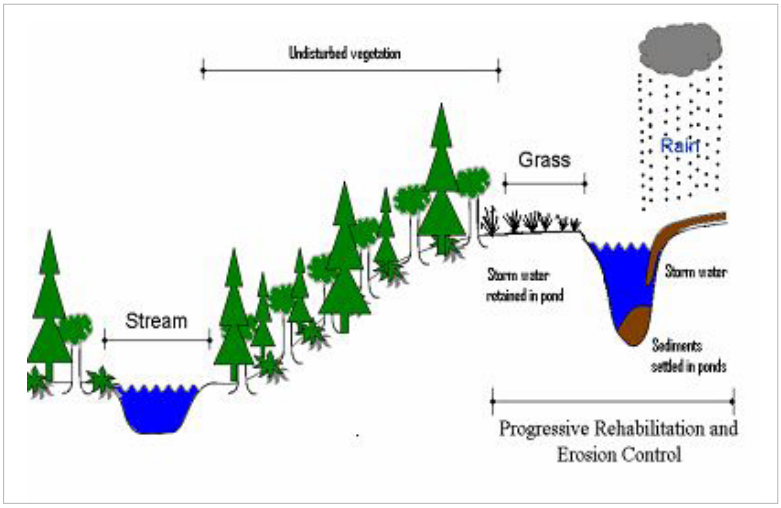
Ramu NIckel Project Land Rehabilitation Trail Test work done well

Land Rehabilitation & Erosion Control Program

RNML is committed to appropriate land rehabilitation and decommissioning, guided by sound environmental protection and sustainable land use management objectives in all its construction to operation activities. RNML has developed a systematic land rehabilitation program to carefully manage the Project environmental aspects from a long term perspective, while making them transparent to the impact communities.

By introducing the rehabilitation program with good management practices as early as during the construction phase, we achieve some good progress in re-vegetation and erosion control. This ensures that the Project is in compliance to the requirement of the Project Environmental Permit, and also shows that RNML is working actively in response to recommendations in the Ramu Nickel Mine Environmental Plan to curtail adverse environmental impacts from the construction activities.



Strategy for sediment management

Erosion is a critical environmental issue which requires more effort to minimize the impacts on the surrounding environment. Sediment collection ponds are constructed to collect storm water and divert unmanaged surface waters from entering water channels.

Re-vegetation activities have began on disturbed soil areas. To enhance the efficiency of vegetation to trap sediments, buffer zones will be established on all waterways, cultural significant areas and other protected areas. This will also protect water resource and the surrounding ecosystems.

Vetiver is being used for slope stabilization and soil erosion control. The grass is planted on the contour as an anti-erosion measure. Contour planting techniques are mostly used on hedges to trap soil and are found to be very effective in soil and moisture.

The stiff stems of the thick hedge slow down the movement of run-off water and spread it out, trapping silt behind the hedge. This allows more water to be absorbed into the soil, thus reducing run-off and erosion.

Picture 2: Stiff stems of sprouting Vetiver grass

Picture 1: Tube stocks of Vetiver grasses on nursery area for future tillering

To propagate the slips are tilled and kept in moist bed of approximately 150-200 mm depth. When two slips sprout up they are ready for planting, which are then removed from the moist bed (exposing their newly established roots) to the planting sites.

Picture 3:
Tillers on moist bed for sprouting

Seeds, seedlings and cuttings of native plants are collected from the nearby bushes and transplanted on prepared soil packed polythene tubes. Orchids of all types are collected and prepared for accommodation beautification.

Picture 4: Native Pine tree(Araucaria sp)seedling transplants

Re-vegetation efforts

According to the Ramu Nickel Environmental Plan, RNML is intensively concentrating on controlling storm water events and soil erosion during the construction phase.

Overburden areas and slopes are re-vegetated with past creeping grasses and past growing native pioneer plants. Vetiver grass is mostly used to stabilize crest slips and storm water erosion.

Plants raised in the nursery are planted on cleared forest areas to protect the ecosystem, the water resources and sustain the environment in an acceptable condition suitable for living.

Picture 5: Contour planting of Vetiver at slope side

Picture 6: Planting tree seedlings along Ramu River Bridge to prevent river bank erosion by floods.