

Economic development

Principle:

Economic resource development is a priority activity within the region. The sound planning and management of economic projects is required for the protection of economic values, minimisation of off site effects, and maintenance of natural resource values.

Natural resource allocation issues arising out of current and potential economic development have been discussed in previous sections, with the main issue identified as competing uses between biodiversity conservation and economic utilisation. Natural resource management issues arise from the planning and ongoing management of economic projects.

The existing Port Hurd sea cage aquaculture facility has a small footprint, and natural resource management issues have been satisfactorily addressed through the Environmental Management Plan currently in draft form. Potential expansion of the facility in situ and to other areas within the region will undergo further environmental assessment, and management and monitoring protocols revised and updated as required. Risk assessments for the current project have been carried out and protocols developed for the following:

- Visual impact;
- Water movement in the estuary;
- Entrapment of marine life in nets;
- Mooring equipment failure;
- Public access for recreational purposes;
- Decommissioning;
- Collision with seagoing vessels;
- Fuel spills;
- Noise;
- Escaped fish;
- Fish faeces;
- Excess feed;
- Chemical treatment of fish;
- Removal of food from the food chain;
- Erosion on the land base;
- Waste generation;
- Raw water usage;

- Native flora and fauna on the land base;
- Fire on the land base;
- Storage and handling of hazardous materials;
- Impact on mangrove area, extent and composition;
- Impact on benthic infauna and habitat;
- Impact on epiphytic algal growth on mangrove roots;
- Impact on plankton counts;
- Impact on water quality.

The current plantation forestry project is a proposed 30,000ha of hardwood plantations grown on short rotation for woodchip production. Associated with this is the harvest and sale of native timber, and mature plantations of *Pinus caribaea* and *Callitris* spp. established by the Commonwealth Government during the 1960's. The project has been assessed and approved under NT and Commonwealth environmental legislation, and management and monitoring protocols have been developed for:

- Biodiversity;
- Management of the main plantation species *Acacia mangium*;
- Weeds;
- Feral animals;
- Quarantine;
- Surface and groundwater quality and quantity;
- Erosion and sediment control;
- Fire;
- Heritage;
- Waste;
- Greenhouse gases;
- Contingencies arising out of inadequate growth, plantation damage or project failure.

It is anticipated that forestry product will be loaded onto ships and taken direct to export destinations. This creates a risk of introduction of marine pests, and the proponents are currently working with the aquatic pest management section of the NT Government to develop management and monitoring protocols.

Both the current aquaculture and forestry projects have land bases. The aquaculture base is located at Barra Base, a facility originally constructed as

a tourist resort. Existing infrastructure includes living quarters, a central communal, cooking and ablution area, workshop, storage area, open work area and a waste disposal area. Investigations carried out during the development of the Environmental Management Plan did not identify any significant natural resource management issues. There is no current intention to expand the site, but should this be required further impact studies will be undertaken.

The forestry base is located at Maxwell Creek, a facility originally constructed by the government during their period of plantation development. The site is also utilised intermittently by external contractors undertaking civil works projects in the area. Built infrastructure includes transportable accommodation and ablution facilities, a central cooking and mess area, workshops, storage areas and a waste disposal area. The facility is located in a previously cleared area among original pine plantations, and the extent of original clearing will accommodate future expansion. NT Government assessments have not identified major natural resource management issues associated with further development of the site.

The Maxwell Creek base was left largely unmanaged after the government withdrew, and several houses constructed for employees are now uninhabitable and uneconomic to repair. Weeds introduced during past forestry activity have proliferated, although they are still confined to the immediate area. It is anticipated that permanent occupation of the area and further development of the site will facilitate ongoing weed management activities.

Pickertaramoor is also an abandoned forestry base, and natural resource management issues include the proliferation of weeds, road and track erosion and abandoned buildings. Rehabilitation of this site should be tied in to a general weed management plan, and options for future uses of the area explored.

The Tiwi Islands are currently at a critical stage of economic development. The aquaculture and forestry industries are being proven as viable, and now have the capacity to provide significant employment and investment income. Gaps in physical infrastructure such as roads, ports, airstrips and accommodation are constraining the

realisation of economic independence through core industries.

A collaborative approach between the Commonwealth Government, Northern Territory Government, Tiwi and private investors where each stakeholder is clear on their role and responsibility, and where the common goal is to maximise opportunities for economic development would go some way to identifying and addressing infrastructure constraints. Infrastructure programs based on per capita funding formulas, or designed to support already established industries will not meet the region's needs given the current stage of development.

Outcome:

Sustainable natural resource utilisation resulting in regional economic growth and development.

Objective:

- 12 Implement and regularly review planning and management procedures for natural resource based economic development projects.

Recommended Actions:

- 12.1 Regularly update, review and implement the Port Hurd Aquaculture Environmental Management Plan.
- 12.2 Regularly update, review and implement the Tiwi Islands Plantation Forestry Strategic Plan.
- 12.3 Prepare and implement management and monitoring protocols for marine pest risk management associated with timber export.
- 12.4 Actively encourage the ongoing management of land degradation issues associated with Maxwell Creek and Pickertaramoor bases.
- 12.5 Implement a collaborative approach to infrastructure development, with a focus on providing sustainable resource development, and optimum opportunities for investment in the region.

