

OCEAN GOVERNANCE & SUSTAINABLE DEVELOPMENT





International Ocean Institute (IOI)

- ▶ IOI was established on 10th June 1972 by the late Prof. Elisabeth Mann Borgese as a scientific, educational and non-profit organisation devoted to the sustainable development of the oceans.
- ▶ It has Special Consultative Status at the United Nations Economic and Social Council (ECOSOC) and consultative status at some of UN's Specialized Agencies.
- ▶ IOI is committed to promoting sustainable development, eradicating poverty, disaster reduction, and improving the livelihoods of people by implementing strategies which build awareness, resilience and capacity to address their unique and particular vulnerabilities.





The Philosophy of Ocean Governance

Ocean

Not oceans

This implies that holistic
Nature of the ocean and
Thus the recognition that
Problems are closely
Interrelated and must be
Considered as a whole

Governance

Not government

This implies the inclusive
nature of decision making
and implementation

Francois Bailet, 2002

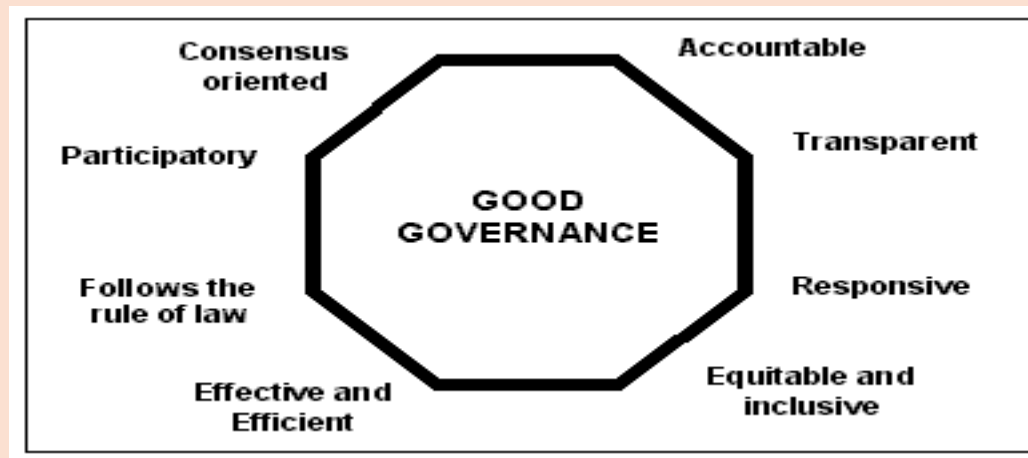
GOVERNANCE

United Nations Economic Social Commission for Asia and the Pacific (UNESCAP) defined Governance as “the process of decision-making and the process by which decisions are implemented” or

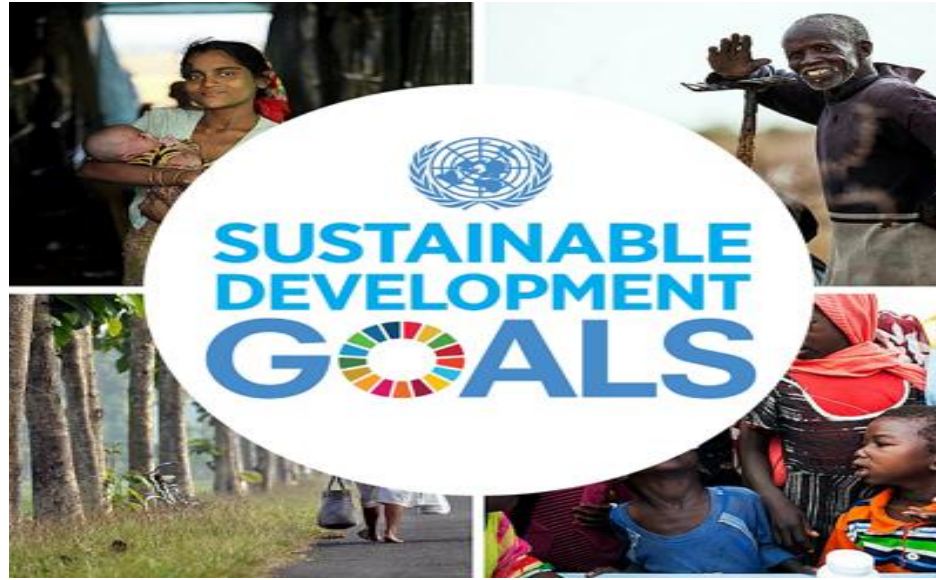
“the institutional structures, policy and decision-making processes and rules related to issues of public concern which determine: how power is exercised: how decisions are taken; and how citizens have their say”.

GOOD GOVERNANCE

- ▶ Good governance has 8 major characteristics. It is **participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive and follows the rule of law**. It assures that corruption is minimized, the views of minorities are taken into account and that the voices of the most vulnerable in society are heard in decision-making. It is also responsive to the present and future needs of society.



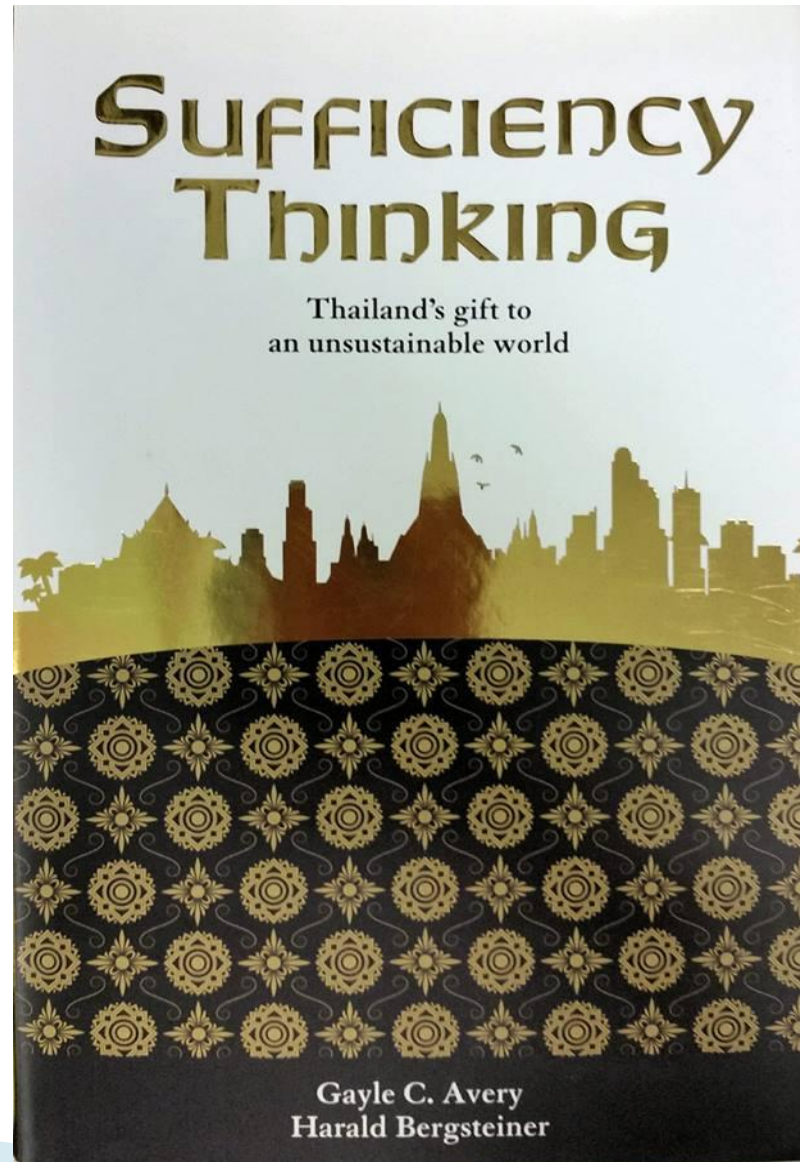
Characteristics of good governance




- ▶ Sustainable development has been defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, 1987). This popular definition can be difficult to translate into action.
- ▶ Bolis, Morioka and Szelwar (2014) argue that sustainable development should consider three dimensions:
 1. satisfy human needs (including social and economic aspects)
 2. using natural resources within the planet's limitations, and
 3. making decisions based on values and ethics.

SUFFICIENCY THINKING (2016)


Thailand is the first country whose government has adopted this kind of thinking as national policy.



SUFFICIENCY THINKING (2016)

- ▶ Thailand is introducing sustainable thinking across the nation—from schools and universities to agriculture, community development, the environment, prisons, business and public policy. By implementing the Sufficiency Economy Philosophy that King Bhumibol Adulyadej of Thailand bestowed on his people, this country is striving for outcomes of well-being, happiness and sustainability.
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SUFFICIENCY THINKING (2016)

- ▶ Sufficiency thinking within the Sufficiency Economy Philosophy seeks to balance the economic, societal, environmental and cultural spheres by following a middle path characterised by decisions and actions that are moderate, reasonable and prudent. The presumption is that individuals, families, communities and societies will embrace virtuous values that, when coupled with appropriate knowledge, enable them to decide and act with wisdom.
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- ▶ Its best definition perhaps is given by Brundtland, not in Our Common Future, but in an address (the Sir Peter Scott lecture) she delivered in Bristol on 8 October 1986.

THERE ARE MANY DIMENSIONS TO SUSTAINABILITY

First, it requires the elimination of poverty and deprivation.

Second, it requires the conservation and enhancement of the resource base which alone can ensure that the elimination of poverty is permanent.

Third, it requires a broadening of the concept of development so that it covers not only economic growth but also social and cultural development.

Fourth, and most important, it requires the unification of economics and ecology in decision-making at all levels.

HUMANS FAILED TO LIVE WITH THE OCEAN & FROM THE OCEAN IN A SUSTAINABLE RELATIONSHIP

The economic and social welfare of humankind depends to a large degree on the oceans' productive sectors and services.

The manner in which humans exploit those resources and services, have been anything but humane.

With over exploitation and depletion of living resources compounded by land based and seaborne pollution this has resulted in the current scarcity of affordable protein making a mockery of attempts to achieve MDG/SDG goals relating to health and poverty reduction.

Awni Behnam

SUSTAINABLE DEVELOPMENT, KNOWLEDGE & EMPOWERMENT

Sustainable development correlates directly with community knowledge and empowerment .

(http://www.footprintnetwork.org/en/index.php/GFN/page/fighting_poverty_our_human_development_initiative/)

Participation of all stakeholders in the strategic planning process, interdisciplinary approach, empowerment and capacity building of all individuals and community organizations, and sustainable management of natural resources and environment are the key principles for sustainable development.



On September 25th 2015, UN adopted a set of goals to end poverty, protect the planet, and ensure prosperity for all as part of a new sustainable development agenda. Each goal has specific targets to be achieved over the next 15 years.



IOI Strategic Road Map on Building Ocean Governance for Equitable Development



International

Master Degree Programme
in Ocean Governance

Training on Ocean Governance
Policy, Law and Management;

Regional Training on Ocean Governance for
Mediterranean, Baltic, Black and Caspian Seas;
Western Pacific, Africa, Turkmenistan, Southeast Asian Seas
and Indian Ocean, and other regions;

System-Wide Pilot projects in different **regions/ countries**
(multi-level, multi-coordination at government functions level
and the community level, adaptive management approach);

Project adoption, implementation and expansion by **national**
governments & **local** communities

**LEGAL FRAMEWORKS &
INTERNATIONAL & REGIONAL
ORGANIZATIONS/COOPERATIONS**



UNCLOS

- ▶ The central international law and policy framework, the 1982 United Nations Convention on the Law of the Sea (UNCLOS), came into force in November 1994.
- ▶ In the wake of the UNCED (UN Convention on Environment and Development), the implementation framework of UNCLOS has started to improve in a number of directions, with

- The adoption of the 1993 FAO Compliance Agreement,
- the 1995 United Nations Fish Stock Agreement and the 1995 FAO Code of Conduct for Responsible Fisheries (CCRF).
- The Precautionary Approach to Fisheries (PAF) adopted in 1995,
- Ecosystem Approach to Fisheries (EAF) adopted in 2001.
- The Sustainable Livelihood Approach to Fisheries has also been successively tested, particularly on small-scale fisheries (Allison & Horemans 2006).
- New instruments have been developed to combat IUU fishing such as the 2001 FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) and, the legally binding 2009 Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated (IUU) Fishing.

UNCLOS

- ▶ In 2017, it is 35 anniversary of UNCLOS
- ▶ Key provisions related to fisheries for food security & food safety

- Limits of maritime zones
- Conservation and management of marine living resources to ensure the long term sustainability of living marine resources within EEZ rests with coastal States. In the high seas, States have a duty to cooperate with other States in adapting measures to manage and conserve living resources. These provisions are further implemented by the Fish Stock Agreement.
- Protection and preservation of the marine environment
- Marine scientific research

UNCLOS

▶ The General Assembly of the UN

- Convened the 1992 UN Conference on Environment and Development (The Earth Summit) which adopted Agenda 21 Chapter 17 sets out a programme of action for the protection of the oceans, all kinds of the sea, including enclosed and semi-enclosed seas and coastal areas and the protection, rational use and development of the living resources.
- The UN Conference on Sustainable Development held in Rio de Janeiro, Brazil in June 2012 (Rio+20) with the Future We Want, recognize the importance of the legal framework provided by UNCLOS for achieving conservation and sustainable use of the oceans and seas and the resources and call upon States to implement their obligations under it.
- Processes established by the General Assembly of UN UN Open-ended Information Consultative Process on Oceans and the Law of the Sea (ICP) with numbers of thematic issues such as ocean and climate change

UNCLOS

- ▶ The Division for Ocean Affairs and the Law of the Sea (UNDOALOS)
 - To facilitate States in implementation of UNCLOS
 - Support capacity building
 - UN Nippon Foundation of Japan Fellowship
 - The Hamilton Shirley Amerasinghe Memorial Fellowship on the Law of the Sea

- ▶ Dr. Ratana Chuenpagdee will present “Holistic Approach to Ocean Governance” on 12 November 2017.

FOOD SECURITY & FOOD SAFETY: Aquaculture & Fisheries in the ASEAN Region

Cherdsak VIRAPAT

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FOOD SECURITY & FOOD SAFETY

FOOD SECURITY

- ▶ **DEFINITION: “Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (World Food Summit, 1996).**

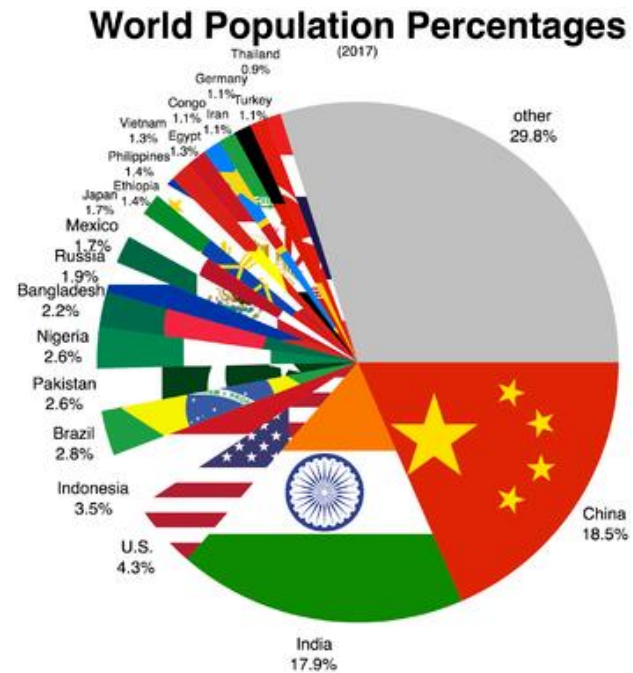
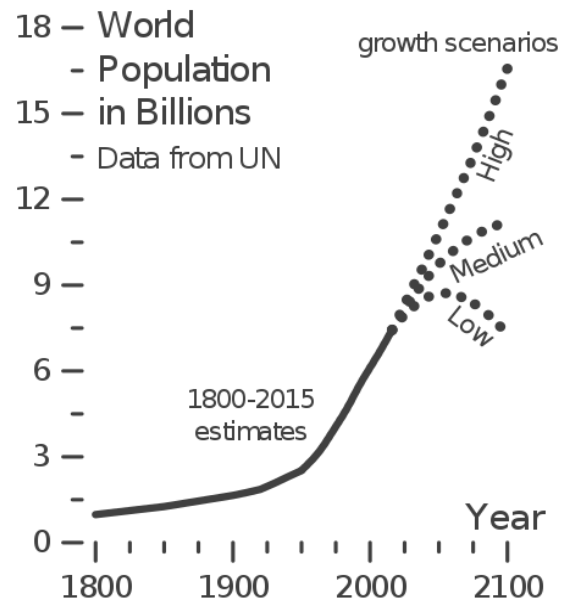
Food security analysts look at the combination of the following four main elements, namely; food availability; food access, food utilization, and food stability.

FOOD SECURITY

- ▶ Sadly, despite the fact that we live in world which produces sufficient food to meet all the dietary nutrient needs of all of its people live a healthy and active life, this is not the case for those people without the monetary resource or government support to purchase or obtain sufficient food to meet their daily needs (Tacon & Metien, 2017).

Fish and seafood products represent an important component of the human diet, providing about 3.1 billion people with almost 20% of their average annual protein intake (FAO, 2015) and providing the only readily available dietary source of long-chain omega-3 polyunsaturated fatty acids for direct human consumption.

The world population was estimated to have reached 7.5 billion in April, 2017.



World population estimates from 1800 to 2100, based on "high", "medium" and "low" United Nations projections in 2015 and UN historical estimates for pre-1950 data
(https://en.wikipedia.org/wiki/World_population)

FOOD SECURITY

- ▶ About 795 million people are undernourished globally during 2014–2016.
- ▶ The decline is more pronounced in developing regions, despite significant population growth. Progress has been hindered by slower and less inclusive economic growth as well as political stability in some developing regions, such as Central Africa (Burundi, Chad, Rwanda, etc.) and Western Asia (Iraq, Lebanon, Yemen).

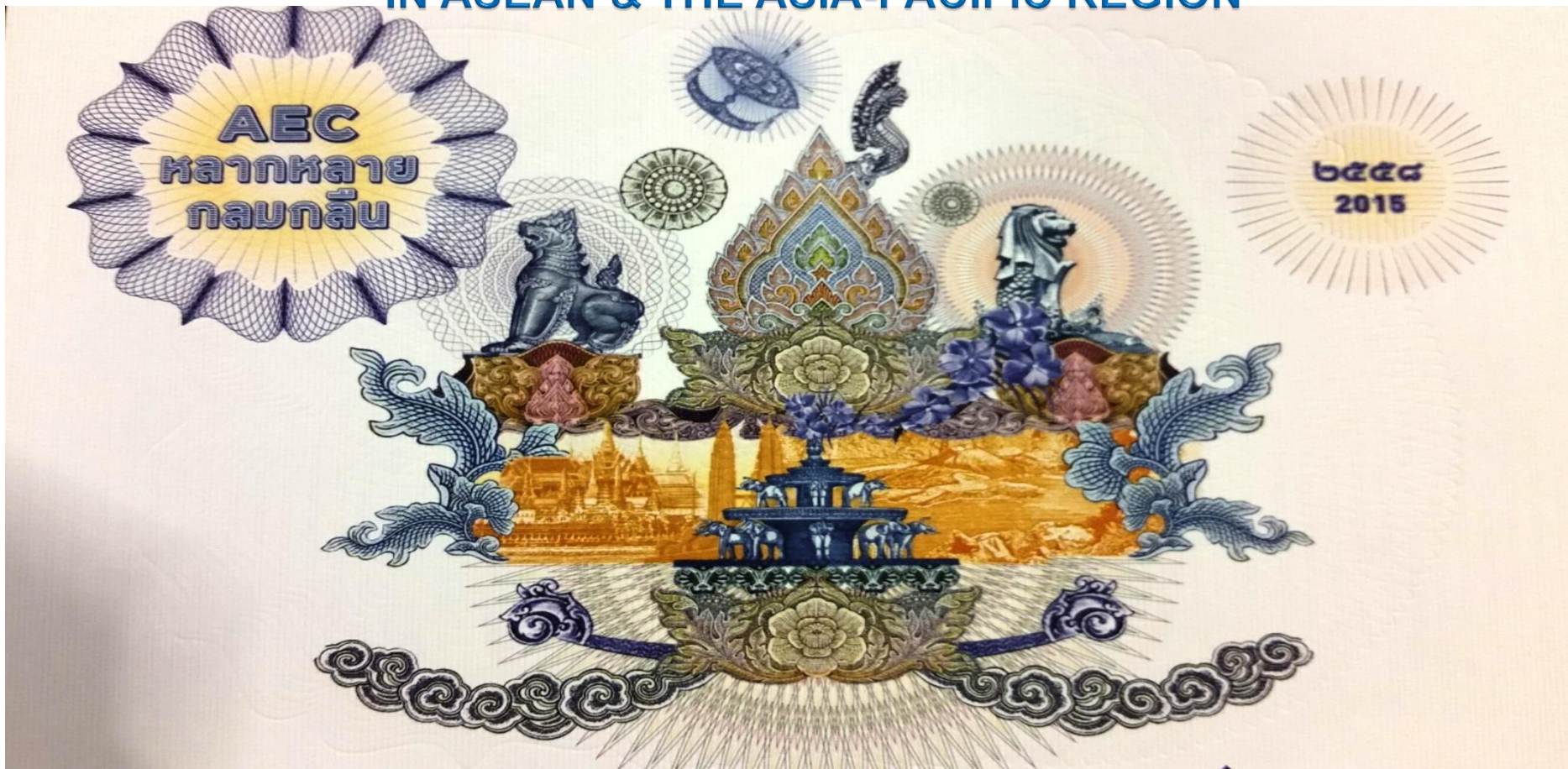
Economic growth is a key success factor for reducing undernourishment, but it has to be inclusive and provide opportunities for improving the livelihoods of the poor. Enhancing the productivity and incomes of smallholder family farmers is key to progress.

FOOD SAFETY

- ▶ Food safety is a key concern for international trade in fish products.
- ▶ The constantly changing regulatory environment and safety requirements of importing countries pose a special challenge to small-scale aquaculture producers.

- NACA assists members to assure the safety and quality of aquaculture products through the adoption of science-based better management practices. Policy issues concerning aquaculture certification and activities in market access are also addressed.
- Food safety and certification programme focuses on assisting small-scale farmers to adapt to the changing trade and safety environment. Cluster-based management approaches and formation of farmer societies are promoted as practical mechanisms for implementation of better management practices.
- Key activities:
 - Food safety standards
 - National residue testing and monitoring
 - Improve access to markets
 - Address biosecurity and associated human health issues regarding the consumption of fish and processed products
 - Development of farmer groups and cluster-based certification concepts and methodologies

AN OUTLOOK FOR AQUACULTURE FOR FOOD SECURITY AND SAFETY IN ASEAN & THE ASIA-PACIFIC REGION



AQUACULTURE PRODUCTION

Aquaculture Production in ASEAN

17,476,296 Tonnes (26.23% of world total production)

Aquaculture Production in Selected Indian Ocean Countries

(Bangladesh, India, Iran)

7,161,100 Tonnes (10.75% of the World total production)

Aquaculture Production in Asia-Pacific

58,895,736 Tons (88.39% of world total production)

China

41,108,306 Tons (61.69% of world total production)

World Total Production
66,633,253 Tons (FAO,
2014)

**Global demand on
aquatic food is driving
by population growth,
poverty and wealth**



FOOD INSECURITY IN ASEAN COUNTRIES

About 60.5 million people are undernourished in ASEAN during 2014-2016.

		% Total Population
Brunei Darussalam	ns	<5.0
Cambodia	2.2	14.2
Indonesia	19.4	7.6
Lao People's Democratic Republic	1.3	18.5
Malaysia	ns	<5.0
Myanmar	7.7	14.2
Philippines	13.7*	13.5
Singapore	ns	
Thailand	5.0*	7.4
Timor-Leste	0.3	26.9
Vietnam	10.3	11.0
TOTAL	60.5	



FOOD INSECURITY IN SELECTED INDIAN OCEAN COUNTRIES

About 269.3 million people are undernourished in selected Indian Ocean countries during 2014-2016

		% Total Population
Bangladesh	26.3	16.4
India	194.6	15.2
IR Iran	ns	<5.0
Maldives	<0.1	5.2
Nepal	2.2	7.8
Pakistan	41.4	22.0
Sri Lanka	4.7	22.0
TOTAL	269.3	

No of undernourished in China is 133.8 millions or 9.3% of the total population.



CONSTRAINTS IN AQUACULTURE

Aquaculture Sector will face serious constraints

- ▶ **Disease prevention and health management;**
- ▶ **Genetic Improvement and domestication;**
- ▶ **Environmental management;**
- ▶ **Food safety**



FISHERIES IN THE SOUTHEAST ASIAN REGION

In the Southeast Asian region:

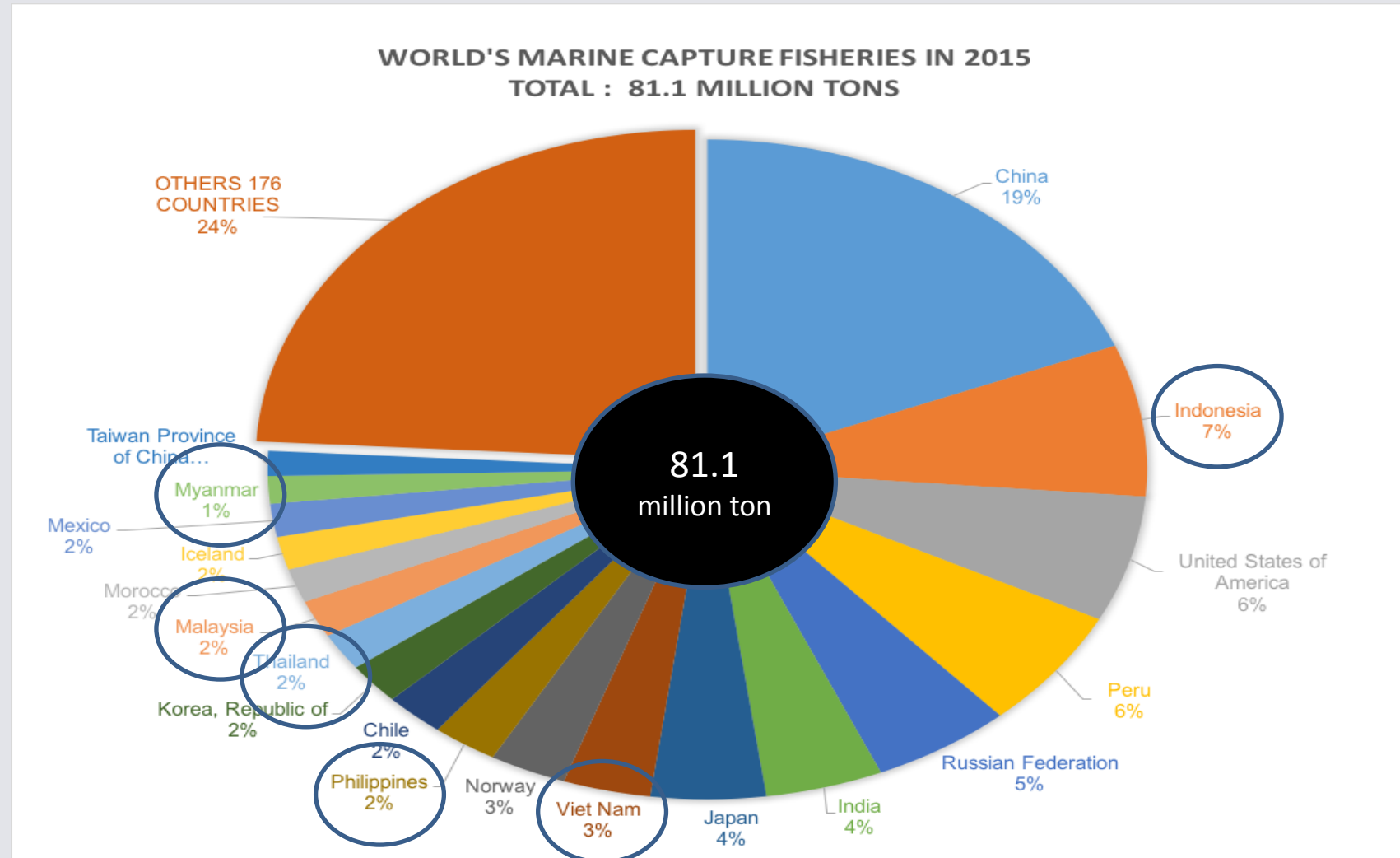
- ❖ Fisheries sector plays an important role for food security
- ❖ contributes to economic and social betterment, to the nutrition and wellbeing of the peoples
- ❖ >20 million persons employed in fisheries-related industries



FISHERIES IN THE SOUTHEAST ASIAN REGION

❖ In 2015, world's top 20 marine capture fisheries;

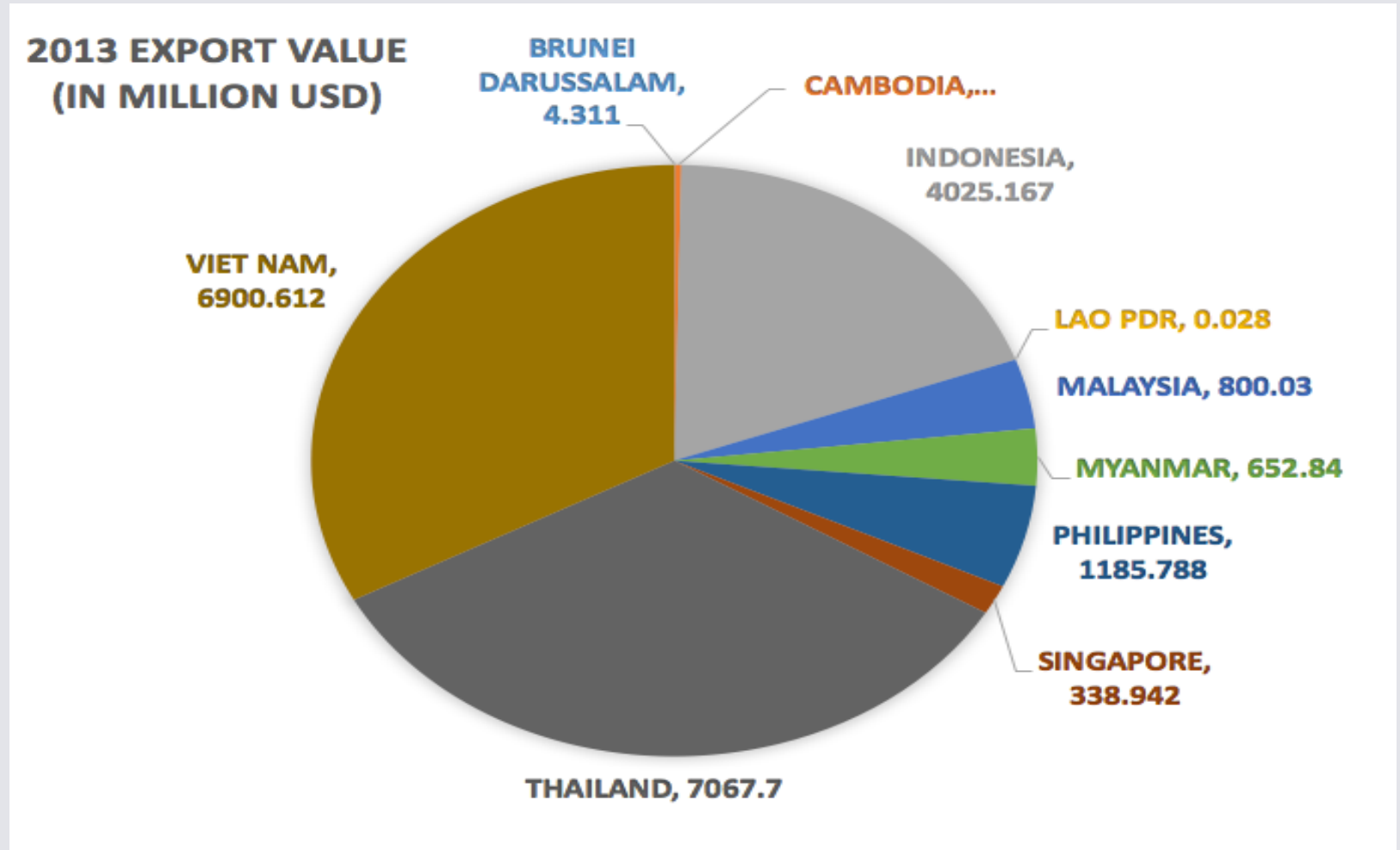
- ✓ ID: 6.03 million ton
- ✓ VN: 2.61 million ton
- ✓ PH: 1.95 million ton
- ✓ TH: 1.50 million ton
- ✓ MY: 1.49 million ton
- ✓ MM: 1.09 million ton



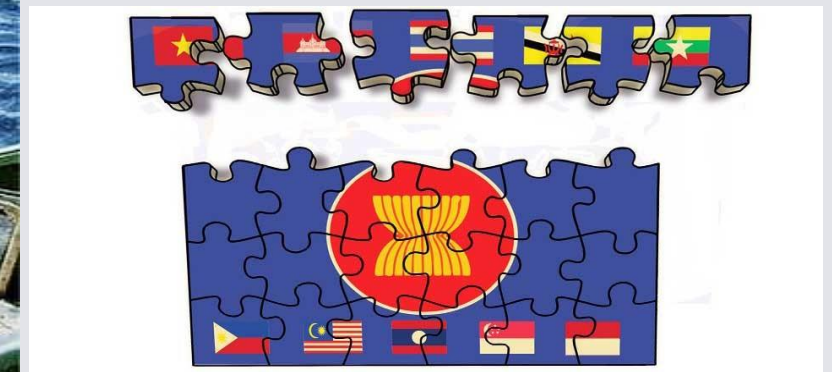
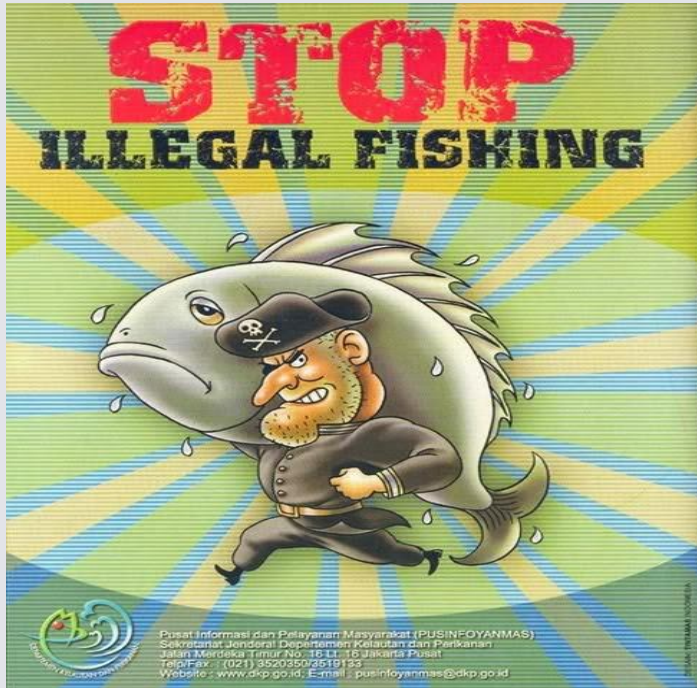
FISHERIES IN THE SOUTHEAST ASIAN REGION (7)

Export Values from ASEAN

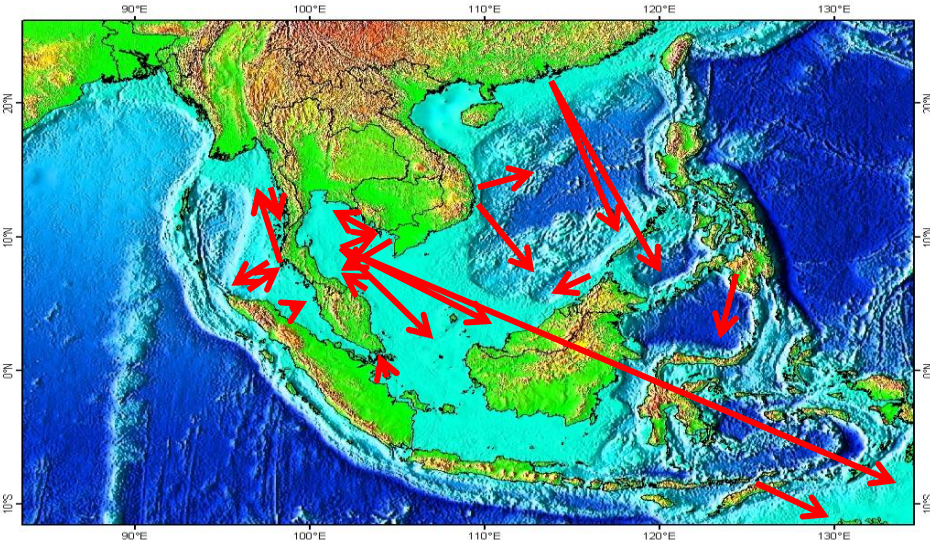
- ❖ TH: 7.1 billion \$
- ❖ VN: 6.9 billion \$
- ❖ ID: 4.0 billion \$
- ❖ PH: 1.2 billion \$
- ❖ MY: 0.80 billion \$



CHALLENGES FACED BY ASEAN MEMBER STATES



IUU FISHING IN ASEAN REGION



© Jürgen Freund / WWF

- ① Illegal Fishing Activities within Country
- ② Landing of Catch Across Borders,
Double flagging
- ③ Poaching in Other Country's EEZ
- ④ Illegal Fishing and Trading Practices of Live Reef Food Fish, Ornamentals, and Endangered Aquatic Species
- ⑤ IUU Fishing in High Seas & RFMO Areas and landing catch in AMS

IUU FISHING: A GLOBAL ISSUE

Fishing is illegal if:

- no authorisation
- against conservation and management measures by RFMOs
- against national laws or international obligations.

Fishing is unreported if:

not reported, or the reporting contravenes international, RFMO or national laws and regulations.

Fishing is unregulated if:

- the fishing vessel has no nationality
- fishing activities jeopardise fish stocks.



IUU Fishing Practices



81%

19%



23 Billion

- IUU caught fish in 2003 was 11-19% of reported catch
- Representing 10-26 Million Tons of Fish
- Equal to 10-23 Billion US Dollars



FISHERIES IN THE SOUTHEAST ASIAN REGION



- **Improvement of peoples' livelihoods**
 - more than 10 M fishers and fish farmers are involved
 - employment is generated in fisheries industries and aquaculture farms

FISHERIES IN THE SOUTHEAST ASIAN REGION



- **Contribution to national economies**
 - ensuring food availability
 - providing household food stability, and nutritional security
 - Improving living standards of poor rural communities

SOME INTERNATIONAL & REGIONAL ORGANIZATIONS/COOPERATIONS RELATED TO FOOD SECURITY

- ▶ Asian Development Bank (ADB), Philippines
- ▶ Asia–Pacific Economic Cooperation (APEC), Singapore
- ▶ Association of Southeast Asian Nations (ASEAN), Indonesia
- ▶ Bay of Bengal Initiative for Multi–Sectoral Technical and Economic Cooperation (BIMSTEC)
- ▶ Bay of Bengal Large Marine Ecosystem (BOB–LME) (Regional Coordination Unit, Phuket, Thailand)
- ▶ Food and Agriculture Organization of the United Nations Regional Office, Bangkok, Thailand
- ▶ The International Fund for Agricultural Development (IFAD), Rome, Italy
- ▶ Network of Aquaculture Centres in Asia–Pacific (NACA), Bangkok, Thailand
- ▶ Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), Philippines
- ▶ Southeast Asian Fisheries and Development Center (SEAFDEC), Bangkok, Thailand
- ▶ Standards and Trade Development Facility (STDF), Geneva, Switzerland
- ▶ World Bank, Washington, U.S.A.
- ▶ WorldFish Centre, Malaysia
- ▶ World Food Programme, Rome, Italy

SOME INTERNATIONAL & REGIONAL ORGANIZATIONS/COOPERATIONS RELATED TO FOOD SAFETY

- ▶ Asia Regional Advisory Group on Aquatic Animal Health (AG)
- ▶ Codex Alimentarius Commission (CAC), FAO, Rome, Italy
- ▶ Food and Agriculture Organization of the United Nations Regional Office
- ▶ Network of Aquaculture Centres in Asia–Pacific (NACA)
- ▶ Southeast Asian Fisheries and Development Center (SEAFDEC)
- ▶ Standards and Trade Development Facility (STDF)
- ▶ World Animal Health Organisation (OIE)
- ▶ World Health Organization (WHO) Regional Office for Southeast Asia, New Delhi, India



THE END