Republika ng Pilipinas (Republic of the Philippines) MINISTRI NG EDUKASYON AT KULTURA (MINISTRY OF EDUCATION AND CULTURE) Maynila

September 8, 1981

MEC MEMORANDUM No. 165, s. 1981

FIVE-DAY SEMINAR-WORKSHOP ON INLAND FISHERIES (SHRIMP HATCHERY MANAGEMENT OPERATION)

To: Bureau Directors
Regional Directors
Schools Superintendents
Vocational School Superintendents/Administrators

- 1. To avail of the expertise of the Japanese expert who is currently based at the Apolinario R. Apacible School of Fisheries, Nasugbu, Batangas, under the JICA-Colombo Plan Technical Cooperation Program, the Ministry of Education and Culture through the Bureau of Secondary Education will conduct a five-day seminar workshop on Inland Fisheries (Shrimp Hatchery Management Operation) at the said school on October 5-9, 1981. Inclosed is the tentative program of activities.
 - 2. The major objective of this in-service training program is to develop better skills among instructors in shrimp hatchery operation as an income-generating project. Specifically, it aims to:
 - a. apply better techniques in the collection and handling of sugpo breeders;
 - b. practice induced/natural breeding of gravid shrimps;
 - c. conduct/replicate experimental activities in hatching particularly on stages of development (cell division) and feeding;
 - demonstrate the preparation of reagents and solutions for water analysis;
 - e. perform analysis of various water samples;

- f. demonstrate the proper use, care and maintenance of hatchery equipment within the context of lessons in inland fisheries; and
- g. review the curriculum framework of science subjects (previously developed) for purposes of enrichment.
- 3. Participants to this seminar-workshop shall be fishery teachers handling classes in inland fisheries (secondary level). In view of the limited equipment and facilities for the training, it is suggested that a school send only one participant, preferably the most ranking, to ensure a better multiplier effect of the training program.
- 4. Participants are allowed traveling expenses and per diems including a registration fee of \$250 to cover expenses for supplies and materials chargeable against local funds, subject to usual accounting and auditing regulations.
- 5. It is desired that the contents of this MEC Memorandum be disseminated immediately to all concerned.

(SGD.) ONOFRE D. CORPUZ Minister of Education and Culture

Incl.:

As stated

Reference:

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Allotment: 1-2--(D.O. 1-76)

To be indicated in the Perpetual Index under the following subjects:

BLUE REVOLUTION
SEMINARS
TEACHERS
VOCATIONAL EDUCATION
WORKSHOP

(Inclosure to MEC Memorandum No. 165, s. 1981)

TENTATIVE SCHEDULE OF ACTIVITIES

DATE First Day - October 5: 0	ACTIVITES Opening Session
	Orientation Review of previously prepared curriculum materials Lecture I - Biology of the Shrimps
Second Day - October 6 : I	Lecture 2 - Growing of Shrimp Food Workshop I - Start propagation of natural shrimp food, Brachionus and Chlorella Lecture 3 - Importance of Dissolved Gases and Other Elements in Water Workshop 2 - Preparation of chemicals/solutions for water analysis
Third Day - October 7 : W	Workshop 3 - Collection of samples for water analysis Workshop 4 - Collection of gravid breeders Lecture 4 - Demonstration on Use, Care and Maintenance of Hatchery Equipment
Fourth Day - October 8:	Workshop 5 - Observation of shrimp breeding - Identification of eggs, (nauplius) larva, etc.
Fifth Day - October 9	Discussion of results of propagation of (Chlorella) and (Brachionus) Presentation of enriched curriculum materials. Wrapping-up session