**Scientific Impacts**
Development assistance to reforest the grasslands of Papua New Guinea is best directed at families rather than clans. Extensive investment is required in developing social and human capital.

**Capacity Impacts**
Species research trials and seedling production training in nurseries have been beneficial to the partner organisations as well as to the communities who have little knowledge on how to produce high quality seedlings with the limited infrastructure and materials they have available.

**Economic Impacts**
The existing constraints to the Timber Authority harvest permit have been identified and discussed with PNGFA government officials along with forest policy revisions that can assist forest communities with accessing formal timber markets to improve livelihoods.

**Social Impacts**
Research on timber royalties has been compared to revenues received from informal market small scale producers, thus providing a better understanding of landowner income in relation to the benefits of the other parts of the supply chain.

**Environmental Impacts**
Current small-holder timber harvests undertaken in natural forests is focused on the most profitable species and this has led to high-grading of the forests harvested by communities, even though the volumes harvested are small.
Project Activities

The project aims to improve rural livelihoods through family focused reforestation and improved value returned to landowners through small-scale timber harvests.

A social science training workshop was held at Ramu in January, 2018. Forest extension activities in the Ramu Markham Valley have been carried out in partnership with the project partner Ramu Agri-Industries Ltd (RAIL). Training has focused on the establishment of seedling nurseries in the villages of Atzunas and Marawassa.

A multi-species, multi-purpose agroforestry demonstration planting at Umi, adjacent to Ramu, has been planted and is growing well. A key feature of the demonstration planting is *Theobroma cacao*, which is receiving increased interest from landowners due to cocoa markets expanding into the Ramu Markham Valley. The selected shade trees for the cocoa trees include *Eucalyptus pellita*, and *Gliricidia sepium*. The selected food crops for the Umi planting include sweet potato, cassava, bananas, corn, and beans.

A bio-economic model is being developed to identify the potential financial returns on labour that rural landowners can receive from these agroforestry activities.

In Papua New Guinea, there is a large informal timber market made up of small-scale forestry participants using portable sawmills. A case study has been conducted on this informal market to identify the reasons people choose to participate, as well as to offer policy revision options that may help to increase formal timber market participation.

A financial analysis on the portable sawmills has been performed to identify opportunities for improving the profitability of small-scale forestry operations and to improve the financial returns received by rural forest landowners.

A forest management plan template and reduced-impact-logging guidelines have been developed that are appropriate to the scale and complexity of rural forest landowners, to improve future small-scale forest management.