

100-REP034

Tragedy of Commons

**A REPORT ON THE STATUS OF
FISHFOLKS IN TIKAMGARH &
CHATTARPUR DISTRICTS OF
MADHYA PRADESH**

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Confession ...

Seven years back a village tank did not have any importance for me, except as a breeding ground for mosquitoes. When I met fisher folk I did not foresee the emergence of a people's organisation. In my interaction with **Achrumata Machuwara Sangathan** as a consultant on community organisation I saw the evolution of the fish workers' organisation which was not only asserting traditional rights over tanks as a source of livelihood but through savings and management was turning fishery into a successful business venture. This led to the idea of doing a mapping of tanks and fish workers in other areas of Bundelkhand region, to ascertain their status and look at the possibility of widening the process further. The present report is an outcome of this search.

I owe a debt to all the men and women fish workers from the Sangathan who deepened my understanding of issues focusing on livelihood crises of communities dependent on traditional sources and skills, and strengthened my belief in people's power.

Vikalp, an NGO based in village Madiya of Tikamgarh district backs the Sangathan. **Omprakash Rawat** who heads Vikalp is like an anchor to all fish workers of the area. I sincerely thank him and his family for providing me a home away from home, and Rawatji for being a great co-worker.

I would have never undertaken this journey of research and report writing without support from Oxfam. I went to Vikalp as a consultant for the **Oxfam Lucknow office**, which later coaxed me to do the research. I thank Oxfam Lucknow for being open, flexible, very supportive and soooo ... patient when I took inordinate time in report writing.

Uzma Khan who assisted me as co-coordinator for data collection and later for data analysis was not only efficient in her work but outdid her area and was a valuable research assistant. Thanks.

I thank all those who were part of the team for data collection for their contribution and team spirit. It will be difficult to mention each of them by name but I thank them all for their work.

Aloka Hiremath who edited this report helped me tighten the document and pushed me to complete it. Thanks Aloka.

I also thank **Madhavi Kukreja** for her inputs on the questionnaire on gender.

I cannot thank those who are integral to my life and whose faith in me as an activist is a source of my growth. I am happy that **Shahira Naim** and **Sandeep Pandey** are around to reinforce my growth.

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This report is a co-operative effort, which has drawn contributions from Oxfam's staff and partner Vikalp and fisherfolks sangathan. Arundhati Dhuru was the writer of the report and was assisted by Uzma Khan and the team during data collection.

Anubha Sood coordinated the process on behalf of Oxfam North India Office. Alok Hiremath carried out the detailed editing of the report and indexing. Kanchan Sinha and Lalchand Garg provided useful comments and valuable support.

Dharmaraju Kakani and several other external readers made time to comment on various drafts.

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Tribute

*'To hundreds of men and
women fish workers of
Tikamgarh and
Chattarpur districts
(M. P) who gave me an
opportunity to be a comrade
in their struggle for rights
over tanks and their
livelihood and enriched me
with love and laughter.'*

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EXECUTIVE SUMMARY

This report is of a study undertaken in the Tikamgarh and Chatarpur districts of Madhya Pradesh to examine the status of fisher folk and tanks, which are their livelihood resource. The study was conducted in Tikamgarh, Baldeogarh, Prithvipur, Jatara, Palera and Niwadi blocks of district Tikamgarh and Bada Malahara, Naugaon and Ishanagar blocks of district Chatarpur. It covered 184 village tanks. Focus group discussions were held with fisher folk and 325 individual interviews were conducted with 105 women and 220 men. The findings of the study are summarised as follows.

The tanks built during the Chandel period in the Bundelkhand region, especially in Tikamgarh and Chatarpur districts, are on the verge of extinction due to neglect by state and society. As per government records, there are a total of 1,395 tanks in Tikamgarh district, with 612 tanks being under fishery and 100 being irrigation tanks. District Chatarpur has 1,092 tanks, of which 703 are under fishery and 53 are used for irrigation. Government records are silent about 683 tanks in district Tikamgarh and 336 tanks in district Chatarpur.

The reasons behind the loss of tanks are mainly deliberate policies focusing on bigger projects and regarding smaller irrigation works such as tank irrigation uneconomical. The most critical reason is the private exploiting of tank-bed land for agriculture by both legal and illegal means. This has led to diminishing tank size and the conversion of commons into private property. This severely affects the livelihood resource of fish workers. They are forced to shift to other occupations and are joining the mass of manual labour.

Cooperative societies and self-help groups of fisher folk exist only on paper. It is the contractor who controls the fishing business. The survey was conducted in 184 tanks out of which there was strong evidence of the contractor in 136 tanks - 74 % of the sample. The contractor controls the business through loans, ownership of assets and nexus with traders in the market. This hold of the contractor over all the activities related to fish production, finance, market and decision-making becomes possible through illegal agreements with executive committee members.

Women were and remain the main subsistence producers, taking multidimensional roles within the fishery sector. Since they are linked with non-monetised activities, their work is under-valued and they are deprived of benefits and say in the sector. Their work security and livelihood is in danger as fishery is transferred from the household economy to the market-oriented economy.

The state government has left fish workers to fend for themselves by not addressing the issues of security of employment and non-transferable ownership of their livelihood. Employment in the inland culture fisheries sector is still unregulated, and casual or contractual in nature. The other problem areas are provision of cheap credit; ownership of tank, boats and nets; security of livelihood; guarantee of minimum wages; easy access and protection in the market; and participatory, democratic administrative processes.

The experiment of working with fish workers that has been ongoing in Tikamgarh for the last six years proved successfully that by creatively mobilising the community, the negative process of



pauperisation could be stopped. The position of fish workers can be turned into an advantageous position by weaving together traditional skills, credit, modern techniques, protected and accessible market, community links and organisation, and mainly by securing ownership of their resource.

CHAPTER I – FISHING IN TROUBLED WATERS



A drop of water – civilisations were established and shaped around a drop of water – the source of life. Traditionally Indian society organised itself around water. People found the ways to collect, harvest, manage and use water in villages and in towns. And societies built practical, systematic and huge organisations for this. The collective effort was so inclusive that every member of society was part of it, strengthening society further.

The economic importance of rain in a country where agriculture is the mainstay can hardly be exaggerated. Indian history is full of examples of indigenous water harvesting systems. These systems found throughout the country showed enormous variation in their design, structure and size. Though crude by present-day standards, they were nonetheless complex and required sophisticated skills to construct. Individuals and communities managed the systems in cooperation. Sometimes the state undertook or encouraged the construction.

In India among different forms of charity one of the most important was the provision of water. An inscription of 1369 AD extols the merit accruing from the provision of water by constructing a tank:

A shade for distributing water; a well and a reservoir; a canal and a lotus pond – the merit of constructing them is millions of times higher, as the water of a pond serves to nurture both movable and immovable creation of this earth. Even Lotus Seated

(Bramha) is unable to recount the fruit of merit attached to it. (Agarwal, Anil & Narayan, Sunita Ed., 1997, p. 281)

The digging of a tank was considered to be one of the seven great meritorious acts a person was expected to perform during a lifetime.

From the well-known Bhopal Tal in Madhya Pradesh to Ghadsisar in Rajasthan, ponds, tanks, *talabs* and *tals* were multifarious. They were used for drinking and other domestic purposes, and for irrigation. They were a place where women came to share their stories, devotees came to offer prayers, and children came to play. When a *talab* overflowed it was an occasion to celebrate. It brought *raja* and *praja* to its banks. Besides being a source of water, *talabs* were a source of livelihood to thousands of fisher folk.

According to commonly held belief, fisher folk claim their descent from the first incarnation of God Vishnu. They worship the sea, rivers and tanks. They live in closely-knit communities, mostly in coastal areas. Sizeable numbers are also settled near all major rivers.

Not very commercially profitable today, inland fishery on tanks was the only source of livelihood for fisher folk. In central parts of India these communities are known as Kevats, Dhimars or Ahirwars and belong to the Other Backward Castes (OBC) category. Apart from fishing they also collect water plants like *kamalgatta* and *singhada*, and earn income from ferrying passengers across the rivers. Women play a very vital role in the fishing operation. Though men do the actual fishing, women take care of cleaning, sorting and selling in the local markets. Fisher folk were closely associated with taking care of tanks, viz. repair works, cleaning etc.

In recent times, commercial fishing through aquaculture plants and trawlers on big reservoirs has been marginalising the fisher community. Lack of control over markets, damming of rivers and drying of tanks has pushed them further towards poverty.

Tikamgarh - An Experiment to Gain Control over Resources

Bundelkhand is an arid region, known for its stony terrain. It has fourteen districts, seven each in Madhya Pradesh and Uttar Pradesh. They are Tikamgarh, Chatarpur, Datia, Sagar, Damoh, Panna and Bhind in Madhya Pradesh and Mahoba, Jaloun, Jhansi, Lalitpur, Chitrakoot, Banda and Hamirpur-Rath in Uttar Pradesh. The region has a very low ground-water level, which has gone down further over the years. Historically, people of this region made efforts to save every drop of water that came their way. The Chandel dynasty, which ruled the region, was famous for its architecture. It left its imprint, as seen from the famous Khajuraho temples. It also encouraged the construction of tanks and wells. Though mainly agricultural castes are predominant in the region, many people are also involved in the stone quarrying activity. The fishing community has considerable presence around tanks and rivers, such as the Betwa River; the area near the famous Nadanwara tank known for its natural mountain based weirs; and the Mahoba *talab* known for its surrounding fort.

Tikamgarh district is on the border of Madhya Pradesh (M.P.) and Uttar Pradesh. As per records of the district administration (2004), there are more than 1,395 tanks in Tikamgarh district. Once they met the irrigation and water needs of villages. Thousands of fisher folk were also

dependent on them. Today most of these tanks exist only in panchayat records, and have either turned into wastelands, or are used partially for irrigation needs by the dominant sections in the villages. Due to siltation and total neglect, what were once the pride of villages, have now turned into garbage dumps. The fisher community has been the worst affected by tanks dying in this fashion.

Fisher communities have fishing rights over tanks through registered cooperative societies. The state government issues licences for these on the recommendation of Village Panchayats. But in actual fact most of these societies are controlled by vested interests. The powerful lobbies in the villages act in the name of fisher folk, while most of the fisher people actually work as labourers earning a pittance. They are completely dependent on the powerful contractors for loans, fishing nets, seedlings and during lean periods. As they do not have access to markets they end up getting much less than is due to them.

As a result the fishing community, already on the fringes of society, has lost its source of livelihood. Their traditional skills unrecognised and unappreciated, fisher folk have been increasingly forced to become part of the large unemployed class of workers. They have been reduced to unskilled labourers, losing their traditional heritage and self-esteem. They are thus getting further pauperised and marginalised in the process.

For the last six years a local non-governmental organisation (NGO) named Vikalp has taken the initiative in organising the fishing community in the blocks of Prithvipur and Jatara of Tikamgarh district of Madhya Pradesh. A fisher folk's cooperative society of village Madia in Prithvipur block was fighting for its fishing licence, which was suspended by a powerful contractor who was also heading the Village Panchayat. Vikalp, which later involved Oxfam for a long-term non-funding partnership, supported the struggle. Though fisher folk had rights over tanks on paper the contractor was controlling the fish production. Fisher folk were organised to gain 'real' control over fish production. They formed pressure groups to reorganise cooperatives to make production participatory and to distribute profit equally. Systematic savings were started in groups, to serve as informal credit sources to break away from the vicious cycle of loan-mortgage-loan – the prevailing pattern leading to loss of control over the livelihood resource. They also started processes for buying seeds and selling catch collectively, thus reducing their transport and other expenses and raising their bargaining position in the markets. The involvement of NGOs ensured that women became equal party to this experiment and shared the benefits. The organisation realised the importance of getting policy changes from the state for actual realisation of their rights. They pressurised the state and district governments through organised efforts. The organisation also raised the issue of dying of tanks. At present, fish workers of over 33 tanks from these two blocks have savings worth Rs. 30 lakhs, and are in the process of establishing a company to further their interests.

In order to explore whether the experiment of the fisher community of Prithvipur and Jatara could be the basis for building viable options for poor unorganised workers, it was necessary to analyse the reasons behind the positive gains. This understanding formed the rationale for further research.

Rationale for Further Research

In developing countries, the poor just like the affluent, have to make difficult economic decisions. Their decisions are however not made in stores, corporations or stock exchanges but through informal markets, household economies, swapping or the use of common lands. Millions of workers take tough economic decisions in informal markets characterised by their personalised relations between transactors. The rules of business in production and exchange are shaped by institutional arrangements that have so far not been adequately conceptualised by social scientists.

A classical economist believes that these workers can be used as an expansive source of labour for rapid industrialisation. In contrast, radical economists of the Marxian tradition argue that property-less labour constitutes a class of unemployed people. The only solution to the problem of surplus labour is to restructure the economy by state control of property rights.

Both these approaches are simplistic because they do not take into account complex informal property rights that are inherent in the contracting arrangements. These property rights generate wealth, segment markets, provide incentive mechanisms and channel income among citizens in ways that are quite different from what existing paradigms predict.

Informal property rights emerge when behavioural relations have a degree of permanence in the economic system. For contracting individuals, these relations amount to a social asset that may be as valuable as physical, financial and human capital. This social asset is very effective to secure a better place for workers in the unorganised sector.

This was amply proved in the case of the fisher community from Tikamgarh district of Madhya Pradesh. State policy worked to strengthen the class, caste and political nexus exploiting fisher folk. By calling the community together under one banner, the same combination of forces was utilised by the fisher community to its advantage to gain control over tanks.

The fish workers of village Madia raised their voice against the exploitation of the contractor who was also using state policy to his advantage. Other fisher folk soon joined them. Their feeling of injustice was fuelled by the understanding of their social status - that they belonged to the caste traditionally linked to the tank and to fishing. They were known as *dhimar* - the one who resides on the banks, that is *dhi* of the tank, and is dependent on the tank. This feeling that it was their 'right' was the centrifugal force of their struggle. The homogeneity and bonding of their community was their strength. The organisation used this social asset constructively.

The six year long intervention in Prithvipur and Jatara blocks of Tikamgarh district led to further thinking to look at possibilities of halting the process of pauperisation of fisher folk in the rest of the Bundelkhand region. For this it was necessary to do a mapping of tanks and fisher folk.

An action research was planned and conducted. The present report is an end product of this action research.

Objectives

1. To map the Bundelkhand region to identify where fishing communities exist, and to look at the possibility of reconnecting them to tanks and rivers for viable inland fishery
2. To explore the prospect of organising the fishing community to improve their livelihood opportunities
3. On the basis of this mapping and exploration, to analyse the status of tanks, fisher folk, their gender dimension and the role of the state; and to propose a broad framework for further organisational efforts

Methodology

The methodology used was 'Between Method Triangulation' which refers to measures of a single characteristic or relationship obtained by two or more different modes of data collection. Hence data was collected and analysed from field questionnaires and also from content analysis of village records, panchayat records, gazettes, census etc.

Data was collected from two sources. Secondary data was obtained from Village Panchayat records and the Fishery Department, which gave details about tanks, tanks used for fishery, and fish workers involved (**Annexure I**). Primary data was collected from focus groups and individuals (**Annexures II and III**).

The villages for primary data collection were selected by analysis of secondary data and by using the 'Snowball Effect' method. A particular village was selected with the help of secondary data analysis, and then followed up with other villages based on the information gathered from that source.

Apart from this, some other criteria were also taken into consideration, such as: size of tanks; equilibrium in terms of number of tanks between different blocks; variables such as tanks managed by fisher folk as a caste and by other castes; tanks managed by women's cooperatives.

SPSS software was used for the data analysis.

Time Frame

The secondary data was collected from April to July 2004. The fieldwork for primary data was carried out in August 2004. The data analysis and report writing was done from September '04 to February '06. During this same time frame, efforts were made to spread the organisation in other areas, since that was an objective and the researcher and activists were directly involved in the exercise.

Sample Size

Though Bundelkhand region comprises fourteen districts, two districts viz. Tikamgarh and Chatarpur were chosen in the initial phase. The research aimed at spreading the organisational efforts further with the help of the NGO Vikalp and the fish workers' organisation. For this it was

necessary to start with the remaining blocks of Tikamgarh district and the adjoining blocks of Chatarpur district, which were easily possible to reach out to.

Secondary data regarding the number of tanks was also collected from the Fishery Department and district administration of all other districts of Bundelkhand region, with the view to conducting a similar exercise at a later stage. This data has not been used and mentioned in the present report as this report concerns the action research conducted only in district Tikamgarh and three blocks of Chatarpur.

The study was conducted in two districts of the Bundelkhand region: Tikamgarh and Chatarpur. All blocks of Tikamgarh (Tikamgarh, Baldeogarh, Jatara, Palera, Niwari and Prithvipur) and three blocks of Chatarpur (Bada Malhera, Ishanagar and Naugaon) constituted the sample area of the study. 216 tanks were selected. Of these, survey was conducted of 195 tanks as the remaining ones had either turned into cesspools or were not used for fishing any longer. Later, data from 11 tanks could not be used, as it was technically invalid. The block-wise break up of tanks is as follows: Tikamgarh - 16, Baldeogarh - 27, Jatara - 24, Palera - 23, Niwari - 16, Prithvipur - 22, Bada Malhera - 22, Ishanagar - 23 and Naugaon - 22 (**Annexure IV**).

The individual surveys were carried out with 325 members, of whom 105 were women and 220 were men.

The final analysis is based on the data of 184 tanks and individual survey of 325 members. This data will henceforth be referred to as 'survey data' in the chapters to follow.

Research Team

The survey team had a main researcher also the writer of this report, assisted by a research assistant especially for technical work. The survey team was a blend of surveyors hired from other NGOs, with experience of working with people's organisations. Activists from the fisher folk's organisation from Tikamgarh led the team. This grouping was essential as the research also aimed at spreading the organisation in the research area.

Additional services of people were used when required for collecting data from government departments, feeding data and editing the report.

Utilisation of Findings

According to the Heisenberg Principle of research we cannot observe something without changing it. In this sense this is an action research.

The findings of the research will be utilised for

1. Identifying and assisting the groups that can organise the fisher community to improve its standard of living
2. Creating a model for viable livelihood opportunities through tank fishery in the Bundelkhand region

3. Building a network amongst the fisher community, to act as an advocacy group to engineer policy changes
4. Further developing understanding of the arena of informal property rights and social assets to organise marginalised communities and collectives, to give them a firmer footing in the existing market economies

Organisation of Chapters

The **present chapter** gives the background of the intervention in Tikamgarh district, and based on its experience the rationale for further research, its objectives and methodology. The remaining five chapters focus on various aspects of the status of tanks and fisher folk.

The **second chapter** probes the status of water bodies and their relation to the fishing community. The **third and fourth chapters** analyse the status of fisher folk in the two districts of Tikamgarh and Chatarpur. While the third chapter looks at the community as a whole, the fourth chapter focuses on the gender dimension. An examination of the status of the fisher community would be incomplete without analysing the role of the state and its policies. The **fifth chapter** explores this dimension. The **concluding chapter** summarises the findings of the research and points to a possible direction to change the status of the fish workers' community. It also suggests the broad direction for further organisational efforts, and takes stock of the consequence of this research in the area.

CHAPTER II - THE ABANDONED RICHES

The son of Maharaja Chatrasal of Bundelkhand found a map to a hidden treasure. Following the map, Jagatraj dug out the buried treasure. Maharaja Chatrasal was very angry when he learnt about this. "Why have you exhumed your Chandel ancestors?" he exclaimed. "Now that your deed is done, you better repay by making the best use of this wealth." The king asked his son to repair the existing tanks built by generations of Chandel kings and also to build new ones. The treasure was huge. The old tanks were repaired and new ones were dug. Referring to the family tree of the Chandel dynasty between the years 286 and 1162 of the Vikrama calendar, 22 big tanks were built (Mishra, Anupam, 1993, p.74).

These 22 tanks, which are testimony of our ancestors' foresight and knowledge of indigenous water harvesting systems, still exist today in district Tikamgarh.

Tanks were the main source of water supply in the area for ages. Moreover the storage tanks enriched the water table through percolation. An institutional system also evolved that used tanks as the major source of irrigation. This tradition of tanks as the largest source of irrigation continued until the mid 1960s. There has since been an overall decline in the area irrigated by tanks in spite of a marginal increase in the number of tanks.

Tanks in the Research Area

District Tikamgarh - Tanks under Irrigation and Fishery

Tanks	Available for irrigation		Available for fishery		Tanks not utilised either for fishery or irrigation	
	Number	Catchment area (Hectares)	Number	Catchment area (Hectares)	Number	Catchment area (Hectares)
Tanks under Irrigation Dept	100	5,072.00	100	5,072.00		
Tanks under Rural Dept	1,295	2,700.00	612	1,731.00	683	969.00
Total	1,395	7,772.00	712	6,803.00	683	969.00

There are a total of 1,395 tanks in Tikamgarh district as per government records, with 612 tanks being under fishery and 100 being irrigation tanks.

District Chatarpur - Tanks under Irrigation and Fishery

Tanks	Available for irrigation		Available for fishery		Tanks not utilised either for fishery or irrigation	
	Number	Catchment area (Hectares)	Number	Catchment area (Hectares)	Number	Catchment area (Hectares)
Tanks under Irrigation Dept	61	2,032.536	53	1,931.656	8	100.88
Tanks under Rural Dept	1,031	1,771.100	703	1,574.573	328	196.527
Total	1,092	3,803.636	756	3,506.229	336	297.407

District Chatarpur has 1,092 tanks in total, out of which 703 are under fishery and 53 are used for irrigation.

As reflected in the above data, though more than 1,000 tanks exist in both the districts, only half the number are under use for either fishery or irrigation.

In district Tikamgarh, government records are silent about 683 tanks. So is the case of 336 tanks of Chatarpur district. Most of these tanks have either become agricultural lands or waste lands. They are also used for residential purposes. It is a common sight in many villages of Bundelkhand both in Madhya Pradesh and in Uttar Pradesh, to enter a village and find a cesspool slowly turning into wasteland.

The research undertaken in Tikamgarh and Chatarpur throws light on the current state of tanks in the area. The survey findings are summarised below.

Tank Size and Age

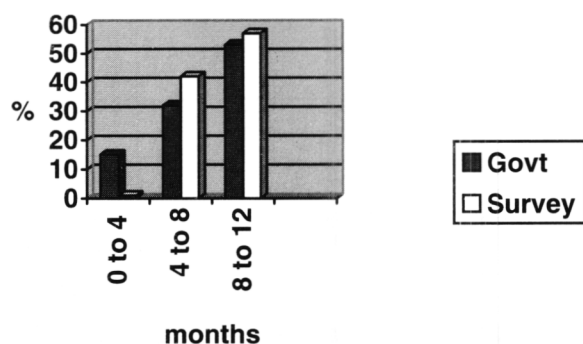
74.3% of the total tanks in Tikamgarh district and the three blocks of Chatarpur district surveyed are from the Chandel period. Of these 94% are above 50 hectares. Smaller tanks are government made, made by the Gram Panchayat. A few have been constructed by private organisations.

Seasonality of Tanks

Government records as well as the survey show approximately similar water holding in yearly tanks (53% and 57% respectively), but the figures for seasonal tanks show wide variations. According to government records there are 32% tanks with water holding capacity for 4 to 8 months; the survey results show 42% for the same. The variation is very wide in the case of

tanks that hold water only for four months: the government records 15% while survey results show only 1%. This difference may be for two reasons: one is the need to update records (the exact year when records were updated could not be established even after probing). Secondly, over the years the water holding capacity of tanks has decreased due to salination, encroachment of tank land and lack of maintenance. Government records do not reflect this fact, while the survey was based on people's experience.

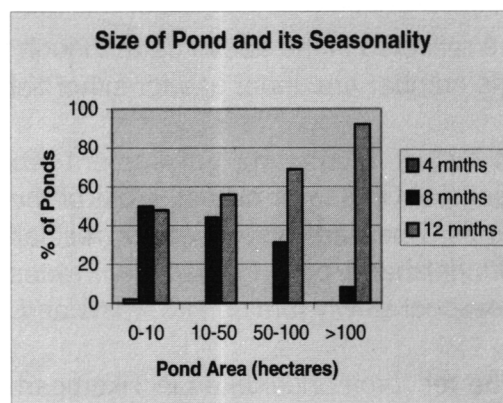
Seasonality of Ponds



Months	Govt. records (%)	Survey records (%)
0-4	15	1
4-8	32	42
8-12	53	57

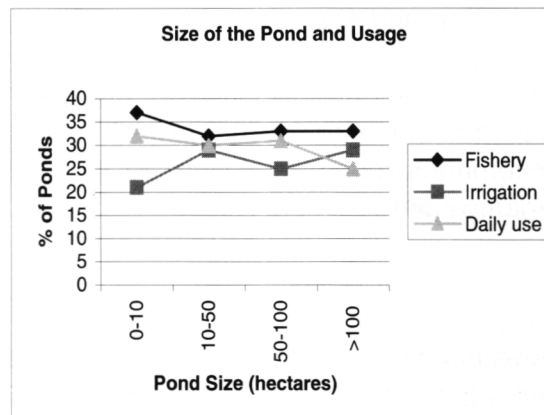
Size of the Tank and Water Holding Period

Bigger tanks have round the year water holding capacity, though smaller sized tanks also hold water round the year (49% of tanks of size 0-10 hectares). There are quite a sizeable number of seasonal tanks (water holding for 8 months) in all the different sizes of tank. Water holding for 4 months was found in just 0-10 hectare tanks, and that too in just 2% of the total tanks in this category.



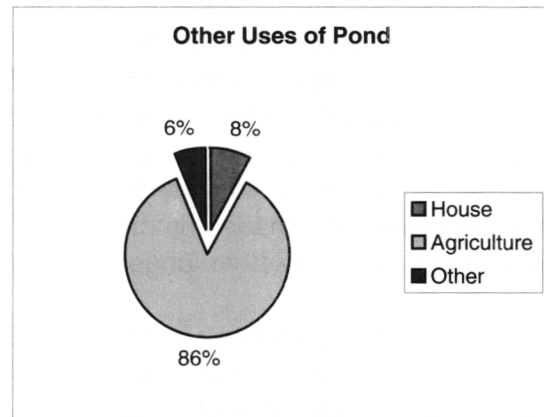
Size of the Tank and Usage

Irrigation, fishery and domestic use are three main uses of tanks irrespective of tank size. As the survey was focused on use of tanks for fishery and as the questionnaire was directed only to fish workers, we found fishery being the highest usage type in tanks of different size, domestic use dominating in tanks up to 100 hectares in size, while irrigation took up the lead in tanks larger than 100 hectares.



Encroachment of Tank Land

The tank areas have been encroached upon over the years. This phenomenon was found in all the tanks surveyed for the research. This indicates a high degree of negligence of tanks. With tank-beds converted into agricultural land, powerful vested interests and castes traditionally practicing agriculture have taken advantage. As the survey revealed, most of the lands were encroached upon. The encroachment was particularly for agriculture - 86%, followed by 8% for residential purposes and 6% for other purposes such as grazing etc.



The administration is supposed to grant seasonal rights for cultivation with a priority to the fisher community. But the local village level administration, instead of giving legal rights, allows 'free for all'. The dominant agricultural castes take advantage of the situation and cultivate more land by bribing the local machinery. Even where rights to cultivate were granted, seasonal land rights were received by powerful castes in 71% of the cases, and only in 21% did fish workers receive seasonal land rights.

From Public to Private

Raja Chatrasal used his wealth for the 'public purpose'. The tanks built by him and his son still serve the common people. Later the policies of the British who had conquered India to exploit its resources destroyed much of the local water management systems. In one stroke the revenue system established the administration's right over land, denying centuries-old customary rights of people and creating a huge mass of landless labourers to serve the rulers.

This policy, which had origins in British rule, continued after Independence. The state became an all-pervading entity taking over rivers, forest, lands, and mines. The forest dwellers, nurturing forests for centuries, became encroachers. In the newly attained bliss of Independence questions such as those raised by the Telengana struggle and many tribal uprisings in various parts of India became a crime.

In the rush to be part of world affairs 'the bigger the better' was the new mantra. Nehru's words that "big dams are modern temples" tolled the death bell for smaller irrigation works such as tank irrigation. An impression was propagated that smaller irrigation works were uneconomical and an unnecessary burden on revenue officials. The thrust was set on ambitious major multi-purpose river valley projects like the Damodar River Valley Project, Narmada Project or Krishna River Valley Project. Minor irrigation, especially in dry regions, got neglected.

In order to satisfy the needs of a growing population the government decided to stress extensive agricultural development. Though the intent was good it did not take into consideration age-old knowledge, practices and people's rights over resources. In fact, irreversible damage was done to minor works by assigning some of the tank-beds to private individuals for cultivation under the "Grow more food" campaign.

As well documented by Agarwal and Narayan (1997) there has been extensive encroachment and transformation of percolation and smaller irrigation works into private land. Beginning with the early 1960s well irrigation increased by leaps and bounds due to the availability of credit facilities and electricity at subsidised rates. This transformation was aided by the increased privatisation not only of land but also of the groundwater on private land. There were also improvements in water-lifting technologies, which made private command over irrigation of large areas feasible. This made common resources like tanks redundant for the rich and powerful in the villages. Tanks were no longer assets that needed to be maintained.

In fact the prime objective became their deterioration leading up to acquisition of the tank-bed for private cultivation. In this way the rich could also take over the lands of those who had lost the benefit of public sources of irrigation like tanks and did not have alternative means of their own.

This was the process that took place in districts Tikamgarh and Chatarpur of Bundelkhand region. Fish workers, who were dependent on tanks, were affected due to shrinking of tank lands. Though supposedly getting priority in seasonal land rights they were not able to take its benefit due to their low strata in society and unorganised bargaining power. While Village Panchayats replaced the village landlords, the same landed gentry uninterested in tank cultivation dominated these local administrative bodies. They were not interested in repairing or maintaining tanks, as a result of which salination increased and tanks went into decline.

The establishment of agricultural cooperative credit institutions for long-term finance aided this process of increasing private command over irrigation. A study of long-term institutional finance provided in Andhra Pradesh with the backing of NABARD shows that a large proportion of credit in the drought prone districts took the form of irrigation-oriented loans (Reddy, Barah & Reddy, 1988). These strengthened private irrigation development in these scarcity areas. It is not that these loans did not benefit individual farms or the region's economy, but they did divert attention away from surface storage works.

Severe financial constraints have been a major factor leading to the decline of tanks. The tank irrigation system, neglected for such a long time, has now lost all supporting institutional structures.

“Local people who were pushed more towards the periphery of society also joined in this loot of commons and what were once community managed commons steadily turned into free access resources” (Agarwal, Anil & Narayan, Sunita Ed., 1997, p. 309).

Lessons Learned:

1. Tanks are decreasing in numbers. They are slowly turning into cesspools of filth and are dying.

2. The big tanks with greater water holding capacity for longer periods of time are all tanks built centuries back during the Chandel period. Most of the tanks built more recently are smaller in size, few in number and have less water holding capacity for a shorter period of time.
3. Most of the tanks in both the districts are extensively used for agriculture, further diminishing the size of the tanks and turning commons into private property.
4. The demarcation of tank areas is an issue for advocacy with the state.
5. The use of tank-bed land for agriculture, either illegally encroached upon, or with acquisition of legal holding, is controlled by the dominant castes and class. Fisher folk are denied the land rights.

CHAPTER III - CAUGHT IN A NET

“A weak fisherman caught a strong fish in his net. He was unable to retain it.
The fish overcame him and pulled the net from his hand.
The net brought every time a fish,
This time the fish went and carried off the net.”

- A Japanese verse



The fish workers of Tikamgarh and Chatarpur districts of Madhya Pradesh are like this weak fisherman. They have not only lost their nets, boats and fish but even their rights to fishing – their traditional occupation and source of livelihood.

Traditional fishermen and women provide most of the fish consumed by local populations, yet they number among the poorest of the world's poor. They haul in about a fifth of the global fish catch, but their earnings are uncertain and their often-fragile boats mean that their lives are at risk. Fisheries make a big contribution, not only to food security but also to livelihoods and culture in many developing countries. In many regions, fishing is the social mainstay.

There is inadequate data for the exact number of fish workers in India; the available data is insufficient especially for inland fishery. It is estimated that in 1990 there were 1.7 million full-time fishermen, 1.3 million part-time fishermen, and 2.3 million occasional fishermen, many of whom worked as salt makers, ferrymen, or seamen, or operated boats for hire.¹ These figures are silent about the presence of women among fish workers. State government statistics club fishing and fish workers with agriculture and allied activities. In a state like Madhya Pradesh which does not have a coastal belt and whose inland fishery sector is underdeveloped, it becomes difficult to arrive at specific data. In India as in most south Asian countries these poor fishermen work in the unprotected sector and are not adequately covered by labour laws.

¹ Source: www.India.fishing/countrystudies.us/India/107, n.d.

Fish Workers in the Bundelkhand Region

For traditional fishing communities, fishing is a source of livelihood as well as a way of life. According to mythology, fishing communities in India trace their origin to the first incarnation of God Vishnu. They are very proud of the role their mythological ancestor played in helping Lord Rama and Goddess Sita to cross the river Ganga during their exile. The Dhimars and Kevants of the Bundelkhand region of Madhya Pradesh and Uttar Pradesh have a rich cultural history. Their folklore links them to Goddess Achrumata who protects them from misfortune. Fishing is not only their livelihood; their festivals are also centered around it. Fisher folk worship tanks, boats, and fishing gear at the start of the fishing season and during festivals like Diwali and Holi. That fish is part of their culture is clear from the use of fish in various aspects of their life: fish preparations are used for medicine e.g. fish oil for itching, soup of the *katala* fish for a weak person to improve health. Fish also has ritualistic value: bones of the *rohu* fish are tied around a child's neck to ward off the evil eye. Fisher folk in these regions are called *mate*, meaning mother, who provides food and sustains life. The other community for which the same word is used is the Kashi community, which is an agricultural community, again providing food to society.

In districts Tikamgarh and Chatarpur of Madhya Pradesh fishing communities have a presence in all the blocks, though their population is not very significant. The survey of 184 tanks in these districts revealed the following salient features of the fisher community in these two districts:

Average Size of Family

The average size of family is 5.9 in district Tikamgarh and the three blocks of district Chatarpur that were surveyed.

Literacy Level

Children

The literacy level for children is quite low. The dropout rate is high, with an average of 4 years of schooling per child. Gender differences in education level are not very evident and children of both sexes are seen dropping out of school in equal measure.

Adults

On an average males are seen having passed just class 5. There is no significant difference in the literacy level for women.

Housing Status

Of the total families surveyed, 98.5% owned the house they were living in. This was mostly in the name of the head of the household (the male head).

Average Value of House plus Land

The average value of the house was around Rs. 35,000, the minimum and maximum ranging from Rs. 5,000 to Rs. 80,0000 respectively.

Number of People with Power Connections

A total of 43.4% of the households surveyed had electricity connections. 89% of them had *katia* connections - illegal connections through the main electric line. A personal legalised connection was owned only by 1.2% of the households, while the rest shared electric connections with other persons.

Sources of Water

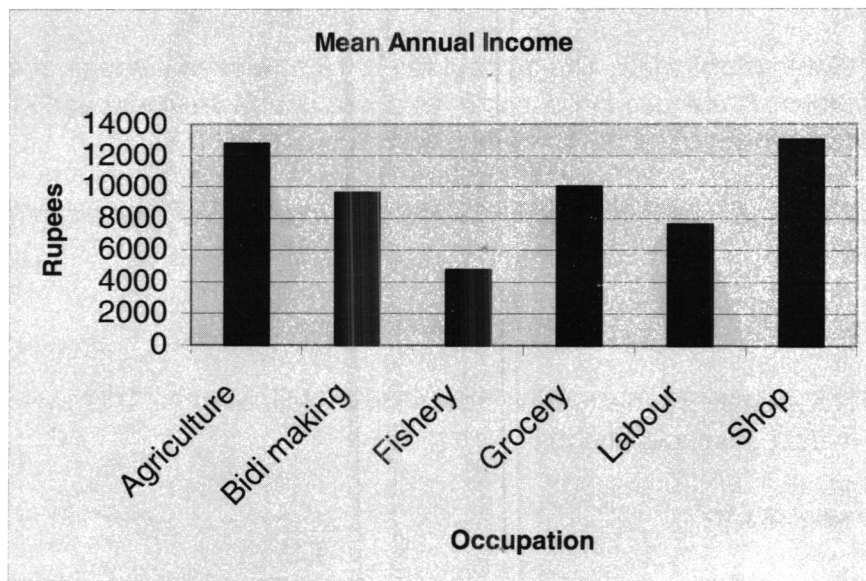
Mostly people fetched water from a community source (89% of households surveyed), while only 11% had personal water connections. The community source in 55% of cases was a well and in 42% of cases it was a hand pump. In just 3% of cases water was fetched from a community tap. Personal water sources were usually hand pumps or tube wells.

Family Property

Most of the households owned furniture (56.4%), cow (18.2%), goat (14.4%) and hen (13.2%). 33.4% of the fisher folk also owned a cycle and 3.6% also owned a motorcycle. Jewelry, fans, televisions etc. were not considered important assets by the fisher folk. They usually maintained items of basic necessity, but most of them were interested in investing in cattle and vehicles for conveyance to increase the fish business.

Family Income

The average total annual income of households was Rs. 5,357 in the two districts of Tikamgarh and three blocks of Chatarpur district surveyed.



Primary Occupation as Fishery

Those whose primary occupation was fishery were seen to be earning the least mean annual income.

Secondary Occupation as Fishery

The income from fishery was seen to reduce if it was practiced as a secondary occupation.

The Status of an Occupation and Annual Income

Economic activity	Annual income when activity is primary	Annual income when activity is secondary
Agriculture	12,737	6,133
Fishery	4,776	3,422
Shop	13,500	10,000
Labour	7,620	3,800
Other	9,600	4,643

Average period, in which income from fishery is available

The income from fishery is available for an average of 6-8 months in a year.

Financial Sources of the Family

As per the survey after analysing the average annual income for a family having 5 members and 3 economic activities, fishery contributed only 24.9%, agriculture contributed 34.7% and labour contributed 31.2% of the family income. The remaining 9.2% came from other economic activities like poultry keeping, goat rearing, shop keeping, boating etc.

Economic Activity and its Contribution to Family Income in Percentage

Economic activity	% share in the family income
Agriculture	34.7 %
Labour	31.2 %
Fishery	24.9 %
Other activities	9.2 %

Fisher folk are not dependent only on fishery for their livelihoods, as income from fishery is not available throughout the year. All of them opt for supplementary livelihoods such as agriculture. With most of them owning insignificant landholdings, they are forced to work as labourers. There is a crying need to analyse this shifting from fishing to other occupations for a community that not only practices fishing for a livelihood, but whose very existence, life and culture revolve around it.

The Fishing Operation

In order to understand the analysis of the survey findings the broad routine of the fishing operation is explained below.

Fishing is not regarded as a major occupation by the state government, and falls in the category of cattle rearing and allied activities. However, it does assume significance as the two districts have 1,395 and 1,092 tanks respectively. Of these, 612 and 703 are used for fishery.²

In Madhya Pradesh fishing rights to tanks are given to cooperatives or self-help groups (SHGs), or in a few cases, to individuals. These groups have to be (in descending order) of Dhimar or Kevant communities (fishing communities), or belong to the Scheduled Castes or Scheduled Tribes, or other marginalised groups such as women. The groups have to get a sanction from either Gram Panchayat, or Zilla Panchayat or Parishad. (This depends on the size of the tank and is elaborated in Chapter V.) The Fishery Department then issues a fishing licence for a period of 7 years or 10 years. The group has to pay a lease amount, which is charged according to tank area (details in Chapter V).

The group then practices fishing. The fishing operation basically follows the following steps: The group buys seeds either from private and/or government hatcheries. This buying is done in the months of June and July.

The fish are fed and maintained.

The actual fishing starts in the month of October. It reaches its peak in the period December to mid-April. This depends on the type of fish and its rate of growth.

A small amount of fresh fish and some dried fish is sold in the local market. The rest of the catch goes mainly to the fish market in Jhansi.

The profit and labour charges are then distributed.

Annexure V - Fish Production Cycle

This operational practice in fishing appears to be uncomplicated and totally beneficial for fisher folk. But a detailed analysis will demonstrate that there are ample reasons, practices and well-planned intentional policies that marginalise these groups that have legal claims over fishing.

The Status of Fisher Folk

The data and analysis is structured on the following counts:

- Caste analysis
- Division of labour – stakeholders; gender analysis (Chapter IV)
- Ownership of assets
- Financial aspects - expenditure pattern, loan, income and savings
- Market
- Leadership and group processes
- Conflict resolution
- Role of government (Chapter V)
- Problem areas

The interrelation of the data will be scrutinised to explore the status of fisher folk in the socio-economic-political context.

² (As per data supplied by the Fishery Departments of the two districts in 2005.)

- *Caste analysis*

According to the survey Dhimars had fishing rights in 75% of tanks. Scheduled Castes, Scheduled Tribes, Thakurs and Yadavs had fishing rights in the remaining 25% of tanks. At first glance it appears that Dhimars as a caste are well represented, but one has to examine whether this representation is only in numbers or in terms of exercising choices.

- *Division of labour related to fish production; Control of stakeholders*

The fishing operations include sprinkling of seeds; fish production; maintenance of tank, nets and boats; cleaning and classification of fish; selling in local and bigger markets; account and record keeping; and liaising with the contractor. There are various stakeholders involved. These are executive committee members, especially president and secretary of the society or group; members appointed by the group; the contractor; and group members. The division of labour also needs to be evaluated on gender lines; Chapter IV is devoted to this aspect. The division of labour is analysed according to the various tasks involved in the fishing operation:

Purchase and sprinkling of seeds

This is the first step in fish production, for which fish workers need money and they approach the contractor. As per the survey, the contractor bought the seeds and dominated sprinkling in 74% of cases, while fish workers from cooperatives and groups pooled together money to buy and sprinkle seeds in 23% of cases. In 3% of cases by putting together resources only a few members of the group carried out the sprinkling.

Fishing operation

Mostly fishery was done through cooperatives (69.2%); fisher folk working through self-help groups also took part in fishing (15.8%). The remaining 15% of tanks were either under litigation or fishing was not taking place as the society had been superseded, i.e. the licence of the society was temporarily suspended.

The contractor dominated the fishing operation. In 61.5% of cases he controlled the fishing by appointing a few members from the executive committee to do so, and other members worked as labourers receiving only labour charges. The contractor also appointed armed watchmen to supervise the operation. In 31.5% of tanks members jointly carried out the fishing; in 7% of tanks women were involved. (These were tanks where NGO intervention had taken place.)

The cooperative society exists on paper, but people work as labourers receiving only labour charges for the fishing operation.

Maintenance of tanks

The control of contractors is evident even from their absence from certain work like maintenance of tanks. This function was taken care of by fish workers in 81.5% of cases. They worked as free labourers since their livelihood was dependent on tanks. The contractor provided meagre help only in 18.5% of cases.

Maintenance of boats

Powerful members appointed by the contractor took care of boats in 46.4% of cases, while all members jointly maintained boats in 22% of cases. In 31.6 % of cases the contractor and his men owned and maintained boats.

Cleaning and classification

The role of fish workers as free labourers in non-market oriented activities was apparent, as contractors were involved in cleaning and classification only in 6.6% and 7.3% of cases respectively. Members of the cooperative did 93.4% of cleaning and 92.7% of classification. Here the gender dimension was also very clear, as we will see later in Chapter IV.

Selling in the local market

The fish sold in the local market is of smaller size and inferior quality. The quantity is also a small proportion of the total produce (10%) as it is only for domestic consumption. Contractors got involved in selling fish in the local market only in 7% of cases; fish workers sold the rest. Here again we will analyse the gender dimension in Chapter IV.

Selling in the outside market

Contractors dominated the outside market: they sold the produce in 80% of cases; male members of the groups sold the remaining 10%. Their main markets were Jhansi and Gorakhpur and sometimes Kolkotta and Howrah. A strong gender bias was seen in selling fish in the outside market as only 3% women sold fish in outside bigger markets. The control of the contractors was obvious as they picked up the total produce and paid only labour charges to fish workers.

Maintenance of accounts and records

In 49.4% of cases the contractor maintained records. In 43% of tanks the secretary along with president managed records. Women maintained records only in 4% of cases – in women-managed tanks with NGO intervention.

Liaison with contractor

Liaising with the contractor was usually done by the executive committee members (84% of cases), and that also by the more dominant and powerful members of the group - mostly

president, secretary and a few others. Only 15% of tanks had all members involved in the decision of liaising with the contractor.

- *Ownership of assets*

There are two major assets - nets and boats.

Ownership of net

Generally there are two types of nets. Smaller nets are used in smaller and shallow tanks and for catching small fish. These nets have only limited purpose and are not very useful for major fishing activity. Personal ownership of these small nets was 66%; group ownership of nets was 16%; 18% of nets were rented.

Bigger nets are essential for the main fishing activity. These are very expensive. There were very few groups that owned bigger nets. These nets were rented from the contractor. The rental contract had a very elaborate system. Apart from rent, people had to pay for transport charges and repair charges in case of any damages (bound to happen in the fishing operation). A major component was giving one-fourth of the total fish catch every day. Thus the contractor not only got rent but also fish free of cost. The group owned the big net or *mahajaal* in 31% cases, while the contractor owned the net in 69% cases, renting it out to fish workers.

Problems faced in renting nets

Though forced to take the net on rent, fish workers faced many problems. The major issues cited by them in taking the net on rent were:

- The expense, as they had to give one fourth of the catch to the contractor (81.7%);
- Not getting the net on time (9.9%); and
- The damage caused to the nets (8.4%).

Ownership of boats

The ownership of boat depends on the size of boat. Group members jointly owned 90% of smaller boats. But in the case of bigger boats the ownership was only 35%, while 65% of bigger boats were taken on rent from the contractor.

- *Financial aspects--expenditure pattern, income, savings and loans*

The fishing business constantly requires money in circulation: for purchase of seeds, maintenance of boats and tank, renting nets, transportation, ice, payment of lease to government, etc. An effort was made to understand expenditure and saving patterns, loans if any, sources of loan, their relationship with the fishing occupation, income etc.

Expenditure

Average annual expenditure for lease amount per person - Rs. 300

Average annual expenditure to buy seeds per person - Rs. 800

Average annual expenditure on rent of nets per person - Rs. 250

Average annual expenditure on fish food per person - Rs. 60

Average annual expenditure on tank maintenance per person - Rs. 90

There are very few fishermen who own a boat (27 of those surveyed), and their annual expenditure is around Rs. 200 per season.

Annual expenditure on audit etc. consumes around Rs. 15 per person while other government works an additional amount of Rs. 90.

Income

Income from fishery is available for an average of 6-8 months in a year. There are three main sources of income from tanks. One is income from fresh fish; the second is income from dry fish; and the third is income from *singhada* and *murad* (both are vegetables grown in tank water).

Annual income from fresh fish - Rs. 4,776 per person

Annual income from dry fish - Rs. 2,100 per person

Annual income from *singhada* and *murad* - Rs. 1,800 per person

The income given above is per person and not per society.

It was very difficult to get data for income generated by the group for two reasons. As we saw earlier the sale was almost totally controlled by the contractor, who took away the entire profit. If members were involved they were very few, such as the president and secretary, who got some share of profit. Secondly, only the secretary maintained the accounts and records along with the president. In 98% of cases they did not share these with group members on the pretext of illiteracy of members, but in reality they pocketed a large share. They were hesitant to share income data with the research team.

Distribution of profit

The contractor took the total profit in 60 % of the tanks.

Profit sharing was seen in 25% of groups. However, this was only amongst a select few members. These (male) members were the president, secretary and a few other executive committee members. In the remaining 15 % of cases profit was shared equally amongst members. There is a very high level of corruption in the fish business within societies/groups. In fact this corruption among the few dominant, powerful members is the entry point for contractors to lure them and exploit others.

Time of distribution of profit

Profit was usually distributed among the society/group members after the season (61.5% of cases), followed by profit distribution per week during the season (24.5% of cases). In the remainder of cases profit was distributed daily (5%), monthly (6%), or yearly (3%).

Where the money is deposited

Most of the people deposited money in the bank (50.7%). 24.8% deposited money with the executive committee members, while the rest kept money with themselves, or with friends and relatives.

Savings

As the incomes are very low saving is minimal.

Regular savings of the group were reported in just 6.2% of cases. In 4.2% of the cases regular savings of individuals were reported. In 17.2% of the cases seasonal savings of the group were reported, while in 19.4% of the cases seasonal savings of individuals were reported. No savings at all were reported in the remainder of cases.

Purpose of saving

None of the communities of the various tanks reported savings for a single purpose. Savings were done for multiple purposes, the most dominant purpose of saving being for the purchase of seeds (57.4%) and for lease (56.4%) - recurring expenditures for fisher folk. 29% of the groups saved for purchase and maintenance of nets; 21% saved for expenditure on conveyance. With high interest rates, loan repayment was also quite a burden for fishermen, and almost 18% saved heavily for this purpose. 27% saved to enhance the business; 7% for boat purchase and maintenance; and 10% for other purposes.

Loan

Loans from the contractor and repayment through mortgaging the fishing business are a major bottleneck for poor fish workers. Out of the 184 tanks surveyed 80% of groups and societies had taken loan from the contractor at some point or other. As a result of getting trapped in the cycle of loan and mortgage, they were getting marginalised. Out of a total of 325 individuals, 178 reported taking some loan. On an average one fisherman took a loan of Rs. 4,000 – 5,000 annually.

Reasons for taking loan

The fish workers surveyed took loans for the following purposes:

33.8% of the total fisher folk took loan for lease; 41.9% for seeds; 16.9% for nets; 8.9% for boat; 13.8% for conveyance; 12.9% for government work; and 26.2% for personal expenditures.

Source of credit

80% of the total fisher folk surveyed took loan from the contractor exclusively; 7.6% took loan from the bank; 8% took loan from relatives and friends; and 4.4% took loan from fish market businessmen.

Mode of repayment

72.4% had to give rights of tank to the contractor and worked as labourers. 15.4% were paying compound interest; 12.2% had to give a share of profit.

When fisher folk repay the loan

Fisher folk usually returned the loan after selling the fish (57.2%); 16.4% repaid whenever they had money or after 6 months; 14.4% returned the loan after a year; the rest (11.9%) returned it in monthly installments. The district-wise analysis shows that in Chatarpur 43% made repayment after selling fish, while 35% in Tikamgarh did the same.

Mortgage for loan

37.5% of individual fish workers mortgaged something for taking loans. 31% mortgaged jewelry; 29.4% took loans on the basis of credibility of the fish business; 18.3% mortgaged land; 16.7% mortgaged the fish catch for taking loan; 4.6% mortgaged their house for taking loan.

In case of groups, mortgaging to obtain loans for running the fish business was reported in 54 tanks. In 37% of these tanks mortgaging was done on the basis of credibility of the fish business. The fishing licence was mortgaged for getting a loan in 41% of the tanks, and the catch in 22%. Tanks in both Chatarpur and Tikamgarh had almost equal mortgaging for taking loans (40.5% and 39.2%). There were not many variations by block, except Jatara, where 12 of 21 tanks reported mortgage for taking loans.

Problems faced in getting loans

The most common problems in taking loans were the high rate of compound interest; control over the fishing licence; high mortgage; and low money in hand relative to the cost of the loan. Other problems were forfeiture of property, bonded labour, bribe, land auction etc. Threats, abuse and beatings were other realities faced by fisher folk in taking money from contractors.

Possibility of working without loan

56.2% of the fisher folk were not confident about being able to continue the fish business without loan. Mutual help, financial aid from the government and savings from the SHG were seen as the most important methods for working without taking any loan. Other options included removal of contractor, alternative employment opportunities, reduced lease and good quality seeds.

The restankents who felt that working without the contractor would be difficult attributed it to their low economic status and the influence of the contractor. They felt that working without loans could be achieved if there was cooperation among fisher folk and they could themselves contribute to the fish business, thus avoiding harassment in repayment, etc. Those who said that the fish business could not run without loan attributed it to financial problems and conflict within the group.

Relation between contractor and the person from whom loan is taken

Loans were mostly taken from the contractor himself (78% of cases), or from a moneylender.

- *Market*

The fisher folk have to go to market to purchase seeds, ice, nets, boats, and to sell fish. The local markets are located in the vicinity of the villages and a small quantity of fish is sold there every day. The outside market is located in Jhansi, Lucknow, Gorakhpur or Howrah. Groups use these for the bulk of their sales. The groups have very close financial relationships with the *mandi* traders. They also work through commission agents, also known as *adtiya*. Fisher folk not only get money for their produce, they also borrow money from traders in case of need.

As per the system fish is valued according to type of fish, weight and freshness, for which a receipt known as *katiya* is given. The community is often exploited when the fish is undervalued in terms of freshness and weight. Often money is paid straight away, but at times the payment is put on hold and given after a week or fortnight. The contractor of course has a very close working relation with the trader, and groups or persons challenging the contractor are punished through under-valuation of their fish catch or even proscription. Fish being a perishable item, this can lead to major loss. It is really very difficult for fisher folk to stand on their own in the open, competitive market without any protection or organisation.

Purchase of seeds – hatcheries

Government hatcheries are the source of seeds for 53% of the purchase. The bigger hatcheries are in Jatara, Tikamgarh, Mehar, Chatarpur, Naugaon and Beniganj. There are also smaller local government outlets in Bejavar, Ghaghi and Khajuraho. Communities reach the closest government outlet from their respective villages to save money on transportation. The distance to the nearest hatchery thus usually varies from 10 km to 80 km for most tanks, with the exception of Satna, which is around 400 km away from a source of seeds.

Private hatcheries are source for 27% of seed purchase. They are spread over Mau, Baldevgarh, Jhansi, Devinagar and Bijavar. Contractors or fish traders maintain these. According to fish workers the best hatcheries are at Howrah in West Bengal, at a distance of 1,200 km from Jhansi. Contractors and traders mostly use these to purchase seeds, for resale to cooperatives at a higher price.

Selling fresh fish

Out of the total produce 10% of fish is sold locally either near the tank to small traders or in the local village and block markets by women from the group. The rest of the catch (90%) is sold in Jhansi, in case the group is independent from contractor control. In rare cases when the catch is big, the group also goes to the Lucknow and Gorakhpur markets.

Selling in Jhansi is more profitable (Rs. 40 per kg) than locally (Rs. 15-25 per kg). The rate is seen increasing with distance, going up to Rs. 90 per kg in the Lucknow and Gorakhpur

markets. This means that marketing fish to new and distant markets would mean greater profitability. But as we saw earlier, the contractor controls sale in 80% of cases. He sells fish in Lucknow and Gorakhpur and also has agents in Jhansi.

Selling dry fish

Dry fish was found at 13% of the tanks and was sold only in the local market at the rate of just Rs. 12-15 per kg.

Sale of singhada and murad

Singhada and *murad* production was in just 8% of tanks, and was mainly marketed locally at Rs. 3 -15 per kg. A small quantity found its way to Jhansi, where it was sold at around Rs. 25 per kg. This would indicate that tanks are not being fully utilised in order to increase livelihood options.

Commission agent at the tank

Commission agents approached tanks in 37% of the total surveyed tanks. In 63% of cases they paid the cost of the fish purchased at the time of purchase; in the rest they did so after a week. Usually commission agent took contracts for a few days (65% of cases) instead of the entire season (35% of cases).

- *Leadership and group processes*

The issue of leadership is very significant as fishing is a group activity. The decision-making structure of a society or group consists of an executive committee headed by the president. There are posts of secretary and treasurer, followed by other members of the executive committee. The size of the committee is mostly 11 members, but varies according to the number of members in the society. The leadership plays a major role in deciding the way business and financial dealings are conducted. Though the leadership is collective, in reality the president, secretary and a few others from the executive committee hold the key to all decisions.

Caste analysis of the executive committee

Dhimars dominate the executive committees in both Tikamgarh and Chatarpur. In 85% of the tanks, Dhimars held the post of president; in 84%, they were the secretaries; and in 83% they were the treasurers. Other caste groups constituting the executive council were Harijans, Adivasis and a few Thakurs.

Leadership selection

In 43.2% of the groups elections took place with all members voting for the selection of the executive committee. However, in the majority of cases (56.8%) the process was conducted under pressure from the contractor, with the tacit understanding of the government. In many cases group members were not aware of the procedures.

"Elections are conducted under pressure by government officials. No one knows about it. This is because society members are not much aware about the group procedures." – Satish, Gurwara block, Bada Malhara, Chatarpur.

"Election is done on discrimination, and a biased president is chosen." - Bhagwantidevi, Jeron block, Prithvipur, Tikamgarh.

In almost all cases even if all the members voted to elect the executive committee, the president was chosen only with the approval of the contractor. The elections of cooperative societies especially of the bigger tanks tend to become violent. Often candidates are bribed, threatened and even kidnapped. In many cases the selection of the executive committee takes place at the district level with the consent of government officers from the Cooperative Department and in the presence of the contractor, without the knowledge of society members. Out of the 184 tanks surveyed it was found that the Cooperative Department played a dubious role in 61% of cases, and in 70% of these, the contractor was a significant influence.

Meeting time period

Meetings were usually held on a yearly basis in 66% of the tanks. Six-monthly meetings took place only in 14% of the tanks.

Who calls the meetings; decision-making and participation

In 82% of the cases, the president of the executive committee called meetings; in 9% members of the committee called meetings. In 4%, the contractors also called meetings.

Usually (49% of cases) all the members of the society/group participated in the decision making process at meetings. There was evident difference in participation when committee members called the meetings, with all members participating in decision making in 70% of meetings; whereas when the president called the meeting, only in 49.5% of the cases did all members participate in the decision making process. Women were present only in 4% of meetings.

Discussions in the meeting

The main discussions at meetings were regarding fishery (44%). Problems of fisher folk were discussed in 22% of the meetings. Individual problems were discussed in 10% of the meetings. Gender problems and issues like health, education etc. were not taken up as issues for discussion.

Nature of group and main decision makers

Irrespective of the type of group, men were seen to be main decision makers (97.8% of groups).

- *Conflict resolution*

Conflict areas

In most tanks, main conflict was seen to arise due to theft (30% of cases), followed by individual conflicts (14.2%) and those around account keeping (12.3%). Profit distribution and loan also took an equal share (11.3% each). Apart from these, problems related to the contractor (8%), conflict in labour charges (5%) and elections (3%) were some other issues leading to conflict.

Resolution of conflict

Conflicts were usually resolved by executive committee members in 43.5% of cases, by Village Panchayat members in 29% of cases and by the contractor in 8% of cases. Other people like group members and influential families in the village also took on a major role.

Decision making, source of loans and conflict resolution

Different people are involved in decision-making, providing loans and resolving conflicts. All of them are influential people who have a say and to whom the fisher folk usually turn for any kind of monetary or physical help.

- *Problem areas in the fishing business*

Fishing rights

31% of groups complained of excessive demand for bribe from Fishery Department officials to grant a licence; 58% of groups complained of constant conflict with the Cooperative Department to get sanction for the society or group; and 11% complained of disputes within the group as a reason for not getting the licence.

Problems within the society

69 tanks in all had problems in the group. 52.2% had two or three sub-groups within the larger group, while 21% had improper account maintenance. 18% of tanks had been superseded, that is their licences were suspended. In the rest fisher folk had been refrained from any kind of membership.

Problems with the contractor

The main problem faced by fisher folk vis-à-vis the contractor was not receiving a share in the profit (45.1%). Other problems expressed by fisher folk were of the contractor bringing external people for fishing operations (19.6%); the contractor creating problems in seed distribution

(11.8%); and abuse and physical repression of fish workers (8%). Mortgaging of fishing license (7%) and engaging labour for free (6%) were other problems created by contractors.

Theft

There were thefts in 84 tanks surveyed. In 57.6% of the cases other villagers stole fish from the tanks; in 34.8% group members stole; in others the contractor indulged in theft. (In many cases group members or villagers who stole fish were also connected with the contractor.)

Poison

Only 7 tanks in all reported use of poison by villagers. In 5 tanks this was perpetrated by group members, and in 2 tanks by contractors.

Fish Workers Rights Over Fishing - Is it a Sham?

“All the members used to do fishery, but due to heavy losses, the family started starving, so I have engaged all my sons in labour work.” – Narayandas, Baldevgarh block, Tikamgarh district.

“We were starving due to lack of profit, so we have switched to agriculture.” – Laxmi, Bhagwa village, Bada Malhara block, Chatarpur district.

“Constant threat from the contractor and excessive abuse and beating apart from loss in the fish business has made us switch to labour work.” – Chennu, Barana village, Palera block, Tikamgarh district.

“Fishery is like a gamble.” – Kallu, Bada Malhara village and block, Chatarpur district.

“The contractor will never let us earn profit of any kind, so why should we waste time and money on an unprofitable business.” – Munna, Nandanwara.

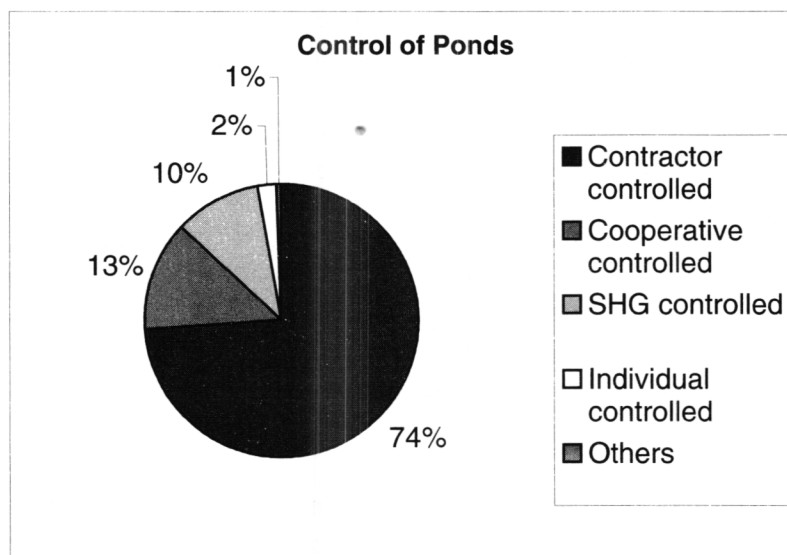
Narayandas, Laxmi, Chennu, Kallu, Munna - different persons from diverse villages. All of them have one common tale - a story of exploitation, marginalisation from their traditional occupation and loss of livelihood leading to poverty.

As the data unfolds the mirage of rights of fish workers starts dissolving. A powerful stakeholder emerges who is absent from all legal documents and hence most difficult to catch. A glance at some of the data clearly points to the overriding role of the contractor.

Control of Contractor over the Fishing Business

Activity	Activity description	Control of contractor	Control of fish workers
Fish production	Seed purchase & sprinkling	74%	26%
	Fish production	61.5%	38.5%
Ownership of assets	Net	69%	31%

Market	Sale	80%	20%
Profit	Share	60%	40%
Loan	Source	80%	20%



The unambiguous presence and control of the contractor is evident from the above data analysis. The research was conducted in 184 tanks out of which there was strong evidence of the contractor in 136 tanks, which is 74 % of the sample size.

Contractor controlled	136
Co-operative controlled	24
Self Help Groups controlled	19
Individual controlled	4
Others	1
Total	184

Out of these the contractor had total control over 62 tanks. The contractor resorted to repression, not even allowing fish workers to use these tanks.

The dominance of the contractor becomes possible only with the help of fish workers who are in decision-making positions - the president and other members of the executive committee. They are the ones who sign illegal agreements with the contractor. Thus, although the fish workers have recognised rights over tanks, in reality they are mere puppets in the hands of the contractor, who pulls the strings with the help of a few powerful, corrupt executive members.

The role of the government machinery is extremely crucial for pushing the fish workers towards this vicious cycle. As the survey pointed out, the Cooperative Department played a role in 61% of elections. The contractor was omnipresent in 70% of these. As we will further analyse in Chapter V, the state not only evades its responsibility towards fish workers but also leaves them to compete with market forces without policy protection, leading to their further alienation from their livelihood.

The consequence is obvious - fish workers are trapped in the poverty web.

CHAPTER IV - THE INVISIBLE GENIE



We are all familiar with the genie that appears in many of our childhood stories. The genie performs a thousand seemingly impossible tasks in a fraction of a second, never seen, never heard or even spoken to. The genie is invisible. Working women - in fishery, agriculture and unorganised sectors - are like this invisible genie. They display great courage and make things happen. In a way they are the backbone of millions of household economies across the country.

Industrial development in India has been highly skewed, with a narrow base. It has provided employment only to a small portion of India's working people.³

The definition of women's work and its measurement by official agencies is questionable. Women's productive work within the household economy is underestimated. Women's answers to questions concerning their work are also coloured by cultural considerations and notions, which downplay the extent of their contribution even in their own perceptions.

Work as defined in the census does not include non-market economic activities. Work is defined as participation in economically productive activity. Such participation may be physical or mental in nature. It would include unpaid work on farms, in family enterprises, household industries etc. But women's work in the production of goods and services for the family's consumption is not considered in arriving at national income. Even women's work in the production of goods and services for the market often does not get computed in the market oriented concepts of income and employment due to its being seasonal, intermittent, casual, and subsidiary to their household work.

The significance of gender extends far beyond the confines of the formal labour market. Gender-based division of all kinds of labour is a fundamental dimension of society. Even a

³ Work Participation Rate (WPR) - the percentage of workers to total population. The WPR is 39.1% for India, with male WPR at 51.7% and female WPR at 25.6%. (*Work Participation Rate*, n.d.)

cursory reading of the literature of economic history indicates that gender is not only a fundamental division of society, but also a division with an economic significance that can change with the level of economic development.

In traditional settled societies, most activities of both women and men took place within the household and its environs, and the extent of gender-based specialisation was limited. Modernisation and development have brought about significant changes in these arrangements. Technological change has increased specialisation and expanded the scale of activity. More resources are required than can be provided by one household, and more of a particular type of output is produced than can be consumed in one household. This has led to the physical removal from the household and its immediate surroundings, of many formerly home based activities. Having moved outside the household, these activities also enter the process of exchange and become increasingly pecuniary.

The physical relocation of activities away from the household has almost inevitably been associated with increased gender differentiation. Women's activities have tended to be restricted to the vicinity of the household because their work has had to be compatible with their primary domestic and childcare roles. Thus women have become associated with activities that are largely non-monetised and produce goods and services that have a direct 'use value'; while men have become associated with monetised, market-oriented enterprises which produce goods and services that have an 'exchange value' (Boserup, 1996).

The statistical under-valuation and ideological devaluation of women's economic role has been largely responsible for the lack of adequate conceptualisation and articulation of women's concerns in development policies and programmes.

Women in the Fishery Sector

The term 'fisheries' as it is referred to today, concentrates on production figures, and may sometimes refer to fish workers. Rarely are women ever mentioned.

Women take multidimensional roles within the fishery sector and within fishing communities. They actually do all the work connected with fish processing, cleaning and categorising. They are also responsible for the maintenance of nets. They not only participate in the production process but are also involved in the marketing of product. These work categories are overlapping and dynamic, often changing according to scale, economics and importance of fishery as the primary livelihood occupation.

However, what is clear is that available data or information does not capture this multidimensional nature of work undertaken by women of fishing communities. Not surprisingly, few policies are formulated taking into account these realities. The survey undertaken in Tikamgarh and Chatarpur districts also clearly reflects this undervaluing of women's role.

The Hidden Working Hand

The role of women fish workers was evaluated and an effort was made to calculate the functions they perform in the fishing economy. Various criteria were examined to understand their status in the fishery sector: their involvement at the local and the more removed bigger markets; the share they get in profit; their role in decision making processes; the leadership positions they hold. Individual interviews were conducted with 105 women members, and the team interacted with 2,000 women in group meetings.

Free Labour in the Household Economy

Women from fish worker families are mainly involved in **maintenance of nets** and cleaning and classifying fish. As per the survey, in the groups women's sole responsibility for net maintenance was 20.6%. In 14% of cases, they were involved along with men from the group. In families, women alone took care of nets in 22.2% of cases, while they otherwise jointly shared the same task with men. The maintenance of seeds, boat and tank being group activities, the sole responsibility of women in these activities was lower: in the case of maintenance of seeds it was 7%; taking care of the tank - 3.2%; and only 2.8% in maintenance of boats.

The other main activity of women in the fishing economy is **cleaning and classification of fish**. Women were solely responsible for this task in 22.5% of cases while they shared the same task with men from the group in 17.5% of cases. The division of labour within the family also shows the vital role played by women in this activity where they alone did this work in 35.7% of cases.

Fishery is a household industry heavily linked with the market on a daily basis, where men play the dominant role. Hence participation of women is less than that of men. In spite of this division of labour, data analysis shows the role women play in carrying out the tasks either single-handedly or along with men. What is more important is that the work of women is unrecognised, undervalued and unpaid, as we will see further when we analyse data regarding profit, control over finances and say in decision making.

The Unwritten Code of Segregation

"If women do the fishing, then the fish shy away and settle in the bed of the tank, leading to loss in the business." - Nathuram, President, Nandanwara tank, Prithvipur block, Tikamgarh district. The statement is representative of the community's perception and women's exclusion from this process. The survey found that women's involvement in activities such as sprinkling of seeds and actual fishing was only 7%. Even this was only visible in the tanks where there had been NGO intervention and women fish workers managed tanks. Otherwise women do not participate in the fishing operation. The notion of impurity is strong. Women are regarded as impure due to the blood they shed during menstruation, and as a result they are excluded from fishing. Women are not recognised as workers in spite of the work they do.

The Inaccessible Markets

The debate of public versus private domain is most obvious in the case of women's participation in functions related to the market.

The share of women in **seed purchase** was only 4.2% and that also only in tanks where fisher folk were organised. Interestingly this share went up in the case of sale of fish in nearby **local markets**, where women alone did the selling in 28.7% of cases, and along with men in 16% of cases. This division was also reflected within families where women alone performed local market sales in 24.6% of cases. But the bigger markets are out of reach of women. Their share in selling of fish in **outside markets** such as Jhansi, Lucknow or Gorakhpur or to more distant Howrah was only 3%.

It is interesting as only smaller sized fish, which do not fetch a good price in the outside market, is sold in the local market. Also small fish, dried and roasted, has a local market near alcohol shops. Out of total production the share of fish that is sold in the local market is low. The bigger markets are highly male dominated, and are controlled by commission agents, procurers, contractors and fishermen. The latter are either president or secretary or members of the executive committee of the groups; as we see in our data, these are mostly men. These markets are also located in cities a distance away (60 km – 1,200 km), and women's mobility is restricted by their secondary status in society.

The Restricted Boundaries of Home

The literacy rate for women is 40.98% in Tikamgarh district and 39.38 % in Chatarpur district, compared to 50.28 % in Madhya Pradesh and the national female literacy average of 54.16% (Census 2001). Our survey showed that the share of women in **record keeping and maintenance of accounts** was only 4% and that also only in women-controlled tanks where NGO intervention had taken place.

Women's share in **liaising** with contractor and government machinery was also very low (2%) - they were virtually absent from this function. Apart from illiteracy, the reason is their negligible presence in decision-making and their seclusion from functions performed away from the house.

The Depreciation of Women's Work

Women got a **share in profit** only in 7.6% of cases, and only in tanks controlled by women with the help of NGO intervention. As women's work is not regarded as contributing to income and having any 'exchange value' in the market economy, it is regarded that they are not entitled to profit.

Women Do Not Speak

Women's representation in societies is very low. Of the total of 9,200 members that the team interacted with for data collection, 1,500 were women. Individual surveys were conducted with 325 members, out of which 105 were women. The highest number of women members was found in Prithvipur block of Tikamgarh district, which had 35 women members, followed by 10 societies with 6 women, 11 societies with 4 women, 19 with 2 women and 11 societies with only 1 woman member. There were 7 cooperative societies and 3 SHGs, which comprised only women members. On an average there were 6 women members per tank, going up to a

maximum of 35 members in one tank. On the other hand, the average number of men per tank was 47, the maximum being 350 members in one tank. Thus, the membership of men was 10 times higher than the membership of women.

The **presence of women in the executive body** of societies is minimal. The executive committee decides about quality and quantity of seeds, decides and monitors fishing, sells fish in the local and outside market, distributes labour charges and profit, deals with contractor and government machinery and controls the fishing business. Women are kept out of this committee. Women held the president's post in 9% of cases surveyed, while they held the secretarial post in 5% of cases, and treasurer's post in 8%. Jatara block of Tikamgarh district, which had NGO intervention, had the highest number of women presidents i.e. 4, followed by 2 each in Baldevgarh block of Tikamgarh district and Bada Malhera block of Chatarpur district. Niwadi, Palera and Prithvipur block of Tikamgarh district each had 1 woman president.

Women's absence as decision makers is also reflected in the choice of issues that are discussed at society meetings. According to the survey, the main topic of **discussion at committee meetings** related to fishery (79.2% of cases). This was followed by 10% of discussions relating to individual problems. Health was the topic of discussion in only 5.6% of cases, while education was discussed in only 4.4% of cases. Discussion on violence against women and gender rights was discussed in only 0.8% of cases, and that too in Prithvipur block of Tikamgarh district, where fisher folk are organised.

The above data coupled with information from individual surveys, shows the gender difference in role performance. It also clearly highlights the woman's role as free labour in the household economy; her diminishing role and the perception about her role in the actual production process; her contribution as product is transferred to market; her insignificant place in financial matters; her absence in writing work; her trivial position in decision making and leadership and her non-participation in dealing with government machinery and contractors. **The invisible genie** played by women performs a major role in the economy of the fishery sector. Women were and remain the main subsistence producers, although they usually have no control over the money.

Invisibility Leading to Slow Demise

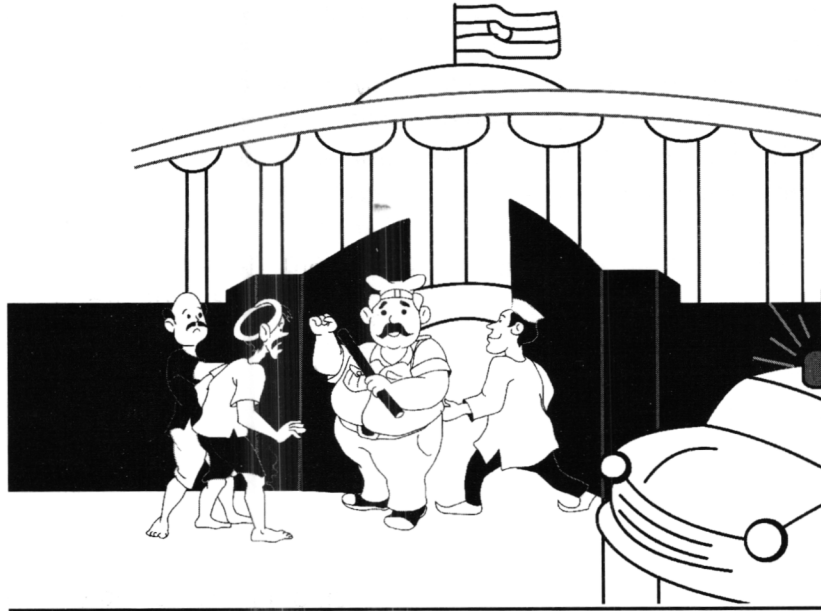
Patriarchal man-woman relations have existed in this area, as in the rest of the country, for at least 3,000 years. Long before the advent of capitalism, brahmanical Hinduism had institutionalised the devaluation of women in general and of their work in particular. What is happening today under the impact of the market economy is not a weakening of this patriarchal order, but a strengthening of it.

The integration of subsistence production and subsistence producers into the profit-oriented market has reinforced the main production relations, and has effectively prevented transformation. The integration of women's subsistence production into the process of commodity production was made possible on the basis of the division of labour between the sexes.

Fishery was traditionally part of the household economy. As we saw above, the 'invisible genie' is facing the threat of losing her livelihood option as the household economy moves towards a market oriented economy. Increasingly, the bigger market is becoming an omnipresent entity, whether for purchase of seed or sale of catch. The family business is shifting to a group activity legalised by the government, where liaising with contractor and government machinery is unavoidable. Literacy is becoming more valuable than traditional knowledge. On the other hand, cultural restrictions concerning 'proper female behaviour' continue to restrict her leadership qualities, causing the genie to get increasingly marginalised.

The issue is not merely of the invisibility of women fish workers, but of their survival and security.

CHAPTER V - THE STATE WITHERS AWAY



“State interference in social relations becomes, in one domain after another, superfluous, and then dies out of itself: the government of persons is replaced by the administration of things, and by the conduct of processes of production. The state is not ‘abolished’. It ‘dies out’.” (Engels, 1884)

This is a dream and one of the higher ideals of Marxist thought, wherein production forces replace the state. And a proletarian state emerges, which works towards the emancipation of the whole of society. This notion is turned on its head by the present state in India. (This is not a reference to the present ruling government but to the state as an entity).

The Indian state has not only given up its role as a welfare state but has in effect, relocated its responsibilities. The state has not withered away, nor has an empowered proletariat replaced it. The state has built a close alliance with market forces, so that the marginalised producer class has to compete with the protected capitalist class in a competitive open market for control, access and use of resources. The vulnerable working class, especially from the informal sector, is pushed more and more towards the periphery and is expected to fend for itself. Fish workers fall in this category.

Fish Workers in the Global Scenario

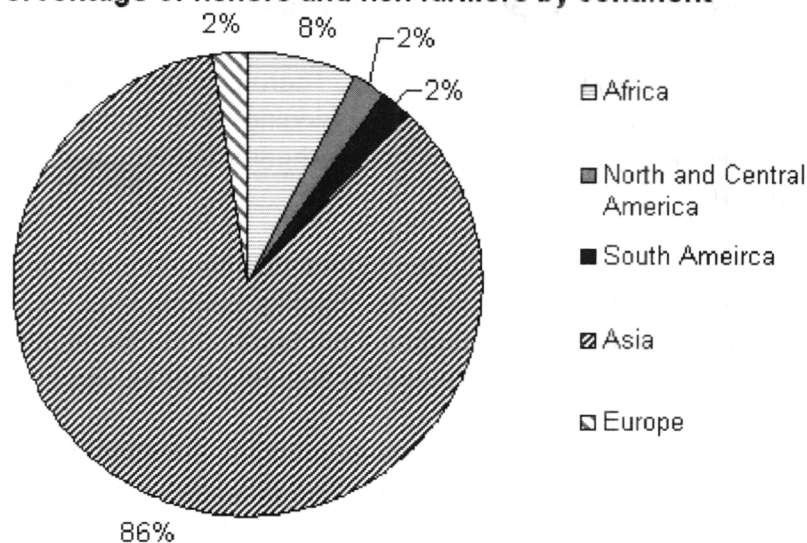
Millions of people depend on fisheries for a living in the Asian region. Undoubtedly the sector is a major source of employment, income and food security. According to the Food and Agriculture Organization, in 2000 an estimated 35 million people worldwide were directly engaged in fishing and fish farming as a full time, or more frequently as a part time, occupation as compared with 28 million in 1990 (FAO Fisheries Department, 2002). In 1990, 84% of the world’s fishers were concentrated in Asia – 9 million in China, nearly 6 million in India, and 4 million in Vietnam, Indonesia, Bangladesh and the Philippines taken together. In 2000, 86% or 29.5 million fishers

were estimated to be in Asia. "Together with wives and dependents there are an estimated 100 million of the world's poorest depending on fishing for all or part of their livelihoods" estimates FAO (ibid).

The majority of these are small-scale fish workers eking out a living from coastal and in-shore resources. It needs to be kept in mind that these figures are likely to be an underestimate. For example, a recent FAO Fisheries Department study (2002) suggests that the figure reported to FAO for the number of inland culture fishers worldwide (4.5 million full-time, part-time or occasional) is easily exceeded by those fishing in inland waters in just eight countries in Southeast Asia that were covered by the study, i.e. Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Thailand, and Viet Nam. Further, these figure do not include those involved in other fisheries-related activities, such as marketing, processing, net-making, boat building etc. Significantly, women play an important role in several of these activities. A conservative estimate would, therefore, place the total number of people involved in fisheries-related activities in Asia at about 150 million.

Division of Fish Workers by Continent—2000

Percentage of fishers and fish farmers by continent



Fisheries are a huge global business and provide income for millions of people. According to ADB-RETA (2002) it is significant that 90% of the catch from small-scale fisheries worldwide is for human consumption. In Asia inland fisheries are estimated to contribute at least 50% of total fisheries production, providing extensive rural employment.

Fish Workers in India

Fishing and fisheries form important activities in India. The annual growth rate in marine fisheries is 9% and in inland fisheries it is 11%. Despite being a marine fish producer traditionally, India is one of the few countries in the world that has substantially exploited its inland fisheries potential.

India has a fisherman population of more than 10 million. About half of this is engaged in the inland fisheries sector, spread over 191,024 kilometers of rivers and canals, 2.03 million hectares of reservoirs, 2.38 million hectares of tanks and 2.2 million hectares of lagoons, lakes, and other water bodies. Inland fish production in India surpassed the annual marine landings in 2002. India is the eighth largest producer of fish in the world, and with an annual landing of approximately 3 million tons, occupies the second position after China in inland fish production.

Before Independence, fishing in India was a decentralised occupation, mainly caste-based, and usually done on small-scale to sustain the livelihood of some communities. However, in the decades of the '70s and '80s, this occupation witnessed certain fundamental changes in its character. The focus of government fisheries development policies was on development and exploitation of fisheries resources, both for domestic consumption and export. These policies were pursued more aggressively in the post-1980 period, when countries in the region, to a greater or lesser extent, went in for liberalisation, privatisation and deregulation, with an emphasis on increasing trade and foreign exchange earnings. Policies were adopted to attract foreign investment, including in the fisheries sector.

Madhya Pradesh – Silent Spectator to the Plight of Fish Workers?

Fisheries are under the control of individual states in India. There is a great deal of variation in the management practices followed by different states, ranging from outright auctioning to almost free fishing. Cooperative societies and state level Fisheries Development Corporations are also involved in fishing and marketing operations.

Fishing in India, both in the marine and inland sectors, has traditionally been a caste-based occupation. Customs and traditional practices of the fishing communities mainly guided employment patterns in fishing. Sharing of the catch on the basis of formulae agreed by the members of the community is still predominant in the inland culture fisheries sector.

The vast and extensive inland water bodies of India engage about 3 million workers in direct fishing operations and another 1 million in ancillary works. The proportions of men, women and children are almost equal among the active fish workers in inland fisheries.

The employment in the inland culture fisheries sector is still unregulated and casual or contractual in nature. Unlike culture fisheries, there is a well-defined employer here, except in the case of home-based subsistence fish farmers. However, there is no law to regulate employment.

The tanks in Tikamgarh and Chatarpur districts surveyed for the research fall into the category of inland culture fishery. Different government units control these tanks for administrative purposes.

According to state policy in Madhya Pradesh, tanks below 10 ha are controlled by the Gram Panchayat. Out of the total tanks surveyed 36% fell into this category. 12.5% of tanks (between 10 ha and 100 ha) fell under the Janpad Panchayat, followed by 25% (above 100 ha) controlled

by the District Panchayat. 12% of tanks were used for the dual purpose of canal irrigation and fishery and were controlled by the Janpad Panchayat. Nagar Panchayats or Nagar Palikas controlled the rest of the tanks. The administrative unit has a crucial role as the Fishery Department issues the fishing licence only after the recommendation of the unit having administrative control over the tank.

In Madhya Pradesh a law was enacted with amendments in 1996, which gives exclusive rights of fishing either to fishers' cooperative societies or fishers' groups or to fishermen on priority basis.

As per the Act:

"Fisherman is the one who, irrespective of caste, earns his livelihood either through fishing or fish rearing or production of fish seedlings. Only the person who, enters water for fishing or is involved in production of fish seedlings is eligible to become a member of fishing cooperative society."⁴

Licences are issued to such societies or groups or persons who are covered by this definition. As per the survey licences were issued to societies or groups of which 49% were cooperative societies, 12% were self help groups and 2% were individual holders. The remaining 37% of tanks were either superseded i.e. their licences were cancelled on the pretext of mismanagement of accounts or conflict within the groups, or the licence was under consideration or the matter was in the court. Although for most tanks fisher persons hold the licence on paper, the reality is different. Actually contractors control tanks, with fisher folk either working only as labourers or not working at all (as shown in Chapter III).

The licence is issued for a period of either 10 years or 7 years. Of the groups surveyed, most had received the *patta*, but 58% did not have control over it. In 31% of the cases the *patta* had not been received due to excessive demand of bribe. Not receiving the *patta* because of community differences and dispute within the group was another problem (11%). Corruption and demand for bribe for issuing *pattas* was virtually all pervasive.

Due to lack of cohesive policy two departments are involved in issuing of licences and managing the fishing activity. Though the fishing licence is issued by the Fishery Department, it is issued only to cooperative societies or groups that are recognised by the Cooperative Department. This Department has no expertise in fishing, nor is it interested in promoting fishery as a livelihood for fisher folk. However, it conducts elections and does the auditing of societies and groups. It has the power to supersede and has great influence on the election processes. The survey clearly points to the nexus between the Cooperative Department and contractors. The survey found that the Department had influenced the election process in 61% of cases. Of these, contractors had control of the tanks in 70% of societies. In close to 40% of the groups elections took place by mutual consent of members. But in the majority, the process was influenced by the contractor, and elections were done on favouritism. In many cases group

⁴ Madhya Pradesh Panchayat Raj Act 1993, No.1, Clause 53/1, Ordinance: No. 2886/31st October 1996

members were not fully aware about the procedures and were virtually scared of government machinery, including the bureaucracy and police.

Demarcation of the tank and encroachment of tank area are another problem. The tank areas are demarcated according to land records that have not been updated in decades. Many tanks are facing encroachment of tank area either due to increasing demand for agricultural land or for residential purposes. Though the actual area is fast diminishing, lease is paid according to the land records. There is no scientific calculation undertaken in fixing the lease amount. At present in Madhya Pradesh Rs. 300/- per ha is charged for tanks that are exclusively used for fishery; Rs. 600/- per ha is charged for tanks that are also used for irrigation. Demarcation has become extremely important, as powerful agricultural castes often not only encroach on tank land, but also drain tank water in order to cultivate the land.

Another major bone of contention is the issuing of seasonal *pattas* for agriculture when water recedes during the summer period. The Gram Pradhan or district authorities issue *pattas* and powerful agricultural castes are usually the beneficiaries. Fisher folk are upset with this unwritten policy followed by government, where they are the ones paying lease amounts for the entire tank area, while they are deprived of agricultural benefits.

Audit of societies is done by the Cooperative Department. This is a major source of corruption. All the societies surveyed reported without exception that the Cooperative Department demanded bribe from societies to complete the audit. This has led to the practice of maintaining false accounts, leading to percolation of corruption to the society level.

According to the state policy of 1996, the state government is to adopt progressive measures to promote fishery as a livelihood and to promote fish production. District governments are given directions to do so under the Panchayati Raj Act of 1993. There are policies such as giving grants for the lease amount, for fish seedling production, boat and net etc. The total maximum amount for a year per society does not exceed Rs. 15,000. In reality even for a small tank of 1 ha to 5 ha, the running cost is around Rs. 70,000.

There are some government-sponsored schemes that cover fisher folk, viz. subsidised low-cost housing, accident insurance, group insurance, lean season participatory assistance (relief cum saving), old age pension. Some assistance is available in the form of subsidy on craft and gear, fish marketing accessories, post harvest handling etc. There are other schemes such as providing training for fishing, net weaving, repair and use of boats, technical training for fish rearing etc. Fish workers are also partially covered by insurance in case of accidents and some efforts are made to encourage savings. There is also a scheme for building housing colonies, although we did not come across any housing either in Chatarpur or in Tikamgarh. A very negligible amount (Rs.15,000) is provided for tank repairs or repair of weir and help is provided by way of recommendation to banks for loans.

Although there are government hatcheries, they severely fall short of good quality seedlings. As the research showed, most groups (84 tanks) asked for better quality of seeds. Improved present market and increased market were the two major suggestions related to the market by the groups/societies (94% of responses) as they do not get much profit in their present market

and do not have access to the extended market. Other responses for suggestions to improve fishery were increase in the depth of the tank (89%), cleaning of the tank (76%), building a dam on the tank (53%) and reduction in irrigation from the tank (51%). Ownership of net (56%), maintenance and ownership of boats (43%) and availability of transport (24%) were some of the major suggestions given for the improvement of infrastructure.

However, these suggestions put together do not reflect very forward-looking steps or policy for development of inland culture fishing. Government has not paid attention to the issue of real control, ownership and rights over tanks. Due to unavailability of cheap credit fish workers are forced to approach contractors. From this begins the vicious cycle: first of loans, then of mortgaging rights of tank. The system is so overpowering that fish workers succumb to it, and tend to become bonded labourers. State policy does not even take into account this exploitative social context.

The problem areas such as providing cheap credit; ownership of tank, boats and nets; security of livelihood; guarantee of minimum wages; easy access and protection in the market; and participatory, democratic administrative processes are simply ignored. In fact, by not addressing these issues, government has left fish workers to fend for themselves.

The Challenges before the Inland Fishery Sector

At present there is hardly any uniform law or standard to regulate employment in inland fisheries. Fish workers are not covered by any special legislation. Ordinarily workers in the culture sector are treated somewhat like agricultural workers and very rarely covered by any social security scheme. The culture sector workers' income is derived from sharing of the catch, which depends on a horde of factors and varies widely. The concept of minimum wage is totally absent in culture fishery. In the absence of guaranteed livelihood and protected employment, the position of workers is pitiable. The work is seasonal in nature and the contractual relationship that emerges puts the worker at the mercy of the powerful nexus of contractor, political interests and corrupt government machinery.

Government is considered the de facto owner of common properties like rivers, lakes, tanks, seas and other natural resources. It is expected to deliver the benefits and protect the rights of the workers who make a living by harvesting these natural resources and supplying the masses. Hence, all demands and grievances are basically aimed at government. However, the role of government as welfare state is dubious. This same state has displaced people and violated their rights over natural resources in the name of 'development' and 'public purpose'. The state decides the allocation of resources and as elaborated in Chapter I, resources are unequally distributed and utilised for the benefit of a few. The masses, who are not only dependent on the resources, but are also the ones nurturing them, are left at the mercy of state and market. Thus 'commons' are turning into 'private property' - thanks to state policy.

There are associations, unions and cooperatives of inland fishers in many parts of the country. However, the vast majority is yet to be organised. Barring a few exceptions here and there, inland fishers are not yet able to exert themselves for any collective bargaining.

It is important to note in this connection that there is a huge deficiency in the availability of statistical data concerning inland fisheries. This has to be plugged immediately to arrive at any proper conclusion on any aspect of inland fisheries. A thorough and comprehensive study of the sector both at national and international level is the prime need of the hour.

The recent boost in production in the inland fisheries sector is mainly due to the increased thrust on aquaculture and fish farming practices. This has brought a new dimension in the employment pattern in inland fisheries, as happened in the marine sector with the advent of mechanisation of fishing craft and gear.

Inland fishery is faced with serious challenges as rivers, lakes, tanks, lagoons and other water bodies are continuously shrinking to accommodate increasing pressure of 'development' in the form of dams, reservoirs, irrigation schemes, power projects, urbanisation, growing agricultural and residential needs etc. Fish workers are also losing fishing space due to privatisation of common waters. The situation is further complicated by large-scale pollution of water bodies, destroying the habitat of inland fish species, and thus eroding fish workers' livelihoods. Securing the resource base has to be the prime concern to ensure that a labour standard in the inland fishing sector bears any meaning for the workers.

Recently there has been a move to voice these concerns and influence policy through the International Labour Organization (ILO). The ILO formulates international labour standards in the form of conventions and recommendations, setting minimum standards of basic labour rights. It also promotes the development of independent employers' and workers' organisations and provides training and advisory services to them. The ILO has adopted seven instruments specifically applying to fishermen: five conventions and two recommendations. These instruments cover the issues of minimum age, medical examination, articles of agreement, competency certificates, accommodation, hours of work and vocational training.

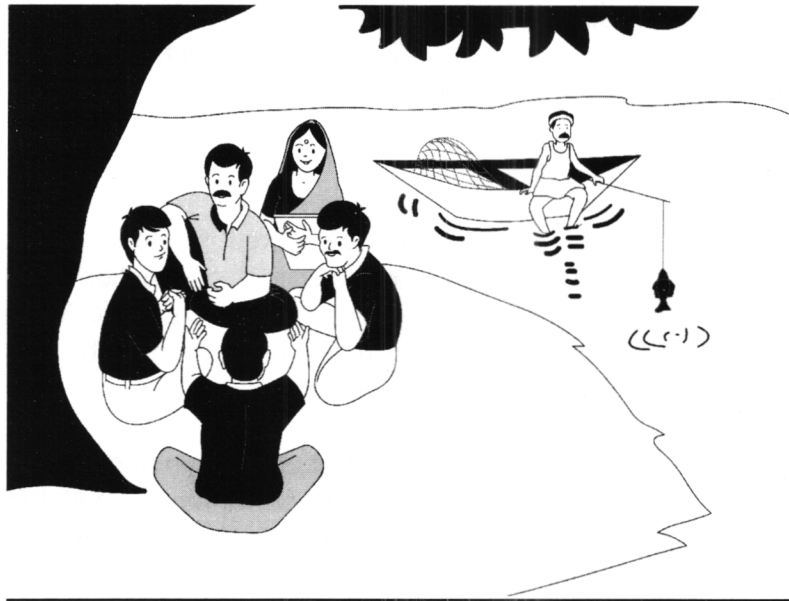
But the proposed ILO convention No. 180 is looking mainly into labour standards in the marine sector. Apart from some pious statements and scanty mention here and there, it does not reflect the concerns of inland fish workers in any detail. Moreover, many governments in their response to the ILO questionnaire have not focused on the inland sector (*ILO Convention No. 180*, n.d.) In fact, the very nature of the sector does not exactly fit it into the conventional tripartite framework. In reality this sector of the economy employs huge numbers of people particularly in countries like India, China, Bangladesh, Thailand, Sri Lanka etc. It definitely deserves special and detailed attention of the ILO and national governments.

Being one of the most vulnerable and massive sections of workers in the informal sector inland fishers need to get proper protection. Guaranteed right to collective non-transferable ownership of resources may be the key to ensure rights to workers in inland fisheries.

CHAPTER VI - UNRAVELLING THE LABYRINTH

Studying history,
Dates, battles, letters written on stone,
Famous phrases, luminaries smelling of sanctity,
I see only dark, metallurgical,
Mining, sewing, slaves' hands.
Creating the brilliance, the adventure of the world,
They died and their fingernails still grew.

- Juan Gelman

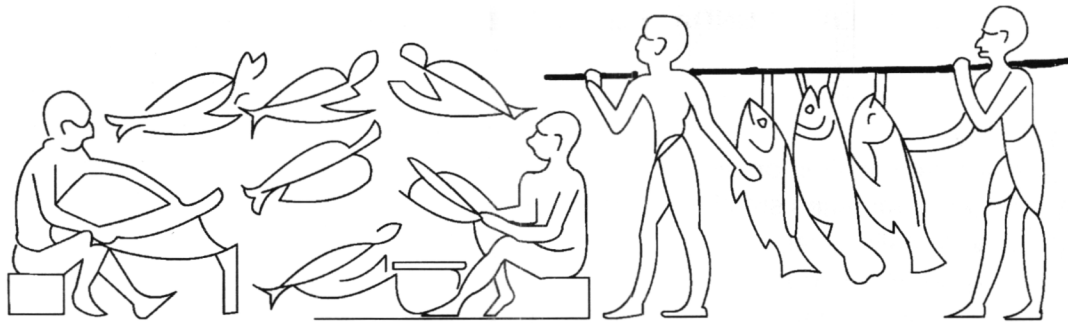


Fish workers' hands are also slaves' hands, providing food to society while they are pushed to endure distress and are deprived of returns of their labour. As the data unfolds this status of fish workers of district Tikamgarh and Chatarpur becomes apparent: although they contribute to the economy they are pushed to live on the fringes of the socio-economic order.

As we saw, this situation of fish workers is a result of a variety of factors. Fisheries have been an important part of human life and food production throughout history. They have become a part of cultures and mythologies, providing community identity and a subject for artists throughout the ages. Partially, this is because fisheries are irretrievably wrapped up in humanity's perpetual fascination with the sea, and partially because they have been a major source of food and income for many communities throughout the ages.

Fisheries Historically

One of the world's longest lasting trade histories is the trade of dry cod from the Lofoten area to the southern parts of Europe - Italy, Spain and Portugal. The trade in cod started during the Viking period or before, has been going on for more than a thousand years and is still important.



(Egyptians bringing in fish, and splitting for salting)

In India, the Pandyas, a classical Dravidian Tamil kingdom, were known for pearl fishery as early as the 1st century BC. Their seaport Tuticorin was known for deep sea pearl fishing. The Paravas, a Tamil caste centred in Tuticorin, developed into a rich community because of their pearl trade, navigation knowledge and fisheries (*Fisheries* n.d.).

The Declining Status

Traditionally in India caste and occupation are closely linked. Caste is an important element of the Indian social fabric. The shifting from one traditional occupation to another is not an effortless transition. The shifting occurs either when an occupation becomes redundant; a caste is upwardly mobile because of process of 'sanskritisation'; or when there is a change in the mode of production as a result of industrialisation or modernisation.

In today's globalised world where not only the mode of production and the market, but lives and cultures are undergoing mutation, we also need to find out whether the shifting occurs because of deliberate policies and biased developmental agenda of vested interests under the protection of the state.

In the case of fisher folk this probe has tried to look into three aspects: the status of water bodies; the status of fisher folk; and the role of the state.

The **first chapter** establishes the rationale behind this research, and specifies objectives, methodology and sample size.

In the **second chapter** 'The Abandoned Riches' an effort was made to explore the status of tanks, which are critical for fishing. It was discovered that the tanks and tanks in the Bundelkhand region are slowly dying because of neglect and turning into cesspools of filth. About a thousand tanks in Tikamgarh and Chatarpur together are unaccounted for. Nobody knows what happened to these tanks. Most of the large tanks, which have greater water holding capacity and can hold water for longer periods, were built centuries ago in the Chandel period. The smaller ones with less water holding capacity and which can store water for shorter durations are few in number and were recently built. That goes to show how durable the traditional knowledge was compared to modern knowledge based on science and technology. By neglecting the old tank systems, we are also losing grasp on this valuable knowledge.

Some of these tanks have been converted permanently, or for periods during the year when they do not have water, into agricultural lands. Those responsible are powerful vested interests, mostly upper caste people, successful in turning a common resource into private property. This has further deprived the fisher folk of their traditional rights and impoverished them. The government view that smaller water bodies are uneconomical to maintain and an unnecessary burden on the revenue system, has caused further deterioration in the situation of these tanks. It has promoted a policy of large projects like the interlinking of rivers, which can have devastating effects on local ecology and the lives of marginalised communities.

In the **third chapter** 'Caught in the Net' an effort was made to portray the status of fisher folk. The fishing community in Bundelkhand is poor by any standards, with an approximate annual income of Rs. 5,000 per family. With a low literacy rate and virtually no assets, fisher folks' lives depend on the mercy of others. Contractors in the business, from outside the fishing community, have a virtual stranglehold on the profession. To perform their tasks, fish workers have to take most things on loan or rent from contractors. Sometimes fisher folk are merely reduced to labourers with no control over what they are doing. It also turns out that compared to other occupations like agriculture, running a shop or even simple unskilled labour, fishing is not such a lucrative proposal. The annual mean income in fishing is lower than what most other people earn in the area, which further seals the fate of fish workers. The contractors, who are very exploitative and take away the major share of profit, make the situation worse. Fisher folk have been effectively marginalised from the decision making process related to their business.

The **fourth chapter** 'The Invisible Genie' focuses on the gender dimension of the issue. As in most other vocations, in fishing too, women are associated with mostly non-monetised activities. They produce things or services which have a direct use value, while men are engaged in monetised enterprises which have a market value. Women are concerned with fish processing, cleaning and classification, as well as with maintenance of fishing nets. Women have been and remain the main subsistence producers but with little control over money. Lately there has been an integration of subsistence production in the profit-oriented market. However, it has only strengthened and not weakened the gender bias in the profession. Women have a long way to go before they can claim their due position in society. The experiment in Tikamgarh has some interesting empowerment stories related to women, as mentioned later in this chapter.

The **fifth chapter** 'The State Withers Away' focuses on the role of the state. The Fisheries and Cooperatives Departments control the fishing activity in Bundelkhand. In collusion with private contractors they have ensured that in about two thirds of the tanks the fisher community is completely denied of any kind of rights. The state has ignored its responsibility of providing ownership of tanks, boats, nets, cheap credit, easy access and protection in the market, guarantee of minimum wages, security of livelihood, and participative, democratic administrative process for governing the business. Instead of playing the role of a welfare state, it has made it more difficult for fisher folk by leaving the field open for the contractors and free market to exploit the community. The corrupt and rotten government system, dominated by feudal tendencies, is responsible for keeping the fishing community in a perpetual state of poverty.

Breaking the Web

Is there a way out and are fish workers ready to get out of this trap? The survey also tried to find solutions from the people's point of view. These are summarised below.

Suggestions

- Related to seeds

Most of the groups and societies (at 84 tanks) advocated for better quality of seed.

- Related to marketing

Improved present market and increased access to bigger markets were the two major suggestions (94%) related to the market by groups/societies as they do not get much profit in their present market and do not have access to the extended market.

- Related to credit

Suggestions were mainly for increased credit from the government so as to escape the clutches of the contractor, who is the major source of exploitation of fisher folk.

- Related to tank

Increase in the depth of the tank (89%), cleaning of the tank (76%), building a dam over the tank (53%) and reduction in irrigation (51%) from the tank were the major suggestions from all the tanks covered.

- Related to contractor

"Contractor be removed" was the major suggestion from tanks having contractors.

- Related to the role of the government

All those who wanted interference of the government wanted it in the form of credit, or reduction of water for irrigation (from the Irrigation Department). Issuing of permanent licence was also suggested as a tool to have control over the tank.

- Related to infrastructure

Ownership of net (56%), maintenance and ownership of boats (43%) and availability of transport (24%) were some of the major suggestions given for the improvement of infrastructure.

- Related to encroachment on tank area and irrigation

Encroachment was a major problem in just a few selected tanks but irrigation was the reason for a major decrease in the water level of tanks. It was considered to be a problem in 51% of the tanks.

A Movement for Empowerment

As mentioned in the first chapter, the experience of organising fish workers in district Tikamgarh was the basis for conducting the survey.

An effort was made during the last six years in Prithvipur and Jatara blocks of Tikamgarh district to get the fisher folk organised to improve their livelihood opportunities and to get them a better bargaining position in the market. The community organised itself in a loose network of committees. They started collective buying of fish seedlings and selling fish. Saving groups were started which played the role of informal credit societies, thus reducing the dependence on creditors. This enabled the community to start reclaiming tanks by organising as political pressure groups. Through organised protests they were successful in getting a few favourable policy changes at the state and district levels.

Women from the community played an important role in this experiment. Women started their separate savings groups and excelled in them due to their inherent capacity to focus within family and community. They became owners of tanks totally controlled by women's committees and thus became shareholders in the network. The community has saved more than Rs. 25 lakhs and is now in the process of forming a federation to improve livelihood opportunities through better access and control over markets.

The fisher folk felt that they had informal property rights over tanks, which were a resource they were losing, and on which depended their lives and livelihood. It was this sense of rightfulness, which was the rallying point. The homogeneity and bonding of the community along with the women's capacity to focus and nurture the family and community, helped to strengthen the organisation. Based on this foundation of social assets the organisation was successful in providing a viable option of livelihood. On about 100 tanks the fisher folk are now politically organised by the name of 'Achrumata Machuwara Sangathan' to determine their own destiny. On 56 tanks, the cooperatives elected to manage the tanks are controlled by the organisation. This was of course not very easy. In order not to be influenced by fear or enticement before electing their office bearers, the elected members of the cooperative committees had to shield themselves from the powerful vested interests. These included the brother of a powerful national level politician.

The fisher folk are now buying their seedlings from as far away as Howrah and selling their produce at far away markets in Gorakhpur. During the last 4-5 years the income levels of fisher folk families have gone up in the range of Rs. 4,000 - Rs. 20,000 per family. The total turnover in 2001 was Rs. 77 lakhs and on an average it is Rs. 30-35 lakhs per year. The fish workers are also in the process of starting their own hatchery to get better quality of seeds.

As the research showed, earlier upper caste or powerful people cultivated the tank land that is available in the summer period due to drying of the tank area. In fact they used force to draw

water for irrigation and also to cultivate the land. After getting organised, the fisher folk have established their right over this land too, and get an additional income from farming. Last year, for some families, the income from agriculture was more than from fishing.

The fisher folk like to call this struggle of claiming their due rights over tanks and being in control of their own business as a struggle for independence. 58 years after the country became independent, some communities are getting a taste of what it means to be independent.

What is unique about this struggle at Tikamgarh is that it is taking place without the help of any established political party or any well-known social or political activist leading it. It is the common fisher folk, with a literacy rate of 2% in their community, who have achieved the miracle all by themselves.

There is a management committee of eleven people, with only two of them from outside as supporters in advisory capacity, which looks after the affairs of the organisation. There is an organisational meeting on the first day of every month, attended by 1-2 members from cooperative committees for each of the tanks. Sub-committees have been formed to take care of fishing nets, sales, women's issues, accounts, organisational matters and office administration. The maturity that the organisation has acquired can be gauged from the fact that when UNICEF offered money for installing hand pumps in the area, the committees decided that they would rather take the money from UNICEF and build more tanks for themselves. This would provide water as well as create more opportunities for fishing. They made seven new tanks from the funds. These tanks are totally managed and controlled by women fish workers. Here one observes the key role played by women fish workers whether it is decision-making or participation in production work.

Along with strengthening the organisation, efforts are still ongoing for obtaining more rights from the administration. The fish workers do this by organising demonstrations, processions, marches and public meetings. Thousands of fisher folk participate in these events. The fisher folk are demanding more rights over their tanks. They do not want people to be pumping out water from their tanks. They want the money for the maintenance of these tanks to be directly transferred to their cooperatives. Presently, there is a lot of embezzlement of these funds. They want the middlemen to stop siphoning off resources meant for them. The fisher folk are demanding rights over other resources from the tank. They also want educational opportunities for their children and skill development programmes for the women so that they may further supplement their family incomes.

It is an amazing process of political-social-economic empowerment. The fisher folk of Tikamgarh are setting an example not only for other fishing communities, but for other marginalised and oppressed communities across the country and the world - to undertake their journey of independence through creative and courageous mobilisation.

Fish workers from these groups were also part of the research team that conducted this research. The reason was to meet the objective of making contact with other fish workers from the remaining 4 blocks of district Tikamgarh and the adjoining district of Chatarpur. Today, as these findings go to print, the fish workers from other blocks have started organising

themselves. They have approached Achrumata Sanghatan. New offices have started in blocks Palera and Tikamgarh. The research has proved to be a major breakthrough in district Chatarpur. The fish workers of blocks Bada Malhara, Naugaon and block Bijawar are now organised under the banner of 'Awarimata Machuwara Sanghatan'. They had their first public rally on 30th November 2005, which was attended by 5,000 fish workers raising their voice against an apathetic state and exploitative contractors.

The Road Lies Far Ahead

Whatever may be the nature or form of organisation, the theory of social assets needs to be woven into the organisational efforts. In labour markets of the informal sector, workers are hired for specific skills or behavioral traits they are willing to offer. These specific skills or traits, which have a very strong traditional lineage, need to be further strengthened by the state through modern techniques and credit facilities. Today, these skilled fish workers are reduced to the category of general manual labour. Theirs can be turned into an advantageous position by weaving together traditional skills, credit, modern techniques, a protected and accessible market, community links and organisation.

The informal sector is a major area of women's employment. While men are dispersed throughout the informal sector, women are clustered in enterprises at the bottom of the hierarchy, involving the lowest remuneration and the least capital investment. In addition to the devaluation of female labour, 'housewifisation' and cultural restrictions concerning proper female behaviour constrain women's options in work and also reduce their income-earning potential. Hence there is a need to call for a reconceptualisation of social theory, so that gender - as a system of divisions and hierarchy - is included along with class and caste as a major explanatory variable.

The third and most important aspect that needs to be addressed by the state is the issue of social security. In spite of their hard work, the needs of the poor for social protection are inadequately met. The situation has worsened after 'liberalisation' was initiated in the country. Social protection or social security is not a welfare measure – it is essential to the economic life of the people. The poor need work security, not welfare.

It is not easy to break the mesh of poverty but neither is it impossible, as proved by the fish workers of Tikamgarh and Chatarpur of Bundelkhand region. The answers will vary, but they need to be integrated, comprehensive and decided and controlled by workers themselves.

“Not I, not any one else can travel that road for you,
You must travel it for yourself.
It is not far.....it is within reach.”

Song of Myself - by Walt Whitman

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ANNEXURE II - TANKS COVERED

BLOCK	VILLAGE	TANK NAME
District Tikamgarh		
Prithvipur	Parakhera	Jhilmil Tallia
	Sarsora	Sarsora
	Rautela	Rautela
	Ladwari Khas	Yagya Sagar
	Chandpura	Chandpura
	Prithvipur	Radha Sagar
	Simra	Hamir Sagar
	Naya Khera	Veer Sagar Naya Khera
	Atarra	Atarra
	Sakea	Danga Taal
	Madiya	Achru Mata
	Dergua	Dergua
	Dumduma	Nagrua
	Jer	
	Laxmanpura Niwadi	Sujaan Sagar
	Simra Khas Ladiya Khera	Ladiya Khera
	Daretha	Laxmibai Talliya
	Daretha	Ganga Sagar
	Bishenpura	Bishanpura
	Mandoran	Mandoran
Jatara	Mohan Garh	Maan Sagar
	Nadi Khera - Digora	Jaitu Talab
	Bhagwan Pura	Khajjiau
	Barmataal	Barmataal
	Mohara	Bilwai
	Berwar	Lal Varu
	Acharra	Ganga Sagar
	Mamori (Bamori Barana)	Kewaldas Sagar
	Biswaanpur	Shyamsagar
	Nandanvara	Nandanvara
	Kumedi	Dharam Sagar(Kumedi)
	Bari	Gidwasan
	Chandera	Jaknera
	Shankar Garh (Nandanvara)	Jaidera Tallia
	Jatara	Madan Sagar
	Bilgaon	Dushiyara
	Madera	Devi Mohalla
	Jatara	Raampura
	Jatara	Dargaikhurd
	Jatara	Peethataal
	Gor	Pateriya Taal

	Bilgaon	Kuiyara
	Lidhaura	Naya Talab
	Kadwa	Moti Sagar
Tikamgarh	Rigaura	Rigaura Matauli
	Madumar	Nadda
	Patha	Rigaura
	Bada gaon	Pokhna
	Sapoun	Baniyan Pera Taal
		Sudha Dagar
	Siddkhand	Siddkhand
	Belataal	Belataal Jalrevi
	Mamon	Chattrisal Taal
	Maharajpura	Maharajpura
	Mawai	Raira Talab
	Mawai khas	Prem Sagar
	Tikamgarh	Mahindra Sagar
	Kari Bawri	Son Sagar
	Dhamna	
	Kanchanpura	Deep Sagar
Baldeogarh	Dhimraula	Nirbhey Sagar
	Sarkanpur	Gaura Taal
	Kachiyat	Jhingan
	Chidari	Chidari
	Jatera	Jatera
	Mata Taul	Bada Taal
	Deri Talab	Madan Sagar
	Balwant Pura	Balwant Pura
	Bhitwar	Bhitarwar
	Khera	Gora
	Jigna Garh	Kherawar Talliya
	Futer	Futer
	Dadgai	Madan Sagar
	Danera	Dharan Sagar
	Pura Khera	Kheyara ka Talab
	Gokmui	Hanuman Sagar
	Ganesh Pura	madan Sagar
	Naya Gaon	Khobera
	Bhelsi	Rani Tal
	Lakhera	Lakhera
	Sujaanpura	Kerkichar
	Narayanpura	Ratan Sagar
	Ludhyankhera	Ludhyankhera
	Chanderi	Gadra
	Tila	
	Eror	Gedan Talab
	Baldeogarh	Gwaal Sagar

Niwadi	Sadik Pur	Sadik Pur Check Dam
	Shyamsi	Damla ki Tallia
	Puchi Kargawa	Mujarya
	Dhimarpura	
	Pathari	Raja Talab
	Niwadi	Bada Talab
	Neem Khera	Neem Khera
	Ladpura	Moti Taal
	Kumbri Ambri Majra	Manpasa
	Khuksi	Khuksi
	Bhamora	God Baba Talab
	Teherka	Arjun Sagar
	Kudaar	Sindoor Sagar
	Sakuli	Sakuli
	Kulua	Kulua
	Larwari	Nistari Talab
Palera	Kudiyala	Gudiya Taal
	Nibora	Nibora
	Morpariya	Bada Talab
	Kharu	Phutera
	Kherak Chutki	Chutki
	Dinau	Dinau Taal
	Perpura	Siddan ki Tallia
	Chari	Chari
	Paga Khera	Paga Khera
	Shyamli	Guara
	Kharagpura	Nistari Talab
	Barana	Dharamsagar
	Ghurra	Ghurra Talab
	Palera	Gajadhar
	Dhimraula	Torriya
	Laraun	Laraun
	Jhitkora	Jhitkora
	Purniya	Purniya
	Ram Nagar	Suniyara
	Kharun	Chetanala
	Palera	Sukh Sagar
	Pura	Bada Talab
	Khera	Khera Taal

District Chatarpur		
Naugaon	Dauria	Berwar
	Joran Churwari	Chuwari
	Jhinjhan	Jhinjhan
	Madarka	
	Maharajpur	Dhatura
	Maharajpur	Shiv Sagar
	Nathupur	Kabir Sagar
	Ujara	Kaar Sagar
	Gadhi Malhera	Sukh Sagar
	Joran	Gora Talab
	Allipura	
	Mau	Jagasagar
	Mausaniya	Dhuvela
	Mausaniya	Jagat Sagar
	Doni	Druv Sagar
	Luwashi	Bheroganj Tallia
	Barat Saderi	Barat Saderi
	Nona	Badi Tallia
	Madra	
	Sigrawan Kala	Dagrahaar
	Sunati	Sunati
	Banchhora	Banchhora
Bada Malhara	Bada Malehara	Bada Malehar
	Bada Malehara	Bandhi Talab
	Kamodpura	Kamodpura
	Sandwa	Jhinna Baandh
	Dargunwa	Darguan Tallia
	Maharajgang	Senpa Taal
	Garkhua	Garkhua
	Futwari	Futwari
	Bhagwa	Siddh Sagar
	Bhagwa	Baram Sagar Taal
	Mani Khera	Naya Taal Kawa
	Barethi	
	Dalipur	Neem Sagar
	Bahmnora Kala	
	Ramtoria	Ramtoria
	Pania	Pania
	Kirat Sagar	
	Ghuwara	Kiratsagr
	Ghuwara	Bada Taal
	Panwari	Panwari
	Bandha	Laxman Sagar
	Bamnora	Dharam Sagar

Ishanagar	Vari	Shiv Sagar Vari
	Mataguwa	Dharam Sagar
	Gehar Gaon	Gehar Gaon
	Ishanagar	Bedhora Talab
	Kharganw	
	Bihata	Patha Tallia
	Sukwa	Sukuwa
	Nandgay	Nandgay
	Achater	Bajjnath Talab
	Saleyia	Moti Sagar
	Soora	
	Kedri	Kedri
	Malpura	Khandewra
	Gora	Gora Tal
	Aamkhera	
	Kalapani	
	Bundhai Kala	
	Parapatti	
	Budor	Siddh Sagar
	Vagota	Miliya Sagar
	Chhatarpur	Rani Tallia
	Ataniya	Ataniya
	Pipara Khurad	

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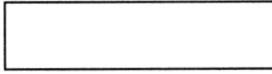
June to August
 Procurement of funds for purchase of seeds and other raw materials

- ❖ Contractor
- ❖ Money lender
- ❖ Commission agent
- ❖ Group collection

April to May

Distribution of profit
 Agricultural activities on tank land, which is dry due to summer and excess irrigation

ICSF
FOR DIGITIZATION
 DATE: 12/11/2018



ANNEXURE II

Fish Production Cycle

