young dependents and 16 old dependents or a total of 95 dependents. The dependency ratio is 50 dependents for every 100 persons in the economically productive age. The dependency of men-headed household is 51 dependents for every 100 persons in the economic productive age while the same ratio for women-headed households is 43 dependents for every 100 persons in the economic productive age. The details are shown in the following Table 5: Breakdown of Household Members by Gender and Age Bracket.

TABLE 8: BREAKDOWN OF HOUSEHOLD MEMBERS BY GENDER AND AGE BRACKET

Type of Household	<15 Years (number)		15-65 Years (number)		>65 Years (number)	
	Male	Female	Male	Female	Male	Female
Men-Headed	37	36	95	78	6	10
Women-Headed	3	3	6	8	0	0
All	40	39	101	86	6	10
Percentage	14.08%	13.73%	35.56%	30.28%	2.11%	3.52%

Source: Socio-Economic Survey, July 2015

b. Education and Literacy

80. In terms of educational attainment, there are 50 members (17.73%) who are not in the school-age and out of this, 22 are females while 28 are males. There are 39 members (13.83%) who have no formal education and out of this total, 23 are males while only 16 are females. It is interesting to note that the number of women without formal education is lesser than that of men.

81. Out of the total number of 193 members who have some kind of formal education, 91 have reached the primary level, 70 members secondary level, 29 members high school level while only 3 members have reached the college level. The gender-breakdown of the educational attainment of the affected population is shown in the following Table 6: Educational Attainment by Gender.

TABLE 9: EDUCATIONAL ATTAINMENT BY GENDER

Category	Male	Female	Total	Percentage
Not of School Age	28	22	50	18
No Formal Education	23	16	39	14
Primary	41	50	91	32
Secondary	38	32	70	25
High School	14	15	29	10
College	3	0	3	1
Total	147	135	282	100

Source: DMS/Socio-Economic Survey, July 2015

82. Educational achievement by women-headed households was disaggregated from the rest to determine differences between two-types of households. The percentage of those who are not within the school age and those without formal education were lower in women-headed households. On the other hand, the percentage of members with primary and secondary education is greater in women-headed households. The percentages of members who have attained high school and college level education are higher in women-headed households compared to the aggregated results. In summary, educational achievements by women-headed households is greater than that of men-headed households. The details are shown in the following Table 7: Educational Attainment for Women-headed Households.

TABLE 10: EDUCATIONAL ATTAINMENT FOR WOMEN-HEADED HOUSEHOLDS

Educational Category	Population (number)		Percentage
	Male	Female	
Not of School Age	1	1	10
No Formal Education	0	2	10
Primary	3	5	40
Secondary	3	2	25
High School	1	1	10
College	1	0	5
Total	9	11	100

Source: Socio-Economic Survey, July 2015

83. Literacy is 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 2011: '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 as English, Motu and Tokpisin. In Ialibu Pangia District, the literacy rate is 45.7%, way below the national literacy rate of 56%.

c. Housing

84. In the affected zone, over 97% of households own their houses. The majority of houses are constructed using non-durable materials such as grass and leaves whilst about 20 % are made using a combination of non-durable and permanent (durable) materials such as corrugated sheets, wooden frames and iron sheets.

85. All AHs use natural water sources for domestic use. The major water source is nearby streams reported by 34 households (60.71%) while 10 households (17.86%) source their domestic water supply from nearby springs. One household has piped water still sourced from a stream while 11 households utilize other water sources such as ponds and lakes. All the 56 respondent households use wood as their fuel for cooking. Thirty-nine households (68%) use kerosene as their fuel for lighting while 18 households use pit-pit plant as their fuel source for lighting. The main toilet type used by the majority of households (57 households) is the pitlatrine.

d. Economic Activities

86. The APs in the Pangia – Wiru Loop road section were asked about their main economic activities. The majority (91 %) of households are involved in agriculture. Twelve households are involved in roadside vending while 16 households are still engaged in hunting and gathering. Many HHs are engaged in multiple activities such as farming combined with vending.

87. Subsistence agriculture in the sub-project area 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. The non-poor have land under coffee that gives them a regular return from the sale of beans.

88. Most households continue to raise small livestock such as pigs, goats, sheep and poultry. Among surveyed households in the resettlement impact zone (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.

89. There are three types of selling that evolved in the Highlands Region; (a) formal market where producers sell to wholesalers who in turn supply retail establishments, (b) informal market, these are open markets throughout the highlands, (c) direct bulk buyers – retailers, restaurateurs and institutions etc, buy from producers at the door. Retailers sell fresh vegetables but often have trouble sourcing local produce due to high transport costs. Kai bars use assorted vegetables on their menus. The institutions (hospitals, technical colleges, prison, armed forces) are a large market.

90. The marketing of cash crops relies on sales to buyers, particularly for households growing coffee and raising pigs. Nearly 90% of coffee growers sell to buyers, while only 40% make direct sales at local and/or regional markets.

e. Poverty

91. The poor HHs are identified as those receiving a total monthly income of Kina 130 per month. The socio-economic survey has estimated that 15 out of the total 56 HHs (27%) affected are poor. The survey reveals that poor HHs have less area for cultivation, do not possess animals and the quality of house itself is also lower than the non-poor. Out of 15 poor AHs, 2 are vulnerable due to elderly, disabled and women-headed nature of their HHs. Two poor HHs will also relocate their residential houses.

f. Vulnerable People

92. The vulnerable APs are those with disability, elderly, a woman-headed household or poor HH. There are 24 vulnerable DPs representing 36% of AHs of this sub-project.

g. Household Income and Expenditure

93. Based on the data collected from 56 AP households, the average annual income is 3,104 kina per HH that works out to an average monthly income of 259 kina per household. Agriculture remains the foundation of the economic activities in the sub-project and is being practiced by 91% of DP households with an annual value of 66, 910 kina representing 39 % of total household income. This is the largest source of household income. Providing assistance to APH to increase their agricultural income is therefore important to reduce the burden of resettlement-related income losses.

94. The second largest source of household income is remittances from relatives and tribal members. It is the source of income for 38 households (68%) and contributing to 33, 920 kina a year representing 20% of total annual household income. The third largest source of household income is from other sources such as sale of pigs and poultry. It is the source of household income for 41 households (73% accounting for 25, 180 kina a year representing 15% of total annual household income. Assistance to APH in raising animals will also contribute to reduce their resettlement impacts. The other details are shown in the following Table 8: Source of Annual Household Income.

TABLE 11: SOURCE OF ANNUAL HOUSEHOLD INCOME

Income Source	Households Reporting		Annual Income	
	Number	Percent	Value (Kina)	Percent
Agriculture	51	91	66,910	39
Roadside Vending	12	21	14,200	8
Paid Labor	4	7	1,970	1
Small Enterprises	1	2	3,900	2
Wage Employment	3	5	18,600	11
Hunting & Gathering	16	29	6,000	3
Remittance	38	68	33,920	20
Business & Trading	2	4	3,120	2
Other Sources	41	73	25,180	15
Total			173,800	100

Source: DMS/Socio-Economic Survey, July 2015

95. The annual household income of the five women-headed households was disaggregated from the rest of the results of the survey. The five women-headed households are earning a total annual income of 20,820 kina or 4,164 kina per household per year, which is equivalent to an average monthly income of 347 kina per household.

96. The largest source of affected women's annual household income is from business and trade contributing around half of total household income. However, only 2 affected women have such income-generating opportunities. It is therefore suggested that the affected women are assisted in establishment of small businesses. This is also a good strategy to reduce resettlement-related impacts on women. The second largest source of women's household income is from paid labor contributing to 6,020 kina a year or around 30% of total household income. Agriculture contributed only 7% of total household income, way below the 39% contribution registered for all APHs. The other details are shown in Table 12: Sources of Annual Household Income for Women-Headed Households.

TABLE 12: SOURCE OF ANNUAL HOUSEHOLD INCOME FOR WOMEN-HEADED HOUSEHOLDS

Income Item	Reporting Women Households		Annual Income	
	Number	Percent	Amount (Kina)	Percent (of all sources)
Agriculture	5	100	1,440	7
Paid Labor	4	80	6,020	29
Small Enterprises	1	20	520	3
Hunting & Gathering	1	20	400	2
Remittance	2	40	620	3
Business & Trading	1	20	10,400	50
Other Sources (piggery, Poultry)	3	60	1,420	7
Total			20,820	100

Source: DMS/Socio-Economic Survey, July 2015

97. Comparing income of men and women -headed affected people's households, the former earns an average of 250 kina a month while the latter earns an average of 347 kina a month. Accordingly, the women- headed households earn 97 kina more a month than their male-counterpart households. Assisting women to raise their income through the support to businesses will therefore largely contribute to reduce the resettlement-related impacts.

98. The average annual household expenditure amounted to 2,411 kina per year which is equivalent to an average of 201 kina per month. Food is the largest expenditure item accounting for 49%, almost half of total household expenses. This percentage most probably would be bigger because expenditure on food is almost always under-reported because of the availability of food gardens and their tendency to report food expense as out of pocket cash spent on food and exclude food coming from their food gardens. Assistance for APH to increase crop yields is therefore a good strategy to support them.

99. Transport expense is the second largest expense item reported by 45 households (80%) and accounting for 14% of total annual expenses. There were very few PMV plying the Pangia – Wiru Loop road section where transportation fares are high because of the very bad conditions of the road. The improvement of road is expected to reduce transport cost, thus is beneficial to APs. The third largest household expense is education to 7% of total annual household expenses while agricultural inputs is fourth largest annual household expense with 6%. The other details are shown in Table 10: Composition of Annual Household Expenditure.

TABLE 13: COMPOSITION OF ANNUAL HOUSEHOLD EXPENDITURE FOR AFFECTED HOUSEHOLDS

Expenditure Item	Reporting Households		Annual Expenditure	
	Number	Percent	Amount (Kina)	Percent (out of total)
Food	56	100	66,250	4
Transportation	45	80	18,508	14
Education	38	68	9,722	7
Agricultural Inputs	39	70	7,531	6
Social Function	28	50	6,960	5
Clothing	38	68	6,411	5
Communication	37	66	6,082	5
House Fuel	41	73	5,664	4
Health	22	39	2,204	2
Electricity	3	5	410	0.30
Other	39	70	5,260	4
Total			135,002	100

Source: Socio-Economic Survey, July 2015

100. The annual household expenditure of the five women-headed households was disaggregated from the rest of the results of the survey. This expenditure item amounted to kina 2,106.57 which is equivalent to 175.50 kina per household per month. The largest expenditure is food representing 37% of total expenditure followed education (16%) and agricultural inputs (12%). The other details are shown in the following Table 11: Composition of Annual Household Expenditure for women-headed Affected Households.

TABLE 14: COMPOSITION OF ANNUAL HOUSEHOLD EXPENDITURE FOR WOMEN-HEADED AFFECTED HOUSEHOLDS

Expenditure Item	Reporting Households		Annual Expenditure (per HH)	
	Number	Percent	Amount (Kina)	Percent
Food	5	100	3,900	37
Education	3	60	1,650	15
Agricultural Inputs	4	80	1,230	12
Transportation	4	80	1,140	11
House Fuel	5	100	710	6
Social Function	3	60	410	4
Clothing	4	80	400	4
Health	3	60	290	3
Communication	3	60	230	2
Electricity	1	20	200	2
Other	4	80	370	4
Total			10,530	100

Source: Socio-Economic Survey, July 2015

101. Comparing the household expenses between men and women-headed AHs, the data reveals that the total average monthly household expense of male-headed households amounted to 203 kina a month while that of the women-headed households was only 175 kina. The difference of 28 kina a month suggests that the men-headed households are spending a bit more than women-headed households.

102. Comparing the income and expenses between men and women-headed households, the former earns an average of 250 kina and spend an average of 203 kina a month or a net savings of 47 kina a month. In women-headed households, the average monthly earn is 347 kina a month and spend an average of 175 kina a month or a net savings of 172 kina a month. In summary, women-headed households are earning more, spending less and saving more in comparison to men-headed households.

h. Migration

103. There are generally four types of migration in PNG, (a) rural to urban, (b) rural to periurban, (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.

104. The AHs were asked if they or any member of the family migrate for work outside of their district. Out of the total respondents of 56 households, 38 households (67.86%) have some members of their families migrating to work outside of their district and/or province. These

migrant workers from the 38 households contribute around 75 kina per month to their respective families.

105. Non-agricultural laborers accounted for around 65.79% of total migratory workers while only 2 were agricultural workers. Ten APs are in business and trade while only one member is classified under other migratory jobs.

i. Status of Women

106. Discussions with the affected women reveal that they are responsible for the cultivation of their food gardens (100%). This is a very important source of food in their families and women are responsible for their continuous production. If the women are finished tending their gar-dens and just waiting for the vegetables and other crops to mature, the women work for other neighbors who are in need of additional agricultural hands (73.21%). While working both on their food gardens and food gardens of others, they also raise chickens and pigs (69.64%). Other activities are shown in Table 12: Affected Household Women's Participation in Economic Activities.

TABLE 15: AFFECTED HOUSEHOLD WOMEN'S PARTICIPATION IN ECONOMIC ACTIVITIES

Economic Activity of Women	Frequency	Percentage
Crops farming	56	100
Agricultural Labor	41	73
Others(poultry, piggery)	39	70
Household Works	13	23
Collection/Sales of Forest Products	8	14
Allied Activities	5	9
Non Agricultural labor	4	7
Services	4	7
Household Industries	3	5
Trade and Business	2	4

Source: Socio-Economic Survey, July 2015

107. It is apparent that far from being marginalized, the affected women are very active in their pursuit to earn and contribute to the income of their families. Fifty AP households reported an aggregate amount of 25, 510 kina per year or around 43 per month per household. This amount represents approximately 17% of total household income. However, this average amount is understated because of the local practice of not considering food consumption raised in the food garden as part of the income earned by a family. In addition, home consumption of raised chickens and pigs are also not included.

108. The affected women were asked about their participation in decision making in the family. Female participation in household decision making process regarding various family aspects is very apparent and observable. Women in all AP households participated in the decisions concerning the education and health care of their children and on financial matters. Table 13: Female Participation in Household Decision Making Table 13: Female Participation in Household Decision Making presents the other details of the female participation in household decision making.

TABLE 16: FEMALE PARTICIPATION IN HOUSEHOLD DECISION MAKING

Female Participation on Decision Making	Frequency	Percentage
Education of Child	56	100
Health Care of Child	56	100
Financial Matters	56	100
On Social Functions and Marriages	43	77
Day to Day Activities	43	77
Purchase of Assets	39	70
Others	2	4

Source: Socio-Economic Survey, July 2015

V. DISCLOSURE, CONSULTATION AND PARTICIPATION

A. Consultations during Project Preparation

109. 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 Pangia – Wiru Loop road sub-project to ensure that 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.

110. 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 Pangia – Wiru Loop road section.

B. Views of Directly Affected People

111. All the AHs were consulted as part of the DMS exercise that assessed the losses. In addition, the APs were consulted using several other methods such as individual HH contacts, focus group discussions and meetings. The focus of such consultation 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. These consultations were conducted only with the APs.

112. The majority of AHs contacted stated that they will significantly benefit from the rehabilitated road. According to their view, such benefits are available for the entire community regard-less of assets donated. However, the AHs in particular the poor HHs, are feeling the gravity of resettlement impacts by having to relocate to another site, donating their cultivated land and relocating 2 trade stores. Although they acknowledge resettlement assistance already proposed, suggested that the project considers providing 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. Few APs who undergo physical relocation were doubtful whether the new house location is comfortable compared to where they are now. These concerns were taken into account in preparing this resettlement plan.

113. 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 AHs in establishing 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. 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. The resettlement assistance package proposed under this RP has incorporated above suggestions. The additional measures are reflected in the resettlement budget.

114. 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. Wider Consultations during RP Preparation

115. Based on the assessment of the sub-project, the key provincial stakeholders identified for Pangia – Wiru Loop road sub-project include the 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. The Annex 8 has names of people who participated in various consultations.

116. The primary stakeholders are the directly affected tribes, clans and sub-clans whose lands assets will be affected by the sub-project. The roadside communities and villages located along the Pangia – Wiru Loop road section are also classified as primary stakeholders and their active participation and support are crucial for the success of the sub-project. Secondary stakeholders are residents of villages and communities that are located in the interior areas of the road alignment within the RIZ.

117. The public consultations for the candidate sub-project Pangia – Wiru Loop road were initially held in May 21-23, 2014 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 the Highlands Region Road Improvement Investment Program (HRRRIIP) 40173-043 – PNG and the Pangia – Wiru Loop 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 sub-project.

118. The Project Team met the stakeholders, village elders/leaders and some ward counselors from the villages along the sub-project road and disclosed to them the inclusion of the Pangia to Wiru Loop Road in the Highlands Region Road Improvement Investment Program (HRRRIIP) as one of the candidate roads. 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 social positive and negative 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.

119. The second community consultations were undertaken from November 18-20, 2014 for the sub-project road. The team distributed project leaflets in English and Pidgin to households along the sub-project road containing project information and HRRRIIP policies on resettlement. Discussions on the content of the leaflet were undertaken in populated areas along the villages and many of the households.

120. The team went to the sub-project road to conduct additional public consultations from May 14-22, 2015 to conduct a rapid resettlement impact assessment to determine if there is a need for a DMS. During this period, the team explained again the compensation policies of HRRRIIP to potential affected people. The team conducted another series of consultations in the sub-project road on June 15-17 to ensure that project information and resettlement policies of the HRRRIIP have been disseminated to the greatest number of DPs as possible. The residents of the sub-project road all agreed on the need for the upgrading and rehabilitation of their road.

121. The team also conducted consultations in Pangia District Office on the day of the signing of the Memorandum of Agreement on June 29, 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.

122. Based on the results of the rapid impact assessment last June 15-17, 2015, there is a need to conduct a DMS along the certain portions of the road section where there are some potential affected assets within the construction limits. On July 21-31, 2015, the resettlement team conducted as detailed measurement survey (DMS) on selected portions of the sub-project road. Intensive consultations were conducted during this two weeks period among the areas wherein the DMS was conducted. The concept of the cut-off date was also presented and the participants promised to observe this cut-off date by not introducing improvements within the road corridor.

123. Overall, the project team discussed with the participants of the various public consultations the likely social impacts that will accrue from the implementation of the sub-

project. On 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.

124. The project team clarified with the participants of the various public consultations that additional land will be required for the sub-project despite of 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.

125. The primary stakeholders, especially the people that will be affected by the sub-project have confirmed the need for the rehabilitation of the Pangia to Wiru Loop Road during the several public consultations/meetings conducted by the Project Team. The concerned Local Level Government units (LLGs) and wards also concurred with the proposed development.

126. The summary of the questions, comments and concerns raised during the series of public consultations is presented in the following Table 14: Summary of Various Public Consultation Proceedings.

TABLE 17: SUMMARY OF VARIOUS 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 Pangia and will end after the Willame village at km 31+400. Formerly, the road is up to 35 km however, DOW decided to shorten the length up to only the Willame Village.
How wide is the proposed road and what assets will be affected by the road project?	Based on the detailed design, the construction limits will require an additional of about 3 meters of customary land each side of the existing road. Based on the design and inspections, aside from customary land, there are no assets or improvements that 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 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 will it take to construct a similar structure as present prices. Graves, crops and trees will be paid based on the Valuer General's rates of 2013.
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.
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 are included in the proposed works.
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.

127. 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 ventilate their issues and concerns and express their opinions regarding the proposed sub-project.

D. Third-party Validation of MOAs

128. The Memorandum of Agreements (MOAs) are written between the representatives of APs, their local leaders and the DOW. The purpose is to permit the use of customary land for public purpose that specifically targeted at the provision of improved transport in rural parts of Pangia district. The MOA signing was conducted as a ceremonial event where all APs and other community members benefitted by the road together with local leaders, district, provincial and national-level officials gather to discuss and explain the purpose of road and the process of community engagement in the construction project. The event is decorated with dancers and sing-songs where the community at large has the opportunity to engage in the process. Several speeches are made by LLG leaders and provincial representatives to explain the purpose and what they loose. It is a local event which is conducted in the local area. In the case of Wiru-Loop road section, the MOA was signed at 2 places; one at East Pangia Rural LLG and the other at Wiru Rural LLG. The representatives of all affected tribal leaders are signatories to the MOA which is counter-signed by the district administrator before being signed off by the Secretary of Works Department. The signed MOAs are produced in Annex 5.

129. The MOA process is witnessed by a third-party 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 determines whether it is fair, open and transparent. 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 East Pangia LLG and Wiru Rural LLG has been verified by Carter Education Management Consultancy which is an independent organization. The third-party verifier is an independent observer of the entire process. He observes the participants, their behavior, feedback or concerns expressed by the community and most importantly, the reactions of the affected people. The third-party verification is attached to the relevant MOA itself.

E. Public Disclosure of RP for Sub-Project

130. 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, the summary will be translated into Pidgin, one of the official languages of PNG and posted to LLGs and other offices in the affected area. The full RP will be disclosed in ADB website prior to the release of any succeeding tranches for sub-projects.

131. 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

132. 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

133. 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 emphasizing local expertise and decentralized decision making.

134. 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.

135. 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.

136. 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.

137. 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.

138. 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

139. Based on the experiences learned in Tranche 1 of the HRRIP, a grievance redress mechanism has been established in the provinces of the Highlands Region, specifically in the Southern Highlands Province (SHP) to provide DPs with the opportunity to seek redress on their complaints and grievances in a timely and satisfactory manner. The grievance redress mechanism will apply equally to the negotiation of the MOA and in the issues related to the implementation of the resettlement plan.

140. In Tranches 1 and 2, a DP 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 and investigate the complaint. Because of the long travelling time and the expenses involved in going to HRMG, very few DPs followed this first procedure.

141. 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.

142. In the improved GRM, the PWM receives the complaint. Since he/she is based on the province, the filing of the complaint is easier for the complainant and the PWM has the necessary personnel who are familiar with the area where the complaint arose. The GRM also created a panel composed of 5 persons, four of which are from the district or province where the sub-project is located. The representative of HRMG is the only one not from the place and the four other members are familiar with the tribal dynamics of the area.

143. It is because of these reasons that an improvement of the grievance redress mechanism is in order. The mechanism was brought closer to potential complainants to provide faster and cheaper way to address the complaints. On the part of HRMG, the designation of the PWM as the first layer in trying to solve disputes relieves some of the load in addressing these complaints and makes the process faster and more responsive to the DPs. The following paragraphs detail the improved GRM.

144. 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.

145. 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 agreement, the DP may seek arbitration from a panel created especially for this purpose.

146. The arbitration panel shall be composed of the District Administrator, LLG Council President, DOW represented by HRMG, representative of the religious sector and representative of civil society. This 5-man arbitration panel has been created in every province where there is a HRRIP road sub-project. The arbitration panel shall make its own rules that will govern the reconciliation/resolution of resettlement related issues raised by any DP.

147. There shall be only two hearings, and the schedule of the final hearing should be not more than 10 days after the first hearing. 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 arbitration panel shall decide the issues involved based on the policies governing HRRIP, prevailing laws of PNG and customary laws of the place where the dispute arose.

148. If the DP is not satisfied with the decision of the arbitration panel, the DP may then take the grievance to the PNG judicial system, specifically to the Local Land Court. 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

149. 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).

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

151. 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

152. 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.

153. 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

154. 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.

155. 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

156. 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

157. 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

158. 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

159. 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.

160. 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

161. 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)

162. 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 its experience with its old safeguard policies, and adapt to its 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.

163. 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 DPs in real terms relative to pre-project levels and improve the standards of living of the affected poor and other vulnerable groups.

164. 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 re-settlement outcomes.

C. Gaps between PNG Laws and ADB's SPS

165. 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 15: Resettlement policy Gaps and corrective Measures shows the gaps identified between the PNG legal framework and the ADB Safeguard Policies.

TABLE 18: RESETTLEMENT POLICY GAPS AND CORRECTIVE MEASURES

PNG Laws	ADB SPS Requirements	Gap-Filling Measures
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 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

166. 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 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

167. 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.

168. In the Pangia–Wiru Loop 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

169. 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).

170. 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 Pangia–Wiru Loop road section. There are no private affected lands in the whole sub-project road.

B. Compensation for Damages

1. Residential Houses

171. Houses and other structures have been constructed within the construction limits. It will be necessary to shift these structures outside the construction limits in order to upgrade the road. In these instances, DPs will be provided with compensation to cover the full replacement cost for loss of the houses (i.e. full value of replacement materials and labor at current market value). They will also be eligible for other allowances such as shifting, transport and for temporary accommodation.

172. There are also some semi-permanent houses that are not possible to shift without affecting the whole structures. DPs are entitled to compensation at full replacement cost for the materials and labor to repair or reconstruct a similar structure.

2. Crops and Trees

173. Crops and trees will be damaged or lost due to the civil works, as a result of earthworks, upgrading drainage structures and other works. DPs who own crops and trees that will be damaged or lost are entitled to compensation to replace these assets based on the full replacement cost or Valuers' General Schedule of Compensation (August 2013) if it still represents existing market prices at the time of compensation. There may be affected assets that are communally owned such as natural occurring trees that may just grow in parcels of customary land assigned to specific households within a tribe or clan. In these cases, in-kind compensation is preferred so that the whole tribe or clan can benefit instead of cash compensation being shared with the host household. The compensation rates and amounts shall be determined in the following manner:

a. Annual Crops

174. 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.

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

b. Perennial Crops and Trees

176. 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.

177. Compensation for lost plants and/or trees will be paid at replacement cost based on existing market rate or Valuers General Rates of 2013 if applicable to current 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.

178. 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.

3. Compensation for Structures

a. Fences

179. 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 Compensation Schedule if applicable to current market prices 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.

b. Grave Sites

180. In the first instance, compensation will be paid in accordance with the provisions of the 2013 Valuer General's Compensation Schedule (unmarked grave site K130; permanently marked grave site K330; with permanent features K1, 300). In addition, the HRRIP will pay an additional grant of 2,000 kina per grave to ensure that the compensation received is equal to the costs for reburial and construction of new graves which are similar to the affected graves. On top of the Valuer General list, additional grant is proposed to be utilized in the ceremony (includes pigs), purchase the new coffin, transport, etc.

c. Business Structures

181. There are 2 trade stores that will be affected by the sub-project and will suffer business losses. The DPs will be compensated for their assets at replacement costs, a shifting and transport allowance and compensation for business losses. The owning household does not require an accommodation allowance as the corresponding affected house will be given the allowance. The shifting allowance is Kina 150 per business whilst the transport allowance is Kina 100. The business loss is calculated as Kina 250 income per day for a period of two weeks to compensate for lost business revenues while transferring the structure to a location outside the area designated for the road.

d. Calculation and Payment of Compensation

182. All compensation rates and the amount of the compensation for damaged crops, trees and structures were based full replacement cost or Valuer General's Schedule of Compensation (August 2013) if applicable to current market prices. ~~or full replacement costs if the damaged assets are not included in the compensation schedule.~~ DPs 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 DPs prior to the start of civil works.

183. In the case of affected crops, trees and structures, the compensation owed will be paid directly to the person who owns these assets. In the event that the losses or damages incurred during civil works are different from those assessed during the DMS, DOW will make appropriate adjustments in the compensation amounts to ensure that DPs are paid promptly.

184. If there are additional assets that will be affected during the implementation of civil works, HRMG will make appropriate payments based on full replacement cost or the Valuer General Schedule of Compensation in 2013 if applicable to current market prices. ~~or full replacement costs, whichever may be applicable.~~

4. Income and Livelihood Restoration Measures

185. The loss of the land will be addressed by the tribes by allocating lands in fallow to the affected households. This was confirmed by the community leaders that were 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.

186. 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.

a. Assistance to Improve Agriculture

187. Agriculture contributes heavily to the household income of APs. The loss of agricultural land will have 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. Each AP will be given free issue of seeds and planting material valued at Kina 50 per season for 2 years (total of Kina 100). 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. The cost of this item is Kina 16,000.00.

b. Business Development

188. 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.

c. Assistance to Tree Planting

189. It is estimated that the clearing of road alignment will remove about 900 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. Each AP will be given 20 saplings for free for planting on their unaffected land. The total number of seedlings to be issued is 1,200. 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 2,400 and the visit by forest technician is priced at Kina 10,000 (two-visits).

5. Design Measures to Assist Communities

190. Additionally, several other measures are proposed for the benefit of the community at large in sub-project area. These measures are aimed at mitigation of non-measurable 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 in-kind compensation in favor of affected communities. In addition, it is also in recognition for their cooperation as shown in their past efforts to shift some of their assets away from the road alignment.

a. Construction of Bus Bays

191. 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 Pangia–Wiru Loop sub-project road. Safety provisions will be incorporated in the design to ensure that these roadside vendors have adequate protection from wayward vehicles.

192. The host tribes /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

193. There are several important junctions connecting secondary roads with the main sub-project road. These secondary roads serve as access roads to several villages located in the interior of the Pangia-Wiru Loop Road. Residents carry on their backs their agricultural produce to these junctions for transport to Ialibu or Mendi, the provincial capital. Returning home, they unload from public vehicles their household supplies in these junctions and carry them on their backs to their villages.

194. 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 pro-

visions for temporary storage facilities will be constructed on at least 3 locations within the sub-project road.

195. 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

196. 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.

197. DOW will encourage women to form associations or use existing ones so that they can tap 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.

198. Arrangement would be made between DOW through the contractor to source out 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.

6. Entitlement to Rehabilitation Assistance

199. Based on the DMS, 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:

a. Shifting Allowance

200. DPs that own a residential house and trade store or other business activity that must be shifted a short distance to a location outside the construction limits of the sub-project road are entitled to a shifting allowance calculated as Kina 100 for a residential house and Kina 150 per business.

201. 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

b. Business Disruption Allowance

202. DPs that own trade stores whose business is disrupted due to lack of access caused by civil works are entitled to this allowance to compensate for the disruption. A business disruption allowance is calculated as Kina 250 per day per business payable for 2 weeks (14 days). This will be given in cash to eligible businesses.

c. Transport Allowance

203. DPs that relocate housing or a business are entitled to a transport allowance to cover the costs of moving their possessions to the new location. This allowance is Kina 100 per HH which will be paid in cash.

d. Accommodation Allowance

204. Each affected household will be given a daily accommodation allowance of Kina 100 for a period of 2 weeks. The APs can use this allowance to pay for alternative accommodation until their house is built. This allowance is not paid for trade store owners whose residential house is not affected.

e. Severity Allowance

205. 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 DPs

206. 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.

207. The 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) women-headed households; and (iv) household heads who are physically and/or mentally incapacitated (disabled). The vulnerable allowance payable is 240 Kina per HH.

208. It is possible that some DPs fall in 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 high lands are headed by men and those headed by women are among the poorest.

8. Indigenous People

209. 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.

210. 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.

211. The last PNG census figures for the year 2000 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.

9. Entitlement Matrix

212. The following Table 16: Pangia-Wiru Loop Road Entitlement Matrix summarizes the entitlements to compensation and rehabilitation assistance for the Pangia–Wiru Loop road section under the HRRIP.

TABLE 19: PANGIA-WIRU LOOP ROAD ENTITLEMENT MATRIX

Type of Impact	Entitled Person	Entitlement	Expected Results	Implementation
Affected Land				
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
	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.	

Type of Impact	Entitled Person	Entitlement	Expected Results	Implementation
	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, trees, fences or other structures on sub-project-affected land (see below).		restoration of the land following its use will be the responsibility of Contractors as part of their Contracts.
Other Affected Assets				
Annual crops	Owners of the crops	Compensation for loss of or damage to annual crops on sub-project-affected land as follows: APss given notice to harvest crops before clearance or removal from required land; OR, if APss are not able to harvest b) cash compensation calculated at replacement costs based on local market prices. c) Seeds and planting material cost of Kina 100 as a grant for a period up to 2 years from resettlement	Compensation for damage to or loss of standing crops to ensure income restoration	DOW will compensate at replacement cost based on market prices. All compensation rates and amounts will be verified and approved by the office of the Valuer General. 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 APss are entitled as rapidly as possible. All compensation shall be paid to the owners of the affected assets.
Perennial crops and trees, including timber trees	Owners of crops and trees	Compensation for losses or damages as follows: a) APss given notice to harvest crops before clearance or removal from required land; AND, b) cash compensation for lost plant or tree calculated at replacement cost based on market prices.; AND, 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 d) in the case of timber trees, APss will be permitted to harvest trees and sell the timber. e) Free-issue of tree seedlings at the rate of Kina 2 per poly-plant . 1,200 poly-plants to be distributed among APs	Compensation for damage to or loss of perennial crops and trees to ensure income restoration.	
Graves	Closest relative of the dead	Compensation based on Valuer General's Schedule of Compensation (2013) and;	Restoration of affected structures	

Type of Impact	Entitled Person	Entitlement	Expected Results	Implementation
	person	Additional compensation of kina 1,600 per affected HH to cover costs of exhumation, coffin, ceremony and reburial of the dead		
Fences	Owner of the affected fence	Compensation based on replacement costs of the affected fences	Restoration of affected structures	
Income Restoration Measures				
Loss of crops and income	All APs who loose crops	Grant of Kina 100 to purchase seeds and planting material for 2 consecutive seasons Participation in agricultural training course conducted by an agricultural technician 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. A block sum of Kina 50,000 is allocated
Loss of trees	All APs who loose trees	1,200 poly-plant trees to be distributed among all APs for planting in their gardens. 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 advice APs on establishment / management of small-scale business. Two subsequent follow-up visits to assist / monitor business development. The total amount for this activity is 50,000 Kina	APs are given an opportunity to enhance their livelihoods that may be lost by resettlement	
Subproject affected people	Members of affected tribes, clans and sub-clans.	Construction of bus bays with road vending stalls	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.
		Construction of waiting sheds with temporary storage areas in strategically located junctions	Provision for additional household income	Part of the conditions in the procurement process for contractors
		Priority for paid work for civil works and/or ongoing maintenance for sub-project road, assuming qualifications to do the work.	Creation of livelihood opportunities	Part of the conditions in the procurement process for contractors
Rehabilitation Allowances				
Shifting back	Owners of	A dismantling/refix allowance	Restoration of	The allowances for

Type of Impact	Entitled Person	Entitlement	Expected Results	Implementation
of Semi-permanent and temporary structures	structures	of Kina 500, shifting allowance of Kina 150 (business) and Kina 100 (residential house) and handling/transport cost of Kina 100 for owners of each affected house/business. Business owners will receive Kina 250 per day to compensate for lost business revenues while shifting the structure to a location outside the area designated for the road. Owners of relocated houses will be given Kina 100 per day of temporary accommodation allowance per HH for a maximum period of 2 weeks until fixing the house in new location.	livelihood /economic activities.	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 150 per business, Transport allowance of Kina 100 per business; Business disruption allowance of Kina 250 per day for a maximum period of 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 shifting allowance of Kina 100 per house to cover the costs of removal of possession, storage and back to new house, paid in cash. Temporary accommodation grant of Kina 100 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 affected people	Members of affected tribes, clans and sub-clans.	Contractor specifications for provision of HIV/AIDS awareness and prevention programs in construction camps and surrounding communities Extensive community relations and participation program involving women linked to	Poverty reduction measure and social development	

Type of Impact	Entitled Person	Entitlement	Expected Results	Implementation
		different aspects of sub-project preparation and implementation Long-term participatory social monitoring study to track benefits among different road user groups		
Unforeseen Impacts	Unforeseen impacts will be documented and mitigated based on the principles agreed in this RP and ADB SPS.			

213. 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.

10. Eligibility for Compensation and Rehabilitation Assistance

214. 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. August 1, 2015 will be considered as sub-project displaced persons (DPs). DPs entitled to compensation or at least rehabilitation under the sub-project are;

- (i) All Owners of crops and plants,
- (ii) All Owners of houses, buildings (trade stores, etc.), crops, plants, trees or other objects attached to the land irrespective of their land occupancy status; and
- (iii) All DPs losing business, income, and salaries irrespective of their land occupancy status.

215. Compensation eligibility will be limited by a cut-off date set for this sub-project as of August 1, 2015 wherein the resettlement impact assessment was carried out and completed. All DPs who settle in affected areas after this date and who cannot prove that they are displaced users of affected plots will not be eligible for compensation. DOW has informed local communities regarding this cut-off date through the provincial, district and local wards and through the relevant local government agencies.

216. 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.

11. Payment of Compensation

217. 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.

218. 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.

12. Coordination of Resettlement Activities with Civil Works

219. 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.

IX. RESETTLEMENT BUDGET AND FINANCING PLAN

A. Sources of Funding for Resettlement and Compensation

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

221. In the case of designated national roads such as Pangia–Wiru Loop 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.

222. 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

223. 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 Pangia–Wiru Loop road. 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. Costs of Different Affected Assets

224. There are 18 affected assets in the sub-project road. Out of this total, 14 are houses (made of materials such as leaves, bamboo, straw) and 2 made of a mixture of both nondurable and durable materials. The total area of these 18 structures is 296.44 sqm. The rates reflect the current prices of materials, labor and other costs. The total amount of compensation for the affected 18 assets is 51,413.32Kina. The details are shown in the following Table 17: Replacement Cost of Different Structures.

TABLE 20: REPLACEMENT COST OF DIFFERENT STRUCTURES

Structure	Unit	Area	Rate	Amount
Houses built by non-durable materials	14	256.8	138/sqm	35,438.40
Semi-Permanent houses	2	39.64	403/sqm	15,974.92
Total	18	296.44		51,413.32
Semi-permanent building	2	14.64sqm	403/Sqm	
Grave				
Marked	1	Gravesite	1,330	1,330.00
Unmarked	3	Gravesite	1,130	3,390.00
Total	4			4,720.00
Wooden Fence	2	10 meters	10/meter	100.00
Ceremonial Ground*	1	608sqm	1,700//ha	1,000.00
Grand Total				57,233.32

* The cost of independent monitoring is excluded as this activity is directly funded by ADB

225. There are four affected graves, one marked and 3 unmarked. The adopted rates were taken from the Valuers' General Rates of August 2013 plus additional grant equivalent to 1,600 kina per grave to defray costs of exhumation, coffin and re-burial of the dead.

226. There are two sections of wooden fences affected and rate adopted is the current rate if these fences will be built at present. The total amount is 100 kina.

227. There is a ceremonial ground cum basketball court with an approximate area of 608 sqm that will be affected by the sub-project. The Valuers' general rate is 1,700/hectare. Since, there are some minor facilities within the ceremonial area that will also be affected; the total value of the ceremonial ground is pegged at 1,000 kina.

2. Cost of Ceremony

228. The exhumation and reburial of the dead people are conducted after performing rituals according to customs of tribesmen in the sub-project area. The rituals for relocation of graves are conducted by family members in the presence of their tribal chiefs and clan members. The ritual itself involves prayers, slaughtering a pig, place remains in a new coffin, the transportation of remains and reburial. The affected family confirmed that a ritual is not required to relocate the ceremonial ground. The cost for ceremony for each grave relocation is estimated as Kina 1,600 consisting of 1 pig (each kina 1,000), coffin (Kina 500) and transport cost (Kina 100).

229. Discussions with affected house owners reveal their custom to conduct a ritual after building a new house. This involves sacrifice a pig, invite Pastor to bless the house and partake a meal. The ceremony is conducted on the day of moving into the new house. The RP makes provisions for this ceremony. A grant of Kina 500 is provided for each house and trade store owner. The total amount allocated for the ceremonies is 15,400.00 Kina.

3. Cost of Crops and Trees

230. There are 22,098 of crops and trees in different stages of development and different categories based on the Valuers' General Schedule of Compensation (2013) that will be

affected by the sub-project road. The total amount of compensation for the affected crops and trees is 87, 847.65 kina. The details are shown in Table 18: Compensation Costs for Crops and Trees.

TABLE 21: COMPENSATION COSTS FOR CROPS AND TREES

Tree/Plant Category	Unit	Amount
Coffee	10,435	36,853.50
Category B (garden plants)	5,500	35,133.90
Category C (economic plants)	3,836	7,715.40
Category C2 (shade trees)	1,050	1,531.50
Category C3 (industrial plants)	370	2,120.05
Trees	907	4,493.30
Total	22,098	87,847.65

4. Costs of Income and Livelihoods Restoration Measures

231. The income and livelihood restoration measures for APs are the free issue of seeds and planting materials, 2 visits to the sub-project by an agricultural technician to train AHs on improved agricultural practices, cost of tree seedlings, visit by a forest technician and business training followed by assistance to develop some businesses. The cost estimate for above measures is presented in Table 22.

TABLE 22: COSTS OF INCOME AND LIVELIHOODS RESTORATION MEASURES

Item	Unit	Rate	Total Cost (Kina)
Seeds and planting material	AHs	Kina 52 x50 x 2	5,200.00
Tree seedlings	1 seedlings	Kina 2 per unit for 52 AHs, inclusive of transport	2,080.00
Agricultural technician visit (includes supplies for demonstrations)	visits	Block sum	10,000.00
Business training advisor (includes supplies and follow up)	Several visits	Block sum	50,000.00
Visit by forest technician	visits	Kina 5,000 per visit	10,000.00
Total			77,280.00

5. Cost of Other Measures

232. As part of the income restoration measures, 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.

233. 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.

234. 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 23: COSTS OF OTHER MEASURES

Income Restoration Measures	Unit	Rate	Amount
Bus Bays	3	25,500.00	76,500.00
Waiting Sheds	3	20,000.00	60,000.00
Total			136,500.00

6. Costs of Rehabilitation Allowances

235. There are 16 residential houses and two trade stores that will be affected and each owner is entitled to a shifting allowance of 150 Kina for trade store and Kina 100 for a house. The total compensation amount is 1,900 kina.

236. The owners of same structures will have to be relocated from their existing locations. They will build their new houses farther inside from the road where each is eligible for transport allowance of 100 kina per household and 150 Kina per business. The total amount is 1,900 kina as moving (transport) allowances. The details are shown in the following Table.

TABLE 24: COSTS OF REHABILITATION ASSISTANCE

Type of Assistance	No of Units	Rate	Amount
Shifting (possessions moving+storage) Allowance	16 Houses	100	1,600.00
Trade store Shifting Allowance	2	150	300.00
Transport Allowance	16 Houses	100	1,600.00
Transport Allowance	2 Trade Stores	150	300.00
Temporary accommodation	16 APHs	K 100/day for 14 days	22,400.00
Business loss compensation	2	Kina 250 per day for 2 weeks	7,000.00
Total			33,200.00

237. Out of the 56 displaced households, two are elderly headed households (65 and above); 5 households are headed by women; 2 households are physically handicapped. In addition, there are 15 households earning a monthly income below 130 kina a month, the poverty threshold in PNG. Each household will receive a vulnerability allowance equivalent to 240 kina, one-time assistance. In addition to the vulnerable allowance of 240 Kina per household, 8 HHs will receive the vulnerability allowance on multi-counts. The total amount for vulnerable allowances accounted for 6,480 kina. The details are shown in the following.

TABLE 25: BREAKDOWN OF VULNERABLE ALLOWANCES

Vulnerability Allowances	Not Entitled	Entitled	Percentage	Rate	Amount
Elderly headed households (65 yrs & Above)	54	2	3.57%	240.00	480.00
Women-headed household	51	5	8.93%	240.00	1,200.00
Physically Disabled HH Heads	54	2	3.57%	240.00	480.00
Households below poverty line (Below K130/HH/Mo)	41	15	26.79%	240.00	3,600.00
Multiple Vulnerability		3	8	240.00	720.00
Total					6,480.00

Vulnerability Allowances	Not Entitled	Entitled	Percentage	Rate	Amount
Elderly headed households (65 yrs & Above)	54	2	3.57%	240.00	480.00
Women-headed household	51	5	8.93%	240.00	1,200.00
Physically Disabled HH Heads	54	2	3.57%	240.00	480.00
Households below poverty line (Below K130/HH/Mo)	41	15	26.79%	240.00	3,600.00
Multiple Vulnerability		3	8	240.00	720.00
Total					6,480.00

Vulnerability Allowances	Not Entitled	Entitled	Percentage	Rate	Amount
Elderly headed households (65 yrs & Above)	54	2	3.57%	240.00	480.00
Women-headed household	51	5	8.93%	240.00	1,200.00
Physically Disabled HH Heads	54	2	3.57%	240.00	480.00
Households below poverty line (Below K130/HH/Mo)	41	15	26.79%	240.00	3,600.00
Multiple Vulnerability		3	8	240.00	720.00
Total					6,480.00

7. Resettlement Budget

238. The total cost of this resettlement plan for the Pangia–Wiru Loop road sub-project amounts to 600,214.40 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 23.

TABLE 26: SUMMARY OF COST ESTIMATES AND RP BUDGET

Resettlement Cost Category	Amount (Kina)
Compensation for Structures	57,233.32
Provisions for Crops and Trees	87,847.65
Livelihoods and Income Restoration	77,280.00
Community-friendly design Measures	136,500.00
Rehabilitation Allowances	39,680.00
Ceremonies	15,400.00
Sub-Total A	413,941.00
Physical Contingency (20%)	82,788.19
Price Contingency (10%)	41,394.10
Sub-Total B	124,182.30
Administrative Expense (15%) Sub-total C	62,091.15
Grand Total* (A+B+C)	600,214.40

*The cost of independent monitoring is excluded as this activity is directly funded by ADB.
Source: Design Consultant's Computation

239. 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

240. As executing agency (EA) for the HRRIP, Department of Works (DOW) has the overall responsibility to manage the planning, implementation and monitoring related to the execution of this resettlement plan that includes acquiring use rights for additional land as well as compensation for damages on project-affected assets (See Annex 6 Organizational Arrangements).

241. The EA is also responsible for recruitment of IMO, consultants and staff to work in this sub-project as well as for the submission of reports to ADB.

B. Highlands Road Management Group

242. The Highlands Road Management 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

243. The Environmental and Social Safeguards Unit (ESSU) of DOW has been expanded through the provision of an International Social Specialist (ISS). Arrangements are being made to recruit a National Social Specialist (NSS) through government resources. This staff is providing support to the HRMG in ensuring compliance with social safeguards in project implementation.

244. The ISS is conducting training of the 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; (iv) resettlement monitoring; and, (v) 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.

245. 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

246. 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.
- V. 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

247. 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.

248. 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

249. 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 Executing Agency (EA) to (i) 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.

250. 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.

251. 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.

XI. IMPLEMENTATION SCHEDULE

252. 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 24: RP Implementation Schedule (2015-16).

TABLE 27: RP IMPLEMENTATION SCHEDULE (2015-16)

Main Resettlement Plan Activities	Responsibility	Dec	Jan	Feb	Mar	Apr
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 resettlement	DOW/National Executive Council					
Updating resettlement plan	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					
Implementation of income/livelihoods restoration measures						
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

253. RP activities in the Pangia–Wiru Loop 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 assigned to the independent Monitoring Organization (IMO) already recruited by DOW, and approved by ADB.

A. Internal Monitoring

254. The HRMG assisted by the ESSU will monitor all activities associated with resettlement, payment of compensation to DPs and the implementation of income and livelihoods restoration measures. 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) grievance management including documentation; (v) public consultation and outcome documentation; (vi) implementation of income / livelihoods restoration measures; (v) AP adaptation in the host area; and, (iv) requirements for remedial actions.

255. During the implementation of the RP, the HRMG will prepare semi-annual safeguard monitoring reports and submit these reports to DOW/ESSU for review and transmission to ADB in addition to regular quarterly progress reports as part of project performance monitoring. HRMG will also prepare a sub-project resettlement completion report for review by DOQ/ESSU and submission to ADB when compensation has been paid and request approval to proceed with civil works.

B. External Monitoring

256. The external monitoring will be conducted by the independent monitoring organization (IMO) already recruited by DOW. The external monitoring will conduct an independent assessment of the implementation of resettlement plan, corrective measures that have been adopted by EA/IA, livelihoods restoration including whether DPs are able to restore, and preferably improve, their pre-project living standards, incomes, and productive capacity.

257. The accepted Terms of Reference for the IMO is found in Annex 7.

258. 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

1. 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.

2. 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 re-production.

3. 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

1. 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, 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.
2. 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.
3. 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.
4. 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.
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 councilors 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.
6. 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 Infra-structure Act of 2010.

Annex 3: Salient Provisions of the 1996 Land Act

1. 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.
2. 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).
3. 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.
4. 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).
5. 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).
6. 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).
7. 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

1. 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.
2. 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.
3. 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.
4. 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.

A. Customary Practices Regarding Compensation

5. 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.
6. 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.
7. 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.

8. 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 ex-ample, 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,

9. 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.

10. 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.

11. 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.

12. 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 ab-horrent.

13. 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.



P O Box 1108
BOROKO, NCD
Papua New Guinea

Annex 5: Memorandum of Agreement DEPARTMENT OF WORKS



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 Kauwo 1, Kauwo 2 and Kauwo 3, East Pangia Rural LLG, District of Ialibu/Pangia, Southern Highlands Province 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 Pangia – Wiru Loop 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 Pangia – Wiru Loop 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 Pangia to Wiru Loop as a pre-selected road for the HRRIP. This road section has a length of around 35.815 km and will start at chainage 00+000 located at East Pangia Rural LLG and will end at chainage 35+815 at Wiru Rural LLG, both Located in Ialibu/Pangia District, Southern Highlands Province.

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: Pangia - Wiru Loop
 Chainage: From 0+000 to 3+400
 Wards: Kauwo 1, Kauwo 2 and Kauwo 3
 District/Province: Ialibu/Pangia, SHP

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 1.614 hectares,

Existing Road	Proposed Road
Carriageway 3.50 meters Formation width 3.80 meters Total width 4.22 meters, to outside of drainage structures Total area 1.953 hectares of existing road within the customary land.	Carriageway 8.00 meters Formation width 9.00 meters Total width 17.31 meters of construction limits Total area 3.567 hectares of proposed road
Difference of area between existing road and proposed road: 1.614 hectares (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.¹We will harvest our affected trees/crops before the road construction and will use the produce for household needs or sell them 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.

¹ 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.²
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.

²All 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.


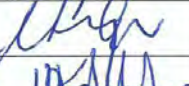
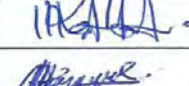
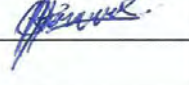
IN WITNESS WHEREOF, we have hereunto affixed our signatures this ____ day of _____ 2015.

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



David Wereh
Secretary, Department of Works


**PANGIA – WIRU LOOP ROAD PROJECT
EAST PANGIA RURAL LOCAL LEVEL GOVERNMENT COUNCIL**


No	Name Of Leader & Status:	Council Ward:	Village:	Clan & Sub Clan:	Signature:	Date:
1	CHARLES ANGEUA	KAUWO 1	KALI	MUNI		29/6/15
2	COLLIN PUNUPO	KAUWO 2	KAUWO	PUPU		29/6/15
3	CARTON PUNUPO	KAUWO 3	ANGE	PAIYOMA		29/6/15
4	KAPIA	THOMAS	KG MANGE	1, 2 & 3		29/6/15
5						
6						
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Witness:

I, NIXON KANEMA, 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 ME in the WIRU 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 PANGIA this 29TH day of JUNE, 2015

Signature:  Designation: DIST AFFAIRS OFF





Third Party Verifier of the HRRIP

Third Party Verification Letter

We provide the independent verification of the Memorandum of Agreement (MOA) signed on 29/6/15 (insert date) between the Government of PNG represented by the Department of Works and landowners clans of EAST PANGIA LOCAL LEVEL GOVERNMENT (insert address of landowners) on the use of 1.614 ha land for widening of the Highlands Regions Roads Improvement and Investment Program (HRRIP) that;

- (i) the landowners support the upgrading and widening of the road and have agreed to provide 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 use of land, and;
- (iii) terms and conditions of the MOA have been explained to and understood and agreed to by the Landowners. The verification is based on our independent;
 - Review of the documentation on the identification of affected landowners and the consultation and negotiation process leading up to the signing of the MOA;
 - Validation that consultations with the landowners have been undertaken and that they were provided with relevant information as per the HRRIP Resettlement Framework (RF);
 - Validation that the agreement is voluntary (free of coercion) and that the landowners have fully understood and agreed to the MOA terms and conditions;
 - Validation that the landowner representatives signing the MOA duly represent the landowners;
 - Validation that the contribution of the land to the project will not cause undue hardship to any third party or individuals;
 - Validation 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);
 - Validation that compensation for loss of assets on the land included in the RP represents a fair and reasonable replacement cost based on market prices; and
 - Validation that the MOA is in compliance with applicable laws of PNG, including _____ (specify applicable law) as well as safeguard requirements stipulated in the RF.

The verified copies of the MOAs are attached herewith.

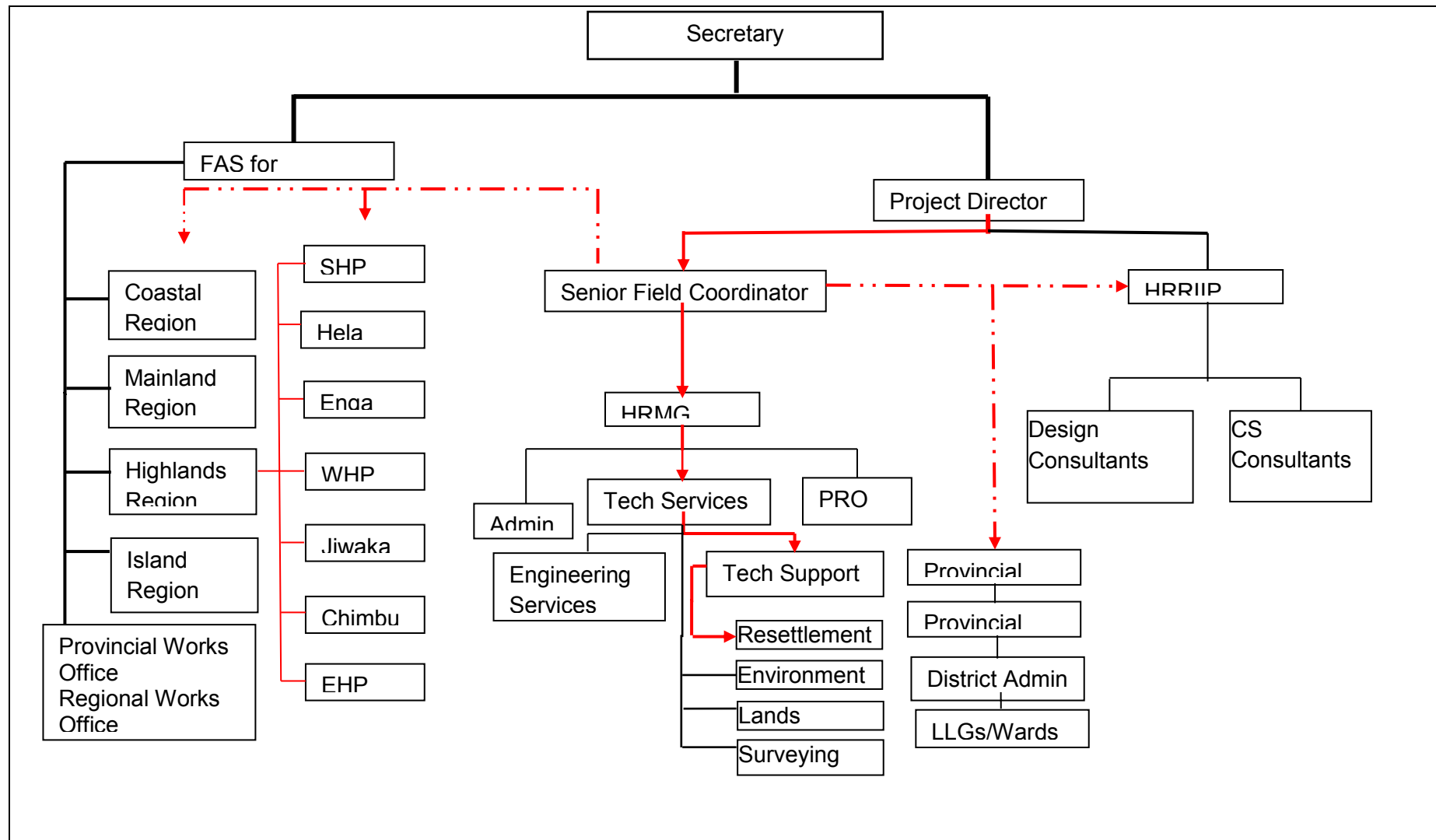
Signature of Verified Officer: _____

Date: 29/6/2015

Name of NGO or Magistrate: _____

Official



Annex 6: Organizational Arrangements

ORGANIZATIONAL STRUCTURE FOR RP IMPLEMENTATION OF HRRIP

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 re-settlement 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 depends 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) Coordination 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 sub-projects, 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 is to be pro-vided 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.

6. 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:

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

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	Issues to address include, but not limited to: Progress of work undertaken Proposed work including recommendations for the attention of the client Deviations, if any, from the provisions in RP and an explanation thereof 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 Progress of the follow-up of problems and issues identified in the previous report	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	Report to cover subprojects that are in various stages of construction	3 individual reports

	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.		
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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

15 June 2015

Willame Catholic Church Parish Hall Km. 31

	NAME	GENDER	DESIGNATION
1	Jonathan John	M	Chair PC and Youth Coordinator
2	Nixon Kanema	M	Project Officer – South Wiru LLG
3	Bob Tana	M	PRO – Wild Cat, Contractor
4	Jack Angopa	M	Pupi Ward CR
5	Luke Kipoie	M	PupiVillage Representative
6	Justin Apuka	M	Timbari Ward 2 Representative
7	Taleka Kupa	M	Timbari Ward 1 Representative
8	Philip Yawio	M	Community Representative
9	Mark Tua	M	Community Representative

16 June 2015

Maupini Village Km 18

	NAME	GENDER	DESIGNATION
1	Albert Koya	M	Church/Community Representative
2	Leo David	M	School Representative
3	Justin	M	Wala Ward CR
4	Kenneth	M	Timbari 1 and 2 Representative
5	Joyce Maip	F	Women Representative
6	Susan Kiopa	F	Subsistence Farmer
7	Ruth Pais	F	Subsistence Farmer
8	Wau Tindipa	M	Coffee Farmer
9	Tepi Preka	M	Councilor
10	Lucy Amos	F	Councilor
11	Eric Yondi	M	Councilor
12	Amama Kopolo	M	Subsistence Farmer
13	Taoke Leke	M	Subsistence Farmer

16 June 2015

Kerapali Ward

	NAME	GENDER	DESIGNATION
1	Dicksin Makal	M	Census Officer
2	Micheal Taisa	M	Subsistence farmer
3	Luke Yoke	M	Chicken farmer
4	Mark Oru	M	Truck driver
5	Potes Makire	M	Peace/ Good Order coordinator
6	Michael Dura	M	Community leader
7	Makal Warea	M	Teacher
8	Rumi Kepiya	M	Subsistence Farmer
9	Demo Bombea	M	Subsistence farmer
10	Nakanol Guli	M	Community elder
11	Rangula Akena	M	Community Leader
12	Aly Akena	M	Community Leader
13	Telek Phlip	M	Subsistence farmer
14	Junior Beri	M	Student

23 July 2015

Weriko Ward

	NAME	GENDER	DESIGNATION
1	Siem Yana	M	Chicken farmer
2	James Yoke	M	Betel nut seller
3	Christopher Oru	M	Student
4	Louise Kopu	M	Pastor
5	Moses Repo	M	Mechanic
6	Mathew Lubirindi	M	Business man
7	Koke Rama	M	Subsistence farmer
8	Maiya Philip	M	Tyre service hand
9	Joas Rungula	M	Student
10	Issac Henry	M	Student
11	Peter Bokolu	M	Community elder
12	Winterford Gabriel	M	Student

24 July 2015

Kulawe Ward

	NAME	GENDER	DESIGNATION
1	Nagapu Puluma	M	Sub-Farmer
2	Kita Busu	M	Sub-Farmer
3	Rose Anton	M	Teacher
4	Erimanda Kurupu	F	Housewife
5	Benjamin Yarepeya	M	Student
6	Stephen Rambuli	M	Student
7	Koni Molo	M	Youth leader
8	Mark Busu	M	Church leader
9	Patama Mark	M	Housewife
10	Luk Rambuai	M	Student
11	Mankel Isopu	M	Student

29 July 2015

Kalane Ward

	NAME	GENDER	DESIGNATION
1	Andawe Payambo	M	LLG councilor
2	Mala Pombo	M	Village court magistrate
3	Duku Kalipa	M	Village court magistrate
4	Issac Samba	M	Community leader
5	Wamo Pasalo	M	Sub- Farmer
6	Walea Yatu	M	Sub- Farmer
7	Emos Pasalo	M	Pastor
8	Philipi Kunipa	M	Youth leader
9	Palua Yamba	M	Sub- Farmer
13	Lyneeth Jacob	F	Housewife
14	Yawame Turi	F	Housewife
15	David Pulua	M	Student
16	Roselyne Moke	F	Housewife
17	Grace Sula	F	Housewife
18	Murina Yama	M	Sub-Farmer



Public consultation being conducted in Km 26. Member of the project team explaining the resettlement policies of HRRIP and answering inquiries from stakeholders about the project and its compensation policies



Picture of ceremonial ground in Km 29+120 located in Pupi ward and owned by Payari Clan under the Wirili Tribe. The existing road carriage actually passes through this ceremonial ground and the Clan/Tribe is amenable to relocate this affected ceremonial ground.



Photo of a public consultation being conducted under some trees in Kerapali ward near the Tunda Junction. Participants are listening intently on the exchange of opinions and concerns about the proposed sub-project road.



Group photo of some of the participants of a concluded public consultation in Kopela area in Kalane ward. Notice that children with their older siblings and mothers attend these gatherings.



Group photo of some of the participants of a public consultation meeting conducted in Wil-liame Village near the end of the sub-project road. This was held inside a church and residents were active in asking questions about the HRRIP policies.



Group photo of participants in a public consultation Maupini Junction. The participants all agreed on the need to upgrade and seal the road and promise to cooperate for the expeditious completion of the sub-project road.