Status of Seaweed Farming in Region 9

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Before 1970, *Eucheuma* locally known as "agar-agar" was found abundant in the Philippines, particularly in the province of Tawi-Tawi, Sulu and Zamboanga City. It became a source of livelihood among the people living in the coastal areas especially in Region 9 and the Autonomous Region for Muslim Mindanao (ARMM). However, constant gathering/harvesting and no proper conservation and propagation, resulted to the depletion of the seaweed resources.

Knowing the impact of the shortage of supply of seaweeds, our government conducted research studies, training programs on seaweed farming and established seaweed Demo Farms in Luuk Bongao, Sacol Island, Zamboanga City; Tapaan Island, Siasi Sulu; and Simunul, Tawi-Tawi for demonstration and seaweed production. Through that initiative, *Eucheuma* farming was successfully promoted in 1973 wherein production dramatically increased.

It is surprising to note that it was the local producers of Zambaonga City, Sulu and Tawi-Tawi who themselves modified the introduction of the costly net method to the more economical floating monoline method of farming. They discovered the giant-sized seaweed and fast growing varieties of *Eucheuma cottonii* in the area and named it "tambalang".

Region 9 is considered the number two seaweed producer in the country. In 1996, the region contributed 107,541 mt or 91% of the total aquaculture production. The region has recorded an annual production of 138,765 mt.

Seaweed farming provides an important source of livelihood to more than hundreds of thousands of families living in the coastal areas who are directly involved in the production as farmers or as entrepreneurs. Presently, only 6,091 ha are utilized for production out of 15,995.8 has. potential areas. The development of the potential areas would mean an increase in production.

Tables 14 show important data for the seaweed industry. Total production area 6,091 ha: Zamboanga City (ZC), 2,959; Zamboanga del Norte (ZdN), 520; Zamboanga del Sur (ZdS), 2,202; and Basilan Province (Bas), 415.

Potential production area is 15,995.8 ha: Zamboanga City, 2,470; Zamboanga del Norte, 325; Zamboanga del Sur, 13,180; and Basilan Province, 20.8.

Players	ZC	ZdS	ZdN	Bas.	Total
Farmers	4,314	1,028	493	317	6,052
Traders	13	3	11	5	32
Processors	3	0	0	0	3

Table 1. Number of seaweed key players by province

Methods of farming

- Floating monoline
- Bamboo raft

Species of Eucheuma planted:

- Kappaphycus alvarezii 90%
- sacol variety ("cottonii") 8%
- Eucheuma denticulatum (spinosum) 2%

ZC ZdN Year ZdS Basilan Total 79,128 7,925 349 87,402 85,033 1995 541 93,836 8,262 2,340 2,340 5,963 512 8,815 1996 8,346 95,260 435 3,500 107,541 9,569 120,818 368 8,011 138,765 1997 11,467 79,947 423 12,131 104,408

Table 2. Regional Seaweed Production (mt)

Source: Bureau of Agriculture Statistics-9 (BAS)

Species	Value (\$)	Volume	Importing Country	
Eucheuma cottonii	1,787,450	2,123,526	France	
dried seaweed	1,335,810	2,182,147	Hong Kong	
	878,100	1,386,898	China	
	1,843,180	2,264,520	Korea	
	166,800	443,000	Taiwan	
	480	25	Taipei	
	86,000	200,000	Spain	
	55,600	120,000	Brazil	
	16,400	20,002	Japan	
	55,245	137,000	Malaysia	
Total	6,228,065	8,877,118		
alkali-treated	24,190	19,000	Japan	
seaweeds	567,558	161,320	Korea	
	98,000	35,000	France	
	148,460	133,000	China	
	6,000	3,000	Japan	
Total	696,356	351,320		

Table 3. Exported Dried Seaweed (Jan-Dec 2000)

Source: BFAR 9

Table 4. Number of Seaweed Industry/ Organizations:

Organization	ZC	ZdS	ZdN	Bas.	Total
Development Council	1	1	0	0	2
Federation	0	1	0	1	2
Association Cooperative	11	25	9	45	90

Organization and local partners in the development of seaweed industry

National Agencies

Department of Science and Technology Department of Agriculture Department of Trade and Industry Bureau of Fisheries and Aquatic Resources Central Office and Regional Office No. 9 Regional Fisheries Training Center Department of Environment and Natural Resources

Local Government

Provincial Agriculture Office Office of the City Agriculture

Private Sector/Academe

Growth with Equity in Mindanao Program Zamboanga State College of Marine Science and Technology Western Mindanao Seaweed Industry Development Foundation

Issues and Concerns affecting the seaweed industry of the region

Problems that affect the seaweed industry in the region are: scarcity of quality seedlings; high cost of inputs/planting materials and transport; rampant practice of harvesting immature plants; lack of seaweed processing plants for processing carrageenan and other post harvest facilities; and poor peace and order situation. The industry also needs guidelines to prevent contamination from toxic wastes, identify the moisture content of dried seaweeds, and methods to combat and prevent seaweed diseases.