

# Seaweed R&D Program of Zamboanga State College of Marine Sciences and Technology

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The Zamboanga State College of Marine Sciences and Technology (ZSCMST) is at present a Zonal Center for aquatic and marine research in Southern Mindanao as identified by the Philippine Aquatic and Marine Research and Development (PCAMRD). The College was identified through the Agriculture and Fisheries Modernization Act (AFMA) of 1997 as a member of the network of selected National Centers for Marine/Capture Research, aimed at modernizing the agriculture and fisheries sector in preparation for the challenges of globalization. As an academic institution, one of the priority thrusts of the college R&D is the development, utilization and management of the seaweed resource in Region 9. The Zamboanga area is one of the seaweed/*Kappaphycus* producers in the country where the region contributes an estimated annual production of 138,265 t of dried seaweeds. Export of dried seaweeds alone generated US\$ 6,225,065 for the year 2000 which helped and contributed to the Philippine economy in terms of dollar earning revenue. In terms of ecological importance, seaweeds are considered as primary producers in the marine environment and it also serves as habitat and breeding ground for many marine organisms.

In support of the National Government's vision, through the Department of Agriculture-Bureau of Fisheries and Aquatic Resources-Seaweed Development Plan (DA-BFAR-SDP), the ZSCMST Research and Extension Office formulated and implemented a seaweed R&D projects/activities to meet the needs of the Philippine seaweed growers and farmers in Region 9.

Thus, the College R&D programs and projects for seaweeds are:

## **Programs/Projects**

- Assessment of seaweed/algae stocks in Southern Mindanao
- Establishment of seedling banks from the wild stocks to obtain/produce quality seedlings
- Establish demo-farms in semi-enclosed seas and ponds including genetic studies on seaweeds

Implementing Agencies: BFAR-9, ZSCMST, MSU-Tawi-Tawi, DOST, LGU's

## **Objectives/Strategies**

- To evaluate potential seaweed species for phycocolloid production and to formulate industrial and consumer products from seaweeds

- To develop and improve culture techniques of commercially important species
- To increase production of farmed *Eucheuma/Kappaphycus*
- To identify and develop new strains
- To develop value added products

#### **ZSCMST- What We Have Done**

##### ***(Completed research projects/activities)***

- Inventory of macrobenthic algae in the Santa Cruz Islands and West Coast of Zamboanga City
- Ethnobotany of *Solieria robusta* in Zamboanga City
- Initial establishment of Marine Herbarium
- Seasonality and abundance of agarophytes (*Gracilaria* spp.) in Zamboanga and Basilan waters
- Assessment of agar quality from agarophytes (*Gracilaria* spp.) taken from Basilan and Zamboanga waters

#### **ZSCMST (ZONAL CENTER V) R&D plans for CY 2001**

- Establishment of *Kappaphycus* seedling bank/nursery at Small Santa Cruz Island
- Inventory of non-geniculate coralline algae in Zamboanga waters
- Assessment of seaweed stocks in Vitali, Zamboanga City and Siocon, Zamboanga del Norte
- Monitoring of growth and survival of *Kappaphycus* strain from Tictabon seedling bank in the West Coast of Zamboanga City