



ISSN 1675-7947  
SEAFDEC-MFRDMD/SP/13  
May 2006

# SEAFDEC-MFRDMD Highlights 2005

2005  
HIGHLIGHTS



A Publication of  
SEAFDEC-MFRDMD



# SEAFDEC-MFRDMD Highlights 2005

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Raja Mohammad Noordin  
bin Raja Omar

## **Message from Chief of SEAFDEC- MFRDMD**

On the whole, I am thankful to Allah Almighty on the successful implementation of the programs conducted by SEAFDEC-MFRDMD in the year 2005. We have implemented most of the programs as outlined in the beginning of the year and this could be attributed mostly to the cooperation provided by the Technical Officers of participating countries and National Coordinators of SEAFDEC member countries. I am happy that the Project Coordinators and their project teams have attempted to implement all the project as decided in all technical consultations.

***They have indeed gone beyond their capacities and obligations to produce the expected outcomes of both the SEAFDEC-MFRDMD and national projects, as all these will contribute to the sustainability of the fish resources both in the national and regional realms of ensuring food security for people.***

We are happy to have collaborated in particular with the Ministry of Fisheries Vietnam and the Project Assessment of Living Marine Resources in Vietnam (ALMRV). All through this collaboration, we have developed the Regional Guidelines in the Use of Indicators for Sustainable Development and Management of Capture Fisheries in the ASEAN countries.

We hope this guidelines will spearhead the use of indicators in the next phase of the Special 5-Year Program as it is required to complement any efforts made by member countries in assessing their fish stocks through the conventional means where relevant.

While lacking in expertise and sufficient staffing in the field of Inland Capture Fisheries, I am overwhelmed at the outcome of this project particularly in the development of database. It is recognized that the training in inland fisheries data collection is important as such that initiatives are underway to collaborate with the Inland Fisheries Development of Cambodia (IFReDi), as the latter institute, has the abled staff experienced in the management of inland fisheries. Finally our technical visit to Myanmar would assist us in extending the knowledge gained to other member countries in their need of consultation in developing and managing their inland capture fisheries.

I take this opportunity to record my sincere appreciation to my Deputy Chief, Dr. Yoshinobu Konishi for assisting in the implementation of the Japanese Trust Fund Projects. I trust this will be taken care of in the year 2006. As for the Trust Fund II, we look forward to making the regional analysis next year that could provide the much needed information of the pelagic fisheries in the South China Sea.

I believe that SEAFDEC-MFRDMD has to some extent achieved the functions that were expected of, in particular, in providing a platform for member countries to discuss the issues of sustainable development and management of fisheries in the Southeast Asian region. I wish that my staff members of SEAFDEC-MFRDMD will double their efforts towards making the development a center of distinction in line with our vision.

We take pride in having the long due "Sharks & Rays Book" printed, and in future the topic will cover shark and rays of other areas of the South China Sea beyond Malaysia and Brunei Darussalam waters.

As the future years of SEFADEC may face reducing project funds, SEAFDEC-MFRDMD will seek extra budgetary funds from relevant and willing donors. This may add extra responsibility to the department as such efforts may be beyond the scope of our tasks. However, we will endeavour to gather any available funds so as to be able to jointly pursue the means of achieving the objectives of the department.

We hope our efforts in enhancing SEAFDEC visibility have been effective through our local press releases in newspapers of the important events namely, Collaborative Survey with National Fisheries University of Japan (NFU) and SEAFDEC-MFRDMD.

Finally, I would like to record my thanks to all staff of SEAFDEC-MFRDMD who have relentlessly put in much effort to implement both the regional and national projects. They have indeed gone beyond their capacities and obligations to produce the expected outcomes of both the SEAFDEC-MFRDMD and national projects, as all these will contribute to the sustainability of the fish resources both in the national and regional realms of ensuring food security for people.

Thank You.

Raja Mohammad Noordin bin Raja Omar  
Chief of SEAFDEC-MFRDMD  
Kuala Terengganu.

31 May 2006.



Dr. Yoshinobu Konishi

## *Message from* **Deputy Chief of SEAFDEC- MFRDMD**

Production of capture fisheries in the Southeast Asian region in 2002 was approximately 14 million tons occupying 15% of the total catch in the world. The production provides employment in the countries, income for the rural people, trade and healthy food for the people. Because of high situation of fisheries contribution to national economies in this region, we have to make effort to sustain development and management of fishery resources.

For sustainable development and management of fishery resources in the region, SEAFDEC-MFRDMD has continuously implemented two projects under the Japanese Trust Fund as well as Special 5-Year Program in collaboration with relevant SEAFDEC Departments and member countries in 2005: "Information Collection for Sustainable Pelagic Fisheries in the South China Sea" under Trust Fund II project; "Research for Stock Enhancement of Sea Turtles" under Trust Fund IV project. We also became a collaborative department for a project, "Environmental Related Task in Southeast Asia," promoted by the SEAFDEC Secretariat.

Under the Trust Fund II project, a Regional Technical Workshop for training of data handling and analysis, and Technical Consultation Meeting for discussion on results of each research activity were held from 27 June to 1 July in Penang, Malaysia and 21 to 23 November in Jakarta, Indonesia, respectively. A format of terminal report to be published in 2006 was also discussed and finalized in these two meetings. A research plan of the Trust Fund IV project was prepared in the planning meeting, held from 21 to 22 December 2004 in Shah Alam, Malaysia and finalized by the participating member countries in the Regional Technical Consultation, held from 25 to 26 April in Kuala Terengganu, Malaysia. Research activities under the Trust Fund IV project consists of two components: biological aspects such as migratory routes, estimation of stock size in selected nesting site by tagging and satellite telemetry, stock identification by DNA analysis, and feasibility studies on sea turtle cloning and head-starting by SEAFDEC-MFRDMD; interaction between sea turtle and fisheries by SEAFDEC-TD. Progress of research implementation for sea turtle biology in 2005 seems to be slightly behind the time schedule due to unfamiliar procedure for collaborative research with participating member countries. Our Trust Fund projects are team-work research in collaboration with Technical Officers in the Southeast Asian member countries. A successful key in getting good outcomes of the projects is to make close and strong relationships among team-work members. During the implementation of these projects, huge data were collected, especially in the Trust Fund II project on pelagic fishes and their fisheries in the South China Sea. It is also very important to accumulate these data and bequeath them to researchers in next generation who will monitor status of resource condition and pursue a mechanism of resources fluctuation for pelagic fishes in the tropical sea waters.

I hope that research activities of Trust Fund II and IV projects in 2006 will be well proceeded with aid of resource persons and collaborative persons in the SEAFDEC member countries based on the achievement of activity programs for 2005. In particular, Trust Fund II project terminates in 2006 and it is expected that the outcomes will lead us to plan the next project program to be implemented it from 2007 onwards.



Mr. Rosidi bin Ali  
(Outgoing Head)

## *Message from* **Special Departmental Coordinator**



Ms. Mahyam binti Mohd. Isa  
(New Head)

Year 2005 is the closing of the first phase of Special 5-year Program on Sustainable Fisheries for Food Security in the ASEAN region (2002 to 2005). I am grateful to Allah that the projects under this program have been performing well and have concluded their findings.

I would like to take this opportunity to congratulate those who have contributed to the implementation of these projects. Full commitment shown by them with close supervision by the Chief and the Deputy Chief of MFRDMD are the main factors that contribute to the success.

I am sure that the findings would benefits the member countries in implementing the Resolution and Plan of Action on Sustainable for Food Security for the ASEAN region, as adopted in the ASEAN-SEAFDEC Conference on Sustainable Fisheries for Food Security in the Millennium "Fish for the People", in 2001.

The findings have also contributed in the formulation of the following phase of the Special 5-year Program (2006 to 2010). In line with the mission, SEAFDEC-MFRDMD will do the best to provide assistance to member countries in implementing the programs in the near future.

Thank you

Rosidi bin Ali



**Staff of  
SEAFDEC-MFRDMD**



# Our Vision

To be the CENTER OF DISTINCTION for the sustainable development and management of fishery resources in Southeast Asia

# Our Mission

To provide assistance to SEAFDEC member countries in matters leading to the sustainable development and management of the fishery resources in Southeast Asia through research, training and information dissemination

# Our Functions

- To provide a regional forum for consultation and cooperation in research and management of fishery resources.
- To coordinate and implement research programmes to support sustainable development and management of fishery resources in SEAFDEC member countries through:
  - Monitoring condition and exploitation of the state of fishery resources.
  - Providing scientific basis and appropriate guidelines.
  - Providing advice on management of fishery resource
- To provide training in the field of stock assessment and fisheries management towards improving the capability of SEAFDEC member countries in the sustainable development and management of fishery resources.
- To publish, disseminate and exchange information through:
  - Regional fora and consultations in research and management
  - Intensification of publications





# Special 5-Year Program

## The Identification of Indicators for the Sustainable Development and Management of Capture Fisheries in the ASEAN Region

The sustainable development and management of capture fishery in this region faces greater challenge due to many negative impacts. Thus, new and innovative management approaches through the use of indicators as management tool have been accepted to complement the classical methods of stock assessment. A regional project was conducted aimed at supporting member countries to improve their fisheries management through the use of suitable indicators. The participating countries were Brunei Darussalam, Indonesia, Malaysia, the Philippines indicators were based on stakeholder participations. The experiences and knowledge gained from the implementation of pilot projects in the participating countries were used as the main input in drafting the Regional Guidelines on the Use of Indicators for Sustainable Development and Management of Capture Fisheries in ASEAN Countries.



Project Coordinator:  
Mr. Rosidi bin Ali

## Activities in 2005

1. Core Group Meeting was conducted from 1-3 August 2005 in Penang, Malaysia. The inputs from each member of the Core Group were harmonized into a final draft of the Regional Guidelines on the Use of Indicators.





2. ASEAN Regional Conference on Adaptive Marine Capture Fishery Management-Application of Indicators was held from 10-12 October 2005 in Hai Phong, Vietnam by the Ministry of Fisheries Vietnam (MOFI) and the Project on Assessment of Living Marine Resources in Vietnam (ALMRV) in collaboration with SEAFDEC-MFRDMD. The findings of pilot projects and experiences gained in developing the Regional Guidelines were also presented.

3. The Third Regional Technical Consultation was organized from 13-14 October 2005 in Hai Phong, Vietnam, in collaboration with MOFI and ALMRV. The Regional Guidelines on the Use of Indicators for Sustainable Development and Management of Capture Fisheries in the ASEAN Region has successfully been adopted in the consultation. Additional inputs for the Regional Guidelines were also extracted from the experiences and knowledge gained in the ALMRV project.





Project Coordinator:  
Ms. Mahyam binti Mohd. Isa

# Information Gathering for Capture Inland Fisheries in ASEAN Countries

The significant role of inland fisheries in the rural areas of Southeast Asian countries is widely recognized as millions of people in the region still depend on these limited resources. However, their importance to the economy is still undermined and the production is underestimated. Due to lack of information and data, the project entitled “Information Gathering for Capture Inland Fisheries in ASEAN Countries” was undertaken and aimed at gathering and compiling as much information on inland capture fisheries in the ASEAN Countries.

## Activities in 2005

1. Two separate websites pertaining to the project and inland databases of rivers, reservoir/ lake and flood plain in the Southeast Asian Countries were developed in collaboration with SEAFDEC-TD. The websites aimed to establish a platform for gathering and compilation of information on inland-water bodies and capture fisheries in the ASEAN Countries.  
The websites are:
  - i. (<http://inland.seafdec.org>) - A website for project of Information Gathering on Inland Capture Fisheries in ASEAN Member Countries
  - ii. ([http://inland.seafdec.org/ASEANDatabaseCD/index\\_800x600.html](http://inland.seafdec.org/ASEANDatabaseCD/index_800x600.html)) - A Website for Inland Waters Database in ASEAN Member Countries.
2. A Progress Meeting to discuss on progress of the implementation of pilot projects and updating data/ information on inland capture fisheries in participating countries was carried out on 28 March 2005 in Kuala Lumpur.
3. A Regional Training Workshop on fish sampling, species identification, preservation of freshwater fish specimens and data entry was conducted from 29 March -1 April 2005 at SEAFDEC-MFRDMD. The workshop aimed at strengthening the capability of Technical Officers from participating countries in the proper techniques of fish sampling, identification, preservation and data entry.



4. Two application databases (Fish Profile and Socio-economy Modules) were developed to assist the member countries on data entry, retrieval and storage of data on inland fisheries.

5. The final Regional Technical Consultation to present findings of pilot projects and formulate proposal for the implementation of project on inland fisheries 2006-2010 was carried out from 28 to 30 November 2005 in Kuala Lumpur.

6. A technical visit to Myanmar was conducted in December 2005 and aimed at assisting the Department of Fisheries Myanmar on information gathering of inland fisheries production.





Project Coordinator:  
Mr. Raja Bidin bin Raja Hassan  
(from September 2005)



Dr. Mansor Mat Isa  
(until 31 August 2005)

# Japanese Trust Funds

Information Collection for Sustainable Pelagic Fisheries in the South China Sea  
(In collaboration with TD and MFRD)

## Activities in 2005

Two meetings that were held were Regional Technical Workshop from 27 June-1 July 2005, in Penang, Malaysia and the Fourth Technical Consultation Meeting from 21-23 November 2005, in Jakarta, Indonesia.

Other activities include:

1. Development of catch and biological databases
2. Collection of biological data for size-frequency and gonad maturity analyses
3. Determination of fishing grounds using the Black Box Onboard (BBO) units
4. Evaluation of resource condition by FISAT Software
5. Determination of spawning season using gonad maturity data
6. Identification of pelagic fish stocks using DNA and morphometric methods
7. Development of new products from pelagic fish species
8. Correlationship analysis between oceanographic parameters and pelagic fish distribution
9. Shelf life study on frozen butterfly breaded fish
10. Publication of manuals for pelagic fish products production





Project Coordinator:  
Mr. Zulkifli bin Talib  
(Outgoing Head)

# Research for Stock Enhancement of Sea Turtles

The year 2005 was the starting year for the implementation of the Trust Fund IV Project “Research for Stock Enhancement of Sea Turtles”.

Several activities were successfully carried out.



Syed Abdullah bin  
Syed Abdul Kadir  
(New Head)

## Activities in 2005

1. A Regional Technical Consultation on Finalization of Implementation Plan on Research for Stock Enhancement of Sea Turtles was held from 25-26 April 2005. The meeting adopted a proposed activity plan under the new Japanese Trust Fund IV project.
2. Collection of tissue sample of green turtles at nesting sites is being conducted and monitored by the participating member countries. Tissue samples of green turtles hatchlings for determining multiple paternities by microsatellite analysis were collected at Mak Kepit beach in Redang Island, Malaysia.



3. On-site training for tissue sampling for stock identification by mtDNA analysis was conducted in Cambodia, Indonesia, Malaysia, Myanmar, the Philippines, Thailand and Vietnam according to the seasonal availability of sea turtles landings.
4. On-site training for proper tagging of sea turtles for determining biological evidence such as moving behavior, growth and estimation of stock size in the selected nesting site was also conducted on the same dates and locations during the training of tissue sampling for mtDNA study.



5. Tagging activities at nesting sites are being conducted by the participating member countries. Recoveries of the tagged sea turtles from 2002-2004 are also being monitored.



6. A study on satellite telemetry was planned to be conducted at Segari beach, Malaysia but it was not implemented due to the delay in the procurement of transmitter.
7. Feasibility study on head-starting technique to enhance the survival of sea turtles hatchlings is being conducted. Preliminary findings showed that the technique is still new to this region but it is widely practiced in North America where evidence suggests that green turtles and Kemp's Ridley released from a head-start program can function normally and integrate themselves into wild population of sub-adults. Thailand has successfully conducted head-starting activities on green and hawksbill turtles at Mannai Island.



# Information and Training Division

## *MFRDMD Welcomes New Information Head*



Mr. Jamaludin Ibrahim  
(Outgoing Head)



Mr. Md. Akhir Arshad  
(New Head)

Starting from 15 November 2005, MFRDMD had new research team member, Mr. Md. Akhir Arshad, a Senior Research Officer who was currently attached to Fisheries Research Institute Penang. Mr. Akhir had involved in many national and regional program and research activities on fisheries resources. Mr. Akhir, on his new task, will be heading the Information and Training Division effectively on 1st January 2006. With the greater emphasis on fisheries information activities in recent years, the visibility of roles and responsibilities of SEAFDEC information as increased accordingly. To keep pace with this development MFRDMD will try to increase its capacity and capability, both physical and manpower to fulfill the department's information needs.

MFRDMD would like to thank Mr. Jamaludin Ibrahim, the former Head of Information and Training Division who is now officially appointed as the new Special Development Officer of SEAFDEC-MFRDMD. Mr. Jamaludin has contributed a lot of effort and his experiences to fulfill the information needs of the department since heading the Information and Training Division from February 2004.

### **6<sup>th</sup> ISEP Meeting in Pattaya Thailand**

SEAFDEC-MFRDMD has participated in 6<sup>th</sup> Information Staff Exchange Programme (ISEP) Meeting in Pattaya, Thailand from 14 - 16 December 2005. The Meeting was participated by SEAFDEC Secretary-General, senior officials of the Secretariat and Departments, as well as information officers of the Secretariat, TD, MFRD, AQD, and MFRDMD. The objective of the meeting is to improve SEAFDEC information tools to cope with the recent requirement and situation. The Secretariat also wanted to regulate the progress of information related activities conducted by SEAFDEC Secretariat, and all four departments, in relevant to promotion of information activities and enhancing visibility of the Center. MFRDMD was represented by Mr. Md Akhir Arshad, Mr. Ku Kassim Ku Yaacob and Mr. Muhamad Nor Azam Lajin.

# Administration and Finance Division



Mr. Che Harun bin Hj Hassan  
(Head)



Mr. Zahari bin Ismail  
(Assistant Accountant)

MFRDMD would like to thank Mr. Che Harun bin Hj Hassan, the Head of Administration and Finance Division and his staff for good administrative and financial arrangements for 2005.

# Human Resources Development Program

## Training in Japan

Mr. Sharum Yusof has attended three months training course (from 1<sup>st</sup> Dec 2004 – 26 Feb 2005) at Center for Atmospheric and Oceanic Study, Tohoku University, Sendai in Remote Sensing respectively. The objective of the training, beside to gain experience and knowledge, it is to process the AVHRR satellite data for sea surface temperature (SST). For the last few years, the remote sensing system at MFRDMD has received and collected a number of Sea WiFs data, as well as NOAA AVHRR. Mr. Sharum has brought this data (2000-2004) to Tohoku University and used the facilities and computer technology there for image processing. The images shall be analyzed for further usage in Fisheries Oceanography.

The training program was under the supervision of Prof. H. Kawamura/Assoc. Prof. F. Sakaida.

Mr. Ibrahim Johari has attended attachment training in Fisheries Economic for six months at Fisheries Faculty, Kagoshima University (from 27 September 2004- 28 March 2005). Research related to fishery bio-economic is very relevant to enable better fisheries management measures for sustainability of the resources. The objective of the training course is to enhance expertise and knowledge in fisheries economy based on Japanese experience. It is hoped that with proper and effective management of fisheries will ensure sustainable fisheries resources and increase fisheries economy.



## Training BIMP- EAGA

Under this program, SEAFDEC-MFRDMD had reviewed the methodology and plan for marine capture fisheries project and coordinate with Sabah Fisheries Department for logistics arrangement during the Project Inception Meeting of the BIMP-EAGA.

Similarly, SEAFDEC-MFRDMD has participated in several project implementations under HRD for BIMP-EAGA region in the West Kalimantan, Indonesia, West Sabah

and East Coast of Palawan Island. Technical expertise in the field of fish stock assessment, ichthyoplankton survey and fishing technology were extended to the trainees on board MV SEAFDEC II from June to August 2005.

# Special Events

## 1. Secretary-General of SEAFDEC visit to MFRDMD

The Secretary-General of SEAFDEC, Dr Siri Ekmaharaj, accompanied by Mr. Somnuk Pornpatimakorn (Administration and Finance Coordinator) has made an official visit to MFRDMD on 27 December 2005.



## 2. Tenyo Maru Team visits to MFRDMD

During the jointly collaboration training programme undertaken between SEAFDEC-MFRDMD and National Fisheries University (NFU) Shimonoseki, Japan has visited MFRDMD office in Kuala Terengganu on 14th. June 2005 on her way back to Japan. The delegations involves of four university scientists, 23 crew on board the Tenyo Maru.



# Collaborative Programs

1. SEAFDEC-MFRDMD has participated in 12<sup>th</sup> Annual Meeting of Mekong River Commission (MRC), Program for Fisheries Management and Development Cooperation in Seam Reap, Cambodia from 2 – 4 June 2005. The participation in the meeting is to establish closer collaboration in conducting projects related to inland capture fisheries in the Southeast Asian countries.
2. SEAFDEC-MFRDMD has conducted a collaborative research and training program with the National Fisheries University (NFU) in Shimonoseki, Japan. The tie-up between the National Fisheries University of Japan (NFUJ) and the MFRDMD are expected to pave the way for the transfer of technology especially in 'mid-water trawl' to local fishermen. This collaborative program has covered three major disciplines: acoustic survey, mid-water trawl operation and oceanographic study. In Malaysia, the program was officially launched on 31 May 2005 and the survey completed on 13 June 2005 in Sarawak waters.
3. SEAFDEC-MFRDMD has participated in several project implementations under HRD for BIMP-EAGA region in the West Kalimantan, Indonesia, West Sabah and East Coast of Palawan Island. Technical expertise in the field of fish stock assessment, ichthyoplankton survey and fishing technology were extended to the trainees on board MV SEAFDEC II in June to August 2005. The Fisheries Studies were conducted in the West Coast of Sabah, Malaysia (2-23 July 2005) to investigate the entire fish stock and new fishing technology for harvesting the resources are needed.

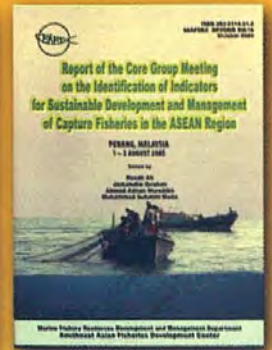
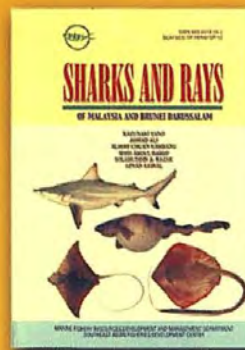


# Publications

- A book on taxonomy, biology and fishery of Elasmobranch entitled "Sharks and Rays of Malaysia and Brunei Darussalam" was published. This book was prepared by SEAFDEC-MFRDMD in collaboration with Brunei Darussalam, Japan and Malaysia.

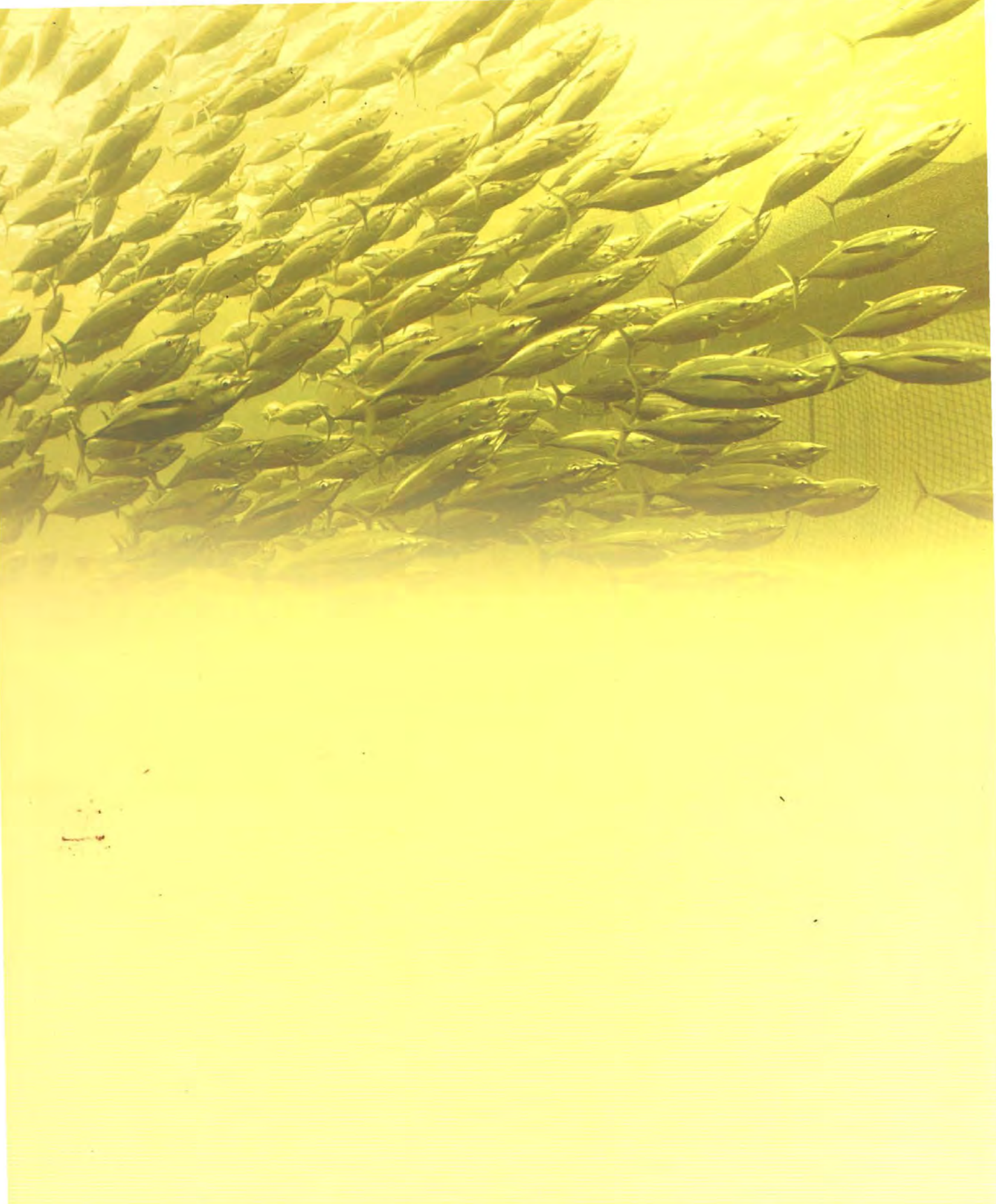
Full list of SEAFDEC-MFRDMD publications in 2005:

- The Catch-Effort Statistics for the South China Sea Area : 1999 and 2000
- A Guide for Tagging of Sea Turtles in the Southeast Asian Region
- Report of the Technical Working Group Meeting on The Identification of Indicators for the Sustainable Development and Management of Capture Fisheries in the ASEAN Region
- Report of the Core Group Meeting on The Identification of Indicators for the Sustainable Development and Management of Capture Fisheries in the ASEAN Region
- Report of the Third Regional Technical Consultation on The Identification of Indicators for the Sustainable Development and Management of Capture Fisheries in the ASEAN Region
- Report of the Third Regional Technical Consultation on Information Collection for Sustainable Pelagic Fisheries in the South China Sea.



# Retirement of Staff

- The Regional Project Coordinator for Japanese Trust Fund II, Dr. Mansor Mat Isa has retired on 31 August 2005. Dr. Mansor was the Head of Fisheries Biology Section MFRDMD and started his career when he first join Fisheries Research Institute Penang in 1982. He was succeeded by Mr. Raja Bidin Raja Hassan.
- Mr. Harun Salleh, the engineman for PL70, has retired after completed his full service in government on 29 October 2005.



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