

BENTENAN AND TUMBAK VILLAGES

OUTLINE

Bentenan and Tumbak are located in the Belang Subdistrict. The combined site is two-and-a-half hours drive southeast of Manado. The villages face the Maluku Sea and are bordered by Minanga in the South and Rumbia in the North.

COASTAL ENVIRONMENT

Bentenan has a fringing reef, especially in front of Hamlet V, and has some white-sandy beaches. Inland is swampland surrounded by hills. Tumbak is located on a tip of narrow cape surrounded in the North by an expansive mangrove forest and a fringing reef in front of the village. Bentenan-Tumbak's coral reefs cover 193 hectares, mangroves 213 hectares, and seagrass beds 61 hectares.

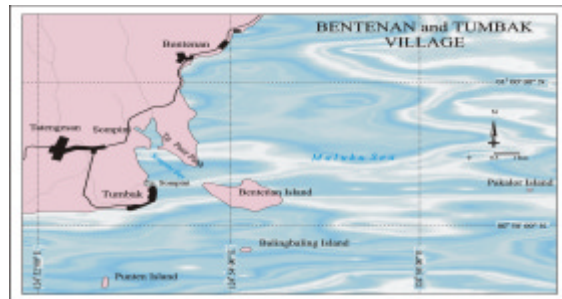


ECONOMIC ACTIVITIES

Fisheries: The communities (especially Hamlet IV, V and part of Hamlet III) fish with nets, trawls and motorized skiffs (Pajeko) and canoes. In season, Bentenan fisherfolk collect milkfish fry. The catch is either sold directly or salted, smoked, or dried. Some villagers cultivate seaweed catch aquarium fish. In Tumbak, villagers harvest lobster, crabs, and aquarium fish.

Agriculture: Bentenan Hamlets I, II and part of III are not on the coast. Villagers therefore farm coconut, cloves, vanilla, corn, cassava and several varieties of fruit. Coconuts are processed into copra or coconut oil.

Trade/Transportation: women generally carry out the sale and distribution of fish (tibo-tibo). Other commercial endeavors include food stalls, food kiosks, land/river transport services.

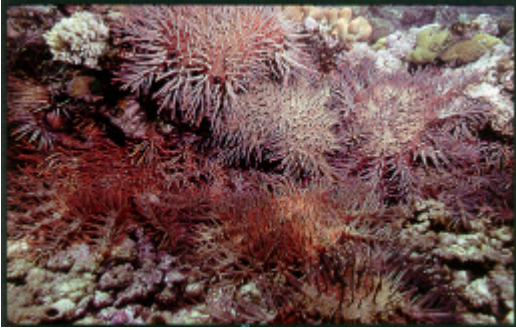


Marine Tourism Efforts: The Bentenan Beach Resort provides reasonable overnight accommodation. The resort is giving employment opportunities to villagers.

Characteristic	Bentenan	Tumbak
Land	8 Km ²	1.35 Km ²
Sea	30 Km ²	30 Km ²
Population	1204 Ind.	1130 Ind.
Religion	Moslem 40% Christian 60%	Moslem 99% Christian 1%
Ethnic	Minahasa Sangir Mongondow Bajo	Bajo, Gorontalo Makassar Bugis, Tidore Ternate

COASTAL RESOURCES MANAGEMENT ISSUES

Similar to most of the coastal communities in North Sulawesi, the Bentenan-Tumbak field site faces management issues such as coral mining, use of destructive fishing methods (bomb fishing and poison), mangrove destruction, beach erosion, inadequate transportation facilities, minimum road maintenance, and endangered species degradation especially dugongs, turtles, giant clams, triton, etc. One management issue which has continue to interest Proyek Pesisir is the Crown of Thorns (CoTs) outbreak on the east coast of Minahasa.



According to issue identification by the communities, the important coastal management issues in these villages are: Unsustainable use of mangroves, destruction of coral reef, the Crown of Thorns outbreak, capture and destruction endangered species, beach erosion, inadequate public facilities, garbage and sanitation, inadequate roads, ecotourism potential, agriculture and fish production, women's roles, swamp and flooding, village borders, seaweed utilization conflict.

PROJECT ACTIVITIES SINCE 1997

Proyek Pesisir with the communities participation has conducted a series of activities in this field site such as Crown of Thorn clean-up, mangrove replanting, training in reef and beach profiling and monitoring and public education in environmental awareness. As part of early action activities an information center was built in the village of Bentenan. The core group of this field site has successfully developed the integrated management plan which have been approved and adopted by the Heads of the Villages, the Head of the subdistrict, the Regency of Minahasa, and the Kabupaten Task Force on November 9, 1999. A marine sanctuary has also been established in Tumbak.



PRIORITIES AND EXPECTATION IN YEAR 4

Similar to other field sites, focus activities in year 4 (2000-2001) in Bentenan and Tumbak field site will be to foster implementation of management plan and the marine sanctuary established in year 3 and to strengthen the Management Body to implement and monitoring-evaluation of the plan and marine sanctuary. Therefore the main activities will be:

- Implementation of Village Development and Coastal Resources Management Plan for Bentenan and Tumbak
- Establishment of marine sanctuary or coral reef conservation program in Bentenan and implementation of marine sanctuary in Tumbak
- Small-business and eco-tourism training and development
- Development of local ordinances
- Agroforestry program and development other supplemental livelihoods
- Improvement in the condition of swamp and rehabilitation sites/areas
- Formation and strengthening of the management body and marine sanctuary management committee



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