

Assistance to develop marine aquaculture on Islands in Indonesia

Following the Tsunami in 2005, Akvaplan-niva staff donated 6 months staff time to rehabilitation of aquaculture in the affected areas supported by NORAD. One of the projects in Indonesia was to assist with the development of aquaculture on Islands in Indonesia. The project took place on the Island of Simuelue.

Technical Assistance

The project work was divided in two parts:

- Recommendations for the repair of the hatchery
- Assessing environmental conditions in coastal lagoons

Hatchery Repair

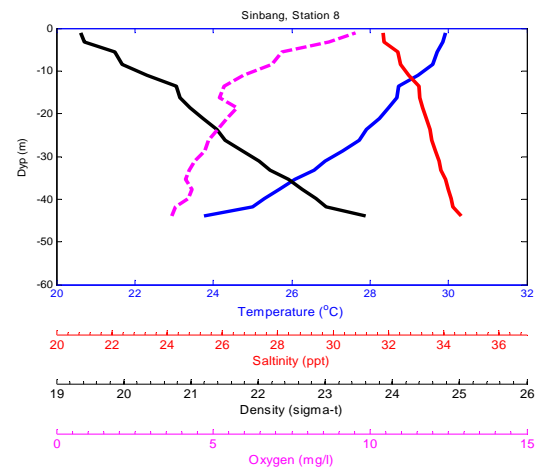
At present the fish farming activity at Simeulue is dependent on wild caught fish. To increase the production volume of fish, the fish farming could be based on juvenile fish instead of wild catch. A marine fish hatchery centre, Balai Benin Ikan Pantai (BBIP) has been built in Busong village, at Baneng Beach. The centre was destroyed by earthquakes in 2004 and 2005, before it was put into operation. The centre has been partly rebuilt, but is not yet ready for operation. A number of recommendations were made for the rehabilitation of the hatchery.

Environmental surveys of the coastal bays and lagoons

Sediment samples were collected from 7 stations in Teluk Sinabang and 11 stations in Teluk Dalam. The samples were analysed for grain size and type, presence of H₂S, sediment colour and presence and type of benthic fauna.



Hydrographical measurements were performed with a CTD-O, measuring vertical distribution of temperature, salinity, density and oxygen, in Teluk Sinabang and in Teluk Dalam Lagoons.



Recommendations

Recommendations were given for the development of small-scale aquaculture. Recommendations were given for the size of production, zoning and location of the farms.



Akvaplan-niva competence

Akvaplan-niva undertook the following;

- Rehabilitation of hatcheries
- Environmental surveys
- Zoning of aquaculture development
- Location of farms
- Estimation of safe carrying capacity
- Demonstration of survey methodology