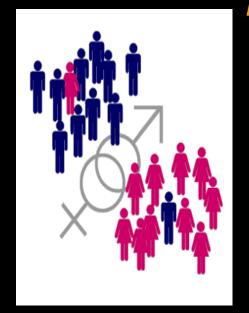
#### "A Sea of One's Own!"-

# A perspective on the Gendered Political Ecology in

Indian Mari culture





Ramachandran, C,

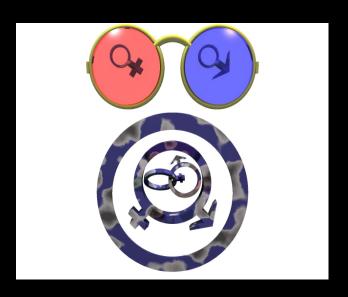
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### Borrowed Lenses.....

#### Gender lens and political ecology of Mariculture-a theoretical perspective



Bina Agarwal 2003

Williams 2002 Amartya Sen 2005

The resonance of the title of this paper with that of a path-breaking study by Bina Agarwal ,which raised the discourse on gender to a new level offering a new perspective on the dialectic between conflict and cooperation in the household and a persuasive analysis of the relationship between gender consciousness and political resistance, cannot go unnoticed. Though the analysis attempted here obviously owes much to the insights gleaned from that study, the point of departure is on the "materiality of nature" (the biophysical realities of natural systems and the way these have influenced ecosystem dependence) in the fluid context of marine ecosystem.





Sociological ecological contexts

Mariculture

**Property Rights** 





 Mariculture, generally understood as the science dealing with the study of cultivation of useful organisms in a marine environment marks a significant paradigm shift in the way we look at controlled production systems. Production increased from 0.5 mill.t (1950) to 40 m t (2008).106 nations involved

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Just as agriculture makes the terrestrial production system a contested space, mariculture makes the marine production system also a contested space. The struggle for human livelihood, having ecological as well as political dimensions, get affected by a nested system of complex factors that emerge in the neo-liberal context of market integration and globalization, the consequences of which are unlikely to be unidirectional.

- Bringing gender relations, conceptualized as relations of power between women and men (as revealed in a range of practices, ideas, and representations including the division of labour ,roles and resources between women and men , and the ascribing to them of different abilities , attitudes, desires, personality traits, behavioral patterns etc., ) and largely seen as a social construct varying over time and space ( Agarwal 1996), into this arena is poised with many challenges.
- Since "it is not just an increase in women's command over economic resources but also the "process" by which that increase occur that has a critical bearing on gender relations" (Agarwal 1996) these challenges do not confine merely to lack of gender disaggregated data but also to epistemological ambiguities.
- For eg., the levels of analysis usually being considered by gender scholars like household, community, market and State are inadequate if we want to provide a political ecology perspective. More over, there are those who argue that these institutions (eg., community) should be viewed as dynamic processes rather than the conventional notion of bounded units in space (Kuhl and Sheridan 2009).

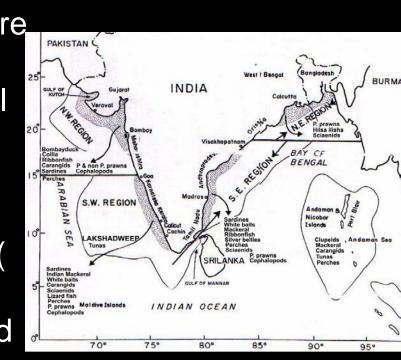
- A major form in which relations between natural resource users and the ecosystem manifest is through property rights which are categorized as private, state owned, open access and common (Ostrom 2000).
- The marine space is generally conceived as a common property system whose institutional complexity is higher than other forms as recent research have brought out.
- Though the role played by women has attained better visibility and recognition (both academic and political terms) in marine fisheries scenario there are very little efforts to decipher the gendered way in which the various dimensions of tenurial relations like control, access, use and responsibilities get praxis and legitimacy in a common property system.
- There could be many reasons for this. The whole debate on marine CPR issues is a post –UNCLOS phenomenon which has centered around harvest rights like ITQs initially and, off late, on spatialisation

- In the case of marine customary rights these aspects remain silent either because it is historically considered as an exclusive male domain or due to the stigmatized nature of property (Kuhl and Sheridan 2009).
- And unlike the agrarian scenario, the vexed issue of women getting excluded and dispossessed in the property rights regime, the resolution of which happened due to political as well as intellectual struggles is yet to emerge in marine CPR system.
- But absence of resistance (overt and covert) doesn't mean absence of inequality (Sen,1990). With mariculture becoming a sunrise enterprise in the coastal ecosystem there is demand for the intervention of maritime States to thrash out appropriate leasing policies. It is in this context that the present analysis is being attempted.

### Methodology

- The analysis draws much on the insights derived by the researcher who has been conducting studies on gender issues in Indian marine ecosystem for the last four years
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- The current study is a follow up of an earlier study ( Ramachandran et al 2007) which analysed gendered spaces in the technology –sustainability interface in two fisheries contexts namely mussel farming and tuna fishing.
- Along with mussel farming two more technologies namely sea weed farming and open sea cage culture were subjected to similar analysis during 2008-2010.

Field studies were done in different locations where these technologies were getting diffused namely Padanna and Kollam in the state of Kerala for mussel farming, Visakhapatanam (in Andhra Pradesh), Karwar (in Karnataka) and Balasure(in Orissa) for open sea cage farming and Ramanathapuram district ( Tamil Nadu) for sea weed farming. The study was conducted using a blend of household socio economic survey done along the two coasts and case studies on different stakeholders on the value chain of mussel as well as sea weed farming. A number of secondary sources also were consulted before arriving conclusions.



### **Results and Discussion**

Mariculture in India –a comparative

**overview** 

- Mussel farming
- Sea Weed farming
- Open sea cage culture







	Seaweed farming	Mussel farming	Open sea cage culture
Technology	Raft farming <i>Kappaphycus alverizii</i> )	rafts	HDPE cages
Source of technology	CSMCRI	CMFRI	CMFRI
Technology promoter	A transnational company PEPSICO	A National research institute (CMFRI	CMFRI,NFDB
Epicenter of diffusion	Gulf of Mannar and Palk Bay	Padanna, Kerala	Visakhapatanam, AP
Year of demonstration	2000-02	1995-96	2007
Diffusion status	Large scale	Large scale	niche

Crop window Gender	45 days  Largely feminine	6months  Largely feminine	9-12 months masculine
Property rights regime	CPR	Lease + CPR	CPR
Threat of bio-invasion	suspected	no	no
Threat to biodiversity	suspected	no	no
Market	export	domestic	domestic
Livelihood option substituted	Sea weed collection fishing	nCollection from wild, fishing,	fishing
Resource conflicts	Not yet reported	With estuarine fishers	nil
Institutional support	Bankable project Subsidy to groups	NABARD approved Subsidy to SHGs under Kudumbasree programme	NFDB support

Ownership unit	5 member group At least one female member in the group, condition diluted recently	SHGs mostly female, men's SHGs also allowed	Fishermen groups
HRD support	Training by Fisheries Department	Training by CMFRI	Training by CMFRI
Value chain integration	Mostly as raw material exported	Domestic consumption	Domestic consumption
Recent drivers in value chain	Domestic production of SAP	Technology forextracting nutracuetical (Green Mussel Extract)	Low cost cages
Source of seed	wild	wild	wild

#### **Economic benefits**

- MF- 20,000 tons-3500 women-net benefit \$9million subsidy \$300 (\$24000 to 100 SHGs (teap,2008)
- SWF-700 t, 1000 women-Gross revenue-\$26000/ha(900 rafts)-subsidy 50% prodn cost \$227 /head
- OSCF-FLD-av revenue-\$9090 (6m cage-sea bass, cage cost\$1300 )-NFDB support-

# Gender issues across the technologies

### Mariculture as women empowerment platforms WEP)

- But for OS Cage Farming ...all proven WEP
- earlier depending on collection of natural resources from the wild, for livelihood, which was more labour intensive.

#### WE manifested as

- economic (improved income under their control),
- political (more women members in the decision making bodies.)
- social (women able to exercise group pressure to eliminate or diminish vices like alcoholism, afford to send children to school,

disposable income has improved her "fall back position"---"bargaining power "







- Self perception also has under gone positive changes.
  - ("feeling more confident to meet officials", "mustering courage to question consumption of spouses", "able to appease mother- in law with a saree which in turn helps to command respect",
- Expressions like "able to buy foods of choice" or "afford to buy ration during lean seasons" were more heard among sea weed farmers than mussel farmers during interviews. This indicates the inherent difference in the level of living standards existing between the two locations.
- A common mode of savings observed among the women farmers is through purchasing gold for their daughters which they generally keep as a secret from their husbands.

## 2. <u>Erosion in the State support for empowerment</u>

- This is a serious problem which demands more attention from gender scholars.
- Mussel farming as well as sea weed farming when started was promoted as women- only enterprises by the State
- In the case of mussel farming the Front line demonstrations initiated by CMFRI got support from the State Agencies like Development of Women and Children in Rural Areas (DWCRA) which was further carried forward by Kudumbasree.
- Since these agencies had women empowerment as their stated mission, financial support in terms of subsidies and loans were served only to women farmers. But once the profitability of the technology was established by the women SHGs the enterprise
  - became bankable and banks came forward with loans.
- But they could not keep the slogan of women empowerment for long as competition in the banking sector increased after liberalization of the economy

"Initially they (men farmers) had to include at least few of us (women) as members in the group to avail loans, ...and we felt a superiority .....but, now banks give loans to all-men groups also. So we are now competing with men said a woman mussel farmer in

Padanna. These female mussel farmers fear they may lose out before the male muscle power soon.

- The case of sea weed farming is slightly different but similar. The
  experimental stage of Kappaphycus culture (2000-02) was financed fully by
  the transnational company. But the diffusion stage (2004-5 onwards) got
  the financial support from the State through SHGs.
- Since it is mandatory to have 50% members in each SHG as women, the
  room for gender imbalance was less. But, as in the case of mussel farming,
  the lucrative ness of sea weed farming is luring more men groups to the
  enterprise and banks have come forward to assist them with loans.
- phenomenon of "male dominated privatization" of profit from common property resources is emerging as another reason for marginalization of women

# Feminization losing grip in maricultural space

- it is clear that coastal/ maricultural space is becoming masculine despite the avowed objectives of women empowerment by the State
- Upper house passed women reservation bill
- the state while on the one hand legitimizes genuine gender concerns on a macro political level it is becoming invisible (satiating a neo-liberal agenda?) in those very spheres where women were historically rendered as invisible entities both economically and politically.

## Gender balancing or biasing Common Property Rights?

- With new drivers in the value chain (for eg., CMFRI technology to extract a nutraceutical called Green Mussel extract in the case of mussel farming and availability of domestic processing facilities and new products in the case of sea weed farming) the prospects of these mariculture technologies getting diffused to wider areas in the coastal ecosystem are bright.
- The expansion in farming area will make it a contested space as competition increases. Thus, it is the benign duty of the State to come out with proactive, rational and gendered leasing policies to keep these enterprises robust. Such policies should also take into consideration the ecological vulnerability of these fragile ecosystems.

- It is an accepted truism that women tend to be better economic stewards at home (This doesn't need a better empirical proof than the fact that this is the premise upon which the much acclaimed micro-credit movement has been built). They cannot be otherwise when it comes to ecological stewardship also
- Responsible management of natural resources depends on a sense of ownership. Unlike landed communities, concept of inherited property rights is alien among the fishing communities and this makes fisherwomen more disempowered
- It was observed that dowry system, though legally banned in India, is very much prevalent among the coastal communities
- Inheritance of means of production like crafts and gears strictly follow notions of patriliny in the communities studied in all the locations

The grave concern "they (men) can go back to the sea, but where shall we go" need to be addressed by the State

- it is essential to argue that a marine common property leasing policy should have an inherent feminine bias which can be pragmatised by keeping the shallow water areas (for eg., up to a depth of 6 m) reserved for women maricultre farmer groups alone.
- There is no problem in fixing a lease amount as license fee based on the production and income. But it should be ensured that lease deed or license rests with women groups. It should be mandatory to conduct carrying capacity studies before renewing the lease year after year
- Incentives (like concession in lease amount) can be given to those groups who ensure ecosystem health through responsible management measures.

#### Conclusions

 The most important finding of the study is the ambivalence shown by the State in getting manifested as a positive "bargaining" force in the intra-household domestic space (by way of providing State -sponsored platforms through the Self Help Groups) while leaving the "common access resource" space from which these platforms gain sustenance less amenable to its democratic ambitions.

### Pro-gendered PR!?

- It is essential for gender scholars the world over to proactively support the cause of women mariculturists by rallying behind the argument that leasing policy should be gender biased, protecting the interests and role of women farmers rather than gender neutral.
- Only a visible State can bring fisher -women out of sociopolitical invisibility.
- Or will the market care to do the job?

### Hope lives...Follow Chiyono

- As a Zen student C failed to attain fruits of meditation. Then one moonlit night she was carrying water in an old pail. The bamboo binding it broke and C was set free! In commemoration she wrote a poem:
- In this way and that I tried to save the old pail
  - Since the bamboo strip was weakening and about to break
- Until at last the bottom fell out
- No more water in the pail
  - No more moon in the water!

