

Status of Policies & Legislative Environment in Inland Fisheries of Indian States



Ananthan, P.S.
ICAR-CIFE, Mumbai

**National Workshop on Towards Developing and Implementation Plan
for draft NIFAP & VG on SSF in Inland Fisheries**

ICSF * Kolkata * 6-7 September 2019

Fisheries is a *Residual Activity* in a *Residual Land* having *Residual Water* **by** *Residual People*

- Prof. K.K. Ghosh on the Status of Fisheries Sector in India (2005)



Why Policy & Governance Important?



- **Policy**: *statement of vision, intent, direction & provides template*
- **Act & Rules**: legal manifestation of policy
- Both ***necessary, but not a sufficient condition*** for development
- **Governance**: **the network of institutional mechanisms** (both *formal and informal*) and **processes** (*written and unwritten*) put in place through which development is both done & undone
- **Policy & Act as the skeletal framework**, **governance as the nervous system** and the **stakeholders** (resource users & managers) **as flesh & blood** of development system



Water Use and Management Policy

- multiple, competing and conflicting demand / use
- clearly recognise the *minimal right to water for fisheries and aquaculture* as against the residual status
- *envisage a regulated market for water in the long term to balance the competing demands - fair and equitable water charges.*
- Fish and its culture as a way to improve aquatic ecosystem - *as creator of net positive social, economic & ecological benefits* / non-consumptive water usage
- This is a cross-sectoral issue and deserves cross-sectoral dialogue for its resolution.

Multiple Ownership & Management

- Most open water resources are under *public domain* with potential for fisheries.
- **multiple ownership** - *village ponds by PRIs, temple ponds by Religious Endowment Dept. / trusts, some by DoF, Irrigation Dept., Dept. of Forests, Revenue Dept.*, some flood plains are owned by a **large number of individuals**
- lack of coordination and conflicting interests among them have lead to **utilisation of only 45% of nearly 6.1 million ha for fisheries and aquaculture**



- **Accept multiple ownership an inevitable evil**
- **But, make a *distinction between ownership & management rights* for fisheries development: transfer & vest lease rights with DoF.**
 - *DoF only technical agency with competency, capacity & mandate to develop them for fisheries.*
- Evolve institutional mechanisms for effective inter-departmental coordination at local, district & State level
- Encourage owners of multiple individual owned private property resources in flood plains to get organized and resort to collective resource use

Leasing regime of public water bodies

- few States have comprehensive leasing policies-only ***GOs & ad hoc rules***
- Most States follow either the ***revenue-oriented management model*** or ***welfare-oriented management model***, but hardly the ***more appropriate development-oriented management model***



Leasing policy in Rajasthan

Category of Water Bodies	Annual Revenue Per Water Body	Leasing Agencies	No. of water bodies	No. of auctioned water bodies	Revenue (Rs. in lakhs)			
					2006-07	2007-08	2008-09	2009-10
					A	> 5 lakhs	Fisheries Dept.	65
B	> 0.5 to < 5 lakhs	Zila Parishads	195	111 (57%)	210.3	283.2	192	-NA-
C	> 0.10 to < 0.5 lakhs	Panchayat Samities	532	222			52	-NA-
D	< 0.1 lakhs	Gram Panchyats	985	123			6	-NA-
Total (information is available with DoF only for 1,777 out of total 15553 no.)				506		1158.5		>1400
			1,777	(29%)	983.3		1100	

Case Studies from Rajasthan

Estimated Fish Production for Large Reservoirs (2001-02 - 2006-07)

S. No.	Name of Waterbody	District	Effective Area	Average Production (tons)	Average Productivity (kg / ha)	Productivity Range (kg/ha)
1	Mahibajaj Sagar	Banswara	10,640	32.7	3.1	1.6 - 4.4
2	Kadana backwater	Banswara	7,000	122.2	17.5	3.3 -23
3	Beesalpur	Tonk	10,615	564.6	53.2	25 - 79
4	Ranapratap Sagar	Chittorgarh	9,800	1268.2	129.4	83 - 184
5	Jaisamand	Udaipur	3,600	347.8	96.6	53 – 182
			41,655	2335.5	56.1	31.5 - 84.2

- In Rajasthan, leasing is entirely based on open auction system and there is no leasing priority to fishers, fishers co-operatives or women, SHGs etc.
- Only 5% concession is given to interested fisheries co-operatives from the maximum bid amount through open auction

2.13.1 Delay in deciding lease of Vatrak reservoir led to loss of fish production and revenue

As per conditions of the leasing policy of 2004, Gujarat Fisheries Central Cooperative Association Limited (GFCCAL) was to be given one reservoir on lease in each district at upset price¹⁷. The lease policy also provided that *Mandali/ Society/Institute* which had any Government dues outstanding was ineligible for allotment of pond/reservoir on lease. Further, while the Department had full authority for implementation and administration of lease policy, only the GoG was authorized to give concessions, issue clarifications and decide on disputes on the lease policy.

GFCCAL requested (28 September 2011) allotment of Vatrak reservoir on lease. The upset price of the Vatrak reservoir was fixed by the Department at ₹ 0.03 crore. GFCCAL had outstanding dues of ₹ 3.26 crore payable to the Department towards various loans¹⁸, interest, penal interest *etc.*, as on March 2011. After protracted correspondence between the Department and the

GoG on GFCCAL's request, the GoG directed GFCCAL in December 2014 to pay the outstanding dues before allotment of the reservoir on lease. GFCCAL paid (March 2015) the principal of ₹ 0.61 crore and requested (May 2015) GoG to waive the interest and penal interest of ₹ 2.91 crore (period upto March 2016).

Despite the Department's repeated request to GoG to take a decision on leasing of Vatrak reservoir during 2011 -2017, the matter was still pending at GoG level (May 2017). The delay in decision resulted in Vatrak reservoir lying idle and not available for fish production during this period. This also led to potential revenue loss towards lease rent of ₹ 1.68 crore¹⁹ and loss of fish production of 325 MT²⁰ *per annum*.

The Department stated (September 2017) that in view of the non-payment of dues by GFCCAL, it has initiated the process of inviting fresh tenders for awarding lease of Vatrak reservoir. The reply notwithstanding, the delay in taking decision led to idling of the reservoir for more than five years.

Case Studies

- **Bisalpur & Rana Pratap Sagar**
 - **open auction & private contractors as lessee**
- **Jaisamand Lake, Mahi & Kadana backwaters**
 - **Preferential leasing to tribal fishers**
 - **Jaisamand succeeded while other 2 failed due to DoF handholding in Jaisamand, large share of tilapia**



Lease Procedures & Processes



- **Varied, obscure, outdated, contradictory lease procedures**
 - *minimum leasing period, conditions of lease, lease rent, priorities & preferences as whom to lease, allotment procedures, conditions of renewal, rights of the lessee, responsibilities of Fisheries Dept.*
 - **resource diversity warrant variations, but need minimum desirable norms & terms**
 - Fair, transparent, scientific and equitable lease procedures / processes
 - *sustainable utilisation of resource* in long term *as against short term production and revenue gain*

Criteria for expected stocking, fish production & lease amount in Maharashtra (DoFM,2012)



S.N.	Reservoir area (ha)	Expected fish fingerling stocking/ha (Size 50 mm)	Expected Fish Production/ha (Kg)	Leasing amount/year/ha (Upset prices in ₹)
1.	0.01 – 20	5,000	1,500	300
2.	20.01 - 60	1,00,000 + 2,000 for per ha ahead of 20 ha	30,000 + 600 for per ha ahead of 20 ha	6,000 + 120 for per ha ahead 20 ha
3.	60.01 – 300	1,80,000 + 1000 for per ha ahead of 60 ha	54,000 + 300 for per ha ahead of 60 ha	10,800 + 60 for per ha ahead 60 ha
4.	300.01 – 1300	4,20,000 + 500 for per ha ahead 300 ha	1,26,000 + 150 for per ha ahead of 300 ha	25,200 + 30 for per ha ahead 300 ha
5.	1300.01 – 5000	9,20,000 + 500 for per ha ahead of 1300 ha	2,76,000 + 100 for per ha ahead of 1300 ha	55,200 + 20 for per ha ahead 1300 ha
6.	5000.01 - ahead	27,70,000 + 500 for per ha ahead of 5000 ha	6,46,000 + 50 for per ha ahead of 5000 ha	1,29,200 + 10 for per ha ahead 5000 ha

Changes in Leasing system – Maharashtra

2014, 2017 & 2019



- All reservoirs >1000 ha (except Ujjaini) transferred to MFDC since 2017
- MFDC leases large reservoirs through open auction – Co-op society to participate only through open auction.
- ***Reserve price increased:*** Dimbhe from **Rs.55,200** (or 1,21,000 – the last auction price whichever is higher) to **Rs.7,10,000** (i.e. **Rs.550/ha**)
- Dimbhe fishers went to court - DAHDF agreed to lease @ reserve price without open tender.

Issues & Options

Maharashtra



Leasing Priority

- **Fishing rights <500 ha:** Primary Fishermen Co-operative Society/ Tendering
- **Fishing rights 500-1000 ha:** Fishermen Co-operative Society/ Tendering/PPP
- **Fishing rights >1000 ha:** Fishermen Co-operative Society/ Tendering/PPP

Leasing Period

- 5 Years

Leasing process

- Open auction / tendering

Classification of reservoirs

- Small: <500 ha
- Medium: 500-1000 ha
- Large: >1000 ha

Leasing rent, royalty and its determination

- Small: Free of cost for Primary Fishermen Co-operative Society
- Medium: Rs. 600/ha
- Large: Rs. 900/ha

Component	Maharashtra
Ownership	<ul style="list-style-type: none">• Fishing rights <500 ha: District Commissioner of Fisheries• Fishing rights 500-1000 ha: Regional Commissioner of Fisheries• Fishing rights >1000 ha: Commissioner of Fisheries Maharashtra State / MFDC



Livelihood Vs. Environmental Concerns





- **Increasing conflicts** over objectives of Biodiversity Conservation and objectives of sustaining livelihoods of small scale fishers – mainly ***around ill managed common property resources***
- E.g. **Tawa Reservoir in Madhya Pradesh** - Fishing banned in 2006 due to declaration of Satpura National Park and Bori Wildlife Sanctuary depriving poor fishers of livelihood
- Similar case around **Jeyakwadi Reservoir region in Maharashtra** and around **Sundarbans in West Bengal**
- Need to appreciate that **livelihood development AND conservation are not mutually exclusive**: *fisheries and fishers can sustain only if biodiversity thrives*
- ***Time to relook / amend provisions in Indian Wildlife Protection Act 1972, Indian Forest (Conservation) Act of 1980, and a host of other such legislations – to usher in Joint Inland Fisheries Management a la Joint Forest Management (JFM) .***

Data Inadequacies & Development Planning



- **Reliable statistics** on reservoir resources, their utilisation, resource wise and species wise production and productivity levels, catch and fishing effort, human development among fishers, market information, etc. **are lacking**
- Existing data on which plans and programs are made is either too old (nearly 30 years) or **lack credibility** and riddled with lot of inaccuracies. **Only crude estimations and approximations with wide margins** of error form the basis of development planning and management.
- The policy shall envisage ***institutionalising an effective mechanism*** for systematic collection, verification, updation and dissemination of requisite data.
- **Innovative mechanisms shall be devised wherein stakeholders / resource users volunteer to supply reliable data through CBOs / PRIs / NGOs.**




Review of State Fisheries Policies - Inland

States Criteria / Components	Tamil Nadu	Karnataka
<p>Policy / Act</p>  	<ul style="list-style-type: none"> • Indian Fisheries (Tamil Nadu [1929 TN Act II Amendment) • Prohibit all fishing in any specified water except under a lease or license granted by Government and in accordance with such conditions as may be specified in such lease or license. • Nilgris Fishing Rules 1969 • Kodaikanal Hills Fishing Rules 1969 • Leasing of water bodies for fish culture by various owners <ol style="list-style-type: none"> a] PWD - G.O.Ms.No:332 AH & F dated 17.11.93 b] Revenue - Revenue Statutory Order No:211 c] Forest - G.O.Ms.No.624 F&F, dated 29.05.1984 d] Local bodies - G.O.No.117 MA & WS, dated 09.05.1997 e] Fisheries Department - G.O.Ms.No.33 AH & F dated 27.2.1995 f] Panchayat - G.O.Ms.No.158 RD Dept, dated 2.8.1999 g] HR & CE - G.O.Ms.No.375 CT & HRCE, dated: 28.11.1994 	<ul style="list-style-type: none"> • The Karnataka inland fisheries (conservation development and regulation act, 1996) • License for fishing • Registration for fish breeding • Leasing of fishing rights • Regulation of fishing • Declaration of sanctuary • Fisheries Policy of Karnataka, 2012 • Develop systematically inland water bodies for fisheries

Review of State Fisheries Policies – Inland

contd...




<p>States</p> <p>Criteria / Components</p>	<p>Tamil Nadu</p>	<p>Karnataka</p>
<p>Policy Objectives</p>  	<ol style="list-style-type: none"> 1. The Department of Fisheries shall evolve different model taking <i>stock of the availability of water period, depth, quality, quantity of water for fish production and productivity to utilize the small / medium / large reservoir resources effectively.</i> 2. Shall ensure the availability of stock size fingerlings for stocking by creating necessary infrastructure and also promoting seed rearing in cages. 3. The fishermen to be provided necessary financial assistance / credit facilities for the <i>purchase of craft and gear and improve the fishing efficiency.</i> 4. The present system of stock-harvest method to be replaced with culture based system to enhance the unit fish production. For which the cage culture and pen culture shall be propagated where ever possible and feasible. 	<ol style="list-style-type: none"> 1. Leasing of tanks, ponds and other water bodies 2. Reservoir fisheries 3. Fish seed production 4. Freshwater Aquaculture Sector 

Review of State Fisheries Policies – Inland

contd...




<p>States Criteria / Components</p>	<p>Tamil Nadu</p>	<p>Karnataka</p>
<p>Policy Objectives</p>	<ol style="list-style-type: none"> 5. <i>The infrastructure facilities for post harvest and marketing to be strengthened</i> by giving top priority. 6. Fisheries to be kept in mind even at the pre survey level for the construction of reservoirs. Dead storage level / fish passes to be provided in all the reservoirs to be newly constructed. 7. The <i>existing management system of leasing, share fishing and licencing to be reoriented with participatory approach</i> to enhance their livelihood option and increase fish productions. 8. The Self Help Group, inland fishermen society may be involved in reservoir fisheries by providing necessary technical skill and financial support. 	



Review of State Fisheries Policies – Inland

contd...



<p>States Criteria / Components</p>	<p>Tamil Nadu</p>	<p>Karnataka</p>
<p>Policy Objectives</p>	<p><i>9. Public-private partnership in reservoir fisheries</i> management may be tried on experimental basis by providing due importance to the conservation of fishery wealth.</p> <p><i>10. Stringent measures to be adopted in effluent standards discharge from the industries</i> in to the aquatic eco-system.</p> <p><i>11. Irrigation channel offers good scope for fish seed rear and fish culture</i> which shall be utilized with participation of local community.</p>	

Review of State Fisheries Policies – Inland

contd...



<p>States Criteria / Components</p>	<p>Tamil Nadu</p>	<p>Karnataka</p>
<p>Ownership of Water body</p>	<ul style="list-style-type: none"> • Reservoirs owned by PWD, Revenue Department, Fisheries Department, Forestry Department, the Hindu Religious and Charitable Endowments Department, and the autonomous bodies like local bodies depending on the directions issued by the State Government. • Fishing rights –1 large reservoir, 1 medium and 6 small reservoirs given to TNFDC. • Fishing rights - 1 large reservoir, 6 medium reservoirs and 47 small reservoirs given to DoF 	<ul style="list-style-type: none"> • Reservoirs owned by Water Resources Department • Krishna Bhagya Jala Nigam limited (KBJNL) • Karnataka Neeravari Nigam Limited (KNNL) • Cauvery Neeravari Nigam Limited (CNNL) • Fishing rights > 40 ha with DoF • Fishing rights < 40 ha with Gram Panchayats

	Tamil Nadu	Karnataka
Leasing /licensing Priority	<p>Reservoirs - TNFDC</p> <ul style="list-style-type: none"> • TNFDC, Private contractors <p>Reservoirs – DoF</p> <ul style="list-style-type: none"> • Fishermen cooperative societies • Fisheries graduates • Private entrepreneurs <p>Panchayat union tanks</p> <ul style="list-style-type: none"> • Fishermen cooperative societies <p>River stretch – Fishers/fishermen cooperative societies and contractors</p>	<p>Reservoirs - leasing</p> <ul style="list-style-type: none"> • Fishermen cooperative societies under- Jalasamvardhana Yojana Sangha • Karnataka Co-operative Fisheries Federation (Mysore) • Other fisheries cooperative societies • Unemployed fisheries graduates • Sanna Neeravari Balakedarara Sangha and other societies / institutions • Private entrepreneurs <p>Reservoirs – Licensing - Fishers/fishermen cooperative societies, ID card from DoF, 5 km residence</p>
Leasing/ licensing Period	<p>Reservoirs and Panchayat union tanks : 5 years</p> <p>River stretch – Yearly once</p>	<p>Reservoirs and panchayat union tanks : 5 years; can be extended for another 5 years</p>
Leasing/licensing process	<p>Reservoirs and panchayat union tanks : Open Auction / tendering</p> <p>River system - Fishers/fishermen cooperative societies</p>	<p>Reservoirs and panchayat union tanks : Open Auction / tendering</p>

Review of State Fisheries Policies - Inland

contd...

	Tamil Nadu	Karnataka
Leasing authority	<p>Reservoirs</p> <ul style="list-style-type: none"> DoF, TNFDC <p>< 40 ha panchayat union tanks</p> <ul style="list-style-type: none"> Village Panchayats or Panchayat Union Council 	<ul style="list-style-type: none"> Leasing > 40 ha: DoF < 40 ha: Gram Panchayats License - DoF
Classification of reservoirs	<p>•Based on MWSA - 10-1000 ha: minor, 1000 - 5000: medium, >5000: large</p>	
Leasing rent, royalty and its determination	<p>Reservoirs – TNFDC – based on potential</p> <ul style="list-style-type: none"> Lease amount 10% increase of every year on the previous year Should pay the annual minimum royalty amount in advance <p>Reservoirs – DoF - based on potential</p> <ul style="list-style-type: none"> Licensing, leasing and share fishing Share fishing : Large fish 1:2 (Fishers : Govt), Small fish 1:1 Leasing –Lease amount 10% increase of every year on the previous year <p>Panchayat union tanks - leasing</p> <ul style="list-style-type: none"> Lease amount 10% increase of every year on the previous year <p>River stretch – license (₹ 1200/ year)</p>	<p>Reservoirs</p> <ul style="list-style-type: none"> ➤ Leasing - ₹ 300/ha EWSA ➤ Licensing <ol style="list-style-type: none"> Gill net - ₹ 500 – ₹ 1000 Drag net - ₹ 12000/per no

	Tamil Nadu	Karnataka
Responsibilities for lessee	<p>Reservoirs – TNFDC</p> <ul style="list-style-type: none"> • Seed stocking should be done accordance with the regulations stipulated by TNFDC • Should purchase the fish seed only from the TNFDC hatcheries • Should conduct fishing by utilizing the fishermen who are registered with Tamil Nadu Fisheries Development Corporation on share wages basis • The disposal of catches by the licensee can be undertaken only after meeting the local demand <p>Reservoirs – DoF</p> <ul style="list-style-type: none"> • Leasing - Stocking done by lessee • Should conduct fishing by utilizing the fishermen who are registered with Fishermen cooperative society on share wages basis 	<ul style="list-style-type: none"> • Stocking done by lessee

Review of State Fisheries Policies – Reservoirs & Tanks *contd...*

	Tamil Nadu	Karnataka
Responsibilities of DoF/ TNFDC	<p>Reservoirs – TNFDC</p> <ul style="list-style-type: none"> • Seed production • To supervise leasing terms and conditions are followed <p>Reservoirs – DoF</p> <ul style="list-style-type: none"> • Share fishing – Stocking done by DoF, riverine seed collection and stocking • <i>Seed supply through departmental hatcheries.</i> • Free housing scheme • Craft and gear subsidy 	<ul style="list-style-type: none"> • The leasing of water bodies to Fishermen Co-operative Societies will be continued after confirming the genuineness of the Societies. • Free housing scheme • Craft and gear subsidy • Follow seasonal fishing ban, follow mess size regulation

Review of State Fisheries Policies - Reservoirs & Tanks

contd...

	Tamil Nadu	Karnataka
Responsibilities of Water Resources Dept.	<ul style="list-style-type: none">• Releasing water for irrigation• Construction and upheld of reservoirs	<ul style="list-style-type: none">• Releasing water for irrigation• Construction and upheld of reservoirs

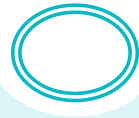


Review of State Fisheries Policies - Reservoir System under TNFDC



- **Leasing (2012)** – Private entrepreneurs, fishers engaged by the TNFDC by paying 1/3 share value on catches (Aliyar reservoir) or share fishing (Bhavanisagar reservoir)
- The bidder will be allowed to participate in the tender-cum-auction only when the following items are submitted along with other details in the format prescribed for Pre Qualification bid.
- **An Earnest Money Deposit of Rs. 60,000/-**
- **A Solvency certificate** should be obtained for not less than **Rs.105.00 lakhs**
- **An Upfront amount** of Rs 6 lakhs /-
- After the evaluation of Pre Qualification bids, qualified bidders will be informed of the time, venue and date of opening of financial bid and auction
- The tenderers should **quote the annual license amount** for taking the fishing rights of Reservoir on lease and license basis.

Review of State Fisheries Policies - Reservoir System under DoF



- **Share fishing** - stocked 75%:25% (Govt: Fishers) unstocked 50%:50% (Govt: Fishers)
 - 75 % catch for DoF (water level < 30 feet); 25 % of catch for fishers
 - 50 % catch for DoF (water level > 30 feet); 50 % of catch for fishers
- **Leasing** - The tenderers should **quote the annual license amount** for taking the fishing rights of reservoir on lease and license basis.
- **Licensing – Fish catch disposal**- individual selling, wherever cooperative society is there fishers sell their catch to cooperative society. The society pays (in Rs.) to a fishing unit, according to the fish species (in grades) the unit land.

Review of State Fisheries Policies - Reservoirs & Tanks

States Criteria / Components	Orissa	Gujarat	Madhya Pradesh / Chattisgarh	Himachal Pradesh
Policy Objectives	<ul style="list-style-type: none"> • Augment fish production • Gainful rural employment • Scientific mgt., entrepreneurship, revenue generation 	<ul style="list-style-type: none"> • No clarity of objectives 	<ul style="list-style-type: none"> • No clarity of objectives 	<ul style="list-style-type: none"> • Livelihood development • Fish Production • Revenue generation
Ownership of Water body	<ul style="list-style-type: none"> • Fishing rights > 40 ha with Fisheries & ARD Dept. • Fishing rights < 40 ha with Gram Panchayats • Transfer of rights to be an automatic process 	<ul style="list-style-type: none"> • Village ponds / tanks under Gram Panchayats, • Reservoir fishing rights with DoF 	<ul style="list-style-type: none"> • Village ponds / tanks under Gram Panchayats, • Reservoir fishing rights with DoF 	<ul style="list-style-type: none"> • Fishing rights with DoF • NOC from DoF mandatory for new projects • Surcharge / Cess for every kw of power generated

Review of State Fisheries Policies - Reservoir s & Tanks contd...

	Orissa	Gujarat	Madhya Pradesh / Chattisgarh	Himachal Pradesh
Leasing Priority	<ul style="list-style-type: none"> •Nearest Primary Fishermen Coop Society (supported & self help) •Preference to interested PAPs •Form PFCS if none exists •Indls, entrepreneurs, public undertakings 	<ul style="list-style-type: none"> •< 20 ha FFDA beneficiaries; •< 200 ha in Saurashtra & North Gujarat •Local co-op societies / SHGs •<i>Tribal Areas:</i> reserved for tribal fisher (< 20 ha.), their co-ops (21 - 1000 ha). •> 1000 ha. to co-op federation •<i>Non-tribal areas:</i> > 200 ha. thro tenders to highest bidder 	<ul style="list-style-type: none"> •Upto 2000ha: preference to primary fishermen cooperative societies; •>2000 ha: Matsya Mahasangh •PAPs •Private contractors 	<ul style="list-style-type: none"> •local Fishermen Cooperative Society
Leasing Period	<ul style="list-style-type: none"> •5 years; can be extended for another 5 yrs • can be cancelled any time if terms are violated 	Same as in Orissa	5-10 years	5 years
Leasing process	Allotment thro upset price; Open auction / tendering	Allotment thro upset price; Open auction / tendering	<ul style="list-style-type: none"> •Preferential allotment • open Auction / tendering 	Licensing system license fee based on type of boat & nets used by fishers

Review of State Fisheries Policies – Reservoir & tanks

contd...

	Orissa	Gujarat	Madhya Pradesh / Chattisgarh	Himachal Pradesh
Leasing authority	ADF / DFO, to be approved by DDF; • FEO / FI & above as authorised officers for enforcement of leasing terms	GFDC/ Gujarat Fisheries Central Co-operative Association Ltd ; yearly auction to contractors or give their own fixed rates to fishermen.	< 10 ha: Gram Panchayat 10 -100 ha: Janpad Panchayat 100-200 ha: Zila Parishad >200: DoF	No leasing system. But licenses are issued by DoF to members of PFCS
Classification of reservoirs	•Based on MWSA - 10-1000 ha: minor, 1000 - 5000: medium, >5000: large			
Leasing rent, royalty and its determination	<ul style="list-style-type: none"> •<i>Med.& Large:</i> Rs. 200 yr (Rs. 160 to be used by FFDA for stocking) •<i>Minor:</i> Rs.300 /ha /yr (Rs. 240 to be used by FFDA for stocking) •<i>Royalty:</i> Rs. 10/ha/yr for major; Rs.20 & Rs.40 for med. &small (for WRDept.) 	6 yr. effective WSA as MWSA		<i>Cost of license:</i> Rs. 50 / year / fisher <i>Royalty:</i> 15% of gross sale <i>Disposal of catch:</i> only to the contractor at a sale price fixed jointly every season / year

Review of State Fisheries Policies – Reservoir & tanks *contd...*

	Orissa	Gujarat	Madhya Pradesh / Chattisgarh	Himachal Pradesh
Responsibilities for lessee	<ul style="list-style-type: none"> •To seek permission from DoF for mechanised boats •Harvesting 6 am to 6 pm though setting of gillnets allowed <p><u>DONTs</u></p> <ul style="list-style-type: none"> •No fishing during 15 June - 31 August in med & Large Reservoir—<i>only for broodstock?</i> •Catch of IMC < 250 mm •Use of gill net <100 mm stretched mesh size •Dynamiting, use of explosives, poisons, toxins etc •Introduction of exotics •Erection of fixed gears 	<ul style="list-style-type: none"> •Follow seasonal fishing ban, follow mess size regulation, prohibition on use of explosives •Stocking to be mainly the responsibility of lessee 	<ul style="list-style-type: none"> •Follow seasonal fishing ban, follow mess size regulation, prohibition on use of explosives 	<ul style="list-style-type: none"> •Licensed fisher to sell the catch only to the identified contractor at the predetermined price



Review of State Fisheries Policies – Reservoirs & Tanks

contd...

	Orissa	Gujarat	Madhya Pradesh / Chattisgarh	Himachal Pradesh
Responsibilities of DoF	<ul style="list-style-type: none"> • fisheries devp. & infrastructure devp. by DoF: road, landing centre, nursery (6 ha), 2000' office • Rearing & Stocking of 100 mm size fingerlings • If >one PFCS, demarcate areas • Prohibit fishing within 100/200/500 m downstream & upstream • No permanent fixtures without approval • To jointly prepare Reservoir Development Plan with WRD. To take help from ICAR/SAU • Don't introduce exotics • Right to declare any part as protected area 	<ul style="list-style-type: none"> • Seed supply through Departmental hatcheries. 	<ul style="list-style-type: none"> • Seed production and stocking of reservoir 	<ul style="list-style-type: none"> • Seed production and Stocking of reservoir • To supervise leasing terms and conditions are followed • Sale price determination and appointing the merchant contractor through open tender



Review of State Fisheries Policies - Reservoirs & Tanks

contd...

	Orissa	Gujarat	Madhya Pradesh / Chattisgarh	Himachal Pradesh
Responsibilities of Water Resources Dept.	<ul style="list-style-type: none"> •No restrictions on its operations •Default provisions in new projects •Coordination Committee - SE, EE, DDF, DFO, Tahsildar – to meet quarterly •Not to drain below dead storage level •Priority to irrigation as against fishery •If no rearing facility exists, may hand over required land to DoF •Shall provide tax free water to fisheries activity to DoF when required •Not to allow effluents / sewage without treatment 			<ul style="list-style-type: none"> •Payment of cess / surcharge to DoF •Mandatory provisions for fisheries infrastructure in all new hydro electric projects



Extension & Service Delivery System



- **Inadequate & ill-equipped technical staff with 20-60% vacancy** positions in many states: fresh recruitment to fill vacant posts immediately
- Extension/service delivery system- **crucial but weakest link**
- State DoFs *involved more in regulatory role than the developmental role.*
- **Lack of coordination** among DoF & other development agencies like financial institutions, NGOs, other development departments, etc.
- Absence of **independent Fisheries Departments / Ministries** in many States: relative neglect of fisheries directorates

Extension & Service Delivery System

- **Evolve innovative mechanisms** to engage field staff on lines of *matsya mitras / para extension workers*, **collaborate with pluralistic service providers** – NGOs, CBOs, Co-ops, SHGs.
- Absence of authentic database on fisheries resources and fishers / fish farmers has limited more appropriate policy and planning exercises. The policy should encourage and incentivize collection of authentic data on resources.



R&D Focus in Reservoir Fisheries



- **Inadequate R&D focus on reservoir fisheries** given the number & surface area of reservoirs in India as one of the major reasons for underutilization and low productivity.
- **Only about 100 reservoirs** (out of 19370) have been subjected to some form of studies so far focusing mainly on ecology & biology, **little on socio-economics & governance** (Sugunan, 2000).
- management interventions would certainly fail **‘without the necessary fundamental research’**. Basic knowledge on food web structure / species interactions in reservoir ecosystem necessary for optimal utilization of reservoir

Some Answers and Many Questions

- One Size does not Fit All

- *Layered and flexible approach*

- Private entrepreneurs not necessarily bad, and *community not always ideal*: enough checks & balances are essential

- Defining inland fishers?

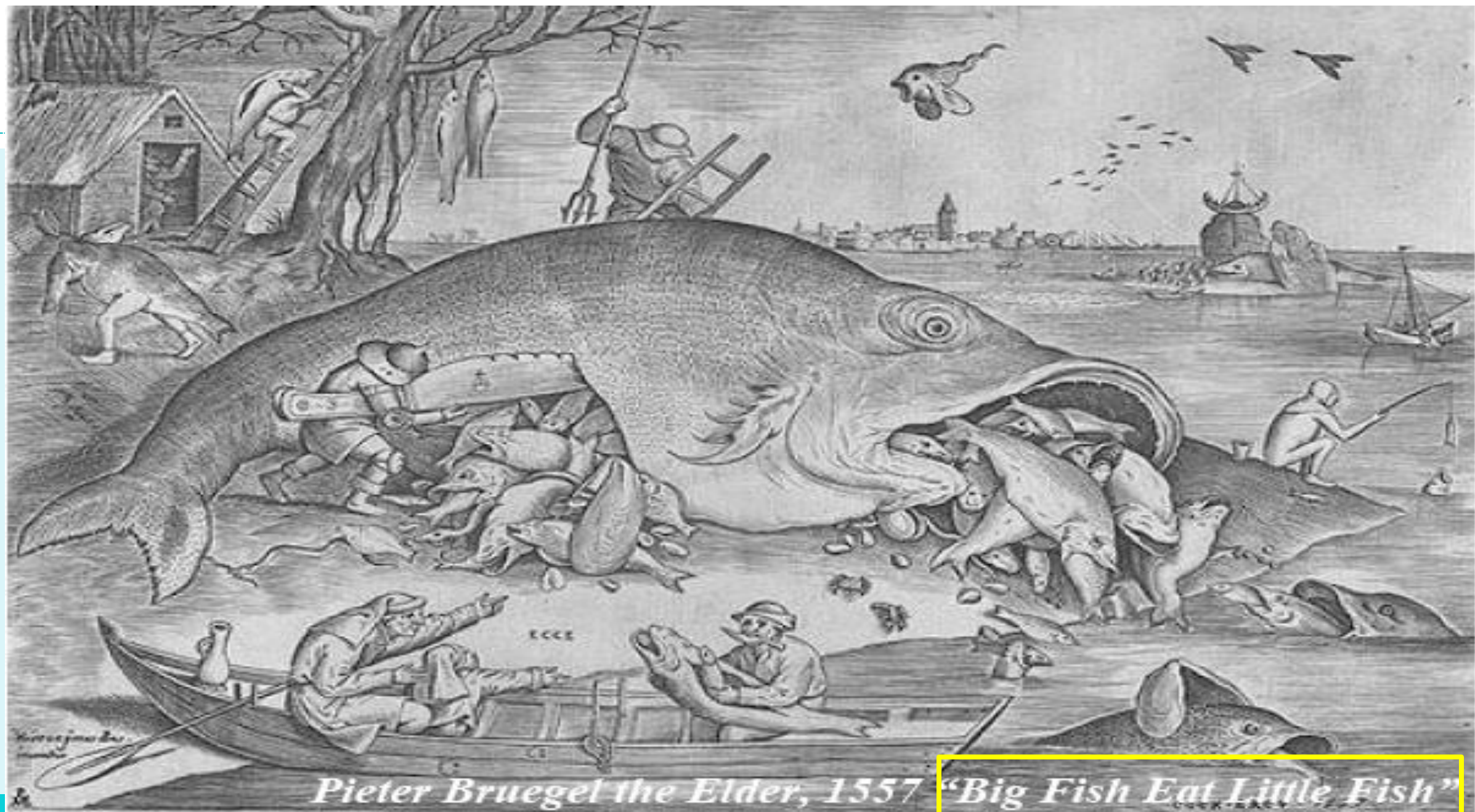
- *By caste or by occupation? Migrants?*

- Central & State Schemes on fishermen welfare

- *Limited budget, non-targeted, no review*

Policy/Comprehensive Act on inland fisheries so far only in *Himachal Pradesh, Madhya Pradesh, Gujarat, Odisha, Tamil Nadu, Karnataka, Andhra Pradesh*





Pieter Bruegel the Elder, 1557 "Big Fish Eat Little Fish"



*Acknowledge the
contribution of My
Students Velumani,
Kemraj, Nibetita, Lloyd,
Pooja, Jitesh, Yunus,
Gomathy & Many Others*

Thank You All