

# Indian Marine Fisheries Code

Guidance on a marine fisheries  
management model for India



# IMFC

Presented by  
K Sunil Mohamed

DADF, MoAFW  
New Delhi  
24 October 2017



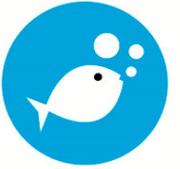
**DRAFT**  
circulated for  
comments



## Collaborative Work of CMFRI & CIFT

- Scientists of the CMFRI and CIFT, two of India's major fisheries research institutes, have come together to develop a guidance on how the FAO-CCRF code can be put into practice in the country
- The IMFC explains in detail each sub-article of the FAO-CCRF and provides information on how the article can be implemented and by whom.
- The IMFC further proposes several new bodies which are necessary to place fisheries management in the country on an unassailable footing.





**FISHING FOR  
THE FUTURE**

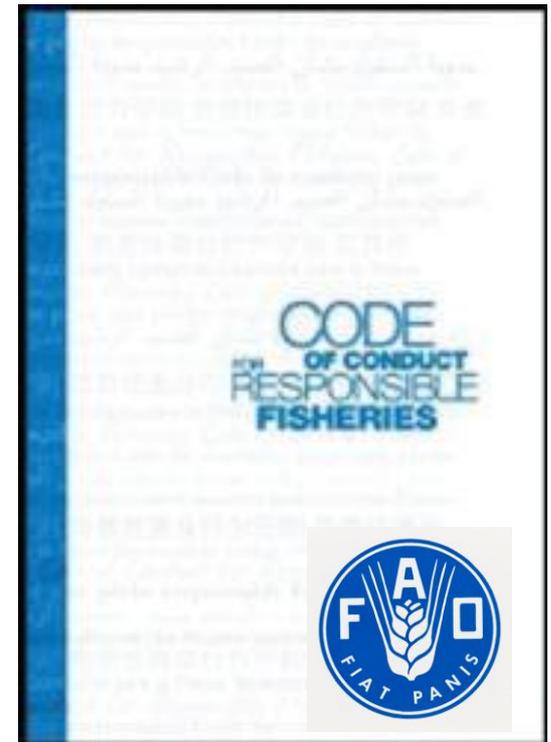
## Background

- India's marine fisheries are at a turning point; the rapid increase in yields witnessed during the first 60 years of independence has slowed down and the scope for increase in yields from new unexploited and underexploited fish stocks and grounds seems limited.
- The situation calls for urgent measures to sustain the production close to the target potential yield of 4.41 million tonnes.
- These measures would mean implementation of science based fisheries management and regulations.
- Although much has been accomplished by way of research and development in marine fisheries in India, the transformation and implementation of the outcome of these studies into effective management of marine fisheries resources of the country has been a shortcoming so far.



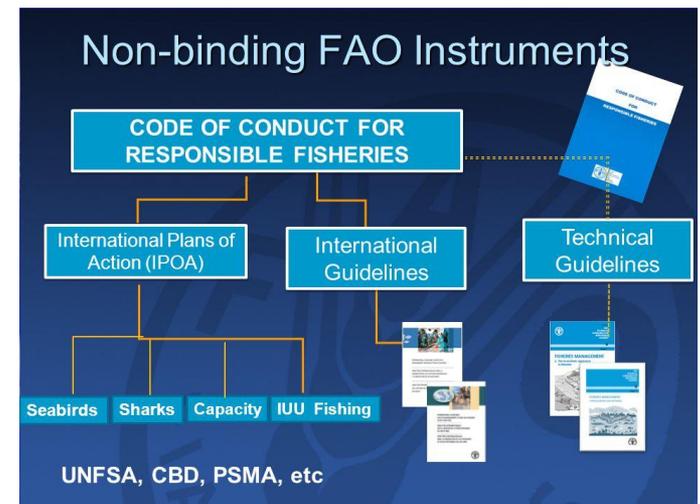
# Genesis of FAO Code of Conduct for Responsible Fisheries [CCRF]

- Realizing the unsustainable nature of global fisheries, the FAO Committee of Fisheries Meeting in 1991 called for more responsible practices and better management
- The 1992 Cancun Conference on Responsible Fishing called on FAO to prepare a Code of Conduct
- The technical consultations during 1992-1995 lead to adoption of a Code of Conduct for Responsible Fisheries (CCRF) by FAO Conference of Member Governments on 31st October, 1995



# The principal goals of CCRF are...

- Sustainable benefits from fisheries in terms of food, employment, trade and economic well-being for people throughout the world
- Provides principles and standards applicable to the conservation, management and development of all fisheries
  - The Code is voluntary and the main actors are all members and non-members of FAO, fishing entities, sub-regional, regional and global organizations, governmental or nongovernmental, and all other interested stakeholders concerned with fisheries resources and fish trade





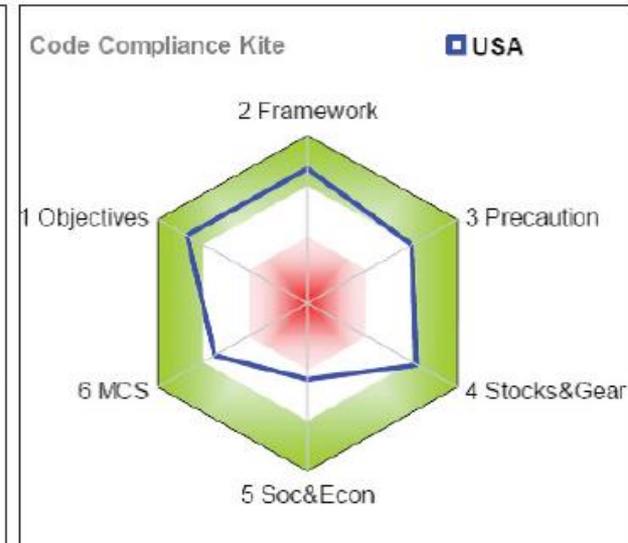
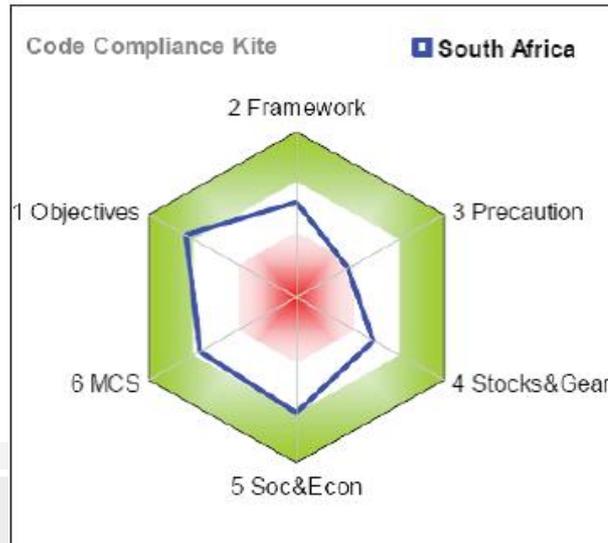
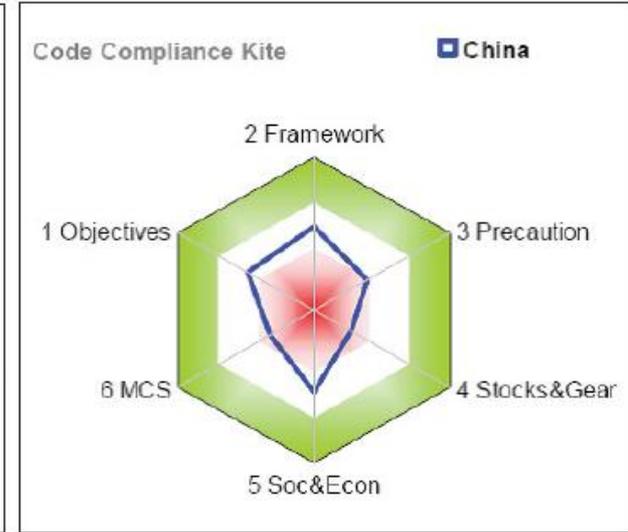
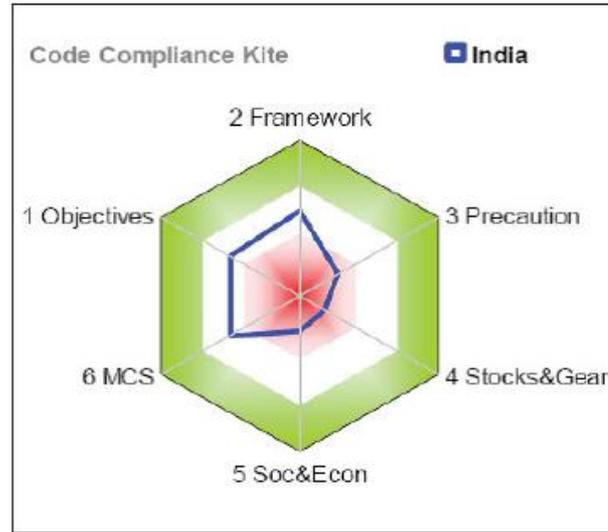
## There are 12 main articles in the Code with 221 sub-articles..

Article #	Area	Number of sub-articles
Article 1:	Nature and Scope of the Code	4
Article 2:	Objectives of the Code	-
Article 3:	Relationship with Other International Instruments	2
Article 4:	Implementation, Monitoring and Updating	4
Article 5:	Special Requirements of Developing Countries	2
Article 6:	General Principles	19
Article 7:	Fisheries Management	46
Article 8:	Fishing Operations	52
Article 9:	Aquaculture Development	22
Article 10:	Integration of Fisheries into Coastal Area Management	15
Article 11:	Post-Harvest Practices and Trade	35
Article 12:	Fisheries Research	20
<b>12</b>	<b>Total</b>	<b>221</b>

# India – Current Compliance to CCRF

A critical appraisal of the fisheries management system in India by the World Bank indicated low compliance to CCRF article 7 and a poor fisheries management score of 2/6.

*Pitcher, T.J., Kalikoski, D. and Pramod, G. (eds), 2006. Evaluations of Compliance with the UN Code of Conduct for Responsible Fisheries. Fisheries Centre Research Reports 14(2).*





## The Approach.....1



- The FAO-CCRF as a whole to be considered and will be the template for the Indian Code. The original articles shall not be altered or removed.
- Against each article and sub article there would be brief descriptive answer to the following questions:
  - a) **How** this article would be implemented on ground?
  - b) **What** would be the standards applied?
  - c) **Who** would be responsible for implementing the articles?
- A council based fisheries management regime would be mooted as the basis for implementation of the adapted CCRF.
- The Institutions and linkages necessary for this shall be prepared and appended to the document.

# Approach .....2 Final Draft.. Expert consultations

No.	Expert Domain	Number of consultations
1	Marine fisheries research and management	6
2	ICAR headquarters – DDG (Fy)/ADG (M.Fy)	2
3	Directors of ICAR fisheries research institutes	6
4	Department of Animal husbandry Dairying & Fisheries	3
5	Fisheries governance departments	12
6	National Biodiversity Authority	1
7	Ministry of Environment, Forests & Climate Change	2
8	Ministry of Earth Sciences	2
9	National Institute of Oceanography	1
10	Non-Governmental Organizations	6
11	Fishermen association/ trade union leaders	10

**ASK AN EXPERT**



**EXAMPLE**

## An Example of how articles are addressed...

Article/ Subsection	How	Standard	Who
7.3.3 Long-term management objectives should be translated into management actions, formulated as a fishery management plan or other management framework.	Practical FMPs would be developed by the CMFRI for each maritime state keeping in view the long-term objective set out in the MFRAs.	Ensure compatibility of long-term objective and FMPs.	CMFRI and DOF of all maritime states
7.3.4 States and, where appropriate, sub-regional or regional fisheries management organizations and arrangements should foster and promote international cooperation and coordination in all matters related to fisheries, including information gathering and exchange, fisheries research, management and development.	This should be done through the respective RFMOs and in cases like the small ecosystems of GoM and PB, bilateral fisheries management organization with Sri Lanka should be created. A similar arrangement should be made with Bangladesh.	RFMO guidelines.	NMFMC DADF
7.3.5 States seeking to take any action through a non-fishery organization which may affect the conservation and management measures taken by a competent sub-regional or regional fisheries management organization or arrangement should consult with the latter, in advance to the extent practicable, and take its views into account.	The DADF should establish a consultative mechanism whereby the views of the RFMOs are taken into account.	RFMO guidelines.	DADF
<b>7.4 Data gathering and management advice</b>			
7.4.1 When considering the adoption of conservation and management measures, the best scientific evidence available should be taken into account in order to evaluate the current state of the fishery resources and the possible impact of the proposed measures on the resources.	The NMFMC and DADF would adopt conservation and management advice from CMFRI, FSI and CIFT based on up-to-date information.	Best practices in scientific conservation and management of marine fish stocks	NMFMC DADF CMFRI FSI CIFT

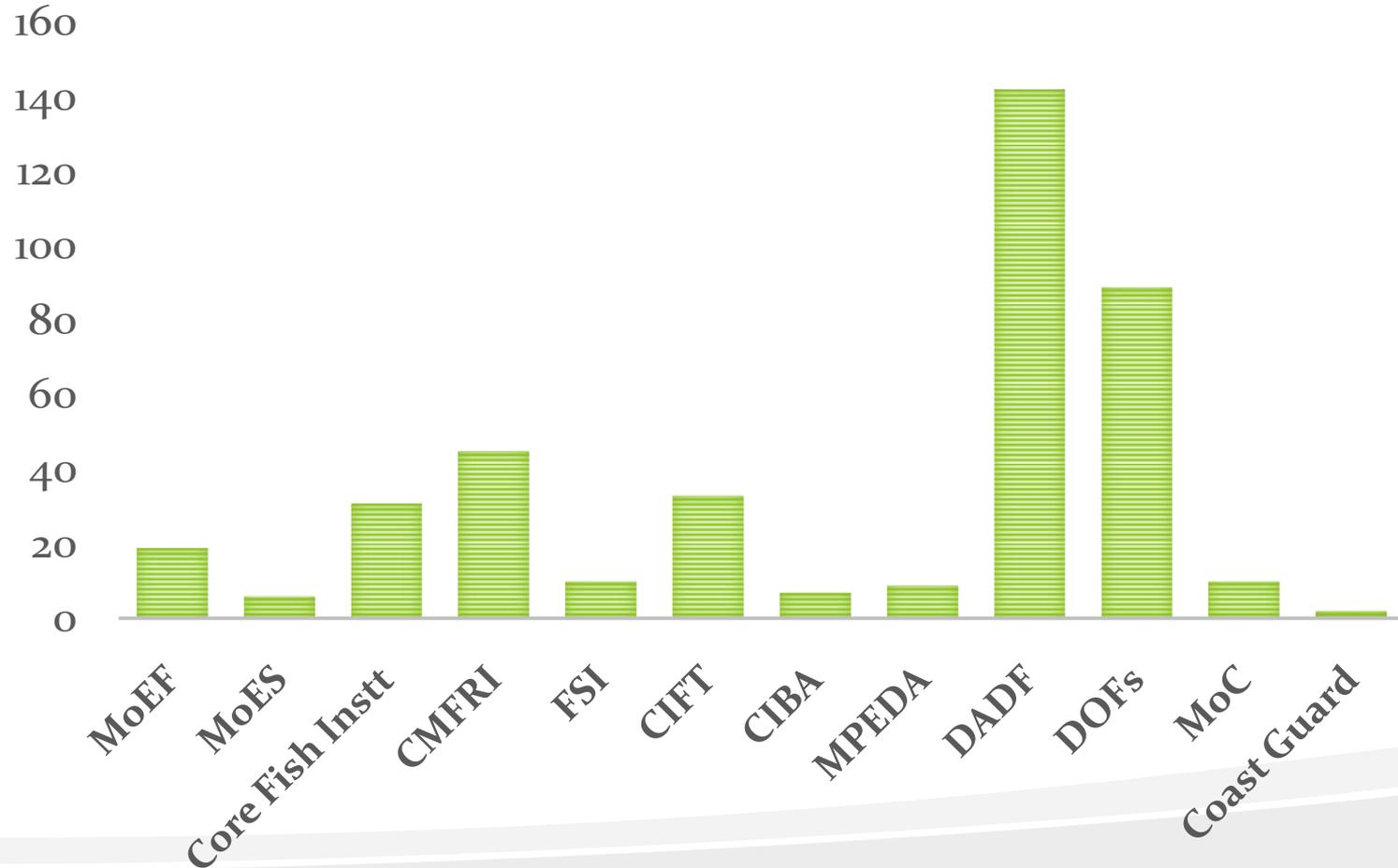
**EXAMPLE**

## Another example...

Article/ Subsection	How	Standard	Who
8.3.2 Port States should provide such assistance to flag States as is appropriate, in accordance with the national laws of the port State and international law, when a fishing vessel is voluntarily in a port or at an offshore terminal of the port State and the flag State of the vessel requests the port State for assistance in respect of non-compliance with sub regional, regional or global conservation and management measures or with internationally agreed minimum standards for the prevention, of pollution and for safety, health and conditions of work on board fishing vessels.	DADF in consultation with MoS should develop guidance on port state duties in accordance with national and international laws to comply with this article.	PSM guidelines of FAO (2016).	DADF, MoS
<b>8.4 Fishing operations</b>			
8.4.1 States should ensure that fishing is conducted with due regard to the safety of human life and the International Maritime Organization International Regulations for Preventing Collisions at Sea, as well as International Maritime Organization requirements relating to the organization of marine traffic, protection of the marine environment and the prevention of damage to or loss of fishing gear.	The MFRA's should be amended to introduce a new section on fishing operations wherein safety of human life as incorporated in guidelines of the International Maritime Organization Regulations for Preventing Collisions at Sea is covered.	International Maritime Organization guidelines.	DADF DOF of all maritime states.
8.4.2 States should prohibit dynamiting, poisoning and other comparable destructive fishing practices.	The existing MFRA's have provisions for prohibiting dynamiting and poisoning. However, there is no updating of destructive fishing practices which are on the increase. The core fisheries research institutions should periodically guide the DADF and DOFs of all maritime state on the prevalence of such practices, which then should be prohibited by amending the law.		DADF  DOF of all maritime states.  Core fisheries research institutes



# Who are the WHO and how many tasks?





## 3 key bodies to be created

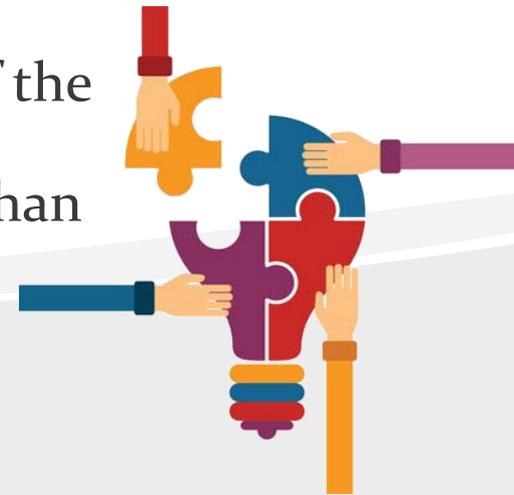


- National Marine Fisheries Management Council [**NMFMC**]
- Aquaculture Authority of India [**AAI**]
- National Aquatic Products Council (**NAPC**)



# National Marine Fisheries Management Council [NMFMC]

- Global shift in the governance of fisheries to a broader approach that recognizes fishermen participation, local stewardship, and shared decision-making in the management of fisheries.
- It is becoming increasingly clear that governments, with their finite resources, cannot solve all fishery problems.
- This approach is called **co-management or participatory management**
- Fishers are empowered to become active members of the fisheries management team, balancing rights and responsibilities, and working in partnership, rather than antagonistically, with government



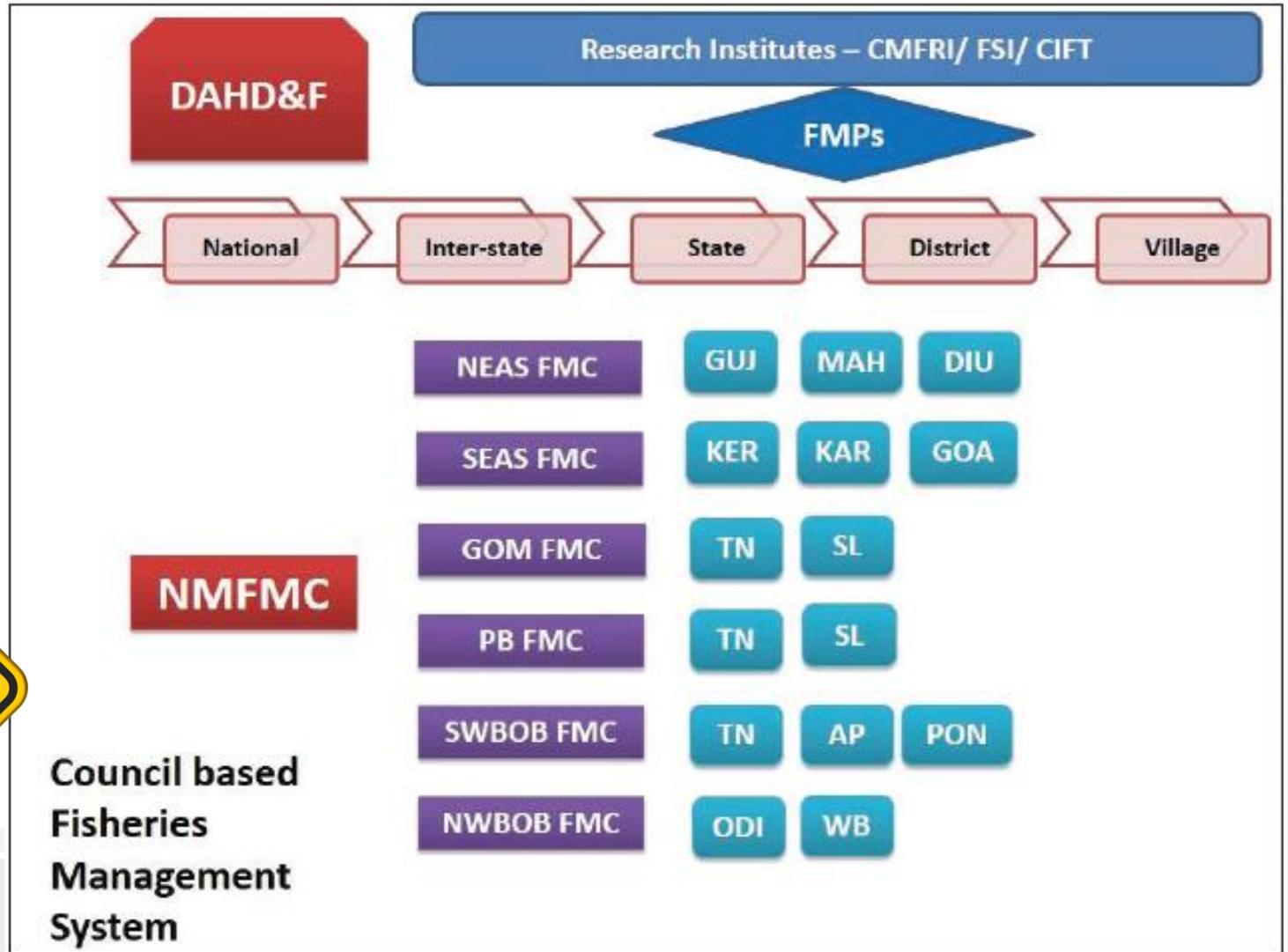


# Types of Co-management

## The Evolution of Co-Management

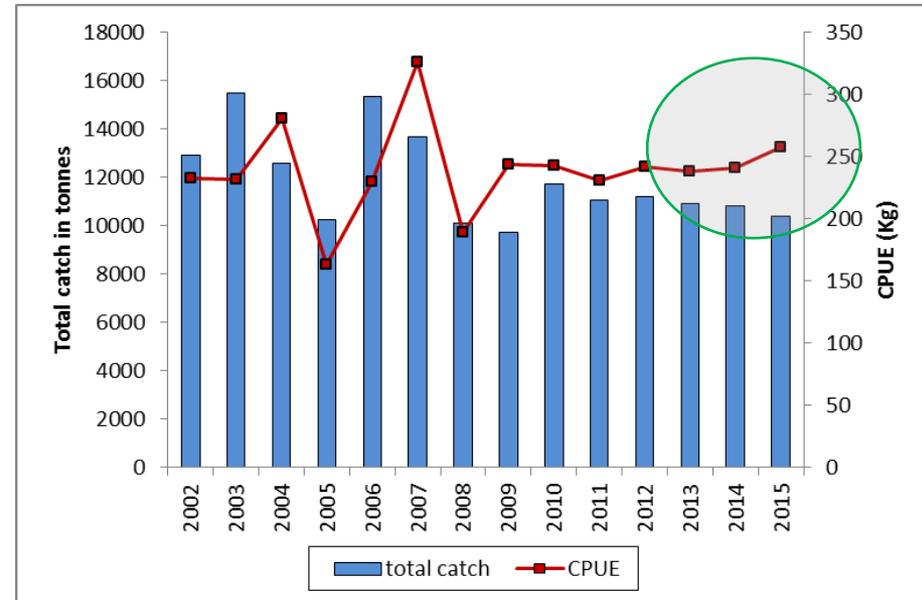
- **Instructive:** There is only minimal exchange of information between government and fishers.
- ✓ • **Consultative:** Mechanisms exist for government to consult with fishers but all decisions are taken by government.
- ✓ • **Cooperative:** This type of co-management is where government and fishers cooperate together as equal partners in decision-making.
- **Advisory:** Fishers advise government of decisions to be taken and government endorses these decisions.
- **Informative:** Government has delegated authority to make decisions to fisher groups who are responsible for informing government of these decisions.

# Management Councils Proposed for India



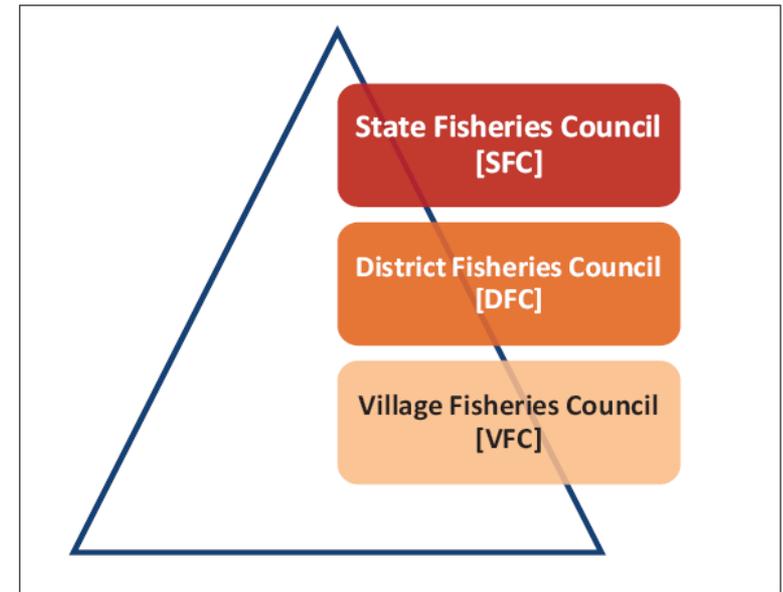
# Ashtamudi Lake Clam Governance Council (ACGC) Meetings

- Based on the advice of CMFRI in its Ashtamudi Lake clam FMP – the ACGC came into existence in June 2013
- The 20-member Council with District Collector of Kollam District as Chairman meets 4 times in a year
- Based on reports of poor biomass in clam beds by CMFRI – council agreed for one additional day per week fishing holiday (~15% less effort during 2015)
- Intensified surveillance and inspections and punished violations



## Kerala moves ahead...

- Kerala MFR Act amended in September 2017 to bring in following changes..
- Registration of boat building yards to control overcapacity
- Registration of net making factories for controlling net sizes and mesh sizes
- Introduction of 3-tiered management councils for co-management with specific TORs



*"13A. Constitution of Fisheries Management Councils.—(1) The Government may, for the effective management and surveillance of marine fisheries and for effectively carrying out the provisions of this Act, by notification in the Gazette, constitute a three tier system of fisheries Management Councils, namely: —*

- (a) Fishing Village Management Council;
- (b) District Fisheries Management Council; and
- (c) State Fisheries Management Council.

*13C. Powers, duties and functions of District Fisheries Management Council.—The District Fisheries Management Council shall exercise the following powers and perform the following duties and functions, namely:—*



# NMFMC Constitution

## Article/ Subsection

### 7.1 General

7.1.1 States and all those engaged in fisheries management should, through an appropriate policy, legal and institutional framework, adopt measures for the long-term conservation and sustainable use of fisheries resources. Conservation and management measures, whether at local, national, sub regional or regional levels should be based on the best scientific evidence available and be designed to ensure the long-term sustainability of fishery resources at levels which promote the objective of their optimum utilization and maintain their availability for present and future generations; short-term considerations should not compromise these objectives.

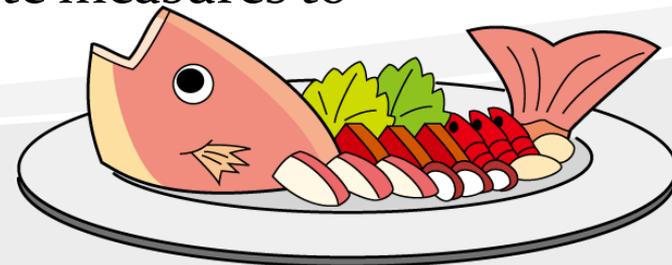
The NMFMC would be comprised of Directors of CMFRI, FSI and CIFT and senior officials of the DADF and headed by the Secretary (Fy). There would be 25 members for NMFMC in the following manner:

Chair

- Secretary (Chair)
- JS (Fy)
- DDG (Fy), ICAR
- Director, CMFRI,
- Director, CIFT,
- DG, FSI,
- Directors of fisheries of all maritime states and UTs
- 3 subject experts
- 4 fishermen association representatives
- FDC as member secretary

# National Aquatic Products Council - NAPC

- The safety of food being consumed is of paramount importance.
- It is obvious that the quality of the fish and other aquatic lives is related directly to the ecosystem and it is important to check the hazardous chemicals and pathogens in fish contributing to ill-health to consumers and thereby the overall well-being of the society.
- Hazards associated with the ecosystem particularly, those caused by organochlorine compounds, antibiotic residues, heavy metal residues, pathogenic microorganisms etc., could be expected in the fish and could cause dangerous outcomes in human beings, if appropriate measures to contain them are not taken up.



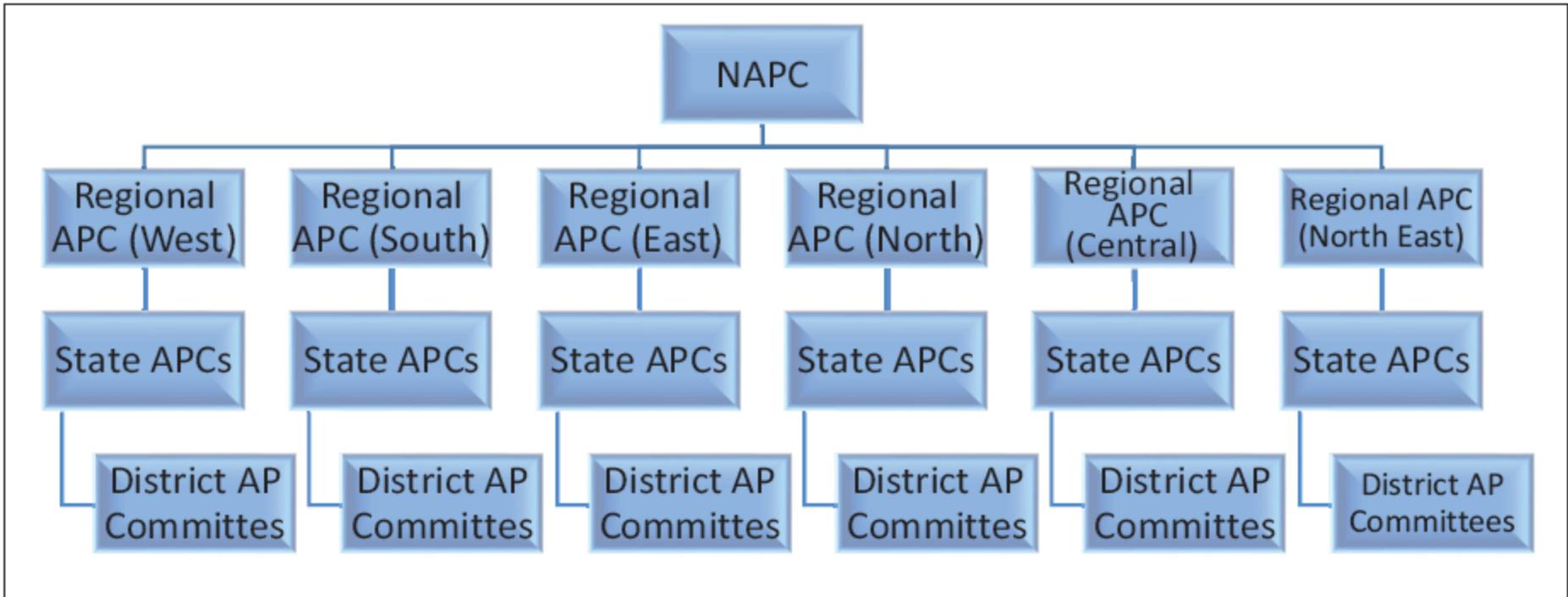


## Seafood Safety – Current Mechanisms

- In India the quality of fish meant for human consumption is, as of now, regulated by Export Inspection Council and Food Safety Standards Authority of India for export and domestic consumption respectively.
- The control at lower level is through Export Inspection Agency on commodity basis and by Food Safety Commiserate at state level.
- To make the whole system effective and have an up and down regulation in accordance with the FAO's Code, a model system is suggested for effective implementation which incorporates a collective involvement of national bodies, regulatory bodies and the core research institutes.



# A 4-tiered NAPC is proposed...





# Constitution of NAPC & regional councils

1. Secretary, DADF, MoA&FW, Chairman
2. Joint Secretary, DADF, MoA&FW
3. Representatives from CIFT, Quality Control (1 member)
4. Representatives from CIFT, Microbiology (2 members)
5. Representative from CMFRI
6. Representative from FSSAI
7. Representative from EIC
8. Representative from NFDB
9. Representatives of the Regional AP Council (2 members)
10. Representatives of State DOF (4 members)
11. President FISHCOPFED or his representative
12. Secretary, SEAI
13. Commissioner of Fisheries (Member Secretary)

## Regional APC (West)

- Rajasthan, Gujarat, Maharashtra, Goa

## Regional APC (South)

- Karnataka, Kerala, Tamil Nadu, Puducherry, Andhra Pradesh, Telangana, Lakshadweep

## Regional APC (East)

- Orissa, West Bengal, Bihar, Jharkhand, Andaman & Nicobar

## Regional APC (North)

- Jammu & Kashmir, Himachal Pradesh, Uttar Pradesh, Uttaranchal, Punjab, Haryana, Delhi

## Regional APC (Central)

- Madhya Pradesh, Chattisgarh

## Regional APC (North East)

- All North Eastern States and Sikkim



# Aquaculture Authority of India - AAI

- The Coastal Aquaculture Authority (CAA) today is greatly focused towards shrimp with regard to the composition of its members, standards and activities.
- The organization needs to widen its scope to include aquaculture of finfish (marine and freshwater), bivalves, seaweeds and other cultivable aquatic organisms.
- Standards for Best Aquaculture Practice (BAP) for all aquatic organisms need to be developed and implemented using the statutory powers vested with the Authority.
- For achieving this, the composition of the members of the CAA has to be enlarged to include expertise in culture of other aquatic organisms and culture systems. The CAA could also be appropriately renamed as **Aquaculture Authority of India (AAI)** to refer to the widened scope of the body.



# Comments received on IMFC

## Comments from FAO

----- Forwarded message -----

From: **FI-ADG** <[FI-ADG@fao.org](mailto:FI-ADG@fao.org)>

Date: Thu, Aug 10, 2017 at 1:49 PM

Subject: CMFRI PUBLICATION

To: "[joshiyoguru@gmail.com](mailto:joshiyoguru@gmail.com)" <[joshiyoguru@gmail.com](mailto:joshiyoguru@gmail.com)>

Cc: FI-ADG <[FI-ADG@fao.org](mailto:FI-ADG@fao.org)>, FIA-Director <[FIA-Director@fao.org](mailto:FIA-Director@fao.org)>, "Mathiesen, Arni (FID)" <[Arni.Mathiesen@fao.org](mailto:Arni.Mathiesen@fao.org)>, "Villani, Alexandra (FID)" <[Alexandra.Villani@fao.org](mailto:Alexandra.Villani@fao.org)>, "SambaMassaka, Linda (FIDP)" <[Linda.SambaMassaka@fao.org](mailto:Linda.SambaMassaka@fao.org)>

**Message sent on behalf of Mr Arni M. Mathiesen, Assistant Director-General, Fisheries and Aquaculture Department of the Food and Agriculture Organization of the United Nations**

Dear Mr Joshi,

The Fisheries and Aquaculture Department of the FAO is pleased to receive a copy of the Indian Marine Fisheries Code: Guidance on a Marine Fisheries the Management Model for India. We support India's efforts to ensure the sustainability of her capture fisheries resources and to align its policies and management activities with international norms and best practices and, in particular, with the 1995 FAO Code of Conduct for Responsible Fisheries.

Indeed, FAO would be pleased to work with India on the further development and implementation of an Indian Marine Fisheries Code as described in the draft document.

The draft document also calls for a new Council-based system of fisheries management and

ईएसएसओ-भारतीय राष्ट्रीय  
महासागर सूचना सेवा केन्द्र  
पृथ्वी प्रणाली विज्ञान संगठन  
पृथ्वी विज्ञान मंत्रालय,  
भारत सरकार  
"ओशियन वैली", प्रगती नगर (बी.ओ.),  
निजामपेट (एस.ओ.), हैदराबाद-500 090, भारत



**ESSO-Indian National Centre for Ocean Information Services**  
Earth System Science Organisation  
Ministry of Earth Sciences  
Government of India  
"Ocean Valley",  
Pragathi Nagar (B.O.), Nizampet (S.O.),  
Hyderabad - 500 090, INDIA.

डॉ एस. एस. सी. शेनॉय / **Dr S.S.C. Shenoi**  
निदेशक / **Director**

No. INCOIS/DIR/09/2017

October 11, 2017

Dear Dr. Gopalakrishnan,

**Sub: Indian Marine Fisheries Code: Guidance on a Marine Fisheries Management Model for India - Reg.**

We have read the draft copy of the book "Indian Marine Fisheries Code: Guidance on a Marine Fisheries Management Model for India" and found it very resourceful in fostering sustainability of Marine fisheries in our country. Comments on brief questionnaire on IMFC is attached herewith.

With best regards,

Yours Sincerely,

(S.S.C. Shenoj)

Response to IMFC by John Kurien

**Dr. John Kurien**

Retired Professor, Centre for Development Studies, Trivandrum

Currently Visiting Professor, Azim Premji University, Bengaluru

Managing Trustee, International Collective in Support of Fishworkers (ICSF), Chennai

(E-Mail: [john.kurien@apu.edu.in](mailto:john.kurien@apu.edu.in) and [kurien.john@gmail.com](mailto:kurien.john@gmail.com))

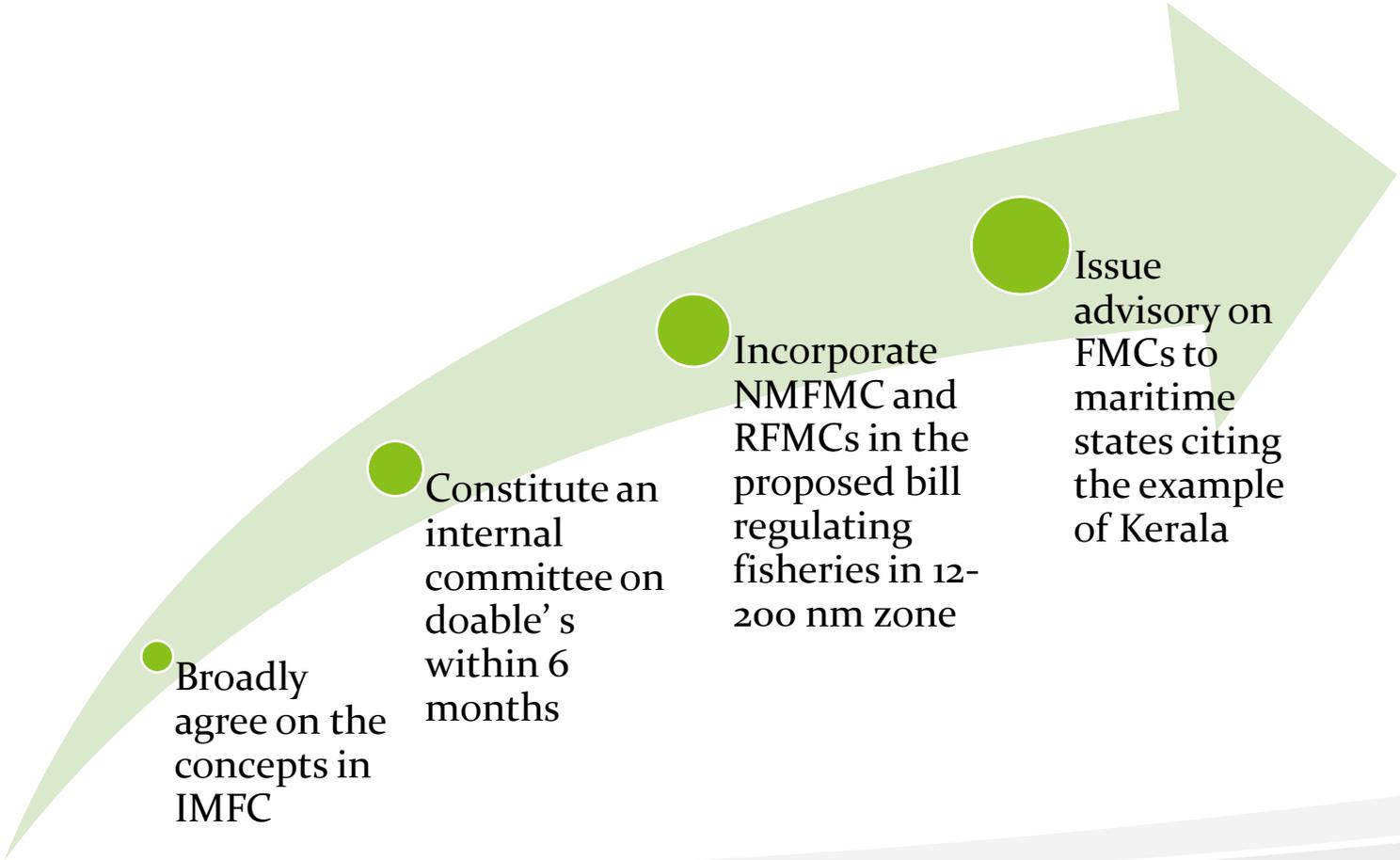
25 August 2017

**Comments on the draft book 'Indian Marine Fisheries Code' by E. Vivekanandan**

I fully appreciate the attempt made by the two institutions. My response to the questions are:



# IMFC – Suggested next steps...



Broadly agree on the concepts in IMFC

Constitute an internal committee on doable's within 6 months

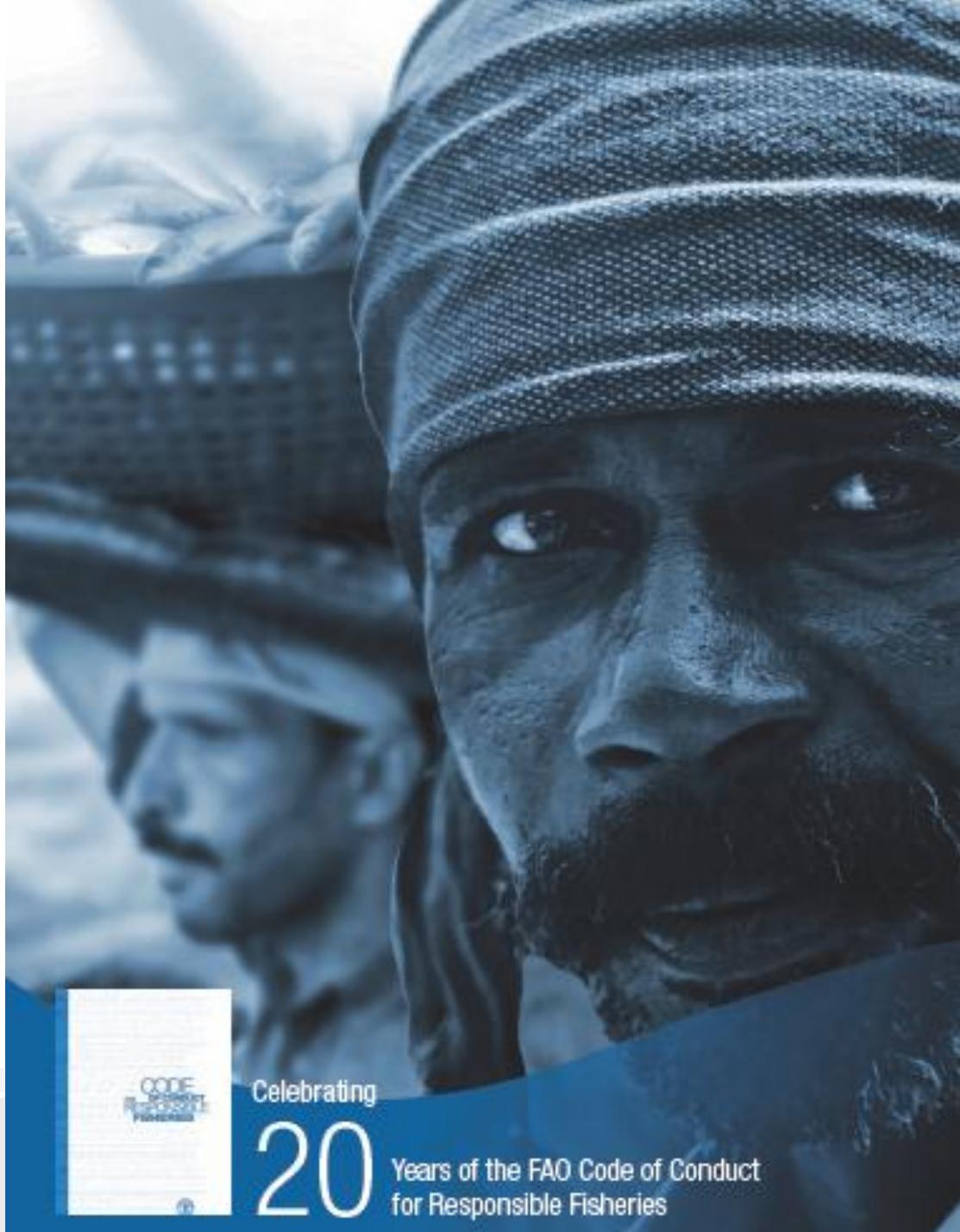
Incorporate NMFMC and RFMCs in the proposed bill regulating fisheries in 12-200 nm zone

Issue advisory on FMCs to maritime states citing the example of Kerala





**Thank for the  
opportunity  
to present  
this & for  
your hearing**



Celebrating

**20**

Years of the FAO Code of Conduct  
for Responsible Fisheries