

# **Summary Report on 2<sup>nd</sup> Expert Meeting on Development of Toolkit for Aquaculture Planning and Management in Asia and the Pacific**

**25-26 November 2013**

**Bangkok, Thailand**

Prepared by

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The 2<sup>nd</sup> expert meeting on development of Toolkit for Aquaculture Planning and Management in Asia and the Pacific was convened during 25-26 November 2013 at FAO Regional Office for Asia and the Pacific, Bangkok, Thailand.

The meeting was participated by 6 invited international consultants and FAORAP technical officer coordinating the regional activity. The list of experts in provided in annex 1.

## **1 Background of the meeting**

As the follow-up to the recommendations from the FAO/NACA Regional Study/Workshop on adoption of aquaculture assessment tools in Asia-Pacific and the recommendation of 32<sup>nd</sup> Session of APFIC, FAO supported the process of developing an aquaculture planning and management toolkit for Asia and Pacific for supporting sustainable development of aquaculture industry in the region.

Six experts from around the world were recruited by FAO for developing the toolkit in early 2013. An meeting participated by all the experts was convened from 21-22 August 2013. The expert team agreed on the structure of the toolkit, template of individual tools, assignment for individual expert and the timetable of the work. The experts had worked individually in developing the draft tools and the overall introductory chapter after the workshop through the coordination of FAO technical officer in charge. The individual experts had completed the draft tools and introductory chapter assigned to them by the time the workshop to be held. The 2<sup>nd</sup> expert workshop was scheduled as part of the process for developing the aquaculture planning and management toolkit during the first expert workshop.

## **2 Objective of the meeting**

The expert workshop was an important process to help the individual experts to finalize the draft tools and introductory chapter document for presentation at the subsequent regional technical consultation. The expert workshop also served as the preparatory meeting for the regional technical consultation on development of aquaculture planning and management toolkit and strategy promoting its adoption in the region. The expert workshop was convened for following specific objective:

- To review the overall progress with the development of the draft tools and the introductory chapter of the toolkit by the individual experts;
- Share the draft tools and the introductory chapter developed among the expert team;

- Provide comments and suggestions to fellow experts on modifications of the documents developed;
- Discuss the remaining issues with the work;
- Finalize the structure of the toolkit and template of the individual tools;
- Discuss the conduction of the regional technical consultation on development of aquaculture planning and management toolkit and strategy promoting its adoption in the region

### **3 Proceeding of the meeting**

The meeting was attended by all the six experts involved in development of the aquaculture planning and management toolkit (Annex 1). The meeting was facilitated by the FAO coordinating officer and assisted by RAP NRE-Fi secretary.

#### ***3.1 Opening of the meeting***

The meeting was opened by the FAO Coordinating Officer with a welcoming message to the experts.

The FAO coordinating officer briefly reviewed the past work and activities related to the development of the aquaculture planning and management.

The FAO coordinating officer then introduced the purpose and expected delivery from the expert meeting.

#### ***3.2 Meeting modality***

The meeting participants discussed and agreed on the meeting agenda and the modality to conduct the meeting.

#### ***3.3 Presentation and discussion on the draft tools and introductory chapter of the toolkit***

The individual experts presented the draft introductory chapter of the toolkit and all together 16 individual draft tools under 5 thematic areas decided during the first expert workshop.

The meeting participants commented on fellow experts' work and made recommendation on modification of the draft documents. The participants had good discussion on some common issues arisen from the presentation and discussion.

#### ***3.4 Discussion and finalization of the toolkit structure and template for individual tools***

Based on the discussion on the draft individual tools, the participants then revisited the overall structure of the toolkit and the format of the individual tools and further modified the them.

#### ***3.5 Discussion and finalization of the program of the regional consultation and details of the proceeding of the consultation***

The FAO coordinating officer introduced the draft prospectus of the regional technical consultation on development of aquaculture planning and management

toolkit and the strategy promoting its adoption in Asia and the Pacific. The meeting participants had elaborated discussion on the consultation agenda. The expert agreed on the agenda items set for the consultation. The meeting participants made suggested changes on the time arrangement of the presentation sessions and working group sessions of the consultation. The modality for the working group session was also discussed.

#### **4 Outputs of the meeting**

After completing all the meeting agenda, the meeting concluded at noon time to allow the experts to concentrate on preparation of presentations at the regional consultation. The expert meeting was convened effectively and produced the following major outputs:

- All the experts got well informed with others' work in developing the individual tools and the overall introductory chapter of the toolkit, which is very beneficial to their own work;
- The experts are well advised by the fellow experts on how to proceed with their work and modify their draft documents to ensure the consistency of the documents developed in terms of technical contents and format;
- The further modified template of the individual tools (Annex 2);
- Finalized program of the regional technical consultation on development of aquaculture planning and management toolkit and strategy promoting its adoption in Asia and the Pacific and detailed modality to run the different session of the regional technical consultation (Annex 3).

## **Annex 1. List of workshop participants**

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## **Annex 2 Final structure of Aquaculture planning and management toolkit for Asia-Pacific**

### ***1. Introduction***

## **2. Aquaculture Site selection and zoning**

### ***2.1 Introduction***

### ***2.2 Tool 1 (Title)***

#### **2.2.1 Introduction (Background, What is the issue? For what purpose?)**

#### **2.2.2 Application (who will use it? Where will it be used? Under what systems?)**

#### **2.2.3 Approach**

- Element/parameters
- Decision tree (optional)
- Methodology
- Interpretation of results

#### **2.2.4 Resource requirement**

#### **2.2.5 List of annexes**

#### **2.2.6 References**

### **2.2 Tool 2**

### **2.3 Tool 3**

### **2.4 Tool 4**

## **3. Environment**

### **3.1 Introduction**

### **3.2 Tool 1**

### **3.3 Tool 2**

### **3.4 Tool 3**

## **4. Biosecurity and health**

### **4.1 Introduction**

### **4.2 Tool 1**

### **4.3 Tool 2**

### **4.4 Tool 3**

## **5. Food safety**

### **5.1 Introduction**

### **5.2 Tool 1**

### **5.3 Tool 2**

### **5.4 Tool 3**

## **6. Socioeconomics**

### **6.1 Introduction**

### **6.2 Tool 1**

### **6.3 Tool 2**

### **6.4 Tool 3**

## **7. Annexes**

## **FAO-APFIC-NACA Regional Technical Consultation on Aquaculture Planning and Management Toolkit and Strategies Promoting Its Adoption in Asia and Pacific**

**27-29 November, 2013, Bangkok, Thailand**

### **Background**

Fish and other aquatic animals are gaining more and more importance in people's animal food consumption and nutrition. Fish and other aquatic animals currently comprises some 17% of animal food consumption of the people globally, the contribution is much higher in Asia. Aquaculture industry has grown at the annual rate of 10% in Asia-Pacific in the past 3 decades, driven by the increasing demand of people for fish that cannot be met by the stagnant capture fish production, and increasing global trade of seafood. Asia and the Pacific region is now contributing more than 90% of global aquaculture production and provide very important source of livelihood for the rural population in the region. Growth of aquaculture industry in the past had been achieved from expansion of scale and intensification of production. The various environmental as well as social problems that came in the wake of a rapid growth could be attributed largely to a poorly planned and managed sector development. The anticipated population growth in the coming decades and changing diet habit of the people will significantly increase the demand for fish in the future, which is believed to be met by increased aquaculture production mainly from Asian region.

Fast growth of aquaculture in Asia region without proper planning and management has raised increasing concern over its sustainability. Aquaculture will have to continue to grow to meet the increasing demand for fish. But growth won't be sustainable if the planning and management are not improved significantly. In order to support sustainable development of aquaculture in the region, the APFIC regional consultative workshop on "Strengthening Assessments of Fisheries and Aquaculture in the Asia-Pacific Region for Policy Development and Management" was convened from 4-6 October 2011, Yangon, Myanmar, following the APFIC Session and EXCO recommendation. The regional consultation workshop recommended to initiate regional activities to promote the use of different assessment tools in supporting informed planning and management of aquaculture for sustainability in the region. The FAO/NACA regional study/workshop was conducted ( 3-5 July 2012 at Pattaya) following the recommendation and found that one of the key constraints in informed aquaculture planning and management is lack of practically applicable planning/management toolkit for the region and thus recommended development of appropriate aquaculture planning/management toolkit(s) as the priority for improving the planning and management of aquaculture for sustainability. The 4th APFIC RCFM (17-19 September 2012, Da Nang, Vietnam) included "Improving the planning and management of aquaculture for food security and social and economic benefit-Appropriate planning and assessment tools developed and shared within the region" in its recommendations to the 32<sup>nd</sup> APFIC Session, which was endorsed by the 32<sup>nd</sup> APFIC Session. The subsequently convened FAO/APFIC/NACA Regional Consultation (9-11 October 2012, Bangkok, Thailand) on Sustainable Intensification of Aquaculture also recommended strengthening of national capacities for situation appraisal, carrying capacity assessment, EIA, zoning (regional); and to make the tools for this more readily accessible".

Now it is widely recognized that developing appropriate planning/management toolkit(s) and promoting their application in the member countries is a priority action needed for supporting the sustainable aquaculture development in the region. In order to address such regional priority and as well as to contribute to the FAO Regional Priority C "Enhancing equitable, productive and sustainable natural resource management and utilization" (Identified by the 31st

FAO Asia-Pacific Regional Conference, 12-16 March 2012, Hanoi, Viet Nam) and the new FAO Organizational Outcome "Stakeholders make evidence-based decisions in the planning and management of agriculture and natural resources to support the transition to sustainable agriculture through monitoring, statistics, assessment and analysis" (Strategic Objective 2-Outcome 4), a draft aquaculture planning and management toolkit for Asia and the Pacific is now being developed by expert team with FAO regular program support. The regional technical consultation is an important process to finalize the toolkit and develop appropriate regional strategy to promote its adoption in the member countries in the Asia-Pacific region.

## **Objective**

The objective of the regional technical consultation is to significantly increase the general awareness of the importance of improving planning and management for sustainable aquaculture development through the adoption of the relevant planning and management tools among the different stakeholders in the region.

Its purposes are to finalize an aquaculture planning and management toolkit and recommend a regional strategy to promote the adoption of the toolkit in the region.

The consultation will provide a platform for sharing of experiences in the use of aquaculture planning and management tools in Asia and other regions of the world. The consultation will be an important technical process for finalizing the draft aquaculture planning and management toolkit developed by the FAO expert team. The consultation will provide a good opportunity for relevant stakeholders to review and critique the toolkit, identify key issues and constraints for effective adoption of planning and management tools in aquaculture development and recommend appropriate regional strategy to the forthcoming APFIC RCFM and Session on promoting wide adoption of the toolkit.

## **Organization**

The consultation will be sponsored by FAO and organised and convened by the Asia-Pacific Fishery Commission (APFIC) with support of regional organizations including but not limited to the Network of Aquaculture Centres in Asia-Pacific (NACA), and Southeast Asia Fisheries Development Center-Aquaculture Department (SEAFDEC-AQD).

## **Participation**

Government representatives of some twenty countries in Asia and the Pacific Region, most of which are members of APFIC and NACA will be invited to the consultation. The consultation will also bring together representatives of relevant regional and international bodies, prominent experts and representatives of other stakeholder in a roundtable consultation. The anticipated consultation participants will be around 50 in total.

## **Process**

The consultation will be convened to facilitate information sharing in a participatory and consultative manner. Global and regional status of adoption of aquaculture planning and management tools will be presented by the invited experts and opened for discussion. Draft aquaculture planning and management toolkit/tools developed by FAO team of experts will be introduced by the experts for review, comments and suggested modifications. The key issues and constraints in adoption of aquaculture planning and management tools identified by the regional study in 9 countries will be introduced and a regional strategy addressing them will be drafted through consultation.

## **Outcome**

The expected outcome of the regional technical consultation will be improved aquaculture planning and management through wider adoption of appropriate planning and management tools, that will contribute to sustainable development of aquaculture industry in Asia and Pacific region. The consultation will enhance the overall awareness of the importance of aquaculture, make practically applicable aquaculture planning and management toolkit available to the different users and provide guidance to countries in the region on how to promote wider and effective adoption of appropriate tools for planning and management.

## **Outputs**

The regional consultation is expected to produce the following outputs:

A consensus on the importance of effective adoption of aquaculture planning and management tools in achieving sustainable development through enhanced awareness and better understanding of current status;

Well reviewed draft aquaculture planning and management toolkit with comprehensive technical comments and suggestions for finalization of the toolkit immediately after the consultation;

Regional strategy for guiding country government, regional organizations and private sector in promoting effective adoption of aquaculture planning and management tools based on the effective identification of the issues and constraints;

Recommendations to the 32<sup>nd</sup> Session of APFIC related to promotion of adoption of aquaculture planning tools for strengthened planning and management for sustainable development



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## Draft Programme

### FAO-APFIC-NACA Regional Technical Consultation on Aquaculture Planning and Management Toolkit and Strategies Promoting Its Adoption in Asia and Pacific

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**27-29 November 2013, Novotel Bangkok Ploenchit Sukhumvit, Bangkok Thailand**

26 November/Tuesday	
Arrival of Participants	
27 November/Wednesday	
0830 - 0900	Registration and Assembly
<b>Opening Session</b> (chaired by Weimin Miao, FAO)	
0900 - 0930	<ul style="list-style-type: none"><li>• <b>Welcome/opening remarks</b>, Mr. Vili Fuavao, FAO Deputy Regional Representative for Asia and the Pacific on behalf of Mr. Hiroyuki Konuma FAO Assistant Director General and Regional Representative for Asia and the Pacific</li><li>• <b>Welcome/opening remarks Mr. Eknath Ambekar</b>, Director General, NACA</li><li>• <b>Welcome/opening remarks Mr. Chirdsak Vongkamolchoon</b>, Deputy Director General, Department of Fisheries, Ministry of Agriculture and Cooperatives, Thailand</li></ul>
<b>Session I Introduction to Aquaculture P &amp; M tools and the Regional Technical Consultation</b> (Chaired by Weimin Miao, FAO/C. V. Mohan, NACA)	
0930 - 0940	Introduction to the regional consultation
0940 – 0955	Global overview on Aquaculture Planning & Management Tools and Their Adoption
0955 -1010	Regional status of adoption of aquaculture P & M tools in Asia and the Pacific
1010-1025	Framework of the P & M toolkit for Aquaculture in Asia and the Pacific
1020 - 1045	<b>Group Photo &amp; Coffee break</b>
<b>Session II Presentation of draft Aquaculture P &amp; M tools</b> (Chaired by Weimin Miao, FAO/C. V. Mohan, NACA)	

1045 - 1145	Presentation and plenary discussion on draft tools related to <b>Site selection and zoning</b> <ol style="list-style-type: none"> <li>1. Site selection of floating cages</li> <li>2. Visual impact analysis</li> <li>3. Flood risk analysis</li> </ol>
1145 -1245	Presentation and plenary discussion on draft tools related to <b>Environment impact assessment and monitoring</b> <ol style="list-style-type: none"> <li>4. Environmental Carrying Capacity</li> <li>5. Environment Impact Assessment</li> <li>6. Environment management and monitoring</li> </ol>
12:45 -1400	<b>Lunch break</b>
1400 – 1500	Presentation and plenary discussion on draft tools related to <b>Social &amp; economic impact assessment</b> <ol style="list-style-type: none"> <li>7. Socioeconomic impact assessment</li> <li>8. Feasibility study</li> <li>9. Aquaculture project monitoring and evaluation</li> </ol>
1500 – 1600	Presentation and plenary discussion on draft tools related to <b>Food safety and traceability</b> <ol style="list-style-type: none"> <li>10. Farm level hygiene</li> <li>11. Chemical residue control</li> <li>12. Traceability</li> </ol>
1600 - 1615	<b>Coffee break</b>
1615 - 1715	Presentation and plenary discussion on draft tools related to <b>Biosecurity and animal health management</b> <ol style="list-style-type: none"> <li>13. Farm level biosecurity plan</li> <li>14. Import Risk Analysis</li> <li>15. Emergency disease preparedness and response plan</li> </ol>
1715 - 1745	<b>Overall discussion</b> (Chaired by Weimin Miao, FAO/C. V. Mohan, NACA)
1830	<b>Reception dinner</b>
<b>28 November/Thursday</b>	

	<b>Session III Working group sessions and the output presentation (facilitated by expert team)</b>
0830 – 1115	<p>Working group discussion III- 1 (facilitated by expert team)</p> <p>Working group 1: Environment carrying capacity + Environment impact assessment (Dr. White)</p> <p>Working group 2 <b>Checklist approach for site selection</b> (Dr. Ross) + Import risk analysis (Dr. Perera)</p> <p>Working group 3 Economic impact assessment (Mr. Bueno) + Traceability (Mr. Andre)</p> <p><i>Coffee/ served during the working group session</i></p>
1115-1230	Presentation of outputs from Working group discussion III-1 and plenary discussion (Chaired by Weimin Miao, FAO/C. V. Mohan, NACA)
1230 -1330	<b>Lunch break</b>
1330- 1615	<p>Working group discussion III-2 (facilitated by expert team)</p> <p>Working group 1 Farm level hygiene + Chemical residue control (Mr. Andre)</p> <p>Working group 2 Environment management and monitoring (Dr. White) + Site selection for pond aquaculture (Dr. Ross)</p> <p>Working group 3 Emergency disease preparedness and response plan (Dr. Perera) + aquaculture project Monitoring and Evaluation (Mr. Bueno)</p> <p><i>Coffee served during the working group session</i></p>
1615 - 1730	Presentation of outputs from Working group discussion III-2 and plenary discussion (Chaired by Weimin Miao, FAO/C. V. Mohan, NACA)
<b>29 November/Friday</b>	
0900 - 1030	<p>Working group discussion III-3 (facilitated by expert team)</p> <p>Working group 1 Farm level biosecurity plan (Dr. Perera)</p> <p>Working group 2 Site selection/zoning of floating cages (Dr. Ross)</p> <p>Working group 3 Feasibility study (Mr. Bueno)</p>
1030-1045	<b>Coffee break (during working group session)</b>
1045 - 1130	Presentation of outputs from Working group discussion III-3 and plenary discussion (Chaired by Weimin Miao, FAO/C. V. Mohan, NACA)
	<b>Session IV Recommendation for promoting adoption of aquaculture planning and management tools in Asia and the Pacific</b>
1130 - 1200	Introduction to the Working Group Session IV – Recommendations for promoting adoption of aquaculture planning and management tools in Asia and the Pacific
1200 - 1300	<b>Lunch break</b>
1300 - 1430	Working group session VI <b>Recommendations for strategy and actions promoting adoption of aquaculture planning and management tools in Asia and the Pacific (focused on issues/constraints)</b>

	<p>Working group 1 - Awareness raising and dissemination of Aquaculture P &amp; M tools</p> <p>Working group 2 - Enabling environment and capacity building for adoption of the tools</p> <p>Working group 3 - Regional collaboration and exchange for promoting the adoption of the tools</p> <p>Emphasize: who does what? (international/Regional organization, national government, sector)</p> <p>Facilitated by expert team</p>
1430 - 1445	<b><i>Coffee break</i></b>
1445 – 1545	Presentation of Working group session VI outputs and plenary discussion (Chaired by Weimin Miao, FAO/C. V. Mohan, NACA)
1545 – 1615	Closing session