

Annex I

Questionnaires

Questionnaire

(Form 1 : for participant concerned)

1. Personal data

1) Full Name : _____

Age : _____

2) Present Occupation

Name of Organization : _____

Location(Name of City / Town) : _____

Your Position: _____

Your Responsibility: _____

Number of Persons in Your Department : _____

Number of Persons in Your Division : _____

3) Your Education Record (University/College).

Year : 19__

Name of Institution : _____

City / Country: _____

Duration: _____ year (or _____ months)

Qualification Obtained: ☐ Diploma ☐ Bachelor Degree ☐ Master Degree

Area of study: _____

4) Training in Foreign Countries Excluding JICA training

a) Year of Participation : 19__ for __ months

Country: _____ Name of Institution: _____

Title of the training course: _____

b) Year of Participation : 19__ for __ months

Country: _____ Name of Institution: _____

Title of the training course: _____

c) Year of Participation : 19__ for __ months

Country: _____ Name of Institution: _____

Title of the training course: _____

d) Year of Participation : 19__ for __ months

Country: _____ Name of Institution: _____

Title of the training course: _____

2. Has the knowledge and / or techniques learned from your Training with JICA improved your ability to carry out your work duties? Please explain how.(50-60 words)

| |
|--|
| |
|--|

3. Please describe the most serious problems and constraints you are encountering to carry out your job effectively ? (according to priority)

- ① _____
- ② _____
- ③ _____
- ④ _____
- ⑤ _____

4. Could you please make a numbered list of the action that should be taken to overcome the above problems?

- ① _____
- ② _____
- ③ _____
- ④ _____
- ⑤ _____

5. Are you interested to receive further training?

Yes ☐ No ☐

If yes, please make a list of training according to priority.

a) Name of Training : _____

Type of Training : ☐ "Hands-on "type ☐ "Seminar" type

Duration: _____ months (or weeks)

b) Name of Training : _____

Type of Training : ☐ "Hands-on "type ☐ Lecture type

Duration: _____ months (or weeks)

c) Name of Training : _____

Type of Training : ☐ "Hands-on "type ☐ Lecture type

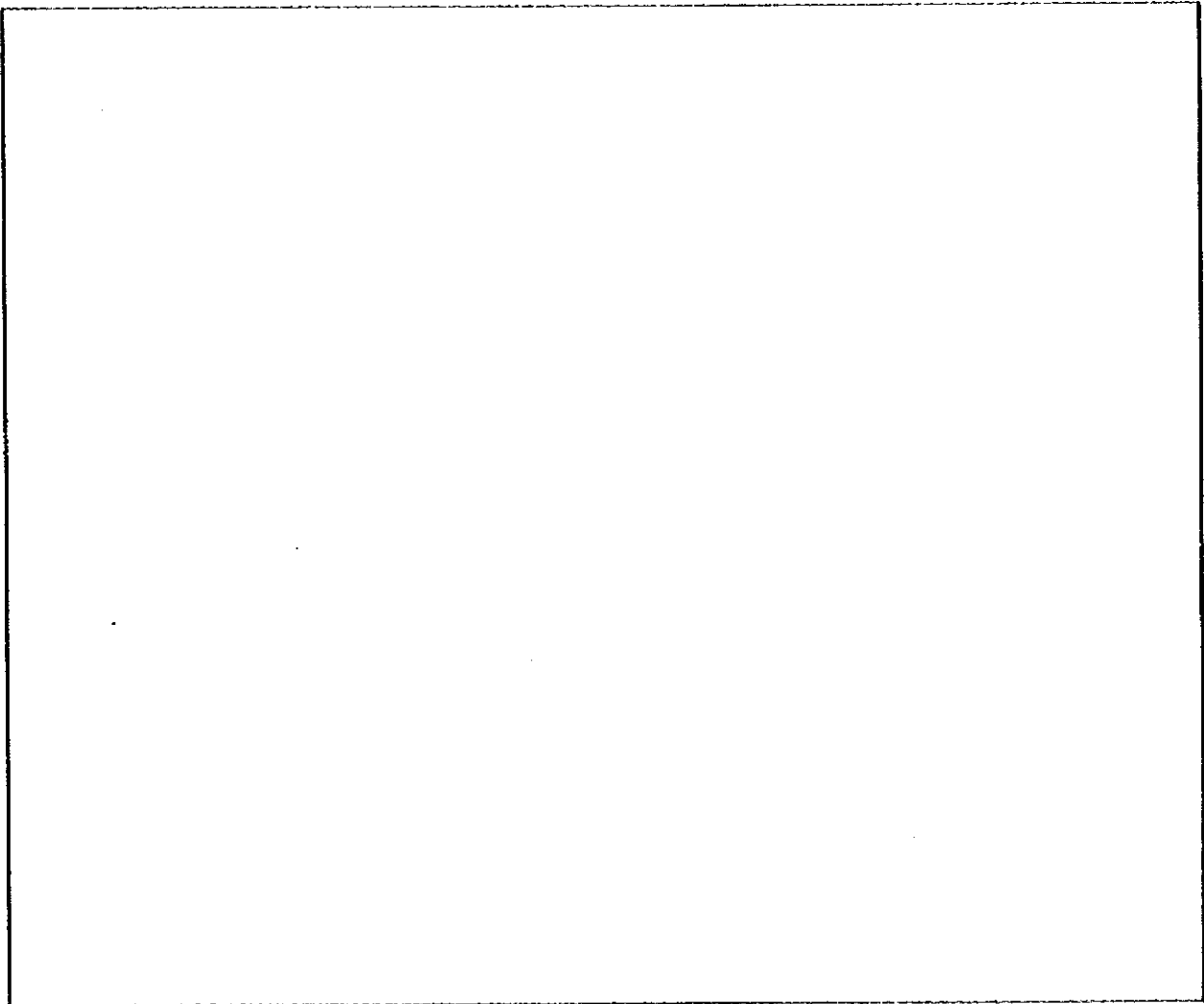
Duration: _____ months (or weeks)

d) Name of Training : _____

Type of Training : ☐ "Hands-on "type ☐ Lecture type

Duration: _____ months (or weeks)

6. Please add additional comments.

A large, empty rectangular box with a thin black border, intended for the respondent to provide additional comments.

Thank you for your cooperation.

Questionnaire
(Form 2 : for officer concerned)

1. Personal Data

1) Full Name : _____
Age : _____

2) Present Occupation

Full name : _____
Title : _____
Name of your organization : _____
Your responsibility: _____
Number of persons in your department : _____
Number of persons in your division : _____

3) Your Education record (University/College) .

Year : 19____
Name of institution : _____
City / Country: _____
Duration: _____ year (or _____ months)
Qualification obtained: ☐ Diploma ☐ Bachelor Degree ☐ Master Degree
Area of study: _____

4) Training or Study in Foreign Countries Training

a) Year of participation : 19____ for ____ months
Country: _____ Name of institution: _____
Title of the training course: _____

b) Year of participation : 19____ for ____ months
Country: _____ Name of institution: _____
Title of the training course: _____

c) Year of participation : 19__ for __ months

Country: _____ Name of institution: _____

Title of the training course: _____

d) Year of participation : 19__ for __ months

Country: _____ Name of institution: _____

Title of the training course: _____

2. Are the skills learnt during JICA Training utilized by the department on their return?

☐yes

☐to some degree

☐no

(If the answer is 'to some degree ' or 'no', please answer question 3.)

3. Please make a numbered list of the reason why the skills are not utilized.
(According to priority)

① _____

② _____

③ _____

④ _____

⑤ _____

4. Upon return from JICA training, are participants able to transfer their knowledge or skills to other persons? If "yes" or "some degree", please list some examples.

☐yes

☐to some degree

☐no

① _____

② _____

③ _____

5. If no, please comment on the reasons for not transferring their knowledge or skills.

①

②

③

6. Are there any positive effects that have been generated by the ex-participants as the result of the training ? Please make a list according priority.

☐Yes

☐No

①

②

③

7. What are the biggest problems that the department is facing in Human Resource Development ? Please make a list according priority.

①

②

③

9. What kind of training courses would help you overcome the above problems?
Please make a list according to priority.

a) Name of Training : _____

Type of Training : ☐ "Hands-on "type ☐ "Seminar" type

Duration: _____ months (or weeks)

b) Name of Training : _____

Type of Training : ☐ "Hands-on "type ☐ "Seminar" type

Duration: _____ months (or weeks)

c) Name of Training : _____

Type of Training : ☐ "Hands-on "type ☐ "Seminar" type

Duration: _____ months (or weeks)

d) Name of Training : _____

Type of Training : ☐ "Hands-on "type ☐ "Seminar" type

Duration: _____ months (or weeks)

9. How can JICA improve it training quality?

JICA is looking for ways to improve training quality to ensure participants making the benefit from training and that the results can be seen as meeting the department or Division workplace training needs. Please make comments(50~60words)

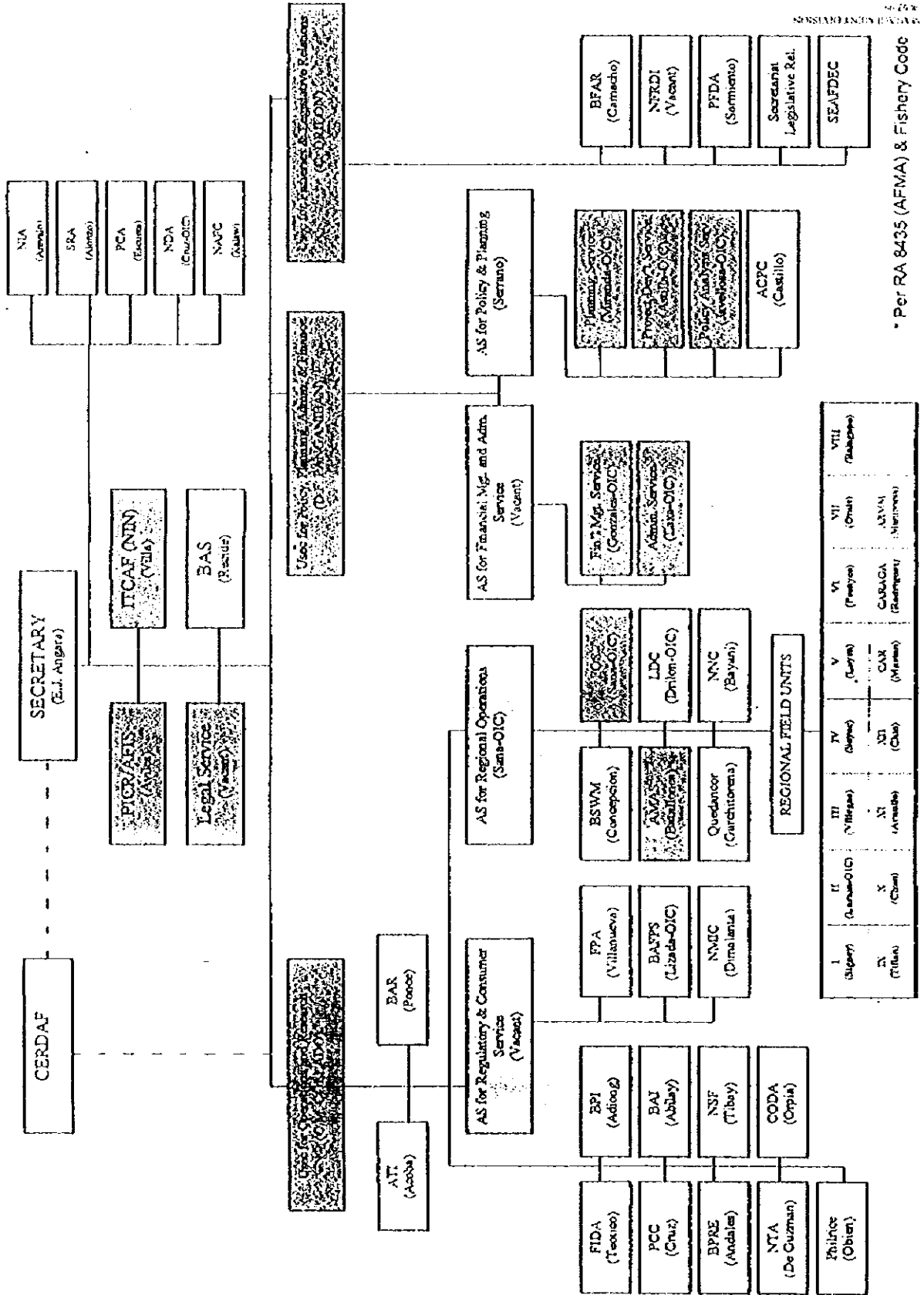
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10. Please make any other comments.

Thank you for your cooperation.

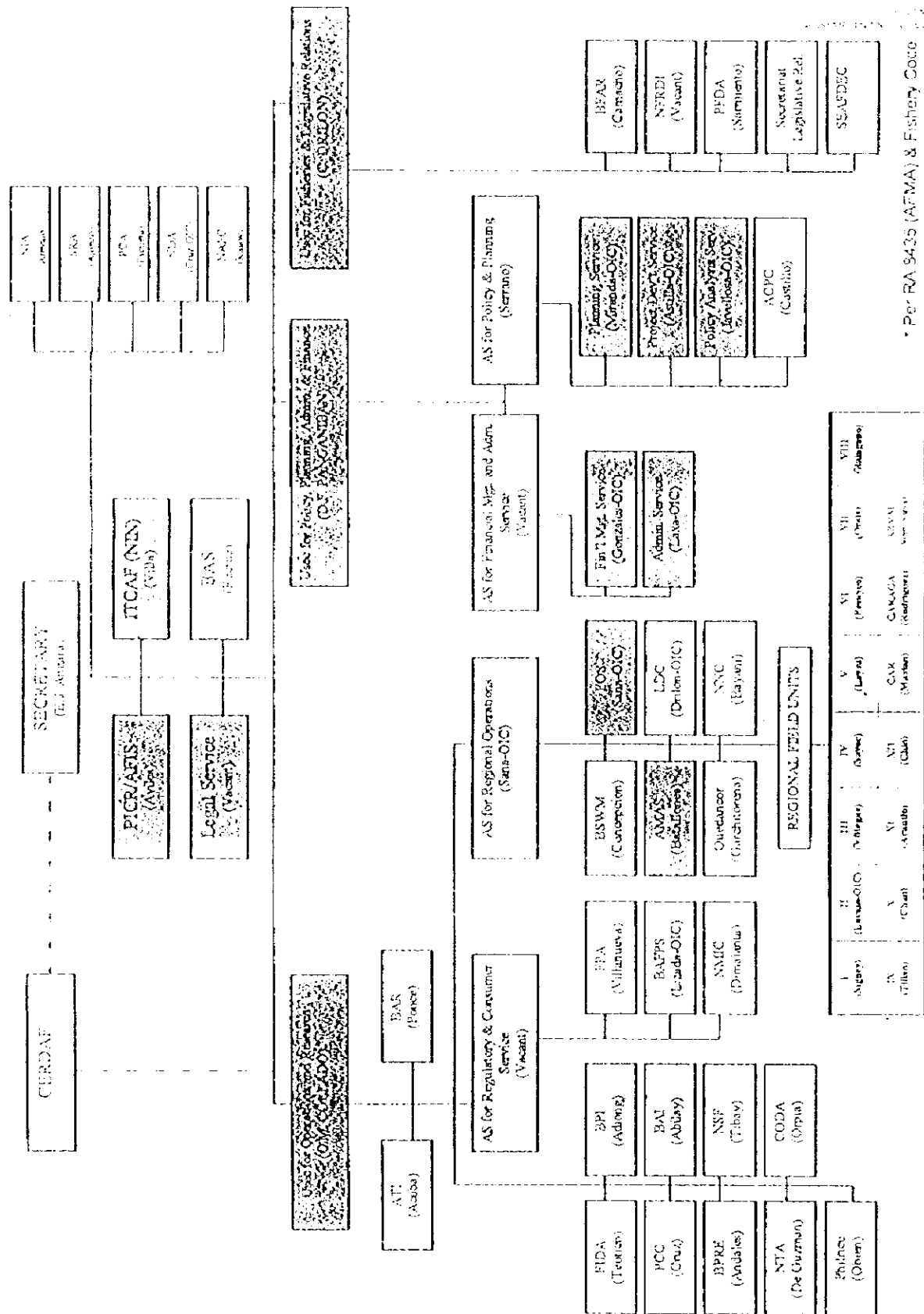
Annex II
Organizational Charts of the Philippines

NEW ORGANIZATIONAL CHART DEPARTMENT OF AGRICULTURE



* Per RA 8435 (AFMA) & Fishery Code

NEW ORGANIZATIONAL CHART DEPARTMENT OF AGRICULTURE



IX. ORGANISATIONAL STRUCTURE OF THE NATIONAL FISHERIES AUTHORITY

The Department of Agriculture (DA) through the Bureau of Fisheries and Aquatic Resources (BFAR) has responsibility for the fisheries sector (Fig. 1). Under the Philippine Fisheries Code of 1998, the BFAR as a reconstituted line bureau under the DA and created the position of Undersecretary for Fisheries and Aquatic Resources solely for the purpose of attending to the needs of the fishing industry.

BFAR, as a line bureau is headed by a Director and assisted by two Assistant Directors who shall supervise the administrative and technical services of the bureau, respectively. The Bureau have 11 Divisions, 8 National Technology Centers, 7 Regional Fisheries Training Centers, 15 Regional Fisheries Offices with Provincial Fisheries Offices, strategically located nationwide (Fig. 2).

Figure 1 Organizational Structure
DA and BFAR

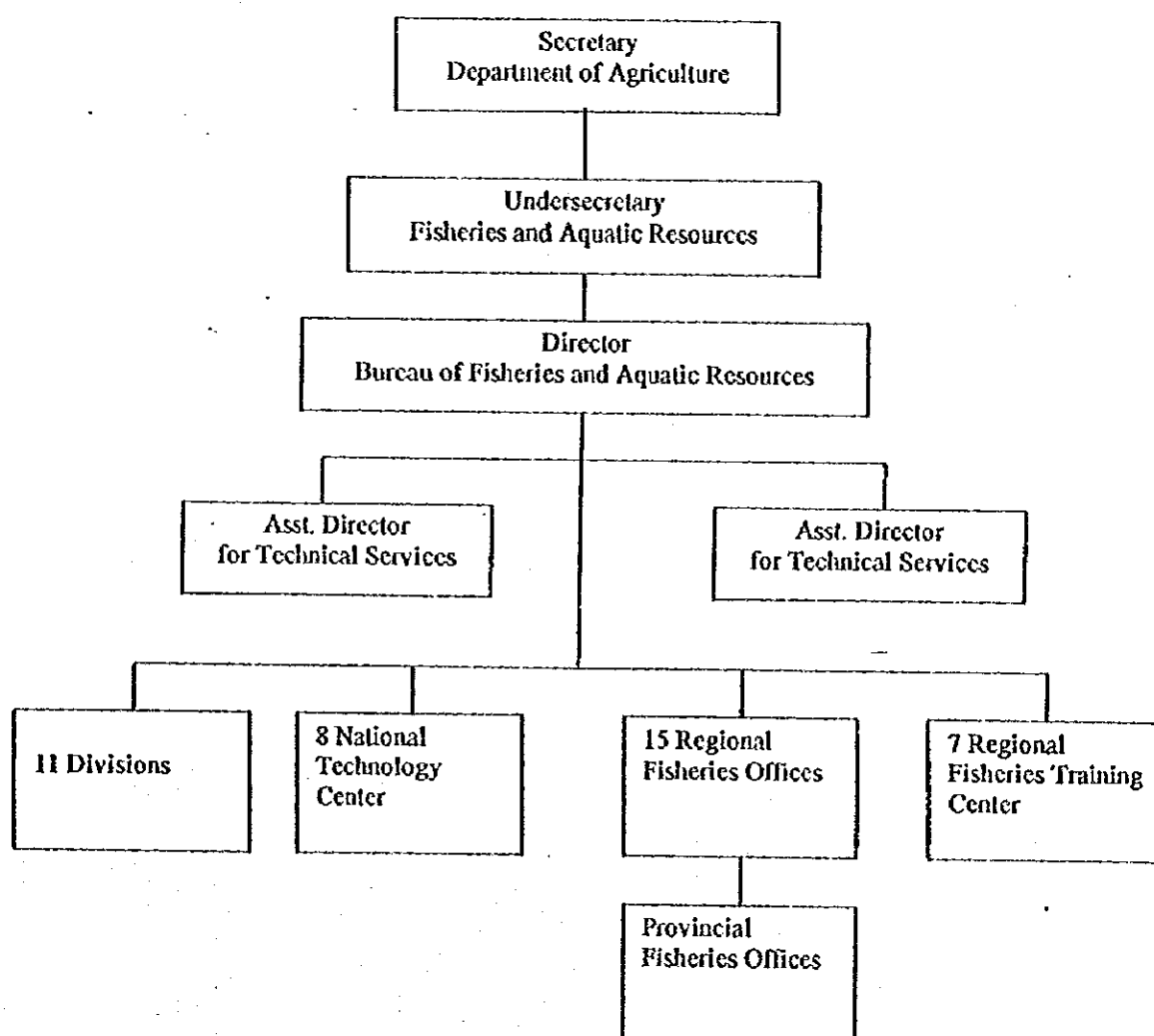
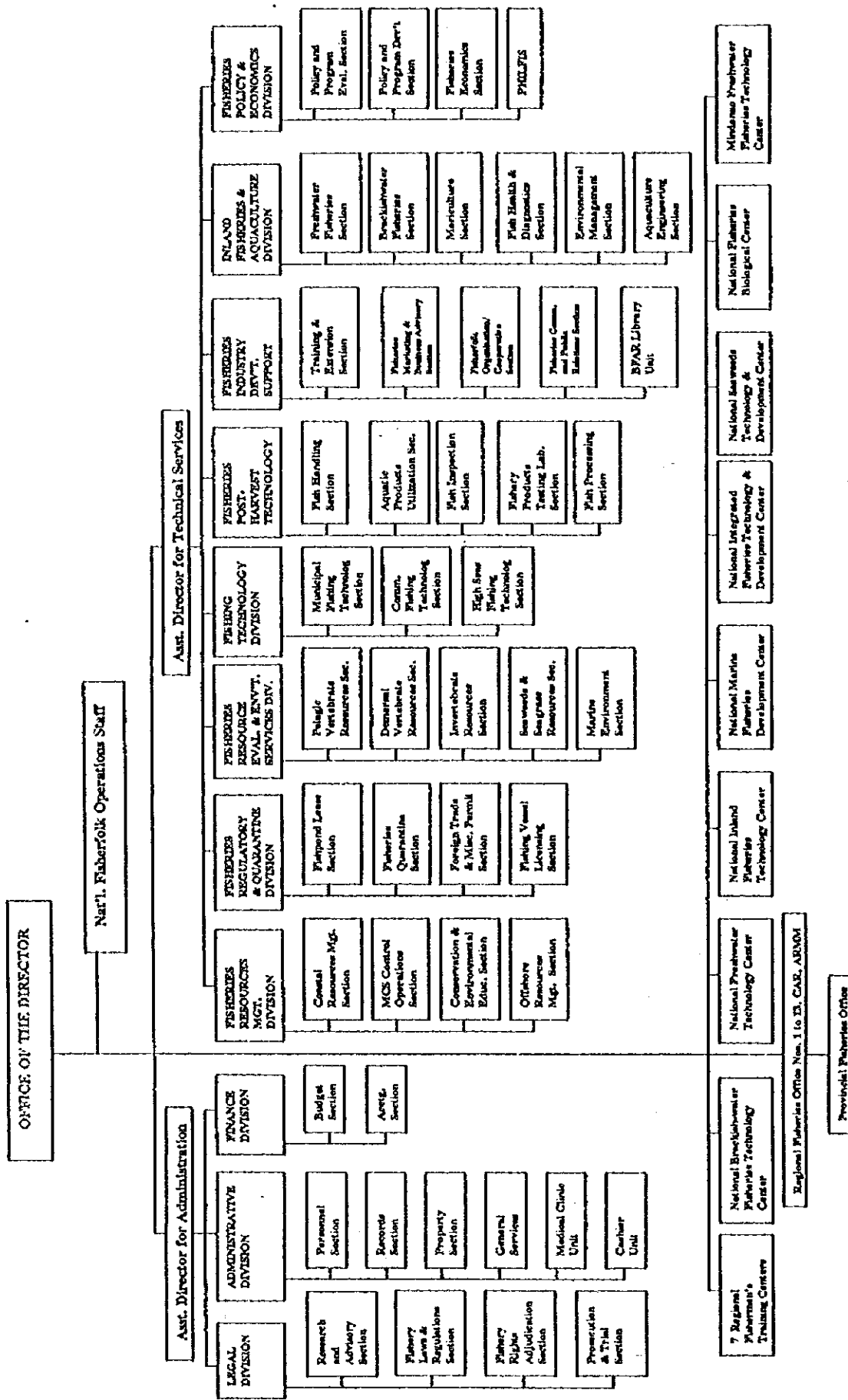
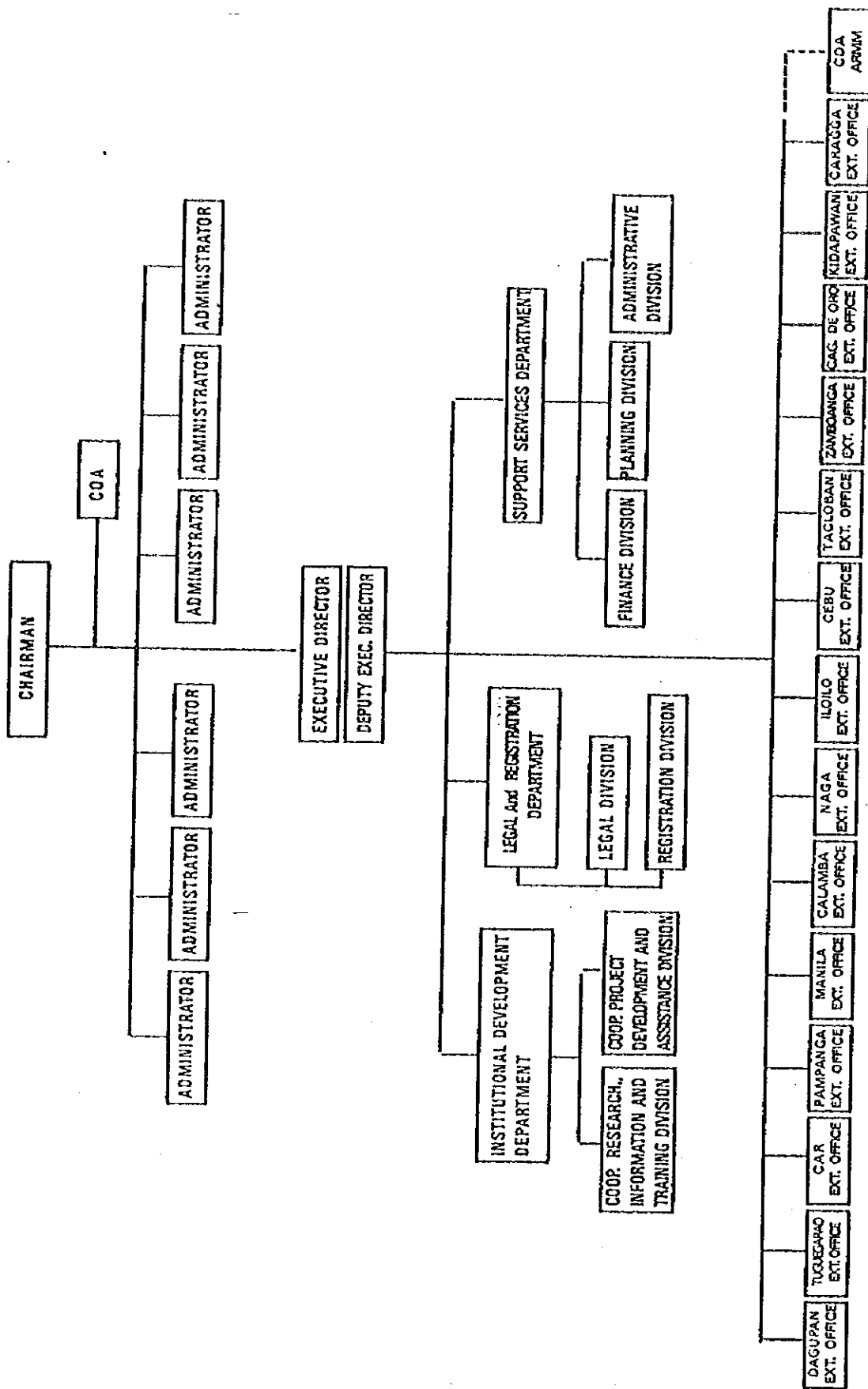


Figure 2 Organizational Structure-BFAR



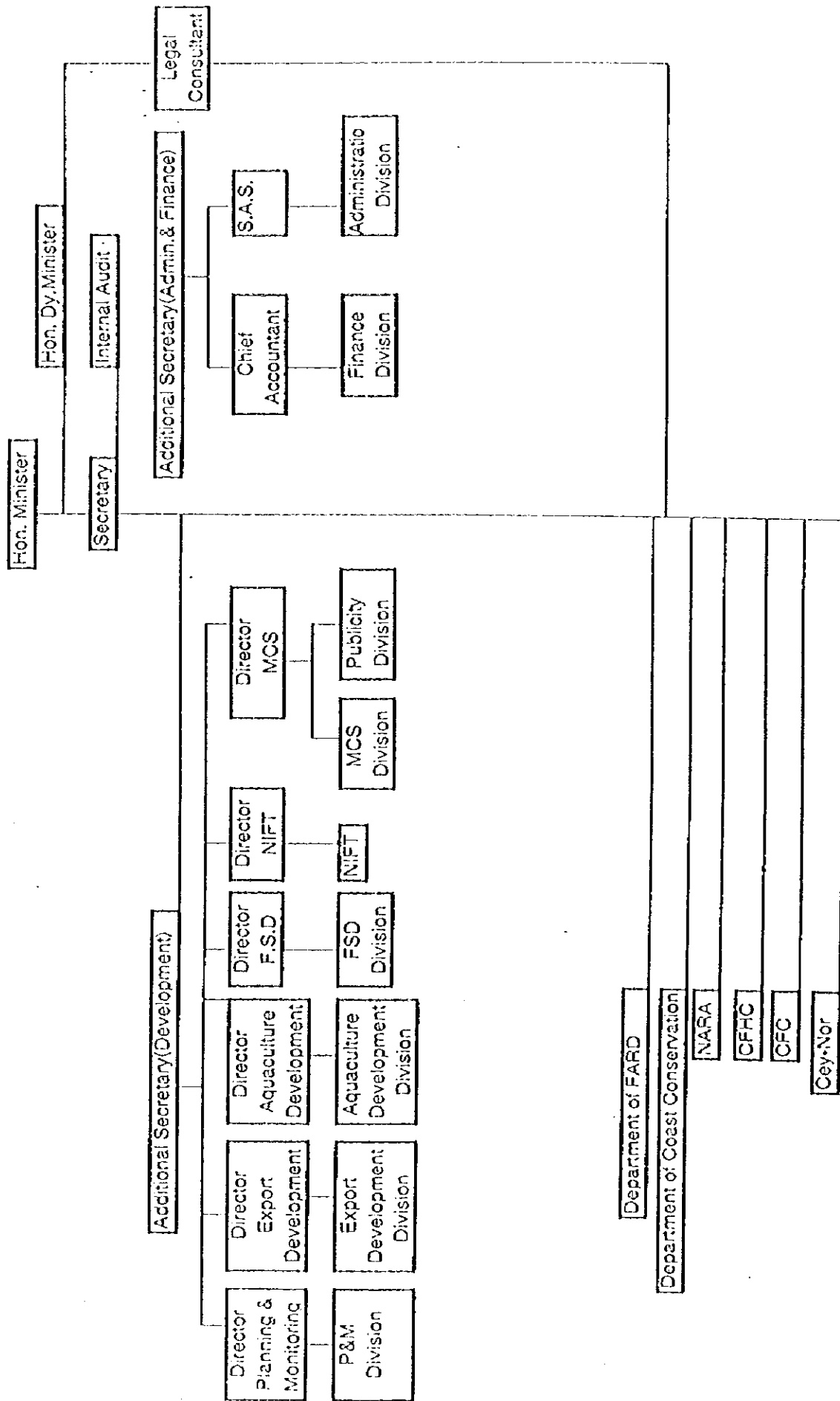
* Proposed to DMM as per RA 8550
(Updated January 19, 1999)

COOPERATIVE DEVELOPMENT AUTHORITY ORGANIZATIONAL STRUCTURE



Annex III
Organizational Charts of Sri Lanka

Ministry of Fisheries & Aquatic Resources Development ORGANOGRAM



Annex IV
Review of the Study Report of the Philippines from Fisheries
Development and Planning Group Training Course 1999

JICA KIFTC

**SEMINAR ON FISHERIES DEVELOPMENT
PLANNING**

STUDY REPORT

on

**Community-Based Coastal
Resource Management Through
Fisheries Cooperative in the
Philippines**

MARISSA D. ALBALADEJO

Kanagawa International Fisheries Training Center

March 1999

CONTENTS

1. PROJECT SUMMARY
2. BACKGROUND AND JUSTIFICATION
 - Overview of the Women s Situation
 - Women in Fisheries: Roles and Needs
 - Women in Coastal Resource Management
3. OBJECTIVE OF THE ASSISTANCE
4. WORK PLAN
5. JICA S INPUTS
6. REPORTING
7. GOVERNMENT CONTRIBUTION AND SUPPORTING ARRANGEMENTS
8. REFERENCES

Annexes

Map of the Philippines

Project Framework

Work Plan

Terms of Reference for Coastal Resource Management

Terms of Reference for Fish Processing and Marketing Specialist

Terms of Reference for Gender and Micro-Enterprise Development Specialist

PROJECT TITLE : Community-Based Coastal Resource
Management Through Fisheries Cooperatives

PROPONENT : Bureau of Fisheries and Aquatic Resources

COOPERATING AGENCIES : Cooperative Union of the Philippines

A. PROJECT DESCRIPTION

1. OBJECTIVES

General:

To contribute to sustainable fisheries development and consequently reduce poverty among fisherfolk members.

Specific:

- a. To strengthen the role of women and capability of fishery cooperatives in promoting, implementing and managing community-based coastal resource management (CB-CRM) programs;
- b. Promote income diversification by developing the cooperative's ability in enterprise development and management.

2. STRATEGIES and MAJOR COMPONENTS

- a. **Capability Building**

This component will focus on strengthening the capacity of fishery cooperatives for community-based coastal resource management (CB-CRM) and will include training, technical assistance and provision of expert/consultancy advice.

b. Micro-Enterprise Development

This aims to promote and develop the entrepreneurial capability of fishery cooperative members by implementing micro-enterprises to diversify their source of income and promote alternative source of livelihood.

c. Implementation of Pilot Projects

This will involve the identification and implementation of pilot projects that could either be directly related to CRM such as mangrove protection and reforestation, marine reserves and fish sanctuaries and those involving small pilot-scale fish processing plants.

3. PROJECT COVERAGE

Location : Aurora and Zambales provinces

Duration : 18 months

Target Beneficiaries : Fishery Cooperatives in the pilot sites

4. FUNDING SOURCE and REQUIREMENTS

Source : Japan International Cooperating Agency (JICA)

Requirement :
National Consultants

Technical Backstopping
Official Travel Within the Country
General Operating Expenses
Equipment
Direct Operating Expenses
Training

B. FINDINGS/ISSUES

1. The project proposal is consistent with the Ten-Point Agenda in Agriculture and Fisheries of the President Joseph E. Estrada Administration, particularly the private sector participation and empowerment of farmers and fisherfolk through the strengthening of associations and cooperatives.
2. The importance of co-management as an alternative management strategy has gained widespread attention because it recognizes the importance of involving the local communities, group of fishermen, and the government in the management of resources.
3. The need to institutionally prepare the fishery cooperatives stems from the creation of the Fishery Aquatic Resources and Management Councils (FARMCs) at the municipal levels in the Philippine Fisheries Code of 1998. At least 11 fisherfolk representatives will compose the FARMCs whose role is to participate in the planning and implementation of policies and programs for the management, conservation, development and protection of fisheries resources in municipal waters.
4. From the incidence of Minamata Disease, Japan has learned a very important lesson on how activities that place priority on the economy but lack consideration for the environment can cause grave damage to health and environment, and how it is difficult to recover from this damage later on. From this purview, Japan plays a major role in the environmental activities of International organizations such as the

United Nations Environment Programme (UNEP) and OECD's Environment Policy Committee. As a part environment-related Official Development Assistance (ODA), the Japanese Government dispatches survey missions to Southeast Asian countries to conduct policy dialogues and identify projects for environmental assistance. **It is within this context that assistance from JICA is being sought by the Philippine government.**

3. Aurora and Zambales were identified as pilot areas for this project. They were chosen because they were not recipients of past and existing CB-CRM programs of government.
4. Guidelines in identifying fishery cooperatives within the pilot areas should also be prepared. These guidelines should be prepared by BFAR, JICA and CUP and should not be limited to fishery cooperatives under the CUP umbrella.
5. A village-level fish processing plant will be established in the pilot area. The equipment were already enumerated in the proposal and expected capacity of production was identified.

Establishing a fish processing plant should be market driven. There should be a clear indication that the demand for the expected finished product is great. There should also be data on the volume of available raw materials to maximize the capacity of the expected plant.

6. BFAR will be providing the technical direction and the necessary administrative support. As such, it will be needing personnel to perform such functions. The proposal should include the number of personnel that will be required and the source - existing within the organization or hired.
7. Sustainability of the project after the assistance has been provided should be clearly indicated in the proposal.

8. The project should be consistent with the plan for fishery development of the pilot provinces identified. It should not be duplicative of any existing programs of the province.

There should be an assurance that the provincial government is willing to participate and support the said project.

C. RECOMMENDATIONS

For further review of the Technical Committee members.

COMMUNITY-BASED COASTAL RESOURCE MANAGEMENT THROUGH FISHERIES COOPERATIVES

I. BACKGROUND AND JUSTIFICATION

Resource depletion and persistent poverty are the major problems confronting the small-scale fisheries sector in the country. These twin issues, which are mutually reinforcing, have relegated the small-scale fisherfolk to be one of the most economically and socially disadvantaged groups in Philippine society. Among others, the depleted state of the resource is attributed to overfishing, illegal fishing and fish habitat degradation. To address these problems, the government has implemented and is still implementing programs that promote the productivity of fishery resources within sustainable and ecological limits. The key word is **sustainability**. Towards this end, the promotion of community-based coastal resource management (CB-CRM) programs and projects has received attention.

As an approach to sustainable development, CB-CRM involves the protection, rehabilitation and regeneration of the degraded coastal areas to benefit coastal communities. It is an integrated approach that considers the interrelationships and interdependencies of the biological, physical, socio-cultural, economic, legal and institutional factors in a given area. Because of its integrated approach, it requires the participation of the various stakeholders. A major stakeholder is the coastal community itself that is dependent on the resource for its livelihood. Studies and experience have shown that the key to the success of any CB-CRM initiative is the active involvement and participation of the community. Indeed, CB-CRM is premised on community accountability and responsibility.

The importance of co-management as an alternative management strategy has gained widespread attention because it recognizes the importance of involving the local communities, group of fishermen, and the government in the management of resources. This is a shift way from top-down fisheries management to one that entails mutual coercion, mutually agreed upon by the majority of the people affected (Hardin, 1968). Such an approach supports the growing contention among fisheries experts that fisheries management is not solely a government responsibility but the

users as well, and that fishermen must be given extensive participation in the development and management policies.

Fishery cooperatives, as locally-rooted institutions, can play a strategic role in the implementation of CB-CRM programs. Given the proper support and interventions, they can serve as channels for CB-CRM schemes. Cooperativism in the fishery sector is, however, relatively young. According to the Cooperative Development Authority, there are only around 240 fishery cooperatives in the country, accounting for only 1.4% of total registered cooperatives. There is therefore an urgent need to strengthen fishery cooperatives in order for them to become viable and committed organizations that are able to mobilize community activities for CRM purposes. This was brought out clearly during the recent Workshop on Community-Based Fisheries Management Through Cooperatives held recently in 1997. The workshop was sponsored by the Cooperative Union of the Philippines (CUP), the International Cooperative Alliance and the Bureau of the Fisheries and Aquatic Resources (BFAR).

In the case of Japan, one of the most important functions of the Fishery Cooperative Associations (FCAs) in relation to fisheries management is education of fishermen. In recognition of this importance, to the fishery cooperative movement, Zengyoren and prefectural federation of FCAs have carried out member education programs. The Fishery Agency and prefectural government have continuously provided subsidies for this purpose.

Fishery cooperatives can have a significant impact on making both small-scale fisheries and industrial fisheries sustainable. As in the case, of Azumacho FCA in Izumi-gun, Kagoshima Prefecture, their actions as individual producers and as an organizations representing the interests of their members has contributed in the improvement of their standard of living, reduce overfishing and depletion of fish stocks; can work with government and other agencies in monitoring the condition of the fishing ground, has contributed to cessation of degradation of ecosystems due to contaminants, through their joint actions increase the value of their fish catch, has introduced selective fishing gear and has created reliable databases.

Encouraging the fishermen to work together in the spirit of cooperativism under the democratic management system of FCA constitutes an important philosophy behind this activities.

The recent reenactment of the Philippine Fisheries Code of 1998 that took effect last March has also underscored the urgency for the strengthening of fishery cooperatives. Two major provisions of the Code directly affect and benefit fishery cooperatives: 1) the preferential granting of fishing privileges in municipal waters to duly registered fishery organizations and fishery cooperatives; and 2) the creation of Fishery Aquatic Resources and Management Councils (FARMCs) at municipal levels. FARMCs institutionalize the role of the local fisherfolk and resource users in the planning and implementation of policies and programs for the management, conservation, development and protection of fisheries resources in municipal waters. According to the new Code, at least 11 fisherfolk representatives, among other members, will compose the FARMCS. The fishery cooperatives must be institutionally prepared to participate in and take advantage of these new mandates and opportunities.

From the incidence of Minamata Disease, Japan has learned a very important lesson on how activities that place priority on the economy but lack consideration for the environment can cause grave damage to health and environment, and how it is difficult to recover from this damage later on. From the purely economic standpoint, too an immense amount of cost and a great deal of time are required to deal with such damages, and, when we compare these costs incurred vs. the cost of the measures that could have prevented the pollution is certainly not an economically advisable option.

From this purview, Japan plays a major role in the environmental activities of international organizations such as the United Nations Environment Programme (UNEP) and OECD's Environment Policy Committee. Financial contribution of 1.342 billion yen was made to UNEP in FY 1993 and the establishment of the International Environmental Technology Center (IETC) of UNEP was supported by Japan. As a part environment-related Official Development Assistance (ODA), the Japanese Government dispatches survey missions to Southeast Asian countries to conduct policy dialogues and identify projects for environmental assistance. With regard to the issue of minimizing the environmental impact of development project, since 1992,

JICA draws up various guidelines for dam construction projects, agricultural, fisheries and rural development projects, forestry development projects, mining and industrial development projects etc. It is within this context that assistance from JICA is being sought by the Philippine government.

The major components of the requested assistance are capability building, micro-enterprise development and implementation of pilot projects. The capability building activities would focus on strengthening the capacity of fishery cooperatives for CB-CRM and would include training, technical assistance and provision of expert/consultancy advice. Practical skills, technical and managerial training as well as those pertaining to enhancing social dimension skills such as conflict resolution and consensus building are envisioned. Particular emphasis will be on CB-CRM principles and procedures that would be appropriate for the implementation of the CB-CRM plan. Microenterprise development aims to promote and develop the entrepreneurial capability of fishery cooperative members by implementing microenterprises to diversify their source of income and promote alternative source of livelihoods. Pilot projects involve the identification and implementation of pilot projects that could either be directly related to CB-CRM such as mangrove protection and reforestation, marine reserves and fish sanctuaries and those involving small pilot-scale fish processing plants.

Particular focus on the role and participation of women. Gender division of labor in coastal fishing communities is such that the men generally carry out fish production activities and women market and process the fish catch. Unfortunately, a majority of government's initiatives in the fisheries sector are male-centered because of the concern and priority on production-related activities. Consequently development efforts are directed mostly to the fishermen to the disadvantage of the women who also play major roles in these communities. The project will address this oversight by explicitly including and identifying women in fishing communities as participants and beneficiaries of project assistance. Existing fishery cooperatives will be encouraged to increase the membership of women or as necessary, special groups of women within the cooperative could be established.

Women's potential role in CB-CRM is still largely unharnessed. The project will tap into this potential through their inclusion in all capability building, microenterprise and pilot project implementation activities. The new Code explicitly

provides, as a matter of policy, support and assistance for the women and identifies them as constituting membership of fisherfolk representatives in FARMCs.

The project directly responds to JICA's identified key priority areas in its plan of action for women in development as it addresses and recognizes the contribution and role of women in food security, environment and poverty alleviation.

Overview of Women's Situation

The situation of women is conditioned and influenced by the socio-economic, political and cultural context. Global, regional and local changes have affected women in different degrees. But while significant development have occurred in the last two decades to improve women's status, much is still to be done to strengthen their claims to development resources.

In agriculture sector, the first decade covering 1976-1985 noted the low recognition accorded to the three million rural workers and their limited participation in agricultural development programs (NCRFW, 1995, p.13). This resulted among others, the invisibility of rural women's work in labor force surveys: thus, lower labor participation rate for women, low wages and restricted access to social and other services. The feminization of poverty and its consequent effects on women's workload access to education and health services and limited economic opportunities were major concerns.

The second decade saw a more active partnership between the government and non-government sectors in attempting to develop more gender responsive development programs and services. In preparation for the 1995 Beijing Conference and at the onset of the third decade, the second decade was reviewed and assessed according to the following major areas of concerns, as identified by the United Nations Commission on the Status of Women (NCRFW, p 15): 1) Inequality in the sharing of power and decision-making at all levels; 2) Insufficient mechanisms at all levels to promote the advancement of women; 3) Lack of awareness of, and commitment to, internationally and nationally recognized rights; 4) Poverty; 5) Inequality in women's access to and participation in the definition of economic structures and policies and productive process itself; 6) Inequality in access to education, health, employment and other means to maximize awareness of women's

rights and the use of their capacities; 7) Violence against women; and 8) Effects of women of continuing national and international armed or other kinds of conflict.

The Philippine report card on these areas of concern show some significant strides and achievement, particularly in setting up mechanisms that promote the advancement of women. These include national machinery's legislation and government and non-government networking and partnership. However the same report cautioned that the mechanisms are still insufficient and are beset with problems of cultural and bureaucratic and lack of technical and financial resource (NCRFW, p25).

Poverty is still rampant. A UNICEF-funded situation analysis that the poverty situation appears to have worsened since 1998 as a result of economic slow-down and several natural disasters (NCRFW, p43). The incidence of poverty is higher in rural than in urban areas. Women in particular are hardest hit, as they become poorer thus forcing them to shoulder the extra burdens to keep their family afloat. The exclusion of almost half of rural women from the ranks of the employable and economically productive still reveals the lack of recognition for and valuation of women's work.

The implementation of Local Government Code in 1992 has hampered the delivery of agriculture extension service. Agriculture field technicians were developed to the local government units and functioned as generalists than specialists. This situation has particularly affected the fisheries sector. The NCRFW report revealed that in 1992, only about 12 percent among the households engaged in agriculture received assistance (p.49). Of this, only 2.97 percent were fishing households. This information was not gender disaggregated so it can be assumed that the beneficiaries were mostly men.

Economic empowerment for women refers for her being given access and control over economic resource like credit, capital and technology. The passage of 1992 Republic Act, also known as Women in the Development and Nation Building Act assured equal access to all economic opportunities including credit, land ownership and training among others. It also mandated the allocation of substantial portion of Official Development Assistance (ODA) to support programs and implement activities for women. Earlier in 1990, Republic Act 6972 was passed

providing for the establishment of day care centers in every village to free the women for other activities. Such laws, however have yet to be fully implemented as mechanisms and systems have yet to be developed and installed. Access to credit is still restricted because collateral requirements, high interest rates and the generally burdensome requirements and procedure imposed by banks. However, micro-credit projects implemented by NGOs and selected government agencies have reaches some rural poor women.

Women in Fisheries: Roles and Needs

A sensitivity and appreciation of existing economic and social structures, which includes women's roles and contributions, is a necessary requirement in the design of an effective fisheries programs. Although there have been initial attempts to incorporate gender concerns in fisheries development and management, such are hampered by a general lack of more comprehensive studies and investigation focusing on women's contribution in quantitative terms. There have been numerous socio-economic studies on fishing communities but the results of such were not gender-disaggregated, as the focus has always been the fishermen.

The conduct of gender-specific studies, socio-economic studies, socio-economic studies in particular are only undertaken only when women fisherfolk are themselves as the target participants of development programs. These studies were essentially site specific and therefore cover a limited field relative to the total women population in fishing communities. This limitation notwithstanding, they provide us some indications on the extent of women's multiple roles as played out in a fishing community.

For low-income households, particularly in rural areas, it is recognized that women assume multiple roles. These roles are generally categorized as those involved in productive, reproductive and community managing work. Reproductive works refer to those activities related to childbearing and rearing and essentially those activities required guaranteeing the maintenance and reproduction of the labor force. In practical terms, this means rendering household work and other services that enable the fishermen to go out to sea and perform the strenuous task of fish capture. Productive work covers women's economic involvement, whether as primary but as usually considered as secondary income-earning activities. Women's

community managing role is seen more in the context of managing their neighborhood and community in terms of providing items and services of collective consumption, such as their role in community feeding programs, among others. This is contrast to the generally perceived man's role in community leadership. Community managing can thus be seen as an extension of the woman's traditional and ascribed roles as wife and mother.

Involvement in fisheries activities. Women in fisheries are involved in different degrees in the three phases of the fish production process, i.e., pre-harvest, actual harvest, and post harvest activities. The following briefly describes this involvement, as summarized from Legaspi (1995, pp. 8-9).

- Fish marketing and vending-the most predominant activity of women in fisheries and involves in selling the husband's catch within the community or in nearby markets. The volume of fish sold is thus dependent on husband's catch.
- Fish processing-generally household-based and thus undertaken on small-scale. Fish processed are salted, dried, or smoked and are usually excess catch which cannot be absorbed in the fresh fish market.

Tan (1995, p.4) reports that women contributes from 50-70 percent of all handling, processing, marketing and distribution activities for fisheries.

- Fry gathering- particularly undertaken in areas where fry is abundant and is done by both men and women, including the children.
- Gender preparation and net vending —for multiple hook and line gear, involves in disentangling the line and putting baits on each hook. This very laborious process takes up almost as much time as that consumed by the fishermen during actual fishing. For example, women who prepare the jigging and troll gear spend about 4-6 hours (Tan, p.4) in this task. The mending of nets is usually done in the afternoon when the women have finished household chores.

- Actual fishing —a survey in 1981 revealed that a substantial number of women are engaged in fishing activities. For example, of the 628 women interviewed, 487 are engaged in fish capture and 15 are in gathering shellfishes and seaweeds.
- As fishing boat owner/operator and financier —some women own their own boats and hire fishermen to operate them; some acts as financiers who either buy the fishermen's catch or act as broker or wholesaler.

Involvement in non-fisheries activities —women's involvement in other economic activities is generally seen as supplementing and augmenting the husband's income. This includes operating a small variety store, making and selling native sweets and delicacies, pig-raising, petty trading and vegetable gardening. In areas where the resource base were depleted which consequently led to a decline in their husband's catch, women were forced to seek employment in the service sector and other traditional female occupations. This involves women selling their labor as laundrywomen or those subcontracting sewing jobs for a local export-oriented garment factory. (Israel, 1991, p.3).

In sum the problems of the fishing industry, particularly small-scale fisheries, confront both men and women. Concerns such as deepening poverty in the sector, serious resource and environmental degradation, poor infrastructure support, and general inaccessibility of other services have continually beset the sector. While these affect all the fisherfolk, the burden of survival has not been gender—neutral. The multiple roles of women in fisheries and the general lack of attention to them cry out for special consideration and support. With the multiple roles notwithstanding, women's potentials are still left unharnessed. Organizing them presents scope and promise.

Women in Coastal Resource Management

Given their involvement in fish production activities, women have as much in the protection and management of fishery resources as fishermen. Women have been found to have higher perceptibility of depletion of certain resources than men because being fish traders and consumers tasked with planning the family meal,

women are aware of what species have been absent or scant from the market for already extended period (Lachica, 93, p.25).

Women are bound to be positively affected by the improvement in catch because household income would increase i) from the value of fish caught; and ii) from incremental by those engaged in fish vending, processing and marketing (Tan, 1995, p.48).

A recent review of the performance of Fishery Sector Program (FSP), funded by Asian Development Bank (ADB) in 1991, particularly its impact on women showed that the implementing design contained features which serve as obstacles to the mainstreaming of women in the program (Tan, pp.65-66). First the group formation was directed mostly at fishermen since the target group of the program are fishermen. Second, the design did not explicitly recognize that women are also stakeholders in coastal resource management. As a consequence, training to make the users involved in resource management as well as livelihood programs were directed at fishermen. Evidently, the FSP was implemented with very little gender awareness among implementers (Tan, p.66).

Despite the oversight, however, and to the credit of the women, the review noted that a number of women managed to become part of FSP activities, particularly attendance to meetings, memberships in various management councils and are aware as men in resource issues. Some of the women in Calauag Bay were deputized as fish wardens active in pursuing law offenders. The unplanned results on women participation was more prevalent in other target areas had there been effort to put women in the mainstream of target groups.

As a measure, then to sustain coastal resource management programs, the report recommended the crucial need to continue the effort to organize the fisherfolk, this timer explicitly including women, into empowered groups which can effectively advocate for measures to protect the resources and to institute equitable sharing of resources.

II. OBJECTIVE OF THE ASSISTANCE

The main objective of the requested assistance is to strengthen the role of women and capability of fishery cooperatives in promoting, implementing and managing CB-CRM programs. To complement this objective, it will also promote income diversification by developing the cooperative's ability in enterprise development and management. The long-term goal is to contribute to sustainable fisheries development and consequently reduce poverty among the fisherfolk members.

III. WORKPLAN

The project will be implemented by the BFAR and CUP which already has an existing partnership. Project duration is for eighteen months. Two areas in the island of Luzon are being considered as pilot sites, namely Aurora and Zambales provinces. These areas have not been recipients of past and existing CB-CRM programs of government and would therefore benefit from the assistance.

The project's major activities include: social preparation, capability building, micro-enterprise implementation, village-level fish processing plant operationalization and CB-CRM activities. Local consultants will be contracted to conduct capability building activities and provide periodic on-site coaching on their respective expertise. While BFAR provides overall technical direction, local consultants are required because they would have to be based on-site for a considerable period of time to provide expert advice and serve as a coaching team.

The detailed work plan is presented as Annex 1.

IV. JICA's INPUTS

1. Personnel (TOR appears as Annexes 2-4)

National Consultants (12 m/m spread in 18 months):

- CB-CRM Specialist
- Fish Processing and Marketing Specialist
- Gender and Micro-enterprise Development Specialist

Supervisory Technical Services:

- JICA's technical backstopping (two weeks in two missions)

2. Official travel within the country

- travel of national consultants and JICA staff related to the project to the two project sites

3. General Operating Expenses (GOE)

- covers expenses for operating the project in the pilot sites including social preparation, capability building, micro-enterprise development and CB-CRM activities.

4. Equipment

- two sets (one in each site) of fish processing equipment and utensils for fish canning, fish smoking and for a variety of surimi-based fishery products with an approximated daily capacity of 100 kilograms.

5. Direct Operating Expenses (DOE)

6. Training

- covers cost of training and other capability building activities in CB-CRM, micro-enterprise development, fish processing, and social dimension skills.

V. REPORTING

Reporting will be as follows: 1) mission reports from each consultant at the completion of his/her separate assignment; and 2) quarterly progress reports of project implementation by the National Project Coordinator.

VI. GOVERNMENT CONTRIBUTION AND SUPPORTING ARRANGEMENTS

The Government of the Philippines, through the BFAR, will be responsible for the technical direction of the project by providing a National Project Coordinator, including the necessary administrative support. It will coordinate and liaise between JICA and the CUP in all project activities. In financing micro-enterprises and working capital for the pilot fish processing plant, BFAR will facilitate access and approval of loans to the fishery cooperatives through the Integrated Livelihood Program for Fisherfolk (ILPF). The ILPF is a government program aimed to improved the living condition of the small-scale fisherfolk through the provision of livelihood projects. Its credit component which is being administered by QUEDANCOR provides credit for identified livelihood projects of the beneficiaries. Fishery cooperatives are eligible borrowers from this Fund and can take out loans for working capital or start-up for identified micro-enterprises. BFAR will assist and facilitate access to the Fund.

The CUP, as the cooperative federation partner in the project, will provide the direct link and coordinating mechanism to the fishery cooperative and the local government units. It will identify the pilot sites and be responsible for communicating and coordinating with the identified fishery cooperatives. On-site administrative and support services and facilities, including transport and local travel to and within the project site will also be provided by CUP. The site for the pilot fish processing plant will also be CUP s responsibility.

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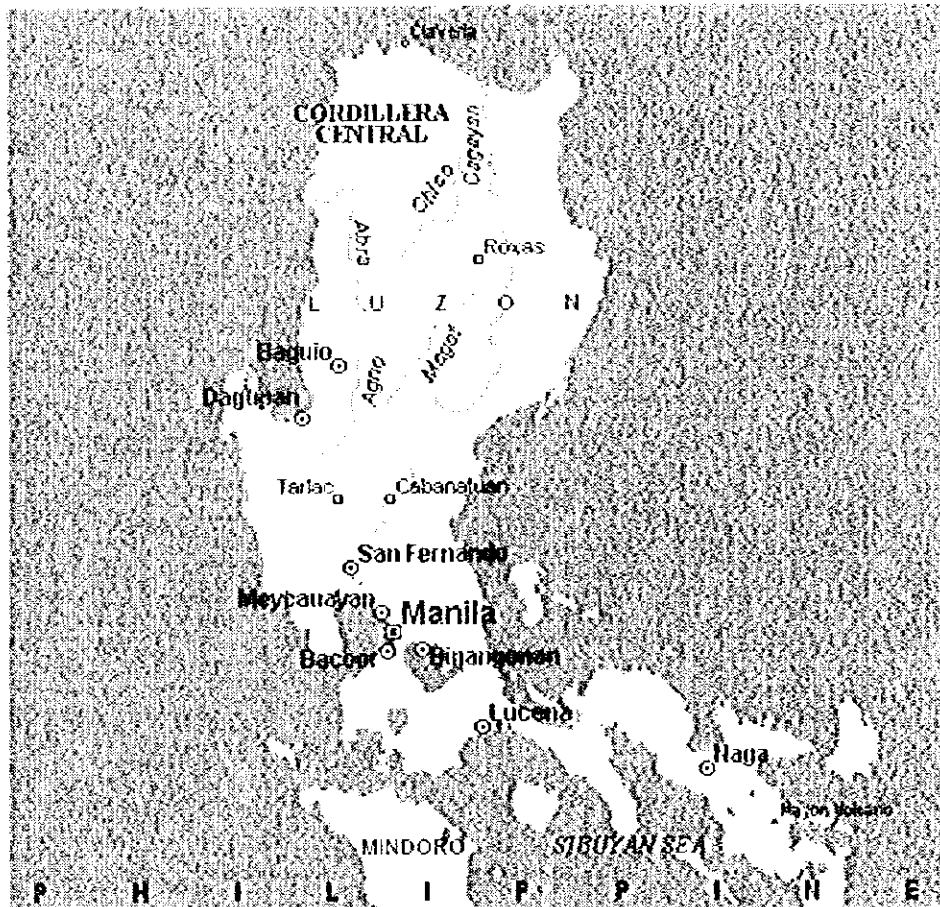
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Annex 1

MAP



Map of Luzon Area of Philippines

Annex II

Project Framework

PROJECT FRAMEWORK

PROJECT TITLE: COMMUNITY-BASED COASTAL RESOURCE MANAGEMENT THROUGH FISHERIES COOPERATIVES

| Design Summary | Targets/indicators | Project monitoring system | Risks/assumptions |
|---|--|--|---|
| Sector/Area Goals 1.1 To sustain fisheries resource management and conserve the coastal fisheries. | <ul style="list-style-type: none"> A well managed coastal fisheries and stabilized or improved fish biomass (stocks) by 30 percent in the project coastal fishing areas | <ul style="list-style-type: none"> Continued National Stock Assessment Program (NSAP) and landing statistics. | <ul style="list-style-type: none"> Coastal fisheries resource management policy remains consistent, and efficient monitoring, control, and surveillance (MCS) sustained. |
| 1.2. To reduce poverty among coastal fishing communities. | <ul style="list-style-type: none"> Poverty level reduced from current 60 percent of project coastal fishing communities. | <ul style="list-style-type: none"> Socio-economic survey at midterm and Project completion, and socio-economic profiles at the district level. | <ul style="list-style-type: none"> No substantial population immigration to project sites and no unexpected increases to basic community costs. |
| Objectives 2.1 To strengthen the role of women and capability of fishery cooperatives in promoting, implementing, and managing community-based coastal resource management (CB-CRM) programs. | <ul style="list-style-type: none"> To increase economic empowerment of women by giving access to credit, capital and technology. Fishing efforts regulated in the two sites involved in CB-CRM | <ul style="list-style-type: none"> Coastal fish stock assessments at initial, midterm, and completion of the Project and monitoring and evaluation (M & E) reports Socio-economic surveys at initial, midterm, and completion of the project | <ul style="list-style-type: none"> Livelihood opportunities are available and women /fishers population remains stable. |

| | | | |
|--|--|--|--|
| 2.2.To promote income diversification by developing the cooperative s ability in enterprise development and management. | <ul style="list-style-type: none"> ▪ A large portion of community households increase their income by 30 percent and improved their living conditions. | <ul style="list-style-type: none"> ▪ Socio-economic surveys at initial, midterm, and completion of the project. | Livelihood opportunities are available and women /fishers population remains stable. |
| Project Components and Outputs | | | |
| 3.1. Capability Building <ul style="list-style-type: none"> ▪ Conduct trainings to strengthen the capacity of fishery cooperatives for community based coastal resource management | <ul style="list-style-type: none"> ▪ At least four trainings conducted for capability building. | <ul style="list-style-type: none"> ▪ Review mission and PCR | <ul style="list-style-type: none"> ▪ No substantial population immigration to Project sites and no unexpected increases to basic community costs. |
| 3.2. Micro-Enterprise Development <ul style="list-style-type: none"> ▪ Organized coastal fishing communities and developed community cooperatives ▪ Provided technical, credit, and social service to cooperatives ▪ Established new micro-enterprises / income generating system | <ul style="list-style-type: none"> ▪ 20 fisheries associations/cooperatives formed ▪ 20 fishery cooperatives received technical, credit, and other social services ▪ 20 fishery cooperatives members provided income-generating opportunities | <ul style="list-style-type: none"> ▪ Socio-economic surveys at initial, midterm and completion of the project | |
| 3.3. Implementation of Pilot Projects <ul style="list-style-type: none"> ▪ Developed coastal fisheries resource management plans | <ul style="list-style-type: none"> ▪ At least two coastal fisheries resource management plans developed at two sites | <ul style="list-style-type: none"> ▪ Review mission and PCR | |

| | | | |
|---|---|---|--|
| <ul style="list-style-type: none"> ▪ Initiate and implemented fisheries resource and related habitats and reduced fishing efforts ▪ Rehabilitated coastal fisheries resource and related habitats and reduced fishing efforts <p>Project Activities</p> <p>4.1. Capability Building</p> <ul style="list-style-type: none"> ▪ Conduct gender analysis, training need analysis ▪ Prepare detailed training and technical analysis plan ▪ Conduct training and other capability building activities <p>4.2. Micro-Enterprise Development</p> <ul style="list-style-type: none"> ▪ Assist members identify viable micro-enterprise and prepare project proposals and provide technical support ▪ Assess and identify available fish resources and appropriate fish processing technology ▪ Set —up systems and procedures in operating village-level fish | <p>10 artificial reefs established, 2 fish sanctuaries established and fishery efforts were reduced by twenty-five percent.</p> | <ul style="list-style-type: none"> ▪ Coastal fish and ecological assessment and Monitoring and Evaluation (M&E) reports | <ul style="list-style-type: none"> ▪ No substantial population immigration to Project sites and no increases to basic community costs |
| | | <ul style="list-style-type: none"> ▪ Project progress report ▪ Review mission and PCR ▪ M & E Report <p>Socio-economic surveys at initial, midterm, and completion of the project</p> <ul style="list-style-type: none"> ▪ Project progress reports | <ul style="list-style-type: none"> ▪ Livelihood opportunities are available and fisherfolk population remain stable ▪ Active participation of various stakeholders and full government service |

| | | | |
|---|--|---|--|
| <ul style="list-style-type: none"> ▪ processing plant ▪ Conduct training on appropriate fish processing technology ▪ Purchase equipment and set-up fish processing technology ▪ FCA will operate and maintain the fish processing plant | | | <p>No substantial population immigration to Project sites and no unexpected increases to basic community costs</p> |
| <p>4.3. implementation of CB-CRM pilot projects</p> <ul style="list-style-type: none"> ▪ Implemented fisheries resource and related habitats conservation activities and reduced fishing efforts ▪ Conducted information and education campaign and training program on resource management | | <ul style="list-style-type: none"> ▪ Review mission and PCR and PCR ▪ Environmental evaluation and PCR ▪ Project progress reports and midterm review and PCR | <ul style="list-style-type: none"> ▪ Coastal fisheries resource management policy remains consistent and efficient MCS sustained ▪ No substantial population immigration to project sites and no unexpected increases to basic community costs |

Annex II

WORKPLAN

WORK PLAN

| Activities | YEAR 1 | | | | YEAR 2 | |
|---|--------|----|----|----|--------|----|
| | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q |
| Project Initialization/Social Preparation: | | | | | | |
| 1. BFAR and CUP will: | | | | | | |
| - identify project sites and collect information; | x | | | | | |
| - come-up with initial check-list of data gaps; | x | | | | | |
| 2. JICA will: | | | | | | |
| - hire local consultants (LCs) | x | | | | | |
| 3. BFAR/CUP/LCs will: | | | | | | |
| - conduct orientation sessions/briefings with cooperative members, local government units. | x | | | | | |
| Capability Building Activities | | | | | | |
| 1. LCs will: | | | x | | | |
| - conduct gender analysis, training needs analysis; | | | x | | | |
| - prepare detailed training and technical assistance plan. | | | | | | |
| 2. BFAR/CUP/LCs will: | | | x | x | x | |
| - conduct training and other capability building activities. | x | | | | | |
| Micro-Enterprise Development | | | | | | |
| 1. BFAR/LCs will: | | | x | x | x | |
| - assist members identify viable micro-enterprises and prepare project proposals; provide technical support | x | x | | | | |
| 2. BFAR will: | x | x | | | | |
| - assist and facilitate access to ILPF. | | | | x | x | |
| 3. Fishery cooperative (FC) will: | | | | | | |
| - implement and maintain micro-enterprises. | x | x | | | | |

| | | | | |
|--|---|---|---|---|
| Village-level Fish Processing Plant | | | | |
| 1. BFAR/LCs will: | | | | |
| - assess and identify available fish resources and appropriate fish processing technology; | x | | | |
| - set up systems and procedures in operating village-level fish processing plant; | x | | x | |
| - conduct training on appropriate fish processing technology; | | | x | |
| - purchase equipment and set-up fish processing plant. | | | x | x |
| | x | x | | |
| 2. FC will: | | | | |
| - operate and maintain the fish processing plant. | | | | |
| CB-CRM Activities | | | | |
| 1. BFAR/LCs/FC will: | | | | |
| - conduct orientation sessions with FC, LGUs, etc. | | | x | |
| - conduct training on CRM and formulate CRM plans; | | | x | |
| | | | x | x |
| - coordinate with FARMCs; | x | x | | |
| - implement CRM plan. | | | | |
| Technical Backstopping | | | | |
| 1. JICA will: | | | | |
| - facilitate and provide technical backstopping. | x | | | x |
| | | | | |
| | x | x | x | x |
| | x | x | | |
| | | | | |
| | | x | x | x |
| Monitoring and Evaluation (M and E) | | | | |
| 1. BFAR/LCs/CUP will: | | | | |
| - conduct regular M and E during project implementation; | x | x | | |
| - LCs will provide periodic on-site coaching. | | | | |

Annex 2

TERMS OF REFERENCE

TERMS OF REFERENCE
Coastal Resource Management Specialist

Duration: Twelve months, spread in eighteen months

The consultant in close collaboration with the National Project Coordinator, CUP, fishery cooperative members and other local consultants will:

1. Using a participatory approach of consulting with the various stakeholders, and utilizing the appropriate resource management principles and legislation, facilitate the formulation of a CRM plan for the area;
2. Ensure that the concerns of the various stakeholders are sufficiently incorporated in the CRM plan;
3. Develop and conduct appropriate orientation/seminar/workshops and training packages on CRM principles to various stakeholders;
4. Coordinate with FARMCs in the area;
5. Assist in the preparation of project proposals for CRM-based projects;
6. Provide inputs in the implementation of the CRM plan; and
7. Provide on-site coaching advise/services and periodic monitoring of the project.

Annex 3

TERMS OF REFERENCE

TERMS OF REFERENCE
Fish Processing and Marketing Specialist

Duration: Twelve months, spread in eighteen months

The consultant, in close collaboration with the National Project Coordinator, CUP, fishery cooperative members and other local consultants will:

1. Identify opportunities and innovative fish processing and marketing enterprise for fishery cooperative members, particularly women members, to enable them to start-up and/or expand their existing activities;
2. Develop, install and operational systems and procedures for the operationalization of the village-level fish processing plant;
3. Prepare training course designs and conduct hands-on skills training on fish processing and marketing to cooperative members;
4. Assist in the preparation of technical project proposals for funding by the ILPF;
5. Provide technical support during project implementation;
6. Assist in identifying potential markets for the cooperative s products, and
6. Provide on-site coaching advice/services and periodic monitoring of the project.

Annex 4

TERMS OF REFERENCE

TERMS OF REFERENCE

Gender and Micro-Enterprise Development Specialist

Duration: Twelve months, spread in eighteen months

The consultant, in close collaboration with the National Project Coordinator, CUP, fishery cooperative members and other focal consultants will:

- 1. Using a participatory approach, conduct a gender analysis to determine existing gender division of labour, women s needs and constraints;**
- 2. From the results of gender analysis, develop a strategy and formulate specific interventions to ensure women s inclusion and participation in all project activities;**
- 3. Design and conduct training programs for cooperative members to improve their gender sensitivity;**
- 4. Ensure and enhance women s participation in all aspects of CB-CRM activities, whenever appropriate;**
- 5. Identify and develop a mechanism of promoting micro-enterprises for cooperative members, with particular attention to women;**
- 6. Assist members in identifying micro-enterprises and in preparing project proposals; and**
- 7. Provide on-site coaching advise/services and periodic monitoring of the project**

Annex V
Review of the Study Report of Sri Lanka from Fisheries Development
and Planning Group Training Course 1999

JICA KIFTC

SEMINAR ON FISHERIES DEVELOPMENT

PLANNING

STUDY REPORT

on

**Coastal Resources Management in
the Southern Province of Sri Lanka**

Wijegunaratne DHARMASRI

Kanagawa International Fisheries Training Center

March 1999

CONTENTS

Summary

1. Introduction
2. General Objectives
3. Overview of Fisheries and Tourism
4. Problems and Constraints
5. Applicability of Japanese Fishery Management System to Sri Lanka Fisheries
6. Discussions and Recommendations
7. Conclusion
8. References

List of Tables

List of Figures

Maps

SUMMARY

The most economically, politically and socially important areas in Sri Lanka are the coastal areas. Over one third of the population and two third of the urbanized land are located in the coastal regions. Out of the total fishing population, almost 90 % are living in the coastal regions. 80 % of the tourism related infrastructure is there. The sectors, Fisheries & Tourism contribute to the national GDP considerably and provide large number of employment opportunities. More than other provinces in Sri Lanka, these two sectors are more prominent in the Southern Province.

The main source of the income of the majority of the people of the Southern Province, 30 years ago was the fishing. Over the years the beautiful, isolated, sandy and sunny beaches and the coral reefs attracted the tourists. Over the years tourist influx has tremendously increased and the main source of income became the tourism for many people in the Southern coast.

Along with the economic development the resource use conflicts arose. Forty years ago the entire fishing was done by using traditional methods. But after the mechanization catches have tremendously increased. The fishermen started new methods of catching fish. The rapid increase in fishing due to motorization and the introduction of new fishing gear causes several disputes among the fishing community. The use of more efficient purse seine nets in the southern coastal waters led to several conflicts with other resource users employing small mesh gill nets and beach seine nets. These light purse seines too have operated in the coastal waters. The disputes were further aggravated when later groups saw the high catches of more efficient purse seines. Many expressed their concern that the purse seine fishery would adversely affect their catches and thereby they rely on their livelihoods.

During the period of 1973 to 1983 tourist influx to Southern Province has tremendously increased and unplanned tourist hotels, guesthouses, restaurants and other tourist establishments were constructed along the coast.

In general development activities in the Southern coastal areas of Sri Lanka have lack proper planning and management. Over the years, as the intensity of activities has increased, the result has been a number of environmental and social problems. Common problems are pollution, illegal fishing, coral and sand mining, felling of mangroves, filling of wet lands, loss of biological diversity.

The Government of Sri Lanka recognized the need for more comprehensive and integrated participatory coastal resources management by governmental and non-governmental agency collaboration.

This paper will discuss how this could be achieved in the Southern Province of Sri Lanka and how could the Japanese System of Fisheries Cooperative Association, could be adopted to achieve this goal.

INTRODUCTION

Sri Lanka is an island situated between latitude 6° & 10° North and longitudes 80° & 82° east in the Indian Ocean. Sri Lanka has a coastline of 1700 km., and the area of 66,000 sq.km. The continental shelf around it is narrow, averaging 25 km. width and rarely exceeding 45 km. The continental shelf area is 28,000 sq.km. Sri Lanka has the jurisdiction over 400,000 sq km. of the Indian Ocean and its resources.

The fisheries sector experience high growth during 1977 —1983 period, in response to heavy capital inputs. Fish production increased by 8.4 percent during this period. Fish is the most important source of protein supplier in the country, contributing approximately 60 percent of the animal protein intake and about 15 percent of the total protein consumption. Unlike the other animal product, eating fish has no taboos. The fishing industry provides employment for considerable proportion of the coastal population of the island.

Before the motorization of fishing craft in the early 1950s, almost entire production of small pelagic came from the traditional method of beach seines. After motorization, small mesh gillnets became popular. With the introduction of synthetic material the gill nets became the most popular fishing gear. In the early 1980s, the fishermen in the South West Coast of Sri Lanka started using the purse seine to target small pelagic resources.

The rapid increase in fishing intensity due to motorization gave rise to several fishing disputes. The use of more efficient purse seine in the South Western coastal led to several conflicts. In 1987, the Ministry of Fisheries & Aquatic Resources Development (MFARD) framed regulations limiting the area of operation of the purse seine and increase the license fee in order to discourage purse seine operators. However enforcement of these regulations was not successful. The MFARD thereupon, realized the need to examine the possible interaction between the different fisheries in terms of resources and income distribution among various users groups.

In order to over come the pace of degradation of environment necessary steps are required to undertaken by the government with involvement of community including the people who have engage in tourism activities.

GENERAL OBJECTIVES

To protect and manage the coastal resources of the Southern Coast of Sri Lanka so that the community can continue to benefit from their biodiversity and general environmental quality and that the local fishing and tourism economics can remain sustainable.

To achieve this goal

1. Improve the capability of the local community to protect and manage the coastal resources in an integrated and sustainable manner by
 - 1.1. Developing institutional and legal support for special area management planning actions.
 - 1.2. Increasing public awareness.
 - 1.3. Ensuring community participation in planning.
 - 1.4. Developing institutional and legal support for Fisheries Cooperative Societies.
2. Increased the benefits at local and national level by encouraging viable local economy based on sustainable levels of tourism and fishing.
3. Improve the health of ecosystems by improving coastal water quality, reducing the physical damage to the coral reef and to the mangroves, and enhancing the populations marine organisms.
4. Enrich the general environmental quality of the community by making advances in waste disposal, water supply, transport infrastructure and land use planning.

OVERVIEW OF FISHERIES & TOURISM

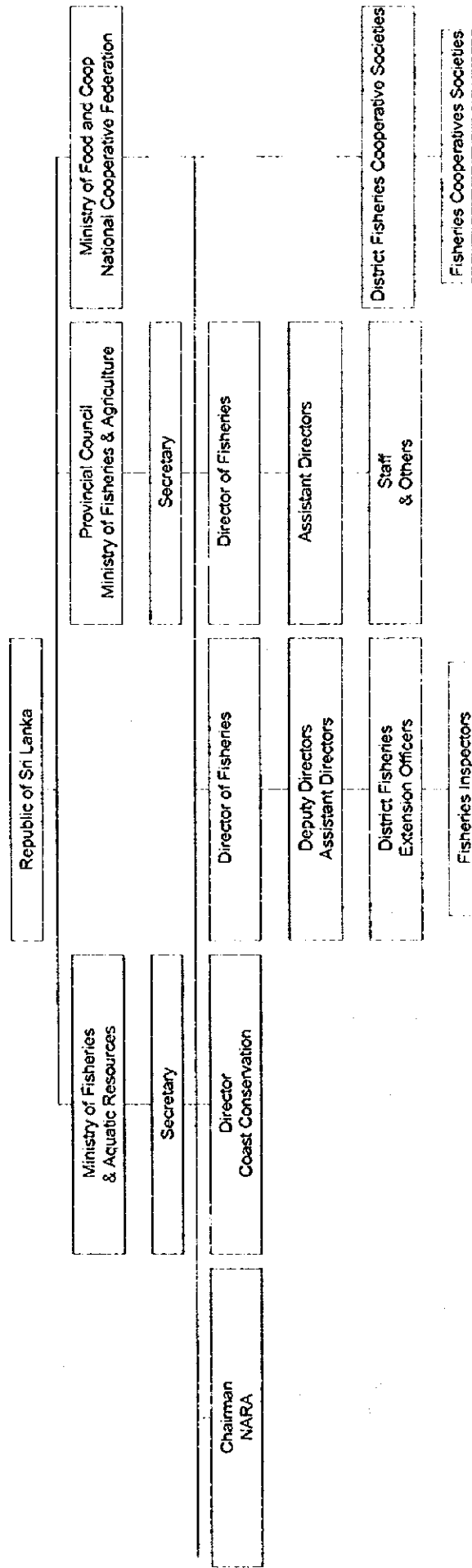
1. PRESENT SITUATION OF FISHERIES

1-1. Organization for Fishery Administration

The Ministry of Fisheries & Aquatic Resources Development is the sole authority for fishery administration in Sri Lanka. Since the devolution of powers to the Provinces of Sri Lanka the Provincial Ministries of Fisheries also established in Sri Lanka. The Provincial Ministries are also actively engage in development actives and most of time work jointly with each other s concurrence.

Under the Ministry of Fisheries & Aquatic Resources Development five other Institutions are functioning.

- | | | |
|---|----------|-----------|
| 1. Coast Conservation Department | (CCD) | |
| 2. Ceylon Fisheries Corporation | (CFC) | |
| 3. Ceylon Fisheries Harbors Corporation | (CFHC) | |
| 4. National Aquatic Resources Agency | (NARA) | |
| 5. The Cey-Nor Foundation Ltd. | (| CEY-NOR) |



Organizational Chart of the Fishery Administration

MARINE FISHERIES

Marine fisheries is the mainstay in fish production in Sri Lanka. It contributes over 90 percent to the total national fish production, out of which over 80 percent comes from the coastal fisheries which are confined to the continental shelf. The national fish production increased steadily from 1970 to 1983. In the year 1984, the production declines owing to the eruption of civil disturbances in the Northern and the Eastern Provinces. Since then it has pick up again gradually. The fish production from has increased to 224,000 mt., in 1994.

The coastal fish production shows decreases in 1984 and 1990. This has been attributed to the irruption of civil disturbances in the Northern and Eastern Provinces.

There has been marked increase in the fish production from offshore and deep-sea waters owing to the introduction of better-equipped multi day boats. The production from the off shore and deep sea sub sector increased from 800 Mt. in 1984 to 37,500 Mt in 1994.

The total production from marine fisheries sector, at present is around 224,000 Mt. The potential yield from the coastal fisheries, according to the past estimates, is 250,000 mt., consisting of 170,000 mt of pelagic fish, and 80,000 mt of demarsals.

The potential yield from the offshore waters has been estimated to be in the region of 70,000 mt to 90,000 mt

FISHERY STATISTICS

| | |
|---|-------------|
| No. of Fisher Folk | 140,000 |
| No of Fishing Population | 700,000 |
| Annual Fish Production | 224,000 mt. |
| Contribution of Fisheries Activities to GDP | 2.8 % |
| No. of Fishing Vessels | 28985 |
| Annual Fish Consumption (per capita) | 15.6 kg. |

FISHERFOLK S ORGANIZATIONS

There are 797 Fishery CO- Operative Societies are functioning in Sri Lanka. Their jurisdiction is limited to the electorates. This number includes the inland fisheries cooperative societies as well. There are 11 District Fishery CO-Operative Societies have formed in each administrative districts. Approximately 100000 fishermen as well as women have obtained the membership. Fishery CO-Operatives are voluntary organizations. These societies have formed under the cooperative law by the guidance of the officials of the Ministry of Fisheries. They have registered under the cooperative

law, in the Ministry of Food and CO-Operatives. In order to encourage fishermen to join these societies the Ministry of Fisheries have channeled the various subsidies to the fisheries through these cooperative societies. While some of the fisheries co-operatives are inactive, most of them are functioning very well in the Southern Province.

INSTITUTIONAL AND LEGAL FRAME WORK

1. EXISTING LAWS AND ORDINANCES FOR FISHERIES MANAGEMENT

The legal frame work for fisheries management and development exists in the form of Fisheries Ordinances and several connected laws and regulations. These have been revised taking in to consideration the management requirements for development and the new devolved system of administration including Provincial Councils.

1.The Fisheries Ordinance (chapter 212)

2.The Chank Fisheries Act (chapter 213)

3.The Pearl Fisheries Ordinance (chapter 214)

4.The Whaling Ordinance (chapter 215)

5.The Fisheries & Aquatic Resources Act No. 2 of 1996.

According to the Provincial Council Act which has been passed by the Parliament of Sri Lanka to solve the ethnic problem, the powers have been devolved to the Provinces. Under that Fisheries subject became a Concurrence subject, that means both the Central Government as well as the Provincial Councils have most of the powers. Except issuing the licenses to the foreign fishing vessels and to settle disputes which arises between two Provinces over fishing rights.

2. INSTITUTIONAL AND LEGAL FRAMEWORK

Institutional Framework for National Coastal Resource Management

The management of coastal resources involves many Government agencies, as in the case of other natural resources in Sri Lanka. Sometimes responsibilities are overlapping and/or conflicting, and in other instances responsibilities are unclear. The primary management responsibility, however, rests with the Coast Conservation Department (CCD), which is responsible for:

- Formulating and implementing coastal protection and management activities;
- Regulating development within the prescribed coastal zone (see below) through permits;
- Evaluating development project impacts through discretionary environmental impact assessments;
- Preparing and implementing the Coastal Zone Management Plan; and
- Conducting surveys in cooperation with other agencies.

One main constraint faced by CCD is its limited legal jurisdiction. CCD's responsibility is within the coastal zone, which is defined as the area 2 km out to sea, 300 m inland, and 2 km inland for rivers and estuaries. CCD and other agencies also face the more common problems of lack of financial resources, equipment and trained personnel.

Unlike other Government agencies, however, CCD's mandate is more farsighted in that it was designed to help coordinate the sectoral management authority of other agencies. Thus far, CCD's coordinating role has been on a more informal basis. There is a need for CCD to place more emphasis on inter-agency coordination. To help accomplish this, more formal inter-agency coordinating mechanisms, such as Memoranda of Understanding, may be needed.

A general Government policy is to devolve responsibility to local authorities. In the present administrative framework, the Divisional Secretariat (DS) is the branch of Government, most suited to this role for the special area management (SAM) activities. The DS implements the development projects of the Division and provides basic services to the inhabitants. Figure 6.1 outlines the administrative structure at the Divisional level

Other government agencies, which have primary responsibilities within coastal areas, with a potential role in the SAM, include:

The Ministry of Fisheries and Aquatic Resources: Coordinates and monitors all activities relevant to fisheries and other aquatic resources. Formulates policy guidelines and recommends management plans. Implement development projects for fisheries and organizes cooperative societies.

The National Aquatic Resources Agency: Conducts research and development, monitoring, and research coordination functions, disseminates information, and provides advisory and consultancy services concerned with marine and inland aquatic resources management.

The Urban Development Authority: Manages development within and outside of the coastal zone, including all areas within one kilometer of the coastline, which it has designated as urban. Undertakes studies relevant to the zoning of priority coastal areas. Formulates zoning related policy recommendations for the coastal zone.

The Ceylon Tourist Board: Implements coastal tourist development projects. Recommends and enforces tourism policies and guidelines affecting the coastal zone. Provides information on development plans. Provides information on proposed and adopted tourism policies and guidelines affecting the coastal zone.

Department of Wildlife Conservation: Responsible for the management of parks, reserves and sanctuaries, and conserving the biodiversity within the coastal zone.

The Central Environmental Authority: Formulates and coordinates environmental policy of various agencies in long-range planning and management. Recommends land use schemes and basic management policies for natural resources with an emphasis on fisheries, wildlife, forestry, and soil. Specifies standards, norms and criteria for environmental management, monitoring of environmental conditions, and initiates research and the dissemination of information. Coordinates environmental impact assessments of development projects and the licensing of pollution discharges, primarily of industries. Mandated to assist Divisional Secretaries to set-up Environmental

Councils to address problems of water pollution, waste disposal and other environmental issues at the Divisional level.

Coast Conservation Advisory Council: Advises the Director of Coast Conservation on all development activities in the coastal zone. Reviews the Coastal Zone Management Plan, environmental impact assessments and requests for variances on permits.

Other Government agencies with secondary responsibilities within the coastal zone include the Sri Lanka Ports Authority; the Sri Lanka Land Reclamation and Development Corporation; the Ceylon Fisheries Harbor Corporation; the Forest Department; the Board of Investment; the Ministry of Irrigation, Power, and Highways; the Ceylon Electricity Board; the National Water Supply and Drainage Board; the Water Resources Board; the Geological Survey Department and the Low Lying Areas Reclamation Board.

PRESENT SITUATION OF TOURISM

Tourism in Sri Lanka was first sanctioned in 1930 under British rule when the Government began implementing a policy of tourism development. By 1948, the year of Sri Lanka's independence, foreign tourist arrivals had reached 41,285 and by 1952 had increased to 66,185. With the change of Government in 1956, however, came a change in Government policy to stop promoting tourism development. As a result, tourist arrivals declined to 23,666 by 1967. An example of lack of government interest is that tourist industry statistics were not maintained from 1958-1966.

The tourist industry began to revive after 1966, again after a change in Government and economic policy to support tourism development. Significant growth occurred in the 1970s and 1980s. Foreign tourist arrivals in Sri Lanka peaked at 407,230 in 1982, and then gradually declined from 1983 due to civil unrest. This downward trend continued through 1989, when the number of tourist arrivals had fallen to 184,732. With the restoration of political stability in 1990, the number of visitors grew dramatically, reaching 297,888 in 1990, 317,703 in 1991, 393,669 in 1992, and 392,150 in 1993. In recent years, The Government has intensified its efforts to promote the tourist industry, making it a central component of Sri Lanka's overall development plan.

The first tourism master plan for Sri Lanka was published in 1967. Environmental considerations for tourism development were generally recognized, with inclusion of basic planning guide lines and architectural design recommendations for the formal, or the larger scale, tourist sector. Tourism development at Bentota (one of the popular beach resort in the Southern Province) followed the master plan guidelines and is a good example of good planning. Environmental factors were generally not considered, however, during growth of the informal sector. The second tourism master plan (UNDP/WTO, 1993), has much more specific and wide ranging environmental guidelines focusing on issues such as environmental impact assessments, waste water treatment, solid waste disposal, water management and conservation and erosion.

Tourism sector provides large number of employment opportunities to the people in the Southern Province. It has become one of the main economic activities in some areas of the Southern Province. Most of the tourists who visit Sri Lanka spend two or three weeks in the Southern Province.

PROBLEMS AND CONSTRAINTS

FISHERIES

1. Resource use conflicts
2. Use of purse seines with lights
3. Dynamiting of fish
4. Lack of fishing rights for fishing communities
5. Lack of knowledge about the environment and the coastal ecosystem
6. Poverty among the fishing community
7. Lack of alternative lively hood for fishermen
8. Not much recognition in the society
9. Environmental degradation
10. Low levels of skills and technology
11. Insufficient infrastructure
12. High cost of fisheries inputs
13. Coral mining

TOURISM

1. Pollution in marine waters
2. Improper dumping of solid waste

3. Inadequate wastewater disposal facilities
4. Degradation of coral reefs and marine life
5. Increasing intensity of beach use
6. Illegal constructions in the coastal zone
7. Unofficial tour guiding
8. Removal of ornamental fishes from the coral reefs
9. Drug trafficking
10. Increasing traffic noise and congestion
11. Lack of alternative forms of income generation
12. Poverty among community

Applicability of Japanese fishery management system to sri lanka

In Japan, all most all fishermen who are qualified to become members of fishery cooperative associations under the fishery cooperative association law, belong to fisheries cooperative associations (FCAs) and 60% of fishery production is marketed through fisheries cooperatives. Fishery conservation measures will not success unless fishermen observe such measures. In this sense voluntary fishery groups and fisheries management organizations constitute important functions for successful management. There is a very good relationship between the government and fishery cooperative associations in Japan.

Fishery cooperative associations consist the most important positions with regards to fishery production, management and conservation of fishery resources in Japan. Within these FCAs there are many kinds fisheries management/study groups who discuss and make decisions such matters as fishing gear, seasons and area etc. These groups function as management implementing bodies, since the members of these groups are the fishermen who depend on the fishing gear and method concerned.

Usually these fishermen s groups formed within CFAs set their own rules, and these self imposed rules are often much stricter ones than the regulations set by the prefectural government. Such rules include restrictions on mesh size, fishing periods, fishing areas etc., are very likely to be observed by the members.

Fishing rights have acted as magnet to attract fishermen to fishery cooperatives. Under the fishery law, the prefecture governor grants fishing rights to fisheries cooperatives.

In other words, unless the fishermen belong to FCAs, it is very difficult for them to make a living out of coastal fisheries. In addition, fishery cooperatives provide various facilities and a wide range of services including credit, marketing and supply of necessary fishing materials etc. to member fishermen.

In Sri Lanka to a certain extent the structure of the fisheries cooperative societies are similar to the FCAs in Japan. 797 fishery cooperatives societies and 11 district fisheries cooperatives are functioning in Sri Lanka. All these fisheries societies are the members of the National Fisheries Cooperative Federation. These societies are expected to play an important role in the management of small scale fisheries by assisting the government agencies in the implementation of fisheries management measures. These include increasing awareness of the fishing community in regard to the need of management of fisheries , diversification of the income activities of the fishing community and thereby reducing the pressure on fish resources. At present these societies act as the link between the Ministry of Fisheries and the fishing community in providing subsidies, extension services, welfare services etc. Some are involved in fish marketing, export etc. Some act as participatory credit institutions.

Since the fisheries cooperatives in Sri Lanka do not have any fishing rights the members are not interested in conservation of the resource. They are only interested in getting the subsidies from the Ministry of Fisheries. Once they get the subsidy some of them do not remain in cooperative society either.

The administration system in Sri Lanka is also somewhat similar to the system in Japan. Ten years ago the Provincial Government system has been introduced and it is similar to the prefecture government system in Japan. The subject Cooperative Development is a fully devolved subject and that means the Provincial Council can take any decision, which is relevant to the administration of cooperatives.

DISCUSSION AND RECOMMENDATIONS

The management of coastal resources in the Southern Province of Sri Lanka involves many government agencies. Therefore the government of Sri Lanka recognized the need for more comprehensive and integrated coastal resources management and responded by enacting the Coast Conservation Act in 1981. Key aspects of the Act required the Coast Conservation Department (CCD) to develop a Coastal Zone Management Plan to regulate and control development activities within the coastal zone. The CZMP in 1990 and 1996, recognizes the need to develop resource management responsibilities to local government authorities.

The implementation of locally based, geographically specific, Special Area Management committees involves the affected communities and provincial agencies in the process of resource management. Such committees built community level support through a highly participatory process and create community base management groups.

Fisheries Cooperatives will be active members of these committees as they play the major role in management process. All the other organizations such as tourism organizations and government agencies also will be the members of these committees. No one will have the monopoly.

By giving the fishing rights to the fishery cooperatives, activities such as dynamiting of fish, use of purse seines with lights could be stopped to a greater extent. Fishermen will feel that they own the fishery resource. Once they organized they will not allow ruining their resource. They will not allow the hotel owners to throw the garbage in to the sea. Hotel owners, fishermen and other resources are also in the same committee and themselves could solve their problems.

The problems, which the tourist hotel owners have faced also, could be solved to a greater extent by discussing with the other members of the management committee.

CONCLUSION

1. The Fishery Cooperative Societies in the Southern Province should be given the Fishing rights in order to manage and conserve the fishing resource and the environment.
2. As the Government of Sri Lanka has recognized the need for more comprehensive and integrated participatory coastal resources management by governmental and non-governmental agency collaboration, Special Area Management Committees should be formed including fishery cooperative societies, government agencies and all the voluntary organizations and community base organizations.

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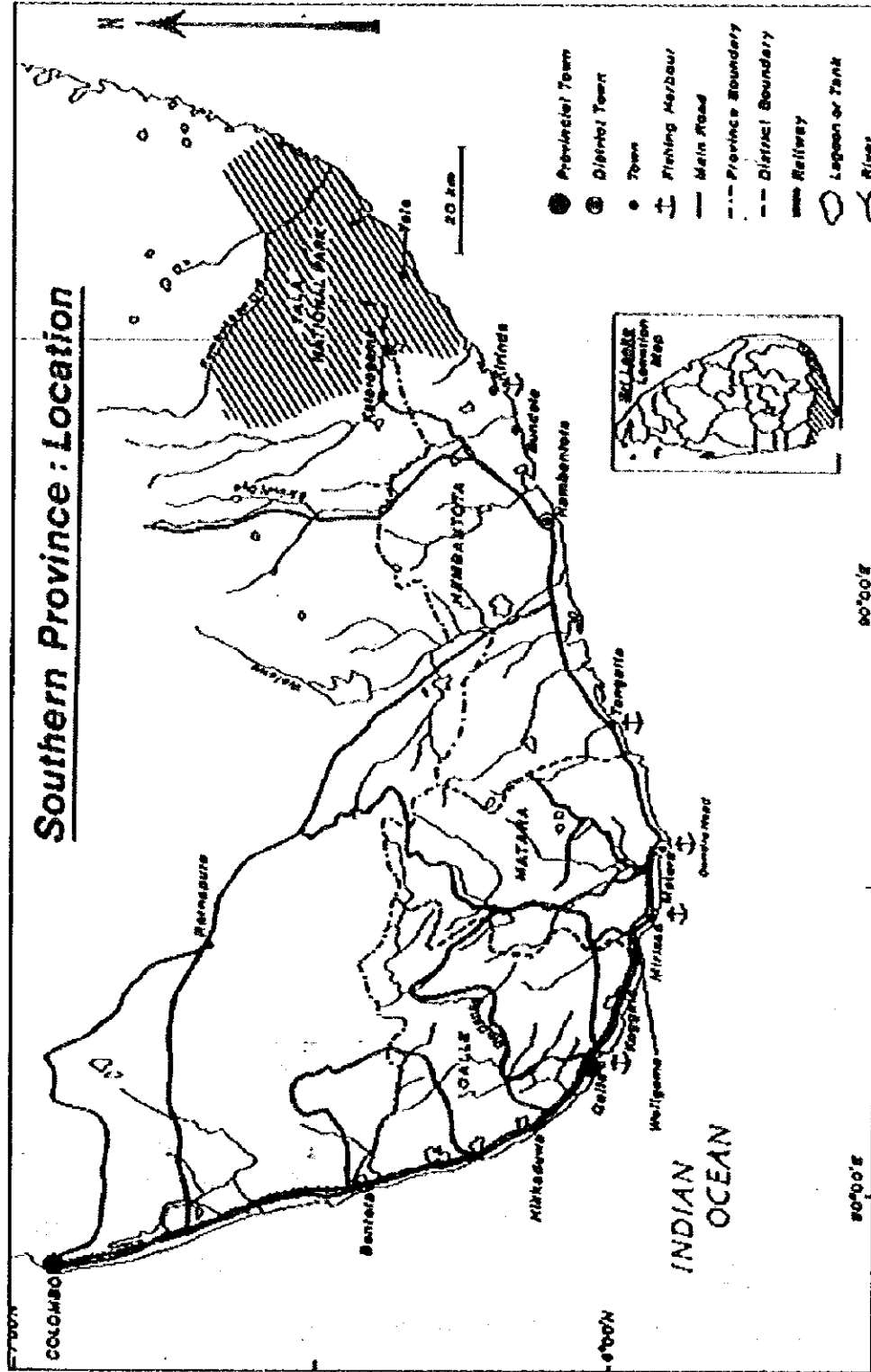
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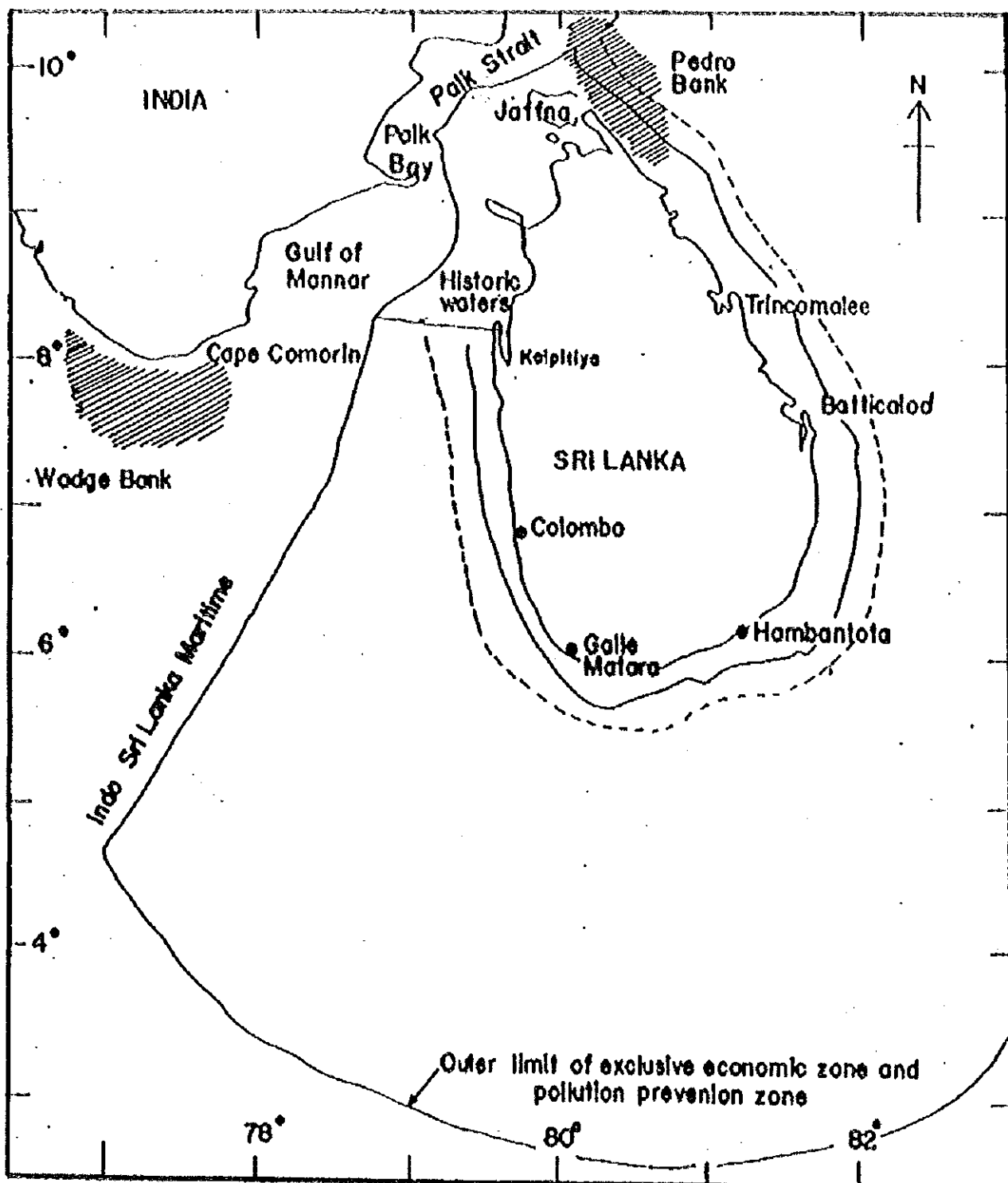
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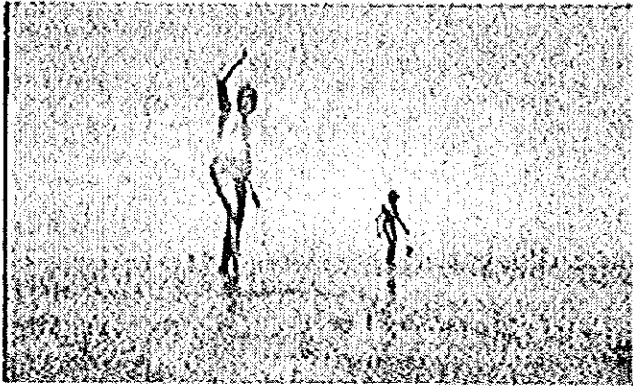
Southern Province : Location



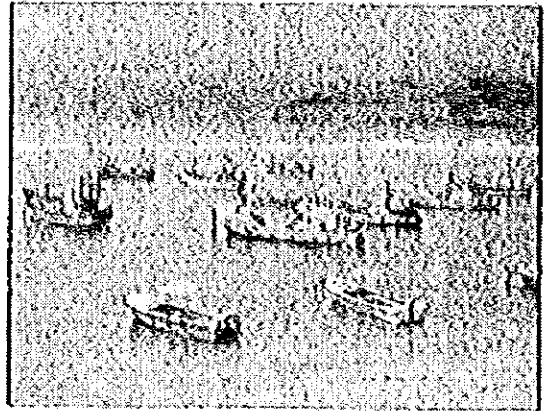


Maritime boundaries of Sri Lanka showing the exclusive economic Zone

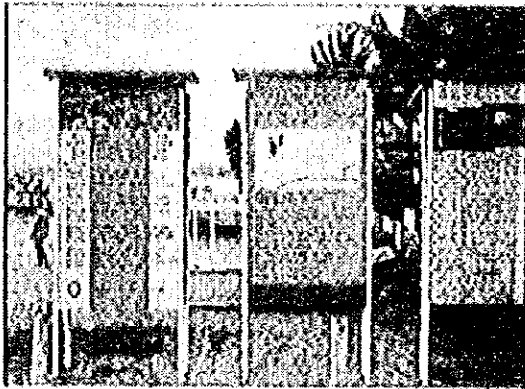




People walking on the reef and breaking the corals require continuous education and surveillance



Anchored fishing boats breaking the corals in the Sanctuary will be relocated to the boat harbour



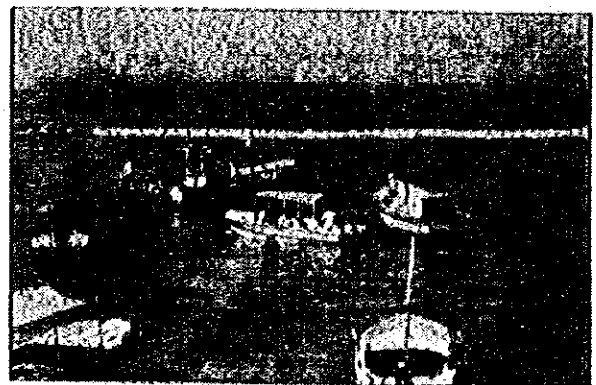
Various signs to educate residents and tourists about the Sanctuary



Fish landing on Sanctuary beach conflicts with tourist use



Barrier walls without setbacks are no longer permitted.



Glass-bottom boats in Sanctuary must be careful to protect the reef



JICA