Strengthening Regional Cooperation for Sustainable Fisheries Development in Southeast Asia

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During the ASEAN-SEAFDEC Conference on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020 "Fish for the People 2020: Adaptation to a Changing Environment" organized by SEAFDEC and the ASEAN in June 2011, the Ministers and Senior Officials responsible for fisheries of the ASEAN-SEAFDEC Member Countries adopted the "Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020." A seguel to an instrument adopted during the ASEAN-SEAFDEC Millennium Conference in 2001, this current instrument has also served as policy framework for sustainable development of fisheries and enhancing its contribution to food security and the well-being of peoples in the region. While carrying out various activities in accordance with the provisions stipulated in these series of two instruments that display the Resolution and the Plan of Action, and with technical support from SEAFDEC, countries in the region continue to be confronted with emerging issues that need to be addressed through closer cooperation. The most recent concerns include the stringent measures applied by importing countries both within and outside the region, on fishery export products making sure that these do not come from Illegal, Unreported and Unregulated (IUU) fishing activities, and that such fish and fishery products are derived from responsible fishing activities. Therefore, cooperation among relevant national agencies as well as among countries in the region is necessary in order to come up with practical and harmonized approaches that would ensure that the region's fish and fishery products traded in intra-regional or international markets do not come from IUU fishing thus, enhancing their competitiveness. After five years of promoting the 2011 Resolution and the Plan of

Action, SEAFDEC considered that mid-way before reaching 2020 would be an opportune time to conduct an indepth review of the emerging regional issues that hinder fisheries development and the competitiveness of fish and fishery products from the region. This would facilitate identification and adoption of measures particularly those that require regional cooperation and intervention, and securing the countries' high-level commitment and continued support to address such issues in an efficient manner.

Thus, with support from the SEAFDEC Council of Directors during its 47^{th} Meeting and the 23^{rd} Meeting of the ASWGFi in 2015, the "High-level Consultation on Regional Cooperation in Sustainable Fisheries Development Towards the ASEAN Economic Community: Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products" was convened by SEAFDEC on 3 August 2016. During the said Consultation, High-level Officials of the ASEAN-SEAFDEC Member Countries adopted the "Joint ASEAN-SEAFDEC Declaration on Regional Cooperation for Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products." The Joint Declaration is meant to secure high-level policy support and cooperation from relevant national agencies of the ASEAN-SEAFDEC Member Countries towards sustainable fisheries development in Southeast Asia, and is also intended to provide a framework that would enable SEAFDEC and relevant agencies and donor organizations to continue their support toward enhancing regional cooperation in sustainable fisheries development as the ASEAN Economic Community undergoes unification.

Sustainable Fisheries Development in Southeast Asia: Challenges and Opportunities

The fisheries sector is very crucial for the economic development of Southeast Asia not only by swelling the coffers of the countries but most of all also enhancing the livelihoods and well-beings of peoples, especially the fisherfolks in the region. Notwithstanding such portrayal, the trend of the region's fisheries production had dismally attained slow growth during the 10-year period from 1991 to 2000 although in the subsequent years, production gained an abrupt upswing (**Fig. 1**). It could also be deduced that the average growth rate of the fisheries production during the 10-year period from 1991 to 2000 was 5%, increasing to 6% in the next 10 years from 2001 to 2010, then to 7% from 2011 to 2014. However, the prospects for the region's fisheries production to increase in the next ten years remain high.

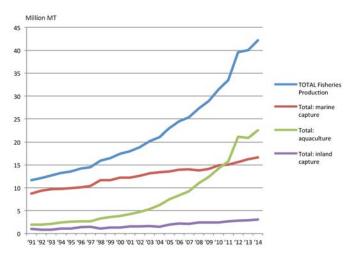


Fig. 1. Trend of Southeast Asia's total fisheries production (in million metric tons) from 1991 to 2014

Sources: SEAFDEC (1997), SEAFDEC (2005), SEAFDEC (2006), SEAFDEC (2010), SEAFDEC (2015), SEAFDEC (2016a)

Table 1. Total fisheries production of Southeast Asia from 1991 to 2014 (in million metric tons)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
TOTAL Fisheries Production	11.67	12.16	12.68	13.26	13.53	14.16	14.48	15.92	16.52	17.45	17.97	18.85
Total: marine capture	8.73	9.40	9.70	9.75	9.90	10.06	10.39	11.63	11.64	12.25	12.20	12.58
Total: aquaculture	1.92	1.93	2.13	2.41	2.56	2.67	2.63	3.25	3.60	3.87	4.21	4.75
Total: inland capture	1.02	0.83	0.85	1.10	1.07	1.43	1.46	1.04	1.28	1.33	1.56	1.52
(Cont'd)												

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
TOTAL Fisheries Production	20.20	21.09	22.94	24.45	25.31	27.29	28.94	31.45	33.49	39.60	40.06	42.22
Total: marine capture	13.19	13.38	13.59	13.94	14.06	13.82	14.14	14.88	15.10	15.59	16.26	16.66
Total: aquaculture	5.38	6.25	7.44	8.35	9.18	11.07	12.38	14.19	15.75	21.16	20.90	22.53
Total: inland capture	1.63	1.46	1.91	2.16	2.07	2.40	2.42	2.38	2.64	2.85	2.90	3.03

Sources: SEAFDEC (1997), SEAFDEC (2005), SEAFDEC (2006), SEAFDEC (2010), SEAFDEC (2015), SEAFDEC (2016a)

This is considering the region's resources which have potentials for further development. Nevertheless, such developments must proceed in a sustainable manner. Specifically, the trend by ten-year periods has increments that almost doubled, for example in 2014, the total fisheries production was about 42.22 million metric tons while it was about 21.09 million metric tons a decade ago in 2004. Moreover, the 2013 production of 40.06 million metric tons in 2013 entails an increase of almost 50% from that of 2003 (Table 1). Nonetheless, the increments come mainly from the aquaculture sub-sector, the production of which had been gaining an average annual growth rate of about 10% during the past 25 years, i.e. about 8% during the 10-year period from 1991 to 2000; about 13% from 2001 to 2010; and about 11% from 2011 to 2014.

Meanwhile, capture fisheries (marine and inland) had very slow annual average growth rate from 1991 to 2014 of about 3%, although the growth had been steadily increasing. With bountiful natural resources available in the region, especially the vast inland freshwater bodies that could be tapped sustainably for inland capture fisheries development, production from capture fisheries could increase in the future.

Both capture fisheries and aquaculture are of fundamental importance to the Southeast Asian region in terms of ensuring food security, enhancing revenue generation, improving economies, and creating employment. In many Southeast Asian countries, catching of and/or farming aquatic resources have always been vital part of people's livelihoods, most particularly the fisherfolks and fish farmers in rural areas. It should be noted that in the cultures of peoples in the region, aquatic resources are not only source of income or food supply but also as raw materials for traditional fish products such as fish sauce and other fish-based condiments which form part of the region's daily diet.

Moreover, fisheries and aquaculture are also crucial in improving the livelihoods of peoples, especially in terms of employment generation, as more than 10 million fishers and fish farmers are reported to be involved in both capture and culture that secure their employment especially for those in rural and coastal communities. It is therefore important that the fishery resources are exploited and utilized in a sustainable manner as these are important not only in securing food stability but also in ensuring nutritional security of the rural and coastal populations.

For such reason, the Southeast Asian countries have been exerting efforts to sustain their fisheries production through the adoption and adaptation of various instruments as well as through cooperation not only with other countries in the region but also with various regional and international organizations involved in fisheries development. As a result, there have been drastic increases in the total fisheries production of the Southeast Asian region from the early 2000s (Fig. 2, Table 2). While Indonesia has always been the leader being the highest total producer of fish during the last 14-year period, the

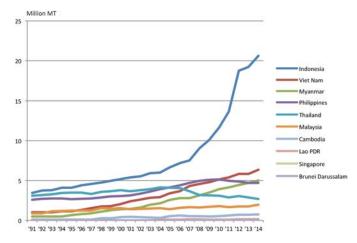


Fig. 2. Trend of total fisheries production of Southeast Asian countries (in million metric tons) from 1991 to 2014 Sources: SEAFDEC (1997), SEAFDEC (2005), SEAFDEC (2006), SEAFDEC (2010), SEAFDEC (2015), SEAFDEC (2016a)

Table 2. Total fisheries production of the Southeast Asian countries from 1991 to 2014 (in million metric tons)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
TOTAL Fisheries Production	11.67	12.16	12.68	13.26	13.53	14.16	14.48	15.92	16.52	17.45	17.97	18.85
Indonesia	3.44	3.75	3.81	4.09	4.12	4.41	4.56	4.73	4.97	5.20	5.40	5.52
Viet Nam	1.02	1.02	1.04	1.14	1.15	1.33	1.55	1.76	1.78	2.04	2.43	2.64
Myanmar	0.50	0.50	0.50	0.50	0.68	0.81	0.90	1.10	1.27	1.39	1.47	1.61
Philippines	2.60	2.70	2.76	2.75	2.69	2.72	2.76	2.88	3.02	3.07	3.16	3.37
Thailand	3.10	3.17	3.28	3.45	3.50	3.51	3.33	3.60	3.68	3.79	3.65	3.80
Malaysia	0.87	0.87	1.16	1.20	1.25	1.24	1.24	1.54	1.50	1.55	1.41	1.47
Cambodia	0.11	0.12	0.11	0.11	0.11	0.11	0.12	0.30	0.28	0.40	0.44	0.43
Lao PDR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Singapore	0.02	0.02	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Brunei Darussalam	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00
(Cam+2-d)												

(Cont'd)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
TOTAL Fisheries Production	20.20	21.09	22.94	24.45	25.31	27.29	28.94	31.45	33.49	39.60	40.06	42.22
Indonesia	5.92	6.00	6.64	7.18	7.51	9.06	10.07	11.66	13.63	18.76	19.24	20.60
Viet Nam	2.86	2.93	3.39	3.65	4.32	4.56	4.78	5.13	5.42	5.82	5.83	6.32
Myanmar	1.99	2.13	2.57	2.80	2.81	3.15	3.50	3.91	4.15	4.43	4.72	5.04
Philippines	3.63	3.91	4.15	4.40	4.71	4.97	5.08	5.16	4.98	4.87	4.70	4.68
Thailand	3.92	4.13	4.12	4.04	3.68	3.21	3.14	3.11	2.87	3.07	2.90	2.67
Malaysia	1.48	1.53	1.39	1.59	1.66	1.64	1.73	1.81	1.67	1.76	1.75	1.99
Cambodia	0.39	0.34	0.55	0.65	0.53	0.54	0.52	0.55	0.63	0.73	0.73	0.75
Lao PDR	0.00	0.10	0.11	0.11	0.14	0.15	0.11	0.11	0.13	0.14	0.17	0.15
Singapore	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Brunei Darussalam	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01

Sources: SEAFDEC (1997), SEAFDEC (2005), SEAFDEC (2006), SEAFDEC (2010), SEAFDEC (2015), SEAFDEC (2016a)

country's supremacy in fisheries became much more obvious starting in 2014 (**Fig. 3**).

In 2014, the total fisheries production of Indonesia accounted for about 48.80% of the region's total fisheries production, followed by Viet Nam at 15.15%, Myanmar by 11.90%, Philippines by 11.20%, and Thailand by 6.35%. Malaysia contributed about 4.50%, Cambodia about 1.75% and Lao PDR about 0.30%. Singapore and Brunei Darussalam accounted for the remaining 0.05% contributing 0.03% and 0.02%, respectively. While most countries either indicated increases or maintained their respective total fisheries



Fig. 3. Contribution of the Southeast Asian countries to the region's total fisheries production (in million metric tons) in 2014 Source: SEAFDEC (2016)

production during the last five years from 2010 to 2014 (**Table 2**), drastic decreases in the total fisheries production were experienced by Thailand and the Philippines (**Fig. 4**). This has been mainly due to decreases in total production not only from aquaculture but also from capture which encompasses marine and inland capture fisheries (**Fig. 5**).

As shown in **Table 2** and **Fig. 4**, the total fisheries production of Thailand has been noticeably decreasing during the past five years. Findings from FAO (2014) suggested that this was brought about by the country's depleted marine resources mainly due to overfishing and environmental degradation in the Gulf of Thailand. Moreover, the stoppage of fishing operations by Thai vessels in Indonesian waters since 2008 also exacerbated the already decreasing catches from the country's marine capture fisheries.

Nevertheless, for the whole Southeast region, capture fisheries had been beset by severe environmental concerns that led to the degradation of the resources, as well as illegal, unreported and unregulated (IUU) fishing that brought about drawbacks to the sustainable development of the region's fisheries sector risking the socio-economic stability of coastal communities especially in developing countries. As defined, IUU fishing is a

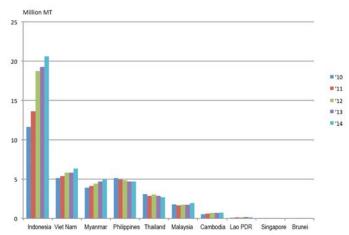


Fig. 4. Changes in the five-year trend of the total fisheries production of Southeast Asian countries (in million metric tons) from 2010 to 2014

(Sources: SEAFDEC (2015), SEAFDEC (2016a))

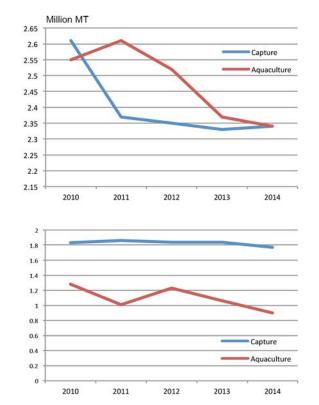


Fig. 5. Production from capture and aquaculture (in million metric tons) from 2010 to 2014: Philippines (above), Thailand (below) (Sources: SEAFDEC (2015), SEAFDEC (2016a))

fishing activity conducted contradictory to legal conservation and management measures that are currently in place. The rampant practice of IUU fishing worldwide has led to the development of instruments that aim to combat IUU fishing, e.g. the FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU); European Union's EC Regulation 1005/2008 to Prevent, Deter and Eliminate IUU Fishing (EC IUU Regulation) which was based on the IPOA-IUU and meant to crack down IUU fishing problems by requiring fisheries products exported to EU fish markets to comply with the EC IUU Regulation; and the US Presidential Task Force on Combating IUU Fishing and Seafood Fraud that enforces risk-based traceability of seafood that enters the US markets.

IUU fishing occurs not only in high seas fisheries but is also generally taking place in small-scale fisheries notably in marine capture as well as in inland capture fisheries, where it could be found in the exclusive economic zones (EEZs) of countries as well as in rivers and other inland water bodies. Specifically in the Southeast Asian region, IUU fishing is multi-pronged and includes numerous facets as shown in Box 1.

Meanwhile, the region's aquaculture sector continues to be one of the biggest contributors to the world's total aquaculture production, contributing an average of about 20% annually and increased to 22% in 2014 (FAO, 2016; SEAFDEC, 2016a). Specifically, six of the world's top 15 producers of cultured species in 2014 are Southeast Asian countries, namely: Indonesia (second highest producer contributing about 14.3%), Viet Nam (fourth, contributing 3.4%), Philippines (fifth, 2.3%), Myanmar (twelfth, about 1%), Thailand (thirteenth, about 1%), and Malaysia (fifteenth, about 0.5%). However, the region's aquaculture sector, specifically the shrimp industry, had been challenged during the past ten

Box 1. The various facets of IUU fishing activities occurring in Southeast Asian waters

- illegal fishing within the countries, i.e. fishing with fake or without license and registration
- use of vessel with fishing license but with specifications different from those indicated in the license
- use of dynamite and other explosives and poisons to catch fish
- use of prohibited fishing gears, practices and methods, e.g. small mesh-sized nets and other destructive gears
- · landing of fish in informal and unofficial ports
- · transferring of catch at sea
- · landing of catch across borders and double flagging
- · poaching in other countries' EEZs
- collecting and trading of live reef food fish (LRFF), ornamental and endangered aquatic species by direct shipping of LRFF from producers to importers bypassing in-country exporters
- · unscrupulous practices of various stakeholders along the value chain
- · fishing in the high seas and Regional Fisheries Management Organization (RFMO) areas but landing the catch in the **ASEAN Member States**
- fishing without permits or during the out-of-season
- fishing without regard on any catch quotas
- · non-reporting or under-reporting of catch and the species caught
- · trading of fish coming from illegal fishing in the high seas and RFMO areas

years by the outbreaks of aquatic diseases. Pakingking and de Jesus-Ayson (2016) indicated that the shrimp industry of Southeast Asia had suffered severe brunt since the early 1990s due to the occurrence of the epizootic white spot disease caused by the white spot syndrome virus (WSSV). This was followed by the taura syndrome caused by the taura syndrome virus (TSV) which devastated the shrimp production of Thailand and Indonesia. Most recently, the shrimp industry was again affected by the occurrence of acute hepatopancreatic

necrosis disease (AHPND), earlier known as early mortality syndrome (EMS) which first appeared in Viet Nam, spreading later to Thailand, Philippines and Malaysia.

Coping with the issues and concerns

Worldwide, the fishery resources have been declining or to some extent at the verge of total collapse due to overexploitation and un-controlled fishing operations within

Box 2. Management tools developed by AMSs and SEAFDEC to combat IUU fishing in Southeast Asia and enhance the competitiveness of ASEAN fish and fishery products							
	Tools for Combating IUU fishing: Main features						
ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain	The ASEAN Guidelines ensures that fish and fishery products in the supply chain do not come from IUU fishing activities through the promotion of strategies and measures to prevent the entry of fish and fishery products from IUU activities into the supply chain; development and implementation of effective fisheries management; and enhancing regional cooperation in strengthening MCS systems. Strategies include: Managing Fishing Activities within a ASEAN Member States, Regulating Transshipment and Landing of Fish/Catch across Borders; Preventing Poaching in the EEZs of ASEAN Member States; Controlling Illegal Fishing and Trading Practices of Live Reef Food Fish, Reef-based Ornamentals and Endangered Aquatic Species; Strengthening the Management of Fishing in the High Seas and RFMO Areas.						
Regional Fishing Vessels Record for Vessels 24 Meters in Length and Over (RFVR-24 m)	RFVR Database System was developed for fishing vessels 24 meters and over in length to defy IUU fishing in the Southeast Asian region as well as monitor IUU fishing vessels through sharing of information on fishing vessels among the AMSs. Maintained at SEAFDEC Training Department, the Database includes information on 28 items, namely: 1) Name of Vessel, 2) Vessel Registration Number, 3) Owner's Name, 4) Type of Fishing Method/Gear, 5) Fishing License Number, 6) Expiration Date of Fishing License, 7) Port of Registry, 8) Gross Tonnage (GRT/GT), 9) Length (L), 10) Breadth (B), 11) Depth (D), 12) Engine Power, 13) Shipyard/Ship Builder, 14) Date of Launching/Year Built, 15) International Radio Call Sign, 16) Engine Brand, 17) Serial Number of Engine, 18) Hull Material, 19) Date of Registration, 20) Area (Country) of Fishing Operation, 21) Nationality of Vessel (Flag), 22) Previous Name (if any), 23) Previous Flag (if any), 24) Name of Captain/Master, 25) Nationality of Crew, 28) IMO Number (if available).						
Regional Plan of Action for Management of Fishing Capacity	Development of the Regional Plan of Action for the Management of Fishing Capacity is meant to match fishing effort with the resources available and safeguard the interest of fishers. This is also intended to serve as guide for the ASEAN Member States to develop their respective National Plans of Action for the Management of Fishing Capacity or NPOA Fishing Capacity.						
Implementation of the Port State Measures in the ASEAN Region	Regional Cooperation to Support the Implementation of the Port State Measures Agreement in the ASEAN Region is aimed at preventing the entry of illegally caught fish in international markets through the countries' ports. This means that the ASEAN Member States have to take Actions on: restriction of entry into ports, use of ports, access to port services, as well as inspection and other enforcement activities of foreign vessels, as stipulated in the Post State Measures Agreement or PSMA, which has been ratified recently.						
Addressing Trans-Boundary Issues through Bi-Lateral/Multi-lateral Dialogues	To effectively and efficiently promote management measures to combat IUU fishing in the whole Southeast Asian region, relevant activities are carried out in sub-regional areas considering that the region's fishery resources are characterized as migratory in nature, fishing licenses are granted to foreign vessels, domestic fisheries are unregulated, high concentration of small-scale fishers that continue to provide significant contribution to the national economies, and high mobility of fishing crew. The sub-regional approach for improving fisheries management to control illegal and destructive fishing practices in the region is promoted through bi/multi-lateral dialogues in the Gulf of Thailand (Cambodia, Malaysia, Thailand, Viet Nam); Andaman Sea (Indonesia, Malaysia, Myanmar, Thailand); Southern South China Sea and Sulu-Sulawesi Sea (Brunei Darussalam, Indonesia, Malaysia, Philippines, Viet Nam); and Lower Mekong Basin (Cambodia, Lao PDR, Thailand, Viet Nam).						
	g the competitiveness of ASEAN fish and fishery products: Main features						
ASEAN Catch Documentation Scheme (ACDS) for Marine Capture Fisheries	The development of ASEAN Catch Documentation Scheme (ACDS) for Marine Capture Fisheries is being carried out by SEAFDEC with the cooperation of the AMSs in order to secure the niche of ASEAN fish and fishery products in the global market. Specifically, the ACDS is meant to provide unified framework that will enhance traceability of fish and fishery products for effective marine fisheries management in AMS; enhance the credibility of fish and fishery products for intra-regional and international trade; and prevent entry of fish and fishery products from IUU fishing activities into the supply chain.						

	ols developed by AMSs and SEAFDEC to combat IUU fishing in Southeast Asia the competitiveness of ASEAN fish and fishery products (Cont'd)
Regional Guidelines on Traceability System for ASEAN Aquaculture Products	Also with the goal of securing the niche of ASEAN fish and fishery products in the global market, the Regional Guidelines on Traceability System for ASEAN Aquaculture Products is being developed by SEAFDEC in collaboration with the AMSs to serve as useful resource and common reference in implementing traceability systems for aquaculture products and in formulating and developing national programs and activities promoting traceability. In order to address difficulties on the part of the AMSs in implementing the Guidelines due to inadequate resources, complexity of the supply chain, and weak enforcement of regulations, compliance with the best practices in aquaculture is encouraged.
Promotion of Good Aquaculture Practices (GAP): Preventing the Spread of Transboundary Aquatic Animal Diseases	The aquaculture industry must comply with good aquaculture practices, one of the most important aspects of which is on preventing the spread of transboundary aquatic animal diseases, as healthy and disease-free aquaculture products would surely secure their niche in the global market. Many aquatic animal diseases occurred in the Southeast Asian region and had impacted the region's aquaculture production resulting in economic damages especially to the exporting countries. The spread of these diseases could be monitored and stopped through effective disease prevention and control as well as by complying with good aquaculture practices such as maintaining the necessary optimal environmental conditions during the culture period.
	Other Measures: Main features
Promotion of GAP: Utilization of Alternative Protein Sources for Aquafeeds to Minimize Pressure on Fishery Resources	Part and parcel of promoting best aquaculture practices is the need to utilize alternative protein sources for aquafeeds to get out from the fishmeal trap and minimize pressure on fishery resources that might have already been depleted due to IUU fishing activities. Some ingredients that had been identified as fishmeal substitutes include plant protein, terrestrial animal protein, fisheries co-products, microbes and unconventional protein sources. Using these ingredients would allow the depleted fishery resources to recover, while the regions' aquaculture stocks would continue to be less-fishmeal dependent. However, there are issues and gaps in the use of these alternative dietary ingredients that need to be addressed.
Addressing Labor Issues in Fisheries	The fisheries sector has been charged with exploitative labor practices, however, there are general labor issues that also need to be addressed, such as: insufficiency in regulating the movement of migrants to the fisheries sector; absence of Good Labor Practices, especially those that involve working and living conditions of migrant labor in fisheries; rampant practice of human trafficking onboard fishing vessels as well as in fish processing plants and factories; national legislations are inadequate to be able to align with international standards and instruments; and weaknesses in the implementation of sustainable management of fisheries. Nevertheless, these issues would need to be discussed collaboratively at the regional level.
Strengthening Fishery Resources Rehabilitation Strategies to Mitigate the Impacts of IUU Fishing	IUU fishing activities impede fish stock recovery, degrade fishery resources, and increase competition among resource users affecting the socio-economic well-being of fishing communities. It is therefore necessary to mitigate the impacts of IUU fishing on the fishery resources by improving critical fish habitats and enhancing the fishery resources, which could be done by identifying the appropriate strategies for rehabilitating the degraded fishery resources. The AMSs and SEAFDEC with support from donors and partners therefore, came up with the Strategic Plans for Fishery Resources Enhancement in the Southeast Asian Region in order to address the looming issues and challenges. To facilitate adoption, the Strategic Plans had been grouped into two aspects, namely: Fishery Resources Enhancement through Habitat Improvement and Management, and Fishery Resources Enhancement through Artificial Propagation and Stock Release.

national jurisdictions or in sub-regional/regional areas or in the high seas. With such backdrop, the tall order is for aquaculture sector to increase production to fill the gap in fish supply as production from capture fisheries would decline if IUU fishing remains uncontrolled. The region's fisheries sector would also have to address the issues on labor in fisheries as it continues to loom the sector. This concern came about because of the allegedly exploitative labor practices of some fishing operators on migrant workers, which in a way has been associated with IUU fishing. Many migrant workers are working in fishing vessels of the region's major fishing countries, e.g. workers from Cambodia and Myanmar working in Thai fishing vessels that operate in other coastal States.

Migrant fishers could be vulnerable to abuse because of the nature of work in fishing, *i.e.* long working hours and periods away from home, tough living and work conditions and the risks and hazards that go with fishing. Moreover, there is limited inspection of conditions; and migrants have limited access to grievance procedures or complaint mechanisms.

Such issues and concerns that continue to confront the region's fisheries sector could not be addressed singly by one country alone, but through enhanced regional cooperation. Therefore, SEAFDEC with support from donors notably the Government of Japan through the Japanese Trust Fund and the Government of Sweden through the SEAFDEC-Sweden Project, has been assisting the ASEAN Member States (AMSs) in their efforts

to combat IUU fishing in their respective waters through the development of measures as fisheries management tools to combat IUU fishing that would eventually enhance the competitiveness of the ASEAN fish and fishery products in the global market. Such collaborative efforts led to the creation of opportunities for relevant stakeholders to readily adopt and adapt, as the case may be. These include management tools and measures that had been developed to combat IUU fishing and enhance the competitiveness of the region's fish and fishery products (Box 2).

The challenges that confront the fisheries and aquaculture sectors of the Southeast Asian region, especially with regards to the sustainability of fisheries could be mitigated through the engagement of AMSs in the opportunities that had been created through collaborative mechanisms (Silapajarn, 2016a). In addition, the commitment of AMSs to implement the aforementioned management measures and tools could be manifested through the implementation of the provisions stipulated in the Joint ASEAN-SEAFDEC Declaration on Regional Cooperation for Combating IUU Fishing and Enhancing the Competiveness of ASEAN Fish and Fishery Products.

Development of Joint ASEAN-SEAFDEC Declaration

As mentioned above, the AMSs have been confronted with emerging issues that seem to slow down the sustainable development of their respective fisheries risking the incomes and livelihoods of peoples. The issues include among others, market driven measures from importing countries, IUU fishing, food safety and traceability system of fish and fishery products, and the labor aspects. The impacts of these emerging issues are not only on the fisheries sector but also on the economies of the countries. Many AMSs have exerted efforts to improve their fisheries management and address the impacts through cooperation among relevant national agencies. However, since these issues could not be addressed by the countries individually, cooperation among countries in the region is necessary by coming up with practical and harmonized approaches, especially on combating IUU fishing and enhancing the competitiveness of fish and fishery products traded in intra-regional or international markets.

The ASEAN-SEAFDEC Member Countries therefore agreed to develop the *Joint ASEAN-SEAFDEC Declaration on Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products* with the main objective of enhancing regional cooperation in sustainable fisheries development in the light of the unification of the ASEAN Economic Community. At the ASEAN level, the development of the Joint Declaration was supported by the Special SOM-36th AMAF in August 2015. On the part of SEAFDEC, preparatory processes were undertaken through regional experts meeting, technical consultations, and multi-

stakeholders consultations in cooperation with the AMSs. Such fora reviewed the fisheries situation and the emerging issues that hinder the sustainable development of fisheries in the region, and assessed the progress of the actions taken by the countries to address the emerging issues while practical steps were recommended toward addressing such issues.

The Joint ASEAN-SEAFDEC Declaration on Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products covers key issues reflecting the current fisheries situation of the ASEAN Member States. These include: preventing the entry of IUU fish products into the supply chain; improving of fishing vessel registration, licensing, and development of the Regional Fishing Vessels Record (RFVR) initially for vessels 24 meters in length and over; promoting the implementation of Port State Measures Agreement; management of fishing capacity under the framework of the Regional Plan of Action for Management of Fishing Capacity in the ASEAN Region; and supporting the bilateral dialogues among the ASEAN Member States. Moreover, in order to enhance the competitiveness of ASEAN fish and fishery products, the key issues also include: enhancing the traceability of capture fisheries through the adoption of the ASEAN Catch Documentation Scheme; promoting the traceability of aquaculture products; addressing labor issues including the migratory workforce and working conditions and safety at sea. Each key issue was discussed among the experts groups as well as through regional consultations resulting in policy recommendations and provisions for implementation by the AMSs. In a span of more than one year, SEAFDEC with the support from the Governments of Japan and Sweden organized series of meetings and consultations to come up with approaches that would address the key issues/areas at hand. Specifically, through such stakeholders' consultations organized by SEAFDEC, the 1st draft of the Joint ASEAN-**SEAFDEC Declaration** was developed. The Draft was submitted and subsequently considered by the SEAFDEC Council of Directors and endorsed by high-level officials of the AMSs prior to the High-level Consultation (Silapajarn, 2016b). The 47th Meeting of the SEAFDEC Council and the 23rd Meeting of the ASWGFi and Special SOM-36th AMAF in 2015 also supported the conduct of the High-level Consultation as a forum where the "Joint Declaration" could be pushed forward.

Adoption of the Joint ASEAN-SEAFDEC Declaration

While articulating its support to the Draft Joint Declaration, the Government of Thailand through the Permanent Secretary of the Ministry of Agriculture and Cooperatives of Thailand *Dr. Theerapat Prayurasiddhi* reiterated the seriousness of the issues on IUU fishing that require not only attention but also commitment from the countries to deal with the issues (SEAFDEC, 2016b). After recalling that in 2011, the Ministers and Senior Officials responsible for Fisheries adopted the

Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region toward 2020, which specified the need to combat IUU fishing and enhance the competitiveness of the ASEAN fish and fishery products, he declared that the High-level Consultation is the most opportune time to put into practice the provisions of the said Resolution and Plan of Action (SEAFDEC, 2016b). He then sought the endorsement of the Joint Declaration by the senior Officials of the ASEAN-SEAFDEC Member Countries. In response, the aforementioned Senior Officials of the ASEAN-SEAFDEC Member Countries signified their concurrence of



Representatives from the Member Countries, ASEAN, SEAFDEC and international/regional organizations attending the Consultation

Box 3. Joint ASEAN-SEAFDEC Declaration on Regional Cooperation for Combating Illegal, Unreported and Unregulated (IUU) Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products (adopted by the Senior Officials of ASEAN-SEAFDEC Member Countries on 3 August 2016)

WE, the Senior Officials of ASEAN-SEAFDEC Member Countries met on the occasion of the "High-level Consultation on Regional Cooperation in Sustainable Fisheries Development Towards the ASEAN Economic Community: Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products," in Bangkok, Thailand on 3 August 2016;

Recognizing the provisions in international instruments such as the United Nations Convention on the Law of the Sea (UNCLOS, 1982), Agenda 21, which was adopted at the UN Conference on Environment and Development (UNCED, 1992), the FAO Code of Conduct for Responsible Fisheries (CCRF, 1995), and the Regional Plan of Action to Promote Responsible Fishing Practices including Combating IUU Fishing in the Region (RPOA-IUU, 2007);

Guided by the ASEAN Charter, which aims to ensure sustainable development for the benefit of present and future generations and to place the well-being, livelihood and welfare of the people at the center of the ASEAN community building process; Bearing in mind that fisheries in the Southeast Asian region had developed rapidly during the last decade contributing significantly to the improved economy and food security of the region, however, IUU fishing is a serious concern and threatens the sustainability of the region's fisheries management and conservation measures, fishery resources and aquatic ecosystems, as well as economic viability and food security;

Aware of the existing national, regional and international initiatives in combating IUU fishing undertaken by the ASEAN Member States (AMSs), relevant Regional Fisheries Management Organizations (RFMOs), and other regional and international organizations; Recalling the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region adopted by the ASEAN-SEAFDEC Ministers and Senior Officials responsible for fisheries during the ASEAN-SEAFDEC Conference on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020 "Fish for the People 2020: Adaptation to a Changing Environment" held in June

Conscious of the need to meet food safety and quality requirements; such as through implementing the ASEAN Guidelines for the Use of Chemicals in Aquaculture and Measures to Eliminate the Use of Harmful Chemicals, ASEAN Good Aquaculture Practice (GAgP), ASEAN Shrimp GAP, and continue developing ASEAN standards in line with relevant regional and international instruments such as the Codex Alimentarius Commission and the Agreement of Sanitary and Phytosanitary (SPS) Measures;

Taking into consideration the importance of working conditions of labor in fisheries sector as outlined in the International Labour Organization (ILO), International Maritime Organization (IMO), Food and Agriculture Organization of the United Nations (FAO), and the ASEAN Declaration on the Protection and Promotion of the Rights of Migrant Workers;

HEREBY DECLARE OUR INTENT, without prejudice to the sovereign rights, obligations, and responsibilities of ASEAN-SEAFDEC Member Countries under relevant international laws and arrangements, to combat IUU fishing in the Southeast Asian region and enhance the competitiveness of ASEAN fish and fishery products by:

- Strengthening Monitoring, Control and Surveillance (MCS) programs under national laws and regulations for combating IUU fishing and enhancing cooperation among relevant national agencies within the country for effective implementation of laws and regulations for combating IUU fishing;
- Intensifying capacity building and awareness-raising programs, including information, education and communication campaigns;
- Enhancing traceability of fish and fishery products from capture fisheries through the implementation of the "ASEAN Guidelines for Preventing the Entry of Fish and Fishery Products from IUU Fishing Activities into the Supply Chain," and "ASEAN Catch Documentation Scheme for Marine Capture Fisheries";
- Enhancing traceability of aquaculture products, through the implementation of all ASEAN GAPs with certification scheme based on regulations of respective countries, and traceability systems that are harmonized with those of major importing countries;
- Managing fishing capacity with a view to balance fishing efforts taking into account the declining status of the fishery resources in the Southeast Asian region, and establishing conservation measures based on scientific evidence;

Box 3. Joint ASEAN-SEAFDEC Declaration on Regional Cooperation for Combating Illegal, Unreported and Unregulated (IUU) Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products (adopted by the Senior Officials of ASEAN-SEAFDEC Member Countries on 3 August 2016) (Cont'd)

- 6. Promoting the implementation of port State measures through enhanced inter-agencies and regional cooperation in preventing the landing of fish and fishery products from IUU fishing activities from all foreign fishing vessels, and encouraging the use of the "Regional Fishing Vessels Record (RFVR)";
- 7. Enhancing regional cooperation in managing trans-boundary fisheries resources through regional, sub-regional, and bilateral arrangements in combating IUU fishing, particularly poaching by fishing vessels, transshipment and transportation of fish and fishery products across borders of respective countries;
- 8. Regulating the quality and safety of ASEAN fish and fishery products all throughout the supply chain to meet standards and market requirements as well as acceptability by importing countries, and development and promotion of ASEAN seal of excellence/label;
- 9. Addressing issues on labor (safe, legal and equitable practices) in the fisheries sector in the Southeast Asian region through strengthened cooperation among relevant national agencies within the country as well as establishing regional, sub-regional and bilateral cooperation and collaboration via relevant ASEAN platforms, and helping to support the development and implementation of relevant labor guidelines for the fisheries sector;
- 10. Enhancing close collaboration between the AMSs and relevant RFMOs in combating IUU fishing; and
- 11. Undertaking collective efforts in developing preventive and supportive measures to strengthen rehabilitation of resources and recovery of fish stocks to mitigate the impacts of IUU fishing.

WE HEREBY DECLARE AND ENCOURAGE THAT

This Joint ASEAN-SEAFDEC Declaration on Regional Cooperation for Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products be implemented by the ASEAN-SEAFDEC Member Countries; and that AMSs and SEAFDEC with support from donors and collaborating partners, strengthen their efforts to implement programs to combat IUU fishing and enhancing the competitiveness of ASEAN fish and fishery products.

This Joint Declaration is adopted on 3 August 2016. In attendance during the adoption are:

- 1) Pg. Kamalrudzaman bin Pg. Haji Md Ishak, Senior Special Duties Officer, Policy and Planning Division, Ministry of Primary Resources and Tourism, Brunei Darussalam
- 2) Dr. Kao Sochivi, Deputy Director General, Fisheries Administration, Kingdom of Cambodia
- 3) Dr. Achmad Poernomo, Senior Advisor to the Minister for Public Policy, Ministry of Marine Affairs and Fisheries, Republic of Indonesia
- 4) Mr. Hideki Moronuki, Senior Fisheries Negotiator, Fisheries Agency, Japan
- 5) Mr. Xaypladeth Choulamany, Director General, Department of Planning and Cooperation, Ministry of Agriculture and Forestry, Lao People's Democratic Republic
- 6) Datuk Hj. Ismail bin Abu Hassan, Director General, Department of Fisheries, Malaysia
- 7) Mr. Khin Maung Maw, Director General, Department of Fisheries, Republic of the Union of Myanmar
- 8) Mr. Sammy A. Malvas, Regional Director, Bureau of Fisheries and Aquatic Resources, Republic of the Philippines
- 9) Dr. Tan Lee Kim, Deputy Chief Executive Officer (Corporate and Technology), Agri-Food & Veterinary Authority, Republic of Singapore
- 10) Dr. Theerapat Prayurasiddhi, Permanent Secretary, Ministry of Agriculture and Cooperatives, Kingdom of Thailand
- 11) Mrs. Nguyen Thi Trang Nhung, Deputy Director, Department of Science, Technology and International Cooperation, Fisheries Administration, Socialist Republic of Viet Nam



Senior Officials from the ASEAN-SEAFDEC Member Countries, as well as from the ASEAN and SEAFDEC during the High-level Consultation on 3 August 2016, expressing their commitment to enhance cooperation for the sustainability of fisheries in the Southeast Asian region by combating IUU fishing in their respective waters



the "Joint ASEAN-SEAFDEC Declaration for Combating IUU Fishing and Enhancing the Competitiveness of ASEAN Fish and Fishery Products" which was then declared adopted (Box 3).

Way Forward

The "Joint Declaration" is another milestone that signifies the Southeast Asian countries' commitment to work together in addressing the issues on IUU fishing which ultimately leads to enhancing the competitiveness of the region's fish and fishery products, including the need to ensure the quality, and safety of such products, as well as addressing issues on labor in fisheries which have recently received much attention of the global community. By adopting the Joint Declaration, the Southeast Asian countries also agreed to implement the provisions and gave the assurance that their respective fishing activities would be conducted in ways that lead to sustainable development that encompasses not only resource sustainability but also food safety and fair treatment to people engaged in the fishing activities. The Joint Declaration is expected to remain a working instrument in all Southeast Asian countries especially that the fisheries sector is considered one of the priorities in the ASEAN Economic Community's Plans and Strategies.

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