

WEST POMIO COMMUNITY DAMAGE ASSESSMENT



Community Assessment of the Value of Damages for Pomata, Ralopal, and Nakiura Special Agriculture Business Leases, West Pomio, Papua New Guinea

Compiled by the affected communities of Atu, Bairaman, Gugulena, Kaiton, Lau, Malmaltalie, Manginuna, Mauna, Meinge, Mu, Polo, Pomai, Porosalel, Puapal, Rano, Rovon, and Tontongpal.

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SUMMARY

This is an assessment of the damage suffered by communities in the West Pomio area of West New Britain as a result of three Special Agricultural Business Leases issued over their customary land by the Department of Lands and subsequent logging and oil palm planting.

The assessment has been compiled by the affected communities using a framework developed by Dr. Tim Anderson of the University of Sydney, published in 2017.¹

The framework provides for an economic evaluation of the damage caused by activities carried out under a Special Agricultural Business Leases (SABL) and consequent compensation to which the affected customary landholders might be entitled.

The evaluation involves the calculation of both direct commercial loss and an economic equivalent value loss suffered as the result of the wrongful appropriation of customary land.

The total assessment comprises two elements. Firstly, the actual losses suffered from 2011 to 2017 and, secondly, the future loss that will accrue from 2018 through to 2110, if the leases are not cancelled and the land not returned to the customary landowners.

The total 99-year time-period to 2110 is the length of the term of the State lease issued over the customary land. The sub-leases [SABLs] have an initial term of 60 years but can be renewed.

The total loss is assessed at K2,402,362,483

This figure comprises current losses, assessed at K1,137,854,791, and the future loss of K1,264,507,692.

If the total loss is divided by the number of hectares of customary land affected, 42,400, the total losses are equivalent to K56'659 per hectare.

The size of these assessment figures, over K 2.4 billion in total, provides a powerful reminder of the value of customary land to local communities and the damage that can be suffered when the State facilitates or encourages customary land alienation, often for ideological reasons or under other external pressure and with only superficial analysis or understanding of the impacts.

¹ Can be downloaded at <http://actnowpng.org/sites/default/files/publications/LAND%20COMP%20FRAMEWORK%20PAPER%202017.pdf>

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BACKGROUND

Over five million hectares of customary land was leased to corporations through 77 Special Agriculture and Business Leases (SABL) between about 2002 and 2011.

In some cases the leases were used to obtain Forest Clearance Authorities from the PNG Forest Authority to permit logging in the SABL areas. The government has been made aware through a Commission of Inquiry that reported in 2013, that the majority of these leases are unlawful, for a failure to follow proper process under the Land Act and in particular for a failure to ensure the free prior and informed consent of customary landowners.

Three of the Special Agriculture Businesses Leases cover the areas of Ralopal, 11,300 ha, 197C; Nakiura, 16,100 ha, 198C; and Pomata, 15,000 ha, 196C, in the West Pomio region of East New Britain. The total area under the three leases is 42,400 hectares.

The leases were issued in 2008 to three 'landowner' companies, Ralopal Investments Ltd, Nakiura Investments Ltd and Pomata Investments Ltd. Together with UnungSigite Investments Ltd, the companies formed an umbrella company, Memalo Holdings Ltd and subleased the land to Gilford Ltd, a subsidiary of the multi-national logging company Rimbunan Hijau.

The subleases cover the whole of the SABL area, meaning all the customary land within the lease boundaries could eventually be logged, planted with oil palm or given over to some other uses. Company directors have frequently mentioned that there will be a resettlement scheme to move all villages involved (e.g. plantation survey pegs run straight through Kaiton village). There are no known maps of the plantations and future settlement locations, and it is unclear where communities could be moved to. The Directors are not able to answer this question.

The average family size in the area covered by the three leases is 8 (father and mother and 6 children).

Although the situation for individual communities varies in the level of losses, in particular for rural production, the calculations are based on the average situation across all communities in the three SABL areas.

According to satellite image analysis by Face the Future, by the end of 2016, Gilford Ltd had cleared a total of 19,886 hectares of forest.

1. COMMERCIAL LOSS

1.1 Timber

The commercial timber loss can be calculated either from the value of the round logs removed in logging operations or the value of the sawn timber that would have been produced by the pre-existing community saw milling business that has now been put out of operation by the loss of the forest. The latter gives a slightly lower value, K292 million as against K301 million, however it does show the huge lost potential of a responsible forest management alternative with perpetual annual production levels.

Value of the round logs removed according to SGS data: 1,268,992 cubic metres to the end of 2016 at an average value of K237.42 per cubic metre = K301,284,081

Alternatively, we can calculate the value of lost production:

3,640 cubic metres per year (export) and 4,925 cubic metres per year (domestic sales) at an average price of K1,400 and K850 respectively = K9,282,250 per year (K55,693,500 2011-2016 and K292,825,957 annualised for 99 years at a 3% discount rate).

Details of sawn timber production levels

Based on the pre-existing FORCERT FSC Group

Certificate: certified portable sawmilling operations at rotation length of 20 years.

Total production forest area (lost) = total forest area cleared - 10% conservation area (FSC requirement) = 19,886 – 1,988 = 17,898ha

Annual production area = 17,898/20 = 895ha

Commercial volume/ha = 63.81m³

Average harvest/ha = 30% of commercial volume (FORCERT FSC Group Certification System) = 63.81m³X30% = 19.14m³/ha

Total round log harvest/yr = 895ha x 19.14m³/ha = 17,130m³

Total harvest/yr = 17,130m³ round log x 50% recovery rate = 8,565m³ sawn timber

FSC export 50% (A-grade) x 85% (export species % as per EFP/PNGFA inventories for Bairaman, Lau & Mauna + FORCERT-Woodage timber order) = 3,640m³





SHIP LOADING LOGS FOR EXPORT. ©GREENPEACE



OIL PALM NURSERY. ©GREENPEACE



FOREST CLEARANCE AND OIL PALM PLANTING. ©GLOBAL WITNESS

Local sales (all grades) = 8,565 (total sawn) – 3,640 (export sawn) = 4925m³

1.2 Carbon credits

Prior to the SABL leases being granted and logging commencing, the communities had been in the advanced stages of negotiating to obtain an income from their responsible forest management through

monetizing the carbon absorption services provided by their forest. This would have been done by calculating and selling the carbon credits resulting from safeguarding the forest from logging and clear felling. That income generating opportunity has now been lost.

The 19,886 hectares of forest that has been cleared stored 224.37 tonnes of carbon (tC) per hectare, or 823.43 tonnes of carbon dioxide equivalents (tCO₂e). These could have been sold as carbon credits with a notional value of K15 per tonne = K245,620,934

Under the contract being negotiated by the communities this value would have been received over a 30-year time period, so discounting at 3% gives a total present value of K160,475,948

The notional value is taken from the average annual price of tCO₂e for forest carbon credits on the voluntary market (State of the voluntary carbon markets for 2011 to 2016 - Forest Trends)

The tCO₂e/ha figure is based on the average tC/ha values obtained through third tier inventories, i.e. establishment and annual monitoring of 65 Permanent Sample Plots (PSPs) for Bairaman, Lau and Mauna forest area, stratified to reflect variances in forest types, in accordance with UNFCCC Best Practices Guidelines.

2. URBAN RENT FOREGONE

Not relevant to this claim.

3. RURAL PRODUCTION LOSS

Twenty-seven communities with 967 families and a total population of 7,736 (average 8 people per family)

3.1 Lost subsistence production

Value of lost subsistence production, based only on the local equivalent value of garden food and local housing costs for an average family of 6.

K29,200 per family based on food, housing costs, including medicines for family of 8; costs of garden food, store food, building materials and medicines in the area are basically double the prices in Kokopo, with for many medicines the need to travel to Kokopo.

The K29,200 was calculated by determining the local replacement costs of subsistence food production for a family, adding annual estimated costs for housing and medicines.

Existing garden areas, former garden areas and planned new garden areas have been affected by the operations, a loss of 50% of the overall garden area is estimated.

K29,200 per year multiplied for 967 families at 50% = 14,118,200 per year and K98,827,400 for seven years, 2011-2017.

For future years, a loss of 80% of garden areas is assumed as the sub leaseholder has the right to use the whole area for plantations, and has so far shown no intent to reserve sufficient suitable land for community gardening purposes.

Discounting the future loss of income over 92 years at a 3% interest rate, the figure is K703,339,625.

3.2 Lost market income

Value of lost income from garden production for local informal or formal markets, based on average incomes.

K1,040 (K20/day, 1 day/week, 52 weeks/yr mainly local village markets) / 20% of the families at any one time will market surplus produce (194 families).

With the estimated 50% loss of garden areas (see 3.1 above), a similar level of loss of garden produce sales is estimated.

50% of K1,040 per year for 194 families = K100,880 per year and K706,160 for seven years, 2011-2017.

For future years, with an expected loss of 80% of garden areas, a similar level of loss for garden produce sales is assumed.

Discounting the future loss of income over 92 years at a 3% interest rate, the figure is K5,025,633.

3.3 Lost export crop sales

Value of lost export crop sales.

Cocoa and kopra. All families, with average of 2 blocks of cacao per family (2ha) / Cacao wet bean sales approx. K3,120 and dry bean K6,400. Kopra is situated in old government plantations, not family



TARO GARDEN AT TAVOLO. ©FORCERT

blocks, hardly any kopra sold, so annual income from kopra per family thought to be negligible

There are an estimated total of 36 fermentaries in Ralopal, Pomata and Nakiura. This means an estimated 36 families sell dry beans, and the remaining 931 sell wet beans.

There is an estimated 50% loss of cacao blocks to date and, similar to the loss for garden areas, 80% loss is assumed in the future.

K3,120 per year for 931 families x 50% loss = K1,452,360 per year and K10,166,520 for seven years, 2011-2017.



A TYPICAL VILLAGE SCENE IN WEST POMIO. ©FÁBIO ERDOS/PANOS



TOBACCO LEAVES DRYING IN THE SUN. ©FORCERT

K6,400 per year for 36 families x 50% loss = K115,200 per year and K806,400 for seven years, 2011-2017.

Total loss for cacao bean sales 2011-2016 is K10,166,520 + K806,400 = K10,972,920

Future loss will be K2,508,096 per year if 80% of all blocks are lost

Discounting the future loss of income over 92 years at a 3% interest rate, the figure is K78,092,608

3.4 Other lost income

Other lost income, for example through loss or damage to typical small rural businesses such as chicken rearing and small stores.

3.4.1 Petrol sales.

Previously 1-3 petrol salesmen per community, depending on the size of the village. Now at the most one per village still selling occasionally, but at a very low level of about 20% of original turn-over. Most people are getting their fuel from the company.

Original average 2 petrol sales persons at 100% = 200 now down to 1 at 20% = 20. Loss is 90%

46 sellers recorded, losing 90% of a previous K1,500 per year profit = K62,100 per year and K434,700 for seven years, 2011-2017.

Discounting the future loss of income over 92 years at a 3% interest rate, the figure is K1,933,558



PLANTING OF CASH CROPS IS FORBIDDEN IN THE PLANTATION AREAS. ©ACT NOW!

4. SOCIAL VALUE LOST

Social costs, in particular the loss of future employment and social security facilities, provided by 'reserve' land. For example, if four related families sought assistance within a related community at a time of hardship, that could translate into subsistence food and housing values and a certain number of employment positions or equivalents, for example in the form of garden produce sellers. 'Unused' land can rapidly add value.

4.1 Employment sink

One in ten families losing security for a paid wage of K120 per week = 97 families losing K6,000 per year = K582,000 per year and K4,074,000 for seven years, 2011-2017.

Discounting the future loss of income over 92 years at a 3% interest rate, the figure is K18,121,275.



A TYPICAL FERMENTARY USED FOR DRYING COCOA, MAUNA VILLAGE. ©FORCERT

4.2 Subsistence security sink

One in ten families losing security for a subsistence food and other products worth K29,200 per year (see 3.1 above) = 97 families losing K29,200 per year = K2,832,400 per year and K19,826,800 for seven years, 2011-2017.

Discounting the future loss of income over 92 years at a 3% interest rate, the figure is K88,190,206

4.3 Cultural, recreational value

Cultural values lost are immeasurable, and can only be captured for a minor part in monetary value through the needs to purchase items and materials for customary practices, which is estimated at K2,000 /household/year.

Additional huge loss is the destruction of cultural sacred sites and other cultural areas, meaning the loss of connection of the people with their ancestors and the loss of the aesthetic values of the forest and all its wildlife.

K2,000 per family per year = K1,934,000 per year and K13,538,000 for seven years, 2011-2017.

Discounting the future loss of income over 92 years at a 3% interest rate, the figure is K60,217,433

5. ECOLOGICAL GOODS AND SERVICES

A combined value for loss or damage to ecological goods and services, and a space of actual value in costs and labour for remediation of ecological damage.

5.1 Loss of Ecological Goods and Services (EGS)

100% forest destruction, leading to severe impact on soil and water ways, meaning all EGS are lost

A\$212 per hectare per year = K500 per hectare for 19,886 hectares = K9,943,000 per year and K69,601,000 for seven years, 2011-2017.

Discounting the future loss of income over 92 years at a 3% interest rate, the figure is K309,587,354.

5.2 Remediation costs

The remediation costs are the actual labour and other costs per year to replant / restore the site. So maybe some clearing of debris/ vines etc in the first instance, some new planting and then weeding until the trees get to a reasonable size.

Based on AUD30,000/ha for restoration of mixed tropical rainforest (Catterall, C.P. and Kanowski, J. (2010) Rainforest restoration: approaches, costs and biodiversity outcomes. Reef & Rainforest Research Centre Ltd, Cairns.), adjusted for the PNG situation by assuming that 75% of total costs will be labour costs and 25% will be non-labour costs:

75% labour costs, meaning $K72,740 \times 0.75 = K54,555 / K1,574$ (Australian minimum wage/week) = 34.66 weeks x K140 (PNG minimum wage/week) = K4,852

25% non-labour costs, meaning $K72,740 \times 0.25 = K18,185$ will be made up of nursery construction costs, poly bags, transport and soil & compost (necessary due to seriously eroded fragile soils on limestone).

The non-labour costs will be at least equivalent or more likely even higher in PNG, compared to Australia.

Total figure is then $K4,852 + (K72,740 \times 0.25 = 18,185) = K23,037/ha$

K23,037 per hectare for 19,886 hectares = K458,113,762 in total



6. SUMMARY TABLES

The columns for this table cite (1) the units in which calculations are made, such as cubic metres of timber, families fed by garden production, etc. Column (2) gives a notional value for each sub-category, Column (3) refers to the percentage loss or damage. It may be the case that there is only partial, say 25% or 50% damage. Column (4) lists the units affected by loss or damage, column (5) lists the number of years for which the damage occurs and (6) the final monetary sum in Kina.

Element of value	1. Units (ha, etc)	2. Notional unit value	3. % loss	4. Number of units	5. Over x years	6. Kina sum
1. Commercial loss						
1.1. Timber loss (m3)	m3	237.42	100	1,268,992	-	301,284,081
1.2. Carbon credit loss	tCO2e/ha	15	100	823.43	-	160,475,948
2. Urban rent forgone	K	0	0	0	7	0
3. Rural production loss						
3.1. Subsistence production	families	29200	50	967	7	98,827,400
3.2. Informal market production	sellers	1040	50	194	7	706,160
3.3. Export crop production	traders	3,120	50	931	7	10,166,520
	traders	6,400	50	36	7	806,400
3.4. Other small business	petrol sales	1,500	90	46	7	434,700
4. Social value lost						
4.1. Employment sink (wages)	workers	6,000	100	97	7	4,074,000
4.2. Food security sink (subsistence)	families	29,200	100	97	7	19,826,800
4.3. Cultural, recreational value	families	2,000	100	967	7	13,538,000
5. Ecological goods and services						
5.1. Loss of EGS (per ha)	EGS/ha/yr.	K 500	100	19,886	7	69,601,000
5.2. Remediation costs	K/ha	K23,037	100	19,886	-	458,113,782
TOTAL						1,137,854,791

Element of value	1. Units (ha, etc)	2. Notional unit value	3. % loss	4. Number of units	5. Over x years	6. Kina sum discounted
1. Commercial loss						
1.1 Timber loss (m3)	m3	0	0	0	93	0
1.2. Carbon credit loss	tCO2e/ha	0	0	0	93	0
2. Urban rent forgone	K	0	0	0	93	0
3. Rural production loss						
3:1 Subsistence production	families	29200	100	967	93	703,339,625
3.2. Informal market production	sellers	1040	100	194	93	5,025,633
3.3. Export crop production	traders	3,135,120	100	1	93	78,092,608
3.4. Other small business	petrol sales	1,500	90	46	93	1,933,558
4. Social value lost						
4.1. Employment sink (wages)	workers	6,000	100	97	93	18,121,275
4.2 Food security sink (subsistence)	families	29,200	100	97	93	88,190,206
4.3 Cultural, recreational value	families	2,000	100	967	93	60,217,433
5. Ecological goods and services						
5.1. Loss of EGS (per ha)	EGS/ha/yr	K 500	100	19,886	93	309,587,354
5.2. Remediation costs	K/ha	K23,037	0	0	93	0
TOTAL						1,264,507,692

*assumes no further logging but loss of whole of the lease area to plantation

Element of loss	Kina value
Economic losses 2011-2017 (Table 1 above)	1,137,854,791
Future economic losses 2018-2110 (Table 2 above)	1,264,507,692
TOTAL	2,402,362,483

