

**Report of Inception workshop on
Regional Initiative on Sustainable Intensification of Aquaculture
for Blue Growth in Asia-Pacific**



**FAO Regional Office of Asia and the Pacific
Bangkok, 2-3 October, 2014**

Contents

Executive Summary 3

Background 4

Purpose of the Workshop 4

Conduction of the workshop 4

 1. Opening Session 4

 2. Introductory Session 5

 Main areas of work of the regional initiative 5

 Key points from the discussion 6

 3. Country presentation on status of aquaculture intensification 7

 Some key points from Country presentations and feedback on the regional “Blue Growth” initiative 7

 4. Development of country work plan 9

 5. Closing Session 9

Annex 1 - List of participants 10

Annex 2 – Programme 14

Annex 3 Draft Bangladesh country workplan 16

Annex 4 Draft Indonesia country workplan 18

Annex 5 Draft Philippines country workplan 20

Annex 6 Sri Lanka country workplan 23

Annex 7 Timor Leste country workplan 25

Annex 8 Vietnam country workplan 26

Executive Summary

The Inception workshop on Regional Initiative on Sustainable Intensification of Aquaculture for Blue Growth in Asia-Pacific was conducted for the purpose to formally kick off the implementation of the regional initiative in all six focus countries of the regional initiative. The workshop was conducted from 2-3 October 2014 at FAO Regional Office for Asia and the Pacific, Bangkok, Thailand.

The inception workshop was participated by the FAO Representative/Assistant Representative in the six regional initiative focus countries (Bangladesh, Indonesia, Philippines, Sri Lanka, Timor Leste and Vietnam) and the government focal point from each regional initiative focus country. Some delivery team member from FAO RAP and HQ and other concerned officers at RAP also joined the inception workshop.

During the workshop, the participants were well introduced with the concept and framework of both the regional initiative on sustainable intensification of aquaculture for blue growth in Asia-Pacific and the global blue growth initiative. The workshop also helped the clarification on some definitions and relationship between the regional initiative and the global initiative.

The country focal points introduced the current status of aquaculture intensification in their respective countries and the issues with the aquaculture intensification that needs to be addressed through the implementation of the regional initiative.

The country focal points worked with the FAO country representative/assistant representative in developing a draft country work plan for implementing the regional initiative in each focus country. The draft country workplan was presented and commented at the workshop.

The workshop discussed the implementation strategy of the regional initiative and the immediate actions to be taken at the country level for implementing the regional initiative. It was agreed that the country focal points will report to the concerned government authority and finalize the country work plan for implementing the regional initiative at respective focus country and submit the final country work plan to FAO shortly after the workshop.

Background

Regional initiative was decided by FAO senior management to be used as a major vehicle to implement the FAO new organizational strategic objective framework aiming to create impacts at the country level. Although the development of RAP regional blue growth initiative started in late 2013, it took long time for the regional initiative to be formulated and endorsed by the senior management due to a number of reasons, in particular the funding constraint.

The concept note and framework of the regional initiative on sustainable intensification of aquaculture for blue growth in Asia-Pacific was finally endorsed by RAP management, SO2 Coordinator and ADG FI in late August 2014. The regional initiative included 6 focus countries in the region, namely Bangladesh, Indonesia, Philippines, Sri Lanka, Timor Leste and Vietnam, which are in the different status of aquaculture development and intensification. The six focus countries have different degree of engagement in the process of the development and implementation of the regional initiative. The perception of the focus country governments to the regional initiative also vary. On the other hand, there was no special fund allocation from HQ for the implementation of the regional initiative. Therefore, RAP senior management envisaged the necessity to organize an formal inception workshop to increase the common understanding of all player to the concept and framework of the regional initiative and develop appropriate country work plan and strategy for effective implementation of the regional initiative, although some focus countries had started the implementation of the regional initiative activities since the beginning of 2014.

Purpose of the Workshop

The purpose of the workshop was to:

- Build common understanding on the background to Blue Growth, covering the concept, objective, expected outputs and implementation strategies of the regional initiative
- Share the information on status of aquaculture intensification in the focal countries
- Develop country level implementation plan of the regional initiative with identified sources of financial resourcing
- Suggest regional implementation strategies - Identify opportunities or issues which would benefit from a regional approach (e.g. policy harmonization, exchange of knowledge, technical cooperation) or support
- Discuss issues related to the implementation of the regional initiative

The agenda of the workshop is presented in Annex 2.

Conduction of the workshop

The inception workshop for the FAO “Regional Initiative on Sustainable Intensification of Aquaculture for Blue Growth in Asia-Pacific” was convened at the FAO Regional Office of Asia and the Pacific, Bangkok, 2-3 October, 2014. It was attended by country focal points appointed by concerned government authorities in the regional initiative focus countries and FAO Representatives and Assistant representatives from Philippines, Sri Lanka, VietNam, Indonesia, Bangladesh, Timor Leste and FAO regional initiative delivery team members from RAP and HQ technical department. The inception workshop was facilitated by the delivery manager of the regional initiative. The participants list is included as Annex 1.

1. Opening Session

The inception workshop was opened by Mr. Konuma, the FAO Assistant Director General/Regional Representative for Asia and the Pacific with his welcome remark. In his

remark, Mr. Konuma reiterated the importance of the regional initiative in implementing the overall FAO new Strategic Framework and the justification of focusing the regional initiative on sustainable intensification of aquaculture in Asia-Pacific. He also emphasized the importance of the inception workshop and expected outputs from the inception workshop.

The opening remark of Mr. Konuma was followed by the self introduction of the workshop participants. The workshop participants also provided their own understanding and expectation to the implementation of the regional initiative.

2. Introductory Session

In the introductory session, the delivery manager of the regional initiative first introduced the objective, expected outputs and modalities of the workshop with a brief presentation.

Mr. Kimpara RAP Planning Officer made a presentation on FAO new Strategic Framework and the roles of the Regional Initiatives in the implementation of the new Strategic Framework.

Mr. Subasinghe, Chief of FAO FIRA and as well as the alternate delivery manager of the FAO global blue growth initiative made a comprehensive presentation on the blue growth and global aquaculture advancement program. In his presentation, he provided an overview on the status and prospectus of the world fisheries and aquaculture, the concept of the blue growth and relationship of the global initiative and the regional initiative.

Mr. Miao, the delivery manager of the regional initiative made a presentation on the Regional Initiative on Sustainable Intensification of Aquaculture for Blue Growth. He introduced the background and rationale for implementing the regional initiative, the overall framework of the regional initiative and the implementation details of the regional strategy.

Main areas of work of the regional initiative

The Blue growth RI is designed to:

Support member countries in identifying options for addressing key governance issues in achieving sustainable aquaculture growth through appropriate regional and national consultation process, develop relevant regional and national policy, strategy and action plan

1. Increase farmers' adaptability to climate change impact and resilience to natural disasters and socioeconomic risks through development and promote innovative aquaculture management concept and practices;
2. Reduce negative environmental and social impacts of aquaculture intensification and through establishing effective aquaculture bio-security and disease surveillance and control system, application appropriate planning and management tools and responsible use of resources
3. Support the member governments in improving the access of poor rural aquaculture farmers to quality production inputs, sustainable production technology and market for improved productivity and economic efficiency
4. Improve management of forestry (mangrove), water, land and tenure that will contribute to sustainable intensification of aquaculture (specific activities to be identified and resource to be mobilized)

For the Regional Initiative short term focused technical support that added a blue growth dimension to on-going programmed activities could be considered. This would see advisory technical support such as:

- Develop blue growth-type pilot activities
- Improve production efficiency and overall output
- Capture efficiencies in the value chain

- Reduce environmental footprint
- Increase resilience or introduce safeguards
- Provide technical and policy advisory support.

Longer term plans for more comprehensive programmes can be, but will require identification of resourcing.

Key points from the discussion

The presentations were followed by the plenary discussion and clarification on some specific issues related to the presentations. The key points from the discussion are summarized as below:

- What is Blue Growth?

In some of the “Blue Growth/Blue Economy” documentation (e.g. APEC definition of Blue Economy, 2014), there has been an apparent emphasis on oceans and the marine domain, with less emphasis (or exclusion) on inland waters/freshwater. Can this be clarified?

For FAO and the Regional Blue Growth Initiative, “Blue growth” is equally applicable to both marine and freshwaters.

The workshop proposed a revised working definition for “Blue growth” as :

*Sustainable growth and development emanating from economic activities in the oceans, **freshwaters**, wetlands and coastal zones, that minimize environmental degradation, biodiversity loss and unsustainable use of aquatic resources, and maximize economic and social benefits”.*

This incorporates the word “freshwaters” to ensure that the definition is not misinterpreted as focusing solely on marine and brackish water environments

- What is the scope of the regional blue growth initiative?

In the documentation, there is mention of water, land forests, ecosystems, but elsewhere there are specific references to aquaculture. How does the blue growth initiative address interactions of aquaculture in the broader environment and ecosystem (including environmental, social and economic impacts)?

- FAO has a corporate/global initiative on blue growth and covers marine and freshwaters, aquaculture and capture fisheries
- The RAP regional initiative is focused on aquaculture (and the intensification of aquaculture in particular) and specifically the challenges of sustainable intensification. It will also cover inter-sectoral challenges (e.g. GEF peatland project in Indonesia; Culture based inland fisheries)

The BGI should aim at improving the governance and management of the aquatic resources, the conservation of their biodiversity and habitats, the empowerment of concerned communities, including through better adaptation of vulnerable communities to climatic changes and improved resilience to natural disasters and crises.

- “Blue economy” is a term that seems to be used interchangeably with “blue growth”

The terminology “**Blue Growth**” is preferred by many instead of “**Blue Economy**”, because there has been criticism in some development circles of the “**green economy**” concept, in particular its emphasis on zero or **limited growth**.

Blue economy is a term coined for sustainable development with emphasis on renewable resources and resource use efficiency, for economic development. Several countries (e.g. Indonesia, Bangladesh) have now adopted policies referring to blue economy.

Provided there is sufficient emphasis on minimizing environmental impacts and maximizing sustainability, blue economy approaches can be considered equivalent to Blue Growth.

- What do we mean by “**intensification**” of aquaculture”?

Intensification of Aquaculture refers the process to improve production efficiency and economic return of an aquaculture unit through:

- Increased use of inputs, such as feed, seed and energy etc.
- Adoption of new technology, such as aeration, genetically improved seed and modified culture facilities etc.
- Adoption of new management practices: intensive feeding, health management and water management etc.
- What do we mean by “**Sustainable intensification of aquaculture**”

Sustainable intensification of aquaculture refers to any kinds of managerial and technical interventions/measures/practices to promote sound environmental benefits, economic viability, farmers’ resilience and social acceptance of intensive/semi-intensive aquaculture while enhancing the productivity and improving resource use efficiency through strengthened regulatory and governance, innovative farming systems/practices/technologies, improved farm management practices and other social interventions (e.g. farm organizations).

3. Country presentation on status of aquaculture intensification

The country focal points from the six regional initiative focus countries made presentations on the status of aquaculture development and intensification of aquaculture in each country. The Country focal points also introduced the issues and constraints related to the intensification of aquaculture and some initiatives taken by the country governments to address the issues.

Some key points from Country presentations and feedback on the regional “Blue Growth” initiative

Participating countries presented their ongoing programmes and priorities, particularly related to “Blue growth”.

Bangladesh	<p>Bangladesh welcomes initiative as it is experiencing challenges of aquaculture development in terms of impacts , from effluents, obstruction of drainage and use of exotic species. There are blue growth developments such as closed system aquaculture and use of improved breeds.</p> <p>Indicative priority areas:</p> <ul style="list-style-type: none"> • Addressing environmental impacts of aquaculture • Would benefit from a marine fishery strategy (similar to the aquaculture strategy) • Code of conduct
Indonesia	<p>Indonesia welcomes the initiative and has a comprehensive programme under a blue economy approach. It is focussed on integrated use of resources and minimization of or recycling of waste streams. Achieving “zero waste” from resource use activities is a major target for the Indonesian approach. This is intended to drive job creation and economic development, particularly in the coastal and marine domains.</p> <p>Indicative priority areas:</p> <ul style="list-style-type: none"> • Massively increased marine finfish production - source of feeds? • Improved planning and management : EIA and ecological risk analysis, Spatial planning and zoning, Social impact assessment

	<ul style="list-style-type: none"> • “Blue economy” sites – can they be improved?
Philippines	<p>Philippines will host APEC on 2015 and “Blue Growth “ strategy will be discussed. This initiative is excellent preparatory work for this event. Aquaculture supplies about 50% of the fish supply in the Philippines. Philippines is highly vulnerable to climatic driven events and ensuring the resilience of fish production is important . The lack of land and freshwater in the Philippines means that there is strong focus on marine based activity for food security and fish supply.</p> <p>Indicative priority areas:</p> <ul style="list-style-type: none"> • Barely covering national demand for fish • Seaweed is 66% of aquaculture output, so aquaculture production of food fish needs to be considered separately • Aquaculture is vulnerable to tropical storms and adverse weather as well as climate effects like el Nino. • Serious environmental impacts of intensive marine and freshwater cage aquaculture and declining productivity • Feed ingredients (<70%) largely imported • Mapping suitable sites and vulnerable areas – hazards are mapped, but not aligned with site suitability • Improving efficiency in feed use, reducing environmental impacts • Insurance/resilience
Sri Lanka	<p>Sri Lanka is still in a relatively early stage of aquaculture development, There is a large potential for aquaculture and Sri Lanka is seeking to harness the potential for development of aquaculture to increase fish supplies. The blue growth initiative is a high priority for Sri Lanka. Aquaculture is viewed as potential activity for diversification of rural livelihoods and reduce dependency on single crop systems.</p> <p>Indicative priority areas:</p> <ul style="list-style-type: none"> • Considerable number of freshwater reservoirs • Considerable amount of abandoned paddy – opportunity? • Majority of production is from culture based fisheries • 90% of fingerling production is from Government hatchery • Need to boost fingerling production from private sector or communities • Nutrition (protein intake) in tea estates is low • mariculture hatcheries
Timor Leste	<p>Timor Leste is currently importing fish to meet demand. There is potential for aquaculture development in freshwaters, but this is limited, there are potentials to develop mariculture in the country and there is a strong need for development support to develop sustainable and economically viable aquaculture, which does not compromise environmental quality/integrity. Poverty alleviation and food security are major thrusts for the country,. Malnutrition remains a problem in the country and improved nutrition through increased production and consumption of animal based food (including fish). Water availability is constrained and aquaculture development in freshwater area needs to take this into account. There is scope to learn from other countries that are efficient water users.</p> <p>Indicative priority areas:</p> <ul style="list-style-type: none"> • Freshwater aquaculture is covered by the NZ cooperation project • Mariculture potential being explored • Capacity development and training/technical transfer needs (potential for south-south cooperation – already ongoing with Indonesia), mariculture hatchery, • Feed production?

	<ul style="list-style-type: none"> • Cold chain – some potential
Vietnam	<p>Vietnam has a massive aquaculture industry, which is highly focused on export (6.7 billion dollars of exports produced from 1.2 million hectares of land. Disease impacts in shrimp have had major impacts. The government is now entering a restructuring programme to ensure sustainability of existing production (disease control, biosecurity, environmental quality, land and water use).</p> <p>Indicative priority areas:</p> <ul style="list-style-type: none"> • Seed quality – genetics and health • Low cost feeds • Farmer organization • Environmental degradation, residues, pathogens • Marketing, value adding and competition • GAP application

4. Development of country work plan

Following the general guideline and format provided, the focal persons from the six regional initiative focus countries worked jointly with the FAO representative or assistant representative to the country in developing the draft country work plan for implementing the regional initiative in the respective countries. The draft work plan indicated the priority activities to be implemented under the respective work areas of the regional initiative in each focus country. The draft work plan also indicated the expected outputs, indicative requirement of resources and likely source of fund and the timeframe for each activity.

The draft country work plans were presented at the plenary by the country focal person and commented by the workshop participants. The first draft of the country work plans were presented below. The FAO officers provided suggestions on the revision of the draft country workplans. It was agreed that the country focal points will report to the government authority on the workshop outputs and actions needed by the country and to prepare a final version of the country workplan on the implementation of the regional initiative in consultation with the relevant government authority and FAO representative office in the country.

5. Closing Session

Mr. Konuma made closing remark at the end of the inception workshop. He summarized the workshop deliberation and outputs produced. He thanked all workshop participants, particularly the country focal persons and FAO representative and assistant representatives for their active participation and valuable contribution to the successful conduction of the workshop. He emphasized the importance for the focus country to timely finalize the country work plan for implementing the regional initiative after the workshop with the support of the FAO Representative Office in the country. He also requested the regional initiative delivery team to work closely with the government of the focus countries and respective country offices to move ahead with the implementation of the planned country activities for implementing the regional initiative.

Annex 1 - List of participants

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Annex 2 – Programme

Inception Workshop of Regional Initiative on Sustainable Intensification of Aquaculture for Blue Growth, Bangkok, 2-3 October 2014

Date/Day	Time	Agenda
1 Oct/Wed	Arrival of participants, check in Riva Surya Hotel	
2 Oct/Thu	08.30-09.00	Register of Participants
	09.00-09.20	Opening remark by Mr. Konuma, ADG/RR
	09.20-09.40	Introduction of participants
	09.40-10.00	Messages from country participants
	10.00-10.10	Group photo
	10.10-10.30	Coffee break
	10.30-10.40	Introduction to the workshop (Miao Weimin, RAP)
	10.40-11.10	Introduction to the FAO new Strategic Framework and Regional Initiatives (Kei Kimpara, RAP)
	11.10-11.40	Introduction to FAO corporate initiative on blue growth and global aquaculture advancement program (Rohana Subasinghe, HQ)
	11.40-12.00	Introduction to FAO Regional Initiative on Sustainable Intensification of Aquaculture for Blue Growth (Miao Weimin, RAP)
	12.00-12.30	General discussion
	12.30-13.30	Lunch break
	13.30-15.00	Country presentation on status of aquaculture
	15.00-15.30	Coffee break
	15.30-16.00	Introduction to country specific action plan for implementing the RI Discussion
	16.00-17.00	Formulate/revise country action plan
18.00	Reception dinner	
3 Oct/Fri	09.00-09.10	Wrapping up of day one
	09.10-10.40	Formulate and finalize country implementation plan
	10.40-11.00	Coffee break
	11.00-12.30	Presentation of country action plan Discussion
	12.30-13.30	Lunch break
	13.30-14.30	Discussion on regional implementation strategy
	14.30-15.00	Coffee break
	15.00-16.00	The way forward
	16.00-16.30	Closing of the workshop
4 Oct/Sat	Departure of participants	

Annex 3 Draft Bangladesh country workplan

RI Work Area ¹	Proposed Activity	Types of intervention/action	Deliverable Outputs	Time frame ²	Total budget required to produce the outputs (US\$)	External Resource to be mobilized (including FAO) (US\$)	Government implementing agency
1 Strengthen aquaculture governance to support transition to sustainable/intensified aquaculture production systems through policy advice work	National Aquaculture Development strategy 2013-2020		Endorsed strategy printed and distributed	31-Dec-14	120,000	completed	DoF
2 Identify/develop and disseminate innovative and sustainable production practices and management approaches	Fisheries sector value chain studies, including food safety considerations (2012-15)	supply chain studies, sampling and identification of hazards and critical control points, through existing food safety project	Studies and recommendations	31-Dec-15	300,000	funded (EKN)	DoF, MoHFW
3 Support rural producers to improve access to quality production inputs, sustainable aquaculture production technology and market (Correspond to SO output: 30103)	Aquaculture Seed and Feed TCP (2014-15)	implementation support for fish feed and hatcheries acts and rules from 2011 - training and awareness programme for owners, department, etc	training, manuals, etc	31-Dec-15	400,000	funded (TCP)	FAO, DoF, Public-Private Partnership

4 Increase the resilience of small aquaculture farmers	Climate change and fisheries, PPG (GEF) - "Community based climate resilient fisheries and aquaculture development" (2014-15)	Consultation, background studies	Project document - for \$5.4m (for 2015-2020) - to be submitted to GEF for endorsement at June 2015 session	30-Apr-15	200,000	funded (GEF)	FAO, DoF, WorldFish, BFRI
4	Cluster formation for 1000 small scale shrimp farmers in SWB (2013-15)	Work with groups, field schools, extend marketing linkages	sustained clusters of farmers	31-Dec-15	700,000	funded (STDF)	FAO, DoF, WorldFish, BSFF
4	Scale up of clusters in smallholder shrimp farming (2015-17)	form clusters for 5,000 small scale shrimp farmers in SWB	awareness, created clusters, initial stocking, training and exchange visits (target 2,000 for 2015)	30-Jun-15	1,000,000	new (Dfid?)	FAO, DoF
Improve the management water, forestry and land to support sustainable aquaculture development	Guidelines on responsible aquaculture with reduced environmental impact (2014-15)	Produce guidelines; possible study tour to Mekong to exchange ideas	Guidelines	30-Apr-15	60,000	new (TCPf)	FAO, DoF
5	Roll out of guidelines on reduced environmental impact of aquaculture, including responsible fisheries (2015-16)	Training for 10,000 (gher owners and government staff)	Training manual, trained producers and DoF officials	31-Dec-16	1,000,000	new (Dfid?)	DoF

Annex 4 Draft Indonesia country workplan

No.	RI Work Area ¹	Proposed Activity	Types of intervention/action	Deliverable Outputs	Timeframe ²	Total budget to produce the outputs (US\$)	External Resource to be mobilized (including FAO) (US\$)	Government implementing agency
SHORT TERM								
1	Support rural producers to improve access to quality production inputs, sustainable aquaculture production technology and market (Development of preventive aquatic animal health protection plan and enhancing emergency response capacities to shrimp disease outbreaks in Indonesia/TCP/INS/3402)	Development of guideline (on surveillance, on preparedness, development guideline on biosecurity on farm level)	National workshop, international workshop, training for farmer group on guideline (incl. ToT), application of guideline for 1 cycle of crop of shrimp production, finalization of guideline	Guideline on surveillance, guideline on preparedness, guideline on biosecurity on farm level	March/April 2015	1,000,000	430,000	Directorate General of Aquaculture, MMAF
2	Support rural producers to improve access to quality production inputs, sustainable aquaculture production technology and market (Seaweed Development)	Production and processing development, economic analysis for value chain	Workshop, study, training, formulation policy and regulation	Economic analysis document, policy document, trained staffs and farmers, zoning plan	March/April 2015	780,000	300,000	Directorate General of Aquaculture and Directorate General of Marine, Coasts and Small Islands, MMAF
3	Innovative and Sustainable Production Practices on Aquatic Animal in Rice-based Production System	Pilot project for technology invention	Workshop, study, training	Innovative and Sustainable Production Practices on Aquatic Animal in Rice-based Production System assessed and disseminated	2015-2016	300,000	18,000	Directorate General of Aquaculture, MMAF
4	Application of Management Tools Aquaculture	Piloting	Workshop, study, training	Guideline of management tools	2015-2016			Directorate General of Aquaculture, MMAF

5	Support rural producers to improve access to quality production inputs, sustainable aquaculture production technology and market (Shrimp Biosecurity)	Sharing Information on Knowledge on IMMV Disease	Regional and Inter regional workshop	document	2015-2016			Directorate General of Aquaculture, MMAF
MEDIUM TERM								
6	Mainstreaming Biodiversity Conservation and Sustainable Use into Inland Fisheries Practices in Freshwater Ecosystem of High Conservation Value/FAO/GEF/MMAF Project)	Value chain for eel, development of BEJE peatland	Workshop, study, training, mainstreaming of inland aquatic biodiversity into resource development and management policy, demonstration of conservation and sustainable use of inland aquatic biodiversity, monitoring and assessment of aquatic biodiversity	Guideline, pilot project	2014-2019	5,897,000		Agency for Marine Research and Development, MMAF
7	Integrated Economic Zone Development based on Blue Economy at Lombok	Preparation of Zoning Plan, Preparation of Detailed Zoning Plan for Aquaculture, Marine Tourism, Salt Pond, Marine Protection Area, Pilot Project Aquaculture	Workshop, Training, Formulation of Regulation and Guideline, Mapping, Dissemination, Capacity Development	Zoning Plan, Detailed Zoning Plan, Maps, trained farmers, Guideline	2014-2018	50,000,000		Directorate General of Aquaculture and Directorate General of Marine, Coasts and Small Islands, MMAF

Annex 5 Draft Philippines country workplan

RI Work Area ¹	Proposed Activity	Types of intervention/action	Deliverable Outputs	Timeframe ²	Total budget required to produce the outputs (US\$)	External Resource to be mobilized (including FAO) (US\$)	Government implementing agency
Short term							
2 Identify/develop and disseminate innovative and sustainable production practices and management approaches	Improvement of Feeding and Feed Management Efficiency in Aquaculture Production in the Philippines	Technical Workshop on the Application of Climatology and Agrometrology to Aquaculture	1) "Climate Impact Assessment" for Freshwater and Brackishwater Pond Aquaculture Operations Monthly Bulletin" for Production Forecasting and Farm Operations	Sept. 2015	70,000		
4 Increase the resilience of small aquaculture farmers			2) "Preliminary Integrated Hazard Vulnerability Geographic Assessment for the Aquaculture Sector"	March . 2015	70000		
		1. Conduct a commodity-based (shrimp, tilapia and milkfish) workshop on feed-management, integrating impacts of climate variability and environmental physiology, with water quality management.	1) Commodity-based (shrimp, tilapia and milkfish) workshop for each island group (Luzon, Visayas and Mindanao)	March . 2015	70000		
			2) A Technical manual on "Climate-smart Aquaculture Practices for Shrimp, Milkfish and Tilapia Farming"Integrated Practical Husbandry	March . 2015	20000		

		Pilot-testing of Organic Mudcrab Feeds	Manual on the Production and Use of Organic Feed for Mudcrab	March . 2015	30000		
2 Identify/develop and disseminate innovative and sustainable production practices and management approaches	Integrating Aquatic biodiversity in Farmer-field School (FSS) on Save and Grow (RRI-2/National IPM Program)	Training of farmers, communities and schools on management practice for enhancing aquatic animals and their contribution in rice-based production system	Curriculum aquatic biodiversity in rice-based ecosystems	Jun-15	10000		
4 Increase the resilience of small aquaculture farmers			Improved nutrition of households from fish and other vegetables derived from rice-fish ecosystems	Jun-15	10000		
1 Strengthen aquaculture governance to support transition to sustainable/intensified aquaculture production systems through policy advice work	Phase-2 Review of the Aquaculture component of the Comprehensive Fisheries Industry Development Plan (CNFIDP) and other government sponsored aquaculture development plans	Consultation workshop amongst commodity industry leaders and other stakeholders	Updated Aquaculture (CNFIDP)	Feb-15	50,000		
Intermediate term--to be implemented in next 1-3 years.							
1 Strengthen aquaculture governance to support transition to sustainable/intensified aquaculture production systems through policy advice work	Promotion of Aquaculture as Livelihood for Fishers and Smallholders	1) Conduct of local sea cucumber resource assessment with local universities and municipal officers	1) Local population of sea cucumber species and stocks assessed; 2) Viable zones for sea cucumber ranching, conservation and open-sea farming (mariculture) identified and demarcated identified		Total 1,700,000		

			3) sustainable species-specific catch-levels of sea cucumber determined				
2 Identify/develop and disseminate innovative and sustainable production practices and management approaches		2. Establish a legal framework for preferential use of fisherfolks over identified coastal areas for seacucumber ranching and culture and local seacucumber resources conservation	1) Local government ordinance crafted on the special use of specific portions of municipal marine waters ecosystems for sea cucumber ranching, conservation and protection and setting appropriate resource use fees and penalties				
3 Support rural producers to improve access to quality production inputs, sustainable aquaculture production technology and market (Correspond to SO output: 30103)		3. Package low input aquaculture technologies suitable for small-scale/community-based operations	1) Training workshop of communities on sea cucumber ranching and open-water culture 2) Sea cucumber ranching established and open-water grow-out within identified areas established				
		4. Transfer village-level post-harvest and product quality technologies	1. Standardized processing methodologies to reduce post-harvest losses and maintain high-quality products developed				
		5. Organize village-level processors into trading clusters for marketing efficiencies	1. Trading centers established that will be used as a buying station for exporters.				

Annex 6 Sri Lanka country workplan

RI Work Area ¹	Proposed Activity	Types of intervention/action	Deliverable Outputs	Time frame ²	Reportable progress by March 2015	Total budget required to produce the outputs (US\$)	External Resource to be mobilized (including FAO) (US\$)	Government implementing agency
Support rural producers to improve access to quality production inputs, sustainable aquaculture production technology and market	Support culture-based fisheries Farmer Societies to undertake fish seed production activities	training, technical assistance, and technology demonstration	At least five water-based hatcheries established and in operation in five reservoirs; fish seed production increased	Jan 2015 to December 2016	Selection of sites; Farmer Societies identified; awareness created	300,000	200,000	NAQDA
Identify/develop and disseminate innovative and sustainable production practices and management approaches	Strengthen the capacity for genetic improvements in selected NAQDA centers	capacity building	Technical capacity of NAQDA officers enhanced to conduct fish genetic improvement work; physical capacity of selected centers upgraded	Jan 2015 to December 2015	Officers selected and first training completed	200,000	150,000	NAQDA and NARA
Support rural producers to improve access to quality production inputs, sustainable aquaculture production technology and market	Improved brood stock management and genetic improvement of Nile Tilapia brood stock	technical assistance	Genetic improvement programme for Nile Tilapia in place; increased availability of quality seeds	June 2015 to December 2018	-	200,000	100,000	NAQDA

Support rural producers to improve access to quality production inputs, sustainable aquaculture production technology and market	Study of aquaculture value chain for improved income-generating opportunities and market linkages	Study	Improved knowledge of potential areas for improvement	January 2015 - June 2015	Study near finalization	20,000	20,000	NAQDA
Support rural producers to improve access to quality production inputs, sustainable aquaculture production technology and market	Improving seabass aquaculture through better feed and health management	technical assistance, capacity building	High quality and cost effective feed formulations for different stages; pilot-scale fish silage plant is established; improved aquafeed supply chain and improved capacity for feed manufacturers; pilot-scale feed quality analytical lab established	October 2014 to September 2015	Baseline information on Asian seabass farms collected; project staff appointed	400,000 (FAO-funded TCP)	-	NARA
Identify/develop and disseminate innovative and sustainable production practices and management approaches	Reducing and managing the risks of Acute Hepato-pancreatic Necrosis Disease (AHPND) of cultured shrimp	technical assistance, capacity building	Biosecurity measures and health management practices introduced	August 2015 to July 2017		422,000 (FAO Inter-regional TCP project)	-	

Annex 7 Timor Leste country workplan

RI Work Area ¹	Proposed Activity	Types of intervention/action	Deliverable Outputs	Time frame ²	Total budget required to produce the outputs (US\$)	External Resource to be mobilized (including FAO) (US\$)	Government implementing agency
Identify/develop and disseminate innovative and sustainable production practices and management approaches	1. Development of a project proposal for sustainable/blue growth mariculture development in TL	Identification of suitable area and basic economic feasibility for development(both growout and hatchery); 6 commodities sea cucumber, green mussel, mud crab; snapper; grouper; seaweed; milk fish; and preparation of mini proposals for pilots	Study report and project proposal	Mar-15	50,000		MAF
	2. Establish sustainable/blue growth mariculture pilots in the suitable areas	Construction floating cages/growout units, procurement of inputs, training and demonstration of aquaculture activities	# at least 4 pilots established	2015 - 2019	500,000 - 1,000,000	500,000 - 1,000,000	MAF
	3. Promote south-south cooperation for capacity building	Exchange of expertise & Training for women's group on seaweed food processing		Mar-15	35,000		MAF & SSPE

Annex 8 Vietnam country workplan

RI Work Area ¹	Proposed Activity	Types of intervention/action	Deliverable Outputs	Time frame ²	Total budget required to produce the outputs (US\$)	External Resource to be mobilized (including FAO) (US\$)	Government implementing agency, partners
Building capacity for marine fish farming for Vietnam	Develop pilot open sea cage farming	pilot farm, training, platform	2-3 companies invest to open sea cage farming	2011-2015	1.5 million		NORAD, MARD
Improving feed sustainability for marine aquaculture in Vietnam and Australia	Develop feed formulation for selected species	determine nutrition requirement for selected species	Project results document	2010-2014	1.1 million		ACIAR
Mangrove for future	Strengthening resilience to climate changing in mangrove-depend coastal community, improve governance natural resources	Fieldtrip, workshop	Policy recommendation	1/2012-12/2015			DANIDA
Costal Resources for Sustainable Development	To improve the sustainable management of coastal fisheries in the project provinces	Consultants assistant, training, workshop, investment for infrastructure...	Consultation report, infrastructure improve and fisheries labours skill improved	1/2013-1/2017			GEF, WB

Facilitate the Development of an Environmental Monitoring System to Strengthen Fisheries and Aquaculture Resilience and to Improve Early Warning in the Lower Mekong Delta	The production of baseline assessments of existing environmental monitoring and pilot and test early warning system	workshop, training, field trip...	Early warning system ready to test with FAO system	10/2014-4/2015	80,000		NACA funded by FAO
Promote the application of aquaculture planning management tools	Formulation national plan of action	workshop, training and fieldtrip...	Management tool for managing aquaculture planning	1/2015-1/2017	100,000		FAO
Promote the good aquaculture production for small-scale aquaculture farmers in coastal areas	Strengthen linkage between farmers in applying good aquaculture practice and market access	Training, workshop and fieldtrip	Policy recommendation	2015-2016	150,000		FAO, MARD
Improving livelihood of fishery community	Develop value chain for farmers in selected provinces	Pilot project in 3 provinces	Policy recommendation	2015-2017	500,000		FAO, MARD
Increasing access ability of farmers to quality of seed	Improving seed quality and access ability of farmers for selected species	Improve quality of seed/broodstock, training, workshop...	Source of quality seed and policy recommendations	2015-2017	500,000		FAO, MARD
Improving feeding management to sustainable	Optimise feed use for fish/shrimp	Pilot project and training	Guideline for better feed management	2015-2016	70,000		FAO, USAID
Building capacity in applying new technology in aquaculture	suggesting relevant technologies for sustainable development	Workshop, consultant, fieldtrip and visiting	Relevant technologies and policy recommendation	2015-2016	200,000		FAO, MARD

