Training Project for Promotion of Community-based Fishery Resource Management by Coastal Small-scale Fishers in Indonesia

Report of Phase One

(01-08 October 2009)

International Cooperative Fisheries Organization of the International Cooperative Alliance & National Federation of Indonesian Fishermen's Cooperative Societies

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Report prepared by

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Copies of Phase One Report can be requested from:

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Preface

I am glad that the International Cooperative Fisheries Organization (ICFO) of the International Cooperative Alliance (ICA) has successfully completed Phase One of the Training Project for "Promotion of Community-based Fishery Resource Management by Coastal Small-scale Fishers in Asia – 2009". The Training Project is funded by the Ministry of Agriculture, Forestry and Fisheries (MAFF), Government of Japan and at the outset, I would like to thank MAFF for its financial support to the Project.

Today, the world is passing through one of its most difficult times. The challenges before the global community are many. Growing population and depleting food supplies are major threats before mankind. So are the looming impacts of climate change, environmental degradation and depleting energy sources from fossil fuel. Although many of these issues are being addressed, but the pace is slow and results yet to be seen.

Among these threats and uncertainties, food availability is becoming a critical issue and calls for urgent attention and solution. The Food and Agriculture Organization (FAO) of the United Nations in its agenda for the World Food Summit - 2009 states that "global food insecurity situation has worsened and continues to represent a serious threat for humanity. With food prices remaining stubbornly high in developing countries, the number of people suffering from hunger has been growing relentlessly in recent years. The global economic crisis is aggravating the situation by affecting jobs and deepening poverty. FAO estimates that the number of hungry people could increase by a further 100 million in 2009 and pass the one billion mark".

Despite this gloomy situation, there is a growing recognition that fisheries resources can be a potential source of food supply that can contribute to reduction of hunger and malnutrition. However, to accomplish this, the resources have to be properly managed, and wastage of resources minimized. In view of the fact that more than 75 percent of the world's major fisheries resources are either over-fished or depleted and more than 90 percent of world's fishers are engaged in coastal, small-scale fisheries and aquaculture, fisheries resource management holds the key for enhancing food supplies from the fishery sector.

Asia accounts for major fish production from both capture and culture practices in the world. Asia also has the largest population of fishers and fish farmers and, therefore, owns a responsibility to contribute to global food and nutritional security. However, to ensure this, it is essential that fisheries resource management, particularly by the coastal small-scale fishers in Asia, is promoted and the skills and capacities of the fishers enhanced to meet the growing challenges of sustainable resource utilization.

After successful implementation of this Training Project in the Philippines, Thailand and Vietnam in the Japanese Fiscal Years (JFY) 2006-07, 2007-08 and 2008-09 respectively, the Training Project in 2009 has been taken up for implementation in Indonesia. As in the previous years, the larger objectives of the Project are to help promote community-based fishery resource management (CBFRM) by coastal small-scale fishers and their organizations (fisheries cooperatives or Kud Mina) in Indonesia, strengthen their activities and contribute to ensuring sustainable development of fisheries, creation of employment opportunities, and finally to alleviate poverty and hunger.

The CBFRM Training Project comprises three Phases, which are as follows:

1) Phase One - Dispatching of experts to the selected country: This is a planning mission for Phases Two and Three and involves visits to organizations/ institutions concerned in the selected country; exchange of views on various aspects of community-based fisheries resource management and collection of information as appropriate for implementation of the subsequent two phases.

2) Phase Two - Study Visit in Japan: This phase includes visit of selected representatives from the participating country to Japan to study the Japanese experience in community-based fisheries resource management. The participants include representatives from fisher organizations such as cooperatives, government institutions and experts.

3) Phase Three – A National-Level Seminar in the participating country: The Seminar, involving a larger group of participants representing the fisheries cooperative sector, government departments/ agencies concerned with fisheries and selected non-governmental organizations, aims at sharing of experiences gathered during Phases One and Two of the Project. The other activities include invited lectures on topics concerning the Project, group discussions on selected themes and a field study visit. An important output of the Seminar is an agreed declaration and/or action plan. It is also expected that national agencies such as government departments and cooperative organizations would initiate adequate follow-up action(s) based on the output of the Seminar.

The Phase One Project of 2009 was implemented during 01 – 08 October 2009 in Indonesia. The Mission members of Phase One included the following:

Dr Yugraj Singh Yadava
Director
Bay of Bengal Programme Inter-Governmental Organisation
91, St. Mary's Road, Abhiramapuram
Chennai 600 018, India

Mr Masaaki Sato
Secretary
International Cooperative Fisheries Organization (ICFO)
of the International Cooperative Alliance (ICA)
c/o JF ZENGYOREN (National Federation of Fisheries Cooperative Associations of Japan)
1-1-12 Uchikanda, Chiyoda-Ku
Tokyo, Japan 101-8503

The National Federation of Indonesian Fishermen's Cooperative Societies (or *Induk Koperasi Perikanan Indonesia* – IKPI in Bahasa Indonesia) acted as the partner organization in Indonesia and also the local host for Phase One Mission.

The Phase One Mission received overwhelming support and cooperation from the following organizations/ agencies they visited during their stay in Indonesia and I would like to extend my gratitude to all of them:

- Ministry of Marine Affairs and Fisheries (MMAF), Government of the Republic of Indonesia;
- National Federation of Indonesian Fishermen's Cooperative Societies (Induk Koperasi Perikanan Indonesia- IKPI);
- Embassy of Japan in Jakarta;
- Indonesian Cooperative Management Institute (Institut Manajemen Koperasi Indonesia- IKOPIN);
- Indonesian Fisheries Society (Masyarakat Perikanan Nusantara- MPN);
- Provincial Federation of Village Unit Fisheries Cooperatives of East Java (Puskud Mina Jawa Timur- PMJT);
- Kud Mina Tani, Brondong, Lamongan, East Java;
- Kud Mina Tani SEMPURNA, Trenggalek, East Java;
- Kud Mina Blanbangan, Banyuwangi, East Java;
- Kud Mina Karya Penganbengan, Negara, Bali; and
- Banyuwangi Municipal Department of the Ministry of Marine Affairs and Fisheries.

On behalf of the ICFO, I would also like to extend my heart-felt gratitude to Dr Yugraj Singh Yadava, Director, BOBP-IGO and to his Organisation for the excellent contributions and support to this Training Project. Dr Yadava, as the Chief Advisor to the Project since its inception in 2006, has played a pivotal role in successful implementation of the activities in the three countries covered so far. I am sure his contributions to the successful implementation of the activities in Indonesia would be equally commendable.

I would be failing in my duties if I do not extend my special thanks to Mr Wibisono Wiyono, President of IKPI and his staff Mr Hardadi Lukito, Secretary and Mr Adi Suryadi, Accounts Officer for their support and cooperation in implementation of Phase One activities. I would also like to thank Mr Natalis Wahyu Dismianto, Director of PMJT who accompanied the Mission during their travel to places in East Java.

The ICFO has organized three seminars in the past for fisheries cooperatives in Indonesia. The first one was held in Bogor during 20-27 November, 1989; followed by a second in Cirebon from 31 March - 4 April, 1997, and the third in Jakarta during 16-19 March, 2004. The seminars focussed on development and empowerment of fisheries cooperatives. In ICFO we believe that business development and resource management must go hand in hand; if one lags behind the other is not likely to succeed.

From this standpoint, the ICFO proposes to highlight fisheries resource management in the present Training Project so that the fishers are empowered to tackle the issues in a comprehensive manner.

I sincerely hope that the successful conclusion of Phase One will lead to equally successful implementation of Phases Two and Three with the active support and cooperation of all the parties concerned, both in Japan and Indonesia.

Ikuhiro Hattori
Chairman
International Cooperative Fisheries Organization
of the International Cooperative Alliance

26 October 2009

Acknowledgements

The cooperation and assistance received from the following organizations/ agencies in successful completion of Phase One of the Training Project for Promotion of Community-based Fishery Resource Management by Coastal Small-scale Fishers in Indonesia is deeply acknowledged:

- Ministry of Marine Affairs and Fisheries (MMAF), Government of the Republic of Indonesia.
- National Federation of Indonesian Fishermen's Cooperative Societies (Induk Koperasi Perikanan Indonesia- IKPI).
- Embassy of Japan in Jakarta.
- Indonesian Cooperative Management Institute (Institut Manajemen Koperasi Indonesia- IKOPIN).
- Indonesian Fisheries Society (Masyarakat Perikanan Nusantara- MPN).
- Provincial Federation of Village Unit Fisheries Cooperatives of East Java (Puskud Mina Jawa Timur- PMJT).
- Kud Mina Tani, Brondong, Lamongan, East Java.
- Kud Mina Tani, Sempurna, Trenggalek, East Java.
- Kud Mina, Blanbangan, Banyuwangi, East Java.
- Kud Mina, Karya Penganbengan, Negara, Bali.
- Banyuwangi Municipal Department of the Ministry of Marine Affairs and Fisheries.

Contents

1.0 Introduction

A new Project entitled "Training Project for Promotion of Community-based Fishery Resource Management by Coastal Small-scale Fishers in Asia" was initiated by the International Cooperative Alliance (ICA) from 2006 onwards by using financial contributions from the Ministry of Agriculture, Forestry and Fisheries, Government of Japan. The International Cooperative Fisheries Organization (ICFO), one of the sectoral organizations of the ICA, is responsible for implementation of the Project in cooperation with the Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO).

In the first year of the Project (Japanese Fiscal Year or JFY April 2006 – March 2007), the activities were implemented in the Philippines. In the second year (April 2007 – March 2008), the Project was implemented in Thailand and in the third year (April 2008 – March 2009), the activities were implemented in Vietnam (see Reports of Phases One, Two and Three of the Training Project for Promotion of Community-based Fishery Resource Management by Coastal Small-scale Fishers in the Philippines, Thailand and Vietnam). In the fourth year of the Project, Indonesia has been identified, where the activities will be implemented during the period April 2009 to March 2010.

The purpose of this Training Project is to promote, in Indonesia, community-based fisheries resource management by small-scale fishers engaged in coastal fisheries and by their organizations (fisheries cooperatives), strengthen their activities, and help contribute to ensuring sustainable production, creation of employment opportunities and poverty alleviation.

The Project comprises the following three phases:

1) Phase One: Visit of Experts to Indonesia
2) Phase Two: Fisheries Resource Management Study Visit in Japan
3) Phase Three: Terminal Project Seminar in Indonesia

The Phase One of the Project was implemented in Indonesia from 01 - 08 October 2009.

1.1 Objective of Phase One

The objective of Phase One was to depute a two-member mission to make an assessment of the present state of fisheries resource management in Indonesia and the role of fisheries cooperatives in sustainable development of the fisheries sector. This objective was envisaged to be accomplished through meetings with officials of the Partner Organization *i.e.* the National Federation of Indonesian Fishermen's

Reports of the Training Project implemented in the Philippines, Thailand and Vietnam during JFY 2006, 2007 and 2008.

Members of the Phase One Mission –
Mr Masaaki Sato (left) and
Dr Yugraj Singh Yadava (right)

Cooperative Societies or the Induk Koperasi Perikanan Indonesia (IKPI) and officials of the concerned Ministries/ Departments/ representatives of the cooperative sector, fisher/ fish farmer associations/ groups, non-governmental organizations and other concerned stakeholders and collection of information and/ or data that would help prepare for, and plan Phase Two (Study Visit to Japan) and Phase Three activities under the Training Project (Terminal Project Seminar in Indonesia). Besides meetings and interactive sessions, a number of field visits were also part of the Phase One mission to Indonesia.

1.2 Members of the Mission

The mission in Phase One comprised the following two experts:

- **Expert**

  Dr Yugraj Singh Yadava, Director, Bay of Bengal Programme Inter-Governmental Organisation, Chennai, India.

- **Expert and ICFO Representative**

  Mr Masaaki Sato, Secretary, International Cooperative Fisheries Organization, Tokyo, Japan.

1.3 Partner Organization

The partner organization of the Project in Indonesia is as follows:

National Federation of Fishermen's Cooperative Societies

Jl. Ir. H. Juanda No 2
Jakarta 10120
Indonesia
Tel: + 62 (21) 384 1183, 345 1118, 344 0741
Fax: + 62 (21) 380 6177
E-mail: ikpi@indosat.net.id
Website: www.ikpi.web.id

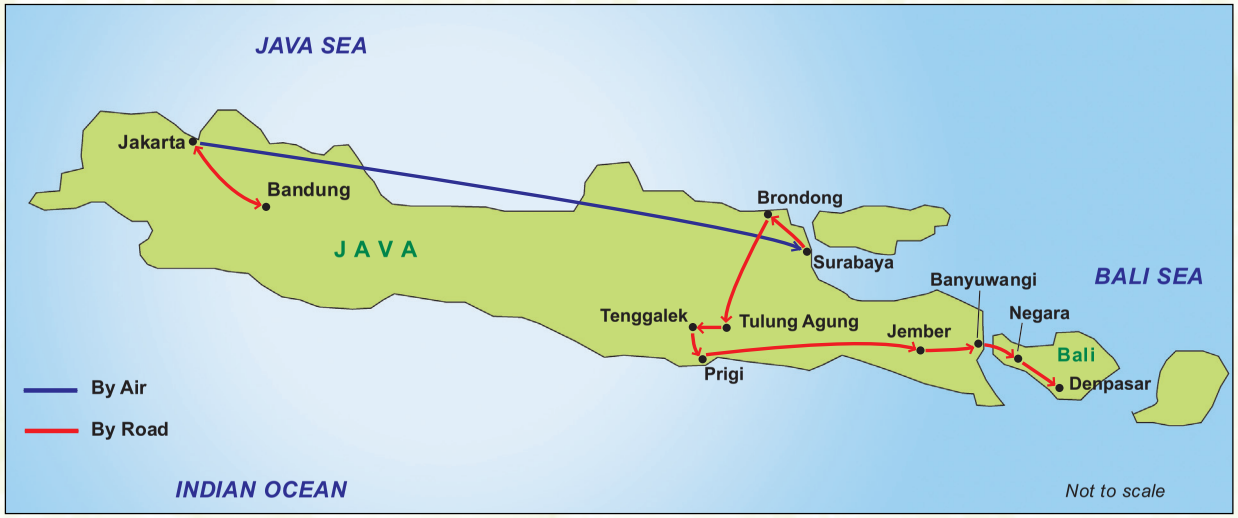
President: Mr Wibisono Wiyono
Secretary: Mr Hardadi Lukito
Contact Person: Mr Hardadi Lukito, Secretary

1.4 Itinerary of the Mission and Persons met

The itinerary of the mission and the persons met in Indonesia during the period 01 - 08 October 2009 is as follows:

Date/ Time	Itinerary	Persons Met/ Participants
October 1 (Thursday)	Dr Yugraj Singh Yadava: Arrival at Jakarta at 1010 hrs by MH 711 Mr Masaaki Sato: Arrival at Jakarta at 1935 hrs by GA 411 ***Hotel: Alila Jakarta, Jakarta***	Mr Wibisono Wiyono, President Induk Koperasi Perikanan Indonesia (IKPI) [National Federation of Indonesian Fishermen's Cooperative Societies] Jl. Ir. H Huanda No. 2, Jakarta 10120 Indonesia *Tel: + 62 (21) 384 1183* *Mobile: + 62 (0) 811 911 458* *Fax: + 62 (21) 380 6177* *E-mail: ikpi@indosat.net.id;* *wibisakana@yahoo.co.id* Mr Hardadi Lukito, Secretary Address as above *Tel: + 62 (21) 384 1183* *Mobile: + 62 (0) 812 932 9367* *Fax: + 62 (21) 380 6177* *E-mail:ikpi@indosat.net.id;* *lukito_2501@yahoo.co.id* Mr Adi Suryadi, Accounts Officer Address as above *Tel: + 62 (21) 384 1183; Fax:+ 62 (21) 380 6177* *E-mail: ikpi@indosat.net.id*
October 2 (Friday) 09:30 - 13:00	Mr M Sato visited the Embassy of Japan in Jakarta. Dr Y S Yadava completed the Bank transactions. Mr H Lukito, Secretary and Mr A Suryadi, Accounts Officer IKPI accompanied Dr Yadava.	Mr Yasuharu Ina, Second Secretary Forestry, Fisheries and Nature Conservation, Embassy of Japan. Jl. MH Thamrin No. 24, Jakarta 10350 Indonesia *Tel: + 62 (21) 3192 4308* *Fax: + 62 (21) 3192 5460* *E-mail: ina@eoj.ntt.net.id*
13:30 - 14:15	**Lunch at Alila Jakarta**	
14:55 - 15:55	Visited Ministry of Marine Affairs and Fisheries (MMAF), Government of the Republic of Indonesia. *Meeting Venue:* Meeting Room "Purse Seine" Directorate General of Capture Fisheries Ministry of Marine Affairs and Fisheries (MMAF) 12th Floor, Jl. Medan Merdeka Timur No.16, Jakarta Pusat 10110 Indonesia.	Mr Ibrahim Ismail, Secretary, Directorate General of Capture Fisheries (DGCF), MMAF Jl. Medan Merdaka, Timur No 16, 12th Floor Jakarta Pusat 10110, Indonesia. *Tel: + 62 (21) 352 0727* *Fax: + 62 (21) 352 1781* *E-mail: ogie_dkp@yahoo.com* Mr Agus Budhiman, Director (Fisheries Resources), DGCF, MMAF Jl. Harsono, RM No 3, Pasar Minggu Ragunan - Jakarta Selatan 12500 Indonesia. *Tel/Fax: + 61 (21) 781 1672* *Email: budhiman@indosat.net.id;* *budhiman2004@yahoo.com* Ms Retnowati, Directorate of Fisheries Resource Management, DGCF, MMAF Department Pertanian Gedung B Lantai 6 Jl. Harsono, RM No 3, Pasar Minggu Ragunan - Jakarta Selatan 12500 Indonesia. *Tel/Fax: + 61 (21) 781 1672* *Email: retnowati@yahoo.com* Mr Wibisono Wiyoyo, President, IKPI *Tel: + 62 (21) 384 1183* *Fax: + 62 (21) 380 6177*

Date/ Time	Itinerary	Persons Met/ Participants
		Mr Supeno, Vice-President, IKPI *Mobile: + 62 (812) 932 9367* Mr Hardadi Lukito, Secretary, IKPI Mr Adi Suryadi, Accounts Officer, IKPI
15:55 - 19:40	Travel to Bandung	
19:40 - 21:30	Dinner at Sari Sunda (State House Restaurant), Bandung. ***Hotel: Bandung GIRI Gahana, Golf & Resort, Bandung***	Dr Muhammad Taufiq, Advisor to the Minister of MMAF on International Cooperation Jl. HR Rasuna Said Kav. 3-4 Lt. 8 Kuningan, Jakarta Selatan 12940 Indonesia. *Tel: + 62 (21) 5299 2867* *Fax: + 62 (21) 527 2742* *E-mail: mtaufiq226@yahoo.com* Mr Indra Fahmi, Vice-Rector Indonesian Institute of Cooperative Management (IKOPIN) Jl. Raya Bandgung Sumadang Bandung, Jawa Barat, Indonesia *Tel: + 62 (22) 7798179* *Fax: + 62 (22) 7796033, 7308174* *Mobile: + 62 (815) 600 4462* *E-mail: indrafahmi@icopin.ac.id; indrafahmy@yahoo.com* Mr Dindin Burhanudin, Vice-Rector, IKOPIN Mr Hisao Tanaka, Lecturer of Japanese language at IKOPIN Mr Dandan Irawan, Lecturer, IKOPIN Mr Wibisono Wiyono, President, IKPI Mr Adi Suryadi, Accounts Officer, IKPI Mr Umar Mappelesse, Journalist Warta Koperasi Jl. R P Soeroso No 21, Jakarta 10330 Indonesia *Tel: + 62 (21) 3190 8148 (Direct) 310 0448, 310 0422* *Fax: + 62 (21) 310 0959* *E-mail: umarmappe@yahoo.com; wartacop@yahoo.com*
October 3 (Saturday) 09:00 - 11:45	Visited the Indonesian Institute of Cooperative Management (IKOPIN). *Meeting Venue:* Auditorium and Vice-Rector's Room Institute Management Koperasi Indonesia (IKOPIN) Kawasan Pendidikan Tinggi Jatinangor Jl. Raya Bandung Sumedang Km 20, 5 Bandung, Jawa Barat Indonesia	Prof Yuyun Wirasasmito, Rector, IKOPIN Prof Turpawana Priatna Senjaya, Rector, IKPOIN Prof Rully Indrawan, Rector, IKOPIN Mr Indra Fahmi, Vice-Rector, IKOPIN Mr Dindin Burhanudin, Vice-Rector, IKOPIN *Tel: + 62 (22) 779 8179* *Fax: + 62 (22) 779 6033* *Email: dindinburhanudin@ikopin.ac.id; dindinburhanudin@yahoo.co.id* Prof Burhan Arief, Vice-Rector, IKOPIN Mr Imron Natsir, President-Director Jl. Janur Hijau V TF 1/17 Kelapa Gading, Jakarta Utara, Indonesia. *Tel: + 62 (21) 7026 0139* *Fax: + 62 (21) 4584 5716* *Mobile: + 62 (812) 925 2780* *E-mail: pudji@cdn.net.id; dir_pudji@cbn.net.id* Mr Undang Sanurdin, IKOPIN Foundation Dr Muhammed Taufiq, Advisor to the Minister of MMAF on International Cooperation



Places visited by the mission in Phase One

Date/ Time	Itinerary	Persons Met/ Participants
		Mr Wibisono Wiyono, President, IKPI Mr Adi Suryadi, Accounts Officer, IKPI
12:00 - 12:20 13:50 - 15:00	Visited a catfish (*Clarias batrachus*) farm in Bandung. Visited the Museum of the Asian-African Conference, Bandung.	
15:05 - 15:40	***Lunch at Asli Ciliuk Restaurant Bandung.***	
15:40 - 19:20	Travel to Jakarta	
19:20 - 21:20	Dinner Meeting with Chairman, Indonesian Fisheries Society (Masyarakat Perikanan Nusantara or MPN)). *Meeting Venue:* Sakura Restaurant Jl. R A Kartini Jl. R A Kzartini (T B Simatupang) No. 9 Lebak Bulas Jakarta 12440 Indonesia ***Hotel: Alila Jakarta, Jakarta***	Mr Shidiq Moeslim, Chairman MPN Wisma Daria Lt.3, Jl Iskandarsyah Raya No 7, Jakarta 12160 Indonesia. *Tel: + 62 (21) 7279 4407* *Fax: + 62 (21) 7279 4405* *E-mail: mpni@indosat.net.id* Mr Wibisono Wiyono, President, IKPI Mr Adi Suryadi, Accounts Officer, IKPI
October 4 (Sunday) 08:40 11:10 - 12:30	Depart for Surabaya by Lion Air (JT 572) leaving Jakarta at 08:40 hrs. Visited PUSKUD MINA JAWA TIMUR (PMJT), Surabaya *Meeting Venue:* Chairman's Room, Second Floor, PUSKUD MINA JAWA TIMUR (PMJT) Juanda Business Centre - Block B/15 Juanda - Sidoarjo Surabaya, Indonesia.	Mr Imron Syukur, Chairman, PMJT *Tel: + 62 (812) 318 1000* Mr Nyoman Sukasadja, Secretary, PMJT *Tel: + 62 (815) 5362 8452* Mr Andul Muhith, Manager of Finance, PMJT *Tel: + 62 (812) 325 8789* Mr Natalis Wahyu Dismianto, Director, PMJT *Tel/Fax: + 62 (318) 54 7518* *Mobile: + 62 (81) 2304 4344* *Email: nataliswdsby@yahoo.com* Mr Hardadi Lukito, Secretary, IKPI Mr Adi Suryadi, Accounts Officer, IKPI
12:45 - 13:20	***Lunch at Tempo Doeloe, Surabaya***	
15:00 - 17:10	Visited KUD MINA TANI, Brondong Lamongan, East Java and the Fishing Port at Brondong. *Meeting Venue:* Second Floor, Meeting Room of KUD MINA TANI, Brondong.	Mr Ali Fauzi Ridelwan, Chairman, Koperasi Unit Desa (KUD) MINA TANI (KMT) Kecamatan Brondong, Kabupaten Lamongan Badan Hukum: No 4716B/BH/II/1980 Komplek Pelbuhan Perikanan Nusantara Brondong 6223, East Java Indonesia. *Tel: + 62 (322) 66 1546* *Fax: + 62 (322) 66 2171* Mr Sumantri, Vice-Chairman, KMT, Brondong Mr Mohammed Suruddin, Secretary, KMT Brondong Mr Muasfandi, Manager of Cold Storage KMT, Brondong Mr Marjuli, Manager of Auction, KMT Brondong Mr Masudi Effendi, Assistant Manager of Auction, KMT, Brondong Mr Natalis Wahyu Dismianto, Director, PMJT Mr Hardadi Lukito, Secretary, IKPI Mr Adi Suryadi, Accounts Officer, IKPI
19:30 - 20:30	Dinner at B' Pass Resto ***Hotel: Narita Hotel, Tulung Agung***	

Date/ Time	Itinerary	Persons Met/ Participants
October 5 (Monday) 09:30 - 10:50	Visited KUD MINA TANI SEMPURNA Trenggalek, East Java. *Meeting Venue:* Office of KUD MINA TANI SEMPURNA Jl. Raya Prigi, Kec. Watulimo, KAB. Trenggalek 66382, East Java Indonesia. BADAN HUKUM: No 4611A/BH/II/1980 Tgl.23.09.1996 *Tel/Fax; + 62 (355) 552 056*	Mr Riyono, Chairman KMT, MINA TANI SEMPURNA *Mobile: + 62 (81) 359 620 144* *Fax: + 62 (355) 551050* Mr Subani, Vice-Chairman KMT, MINA TANI SEMPURNA *Mobile: + 62 (81) 335 577 208* *Fax: + 62 (355) 551050* Mr Djuwari, Manager of Finance KMT, MINA TANI SEMPURNA *Mobile: + 62 (85) 230 094 349* *Fax: + 62 (355) 551050* Mr Bamban Sutopo, First Secretary KMT, MINA TANI SEMPURNA *Mobile: + 62 (81) 555 821 231* *Fax: + 62 (355) 551050* Mr Pramuji, Second Secretary, KMT, MINA TANI SEMPURNA *Mobile: + 62 (851) 259 638 575* *Fax: + 62 (355) 551050* Mr Natalis Wahyu Dismianto, Director, PMJT Mr Hardadi Lukito, Secretary, IKPI Mr Adi Suryadi, Accounts Officer, IKPI
11:10 - 11:45	Visited Nusantra Prigi Fishing Port at Prigi.	
12:00 - 13:30	Lunch at Bu Alif Restaurant Pantai Prigi, Watulimo Trenggalek. ***Hotel: Hotel Sulawesi, Jember***	*Note:* The visit to KUD MINA TANI SEMPURNA was originally scheduled for one hour from 08:00 to 09:00. However, the entire morning hours were used for the visit to this cooperative and its facilities. Accordingly, the visit to KUD MINA SENDANG BIRU in MALANG scheduled from 12:00-12:30 was cancelled.
October 6 (Tuesday) 08:50 - 10:45	Visited KUD MINA BLANBANGAN Banyuwangi, East Java *Meeting Venue:* Office of KUD MINA BLANBANGAN Banyuwangi.	Mr D Huri Zaini, Chairman KUD MINA, BLANBANGAN Sampangan Rt. 02 Rw.06 Kedungrejo, Muncar, East Java Indonesia. *Tel: + 62 (333) 59 3194* *Mobile: + 62 (81) 249 614 943* *Fax: + 62 (333) 59 3640* Mr Untung Samudra, Vice-Chairman KUD MINA BLANBANGAN Komis Rt. 01 Rw.04 Desa Wonosobo, Srono, East Java Indonesia. *Mobile: + 62 (81) 937 657 916* Mr Ali Maki, First Secretary, KUD MINA BLANBANGAN Muncar Rt. 03 Rw.06 Kedungrejo, Muncar, East Java Indonesia. *Mobile: + 62 (81) 358 284 684* Mr Sarbini, Second Secretary, KUD MINA BLANBANGAN Kalimati Rt. 02 Rw.09 Kedungrejo, Muncar, East Java Indonesia. *Mobile: + 62 (81) 249 279 055*

Date/ Time	Itinerary	Persons Met/ Participants
		Mr Jufri Zain, Manager of Finance, KUD MINA BLANBANGAN Kalimati Rt. 01 Rw.01 Kedungrejo, Muncar, East Java Indonesia. *Mobile: + 62 (81) 336 030 193* Mr Kartono Umar, Head of Fishing Port of Muncar, Banyuwangi Mr Abidin, Technical Affairs Officer Banyuwangi Municipal Department of Marine Affairs and Fisheries Mr Natalis Wahyu Dismianto, Director, PMJT Mr Hardadi Lukito, Secretary, IKPI Mr Adi Suryadi, Accounts Officer, IKPI
10:50 - 12:30	Visited the Fishing Port of Pelabuhan Perikanan Pantai Muncar, Banyuwangi	
14:05 - 15:20	***Lunch at Cawang Indah, Banyuwangi***	
15:45 16:15 16:55 - 17:15 18:00 - 19:00	Departed Banyuwangi by Ferry Boat Arrived at Bali Island Halt for Coffee/ Tea at "Bidadari" Restaurant. Visited Karya Fishing Port	Mr Abdul Kadir Jailani, Chairman, KUD MINA KARYA PENGAMBENGAN Negara, Bali 82251 Jl. Ketapang Muara, 189, Desa Pengambengan, Kec. Negara, Kab. Jembrana, Province Bali, Indonesia *Tel/Fax: + 62 (365) 42486* *Mobile: + 62 (81) 338 339 246*
22:00	Arrived at Hotel Ramayana Resort & Spa, Kuta, Bali Mr Wibisono Wiyono, President, IKPI, also arrived from Jakarta for the wrap-up meeting. ***Hotel: Ramayana Resort & Spa, Kuta, Bali***	
October 7 (Wednesday) 09:30 - 13:15	Wrap-up Meeting to review the activities of Phase One and prepare for Phases Two and Three. *Meeting Venue:* "Bale Room", Ground Floor of Ramayana Resort & Spa.	Mr Wibisono Wiyono, President of IKPI Mr Hardadi Lukito, Secretary, IKPI Mr Adi Suryadi, Accounts Officer, IKPI Mr Natalis Wahyu Dismianto, Director, PMJT Mr Abdul Kadir Jailani, Chairman, KUD MINA KARYA PENGANBENGAN
13:30 - 15:30	Lunch at the Restaurant of Ramayana Resort & Spa. ***Hotel: Ramayana Resort & Spa, Kuta, Bali***	Post-Lunch, Mr Wibisono Wiyono, President IKPI; Mr Hardadi Lukito, Secretary, IKPI and Mr Adi Suryadi, Accounts Officer, IKPI left for Jakarta by SJ 261. Mr Natalis Wahyu Dismianto and Mr Abdul Kadir Jailani returned home by Road.
October 8 (Thursday) 00:35 13:50	Mr M Sato Departed Denpasar by GA 880 at 0035 hrs. Dr Y S Yadava Departed Denpasar by MH 714 at 1350 hrs.	

Leaders of the cooperative organizations/ societies visited by the mission in Phase One

Mission members with officials of MMAF and IKPI in Jakarta

Mission members with officials of IKOPIN, Bandung and IKPI, Jakarta

Mission members with members of Puskud Mina Jawa Timur, Surabaya

Mission members with members of Kud Mina Blanbangan

Mission members with officials of IKPI in Bali during the wrap-up meeting


MALAYSIA
SINGAPORE
SUMATRA
KALIMANTAN
SULAWESI
Moluccas
PAPUA
Jakarta
I N D O N E S I A
Surabaya
JAVA
Bali
TIMOR
INDIAN OCEAN
Not to scale

2.0 Report

The Phase One of the Training Project for Promotion of Community-based Fishery Resource Management by Coastal Small-scale Fishers in Indonesia was undertaken from 01 - 08 October 2009. The mission members comprised Dr Yugraj Singh Yadava, Director, Bay of Bengal Programme Inter - Governmental Organisation (BOBP-IGO), India and Mr Masaaki Sato, Secretary, International Cooperative Fisheries Organization (ICFO), Japan. The National Federation of Indonesian Fishermen's Cooperative Societies or Induk Koperasi Perikanan Indonesia in Bahasa Indonesia (IKPI) is the partner organization for the Training Project in Indonesia.

The Phase One mission held meetings with officials of the IKPI, the Ministry of Marine Affairs and Fisheries (MMAF) in Jakarta and Officials of the Fisheries Cooperative Societies at the Provincial and local levels (also known as the *Koperasi Unit Desa* or the KUD). Mr M Sato, Mission member also met with the concerned official of the Embassy of Japan in Jakarta, Indonesia.

The mission undertook extensive field visits covering coastal fisheries and aquaculture in Java Province. These included visits to the Indonesian Institute of Cooperative Management (IKOPIN) and freshwater catfish farm in Bandung (West Java) and fisheries cooperatives including fishing harbours (Ports) in Brandong Lamongan, Prigi and Banyuwangi. The day-to-day itinerary of the mission and the names of the persons with whom the mission interacted are presented under Chapter 1.4. The following section of the Report presents a brief review of the fisheries and cooperative sectors in Indonesia.

2.1 Fisheries Sector

2.1.1 Introduction

Indonesia is the largest archipelago in the world. It consists of five major Islands and about 30 smaller groups of Islands. The total number of Islands has been estimated at 17 508 of which 6 000 are inhabited. Situated on a crossroad between two oceans, the Pacific and the Indian Oceans, Indonesia bridges two continents, Asia and Australia. This strategic position has always influenced the cultural, social, political, and economic life of the country. With an estimated population of around 240 million in 2009, it is the world's fifth most populous country and home to the world's largest Muslim population[1] . The country's motto is *'Bhinneka Tunggal Ika'*, which means unity in diversity.

With a total area of 1 904 569 sq. km, Indonesia is the 23rd largest country in the world. The country shares land borders with Papua New Guinea, East Timor and Malaysia. Other neighboring countries include Singapore, Philippines, Australia and the Indian territory of the Andaman and Nicobar Islands[2] . Due to its proximity to the equator, Indonesia enjoys a tropical climate. The terrain comprises mostly coastal lowlands although larger islands have interior mountains with moderate temperature. However, it also suffers from occasional floods, drought and earthquakes. The country is rich in petroleum, tin, natural gas, nickel, timber, bauxite, copper, fertile soils, coal, gold and silver.

Indonesia's strategic sea-lane position fostered inter-island and international trade and fundamentally shaped Indonesian history. Portugal is the first colonial power to set foot in Indonesia in 1512. They were followed by the Netherlands and Britain. However, by 1602, Netherlands established itself as the dominant European power in Indonesia. During the World War II, Japan invaded Indonesia and occupied it leading

to the end of Dutch rule. The invasion also fueled the nationalist undercurrent in the country and following the surrender of Japan in 1945, the country declared independence on 17 August 1945[3]. Following the Declaration, the country entered into an 'War of Independence" (1945-49) with Netherlands as it tried to secure its dominion again. The Dutch invasion received global criticism. Finally, following a round Table Conference in the Hague from August 23 - November 2, 1949 between representatives of the Netherlands, the Republic of Indonesia and the BFO (Federal Consultative Assembly) representing various states the Dutch had created in the Indonesian archipelago, the Netherlands agreed to transfer sovereignty to the United States of Indonesia[4] .

2.1.2 Economy

Indonesia has a population of 206 million as per the national census conducted in 2000. The current estimated population is about 228 million (in 2008) with an annual growth rate of 1.2 percent. Javanese (40.6%) is the dominant ethnic group in the country, followed by Sundanese (15%), Madurese (3.3%), Minangkabau (2.7%) and others (29.9%) as per the national census of 2000. The adult literacy rate (age 15 and over that can read and write) is 92 percent. The Human Development Index (HDI) for Indonesia in 2007 is 0.734, which gives the country a rank of 111th out of 182 countries. This also puts Indonesia in the medium human development category (Human Development Report 2009)[5] . Box 1 provides a brief profile of Indonesia.

Indonesia is the largest economy in Southeast Asia, a member of G-20 major economies and is considered as the New Asian Tiger. It has made significant economic advances during the last two decades but faces challenges stemming from the global financial crisis and world economic downturn. The industrial sector is the largest and accounts for 48.1 percent of GDP, followed by services (37.5%) and agriculture (14.4%) in 2008 (CIA: The World Factbook 2009). However, agriculture employs more people than other sectors, accounting for 42.1 percent of the 112 million-strong workforce (2006). This is followed by the services sector (39.3% in 2006) and industry (18.6% in 2006). Major industries include petroleum and natural gas, textiles, apparel and mining. Major agricultural products include palm oil, rice, tea, coffee, spices and rubber.

Recently, the government has introduced significant reforms in the financial sector, and include areas such as tax and customs, the use of Treasury bills and capital market supervision. However, the country has still to overcome poverty, unemployment, inadequate infrastructure, a complex regulatory environment and unequal resource distribution among regions[6]. In 2007, the unemployment rate in the country was estimated as 9.1 percent, which marginally declined to 8.4 percent in 2008. The gini index for distribution of family income on the other hand has worsened. It has increased from 37 in 2001 to 39.5 in 2005 (CIA: World Factbook 2009). The non-bank financial sector, including pension funds and insurance, remains weak. Despite efforts to broaden and deepen capital markets, they remain underdeveloped.

Box 1: Data Profile – Indonesia				
	2000	**2005**	**2007**	**2008**
World view				
Population, total (million)	206.27	220.56	225.63	228.25
Population growth (annual %)	1.3	1.4	1.2	1.2
Surface area (sq.km) (thousand)	1 904.6			
People				
Income share held by lowest 20%	–	7.1	–	–
Life expectancy at birth, total (years)	68	70	71	–
Employment to population ratio 15+, total (%)	63	61	–	*62*
Vulnerable employment, total (% of total employment)	65	63	–	*63*
Literacy rate, adult total (% of people ages 15 and above)	–	*92*	–	*92*
Economy				
GDP (current US$) (billion)	165.02	285.87	431.93	514.39
GDP growth (annual %)	4.9	5.7	6.3	6.1
Inflation, GDP deflator (annual %)	20.4	14.3	11.3	18.3
Agriculture, value added (% of GDP)	16	13	14	14
Industry, value added (% of GDP)	46	47	47	48
Services, etc., value added (% of GDP)	38	40	39	38
Source: World Development Indicators Database, April 2009				

The economic difficulties in early 2008 centered on high global food and oil prices and their impact on Indonesia's poor and on the budget. As global demand has slowed and prices for Indonesia's commodity exports have fallen, Indonesia faces the prospect of growth significantly below the 6-plus percent recorded in 2007 and 2008.

Administratively, Indonesia consists of 33 provinces, five of which have special status. Each province has its own political legislature and governor. The provinces are sub-divided into regencies (*Kabupaten*) and cities (*Kota*), which are further sub-divided into sub-districts (*Kecamatan*) and again into village groupings (either *Desa* or *Kelurahan*). Following the implementation of regional autonomy measures in 2001, the regencies and cities have become the key administrative units, responsible for providing most government services. The village administration level is the most influential on a citizen's daily life, and handles matters of village or neighborhood through an elected *Lurah* or *Kepala Desa* (village chief)[7].

The Wallace Line is an ecological boundary that separates the Asian and Australian habitat regions of the Indonesian archipelago. Animals, plants, and even ethnic groups differ greatly between the two regions, separated by the channel between the Island of Bali and the Lombok Islands and the sea to the west of Sulawesi.

2.1.3 Contributions of fisheries sector

Indonesia, often mentioned in the vernacular as '*Tanah Air Kitah*', - Our Land and Water, which signifies the importance of seas and water bodies in the day-to-day life. The country has a long coastline of 81 000 km and a large maritime zone of 5.8 million sq. km comprising the Exclusive Economic Zone (EEZ) of 2.7 million sq. km, the archipelagic waters and the territorial seas[8]. The fisheries sector has contributed 3.1 percent of the GDP at Current Market Prices in 2009 recording an increase from 2.3 percent in 2004.[9] The sector recorded a growth rate of (at 2000 prices) 5-7 percent during 2004-08, which is above the growth rate of the primary sector and at par with the growth of the economy **(Figure 1)**.

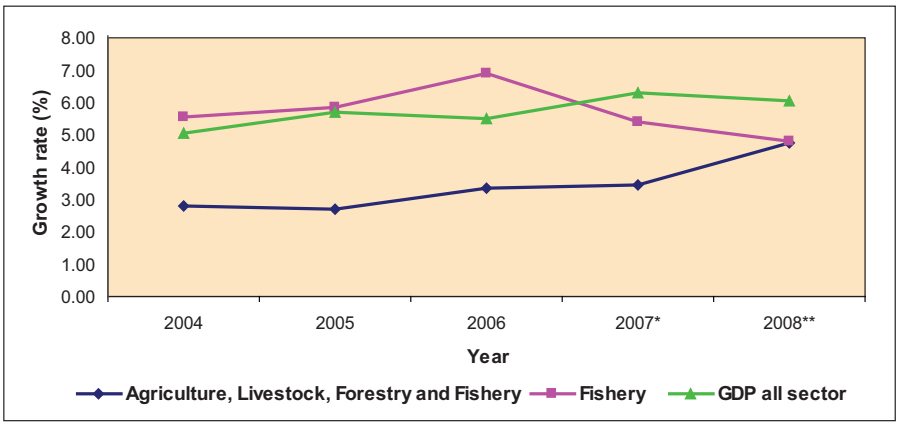


Figure 1: Sectoral growth of GDP at 2000 Constant Market Prices

Source: Computed from Statistics Indonesia 2009. Figures for 2007 & 2008 are provisional

Fish and fish products are a major source of animal protein in the country. The average domestic consumption of fish and fish products has increased from 21.3 kg in 2003 to 28 kg in 2008 and is expected to reach 30.17 kg by the end of 2009[10]. The estimated employment in the sector (capture and culture) directly and indirectly was 7.27 million in 2005 **(Figure 2)**. The sectoral employment has increased to 8.94 million in 2008 and is estimated at 10.02 million in 2009. At the same time, the average income of participants in the sector has increased from IDR[11] 1.25 million/ person/ month in 2008 to IDR 1.50 million/ person/ month in 2009 as per the Ministry of Marine Affairs and Fisheries (MMAF), Government of the Republic of Indonesia.

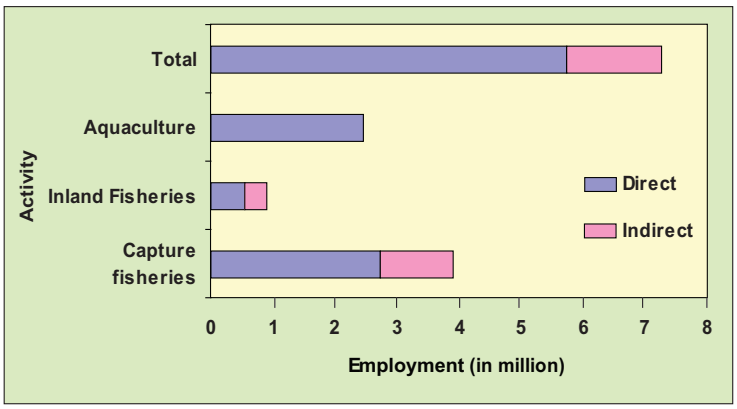


Figure 2: Employment scenario in fisheries sector, 2005

Source: FAO







Fishers of East Java, Indonesia

The marine capture fisheries situation in Indonesia can be summarized as juxtaposition of prospects and problems. The MMAF has estimated the MSY of marine waters at 6.4 million tonnes per year and 80 percent of the MSY *i.e.* 5.12 million tonnes per year has been fixed as the total allowable catch (TAC). Against this, the present total marine capture production stands at 4.73 million tonnes, which is 92 percent of the TAC. The inland open water sources comprise an area of 5.4 million ha. The potential fisheries yield from inland open water sources was estimated at 0.9 million tonnes in 1985. The figure was later revised to 4.95 million tonnes per year in 2004 and can increase to 6.4 million tonnes per year with stock enhancement. However, the total production from inland open water sources was only 0.31 million tonnes in 2007 and presents a picture of grossly underutilized resources. In aquaculture, Indonesia has huge untapped potential in sea based farming (or mariculture). There is also potential for 6 to 8 fold increase in brackish water and open water fisheries culture. Overall, the current area utilization and production figures show the country is using about 11 percent of its cumulative production potential from the fisheries sector **(Table 1)**.

Table 1: Utilization of fisheries resources in Indonesia

Resource	Area (million ha)	Potential yield (million tonnes)	Production in 2007 (million tonnes)	Utilization level (%)
Capture Fisheries				
Sea	580	5.12	4.73	92.38
Open Waters	54	4.95	0.31	6.26
Sector total	***634***	***10.07***	***5.04***	***50.04***
Culture Fisheries				
Sea	24	47.00	1.04	2.21
Brackish Water Pond	1	5.00	0.79	15.80
Open Waters	14	5.70	0.71	12.46
Sector total	***39***	***57.70***	***2.54***	***4.40***
Grand Total	***673***	***67.77***	***7.58***	***11.18***

Source: MMAF & Induk Koperasi Perikanan Indonesia (IKPI)

Fisher population

There are over 5.4 million people engaged in fisheries sector in Indonesia. About 2.6 million people are engaged in capture fisheries and about 2.8 million in aquaculture. During 2004-06, the number of fishers engaged in capture fisheries has declined from 2.9 million to 2.6 million. During the same period, fisher population in culture fisheries has increased from 2.5 million to 2.8 million. Assuming an average family size of 3-6 as indicated in various studies, the total fisher population is estimated at about 21 million, which is roughly one-tenth of the total population of the country in 2006.

Long-term trend analysis of fish production (1950-2007) shows that during 1950s and 1960s, production from inland waters contributed significant part of total production. However, inland fish production remained stagnant while the marine production increased rapidly. Culture fisheries started to pick up from the late 1970s in tune with the global trend and recorded a high growth rate in the 2000s. The sectoral contribution has been accordingly changed from about 9, 72, 18 percent for inland, marine and aquaculture respectively in the 1990s to about 4, 58 and 38 percent for inland, marine and aquaculture respectively in 2000s **(Figure 3 and Table 2)**.

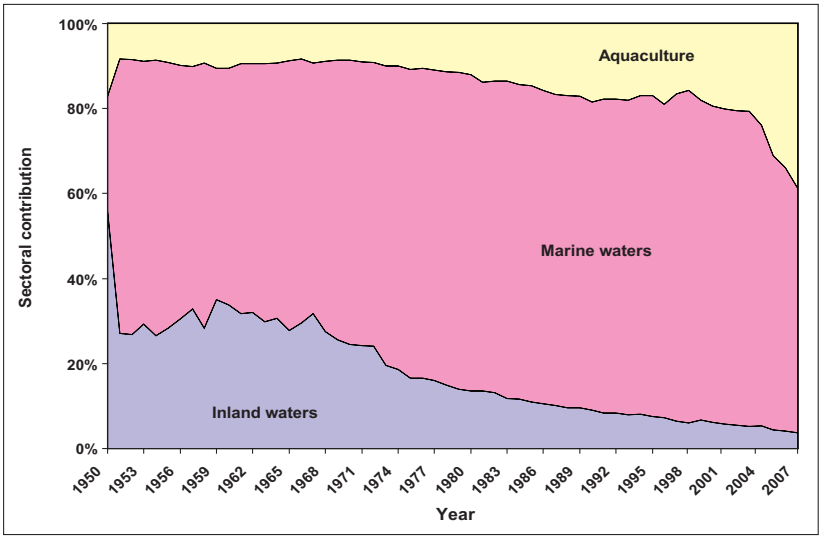


Figure 3: Sectoral trends in fisheries production, 1950-2007

Source: FAO Fisheries Department, Fisheries Information, Data and Statistics Unit. FISHSTAT Plus: Universal software for fisheries statistical time series. Version 2.3.2000.

Table 2. Recent trends in fisheries production in Indonesia

Production	2002	2003	2004	2005	2006	2007	Growth during 2006-2007(%)
TOTAL	**5 515 648**	**5 915 988**	**6119 731**	**6 869 543**	**7 488 709**	**8 238 302**	**10.01**
CAPTURE FISHERIES	4 378 495	4 691 796	4 651 121	4 705 869	4 806 112	5 044 737	4.97
Marine Fish	4 073 506	4 383 103	4 320 241	4 408 499	4 512 191	4 734 280	4.92
Inland Openwater	304 989	308 693	330 880	297 370	293 921	310 457	5.63
AQUACULTURE	1 137 153	1 224 192	1 468 610	2 163 674	2 682 597	3 193 565	19.05
Marine Aquaculture	234 859	249 242	420 919	890 074	1 365 918	1 509 528	10.51
Pond	473 128	501 977	559 612	643 975	629 610	933 832	48.32
Inland Openwater	429 166	472 973	488 079	629 625	687 069	750 204	9.19

Source: Indonesian Fisheries Book, 2009

However, as **Table 2** shows, aquaculture is growing at a double digit and inland fisheries are showing signs of recovery. On the contrary, marine fisheries are slowing down as resources in the near shore waters are showing signs of depletion.

2.1.4 Marine fisheries sector

Indonesia has mixed tropical fisheries. Marine fisheries resources are classified into large pelagics (skipjack, other tunas, billfish, oceanic sharks and small tuna), small pelagics (scads, mackerels, sardinellas, trevallies, engraulids, anchovies), demersal and coral reef fishes (groupers, snappers, rabbit fish, etc.), and shrimps and other crustaceans, etc. The MMAF logbook lists 108 different species subject to commercial exploitation.

As per a Ministerial Decree, the marine capture fisheries in Indonesia are divided into 11 Fisheries Management Areas (FMAs): (i) Malakka Strait and Andaman sea; (ii) Indian Ocean, West Sumatera and Sunda Strait; (iii) Indian Ocean, Southern part

of Java to Southern part of Nusa Tenggara, Sawu Sea and Western part of Timor Sea; (iv) Karimata Strait, Natuna Sea and South China Sea; (v) Java Sea; (vi) Makassar Sea, Bone Bay, Flores Sea and Bali Sea; (vii) Tolo Bay and Banda Bay; (viii) Tomini Bay, Maluku Sea, Halmahera Sea, Seram Sea and Berau Bay; (ix) Sulawesi Sea and Northern part of Halmahera Island; (x) Cendrawasih Bay and Pacific Ocean and (xi) Aru Sea, Arafura Sea and Eastern part of Timor Sea[12] . Among the provinces, Sumatera contributes the largest share of catch, followed by Maluku-Papua, Java, Sulawesi, Kalimantan and Bali- Nusa Tenggara **(Box 2 and Table 3)**.

Box 2: Description of FMAs in Indonesia

Fisheries Management Area	Code	Associated provinces
Malakka Strait and Andaman sea	FMA 571	Sumatera
Indian Ocean, West Sumatera and Sunda Strai;	FMA 572	Sumatera, Java
Indian Ocean, Southern part of Java to Southern part of Nusa Tenggara, Sawu Sea and Western part of Timor sea	FMA 573	Java
Karimata Strait, Natuna Sea and South China Sea	FMA 711	Sumatera, Kalimantan
Java Sea	FMA 712	Kalimantan, Java
Makassar Sea, Bone Bay, Flores Sea and Bali Sea	FMA 713	Kalimantan, Sulawesi
Tolo Bay and Banda Bay	FMA 714	Sulawesi, Maluku, Papua
Tomini Bay, Maluku Sea, Halmahera Sea, Seram Sea and Berau Bay	FMA 715	Sulawesi, Maluku, Papua
Sulawesi Sea and Northern part of Halmahera Island	FMA 716	Kalimantan, Sulawesi, Papua
Cendrawasih Bay and Pacific Ocean	FMA 717	Maluku, Papua
Aru Sea, Arafura Sea and Eastern part of Timor Sea	FMA 718	Maluku, Papua

Source: DG of Capture Fisheries, MAFF, 2009

Table 3: Marine capture fisheries by Provinces, 2007

Province	Production in 2007 (Million tonnes)	Share (%)
Sumatera	1 343 789	28.38
Bali - Nusa Tenggara	306 983	6.48
Maluku-Papua	949 205	20.05
Java	915 155	19.33
Kalimantan	308 822	6.52
Sulawesi	910 326	19.23
Total	**4 734 280**	**100.00**

Source: Indonesia Fisheries Book, 2009

Total production of marine capture fisheries has shown steady increase. However, production of tunas and shrimps has stayed about the same in recent years. Large increase in production was observed in blue swing crab, common squid, cuttlefish and miscellaneous fish species, including sardinella, croakers and groupers (FAO). Overall, in marine capture fishery in 2007, tunas (including skipjack and eastern little tunas) represented 18.85 percent of production, followed by shrimp (5.47%) and other fishes (70.55%) **(Table 4)**.

Table 4. Indonesian marine capture fisheries production by major fish (tonnes)

Major Species/ Groups	2002	2003	2004	2005	2006	2007
Total	**4 073 506**	**4 383 103**	**4 320 241**	**4 408 499**	**4 512 191**	**4 734 280**
Tuna/ tunas	148 439	151 926	176 996	183 144	159 404	191 558
Cakalang/ Skipjack tunas	203 102	208 626	233 319	252 232	277 388	301 531
Tongkol/ Eastern little tunas	266 955	267 339	310 400	309 794	329 169	399 513
Other fish	2 889 364	3 157 465	3 112 018	3 246 770	3 293 729	3 340 120
Shrimp	241 485	240 438	245 913	208 539	227 164	258 976
Seaweed	55 731	64 610	8 677	9 670	4 996	4 643
Others	268 430	292 699	232 918	198 350	220 341	237 939

Source: DG of Capture Fisheries, MMAF, 2008

Fisheries inputs

Fish landing points or fishing harbours/ ports in Indonesia are classified into three categories, based on their capacity and facilities available. The first category is the Oceanic Fishing Harbour (Type A fishing harbour), which is able to provide daily shelter to at least 100 fishing vessels of more than 60 GT each. This facility is especially for vessels fishing in the Indonesian EEZ. Additionally, Type A harbours are able to support annual landings of 18 000 to 120 000 tonnes. At present there are six Oceanic Fishing Harbours in Indonesia.

The second category is the Archipelagic Fishing Port (Type B fishing harbour), that is able to provide daily servicing of 75 fishing vessels of 15 - 60 GT each, fishing in Indonesian home waters and also the EEZ. The Type B harbours are able to support annual landings of 7 200 -18 000 tonnes. At present, there are 13 Archipelagic Fishing Ports in the country.

Table 5: Fisheries infrastructure in Indonesia

CLASSIFICATION	NAME	LOCATION	PROVINCE
Oceanic Fish Port	1. Nizam Zachman	Jakarta	DKI Jakarta
	2. Kendari	Kendari	South East Sulawesi
	3. Belawan	Belawan	North Sumatera
	4. Bungus	Bungus	West Sumatera
	5. Cilacap	Cilacap	Central Java
	6. Bitung	Bitung	North Sulawesi
Archipelagic Fishing Port	7. Sibolga	Sibolga	North Sumatera
	8. Tanjungpandan	Tanjungpandan	Bangka Belitung
	9. Palabuhanratu	Palabuhanratu	West Java
	10. Kejawanan	Kejawanan	West Java
	11. Pekalongan	Pekalongan	Central Java
	12. Brondong	Brondong	East Java
	13. Prigi	Prigi	East Java
	14. Pemangkat	Pemangkat	West Kalimantan
	15. Ternate	Ternate	North Maluku
	16. Ambon	Ambon	Maluku
	17. Tual	Tual	Maluku
	18. Pengambengan	Pengambengan	Bali
	19. Sungailiat	Sungailiat	Bangka Belitung
Coastal Fishing Port	20. Karangantu	Karangantu	Banten
	21. Teluk Batang	Teluk Batang	West Kalimantan

Source: DG of Capture Fisheries, MMAF, 2008

The third category is the Coastal Fishing Port (Type C fishing harbour), capable of daily harboring 50 fishing vessels of 5–15 GT and supporting annual landings of 3 000–7 200 tonnes. At present there are 2 Coastal Fishing Ports in Indonesia.

Harbour types A, B and C is managed by the MMAF. In addition, there is a Type D, which is a fish landing centre (FLCs) and is under the management of Provincial Governments. At present there are 44 Type D FLCs in Indonesia (DGCF, 2009). Three-quarters of the fisheries harbours are in the western part of Indonesia. Their location and operational criterion are presented in **Tables 5 & 6**.

Table 6: Types of harbours and their technical criterion

Class of Fishing Port	Technical Criteria	Condition of Processing
Oceanic Fishing Port	- To serve fishing vessels that operate in Territorial Waters, Exclusive Economic Zone of Indonesia and offshore. - Have mooring/ docking facilities for minimum fishing vessels of 60 GT. - Minimum length of pier is 300 m and minimum port pond/ water depth is -3.00 m. - The port pond is available for 100 fishing vessels or at least can accommodate 6 000 GT. - The fish landings are for export purpose. - There are fisheries industries.	Central Government - *MMAF *(Central Technical Implementing Unit)*
Archipelagic Fishing Port	- To serve fishing vessels that operate in Territorial Waters and Exclusive Economic Zone of Indonesia. - Have mooring/ docking facilities for minimum 30 GT capacity of fishing vessels. - Minimum length of pier is 150 m and minimum port pond/ water depth is -3.00 m. - The port pond is available for 75 fishing vessels or at least can accomodate 2 250 GT. - There are fisheries industries.	Central Government - *MMAF *(Central Technical Implementing Unit)*
Coastal Fishing Port	- To serve fishing vessels that operate in inland waters, archipelago and Territorial Waters. - Have mooring/ docking facilities for minimum 10 GT capacity of fishing vessels. - Minimum length of pier is 100 m and minimum port pond/ water depth is -2.00 m. - The port pond is available for 30 fishing vessels or at least can accommodate 300 GT.	Central Government - *MMAF *(Central Technical Implementing Unit)* Provincial Fisheries Service – Provincial Office of Marine and Fisheries *(Local Technical Implementing Unit)*
Fish Landing Centres	- To serve fishing vessels that operate in inland water and archipelago waters. - Have mooring/ docking facilities for minimum 3 GT capacity of fishing vessels. - Minimum length of pier is 50 m and minimum port pond/ water depth is -2.00 m. - The port pond is available for 20 fishing vessels or at least can accommodate 60 GT.	Provincial Fisheries Service – Provincial Office of Marine and Fisheries *(Local Technical Implementing Unit)* Regency/ City Government – Provincial Office of Marine and Fisheries *(Local Technical Implementing Unit)*

** MMAF: Ministry of Marine Affairs and Fisheries*

Note: There are 2 private fishing ports also (Barelang and Telaga Punggur (Batam)) that are managed by the private sector.

Fishing vessels and gear

In 2007, the number of registered marine fishing gear were estimated at 1 237 797 units. Major fishing gears are hook and line, gill nets, traps (especially portable traps), trawl nets and seine nets.

The structure of fishing fleet in Indonesia is dominated by the traditional/ small-scale fishing fleet using non-motorized boats (boat without engine), boat with out-board engine, and in board fishing vessels below 5 GT. The total number of boats under this category have been estimated at 512 500 units, which represents 92.18 percent of the total fishing fleet in Indonesia. Fishing vessels using inboard engine and measuring from 5 GT and up to 30 GT have been estimated at 38 240 units; those measuring between 30 GT to 100 GT at 3 290 units; and fishing vessels measuring 100 GT and above at 1 740 units **(Table 7)**.

Table 7: Fishing fleet structure in Indonesia (2003-2006)

Type and Size of Vessel/Boat	Number of Fleet (units) by Year			
	2003	2004	2005	2006
Total	**528 717**	**549 100**	**555 581**	**555 950**
1. Boat without engine	250 469	256 830	244 471	244 190
2. Boat with outboard engine	158 411	165 337	165 314	165 430
3. In Board Fishing Vessel	119 837	126 933	145 796	146 330
< 5 GT	79 218	90 148	102 456	102 880
5 – 10 GT	24 358	22 917	26 841	26 880
10– 20 GT	5 764	5 952	6 968	6 970
20 – 30 GT	3 131	3 598	4 553	4 570
30 – 50 GT	2 338	800	1 092	1 120
50 – 100 GT	2 698	1 740	2 160	2 170
100 – 200 GT	1 731	1 342	1 403	1 410
> 200 GT	599	436	323	330

Summing up

The rich resource base and provision of inputs have been the main drivers of the steady increase in fish production during the past years. However, sustainability of this growth is a major issue now. Resources in most of the FMAs are showing signs of depletion **(Table 8)**. Based on the available statistics it may be concluded that major fishing provinces like Sumatera and Java may suffer in the near future if exiting fishing practices continue. On the other hand there is still some potential left in the Western part of Indonesia. However, considering the status of resources there is now little scope of expansion in coastal and archipelagic waters of the country.

2.1.5 Inland fisheries Sector

Inland open water capture fish production has increased from 304 989 tonnes in 2002 to 310 457 tonnes in 2007. Fish accounted for 93.6 percent of the total production with snakeheads, murrels (tilapia, catfish) and kissing gouramis forming bulk of the catch. Major inland open water production came from set gillnets, which was estimated at 61 568 tonnes (18.6%) of the total inland open water capture production in 2004, followed by hook & lines (10.8%), and portable traps (10.7%) (FAO).

There were 818 411 fishing gear units recorded in 2007 in inland open water fisheries. Hook-and-line remained the dominant gear in most areas (274 698 units), only displaced

Table 8: Status of resources in FMAs

Fisheries Management Area (FMA)	Status			
	Demersal	Shrimp	Small Pelagic	Big Pelagic
FMA 571	O	O	F	UN
FMA 572	F	F	M	F
FMA 573	F	F	F	F
FMA 711	F	M	O	UN
FMA 712	F	F	O	UN
FMA 713	F	O	M	UN
FMA 714	U/UN	UN	M	M
FMA 715	M		M	F
FMA 716	UN		UN	O
FMA 717	UN		UN	O
FMA 718	F O	O	M	UN

Moderate Uncertain Over Exploited Fully Exploited

by portable traps in Kalimantan and by set gillnets in Sulawesi (FAO). Other major gear used included portable traps & set gillnets (133 871 and 119 810 units respectively).

The number of fishing boats increased from 180 582 in 2004 to 198 534 in 2007 (MMAF, 2008). However, about 80 percent boats are not powered. This include dug out boats and plank built boats. There are 37 747 OBM boats (increased from 33 599 in 2004) and 1006 IBM boats in inland open water capture fisheries.

Among the provinces, Kalimantan and Sumatera contributed about 77 percent of total landings. South Kalimanatan, South Sumatera and Central Kalimantan are major areas for inland fisheries in Indonesia **(Table 9)**.

Table 9: Inland capture fisheries by Provinces, 2007

PROVINCE	Production	Share(%)	PROVINCE	Production	Share(%)
TOTAL	**310 457**	**100.00**	**JAVA**	**36 369**	**11.71**
SUMATERA	100 945	32.51	Banten	645	0.21
Nanggroe Aceh Darussalam	1 127	0.36	DKI Jakarta	-	-
North Sumatera	13 452	4.33	West Java	7 187	2.31
West Sumatera	9 360	3.01	Central Java	15 870	5.11
Riau	14 355	4.62	D.I. Yogyakarta	977	0.31
Riau Island	-	-	East Java	11 690	3.77
Jambi	5 345	1.72	**KALIMANTAN**	**136 324**	**43.91**
South Sumatera	43 045	13.87	West Kalimantan	7 795	2.51
Bangka Belitung	-	-	Central Kalimantan	39 417	12.70
Bengkulu	666	0.21	South Kalimantan	53 563	17.25
Lampung	13 595	4.38	East Kalimantan	35 549	11.45
BALI-NUSATENGGARA	**3 261**	**1.05**	**SULAWESI**	**26 507**	**8.54**
Bali	684	0.22	North Sulawesi	1 373	0.44
West Nusa Tenggara	2 577	0.83	Gorontalo	903	0.29
East Nusa Tenggara	-	-	Central Sulawesi	376	0.12
MALUKU-PAPUA	**7 051**	**2.27**	South Sulawesi	19 014	6.12
Maluku	124	0.04	West Sulawesi	-	-
North Maluku	-	-	South East Sulawesi	4 841	1.56
Papua	6 927	2.23			
West Papua	-	-			

Source: DG. of Capture Fisheries, MMAF, 2008

2.1.6 Aquaculture

Aquaculture constitutes an important component of Indonesian fisheries and is becoming a valuable contributor to the national food security, income and employment generation and foreign exchange earnings. Simultaneously, aquaculture is also contributing to the reduction in pressure on marine natural resources. In recent years, aquaculture development has accelerated in Indonesia and it is considered important in supporting development of rural economy.

Aquaculture in Indonesia comprises sea culture (mariculture), brackish water and fresh water aquaculture. Mariculture comprises farming of fishes such as snapper, grouper and gobia, molluscs (various kinds of molluscs, pearls and sea cucumbers) and sea weed. Fresh water aquaculture consists of farming in open waters (such as rivers and swamps), fresh water ponds, and fish/rice in the paddy fields. As shown below **(Table 10)**, vast potential of aquaculture in both marine and freshwaters remains unutilized in Indonesia.

Table 10. Potential for aquaculture in Indonesia

Sl.No	Aquaculture areas	Total potential area (ha)	Area developed (ha) (% of potential)	Area proposed to be developed (ha)
	TOTAL	**11 806 392**	**762 320 (6.46%)**	**11 044 072**
1	Mariculture	8 363 501	84 481 (1.01%)	8 279 020
2	Brackishwater culture	1 224 076	452 901 (36.99%)	771 175
3	Freshwater culture	2 218 815	224 937 (10.14%)	1 993 878
	a. Ponds	541 100	105 127 (19.43%)	435 973
	b. Openwater	139 336	1 491 (1.07%)	137 845
	c. Paddy field culture	1 538 379	118 320 (7.69%)	1 420 059

*Note: * Based on Revitalization of Aquaculture 2006-2009, published in 2005.*
Source: DG. of Aquaculture, MMAF, 2008

Indonesian freshwater farming started with the stocking of common carp in backyard ponds in West Java in the middle of the nineteenth century, during the Dutch occupation. Subsequently, it spread to other parts of Java, Sumatera and Sulawesi Islands in the early twentieth century. However, it was only in the late 1970s that a remarkable increase in production from freshwater aquaculture was observed. This was a result of the introduction of new farming technologies which contributed to the availability of hatchery-produced seed and the development of compound feeds[13].

In Indonesia, the most common farmed species are common carp (*Cyprinus carpio*), Nile tilapia (*Oreochromis niloticus*) and giant gourami (*Osphronemus goramy*). Common carp is the most dominant species, with production comprising about half of the total freshwater farmed species. Nile tilapia, which was first introduced in the country in 1969, is also contributing significantly with production increasing from 31 217 tonnes in 1999 to 206 904 tonnes in 2007 (DGA, MMAF, 2009) **(Table 11)**.

Aquaculture production increased from 1 468 610 tonnes in 2004 to 3 193 565 tonnes in 2007, recording an increase of 217 percent. Area under farming occupied 762 320 ha, comprising brackish-water aquaculture (60 % of the area), followed by paddy field aquaculture (16%) and pond aquaculture (14%). In terms of total production (including aquatic plants), mariculture produced 1 509 528 tonnes in 2007 followed by brackish-water aquaculture (933 832 tonnes) and fresh water aquaculture (750 204 tonnes). Mariculture production comprises seaweed (94.55%), colored rosar shell (3.07%), groupers (1.56%) and sea bass (0.41%). Pond aquaculture includes common carp (27.92%), catfish (19.25%), Nile tilapia (19.92%), giant gouramy (7.68%) and Java

Table 11. Aquaculture by main fish species in Indonesia

Sl.No	Commodity	2002	2003	2004	2005	2006	2007
Total production		1 137 153	1 224 192	1 468 610	2 163 678	2 682 596	3 193 565
1.	Shrimp	159 997	192 912	238 857	280 629	327 610	360 096
2.	Nile tilapia	60 437	71 947	98 102	151 363	179 934	206 904
3.	Common carp	199 632	219 385	192 461	216 924	247 633	264 349
4.	Milk fish	222 317	227 854	241 438	254 067	212 883	263 139
5.	Giant seaperch	38 041	14 145	11 215	9 428	6 203	12 453
6.	Cat fishes	10 264	12 904	23 962	32 575	31 489	36 755
7.	Java barb	39 193	58 614	55 691	69 386	77 332	91 735
8.	Giant gouramy	16 438	22 666	25 948	25 442	28 711	35 708
9.	Mud crab	9 039	3 172	2 241	4 379	5 525	6 631
10.	Shells	7	2 869	12 991	16 348	18 896	15 623
11.	Seaweed	223 080	233 156	397 964	866 383	1 374 463	1 728 475
12.	Others	158 708	164 568	167 740	236 754	171 917	171 696

Source: DG of Capture Fisheries, MMAF, 2008

carp. Paddy field aquaculture comprises common carp (62.54%), Java carp (11.32%), Nile tilapia (11.13%) and Mozambique tilapia (5.32%) and others. Cage culture species include Common carp (67.95%), Nile tilapia (24.56%), giant gouramy (2.09%) and others (FAO, 2009).

2.1.7 Post Harvest utilization

In Indonesia, about 56 percent of fish produced is consumed fresh. Supply of ice and availability of refrigerated storage and transport facilities are limited, therefore the balance is processed and consumed as dried and salted (18 percent), smoked or fermented. There are about 10 000 small fish processing operations, generally using traditional methods. Less than 2 percent of the catch is canned. The canneries utilize pelagics, mostly oil sardines and skipjack. Processing of fishmeal has still not yet developed and takes place mostly in conjunction with canning operations. About 16 percent of the total production is frozen for export, mostly shrimp and tuna (FAO, 2009).

The volume of export of fish products during 2004 to 2006 has increased at about 6.45 percent per year while the value of export has risen by 8.60 percent. Shrimps account for about 53 percent of the export in value terms. For tuna and tuna like fishes, export in terms of volume has declined. However, their value realization has increased during 2004-06. In aggregate, export of fish products in quantity terms, has increased from 902 358 tonnes in 2004 to 1 018 447 tonnes in 2006. In value term it has increased from 1 780 833 in 2004 to 2 087 016 in 2006 (in '000 USD) **(Table 12)**.

Table 12: Export of fish and fish products from Indonesia

Products	Volume (tonnes)			Value (US.$.1 OOO)		
	2004	2005	2006	2004	2005	2006
Shrimp	142 094	153 906	169 581	887 127	948 130	1 098 651
Tuna, skipjack, little tuna	94 221	91 631	88 791	243 937	246 303	252 511
Crab	20 903	18 593	17 191	134 355	130 905	134 215
Others	645 140	593 652	742 884	515 414	587 588	601 639
Total	**902 358**	**857 782**	**1 018 447**	**1 780 833**	**1 912 926**	**2 087 016**

Source: Indonesian Fisheries Book, 2009

2.1.8 Fisheries governance in Indonesia

Traditionally, governance in Indonesia has a strong central focus. However, through a series of reforms initiated in 1998, decentralization is taking place and provincial governments are now entitled with more power.

In respect of fisheries sector, the most important decision taken during the reform period is setting up of the Ministry of Marine Affairs and Fisheries (MMAF or *Departemen Kelautan dan Perikanan* or DKP). Prior to this, the fisheries sector was under the Ministry of Agriculture. Further, as a major step to boost community-based management in fisheries (CBFM), the government has legally recognized the customary laws prevalent in many parts of Indonesia (Satria).

At national level, fisheries and aquaculture are regulated by Fisheries Law No. 31/2004 (2004), which underscores the importance of sustainable use of aquatic resources in the development of fisheries. Under Law No. 22/1999 on Regional Administration (1999), and in the context of the decentralization process, Provincial Governments are now held responsible for the management, use and conservation of marine resources in their own territory, *i.e.* within territorial waters. Responsibility for local-level marine fisheries management rests with the Provincial Marine and Fisheries Service *(Dinas Kelautan dan Perikanan Propinsi)* which has offices at province, district and sub-district levels. With the adoption of Law No. 22/1999, the Provincial Marine and Fisheries Services have been given more responsibilities as well as greater autonomy in carrying out their functions, being no longer under the technical supervision of the MMAF. This regime change in Indonesia during 1998 and continuing till present (after Satria), can be summarized as follows:

Sl. No.	Regulation	Directives
1.0	*Undang-Undang 22/1999* and *Undang-Undang 32/2004*	Small-scale fishers are free to go fishing in all fisheries management areas of the Republic of Indonesia
2.0	*Undang-Undang Perikanan 31/2004 (Fisheries Law)*	Small-scale fishers are free to go fishing in all fisheries management areas of the Republic of Indonesia
3.0	Minister of Marine Affairs and Fisheries Decree No:41/2000) on guideline for small island development	a) The state recognizes the existence of customary law based resources management in small islands b) Local people must participate in surveillance activities
4.0	Ministry of Marine Affairs and Fisheries Decree No 58/2001 on guideline for community-based marine and fisheries surveillance	a) The state pushes the role of local institutions in promoting *siswasmas* b) The local government has to facilitate empowering peoples' group for surveillance activities
5.0	Minister of Marine Affair and Fisheries Decree No Kep.10/Men/ 2002 on guideline for integrated coastal management planning	a) The state pushes the role of local institution in promoting *siswasmas* b) The local government has to facilitate empowering peoples' group for surveillance activities

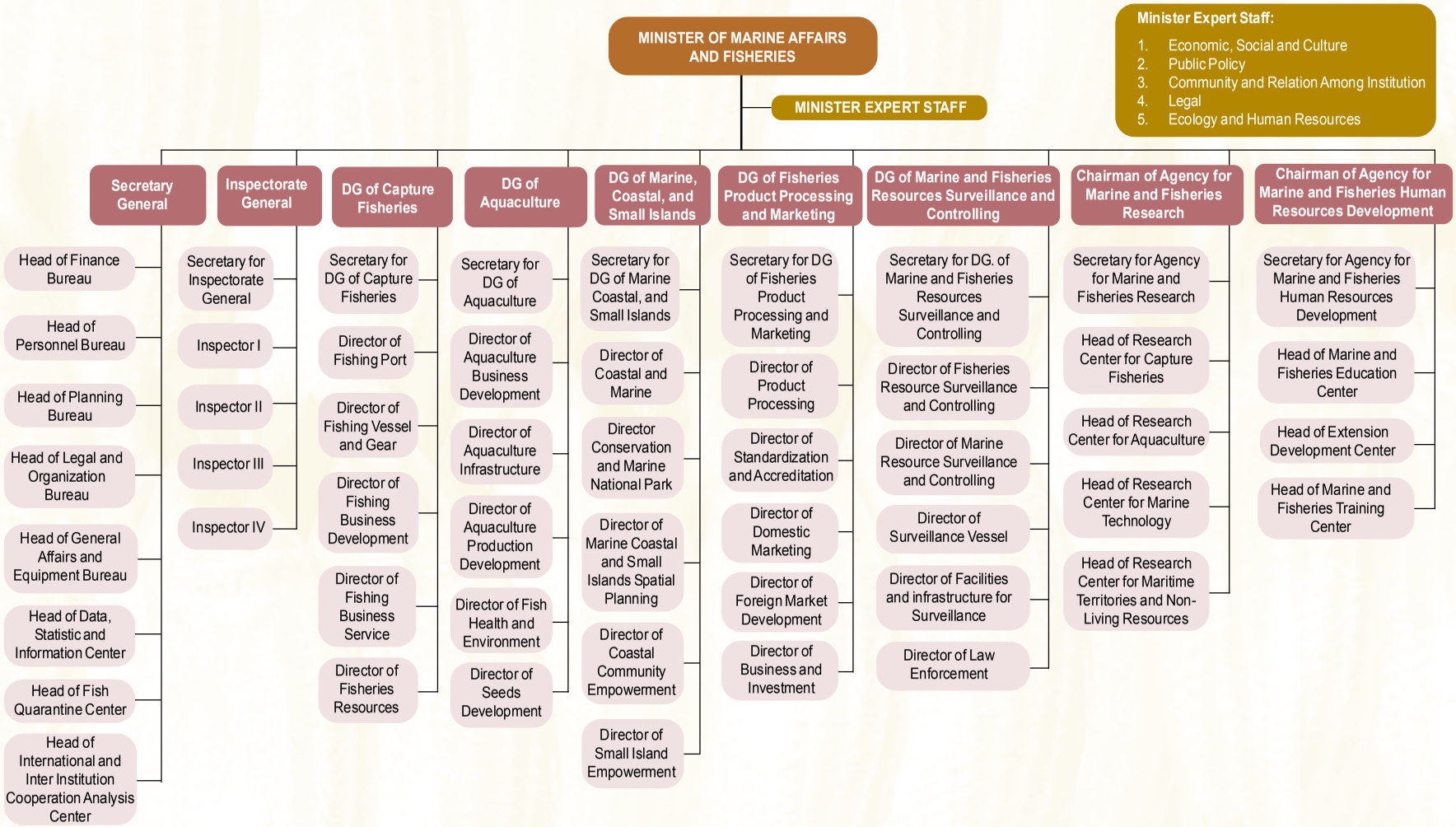
Quoted from Sataria Arif: Decentralization of Property Right in Marine Fisheries: Indonesia Perspective

The MMAF is the principal agency responsible for marine and fisheries sector planning, management and administration in Indonesia. As of now, the Ministry comprises: (i) six line offices, consisting of an Agency for Marine Affairs and Fisheries and five Directorate Generals - of Aquaculture, Capture Fisheries, Coastal and Small Islands, Marine and Fisheries Resource Controls and Capacity Building and Marketing; (ii) two staff offices, a Secretariat General and an Inspectorate General; and (iii) an Advisory Staff providing expertise to the Minister in specific fields (the Organizational structure is depicted in **Figure 4**).

Fishing Ports of East Java – Fishers in action


Sinar...

Figure 4: Organization Structure of MMAF



Based on the national development priorities, the policies of the MMAF are:

- *To develop the business scale capacity of fishers, fish farmers and other stakeholders in marine and inland fisheries;*
- *To develop competitive and environmental conception of aquaculture;*
- *To strengthen and develop the national capture fisheries business in terms of efficiency, sustainability and community based fisheries;*
- *To develop and strengthen the industry of handling, processing and product marketing;*
- *To develop sustainable and community-based fisheries in small islands;*
- *To increase rehabilitation and conservation of marine fisheries resources;*
- *To increase the effort to tackle illegal fishing;*
- *To develop education, training and extension;*
- *To strengthen research, knowledge and technology in fisheries.*

The vision for marine affairs and fisheries development is:

"Marine and freshwater ecosystem with all natural resources in it are the God Almighty's gift, that should be considered, sustained and managed in an optimum and sustainable manner for national unity, national development, and Indonesian community welfare."

The Mission of the MMAF is as follows:

- *To improve the role of marine and fisheries sector as a source of economic growth;*
- *To improve prosperity for coastal fisheries and marine communities, especially fishermen and small-scale fish farmers; and*
- *To improve fish consumption of the population; to maintain and improve the environmental quality of freshwater, coastal, small-island and marine ecosystems; and to improve the role of the sea as a unifying instrument for the nation and the creation of a Indonesia maritime work ethic to improve role of marine and inland fisheries as a source of economic growth.*

In order to support the vision and mission, the necessary strategies include:

- *utilization of optimal, efficient and sustainable marine resources and services;*
- *improvement of surveillance and control of marine and fisheries resources;*
- *rehabilitation of coastal and marine habitats and ecosystems;*
- *application of science, technology and professional management in marine affairs and fisheries businesses;*
- *establishment of a conducive fiscal and monetary policy;*
- *empowerment in social and economic terms in marine and fisheries communities;*
- *expansion and strengthening of the economic network;*
- *expansion and strengthening of the information system for marine and inland fisheries;*
- *expansion of the system and mechanism of relevant law, and cooperation with international and national organizations; and*
- *establishment of a marine concept in society.*

While these efforts are welcome steps to manage Indonesian fisheries, in practice, the country is plagued by a plethora of problems resulting from historical manhandling of resources. As mentioned earlier, in most of the MFAs, resources are fully or over exploited while at the same time the fleet size is increasing. According to a recent FAO

study[14] the country has a fishery management quality index of 3/6; International Treaties score of 46 percent; and Monitoring, Control and Surveillance (MCS) quality score of 46 percent. On different aspects of fisheries management, the study quoted *Fauzi and Buchary (2001)* that " *the New Order's development paradigms had created systemic problems known as KKN (i.e., corruption, collusion, and nepotism) in both government and public systems. As a consequence, resources were heavily exploited, destructive fishing practices were widely used and widespread degradation of the marine areas occurred. Several examples highlight this degradation. The total value of export of fisheries products increased significantly from US $ 2.8 million in 1968 to US $ 2.0 billion in 1999, a more than 600-fold increase. This increase in production was driven by the export-oriented policy of fish and fisheries products during the last 20 years and was principally accomplished by developing a large aquaculture sector and expansion of capture fisheries. Consequently, an estimated 700 000 ha of Indonesia's mangroves were converted to various uses such as coastal aquaculture ponds. Destructive fishing practices such as blast and cyanide fishing have damaged an estimated 80 percent of the coral reefs in eastern Indonesia. At its peak, the net quantifiable loss to the Indonesian economy due to cyanide fishing was U S $ 46 million over four years in 1997 value terms … This reflects a cost to society that is four times larger than the total net benefit obtained by private fishers from blast fishing".*

This study indicates the underlying problems in Indonesian fisheries and identified the areas that need to be addressed. Considering these facts, the country's performance in promoting responsible fisheries (after FAO, 2006) is presented in **Table 13**.

As the analysis in the Table describes, Indonesia's problem areas lie in stock management, gear regulation and prevention of destructive practices. However, on the positive side, the policy makers now acknowledge participation of fishers and fish farmers, 80 percent of whom are small-scale, in decision making and in the implementation process. The management framework since the beginning of reform period has become dynamic with periodical revisions. Further, the legal framework has now also provided necessary support to the implementation of the various provisions of the Code of Conduct for Responsible Fisheries (CCRF) vide a Ministerial Decree in 2008.[15] The Decree specifies that any Indonesian individual or legal entity that shall conduct fishing activity in Indonesian waters and the high seas should have license for fishing business (SIUP). However, small-scale fishers with non-powered boats or with capacity below 5 GT are exempted (Chapter 3: Art 6). Regarding landing, the fishing boats are required to land as specified in their license. There is also regulation of transfer of fish in the mid-sea.

MCS Mechanism

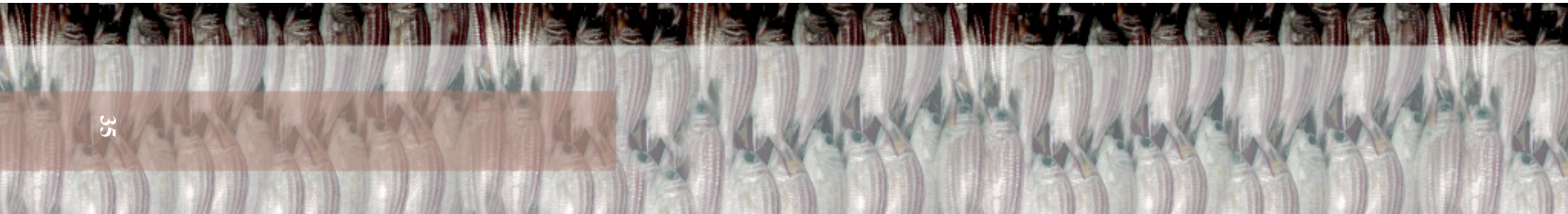
Presently, Illegal, Unreported and Unregulated (IUU) Fishing is still a sizable problem for Indonesian fisheries that seriously undermines its sustainability prospects. As per the report of the Director General of Marine Fisheries Resources Surveillance and Controlling (2009), Indonesian patrol vessels have inspected 2 492 fishing vessels in 2009. More that one-tenth of the fishing vessels are found to be engaged in IUU fishing. However, implementation of a Vessel Monitoring System (VMS) and formulation of a Regional Plan of Action on IUU fishing can improve the scenario in future. Information on violation of fisheries law for the last five years shows the number of violations has steadily declined from 174 in 2004 to 77 in 2008[16] .

However, many feel that MCS mechanism in the country is still not sufficient. A 2008 report in Jakarta Post states that, "a very limited amount of government employees are investigating the fishing industry. The Arafura Sea area, for example, has only 15 fishery and sea regional office investigators. That amount is too low given the size of the surrounding Papua Sea and allows for many problems. This is especially true in several Papuan regencies where there are no investigators at all."[17]

Table 13: Status of Implementation of the Code of Conduct for Responsible Fisheries in Indonesia

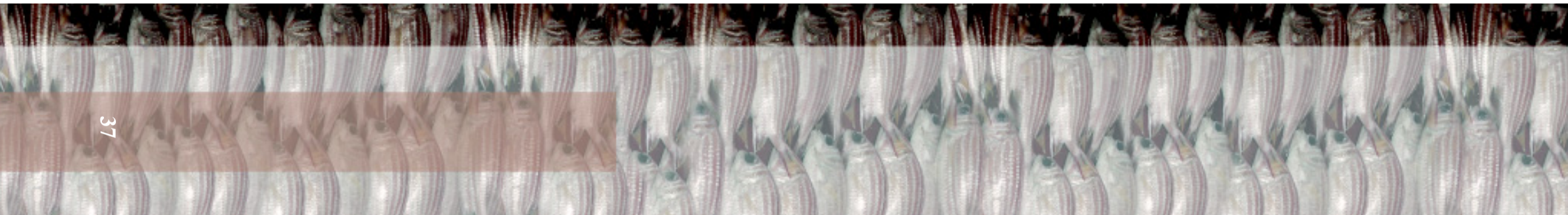
The Table has been reproduced from Pitcher, T J (2006). It has been constructed using RAPFISH, A Rapid Appraisal Technique For Fisheries in relation to CCRF. There are 44 questions arranged in six fields. Fields 1-3 measures intention while fields 4-6 measures implementation.

Field	Parameters (Scoring criterion)	Score (Lower & upper limits)	Situation
Management objectives	Setting reference points for fish stocks. *[No (0); partially (5); completely (10)]*	2.0 (1 to 3)	Estimates of MSY have been made for a number of major Indonesian fish stocks using the Gulland formula and acoustic survey data (*e.g.*, small pelagics, shrimps, etc.). However, most of these estimates are based on one-time exercise and methodology used is not rigorous.
	Alignment of fishing capacity. *[No (0); calculated (3.5); target capacity defined (7); planned measures to reduce capacity (10)]*	1.0 (0 to 3)	Present estimates of fleet sizes are imperfect; the fishing capacity of the fleets is not well estimated and measures to reduce capacity are not implemented. In late 2004, however, an attempt was made to identify various fishing boats, their types, sizes and size of engine power.
	Involving small-scale fishers (SSF) in management consultation. *[No (0); considered but not consulted (2.5); consulted informally (5); institutional structures for ongoing consultation (7.5); plus extra points if small-scale fisher's opinions are often included in plans. (max 10)]*	3.0 (2 to 5)	While policy makers are aware of the need of inclusion of SSF in management consultation, apart from a few traditional CBFM schemes and some experiments in CBFM, there appears to be few actual and ongoing schemes that involve SSF in marine resources management decisions.
	Managing impact of fisheries on biodiversity. *[No (0); some impacts assessed (3.5); most impacts assessed and mitigated (7); full impacts mitigated in management plan (10)]*	2.0 (1 to 3)	Indonesia has signed the CBD and the UN Oceans Charter. Some measures by NGOs and government have been undertaken to protect charismatic species, such as marine turtles.
	Restoration of depleted stock. *[No (0); slowly (5); rapidly (10)]*	2.5 (1 to 3)	Efforts to restore depleted stocks are usually spotty and occur in isolated patches. They are mainly initiated by private organizations.Very few restoration plans have been taken up by the government.
	Mitigation of anthropogenic impacts (pollution, etc) on fisheries habitat. *[No (0); partially identified (3.5); identified and plan includes measures to mitigate (7); complete mitigation in plan (10)]*	2.0 (0 to 3)	All along large and small coastal cities in Indonesia, pollution from anthropogenic sourcesis a major problem.
	Management plan to control harmful effect of fishing gear. *[No (0); in part (5); totally (10)]*	3.0 (2 to 4)	For shrimp trawls, the Indonesian fleet is required to apply Turtle Excluder Devices; however the practical application is low.
	Explicit ecosystem linkages in management plans. *[No (0); identified (3.5); made fully explicit (7); & adverse ecosystem impacts minimized (10)]*	1.5 (0 to 3)	Not much attention has been paid to the Code of Conduct principles in Indonesian policy and management. Nevertheless, in specific cases, there has been some emphasis on the importance of ecosystem inter-connectedness in producing good fishing catches.



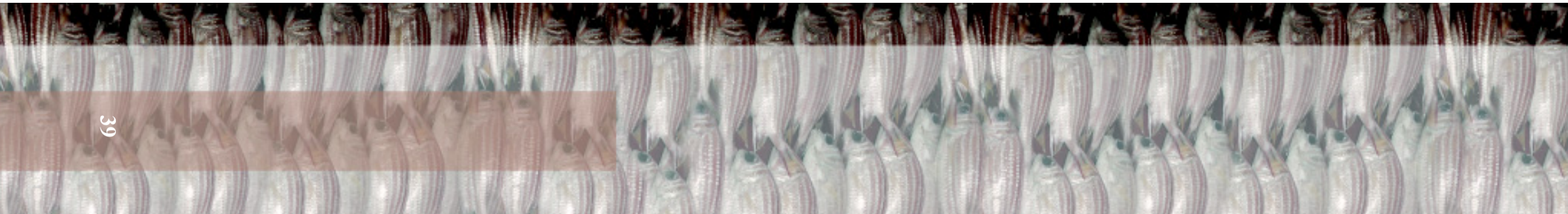
Field	Parameters (Scoring criterion)	Score (Lower & upper limits)	Situation
	Explicit environmental linkages to fisheries *[No (0); identified (3.5); made fully explicit (7); & adverse impacts minimized (10)]*	4.0 (3 to 5)	In a few fisheries that are strongly influenced by inter-annual climate fluctuations, such as the Bali Strait sardine fishery, surplus production models have been constructed. However, this scientific knowledge has not translated into any effective management policy or actions.
Framework (data & procedures)	Accounting for total and complete removal from the stocks over the whole stock area and over whole life cycle. *[No (0); somewhat (3.5); mostly with a few omissions (7); almost completely (10)]*	3.0 (2 to 4)	Of the few basic stock assessments performed in Indonesia, attention to stock identity or to migratory and juvenile life history stages is inadequate. The most important migratory tuna stocks are assumed to be unit stocks for the purpose of assessment.
	Compatibility of management measures with those of other jurisdictions concerned with the stocks. *[No (0); in part (5); almost completely (10)]*	3.5 (2 to 5)	In the north, relations with Thailand and the Philippines are not good because of frequent illegal incursions by vessels of these countries into Indonesian waters. However, port sampling for tuna catches has improved and this might change the situation.
	Clearly stated long-term objectives in management plans. [No (0); in part (5); absolutely clear (10)]	5.5 (5 to 7)	Indonesia has the largest area for management and has recently set a high priority for fisheries management, as evident by the new government structure (setting up of the Ministry of Marine Affairs and Fisheries), and is rapidly advancing in the development of fisheries management schemes.
	Identification and consideration of all stakeholders [No, only government interests (0); score two for each group represented: large-scale industry, small-scale fishers, recreational fishers, local communities, conservation and public watchdog groups (Max = 10).	3.0 (2 to 5)	The literature suggests that, in general, only commercial and large-scale fishery stakeholders are effectively considered.
	Openness and transparency of data, management and decision-making processes. [No, closed except to management (0); informed only when necessary (2.5); regularly consulted (5); participation in decisions (7.5); full co-management in decision-making (10)]	3.0 (2 to 4)	Although a well-planned data scheme exists, the output is still of very variable quality.
	Timely collection of complete and reliable statistics. [No (0); collected partially (2); collected almost completely (4); timely - add 1 if available in less than 1 year, add 2 if 6 months (6); add 2 if there are attempts at verification (8); add additional 1 to 2 if almost totally satisfactory verification (10)]	3.0 (1 to 4)	There are serious problems with most of Indonesia's fishery statistics. Literature suggests the further east one goes in Indonesia, the higher the proportions of unreported catch or catches that are unaccounted for. This is mainly related to capacity issues of the fisheries service offices. However, commercial tuna fishery is an exception.
	Evaluation of social, economic and institutional factors related to sustainability. [No (0); score one or two points for each, plus up to additional 2 points for interdisciplinary analysis (10)]	4.0 (4 to 5)	Social and institutional issues seem to be overlooked in formal planning of fishery management schemes. However, the score reflects local examples of successful co-management and traditional management initiatives.

Field	Parameters (Scoring criterion)	Score (Lower & upper limits)	Situation
Precautionary approach	Explicit precautionary approach in legislation, and its application to management of fishery stocks [No (0); implicit in some regulations or actions of the country (1-4); explicit in legislation, and partially applied in management (5-8); almost fully applied in regulations (9-10)]	2.5 (2 to 4)	Fixing TAC at 80 percent of MSY is an explicit precautionary measure. Unfortunately, this exemplary step is not yet well reflected in the management of fishery resources.
	Quantification and use of uncertainty, including lack of appropriate information, to restrain fishing that might otherwise occur. [No (0); in part (3.5); a great deal (7); add 1-3 points for degree of quantification of uncertainty (10)]	0.0 (0 to 4)	There appears to be no published examples of the explicit calculation of uncertainty in Indonesian fish stock assessment.
	Estimation and employment of stock-specific target reference points. [No (0); simple targets estimated (3.5); estimated and employed (7); almost totally satisfactory (10)]	3.5 (3 to 4)	Some stock target reference points (mainly based on MSY from surplus production methods) are estimated but not employed, as the fishery is in an open-access regime.
	Estimation and employment of stock-specific limit reference points. [No (0); estimated (3.5); actively employed (7); working almost totally satisfactorily (10)]	0.0 (0 to 0)	No limit reference points are estimated in Indonesia.
	Viable contingency plans to restrict fishing in the event of an environmental emergency. [No (0); plan exists (3.5); a good plan with clearly identified rapid-acting triggers exists (7); almost completely satisfactory plan with triggers in place, and defined ways to validate trigger data (10)]	1.5 (0 to 3)	It is doubtful if the open-access nature of Indonesian fisheries allows for fishery closures on these grounds. There appear to be no examples of mandated fishery closures on account of oil spills or the like. Nevertheless, voluntary cessation of fishing occurs in such events.
	Viable contingency plans to restrict fishing in the event of an unforeseen emergency caused by excess fishing. [No (0); plan exists (3.5);a good plan with clearly identified rapid-acting triggers exists (7); almost completely satisfactory plan and triggers in place, and defined ways to validate trigger data (10)]	0.0 (0 to 0)	There is no evidence of fishery closures on these grounds. In many regions of Indonesia, severe depletion of marine resources could be legitimately regarded as an emergency, as they are adversely impacting the socio-economic viability of many coastal and fishing communities.
	Review of management instruments [No (0); infrequently and informal review (3.5); formal review (7); formal review every year (10)]	4.0 (2 to 5)	Since the reform period, overall legislation has improved. However, in terms of implementation of management instruments rather than policy goals, very little seems to have changed. There has been some improvement in the introduction of Marine Protected Areas (MPAs).
	Establishment of effective no-take areas. [None (0); no-take areas less than 1% of EEZ (2); 1-5% of EEZ (4); >5% (6)]	3.5 (2 to 5)	Declared MPAs in Indonesia have an area of 58 057 km^2 which accounts for about 1 percent of the total EEZ. However, none of these are reported as no-take areas.
	Contingency plan to restrict fishing if species linked through the ecosystem to the target(s) of a fishery become threatened. [No plans (0); informal plans (2); formal plans in place (4); tested with models or simulations (6)]	1.0 (0 to 3)	Historically, there has been no evidence of this factor being considered in the management of Indonesian fisheries. However, the situation is likely to change.



Field	Parameters (Scoring criterion)	Score (Lower & upper limits)	Situation
Stocks, fleets and gear	Reduction of excess fleet capacity. [no (0); mainly measures aimed at avoiding an increase in capacity (3.5); measures actually aimed at capacity reduction (5); effective capacity reduction measures (7); completely effectively (10)]	0.0 (0 to 0)	There is no actual evidence of fleet capacity reduction in either small-scale or large-scale Indonesian fisheries. In fact it is the opposite case with the introduction of new fishing vessels for tuna. However, regulations for fleet capacity management exist. For example, a cap on the number of purse seine fishing fleets exists in Bali Strait.
	Phasing out of harmful or high capacity fishing methods. [No (0); partial phasing out (5); substantial, effective and monitored plans for phasing out (10)]	1.0 (0 to 3)	There has been almost no phasing-out of harmful fishing methods in Indonesia. However, the Indonesian Government does have a stringent regulation that penalizes anyone who employs blast fishing.
	Minimization of by-catch of non-target species. [No, there are serious problems with by-catch (0); some attempts to assess and reduce by-catch (2); by-catch is estimated and reduction of by-catch is a priority (4); by-catch is very low or greatly reduced in this fishery (6)]	2.5 (1 to 3)	There has been very little attempt to deal with by-catch. By-catch excluder devices are mandated in shrimp trawls operating in the Arafura Sea, but compliance is an issue. Because of high by-catch, Arafura sea trawling for shrimp was banned by Presidential Decree in 1980.
	Minimization of discards. [No (0); some attempt to reduce discards (2); discards reduced or very small (4); discards almost nonexistent or completely under control (6)]	3.0 (2 to 4)	Discards are low since all fish caught in Indonesia have a ready market.
	Gear designed to minimize ghost fishing. [No (0); partially (5); effectively (10)]	0.0 (0 to 0)	There is no information on attempts to identify or reduce ghost fishing in Indonesia.
	Restrictions on fishing of juveniles and spawners to safe levels. [No (0); a little (2); partially (4); almost completely satisfactorily (6)]	0.0 (0 to 1)	Many juvenile fish and spawning aggregations are targeted by fisheries in Indonesia, often for cultural reasons.
	Rebuilding depleted stocks. [No (0); the intention is to rebuild, but it is not effective (2.5); some attempts at rebuilding with limited success in some stocks (5); some effective rebuilding of most depleted stocks (7.5); completely satisfactory rebuilding of all depleted stocks (10)]	0.0 (0 to 2)	There is little evidence of the rebuilding of depleted fish resources in Indonesia.
Social & Economic	Conflict minimization. [No (0); partially (5); almost completely effective (10)]	0.0 (0 to 0)	All management in Indonesia is traditionally hierarchical, and any mention of conflict is often deliberately avoided. However, traditional mechanism based on *Adat* exists.
	Meeting indigenous peoples rights and needs in fisheries. [No (0); established and partially met (5); almost fully respected (10). (Score 5 if no Indigenous People present)]	2.5 (1 to 3)	There are not enough policy provisions for indigenous peoples. They are often considered backward and primitive.
	Meeting the needs of local fishing communities. [No (0); identified and partially met (5); almost completely met (10)]	3.0 (2 to 4)	In Indonesia, top-down approaches in many fisheries activities have usually provided more benefit to the large-scale or commercial-scale fishing entity, rather than the smaller-scale fisheries.

Field	Parameters (Scoring criterion)	Score (Lower & upper limits)	Situation
	Evaluation of cost-effectiveness of management change. [No (0); evaluated, but little modification of change (5); plans are modified according to the results (10)]	0.0 (0 to 3)	There is no mention of such an evaluation in the fisheries management literature on Indonesia.
	Evaluation of social impacts of management change. [No (0); evaluated, but little modification (5); plans are always modified according to the results (10)]	2.0 (0 to 3)	Social impacts are rarely evaluated when changes are made to fishery management. Most examples in Indonesia involve the work of NGOs.
	Cost recovery from the sector of research and MCS. [No (0); up to 30% (2); 30 - 50% (4); 50 - 70%; (6) 70 - 90% (8); more than 90% (10)]	3.5 (2 to 6)	Most research and MCS costs are met by the Government, with significant help from NGOs and organisations like the World Bank and Asian Development Bank. License fees from large-scale fishers go towards the cost and some VMS costs are met by fishing vessel owners.
Monitoring, Control & Surveillance (MCS)	Effectiveness of the observer scheme on a 10-point scale. [No scheme (0) to almost fully effective (10)]	1.0 (0 to 2)	The Western Central Pacific Fisheries Committee complains that Indonesia is not implementing observer programmes. However, on a smaller scale, local MCS surveillance and enforcement effort is planned and implemented.
	Effectiveness of the catch inspection scheme on a 10-point scale. [No scheme (0) to almost fully effective (10)]	3.5 (1 to 4)	Not very effective. However, The situation has recently improved for tuna catches.
	Effectiveness of the vessel monitoring scheme on a 10-point scale. [No scheme (0) to almost fully effective (10)]	4.0 (2 to 6)	Vessel monitoring has been even less effective than the catch inspection, but the recent introduction of a VMS system has improved matters.
	Extent of IUU fishing. [No (0); occasionally (2.5); often (5); a great deal - half as much as legal vessels (7.5); almost as much as, or more than legal vessels (10). If no information is available, score 10]	9.0 (8 to 10)	Many vessels are fishing illegally in the Indonesian EEZ. Fish Information and Services (2001) reported that the country is losing US$ 2 billion a year to illegal fishing operators in its EEZ. Poor surveillance of the EEZ was cited as the main factor contributing to the situation.
	Effectiveness of controlling access in stopping illegal fishing on a 10-point scale. [Not at all effective (0), to almost fully effective (10)]	3.5 (2 to 5)	The number of patrol boats is not enough to cover the vast EEZ in Indonesia. Many patrol boats are also not serviceable.
	Are vessels that really derive from this jurisdiction reflagged in states of convenience, generally to avoid reporting or other fishery regulations? [Never (0), sometimes (1-5), often (6-7), practice is very common (8-10)]	4.0 (3 to 6)	It has recently been discovered through the use of VMS that some Indonesian vessels have been flagged for other countries.



Co-management

As mentioned above, Indonesia has deep rooted community-based system in fisheries management. However, prior to the ongoing reforms, these traditional measures were not supported by national constitutions. For example, *sasi laut* practiced in central Maluku is a traditional system where community has successfully looked after the resources. As a result, Harkes (1999) found that "while marine resources are being destroyed at one place, in specified areas there are regulations in place that implicitly protect the resources."[18] Harkes reported that with regard to marine resources, *sasi laut* (laut = sea), there are regulations on the use of poisonous plants and other chemicals, destructive nets and intensive gear such as the bagan (=lift net). There are also regulations concerning access to the *sasi* area, activities allowed in the *sasi* area, and seasonal rules of entry and harvest. All these rules are guarded and enforced by an institution known as the kewang, which functions as a local police force. Their legitimacy, as well as that of the sasi institution itself, is based on *Adat. Adat* lies at the basis of Moluccan society, and stands for customary law and tradition. *Sasi*, as part of *Adat*, is an intrinsic part of Moluccan Society. Other such examples are *petuanang* (Nikijuluw 1994) and *awig-awig* (Satria *et al*., 2006)[19].

Satria reported that recent guidelines issued by the Minister of Marine Affairs and Fisheries contain recognition to the CBFM and encourage the practice of co-management in small island development (Minister of Marine Affairs and Fisheries Decree No: 41/2000), marine and fisheries surveillance (Ministry of Marine Affairs and Fisheries Decree No 58/2001), and integrated coastal management planning (Minister of Marine Affair and Fisheries Decree No Kep.10/Men/2002). The following paragraphs further elaborate the focus of the three Decrees.

The Minister of Marine Affairs and Fisheries Decree No: 41/2000 states that community-based management shall mean management that places the community as manager of natural resources and environmental services and who is supported by the government and business sector. Community-based small islands management must consider traditions, norms, and/or social culture as well as the interest of local community. Moreover, in Chapter 4 Section A1-3, the state recognizes and protects customary rights/ traditional rights/ basic rights over the control of lands and waters of small islands based on local customary law in addition to other rights governed by prevailing legislative regulations. Furthermore, it is clearly confirmed that for small islands and waters controlled/ owned/ managed by customary law, their management shall be fully based on customary law, according to prevailing legislative regulations.

This means that the management-rights are explicitly granted to the local people. Any collaboration in managing small islands between local customary law society and third party must be based on mutual agreement in due observance with the environment and conservation of natural resources. Any collaboration in managing small islands between the customary law society and foreign third party must obtain approval from the Regency/ City Government in due observance with the national interests. In Chapter 4.C, the Central, Provincial, Regency/ City government must guarantee that small islands' coasts and waters are accessible to the people. This means that use-rights are granted to the local people.

The Ministry of Marine Affairs and Fisheries Decree No 58/2001 on Guidelines for Implementation of Community Surveillance System in Marine and Fisheries Management recognizes the role of local institutions that concern marine resources sustainability. Such institutions must be involved in surveillance system held by *Kelompok Masyarakat Pengawas or Pokmaswas (*Community Group for Surveillance). This decree doesn't grant rights for the local people to conduct adjudication process, but rather to do day-to-day surveillance through collaboration with formal authorities. Nevertheless, the local people have the right to elect members of *Pokmaswas.* Such rights can be categorized as management-rights.

The Minister of Marine Affair and Fisheries Decree No Kep.10/Men/2002 on the guideline for implementation of integrated coastal management planning recognizes the spirit of decentralization in coastal management.

Decentralization to the local government is mentioned as one principle in integrated coastal management planning. Furthermore, the people shall be given an access to express their opinion, objection, perception, suggestion during the process of integrated coastal management planning, and shall be involved in all the stages from preparation, initiation, planning, certification, implementation and institutionalization process. This participation process shows that the government shall grant management-rights to the local people.

Research & Development

Historically, fisheries research and development was under the Ministry of Agriculture and not so prioritized. However, subsequent to the establishment of MMAF, the government set up a line department: the Agency for Marine and Fisheries Research (AMFR). The Agency headed by a chairperson comprises Centre for Capture Fisheries, Centre for Aquaculture, Centre for Marine Technology and Centre for Maritime Territories and Non-living Resources. The mission of the AMFR is to develop the capacity in marine and fisheries research; innovative fisheries technology and dissemination of knowledge. The main research institutions in Indonesia dealing with fisheries issues are:

- *National Coordinating Agency for Survey and Mapping (BAKOSURTANAL).*
- *Meteorological and Geophysics Institute of Indonesia (BMG).*
- *Agency for the Assessment and Application of Technology (BPPT).*
- *Indonesian Navy Hydrographic and Oceanographic Service (DISHIDROS TNIAL).*
- *Agency for Marine and Fisheries Research, Ministry of Marine Affairs and Fisheries (BRKP-DKP).*
- *Research Centre for Oceanography, Indonesian Institute of Sciences (P2O -LIPI).*

Apart from public-funded research projects, Indonesia is also executing many collaborative research projects with international NGOs and foreign universities. For example a collaborative research program between CSIRO Division of Fisheries (Australia) and the Research Institute of Marine Fisheries of Indonesia was set up in 1992 to monitor the catch of southern bluefin tuna (SBT) (*Thunnus maccoyii*) caught by the long-line fishery. This programme has successfully monitored the SBT catch and results have been accepted and adopted by the Commission for the Conservation of Southern Bluefin Tuna (CCSBT). Among international NGOs, WWF is working with the research department of the MMAF to make trial adjustments of long-lines to reduce turtle by-catch and also plans to start working on shrimp trawl by-catch issues apart from another programme to train observers.

6.0 Summary

- Indonesia has a rich and diverse resource base that is yet to be fully realized.
- However, marine capture fisheries are near their potential and need to be managed, not exploited.
- Growing fishing capacity, high incidence of IUU fishing is a serious threat to the sustainability of marine resources.
- In terms of inland fisheries, vast area remains unexplored. However, status of resources needs further examination in view of rapid development of the economy leading to urbanization and industrialization resulting in pollution.
- As for aquaculture resources, again there is a large scope of expansion as per published Ministry data. However, taking into consideration research reports, such expansion in the past has resulted in destruction of mangrove cover. Indonesia, which has suffered heavily from the December 2004 Asian Tsunami, cannot overlook the importance of having the mangrove cover.

Traditional fisheries management system in Indonesia – Some examples and lessons learnt

Management Guru Peter Drucker remarked once that traditional wisdom is often the best wisdom as it is rooted in honesty, simplicity, discipline and common sense and aims at common good.

Some of the common traditional management systems in Indonesia cited here are the ***Lubuk Larangan*** system in North Sumatera; ***Ikan Larangan*** in West Sumatera; ***Panglima Laut*** in Aceh and Maawu Dabau Bakouk in Riau Province.

The *Lubuk Larangan* and *Ikan Larangan* systems are practiced in inland capture fisheries like rivers and large lakes. They are a mix of formal and informal measures. To set up a *Lubuk Larangan*, community members meet and decide on site and timings. Subject to permission from the District Fisheries Head, the community marks the area for *Lubuk Larangan*. The area and timings of the activity are then announced to the village and stipulation on violations fixed. On the appointed day – generally once or twice in a year during the festive period, the venue is opened for fishing. The entry is restricted by selling tickets and funds accumulated are allocated for village development activities. The place is monitored by the community and steps like stocking is taken to improve fisheries resources. Even when the event is declared open, the community strictly controls the use of fishing gear and destructive gear are not allowed.

The importance of *Lubuk Larangan* is not as a production model but as a tool to use common pool resources for community development. As can be seen the activity is a hybrid of farming and hunting. The community cares for the resources throughout the year for reaping benefits at one or two points of time. The lesson is that under clearly defined property rights and not-so-risky benefits, the fishers can take time to rebuild the resources and control their harvesting.

Panglima Laut on the other hand is a sea regime and much complex in implementation. Assuming that the mechanism dates back before the introduction of mechanized fishing boats, the system has detailed provisions equally applicable to the conflicts developed later. It is generally agreed that much of the conflicts among fisheries users stem over the ownership of a school of fish and local versus outsiders. The *Panglima Laut* system has clearly defined rules in these respects. The system also promotes cooperation among fishing boats by a pre-determined revenue sharing system and assigning value on information and services provided.

The *Panglima Laut,* literally sea commander, is selected by all the guides in the *Lohk* area. The task of the sea commander is to set user rules, resolute conflict and protect resources, including mangroves. The common user rules for the fishing boats include ***revenue sharing, compensation,*** and ***rewarding information.*** Apart from these, the other measures include safety at sea, environmental protection and assisting the government.

The lessons - the traditional systems are an effective way to promote the objectives of the government in a non-confronting manner. The traditional system is generally resource-friendly and tends to ensure a fair revenue sharing among the participants and community development. Such measures can go a long way in ensuring food security of the community; especially the poorer sections who find it difficult to compete with the larger boats (mechanized boats).

Source: Yadava, Y S (ed.), 2002. Traditional Fisheries Management System in Six Provinces of Indonesia - North Sumatra, West Sumatra, Aceh, Jambi, South Sumatra and Riau, BOBP Report No 89. pp. 38.

- In terms of fisheries governance, there is a major policy shift post 1998 (reform period) towards sustainable utilization of resources and involving community in the governance process.
- Such policy shifts were bolstered by creation of MMAF and improvement of MCS regime, including use of VMS.
- However, in practice, MCS measures are still insufficient (Flewwelling 2001- MCS quality score = 46%) as reflected by use of destructive fishing practices and IUU fishing.
- Traditional community-based mechanism has shown inspiring results in resource management. However, the traditional systems are in threat from expanding markets. Some traditional systems now also practice destructive fishing like dynamiting. A good scope of co- management exists in the country supported by a strong and efficient regime.

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2.2 Fisheries Cooperative Sector of Indonesia

2.2.1 The evolution of cooperatives

A **cooperative** is defined by the International Cooperative Alliance's (ICA) statement on the Co-operative Identity as an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise. It is a business organization owned and operated by a group of individuals for their mutual benefit. A cooperative may also be defined as a business owned and controlled equally by the people who use its services or who work in it. The history of modern cooperative forms of organization dates back to the Agricultural and Industrial Revolutions of the 18th and 19th centuries. Robert Owen (1771–1858), a prominent British cotton trader is often considered as the father of the cooperative movement. Based on the ideology that workers can meet their needs by working together, he initiated the first cooperative store in the cotton mills of New Lanark, Scotland.

After 300 years of many successes and some setbacks, today the 'Cooperative Movement' brings together over 800 million people around the world. The United Nations estimated in 1994 that the livelihood of nearly 3 billion people, or half of the world's population, was made secure by cooperative enterprise. The sector provides over 100 million jobs around the world, 20 percent more than multinational enterprises. Especially, in developed market economies cooperatives have a strong root. For example, in Singapore, consumer cooperatives hold 55 percent of the market in supermarket purchases and one in every two Singaporean is a member of cooperatives. In Japan, the agricultural cooperatives report outputs of USD 90 billion with 91percent of all Japanese farmers in membership and in USA, 4 in every 10 person is a member of cooperative.

However, the fundamental difference between cooperative movement in developed and developing world is that the first one sprang out of industrial revolution while the second one was in response to freedom from colonial powers (William, 2007). The cooperative model gave people a taste of democracy which was absent during autocratic colonial rules. As ICA defined the intrinsic values of a cooperative as self-help, self-responsibility, democracy, equality, equity and solidarity and the cooperative members believe in the ethical values of honesty, openness, social responsibility and caring for others. These values are best summarized in seven principles of cooperatives:

1st. ***Voluntary and Open Membership:*** Cooperatives are voluntary organisations, open to all persons able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political or religious discrimination.

2nd. ***Democratic Member Control:*** Cooperatives are democratic organisations controlled by their members, who actively participate in setting their policies and making decisions. Men and women serving as elected representatives are accountable to the membership. In primary cooperatives members have equal voting rights (one member, one vote) and cooperatives at other levels are also organised in a democratic manner.

3rd. ***Member Economic Participation:*** Members contribute equitably to, and democratically control the capital of their cooperative. At least part of that capital is usually the common property of the cooperative. Members usually receive limited compensation, if any, on capital subscribed as a condition of membership. Members allocate surpluses for any or all of

the following purposes: developing their cooperative, possibly by setting up reserves, part of which at least would be indivisible; benefiting members in proportion to their transactions with the co-operative; and supporting other activities approved by the membership.

4th. ***Autonomy and Independence:*** Cooperatives are autonomous, self-help organisations controlled by their members. If they enter into agreements with other organisations, including governments, or raise capital from external sources, they do so on terms that ensure democratic control by their members and maintain their co-operative autonomy.

5th. ***Education, Training and Information:*** Cooperatives provide education and training for their members, elected representatives, managers, and employees so they can contribute effectively to the development of their cooperatives. They inform the general public - particularly young people and opinion leaders - about the nature and benefits of co-operation.

6th. ***Cooperation among Cooperatives:*** Cooperatives serve their members most effectively and strengthen the cooperative movement by working together through local, national, regional and international structures.

7th. ***Concern for Community***: Cooperatives work for the sustainable development of their communities through policies approved by their members.

2.2.2 Development of cooperative sector in Indonesia

The origin of cooperatives in Indonesia can be traced back to 1886. At that time, R Aria Wiraatmadja, Vice-Regent of Purwokerto, founded Hulp en Spaarbank, whose working was similar to the credit cooperative model of Raiffeisen (Germany). The objective was to help the people in Purwokerto, Central Java get out of the trap of money lenders. The Dutch colonial government further developed cooperatives within society as part of their ethical politics. However, as Asnavi Hassan in "Development of Cooperative Legislation in Indonesia" states: *"The Netherlands Indies Government suspected the cooperatives as an organization which could be utilized as a political entity and encourage the people to live independently in the economic field and not on the colonial government". Thus, the Registrar was called "the Friend, Philosopher and Guide" and no cooperative could afford to go against his wishes"*. Cooperatives as a pure people's movement emerged in 1908 through an initiative of Budi Utomo establishing a cooperative (Household Cooperative) followed by another cooperative, Sarekat Dagang Islam in1913. Although these early evidences of cooperatives failed to sustain, the movement continued.

On 12 July 1947, the first cooperative movement congress was held in Tasikmalaya, West Java. The congress was attended by 500 delegates from Java, Madura, Kalimantan, Sumatera, and Sulawesi in spite of the heightened socio-political crisis at that time. The congress adopted 10 important decisions:

First: Establishing a Central Organization of the Indonesian People's Cooperative (SOKRI), located in Tasikmalaya.

Second*:* The Principle of Mutual Assistance (*Gotong Royong*).

Third: Stipulating the basic rules of SOKRI.

Fourth: Forming a board of management on presidium basis, and Niti Sumantri was elected as the chairperson and conferred with the task to set up a Standing Working Committee and to arrange any matter related to the decision of the congress.

Fifth: Creating people's prosperity in conformity with Article 33 by people's cooperatives and economy cooperatives as the implementing instruments.

Sixth: Establishing a Central Cooperative Bank.

Seventh: Determining cooperatives as Village People Cooperatives covering three business units of credit, consumption, and production under a statement that the Village People Cooperatives had to be a foundation to establish SOKRI.

Eighth: Strengthening and extending education on cooperatives among society.

Ninth: Determining distribution of important goods to be carried out by cooperatives.

Tenth: Stipulating 12 July as the Indonesian Cooperative Day, which had to be commemorated annually.

Post-independence development of cooperatives in Indonesia is inseparable from the Government's national development programme. According to Suradisastra (Suradisastra, 2006), the development of farm cooperative was always in line with the country's food sufficiency programme. Specially designed law and Government's regulations were introduced to develop and establish the functions of farm cooperatives. Indonesia's farm cooperatives, with little exception, were in fact Government programme agents which contributed to the success of self-sufficiency in rice. The most successful cooperatives in Indonesia have been village unit cooperatives or *Koperasi Unit Desa* in Bahasa Indonesia (KUD), formed under Presidential Instruction No 4/1973. These cooperatives are designed to meet the small farmer's need for credit and aid in marketing cash crops. The cooperatives have also been instrumental in distributing improved rice, fertilizers, pesticides and superior cattle breeds, and also in instructing farmers in their handling. Village unit cooperatives also exist for such cottage industries as batik (a method of hand-painting textiles), textiles and garment production, which are important sources of employment in rural areas.

2.2.3 Institutional framework

Basic legislation on cooperatives in Indonesia is Law No 12/1967 which was later repealed by Law of the Republic of Indonesia Number 25 of the year 1992 concerning cooperatives. As mentioned above, the development of the cooperatives in Indonesia has been strongly influenced by the economic and political events. The cooperative has been widely propagated as the ideal vehicle for promoting rural development by integrating local communities in the bottom – up financed development process whilst spreading the benefits of these. The Indonesian Government has stimulated the development of cooperatives since the early 1950s. By 1959 the cooperatives had become the main vehicle for the national transmigration programme. According to the Presidential Instruction No 4/1973, every village must have a KUD. All farmers, including the landless ones are allowed to become member of a KUD. The KUD is supposed to offer advice and credit and productions facilities and sale of agrarian products. The legal framework supporting the cooperative movement in Indonesia is given in the following matrix:

Act/ Regulation	Brief Description
Law of the Republic of Indonesia Number 25 of the year 1992 concerning cooperatives.	Under this law a cooperative society has the objectives to improve the members' welfare and to participate in developing the national economic system. Provides for cooperative functions, roles and principles. Other provisions cover establishment, liquidation and types of cooperatives. Sets forth the requirements for membership as well as their rights and obligations. Lists the organs of a cooperative society which consist of the members meeting, the committee of management and the committee of supervision. Specifies that the capital of a cooperative consists of equity capital and borrowed capital. Regulates the distribution of net surplus among members. Provisions are made for the dissolution of cooperatives and the institution of a cooperative movement. Entitles the Government to create and develop conditions that stimulate growth and socialization and to provide guidance, facilities and protection to cooperatives societies. Repeals Law No. 12 of 1967 concerning basic regulations for cooperatives.
Joint Decree of the State Minister of Cooperatives and Small-scale and Medium-scale Enterprises and the Minister of National Education on Cooperatives and Entrepreneurship (No. 4/U/SKB/2000).	Pursues the aim of popularizing and developing cooperatives and entrepreneurship through education, preparation of professional cooperatives and entrepreneurship cadres and development of cooperatives, small- and medium-scale businesses to become efficient economic actors in Indonesia's economic system.
Joint Decree of the Minister of Cooperatives and the Minister of Finances concerning the Audit Service Cooperatives (No. 03/SKB/M/XI/1987).	Provides for the establishment of first level and national level Audit Service Cooperatives to protect the interests of cooperative societies as well as the interests of other parties doing business with cooperative societies.
Decree of the Minister of Cooperatives concerning the Guidance for the Distribution and Utilization of the Net Surplus of Cooperative Societies (No. 266/KPTS/M/V/1987).	Provides essentially that the net surplus has to be utilized for the interests of the members and for increasing cooperative's self-help capability.
Presidential Instruction to Assist and Guide the Development of Rural Cooperatives. No.4 of 1984.	Establishes Village Unit Cooperatives (KUDS) as centers of economic services in rural areas development and strengthen them so that they can fulfill the responsibilities of rural communities, manage themselves and play a role in national development.
Decree of the Minister of Cooperatives concerning the Implementation of the Cultivation and Development of the Village Unit Cooperatives (No. 84/KPTS/VI/1984).	The KUDs shall be established by the rural people themselves. The Decree provides criteria to determine the operational area of a KUD. It also provides for its organizational bodies and other matters connected thereto.
Instruction of the Minister of Cooperatives concerning the Cultivation and Development of the Village Unit Cooperatives (No. 05/M/INST/VI/1984).	Instructions relative to the implementation of Presidential Instruction No. 4 of 1984 and of Ministerial Decree No. 84/KPTS/VI/1984.
Instruction of the President concerning the consolidation and development of Village Unit Cooperatives (No. 4 of 1984).	Provides for the establishment and consolidation of Village Unit Cooperatives (KUDs). The KUDs are to play a leading role in rural economic activities.
Decree of the Director General of Cooperatives concerning Regulation of the Cooperative Educational Fund (No. 61/DK/KPTS/A/VIII/79).	The cooperative educational fund is constituted from the annual net surplus of a cooperative society. The Decree provides criteria for the utilization of the educational fund.

Act/ Regulation	Brief Description
Decree of the Minister of Trade and Cooperatives concerning Cooperative Development and Cultivation in Urban Areas (No. 283/KP/XII/78).	Provides a pattern for cooperative development in urban areas to increase and strengthen their roles and functions.
Law on the Basic Regulations for Cooperatives (No. 12 of 1967).	Makes provisions for: basic values and principles of cooperation, role of cooperatives, rights and responsibilities of members, organization, types of cooperation, liability of members, role of government, incorporation, winding up and dissolution, and other matters connected therewith.

The State Ministry for Cooperatives and Small and Medium Enterprises has the task to assist the President in formulating policies and coordinating in the aspects of cooperatives and small and medium enterprises. The functions of the Ministry are:

- *Formulating national policies in the aspects of cooperatives and small and medium enterprises;*
- *Coordinating the policies implementation in the aspects of cooperatives and small and medium enterprises*
- *Organizing state-owned properties/ assets under its responsibility;*
- *Supervising the implementation of its tasks;*
- *Submitting the evaluation report, suggestion, and consideration in the aspects of its tasks and functions to the President.*

The national body of cooperatives

In 1968, SOKRI was converted into the Indonesian Cooperative Council (DEKOPIN). DEKOPIN (or *Dewan Koperasi Indonesia* in Bahasa), based on the Parliamentary Act No. 25 of the Year 1992 and Presidential Decree No. 24 of the Year 1999, as the single highest organization of cooperatives in Indonesia. Dekopin is a representative of the Indonesian cooperative movement both at domestic and international forums and plays its role as a counterpart of the government in the development of cooperatives in Indonesia. At present, over 1 30 000 cooperatives and over 30 million members throughout Indonesia are part of DEKOPIN. The vision of DEKOPIN is *"to establish the Indonesian Cooperative Council (DEKOPIN) as an umbrella organization of the people's economy struggle in order to create social justice and self-reliance of the nation."*

To achieve this vision, the organization has set the following mission for itself:

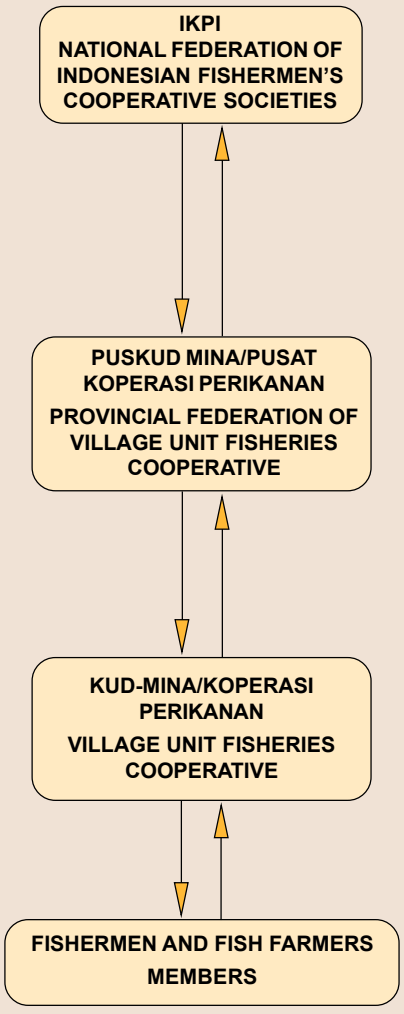
- *To fight for the interest and aspiration of cooperatives for the growth of a conducive business atmosphere which encourages an even distribution of the economic asset ownership, an increase of the efficiency and national productivity and an improvement of the achievement for the access of development resources by the people's economy.*
- *To develop a social atmosphere based on equality and trust of cooperation as the foundation for the development of cooperative movement.*

The other important organizations in cooperative movement of Indonesia are the Cooperative Education and Training Institution in Jatinangor, Bandung and the Cooperative Business Network in Jakarta.

The Cooperative Education and Training Institution (*Lapenkop*) (www.lapenkop.coop) was founded on 24 May 1995. The objective of this organization is to address some two fundamental obstacles faced by the cooperatives: lack of member's awareness and lack of professional management. *Lapenkop* has developed relevant training

ORGANIZATION AND BUSINESS STRUCTURE OF FISHERIES COOPERATIVES

Recommendations taken from the 35th Annual Members Meeting of IKPI in 1985



Function:

1. Fisheries Industry
2. Fisheries Facilities Industry
3. National Material and Fishing Gear Supplying
4. Marketing, Export
5. National Planning
6. Developing Fish Catch
7. Fish Culture Technology
8. Puskud Mina, KUD Mina, Fishermen and Fish Farmers Guidance

Function:

1. Regional Material and Fishing Gear Supply
2. Regional, inter-Island, Export Marketing
3. Processing Industry Facilities
4. Regional Planning
5. Fishermen, Fish Farmers and KUD Mina Guidance
6. Fish Auction Place Management Coordination by KUD Mina

Function:

1. Procurement of Facilities, Fishermen Household Needs and KUD Store
2. Credit for the Fishermen
3. Local Management of Marketing
4. Fish Auction Place Management
5. Fish Farmers, Fishermen Member Educational Training

Function:

Increase the Production of Fish Catch and Fish Culture through Intensification and Modernization.

modules and methods for members and board of management of cooperatives to address these problems. The modules are also adopted by other cooperative movements in various countries. *Lapenkop* is in operation under a networking system in several provinces and regencies. The activities of *Lapenkop* include:

- *Designing cooperative education system and curriculum.*
- *Designing and publishing education and training material and media.*
- *Preparing trainers and facilitators.*
- *Building network within cooperative movement to conduct cooperative education and training.*

The Cooperative Business Network (JUK) (www.juk.coop), established on 10 November 1992, is meant to create a solid business network under a wide scope for the cooperatives. JUK facilitates any cooperative to market their products, among others by setting up a database system, conducting business meetings and workshops adopting Erfa method, which is proven to be effectively applied in Danish Cooperative Movement. The co- business network maintained by JUK includes, among other, joint purchase, sale, and financing.

2.2.4 Cooperative movement in fisheries sector

Fisheries cooperatives traditionally have been concerned with the harvesting of wild fish and sea animals but more recently they have become evident in various kinds of resource cultivation, fish farms and shellfish beds (clams, oysters, etc.). Currently fishing cooperatives around the world are dealing with issues involving the future of their industries. Arguably, fishing cooperatives, given the special relationships with their members, have special responsibilities to ensure the sustainability of their activities.

Indonesia has a long tradition of cooperation in the traditional management systems. However, fisheries cooperatives movement in its modern form was initiated during 1940s. Initially, they were in the form of associations to deal with fisheries business. The objective of such cooperatives was primarily to take control of the business and release their members from middlemen and money lenders. During the first Sea Fisheries Cooperatives Congress in April, 1947, the secondary cooperative of National level was established with the name *Gabungan Pusat Koperasi Perikanan Indonesia* or the Federation of Indonesian Central Fisheries Cooperatives. Later in 1962 the name was changed to *Induk Koperasi Perikanan Indonesia* (IKPI) or National Federation of Indonesian Fishermen's Cooperatives Societies.

Based on Law No: 12/1967 on the principal of cooperatives, the structure of Fisheries Cooperatives in Indonesia is as follows:

a) KUD *Mina Koperasi Perikanan* (Village Unit Fisheries Cooperative/ Fisheries Cooperative) as primary cooperative at Regency/ District level.

b) PUSKUD MINA/ *Pusat Koperasi Perikanan* as secondary cooperative at Provincial level, and

c) Induk Koperasi Perikanan Indonesia (IKPI) as secondary cooperative at National level.

The IKPI membership (as of December 2006) comprises 15 member organisations: 9 *Puskud Mina* and 5 *Pusat Kopersai Perikanan* (PKP) as the secondary fisheries cooperative at province level; and one special characteristic *Koperasi Perikanan* as the primary fisheries cooperative. However, among these 15 members, two member organization - *Puskud Mina Bahtera*, Sumatera Barat and *Puskud Mina Siwa Lima*, Maluku are not active **(Table 14).** In 2004, the total numbers of *KUD Mina/ Koperasi Perikanan* all over Indonesia was 731.

Table 14: List of Members of IKPI

Sl.No.	Name of Members	Location (Province)	Destription
1.	Pusat Koperasi Perikanan (Puskokan) Nangroe Aceh Darussalam	Aceh Besar (NAD)	Active
2.	Puskud Mina Sumatera Utara	Medan (South Sumatera)	Active
3.	Puskud Mina Bahtera, Sumatera Barat	Padang (West Sumatera)	Not Active
4.	Puskud Mina Laksana Mukti, Jawa Barat	Bandung (West Java)	Active
5.	Puskud Mina Baruna, Jawa Tengah	Semarang (Central Java)	Active
6.	Puskud Mina Jawa Timur	Surabaya (East Java)	Active
7.	Puskud Mina Dewata, Bali	Denpasar (Bali)	Active
8.	Puskud Mina Tasik Jaya, Nusa Tenggara Barat	Mataram (West Nusa Tenggara)	Active
9.	Puskud Mina Bahari, Kalimantan Barat	Pontianak (West Kalimantan)	Active
10.	Puskud Mina Siwa Lima, Maluku	Ambon (Maluku)	Not Active
11.	Koperasi Perikanan Mina Jaya, DKI Jakarta	Jakarta	Active
12.	Pusat Koperasi Perikanan (PKP) Kie Raha di Bacan, Maluku Utara	Bacan (North Maluku)	Active
13.	Pusat Koperasi Perikanan (PKP) Tunas Jaya, Sorong, Irian Jaya	Sorong (Papua)	Active
14.	Pusak Koperasi Mina Lautan Mandiri Indonesia (PKML-MI), Nusa Tenggara Timur	Kupang (East Nusa Tenggara)	Active
15.	Pusat Koperasi Perikanan (PKP) Prop. Kalimantan Selatan	Banjarmasin (South Kalimantan)	Active

Activities of Fisheries Cooperatives

In the 35th Annual Members Meeting of IKPI in 1985 it was decided that the function and the role of the respective level of cooperatives would be to increase the welfare of fishers and fish farmers. However, they are yet to implement the functions and the role satisfactorily. In Indonesia, the Fisheries Cooperatives generally perform the following activities:

Fish Auction Place

The fish auction place constitutes one of the core activities of Fisheries Cooperatives. Presently, there are 241 auction places in Indonesia classified as Managing/ Organizer or fee-based (**Table 15**). As a part of decentralization process in Indonesia, the local government is now responsible for the auction places.

Means of provisions

Some cooperative societies are supplying provisions for fisheries and households through their shops/ kiosks. These kiosks were built by the concerned Fisheries Cooperatives.

Supply of Fishing Gears

Procurement of fishing gears is carried out by some of the Fisheries Cooperatives. However, high price of fishing gear has limited the scope of this activity. The procurement of fishing gear is carried out by the Fisheries Cooperatives through IKPI-Puskud Mina-KUD Mina with the understanding of mutual capital and profit sharing.

Saving and Credit Business

Some Fisheries Cooperatives have Savings and Credit Business Unit to meet the needs of the fishers to purchase their means of provisions for fishing. The system is

Table 15: Details of fish auction places in Indonesia

Sl. No.	Province	Status			Total
		Managing	Organizer	Fee	
1.	NAD	-	-	02	02
2.	North Sumatera	-	-	23	23
3.	South Sumatera	-	-	01	01
4.	Riau	-	-	01	01
5.	Bengkulu	-	-	01	01
6.	West Sumatera	-	10	-	10
7.	Lampund	-	05	-	05
8.	DKI Jakarta	02	-	-	02
9.	West Java	47	-	-	60
10.	Central Java	21	-	-	77
11.	DIY	-	-	01	01
12	E Java	26	-	-	28
13.	Bali	-	-	03	03
14.	NTB	-	13	-	13
15.	West Kalimantan	-	07	-	07
16.	South Kalimantan	-	01	-	01
17.	East Kalimantan	-	-	03	03
18.	South- East Sulawesi	-	01	-	01
19.	North Sulawesi	-	-	02	02
	Total	**96**	**37**	**37**	**241**

now being developed further in cooperation with BUKOPIN Bank in the areas of capitalization, management and information technology. The evolving system called 'SWAMITRA MINA' is also expected to go online. Some of the Fisheries Cooperatives which have owned Swamitra Mina are - Fisheries Cooperative "MINA JAYA" DKI Jakarta; KUD MINA Makaryo Mino, Pekalongan; KUD Sarono Mino, Pati; and PUSKUD MINA of West Kalimantan.

Supply of Fuel

Fuel is a major input for fisheries production and holds a special place in the development plan of Fisheries Cooperatives. Nevertheless, due to the complexity and capital intensiveness of the distribution system of the fuel in Indonesia, only 3 cooperatives are now involved in fuel distribution. These organisations are - KUD Makaryo Mino, Pekalongan; KUD Sarono Mino, Pati; and KUD Mino Saroyo, Cilacap.

Activities of the IKPI

Advocacy at national level: As a secondary fishery cooperative at national level, IKPI plays a strategic role to protect and promote interest of its members in the country. Owing to the evolving three-tier governance system in Indonesia, IKPI concentrates its activities at the national level while the member provincial cooperatives and KUDs concentrate their strategies at provincial and local levels

respectively. In its capacity, IKPI maintain linkages with the Ministry of Cooperatives and the MMAF.

Cooperation with other cooperatives: Nationally, IKPI together with all other national level cooperatives in Indonesia is a member of DEKOPIN. Alongside DEKOPIN, IKPI also acts to expand the cooperatives movement in Indonesia.

Monitoring: IKPI together with other fisheries organizations is establishing Masyarakat Perikanan Nusantara (MPN) to work with the community and the government in realizing and supervising the National Fisheries Development Programme.

Fisheries business: The business portfolio of IKPI is versatile and comprises production of fishing floats, marketing of gear, fish marketing and warehousing facility.

The Fishing Floats Factory "Mina Kencana" in Tangerang, Province of Banten constitutes the mainstay of IKPI. Commissioned in 1982, it is engaged in production of synthetic rubber fishing floats. The floats have measurements suitable for the small-scale fisheries. However, rising input costs, competition with imported products and decreasing buying power of the fishers has impacted the business in recent years. On the positive side, opening of market for the floats in the Middle East countries is expected to boost the business again.

IKPI has also entered into contract with fisheries gear manufacturers in Indonesia to supply fishing gear to its members at a reasonable price. Apart from fulfilling the need of the members, IKPI earns profit through supplying fishing gear to third parties.

IKPI has entered into fish marketing business with freshwater catfish in 2003. The business is focused on trading live fish of the size 0.8 to 1.0 kg per fish. The fishes are processed and sold to restaurant chains in Jakarta. However, by 2008 due to lack of demand, IKPI stopped producing catfish fillets. It is planned that in the near future IKPI is going to expand business in hatchery of catfish and black pomfret fish.

IKPI has 2 warehouses located at Fishing Float Factory Mina Kencana in Tangerang. Originally these warehouses were catering to the Fishing Float Factory. However, as the production of fishing float declined, the warehouses were rented out to private entrepreneurs.

In 1989 IKPI commissioned a fishing gear and net factory "Minasarana Tirtaraharja" in Bekasi in collaboration with PT. Arida. The factory is engaged in production of PE net and white fishing floats (PVC) which are used by the large-scale fishing units. However, due to worsening marketing condition, the factory stopped production in 2007.

Training of Fisheries Human Resources: Training in fishing methods is carried out in Japan in collaboration between IKPI and Tee Kay Cooperation (a Trainee Channeling Agency based in Japan). This activity started in 1996 and is still continuing. Till the end of 2007, 814 fishers were trained under this programme.

2.2.5 Summing up

The fisheries sector in Indonesia is passing through a transition phase. Owing to the major changes in the policy and governance system, the fisheries institutions ought to adjust themselves. Apart from policy and governance, the fisheries sector is also facing major challenges from depleted resources and rising input prices. Since catch per unit effort is declining, the fishers are increasing their effort in maximizing the catch - resulting in increase in number of trips and also trip lengths. This is also creating a vicious circle of low catch – increased effort – lower catch in Indonesia, which if allowed to continue unchecked may lead to collapse of the sector.

On the other hand, fuel prices have increased manifold in recent times, increasing the cost of fishing operations. In Indonesia, the Government initially tried to subsidize/ regulate the oil price, which resulted in double digit inflation during the 1990s - early 2000s. Although through prudent fiscal measures, the inflation rate is now brought under control, the cost of living has also increased. This scenario is likely to further affect the fishers.

In particular case of IKPI, the organization is trying to address these issues in multiple ways. However, it is yet to overcome the problem of professional management. Most of the business ventures taken up be IKPI are now curtailed or even closed. The organization's main role is now being limited to advocacy.

Given the above scenario, IKPI is expected to play a major role for the development of fisheries, especially small-scale fishers. One of the major activities that the organization may like to take up is strengthening of the guidance services in areas such as fisheries resource management and capacity building for adapting to changing environment.

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3.0 Preparations for Phase Two

3.1 Composition of the Study Team

Participants

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1.0	**Mr Wibisono Wiyono** 	***President*** Induk Koperasi Perikanan Indonesia (IKPI) (National Federation of Indonesian Fishermen's Cooperative Societies) Jl. Ir. H. Juanda No. 2 Jakarta 10120 Indonesia *Tel: + 62 (21) 345 1118 (Office)* *Mobile: + 62 (811) 911 458* *Fax: + 62 (21) 380 6177* *E-mail: ikpi@indosat.net.id; wibisakana@yahoo.co.id*
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6.0	**Mr Untung Samudra** 	***Vice-President*** KUD MINA BLANBANGAN, BANYUWANGI, JAWA TIMUR (Blanbangan Fisheries Cooperative of Banyuwangi, East Java) Jl. Pelabuhan No: 1 Muncar, Banyuwangi East Java, Indonesia *Tel: + 62 (333) 59 3194 (Office)* *Mobile: + 62 (081) 2304 4344* *Fax: + 62 (333) 59 3640*

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Secretariat

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3.2 Itinerary of the Study Team in Japan

Date/ Month	Itinerary
4 November (Wednesday)	
07:30 -	Participants arrive at Narita International Airport by SQ 638
10:30 - 12:30	Prior to check-in at the Hotel, participants visit the following places: - Fish and fishery products selling counters in some of the Department Stores - Fish retail shop "Yoshiike" in Okachimachi
12:30 - 14:00	*Lunch (includes prayer time)*
15:00 -	Check-in at the Hotel
16:00 -	Dr Yugraj Singh Yadava, Advisor arrives at Narita International Airport by TG 676
18:00 - 18:30	Brief orientation on Phase Two at "Chakura" (a coffee shop) on the ground floor of the Hotel ***Hotel: Grand Central Hotel, Tokyo***
5 November (Thusday)	
06:00 - 07:30	Visit to the Central Wholesale Fish Market of the Tokyo Metropolitan Government (at Tsukiji, Tokyo)
11:00 - 11:30	**Opening Ceremony** **Venue:** "Meeting Room Number 5", 6th Floor, Co-op. Bldg., Tokyo 1) **Opening Speech:** Mr Ikuhiro HATTORI, Chairperson, ICFO 2) **Speech:** Mr Yuichi NAKAMURA, Deputy Director, International Cooperation Division, Ministry of Agriculture, Forestry and Fisheries (MAFF) 3) **Speech:** Dr Yugraj Singh Yadava, Main Advisor of the Training Project and Director, Bay of Bengal Programme Inter-Governmental Organisation (BOBO-IGO) 4) Group Photograph
11:30 - 12:15	**Lecture** **Venue:** "Meeting Room Number 5", 6th Floor, Co-op. Bldg., Tokyo 1) Phase One Report on the Training Project for Promotion of Community- based Fishery Resource Management by Coastal Small-scale Fishers in Indonesia by Dr Yugraj Singh Yadava, Director BOBP-IGO, Chennai, India.
12:15 - 13:30	*Lunch (includes prayer time)*
14:00 - 14:40	**Venue:** Meeting Room (Chuo Kenshushitsu), 4th Floor, MAFF, Tokyo **Video Presentation** Japanese Agriculture, Forestry and Fisheries by Mr Yuichi NAKAMURA Division, Deputy Director, International Cooperation Division, MAFF, Tokyo.
14:40 - 15:30	**Lecture** 2) Fisheries Resource Management System in Japan by Ms Ritsuko YONEDA, Deputy Director (Legal & Planning Section) Resource Management Division, Fishery Agency, Tokyo and Mr Michael Louis Clark, Mansfield Fellow, The Maureen & Mike Manifield Foundation.
15:30 - 15:45	*Tea break (includes prayer time)*
15:45 - 16:15	Video Presentation on Japan's Fishery Policies
16:15 - 16:45	Question and Answer Session
18:00 - 19:30	Welcome Party **Venue:** Mangetsu, Japanese Restaurant ***Hotel: Grand Central Hotel, Tokyo***
6 November (Friday)	**Lectures** **Venue:** "Meeting Room Number 4", 6th Floor, Co-op. Bldg., Tokyo
10:00 - 11:00	3) Fisheries Management in Japan – Why Community-based Fishery Management has developed in Japan by Mr Masaaki SATO, Secretary of ICFO, JF ZENGYOREN, Tokyo, Japan.

Date/ Month	Itinerary
11:00 - 12:00	4) Promotion of Community-based Fisheries Resources Management Movement in Japan by Mr Jun MACHIBA, Deputy General Manager, Fishery Policy Department, JF ZENGYOREN, Tokyo, Japan.
12:00 - 13:30	*Lunch (includes prayer time)*
13:30 - 15:00	Video presentation on examples of Community-based Fisheries Resources Management (CFRM) in Japan.
15:00 - 15:30	*Tea break (includes prayer time)*
15:30 - 16:30	Video presentation on examples of CFRM in Japan - continued.
	Hotel: Grand Central Hotel, Tokyo
7 November (Saturday)	
09:00 - 16:00	Consolidation of Notes and preparation for travel to Aomori Prefecture.
	Hotel: Grand Central Hotel, Tokyo
8 November (Sunday)	
10:00 -	Leave Haneda airport by JAL 1203
11:15 -	Arrive at Aomori airport
11:15 - 12:30	Lunch (includes prayer time)
12:30 -	Leave Aomori Airport (by chartered bus)
14:30 -	Arrive at "Shin-Fukaura Machi FCA"
	Lecture
14:30 - 15:30	5) Outline of the Organization and Activities of Shin-Fukaura Machi FCA with particular emphasis on promotion of community-based fisheries resource management by Mr Gizou NISHIZAKI, President of Shin-Fukaura Machi FCA.
15:30 - 15:45	*Tea break (includes prayer time)*
15:45 -	Leave Shin-Fukaura Machi FCA
16:15 -	Arrive at Hotel
17:00 - 18:30	*Dinner*
	Hotel: Hotel Gran Mer, Ajigasawa Cho
9 November (Monday)	
08:00 -	Leave Hotel (by chartered bus)
08:30 - 10:30	- Visit to "Oodose Fish Wholesale Market" (Guide: Mr Hiroaki Fukuda, Chief of all Divisions, Shin-Fukaura Machi FCA)
10:30 -	Depart "Oodose Fish Wholesale Market"
12:30 -	Arrive at Aomoriken-Gyoren, 3rd Floor, Aomori-Ken Suisan Bldg (Fishery Organizations Bldg. of Aomori Prefecture), Aomori City.
12:30 - 13:30	*Lunch (includes prayer time)*
13:30 - 14:15	**Lectures** **Venue:** Meeting Room of Aomoriken-Gyoren, 3rd Floor, Aomori-Ken Suisan Bldg. 6) Improvement of Fishers' Livelihoods and Resource Management by Fisher Groups by Prof Junichiro OKAMOTO, Faculty of Fisheries, Hokkaido University, Hakodate, Japan.
14:15 - 15:00	7) Present State of Fisheries of Aomori Prefecture, and the Framework for Fisheries Resource Management of the Prefecture by Mr Akira ABURANO, Fisheries Expert, Fish Farming and Resources Management Group, Aomori Prefectural Government, Aomori, Japan.
15:00 - 15:15	*Tea break (includes prayer time)*
15:15 - 16:00	8) Organization and activities of Aomori-Ken-Gyoren with particular emphasis to promotion of CFRM by Mr Masanori KUMAKI, Chief of Guidance Section, Aomori-Ken-Gyoren.
16.00 - 16.30	Observation of Aomoriken Suisan Bldg. and "ASPAM (Aomori Prefectural Sightseeing Spots and Products PR Building)"

Date/ Month	Itinerary
16:30 -	Leave Aomoriken Suisan Bldg.
17:10 -	Arrive at Hotel
18:00 - 20:00	Dinner at Hotel
	Hotel: Asamushi Onsen "Kaisen Kaku", Asamushi
10 November (Tuesday)	
05:30 -	Leave Hotel (by chartered bus)
06:00 - 07:30	Visit the Aomori City Central Wholesale Market
08:00 - 09:00	Return to hotel for breakfast
09:30 -	Leave Hotel (by chartered bus)
10:00 -	Arrive at Hiranai Town Municipality Office
	Lectures
10:00 - 10:40	9) How local government provides support to the efforts of FCA's promotion in CFRM by Mr Atsuchi KAMEDA, Assistant Chief-in-Charge of Scallop Aquaculture Promotion Section, Hiranai Town Municipality Office.
11:00 - 11:45	10) Outline of the Organization and Activities of Hiranai Machi FCA with particular emphasis on promotion of CFRM by Mr Motokatsu SUTOU, Chief of Staff, Hiranai Machi FCA.
11:45 - 12:30	Visit Hiranai Scallop Processing Plant (HSPP) of Aomori-Ken Gyoren (*Guide:* Mr Mitsuo TAKAHASHI, Director, HSPP).
12:30 - 13:30	*Lunch (includes prayer time)*
14:00 - 15:00	11) Organization and activities of Prefectural Industrial Technology Research Center, with particular reference to the research on community-based fisheries resource management by Mr Yoshinori KABUTOMORI, Manager of Fisheries Resources Management Division.
15:00 - 15:15	*Tea break (includes prayer time)*
15:15 - 16:15	Observation of scallop aquaculture facilities from fishing vessel (depending on weather).
16:15 - 16:50	Observation of "Hotate Hiroba (Scallop Plaza)" from the bus.
16:50	Arrive at Hotel
17:30 - 19:00	Dinner
	Hotel: Asamushi Onsen "Kaisen Kaku", Asamushi
11 November (Wednesday)	
09:30	Leave Aomori airport by JAL 1202
10:45	Arrive at Haneda airport
	Lecture
14:00 - 15:00	12) Essential factors required for empowerment and strengthening of FCA's businesses and its management by Mr Naoyuki TAO, Advisor FCA Management Center Co. Ltd., Tokyo, Japan
15:00 - 15:30	*Tea break (includes prayer time)*
15:30 - 17:30	**Discussion, Evaluation and Report Preparation of Phase Two**
	Venue: Meeting Room Number 5, 6th Floor, Co-op. Bldg. • Overall evaluation of Phase Two • Points for consideration of Phase Three of the Training Project
17:30 -	Prof Junichiro OKAMOTO, Advisor leaves for Haneda airport to travel to Hakodate, Hokkaido by JAL 1167.
	Hotel: Grand Central Hotel, Tokyo
12 November (Thusday)	**Venue:** Meeting Room Number 5, 6th Floor, Co-op. Bldg.
10:00 - 17:00	**Discussion, Evaluation and Report preparation of Phase Two (continued)** • Finalization of draft of Phase Two Report - continued - • Presentation of summary report by the participants

Date/ Month	Itinerary
18:00 - 19:30	• Evaluation of Participants • Conclusion of Phase Two activities Farewell Party ***Hotel: Grand Central Hotel, Tokyo***
13 November (Friday) 11:30	Participants leave Narita by SQ 637
14 November (Saturday) 10:45	Dr Y S Yadava, Advisor leaves Narita by TG 641

Information on Hotels

Place	Hotels
Tokyo	**Grand Central Hotel** 2-2 Kanda Tsukasa-Cho, Chiyoda-Ku Tokyo 101-0048 Japan *Tel: + 81 (0) 3 3256 3211* *Fax: + 81 (0) 3 3256 3210* *E-mail: gch@pelican.co.jp* *Home page: http://www.pelican.co.jp/grandcentralhotel/eng/index.html*
Aomori Prefecture	
Ajigasawa	**Hotel Grand Mer** 1 Banchi Naruto, Ooaza Maito, Ajigasawa-Cho Nishi Tsugaru Gun, Aomori-Ken Japan 038 2761 *Tel: + 81 (0) 173 72 8111* *Fax: + 81 (0) 173 72 9111* *E-mail: grandmer@sugisawa.co.jp* *Home page: http://www.sugisawa.co.jp*
Asamushi	**Asamushi Onsen "Kaisen Kaku"** 31 Aza Uhuisu Dani, Asamushi, Aomori-Shi Aomori-Ken Japan 039 3501 *Tel: + 81 (0) 17 752 4411* *Fax: + 81 (0) 17 752 3314* *E-mail: nanbuya@infoaomori.ne.jp* *Home page: http://www.kaisenkaku.com*

3.3 Study Material for Phase Two

The following study material will be provided by ICFO to the participants during Phase Two of the Training Project in Japan.

Sl. No.	Document
1.0	Report of Phase One - Training Project for Promotion of Community-based Fishery Resource Management by Coastal Small-scale Fishers in Indonesia (*by Dr Yugraj Singh Yadava, Mr Rajdeep Mukherjee & Mr Masaaki SATO*).
2.0	An Introduction to Fishery Cooperative Associations (FCAs) in Japan.
3.0	Outline of Fishery Co-operative Associations (FCAs) in Japan.
4.0	The Fisheries Law of Japan.
5.0	Fishing Right and Fishing License System in Japan.
6.0	Fisheries Coordination Regulations of Aomori Prefecture.
7.0	The Fisheries Cooperative Association Law of Japan.
8.0	A Model By-Law of Fisheries Cooperative Association.
9.0	Fisheries Resource Management System in Japan (*by Ms Ritsuko YONEDA and Mr Michael Louis Clark*).
10.0	Fisheries Management Development in Japan – Why Community-based Fishery Management has well Developed in Japan (*by Mr Masaaki SATO*).
110	Promotion of Community-based Fishery Resources Management Movement in Japan (*by Mr Jun MACHIBA*).
12.0	Outline of the Organization and Activities of Shin Fukaura Machi FCA with Particular Emphasis on Promotion of Community-based Fishery Resource Management (*by Mr Gizou NISHIZAKI*).
13.0	Outline of Oodose Fish Wholesale Market.
14.0	Improvement of Fishers' Livelihoods and Resource Management by Fisher Groups (*by Prof Junichiro OKAMOTO*).
15.0	Present State of Fisheries of Aomori Prefecture and the Framework for Fisheries Resource Management in the Prefecture (*by Mr Akira ABURANO*).
16.0	Organization and Activities of Aomori-Ken Gyoren with Particular Emphasis on Promotion of Community-based Fishery Resource Management (*by Mr Masanori KUMAKI*).
17.0	Outline of Aomori City Central Wholesale Market.
18.0	How Local Government Provides Support to the Efforts of FCA's Promotion of Fishery Resource Management (*by Mr Atsushi KAMEDA*).
19.0	Outline of the Organization and Activities of Hiranai Machi FCA with Particular Emphasis to Promotion of Community-based Fishery Resource Management (*by Mr Motokatsu SUTOU*).

Sl. No.	Document
20.0	Organization and Activities of Aomori Prefectural Industrial Technology Center, with Particular Reference to Research on Community-based Fishery Resource Management (*by Mr Yoshinori KABUTOMORI*).
21.0	Essential Factors Required for Empowerment and Strengthening of FCA's Businesses and Its Management (*by Mr Naoyuki TAO*).
22.0	Key Points of Community-based Fisheries Management in Coastal Areas of Japan (*by Mr Masaaki SATO*).
23.0	Market Guide (The Central Wholesale Market at Tsukiji, Tokyo).
24.0	The Tokyo Central Wholesale Market at Tsukiji.
25.0	Current Situation of Wholesale Market Distribution. General Food Policy Bureau, The Ministry of Agriculture, Forestry and Fisheries of Japan, December 2007.
26.0	Hiranai Scallop Processing Plant of Aomori-Ken Gyoren.
27.0	The Hokkaido Fishermen's Liberation Movement – The Philosophy and Works of Mr Takatoshi ANDO, the Pioneer of the Fishery Cooperative Movement in Hokkaido, Japan (*Translated, compiled and edited by Mr Naoyuki TAO and James Colyn*).
28.0	Visual Japan's Fisheries - Fisheries Agency - January 2009.
29.0	Brochure of YOSHIIKE Retail Fish Shop.
30.0	Information Material on Aomori Prefecture, Japan.

3.4 Details of Organizations to be visited in Japan

Date & Time	Organization	Contact Person/ Presenter	Activity
November 5, 2009 (Thursday)			
06:00 - 07:30	The Central Wholesale Market of Tokyo Metropolitan Government at Tsukiji, Tokyo 5-2-1 Tsukiji, Chuo-Ku, Tokyo, Japan. (Representative of the Organization: Mr Hiroyuki MORIMOTO, Director).	Mr Ihei SUGITA General Affairs Section (GAS) Management Division. *Tel: + 81 (3) 3547 8011* *Tel: + 81 (0) 3 3547 2222 or 3547 8031* *Fax:+ 81 (3) 3542-1376 (GAS)* *Website: http://www.shijou.metro.tokyo.jp/english* *Guide:* Mr Yoshihiro TERASAKI (Provisional)	Observation on wholesale marketing in action, including auction and briefing on structure and business of the Wholesale Fish Market at Tsukiji.
11:00 - 11:30	National Federation of Fisheries Cooperative Associations (= JF ZENGYOREN) 7th Floor, Coop. Bldg., 1-1-12 Uchikanda, Chiyoda-Ku Tokyo, Japan 101 8503. (Representative of the Organization: Mr Ikuhiro HATTORI, President of JF ZENGYOREN and Chairman of ICFO).	Mr Masaaki SATO Secretary of ICFO Fisheries Policy Dept. (FPD). *Tel:+ 81 (3) 3294 9617* *Mobile: + 81 (80) 3202 9782 (FPD)* *Fax:+ 81 (3) 3294 3347 (FPD)* *E-mail: kokusai-sato@r6.dion.ne.jp*	Opening Ceremony of Phase Two.
14:00 - 14:40	International Cooperation Division, International Affairs Department, Minister's Secretariat, Ministry of Agriculture, Forestry and Fisheries (MAFF), Government of Japan, 1-2-1 Kasumigaseki Chiyoda-Ku, Tokyo Japan 100 8950. (Representative of the Organization: Mr Masahiko SUNEYA, Director, International Cooperation Division (ICD)).	Mr Yuichi NAKAMURA Deputy Director, International Cooperation Div. (ICD). *Tel: + 81 (0) 3 3502 8111 (MAFF)* *Tel: + 81 (0) 3 3592 0313 (Direct to ICD)* *Fax: + 81 (3) 3502 8083 (ICD)* *E-mail: yuichi_nakamura001@nm.maff.go.jp*	Presentation on Agriculture, Forestry and Fisheries Sectors of Japan.
14:40 - 15:30	Fisheries Resource Management Promotion Section Fisheries Resource Management Dept., Fishery Agency, MAFF 1-2-1 Kasumigaseki Chiyoda-Ku, Tokyo Japan 100 8950. (Representative of the Organization. Mr Katsuhiro MACHIDA, Director General Fishery Agency & Mr Kazyhiko UTSUMI Fisheries Resource Management Section (FRMS) Fishery Agency).	Ms Ritsuko YONEDA Deputy Director, Fisheries Resources Management Division (FRMS), Fishery Agency, MAFF, Tokyo. *Tel: + 81 (0) 3 3502 8111 Ext. 6663* *Tel: + 81 (0) 3 3502 8452 (Direct)* *Fax: + 81 (0) 3 5510 3397 (FRMS)* *E-mail: ritsuko_yoneda@nm.maff.go.jp* *Lecturers:* Ms Yoneda and Mr Michael Louis Clark, Mansfield Fellow The Maureen & Mike Mansfield Foundation, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, United States Department of Commerce.	Presentation on "Fisheries Resource Management System in Japan with particular emphasis on Promotion of Coastal Fisheries Resource Management (CFRM) in Japan".

Date & Time	Organization	Contact Person/ Presenter	Activity
		1st Floor, Tanaka Mack Toranomon Bldg.,1-1-10 Atago Minato-Ku, Tokyo Japan 105 0002. *Tel: + 81 (0) 3 5403 7228 Fax: + 81 (0) 3 5403 2766 E-mail: michaellouisclark @yahoo.com*	
November 6, 2009 (Friday)			
10:00 - 16:30	National Federation of Fisheries Cooperative Associations (JF ZENGYOREN) 7th Floor, Coop. Bldg., 1-1-12 Uchikanda, Chiyoda-Ku Tokyo, Japan 101 8503. (Representative of the Organization: Mr Ikuhiro HATTORI, President of JF ZENGYOREN and Chairman of ICFO).	Mr Masaaki SATO and Mr Jun MACHIBA, Deputy General Manager of Fishery Policy Department. *Tel: + 81 (3) 3294 9617 Mobile: + 81 (80) 3202 9782 (FPD) Fax: + 81 (3) 3294 3347 (FPD) E-mail: j-machiba@ zengyoren.jf-net.ne.jp*	Presentations on: "Fisheries Management Developed in Japan – why Community-based Fishery Management has developed well in Japan – (by Mr Sato)" and "Promotion of Community-based Fisheries Resources Management Movement in Japan (by Mr Machiba)".
November 8, 2009 (Sunday)			
14:30 - 15:30	Shin Fukaura Machi Fisheries Cooperative Association Aza Shiomigata 406-1, Ooaza Kita Kanegasawa, Fukaura Machi, Nishi Tsugaru-Gun Aomori-Ken, Japan 038 2504. (Representative of the Organization: Mr Gizo NISHIZAKI, President).	Mr Hiroaki FUKUDA Chief of All Divisions. *Tel: + 81 (0) 173 76 2511 Fax: + 81 (0) 173 76 3088 Mobile: + 81 (0) 90 3365 8375 E-mail: fukuda.shinfuka@ ac.auone-net.jp* *Lecturer:* Mr Gizo NISHIZAKI, President.	Presentation on organization/activities of Shin Fukaura Machi FCA with special emphasis on Fisheries Resource Management (CFRM) promoted by Shin Fukaura Machi FCA.
November 9, 2009 (Monday)			
08:30 - 10:30	Oodose Fish Wholesale Market (a local wholesale market), Aza Shiomigata 406-1, Ooaza Kita Kanagasawa, Fukaura Machi Nishi Tsugaru-Gun, Aomori-Ken Japan 038 2504. (Representative of the Organization: Mr Gizo NISHIZAKI, President).	Mr Hiroaki FUKUDA Shin Fukaura Machi FCA *Guide:* Mr Hiroaki FUKUDA Shin Fukaura Machi FCA *Tel: + 81 (0) 173 76 2972 Fax: + 81 (0) 173 76 3670* (Oodose Fish Wholesale Market)	Briefing on Organization and activities of the Oodose Fish Wholesale Market and observation of business in action.
14:15 - 15:00	Meeting with Prefectural Government Officials of the Aomori Prefectural Government in the Meeting Room of Aomori-Ken Gyoren on the 3rd Floor of Aomori-Ken Suisan Kaikan, Aomori City. 1-1-1 Nagashima, Aomori-Shi Aomori-Ken, Japan 030 8570. (Representative of the Organization: Mr Morio TAKARADA, Director Fisheries Promotion Section Agriculture, Forestry and	Mr Kyosei NORO Planning and Extension Group Fisheries Division, Agriculture Forestry and Fisheries Department. *Tel: + 81 (0) 17 734 9592 Mobile: 090 4314 7105 Fax: + 81 (0) 17 734 8166 (FPS) E-mail: kyosei_noro@ pref.aomori.lg.jp* *Lecturer:* Mr Akira ABURANO, Fisheries Expert, Fish Farming and Resource management Group.	Presentation on "Present state of fisheries of Aomori Prefecture, and the Framework for Fisheries Resource Management of the Prefecture".

Date & Time	Organization	Contact Person/ Presenter	Activity
	Fisheries Department).	*Tel: + 81 (0) 17 734 9594* *Fax: + 81 (0) 17 734 8166 (FPS)* *E-mail: akira_aburano@ pref.aomori.lg.jp*	
15:15 - 16:00	Aomori-Ken Gyoren (Aomori Prefectural Federation of Fisheries Cooperative Associations). *Meeting Place:* Meeting Room of Aomori-Ken Gyoren, 3rd Floor, Aomori-Ken Suisan Kaikan, Aomori City 3rd Floor, Aomori-Ken Suisan Bldg., 1-1-32 Yasukata Aomori-Shi, Aomori-Ken Japan 030 0803. (Representative of the Organization: Mr Shoji UEMURA, President).	Ms Hideko SASAKI Secretary to the President *Tel: + 81 (0) 17 722 4211* *Fax: + 81 (0) 17 722 5016* *Mobile: + 090 8780 3747* *E-mail: h-sasaki@amgyoren.or.jp* Mr Masamitsu EBINA, Manager Guidance Dept. *Mobile: + 080 1674 2451* *Email: m-ebina@amgyoren.or.jp* *Lecturer:* Mr Masanori KUMAKI Chief of Guidance Section *Tel: + 81 (0) 17 722 4218* *Fax: + 81 (0) 17 722 5031* *Mobile: + 090 2799 6999* *Email: m-kumaki@amgyoren.or.jp*	Presentation on organization/ activities of Aomori-Ken Gyoren with particular emphasis on CFRM
16:00 - 16:30	ASPAM Aomori-Ken Kanko Bussan Kan 1-1-40 Yasukata, Aomori-Shi Aomori-Ken, Japan 030 0803. (Representative of the Organization Mr Mitsuo HAYASHI, Director Aomori-Ken Kanko Renmei (Aomori Prefecture Tourism Association).	Mr Kenichi IGARASHI, Chief General Affairs Section Aomori-Ken Kanko Renmei. *Tel: + 81 (0) 17 735 5311* *Fax: + 81 (0) 17 735 2067* *E-mail: kenichi_igarashi@ aomori-kanko.or.jp* *Home page: http:// www.aspm.or.jp*	Observation on marketing and PR activities of fish and fishery products produced by fishers in Aomori Prefecture.
November 10, 2009 (Tuesday)			
06:00 - 07:30	The Central Wholesale Market of Aomori City, 1-1 Orosi Machi, Aomori-Shi Aomori-Ken, Japan 030 0137. (Representative of the Organization: Mr Masayoshi KON, Director).	Ms Ayako KIMURA Management Section *Tel: + 81 (0) 17 738 1101* *Fax: + 81 (0) 17 738 1199* *Email: kimura_ayako@ city.aomori.aomori.jp* *Guide:* Mr Seigou YOKOYAMA Management Section *Mobile: 080 5562 7904*	Observation on wholesale fish marketing in action including auction. Presentation on organization and activities of the wholesale fish market.
10:00 - 10:40	Hiranai Town Municipality Office Aza Kominato 63, Ooaza Kominato, Hiranai Machi Higashi Tsugaru-Gun Aokori-Ken, Japan 039 3321. (Representative of the Organization: Mr Yuichi OSAKA Mayor, Mr Toshihiro UCHIYAMA, Chief of Industry Promotion Section (IPS)).	Mr Atsushi KAMEDA Assistant Chief-in-charge of Scallop Aquacultrure Promotion Section (IPS) *Tel: + 81 (0) 17 755 2111 (IPS)* *Mobile: + 81 (0) 80 5564 2524* *Fax: + 81 (0) 17 7552145 (IPS)* *E-mail: kameda-atsushi@ town.hiranai.aomori.jp* *Lecturer:* Mr Atsushi KAMEDA	Presentation on how the local government provides support to the efforts of FCA's promotion in CFRM.
11:00 - 11:45	Hiranai Machi Fisheries Cooperative Association (Hiranai Machi FCA) Aza Asadokoro 91-56, Ooaza Asadokoro, Hiranai Machi Higashi Tsugaru-Gun	Mr Teruo GOTO, Manager General Affairs Dept. (GAD). *E-mail: goto@hiranai-gk.or.jp* *Lecturer:* Mr Motokatsu SUTOU Chief of staff.	Outline of the Organization and activities of Hiranai Machi FCA with particular emphasis to promotion of CFRM.

Date & Time	Organization	Contact Person/ Presenter	Activity
	Aomori-Ken, Japan 039 3312. (Representative of the Organization:Mr Hiroaki MITSUYA, President).	*Tel: + 81 (0) 17 755 4111 (GFD)* *Fax: + 81 (0) 17 755 2792 (GFD)* *E-mail: sutou-m@ hiranai-gk.or.jp*	
11:45 - 12:30	Hiranai Scallop Processing Plant (HSPP) of Aomori-Ken Gyoren, Aza Asadorkoro 91-55, Ooaza Asadokoro Hiranai Machi, Higashi Tsugaru-Gun, Aomori-Ken Japan 039 3312. (Representative of the Organization: Mr Mitsuo TAKAHASHI, Director, HSPP).	Mr Mitsuo TAKAHASHI Director, HSPP. *Tel: + 81 (0) 17 755 5800 (HSPP)* *Fax: + 81 (0) 17 755 5806 (HSPP)* *E-mail: m-takahasi@ amgyoren.or.jp* *Guide:* Mr Mitsuo TAKAHASHI.	Observation on processing of scallop at HSPP.
14:00 - 15:00	Fisheries Research Institute (FRI is a division of the Local Independent Administrative Institution), Aomori Prefectural Industrial Technology Research Center Aza Tsukidomari 10 Banchi Ooaza Mora, Hiranai-Machi Higasi Tsugaru-Gun Aomori-Ken, Japan 039 3381. (Representative of the Organization: Mr Zenji TARAKITA, Director).	Mr Tsugio KAMIHARAKO Senior Research Manager *Tel: + 81 (0) 17 755 2155* *Fax: + 81 (0) 17 755 2156* *E-mail: tsugio_kamiharako@ aomori-itc.or.jp* *Lecturer:* Mr Yoshinori KABUTOMORI Manager Resources Management Div. *E-mail: yoshinori_kabutomori @aomori-itc.or.jp*	Presentation on "Roles of the Fisheries Research Institute with Particular Emphasis on Research and promotion of CFRM".
November 11, 2009 (Wednesday)			
14:00 - 15:00	Fisheries Cooperative Association Management Center Co. Ltd. (= Gyokyo Keiei Senta) 2nd floor, MM Bldg., Harue-Machi 4-6, Edogawa-Ku Tokyo, Japan 134 0003. (Representative of the Organization: Mr Tatsuyoshi YAMAMOTO, President).	Mr Naoyuki TAO Advisor of FCA Management Center Co. Ltd. 1-1 Aoba-Cho 4 Chome Atsubetsu-Ku, Sapporo-Shi Hokkaido, Japan Postal code: 004 0021 *Tel/Fax: + 81 (0) 11 891 8663* *E-mail: n-tao@orange.zero.jp* *Lecturer:* Mr Naoyuki TAO.	Presentation on essential requirements for empowerment and strengthening of FCA's businesses and management.

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