



# REPORT OF THE PLANNING MEETING BY EXPERTS ON THE RESEARCH FOR STOCK ENHANCEMENT OF SEA TURTLES

Shah Alam, Malaysia  
21 - 22 December 2004



Marine Fishery Resources Development and Management Department  
Southeast Asian Fisheries Development Center





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21-22 DECEMBER 2004



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Report of the planning meeting by experts on the research for stock  
enhancement of sea turtles

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1. Sea turtles--Congresses

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TURTLES

21-22 DECEMBER 2004







- |                            |                             |  |
|----------------------------|-----------------------------|--|
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| 7. Mr. Bundit Chokesanguan | 8. Mr. Suriyan Vichitlekarn | 9. Mr. Agus Dermawan                   |
| 10. Mr. Ahmad Ali          | 11. Dr. Dionysius Sharma    | 12. Mr. Syed Abdullah Syed A. Kadir    |
| 13. Dr. Yosni Bakar        | 14. Dr. Osamu Abe           | 15. Ms. Yeo Bee Hong                   |
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| 19. Mr. Paul Basintal      | 20. Dr. Sukarno Wagiman     | 21. Mr. Kamarruddin Ibrahim            |
| 22. Mr. Zulkifli Talib     | 23. Mr. Mickmin Charuchinda | 24. Assoc. Prof. Liew Hock Chark       |
| 25. Mr. Daniel S. Torres   | 26. Mr. Rosidi Ali          |  |



THE PLANNING MEETING BY EXPERTS ON THE  
RESEARCH FOR STOCK ENHANCEMENT  
OF SEA TURTLES

CONCORDE HOTEL SHAH ALAM  
21-22 DECEMBER 2004





## **I. INTRODUCTION**

1. The Planning Meeting by Experts on the Research for Stock Enhancement of Sea Turtles was organized by the SEAFDEC-MFRDMD (Marine Fishery Resources Development and Management Department) in Shah Alam, Selangor, Malaysia from 21-22 December 2004.
2. The Meeting was attended by experts from the participating countries namely Indonesia, Japan, Malaysia, the Philippines and Thailand. Representatives from WorldFish Center, WWF-Malaysia, SEAFDEC Secretariat, SEAFDEC Training Department and SEAFDEC-MFRDMD also attended the meeting.
3. The objectives of the Meeting are to:
  - review the results of the Conservation and Management of Sea Turtle program (2001-2004) supported by the Japanese Trust Fund I (JTF I),
  - conduct planning of activities under the new project on Stock Enhancement of Sea Turtles (2004-2008) supported by the Japanese Trust Fund IV. The project is considered as part of the Program on Research and Development (R&D) of Stock Enhancement for Species Under International Concerns, and
  - investigate interaction between sea turtles and fisheries particularly linkage with technical guidelines on the same topics as well as possible link to trade-related issues/barriers.

## **II. OPENING OF THE MEETING**

4. Welcome Remark was given by the Chief of SEAFDEC-MFRDMD, Mr. Raja Mohammad Noordin bin Raja Omar. The Deputy Secretary-General of SEAFDEC, Mr. Junichiro Okamoto delivered his statement and declared the Meeting open.

## **III. ADOPTION OF THE AGENDA**

5. The Agenda of the Meeting was adopted with some modifications of the Provisional Agenda.

## **IV. BACKGROUND AND EXPECTED OUTCOME OF THE MEETING**

6. The Deputy Chief of SEAFDEC-MFRDMD, Dr. Yoshinobu Konishi who is also the Co-Manager of JTF presented the background and the expected outcomes of the Meeting.







## **V. REVIEW OF ACTIVITIES UNDER THE JAPANESE TRUST FUND I (JTF I)**

7. The Meeting noted the following developments and past program achievements:
  - 7.1 Program on Conservation and Management of Sea Turtles in Southeast Asian Countries under ASEAN-SEAFDEC Fisheries Consultative Group (FCG) mechanism and supported by JTF I, which composed of:
    - Sea turtle hatchery management studies
    - Sea turtle tagging survey
  - 7.2 Finalization of the MOU on ASEAN Sea Turtle Conservation and Protection adopted at the 19<sup>th</sup> AMAF in 1997
  - 7.3 Establishment of ASEAN Network on Sea Turtles as a regional taskforce in the promotion of conservation and management of sea turtles in the region
  - 7.4 Development of the Turtle Research Database System promoted by Western Pacific Regional Fisheries Management Council (WPRFMC), Hawaii, USA, Department of Fisheries Malaysia and SEAFDEC-MFRDMD
  - 7.5 SEAFDEC and SEASTAR2000 cooperation on satellite tracking of sea turtles
  - 7.6 Use of turtle excluder devices (TEDs) in Southeast Asia
  - 7.7 The JTF I ends in 2004 and the following publications have been produced:
    - Conservation and Enhancement of Sea Turtles in the Southeast Asian Region,
    - A Guide to Set-up and Manage Sea Turtles Hatcheries in the Southeast Asian Region,
    - Report of the ASEAN-SEAFDEC Regional Consultation on Conservation and Management of Sea Turtles in Southeast Asia, and
    - Sea Turtle Tagging Manual.



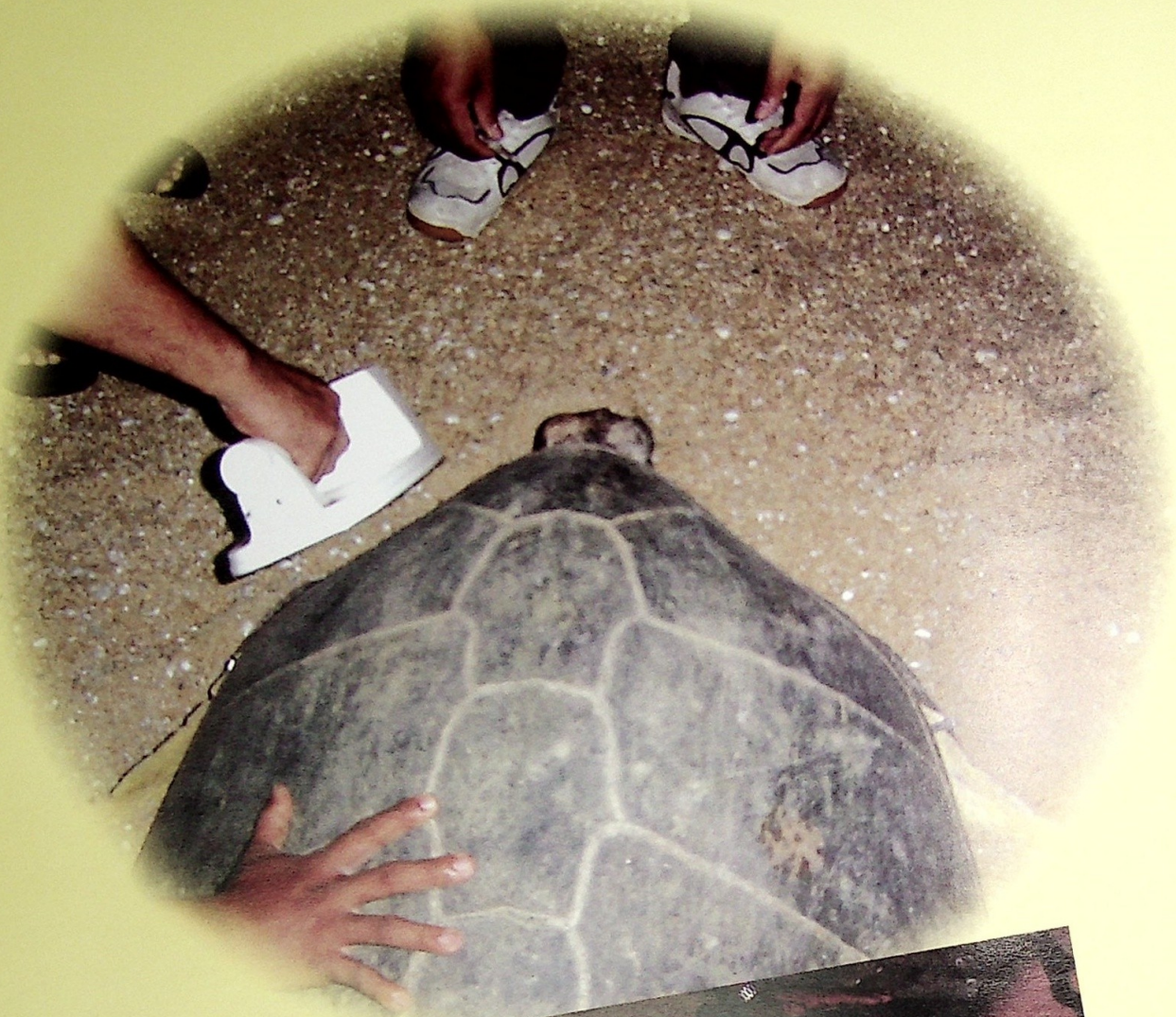




## **VI. TAGGING RESEARCH ACTIVITIES (INCLUDING SATELLITE TRACKING)**

8. The Meeting was informed on the progress and achievements made in the research and monitoring work in the ASEAN-SEAFDEC Member Countries where the turtle rookeries are concentrated:
  - Indonesia, Japan, Malaysia, the Philippines and Thailand presented their country research on sea turtle tagging as well as other activities such as head-starting techniques and DNA studies.
  - Tagging research was generally found to be a useful tool in understanding the behavior of sea turtles including migration and nesting population to support their conservation and management of sea turtles.
  - The tagging and monitoring of sea turtle nesting in a number of places in the region can be strengthened in the future plan of action together with the involvement and support from various organizations.
  - Tagging, satellite telemetry and recapture data are still widely used in the monitoring of head-started and wild juveniles as well as nesters to elucidate migration patterns and the location of foraging habitats.
  - A significant amount of information on migration was gathered from species-specific satellite tracking programs conducted in Indonesia, Japan, Malaysia and Thailand.
  - Captive rearing is able to provide information on food preference, health status, treatments and growth rate on a small number of sea turtles.
9. From the discussion session, the following issues were raised:
  - 9.1 The issue of bioethics in sea turtle research was suggested to be included in the development of guidelines/protocols for future research on sea turtles,
  - 9.2 Most data on tag recovery were from nesting turtles or as reported by fishers through incidental catches. The comparatively high recapture rate in Japan may be attributed to a better informed public,
  - 9.3 Importance of correct tagging position (the closer to the body is the better to avoid tag loss),
  - 9.4 Importance of awareness building to ensure public participation in tag recovery programs,
  - 9.5 Proper tagging technique, training and data management to ensure continuity of tagging programs, and
  - 9.6 Database for tags should not only limit to SEAFDEC's but also other tagging series ISO codes/series by other organizations. Networking and cooperation with relevant organizations should be promoted.







## **VII. HEAD-STARTING ACTIVITIES**

10. Malaysia and Thailand presented their experiences on head-starting research.
11. Head-starting is generally referred to as a technique for raising sea turtles in captivity for release in order to improve their survival rates in their early years.
12. In discussion, the following were raised:
  - The technique is still relatively new to the region, lacks in supporting information, has high cost implications and needs supporting expertise.
  - Major concerns are the survival of the head-started sea turtles in the wild and their ability to return to their natal grounds for nesting.
  - In some countries, head-starting probably an appropriate management tool and as such the scale has to be clearly defined against specific objectives.
  - Any new initiatives on head-starting should benefit from a thorough assessment of global and regional practices, successes and failures, and appropriate cost-benefit analysis.

## **VIII. DNA STUDY**

13. Malaysia and SEAFDEC-MFRDMD presented their research activities on DNA.
14. The Meeting noted that DNA analysis could contribute to understanding of the population structure of sea turtles. The genetic data has to be interpreted with caution. Two populations that exhibit non-significant divergence do not necessarily constitute a single homogenous population as both populations may have diverged only recently and genetic differences have not yet accumulated to form two separate populations.
15. In discussion, the following were raised:
  - To ensure reliable results, sufficient samples and number of primers should be used,
  - Sea turtle populations that are genetically homogenous do not necessarily mean that they belong to the same population, and
  - DNA study is only a tool and needs to be supported by other studies such as tagging.
16. For the regional and global initiatives in the genetic studies of sea turtles, the standardized methodology and guidelines should be developed and adopted so that comparative works can be made.







## **IX. INTERACTIONS BETWEEN SEA TURTLES AND FISHERIES**

17. The Meeting was informed on the results of the recently held FAO Technical Consultation on Sea Turtles Conservation and Fisheries held in Bangkok, Thailand from 29 November to 2 December 2004 to consider, *inter alia*, the preparation of guidelines to reduce sea turtle mortality in fishing operations.
18. The Meeting was briefed on the draft FAO guidelines particularly on interactions between sea turtles and fishing operations including:
  - Appropriate handling and release of sea turtles caught by fishing gear, and
  - Measures appropriate for all fishing practices particularly coastal trawls, purse seine and longlines.
19. It was stressed that there is a need to study the possible impacts of the draft FAO guidelines to the fisheries in the region. Results of the study could form a basis for the Member Countries for their finalization of the guidelines at the forth coming biennial meeting of FAO Committee on Fisheries in March 2005 in Rome.
20. In discussion, the following issues were raised:
  - When a sea turtle is caught dead, it should not be returned to the sea but brought back for further studies/autopsy. Some participants expressed concern that fishers may be worried of being charged for killing sea turtle if they brought it back. Investigation on guidelines for treatment of incidental catch of sea turtles should be conducted.
21. Research towards stock enhancement of sea turtles should ideally be complemented by appropriate policy changes.

## **X. PROPOSED DOCUMENTS OF JAPANESE TRUST FUND IV PROGRAM (JTF IV)**

22. The Meeting took note of comments made on the project proposal under Japanese Trust Fund IV by four working groups. The Meeting also requested SEAFDEC-MFRDMD, SEAFDEC-TD and SEAFDEC-Secretariat to re-examine the proposal taking into consideration recommendations made by the experts, availability of funds and practicability.
23. In view of future work, the Meeting made the following recommendations:
  - SEAFDEC-MFRDMD to circulate the revised project proposal together with comments made by this Meeting to ASEAN-SEAFDEC Member Countries for advance review and finalization at the next Regional Technical Consultation in March 2005.
  - SEAFDEC-MFRDMD, SEAFDEC-TD and SEAFDEC-Secretariat to develop an information kit compiling achievements and work completed under JTF I program for dissemination to publicize initiatives and efforts in conservation and management of sea turtles in Southeast Asia.
  - The SEAFDEC-Secretariat in collaboration with SEAFDEC-MFRDMD and Malaysia to submit an executive report to ASEAN on progress and achievements in the implementation of the MoU of ASEAN Sea Turtle Conservation and Protection and regional program on conservation and management of sea turtles in order to obtain high-level policy support for future implementation of the program.
  - SEAFDEC-MFRDMD to collaborate with SEAFDEC-AQD in the research and development of stock enhancement. This can be conducted through sharing of knowledge and experiences in stock enhancement research.



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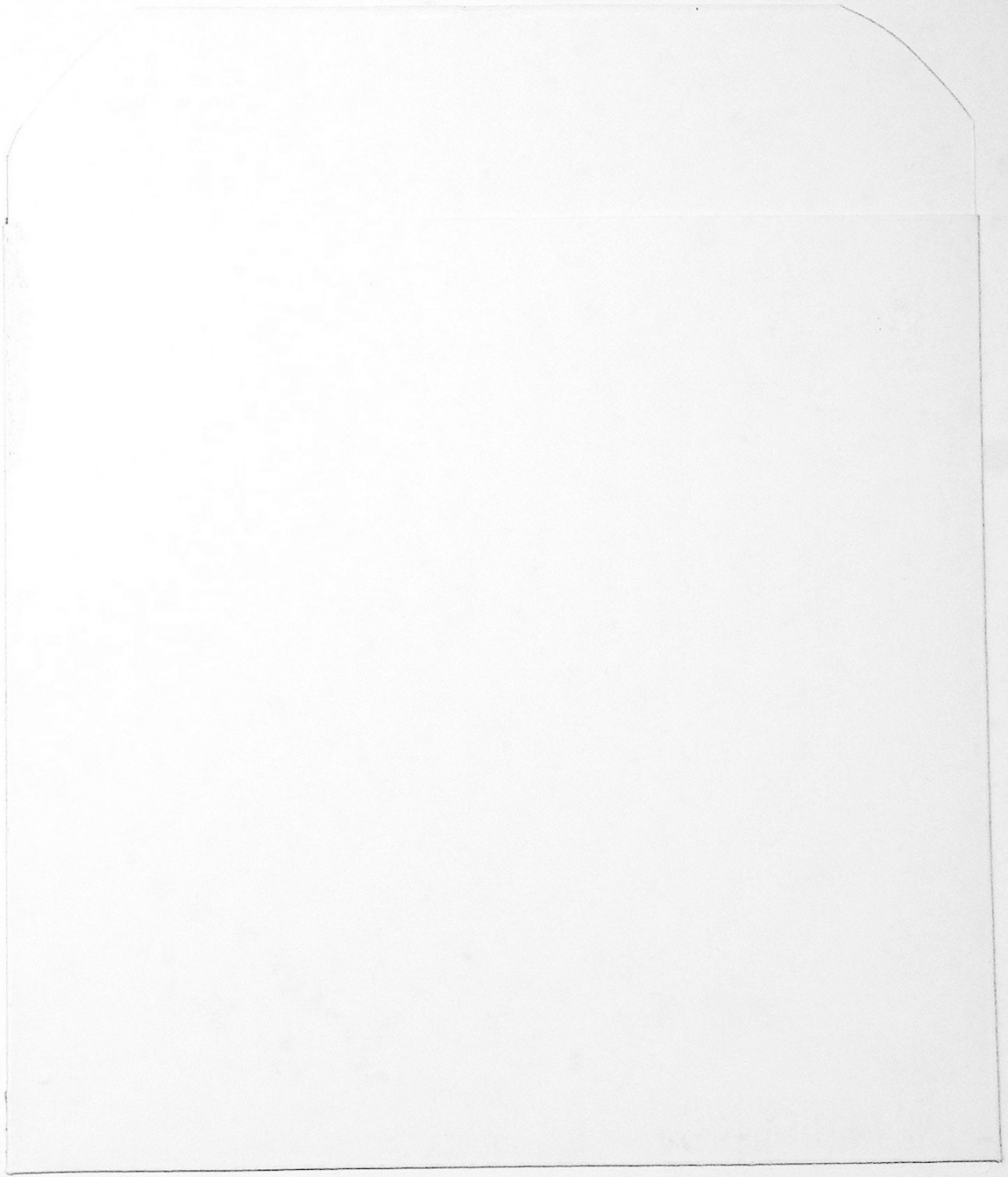
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