

**A FUTURE SCENARIO FOR FISHERIES  
EDUCATION IN THE PHILIPPINES**

## **Geography and Fisheries Situation in the Philippines**

- 1. 7,107 islands and isles**
- 2. coastline of more than 36,000 kilometers**
- 3. population of 90,000,000 people, 60% lives in the coastal areas**
- 4. migrate to coastal areas with the hope that the sea can offer better livelihood**
- 5. population continues to increase unregulated**
- 6. food production could not outpace the population boom**
- 7. industrialization and urbanization have reduced areas for fish/food production**
- 8. illegal fishing activities have damaged fish havens and habitats**
- 9. open access fishing is still prevailing despite overfishing of marine resources**

## History of Fisheries Education in the Philippines

1. The boom in fisheries education started with creation of the Philippine School of Fisheries, a tertiary vocational school in fisheries, in 1946
2. Bureau of Fisheries later established some high schools in fisheries in coastal municipalities
3. cheap secondary education to children of poor fishers
4. educational ladder of small-scale fishers' children to go to college
5. fishery high schools were later elevated to tertiary vocational schools; then elevated by Congress to colleges of fisheries and became part of state universities
6. neglect by Congress to assist these schools to develop their capability to become good colleges of fisheries
7. majority of these colleges of fisheries in national and provincial state universities/colleges are substandard

8. many of the existing older faculty members in fisheries of these universities were the fishery high school teachers with graduate degrees in education but not in fisheries
9. physical facilities in laboratories and field work are deficient to provide a decent fisheries education
10. offerings of the general education courses are also weak and create a poor foundation for full comprehension of fisheries courses
11. more than fifty (50) colleges/schools of fisheries in the country
12. faculties took graduate degrees in education but not in fisheries because it was easier for them to obtain these degrees in their localities
13. Juliano (2005) revealed several problems such as weak and elderly fisheries faculty, inadequate facilities, pathetic quality of general education courses, declining enrolment, and some others. The decline in enrolment forced fisheries programs to close shop

a few

- **The World Bank loan on fisheries education in the late 1970s assisted seven (7) vocational fisheries schools to strengthen the post secondary education in fisheries. WB assistance for collegiate degree level was provided the University of the Philippines Visayas (Miagao, Iloilo).**
- **These seven schools later was not provided attention by their colleges and universities and instead offered the B.S. Fisheries degree.**
- **Vocational fisheries education was relegated to the background and all colleges/universities went for B.S. Fisheries program.**
- **The Board of Fisheries of the Professional Regulation Commission was created in December, 2000, in order to set/force a higher standard for fisheries education.**

**Board of Fisheries of the Professional Regulation Commission blamed for enrolment decline**

**Job competitions from graduates of related fields (i.e., biology, marine biology, chemistry, food science) from much better public and private universities**

**Fisheries as a profession has lost its attraction because job opportunities are few, licensure to practice the profession is difficult to obtain by graduates of poor quality schools, and the fisheries curricula are not relevant to the present fisheries situation in the country**

**Government thrust to increase fish production to emphasize intensive mariculture rather than regulate fishing to sustain production.**

**On examination of the curriculum for the B.S. Fisheries (CMO No. 43), it is glaring that there is only a 5 unit course on aquatic ecology. The rest of the courses taken are on fisheries that more or less provides the students knowledge on ichthyology, aquaculture, capture fisheries, and post-harvest fisheries**

**LGUs never regulated fisheries in coastal waters because they did not have the capability for such an endeavor nor are they willing to displace some fishers from their livelihood. Hardly any hiring of fisheries graduates has taken place.**

**Commercial fisheries (industrial fisheries in part) hardly hired fisheries graduates. The large fishing fleet companies had indicated that fisheries graduates from universities ask for high salaries and are not used to the rigors of commercial fishing, and sometimes try to organize labor unions.**

**To some degree, hiring of fisheries graduates is happening in aquaculture especially in intensive cage and pen culture and in prawn farming. The feed milling companies also hire fisheries graduates as farming technicians and sales representatives of aquaculture feeds. But the hiring is normally focused on fisheries graduates of topnotch schools.**

**In post-harvest fisheries, competition from graduates of food technology and food science from good private universities deprives some fisheries graduates of work**

**The above conditions of poor job opportunities in fisheries will prevail in the coming years unless the fisheries curriculum is revised to make fisheries graduates more relevant to future activities in the coastal zone.**

### **INTEGRATED COASTAL MANAGEMENT IS A NATIONAL POLICY**

**“ICM and related approaches such as coastal resource management or coastal zone management shall be the national management policy framework to promote the sustainable development of the country’s coastal and marine environment and resources in order to achieve food security, sustainable livelihood, poverty alleviation and reduction of vulnerability to natural hazards, while preserving ecological integrity.”**

**“ICM shall be implemented in all coastal and marine areas, addressing the inter-linkages among associated watersheds, estuaries and wetlands, and coastal seas, by all relevant national and local agencies”.**

**“Consistent with the provisions of the Local Government Code (Republic Act 7160) and the national sustainable development policies and strategies, LGUs shall act as the frontline agencies in the formulation, planning and implementation of ICM programs in their respective coastal and marine areas”.**

**Fisheries education curriculum (B.S. Fisheries) being imposed by CHED has become outdated and fisheries graduates will have difficulty adjusting to the national policy/strategy. Fisheries will have to be taught in the context of integrated coastal management taking into consideration all the elements and components in the ecosystem that relates and interacts with living aquatic resources and other uses of the aquatic resources.**

**The management of fisheries will rely more on environmental issues, organizing stakeholder consultations, and group planning and management implementation by stakeholders of the coastal resources.**

**A fisheries graduate will be a fisheries specialist with the broad background on ICM and should have a more holistic approach in solving fisheries problems and issues.**

## **OTHER OPTIONS**

**TESDA and CHED are at the moment developing a ladderized B.S. Fisheries which provides opportunities for students to obtain jobs even before graduation from the four-year course. Fisheries courses are offered early in the curriculum, so that by the second year the students would have adequate fisheries knowledge to work for the fisheries industry.**

**Surgery has to be done in fisheries education in the Philippines.**

**Low quality fisheries education programs should be closed.**

**The present reduction being done by CHED implementing the Agriculture and Fisheries Modernization Act (AFMA) will assess all the fisheries institutions of higher education and reclassify them as national/regional or provincial categories. Republic Act 8435 – Agriculture and Fisheries Modernization Act, 1997.**

**Sec. 68. Post-Secondary Education Program. – To establish a Post-secondary Education Program in Agriculture/Fisheries under NAFES to be led by TESDA.**

**Sec. 69. Network of Centers of Excellence for Tertiary Education. CHED shall establish a Network of Centers of Excellence in Agriculture/Fisheries. The criteria for selecting the centers of excellence are given.**

**Sec. 70. Rationalization Plan. – For the purpose of upgrading and maintaining a high degree of academic excellence in agriculture and fisheries, schools not designated and accredited as centers of excellence shall be given adequate time to redirect its programs to non-agriculture/non-fisheries areas relevant to the province or region.**

**Three universities for Luzon, Visayas and Mindanao should be the ones to produce fisheries professionals that can be licensed to practice the fisheries profession.**

**They will be developed to offer graduate programs in fisheries (M.Sc. and Ph.D.) and should be active in research and development of fisheries in the country. These three universities should work together and complement each other in research and development and not compete with each other.**

**The graduate programs should be open to all qualified graduates of a baccalaureate degree, especially those in the sciences to strengthen the graduate programs from different curricular backgrounds with interest in fish and fisheries research.**

**There is real need for high caliber fisheries scientists with broader perspective and deep interest in the development and sustainability of the fisheries industries and the alleviation of the poor conditions of the coastal fisherfolk. The country cannot continue to destroy fish habitats, allow illegal fishing to continue, pollution to be uncontrolled, and food fish demand to increase by allowing population to increase.**

**This might be a good dream but not implementable unless backed up by law which Congress should support and sponsor.**

**The implementation of the AFMA law will probably be a good start and save some fisheries schools in the down trend in enrolment. If job opportunities remain poor and passing rate in the licensure examination continues its present trends of very poor results, fisheries might just die a natural death in the Philippines.**

**If there are revisions to offer fisheries in the context of ICM and the universities have reliable multi-disciplines to start this concept, there might still be hope for fisheries to have its proper niche in the aquatic ecosystem.**

**It is suggested that CHED sponsors a discussion on the feasibility of working towards developing a fisheries curriculum in the context of ICM. Let us start the ball rolling.**

**THANK YOU**