

#### 1<sup>st</sup> Meeting of RWG-M

## Scaling up Sustainable Mariculture in the YS: Terms of Reference for Regional and Demonstration Activities

Secretariat
Rongcheng, 26-27 October 2017

### Activity 4 of Output 2.3.1 (1)

Survey of coastal areas suitable for IMTA and economic analysis of benefits for replication across YSLME

- Develop feasibility assessment criteria for development of IMTA in coastal areas of YSLME;
- Develop survey plan and conduct IMTA feasibility survey in coastal areas of YSLME and identify locations, areas, current mariculture practice and availability of markets;
- Conduct "willingness to participate" survey of coastal communities or companies in suitable coastal areas for IMTA operations;
- Assess capacity needs of suitable coastal areas for IMTA and availability of technical support;
- Assess existing enabling policy environment for development of IMTA, and identification of projects and programs that facilitate IMTA replication;
- Identify institutional, policy, technical, financial and managerial gaps in replication of IMTA in identified coastal areas suitable for IMTA operations;

### Activity 4 of Output 2.3.1 (2)

Survey of coastal areas suitable for IMTA and economic analysis of benefits for replication across YSLME

- evaluate the incremental ecosystem services of full operation of IMTA in suitable areas in YSLME, and assess the incremental costs of IMTA operations.
- prepare feasibility study report in English and Chinese.
- Facilitate the development of Dongchu Island Fishery Corporation in Sungo Bay as an IMTA demonstration and training center under YSLME Phase II Project;
- Assist in developing programs, mobilizing resource persons and organizing annual sustainable mariculture conference in China;
- Assist in preparing and finalizing conference proceedings;
- Assist in conducting one training program of IMTA in collaboration with IW:Learn for Asian LMEs;

# Activity 5 of Output 2.3.2 (1)

#### Develop national plan to promote IMTA

- based on the inputs from assessment of suitable IMTA sites in YSLME, identify the suitable sites for promoting IMTA;
- identify the policy, institutional, technical, legal (access to sea use), financial and market barriers and bottlenecks that impede the promotion of IMTA in YSLME and across China;
- formulate reforms and improvements to strengthen the policy and regulatory framework, institutional capacity, technical skills, consumer awareness to promote IMTA at provincial and national levels;
- conduct rapid needs assessment and identification of types of training courses needed for replication of IMTA;
- prepare first draft and review by NWG-M;
- consult with stakeholders in particular regulatory bodies and aquaculture associations and societies and revise the promotion plan;

# Activity 5 of Output 2.3.2 (2)

#### Develop national plan to promote IMTA

- finalize the draft for review and adoption by Fishery Bureau of Ministry of Agriculture;
- prepare a report for integration into national report in implementation of YSLME SAP;
- integrate lessons and recommendations into TDA and revised YSLME;

## Activity 1 of Output 2.3.2 (1)

#### Developing IMTA Training Modules

- conduct needs assessment and identify target audience of the training program, current roles, knowledge gaps, and outcomes of the training program
- Develop the training modules and materials, which include the following elements:
  - Background and descriptive information
  - Directions on how to use the curricula
  - Course planning forms and checklists
  - Guidance on tailoring each particular workshop or training course so it matches the needs or wants of participants, or fits a program's needs
  - Specific, measurable, and realistic learning objectives
  - Clear and complete modules content
  - Integrated evaluation plan/tools

# Activity 1 of Output 2.3.2 (2)

#### Developing IMTA Training Modules

- Contents of the training modules as a minimum should include:
  - Sustainability principles in IMTA
  - IMTA modalities in China and elsewhere
  - design of an IMTA system
  - identification of biological and environmental factors affecting IMTA system
  - key considerations in IMTA location selection
  - key considerations in species selection under different trophic levels
  - Assessment of carrying capacity of mariculture ecosystem under different IMTA modalities
  - design of a monitoring program for IMTA
  - density control;
  - economic valuation of IMTA
  - suggested further readings

# Activity 1 of Output 2.3.2 (3)

#### Developing IMTA Training Modules

- Present the training modules for review and recommendation for adoption for quality control;
- Assist in adapting the training modules into an online version for use by virtual EBM-LME academy.

## Activity 1 of Output 2.3.1 (1)

#### Develop Regional Guidelines for Sustainable Mariculture

- Agree on scope of guidelines for sustainable mariculture
- Establish a guideline development group (GDG) in consultation with the RWG on Sustainable Mariculture. The GDG agrees on the key questions, considers the evidence and has considerable influence on the final guideline recommendations for endorsement by National Working Group (NWG) and adoption by the Interim Commission Council. The participation of representatives of all key disciplines affected by the guideline topics is highly recommended.
- Conduct bottleneck analysis in mariculture industry, and generate insight into the obstacles of mariculture industry to ensure the guideline will help to focus on practical situations with most improvement potential and to facilitate the applicability of a guideline.
- scope the guideline, and define the overall objectives of the guideline (e.g. potential impact and benefits), the target users to whom the guideline is meant to apply and its relation to other existing documents, and key stages of mariculture.

## Activity 1 of Output 2.3.1 (2)

#### Develop Regional Guidelines for Sustainable Mariculture

- Formulate key questions that guidelines seek to address in each stage. Effective and efficient guideline development involves asking and answering key questions. Key questions should be clear, focused and closely define the boundaries of the topic. They are important both as the starting point for the subsequent systematic literature review and as a guide for the development of recommendations.
- Identify and select evidence towards answering the key questions, which includes looking for existing guidelines addressing the same question(s), evidence search, and summarizing and evaluating the evidence to avoid bias.
- Combine and formulate recommendations based on selection and summary of evidence that propose a course of action. Upon reaching consensus on recommendations by the GDG, the draft version of the guideline can be written.

# Activity 1 of Output 2.3.1 (3)

#### Develop Regional Guidelines for Sustainable Mariculture

- Write the guideline's draft version, ensuring the guidelines are comprehensive and flexible enough to allow adaptation to diverse settings and circumstances of on-the-ground practice. The guidelines consist of the following parts and order:
  - general introduction (e.g. need) and scope of the guideline
  - key question-related part (e.g. explicit links between recommendations and available evidence) and
  - a final general part (e.g. abbreviations, glossary, guideline development group, research recommendations, methodology, reviewers, disclaimer).
- Review by its future users and approval by the Interim Commission Council.

## Activity 3 of Output 2.3.1 (1)

### Develop BAP of IMTA

- Identify a response person or coordinator for development and facilitation of consultation and approval of the BAP.
- Prepare a plan for BAP development, review and approval by the MSTP and Interim Commission Council;
- Identify and establish a BAP development group.
- Design the review and approval process for the standards development and certification of IMTA under the framework of Interim Commission Council. The structure should consider a body to ensure guidance and oversight for the process with broadbased membership from aquaculture industry, nongovernmental conservation or aquaculture associations and societies, academic and regulatory bodies, etc.
- Identify and establish the technical committee who will report its recommendations to the Interim Commission Council for final standards approval.

# Activity 3 of Output 2.3.1 (2)

### Develop BAP of IMTA

- Define the most important elements of IMTA, including but not limited to acceptable species, materials, methods and processes;
- Identify appropriate quantitative performance metrics and targets that directly address food safety, environmental and social concerns, and product traceability. SMART criteria of the BAP standards should be applied in the field.
- Develop auditing procedures by which to evaluate adherence to those practices.
- Define the knowledge, experience and credentials for auditors of BAP standards. Compliance with the BAP standards is determined by auditors supplied by independent certification bodies with training in the standards.

# Activity 3 of Output 2.3.1 (3)

### Develop BAP of IMTA

- Review and ensure the BAP standards and certification procedures are consistent with relevant international guidelines for aquaculture certification programs, such as the United Nations Food and Agriculture Organization (FAO) Technical Guidelines on Aquaculture Certification and the International Social and Environmental Accreditation and Labeling Alliance (ISEAL) Code of Good Practice for Setting Social and Environmental Standards.
- Conduct stakeholder analysis and prepare a stakeholder participation plan to ensure that the overall process is transparent.
- Prepare a public appeals process for scrutiny of accountability, quality and impartiality of the development and certification process.
- Prepare and revise a preliminary draft for comments by MSTP and Interim Commission Council.

### Activity 3 of Ouput 2.3.2 (1)

### Demonstration of IMTA in three sites

- Prepare criteria for selection of demonstration sites and determine demonstration sites;
- Conduct baseline assessment of demonstration sites using relevant indicators of project monitoring and evaluation plan;
- Identify gaps, needs and feasibility of application of IMTA in demonstration sites, and conduct cost-benefit analysis of each demonstration site;
- Determine objectives, tasks, interventions, equipment needed, budget, roles of UNOPS, demonstration site and service provider (YSFRI), timeframe, indicators of success, frequency of monitoring and appraisal of each demonstration site;
- upon signing of agreement/subcontract with UNOPS, service provider (YSFRI) and demonstration site, mobilize expertise to supply solutions to demonstration sites in accordance with the schedule and tasks specified in the agreement/subcontract.

### Activity 3 of Ouput 2.3.2 (2)

### Demonstration of IMTA in three sites

- Submit quarterly progress report to PMO and report any variance and issues that will affect the implementation of the demonstration projects;
- Submit technical or thematic report to PMO in accordance with the agreed deliverable and request for advance of fund;
- Facilitate and coordinate visits and monitoring missions of UNOPS, SOA, RWG-M members, auditors, evaluators and trainees and report the progress of demonstration during the visits and missions;
- Assist in preparation of information and materials for communication purposes of the project;
- Collect and analyse monitoring data and report to PMO in accordance with the scheduled deliverables;

### Activity 3 of Ouput 2.3.2 (3)

### Demonstration of IMTA in three sites

- Coordinate the certification of compliance of the demonstration site with GAP of IMTA by a third party, if necessary;
- conduct pilot CBA and valuation studies of IMTA demonstration in three sites;
- Prepare a case study to showcase the costs and benefits of IMTA to promote wide application of the technologies.