PROPOSAL FOR COSTS AND RETURNS SURVEY OF SEAWEED PRODUCTION

I. INTRODUCTION

Rationale

Seaweed has shown its increasing economic importance not only for its wide industrial uses but also for becoming one of the major contributors to growth of the fishery sector. Aside from providing food products for human consumption, substances extracted from seaweeds are used as fertilizers, animal feeds and cosmetic additives. In 2007, seaweed constituted 68 percent of the total aquaculture production. Export data indicate that seaweed ranked second among the top fishery exports, accounting for 16 percent of total fishery exports in 2006. Seaweed culture requires low input and high return of investment and offers good opportunities for the employment of idle labor force in the coastal areas. Workforce of the industry is estimated between 100,000 and 120,000.[1]

The profitability prospect of seaweed culture is one of the primary concerns of planners and policy maker in setting-up targets of goals and program areas. Moreover, entrepreneurs, investors and other agri-business players are looking closely on the viability of seaweed production before venturing into the business. Hence, this proposal on Costs and Returns Survey of Seaweed Production will be implemented to generate the needed information.

Objectives

The main objective of this study is to generate production costs and returns structure of seaweeds.

Specifically, this study shall generate seaweed data on the following:

- Cost of production
- Levels of material and labor input use
- Measures of production profitability
- Other socio-economic data

Reference Period

The reference period for Costs and Returns Survey of Seaweed Production shall be the last production cycle completed in 2007.

II. METHODOLOGY

Coverage

The survey shall be conducted in five (5) provinces, namely; Palawan, Bohol, Zamboanga Sibugay, Maguindanao and Tawi-tawi. Each province was chosen to represent the top seaweed producing regions. The domain of the study is the province. Seaweed farm operators from the said provinces who harvested seaweed during the reference period shall be the target sample for the survey. The sample operator should also be knowledgeable on the details of seaweed culture and be able to provide the needed information.

Sampling Frame

The sampling frame shall be the list of seaweed operators from Aquaculture Farms Inventory conducted prior to this activity.

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[1] The Philippine Seaweed and its Industry (An Overview). Ms. Ma. Salvacion R. Ferrer (BFAR)

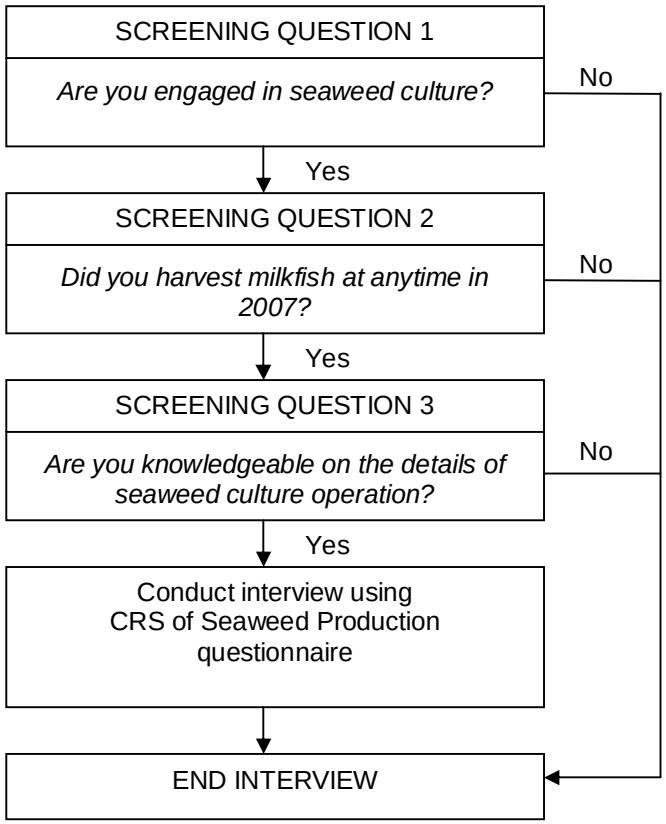
Sampling Design, Sample Size and Sample Selection Procedure

A two-stage sampling design shall be employed with the barangay as the primary sampling unit and seaweed farm operator as the secondary sampling unit.

The sample barangays shall be drawn using simple random sampling from the list of barangays with at least 90 percent cumulative share of seaweed harvested area and with more than five seaweed operators. Ten (10) barangays shall be taken as sample from each province except for Maguindanao, which has less than ten seaweed producing barangays. In this case, all barangays shall be taken as sample.

The number of sample seaweed operators shall be allocated proportional to the number of operators in the sample barangay. This implies that more sample operators shall be taken from sample barangays with more operators involved in seaweed culture.

Selection of sample operators shall be done during data collection. In each sample barangays, sample seaweed operators shall be located using snowball sampling. This procedure entails looking for the first potential sample then searching for the rest based on referrals of the previous samples. For this activity, this shall be done by obtaining names and addresses of seaweed operators living in the barangay from the barangay captain or seaweed cooperative/association leader. The following screening questions shall be asked to the first potential sample operators:



If the operator qualifies for the survey, interview shall be conducted using the CRS of Seaweed Production questionnaire. Whether the operator interviewed is qualified or not, he/she shall be asked to refer other seaweed operators in the barangay to serve as next potential sample. The process shall continue until the required number of sample seaweed operators is met.

The sample size is 50 per province. However, in the case of Palawan and Bohol, sample size is 75 operators in order to capture the information between varieties of seaweed culture within the province.

III. FIELD OPERATIONS

Pre-test of Questionnaire

A pre-test of questionnaire shall be conducted to ensure the accuracy and completeness of data items contained in the survey questionnaire. The proposed pre-test site shall be Zambales, the nearest seaweed producing province from Metro Manila. Aside from AqSS staff, the participants shall be representatives from AASID and SMRD.

The pre-test team is expected to interview at least 5 seaweed operators using the questionnaire and take note of the following:

- Interview time
- Farm investments, material and labor inputs other data items relative to seaweed production
- Other comments like, format of the questionnaire, etc.

A meeting shall be held upon return to CO to discuss the results of the pre-test and finalized the survey instruments.

Trainers' Training

Trainers' training shall be attended by Central Office personnel from FSD, AASID and SMRD. It is a one-day training which will cover the following:

- Rationale, Objectives and Methodology of the survey
- Filling-up of questionnaires
- Field editing
- Administrative matters

At the end of the training, survey material shall be distributed to C.O. trainers to be used for the field training.

Field Training

There will be two CO trainers per province. The team shall be a pair of FSD, AASID and SMRD staff. They shall conduct the one-day training at the POC which shall be participated in by RASO, PASO and concerned field staff.

After the training, the CO trainers shall also assist the PASO and field staff in the sample selection. Afterwards, the dry-run of questionnaire shall follow. Samples to be covered in the dry-run shall be part of the 50 samples required for the province.

Survey Operation

The Field Staff shall conduct the interview while the PASO/RASO shall serve as the supervisors. CO trainers shall also assist in the supervision during the duration of their travel and shall edit the accomplished questionnaires. The survey operation shall last for two weeks. Another week shall be allocated for editing of returns. Edited returns shall be mailed to CO for data processing

IV. DATA PROCESSING AND ANALYSIS

Data processing shall be done at the CO using the same system used for previous CRS undertakings. The said system shall be revised to make it applicable to the current commodity. The CO trainers who conducted the field training shall be responsible for editing and encoding of returns of their assigned province. They shall also assist the Analysis Group in the analysis and interpretation of results.

V. PRESENTATION OF RESULTS

The results shall be presented to the management, members of the TWG on Fisheries, AASID and representatives from other concerned divisions. It aims to gather comments and suggestions vital to the preparation of technical report.

VI. REPORT PREPARATION

As soon as the results become final, a report shall be prepared as the final output of the project.