

B. Development of sustainable milkfish cultivation technology in floating net cage

Description

The development of sustainable technology of milkfish cultivation in floating net cages is one way in implementation of minapolitan area development program. In the regulation of the Minister of Marine Affairs and Fisheries stated that the development of Minapolitan area is the efforts consisting of (a) national campaign; (b) running the production, processing, and/or marketing in leading production centers pro-small business; (c) integrating production centers, processing, and / or marketing of the leading economy areas into the Minapolitan areas; (d) business mentoring and technical assistance in the centers of production, processing, and / or marketing in the form of counseling, training and technical assistance; and (e) developing marine and fishery areas based economic systems.

The objective of this program is to develop and disseminate mariculture technology, especially the environmentally friendly cultivation of milkfish (*Chanos chanos*) in floating net cage (KJA) to support food security programs in order to anticipate the negative impact of global climate change.

Timeline

In accordance with the targets, this activity is a multiyear project which will be implemented over three years.

First year

- 1) Site selection and feasibility study.
- 2) Design of production units, economic estimation and evaluation of marketing.
- 3) Setting up a small scale pilot unit of environmentally friendly milkfish cultivation technology in floating net cage for production and training purposes with the method of “Integrated Multitrophic Aquaculture (IMTA)” to the group of fish farmers.

Second year:

Expand the medium-scale pilot unit by involving groups of fish farmers, through training for a skilled group of fish farmers.

Third year:

Establishment of several milkfish production centers as well as establishment of industrialization of environmentally friendly milkfish cultivation technology in floating net cage in several areas of Indonesia including the Thousand Islands (Kepulauan Seribu), the Riau Islands (Riau Kepulauan) and South Sulawesi.

Geographic scope

- Kepulauan Seribu
- Batam (Riau Kepulauan)
- South Sulawesi

Resources needed

- Expert coordination with stakeholders (KKP, local Fisheries Department, Fish farmer group/ Fishermen, Entrepreneurs, Institutions of funding sources, etc.).
- Technical expert for detail planning, financing and implementation of project activities.
- Manpower availability and equipment (cage) locations to be used as training and production facilities.
- Milkfish fish floating cage system.
- Energy for supporting facilities, training and socialization of milkfish cultivating techniques with floating net cage system must be environmentally friendly.
- Application of facilities and infrastructures in various regions of Indonesia such as survey equipment of the location for environmental impact assessment study.
- Pilot unit of milkfish cultivation technology in floating net cage and its facilities for training and monitoring activities.
- Facilities and infrastructures of mariculture aquaculture monitoring and evaluation.

Regulatory change

- 1) Law Number 16 Year 2006, on Extension System for Agriculture, Fisheries and Forestry
- 2) Act No.17 2007, on Long-Term Development Plan of 2005 to 2025
- 3) Law Number 26 Year 2007 regarding Spatial Planning
- 4) Law Number 27 Year 2007 on the Management of Coastal Areas and Small Island.

Coordinating or Implementing Agency

Coordination with stakeholders from the central to district level, such as KKP, especially Marine and Coastal Research and Technology (P3TKP)-KKP and the Center for Marine and Coastal Resources (P3SLP)-KKP, Center for Agricultural Production Technology - BPPT, Kepulauan Seribu Fisheries Office, Fisheries Office of City of Batam, other Local Government Fishery Offices, Fish Farmers/ Fishermen groups, Private Companies, particularly the owners of milkfish hatchery feed producers, Institutions of funding sources, and others in the trade sector and downstream industries, NGOs accompanying the application of milkfish cultivation technology.

c. Cultivation Engineering of Beef Cattle Technology

Description

The main program of cultivation engineering of beef cattle technology is the development of the cattle breeding technology to fulfill the certification standard. The purpose of this certification is to maintain and increase the price of seed produced by the breeder. The calf quality standard is determined to implement the method of the parent's breeding to produce good calves.

Timeline

First year:

Formulation of village breeding center (VBC) criteria based on the scientific references.