

Self-Governance and Watershed Development Programme: A Case from Eastern India

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Abstract

Community participation in watershed management is one of the features of post watershed project implementation era. Community participation refers to the involvement of watershed beneficiaries in watershed activities, it is essential for the sustainability of the programme. Watershed is implemented by the Government of India (GOI) and State governments to deal with the problem of runoff reduction, soil degradation and improve the productivity of rain fed agriculture. To explore the potentiality of the rainfed agriculture, Watershed Development Programme (WSDP) is implemented with the involvement of the local community. However, the variation in participation is found among all the caste and communities. Under this background, the present study has carried out in *Asurmunda* micro-watershed located in Balangir district of western Odisha, India. Broadly, the objective of the study is to figure out the level of community participation in WSDP. The sociological and anthropological techniques are used to fulfil the objective of the present study. The overall empirical findings of the study show that the Watershed Committee (WC) and User Groups (UGs) created during the watershed are mainly dominated by male, rich, head reach and upper caste farmers. On the other hand the participation of women, landless and marginal community is not higher. Their participation is quite less because of lack of awareness and non-closeness with the PIA. Considering the importance of their participation in watershed activities the participatory institutions must meet the emerging challenges. Participation can be improved by regular training and capacity buildings programmes, conflict management and appropriate awareness activities.

Keywords: WSDP, Community Participation, Rain fed agriculture, Sustainability, WCs, UGs

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INTRODUCTION

Common pool resources are also called as common property resources; it could be either created by man or by natural processes (e.g. an irrigation system or fishing grounds etc.). There is difference between open access and common property resources; in open access property resources nobody has the legal rights to exclude anyone from using the resources. And in common property resources, there are defined groups who have legal rights to exclude non-members of that group from using the resources (Wantrup and Richard, 1975). In India the Common-Pool Resources (CPRs) consists of community pastures, community forests, village wastelands, watershed drainages, river or rivulet beds and banks etc. Within CPRs some of them are owned by the Government agencies (Jodha, 1996). Watershed comes under Common Pool Resource; watershed is an area from which all water drains to a common point. Watershed is an attractive unit for technical development to manage water and soil for production and conservation of natural resources (Kerr, 2002).

Watershed Development Programme has a significant impact on the agricultural income, non-agricultural income, employment, forestry activities, cropping pattern, production and productivity of different crops. Watershed Development Programme (WSDP) is one of the most important policy initiatives in the post nineties, to address the issue of generating natural resources and enhancement of rural livelihoods, especially in dry areas (Shah, Joshi and Jayaramdesai, 2009). Many donors and development agencies have promoted watershed development programmes, such as central Government, state Governments, the World Bank, Non-Government Organizations (NGOs) and other external agencies, (Kerr, 2002). Watershed Development strategy improves the productivity of land and other natural resources. It is considered as a best means of CPRs along with the other land and rural development programmes. The role of local communities in the management of natural resources has been systematically reduced with increasing interference of the state, as the policy formulation and operational functions were delegated to the state employees. But in the era of globalization the State is challenged by international corporations, and by citizens and communities. To deal with these new challenges, the state has often seen 'participation' as input in mediating conflicts and relationships between its own administration, civil society and the private sector (Pimbert, 2004).

Therefore more emphasis has been placed on the participatory approaches in natural resource management and more particularly on watershed management development programmes. Indian watershed projects started in the 1970s and 1980s with technocratic approach that failed to recognize the need to address the challenges faced by the watershed projects. Subsequently, in 1990s, projects included participatory approach that focuses more on social organization, but results remained vague (Kerr, 2007). Subsequently, many committees have been set up to review the working progress of watershed programmes in India from time to time and they have recommended some important guidelines to carry out watershed projects more successfully. These guidelines are, Watershed Guidelines (1995), Watershed Guidelines (2001), Hariyali Guidelines, (2003), Watershed Guidelines (2008). It was also included in these guidelines that watershed management should be carried out by adopting community participatory and integrated approach. Watershed is found to be effective for agricultural productivity, especially for dry land agricultural growth, poverty eradication, livelihoods and sustainable development in many parts of India. And the success and sustainability of watershed programs is highly influenced by collective action and community participation.

India has implemented watershed approach for development of rain fed areas. But expectations from watershed are not up to the mark, because it is found that 66% watershed programme is performing below average. On the other hand, comprehensive assessment of watershed programs in India has shown that, community watersheds should be adopted not only for the improvement of soil and water conservation measure but also it needs to be holistic and completely addressing equity and gender issues (Wani and Sreedevi, 2009). Women and men are involved in watershed management. Though women are taking parts in managing and protecting the watershed and environment is not recognized in terms of ownership. The migration of male members from village to town sometimes makes rural women agent to manage the natural resource management. Women constitute more than 50% of the world population can play a significant role in watershed management. They support the watershed programmes, individually or in groups; at domestic or community levels. The activities undertaken for women in watershed development projects do not empower them to be equal partners with men (Pangare, 1998).

Generally women participation is less in Watershed Development Programmes (WSDPs), but tribal women and scheduled caste women are more marginalised. The paper emphasized that unless the women actively involved in the central role of decision making process, the long term sustainability of the watershed development cannot be achieved. Hence, an effort to empower women through the process of watershed development has taken into consideration. Believing women as an integral member of communities the present paper describes the progress from the perspective of women to the development activities in general and watershed development in particular. Present paper based on both primary and secondary resources and general perception regarding women participation in watershed management.

The present study is carried out at Asurmunda Watershed, present in Agalpur block of Bolangir district in Western Odisha. Study attempts to examine the Scheduled Castes (SCs) and Scheduled Tribe (STs) women participation in Watershed Development Programme (WSDP) and its impact on livelihoods in studied area. The paper is divided into three parts. First part deals with background of the paper, objectives and methodology. In second part types of participation checked under real field condition has been discussed. The third part of the paper discusses the institutional arrangements and women participation in watershed, and problems in participation and conclusion. Some of the suggestions have made in the paper to implement the watershed programme more successfully.

I

WOMEN GOVERNANCE IN NATURAL RESOURCE MANAGMENT

Governance is the activity of governing. It relates to decisions that define expectations, grant power, or verify performance. It consists either of a separate process or of a specific part of management or leadership processes. There are sincere efforts going on to involve women in watershed development programme. But if there is any involvement of the women in the project that are only meant for the record keeping. Moreover, in this also the decision making communication for these project done only by the male part of the family in place of women. Although the goal of gender equality provides strong a prior grounds for enhancing women's presence in institutions of natural resource governance there is rather little knowledge about the impact of their presence on outcomes (Agarwal, 2010).

Women Participation in Watershed Management

The participation in development programmes between men and women is not equal. The burden of the development has fallen disproportionately on women in comparison with men. Interventions such as irrigation and other technological improvements have habitually failed to take into consideration the existing imbalance between men and women's ownership rights, division of labour and incomes. Efforts are being made to change the status quo by forming self-help groups, which have remained fairly autonomous savings initiatives with no direct link to watershed management. Moreover not all women have access to such groups and organizations. Their vulnerability further increases in the absence of any communication with the outside world (Arya and Samra, 2007). The most vital objective of the watershed development is to increase the land productivity. So the farmers are the first who are attracted and involved in the process to form the village level watershed committee core. Although women are nominated to this process but only for making records as token. But here only male person of the household involved treated them only farmer. On the other side if we look the agricultural process then we can find many productive activities carried out by the women participation. Moreover there are women who are attached to more subsistence level of the whole agro-process. In nearly all rice growing areas of Asia men traditionally perform such activities as land preparation, ploughing, irrigation and levelling of the fields. However, sowing, transplanting, weeding and crop processing are usually women's work (Rwelamira, 1999).

Importance of Gender Participation in Watershed Management

Women participation is very significant in watershed and other natural resources because, in rural areas, a tribal woman activity is chiefly depends on managing the common pool resources i.e., from collecting fuel to preparing food, water, fuel, fodder, and on the those resources which provide the livelihood option to women such as rope making, basket making, leaf plate making and tendu leaves production. Women are using customary methods, and it has been effective in conserving soil fertility. Given access to appropriate resources, they practice, crop rotation, intercropping, and a variety of other soil conservation and enhancement techniques. Owing to the nature of dependency and necessity tribal women have developed practices for the efficient and sustainable use of the existing resources available to them. Responsibility of household work sometimes, deprived women to contribute in the process of natural resources governance. Customary obligations have reduced the level of women participation in usual governance. Women traditionally, obliged to follow expected social norms. This increases the rate of environmental degradation and deprives them of their livelihoods. Under the above background the western Odisha gives the immense scope to study the tribal women participation in watershed, and impact of watershed on livelihoods. Odisha is one of the least developed states in India and majority of the rural and tribal population are poor but rich in natural resources and depends on it for their livelihoods. In studied area almost all women groups belong to the either STs or SCs.

WATERSHED DEVELOPMENT PROGRAMME IN ODISHA

The Government of Odisha has been implemented various schemes for the small and marginal farmers, in rain-fed areas that aims to improve the agricultural productivity. Among such schemes, Integrated Watershed Development Projects (IWDP) is one of them. The Department of Agriculture, through Odisha Watershed Development Mission has been carrying out different centrally sponsored as well as externally aided watershed programmes mainly in the rain-fed areas. The primary objective of Integrated Watershed Management

Project is to reduce the rural poverty through various agricultural and horticultural activities that directly affect livelihoods. Odisha Watershed Development Mission was established in the year (2000) as a registered society. The Mission is responsible for the coordination and implementation of various centrally sponsored schemes in the entire State. From the year 2000-2001, the mission has been emphasizing on Participatory Rural Appraisal (PRA) tools and techniques following building block approach to promote community participation in planning and implementation of watershed programmes. Though Watershed was introduced in the second five year planning, but only two line departments such as forest and agriculture were involved in the process of work implementation. The works executed through the department field staff and “signal line approach”. No approach of people’s participation has been adopted. It started that in Orissa from the beginning of eighth five year planning when three major projects have taken. These projects are, Integrated Watershed Development Projects (NWDP), National Watershed Development Project for rain-fed areas (NWDPPRA) and Indo-Danish Comprehensive Watershed Development Project (DDCWDP) launched in Orissa (Das, 2006).

THE STUDY AREA

The present study has carried out in Asurmunda Watershed, situated in the Asurmunda village; Agalpur Block of Bolangir district. It is a part of Western Odisha Rural Livelihoods Projects (WORLP), scheme operational in Western Odisha since 2001. Total area of the studied watershed is 506ha; out of which 25.40ha, 48ha; and 76.62 lands belong to up land, medium land and low land. Apart from this total treatable area is 194ha, similarly cultivable waste land, non cultivable waste land, pasture land and village forest land are; 45ha, 70ha, 30.46ha and 45.20ha. In Asurmunda village total number of household is approximately 73 and total population is nearly 414. Majority families in this village are SCs, STs and OBCs. Total numbers of female is 217 (from all categories, SCs, STs, OBCs, and General, total number of male member is 230. Duration of this watershed project is from the year 2005 to 2010. It is located in Salebhata and it comes under Banki Gram Panchayat and it is 12KM, away from the block headquarters. The Total Geographical Area of the village is 506ha; out of which total treatable area is 194ha. The project was out by the NGO, Sabuja Biplav (Project Implementing Agency) and the District Watershed Mission Bolangir is Districts Nodal Agency. Bolangir, located in western Odisha and it one of districts of KBK belt. It is the 9th biggest district in Odisha. Bolangir was established as the headquarters of the princely state of Patna by Balaram Deo in the 16th century. The states of Patna and Sonapur were merged with Odisha in 1948. And jointly they formed the district of Bolangir. Generally, Bolangir has dry and hot central table-land and receives insufficient rainfall. It mainly has uplands and the major soil type is acidic red, with some patches of black soil. The groundwater level is low. Bolangir becomes very hot during summer; Forests, which are mostly of the tropical dry variety, cover 25 per cent of Bolangir district.

This district is regarded as the largest contributor to the non-timber forest produce trade in Odisha. Land distribution is not equal in Bolangir. It is dominated by big farmers, because 30 per cent of the big farmers own 70 per cent of the agricultural land; remaining land is owned by small and marginal farmers. The nature of uncertain rainfall leads to repeated droughts. The district faces many socio- economic problems. The human, natural and physical loss is very high and characterised by high starvation deaths, perpetual indebtedness to exploitative money lenders, massive crop loss, land alienation, distress sale of assets and irreparable damage to the forest resources. In this regard the role of watershed is very important to improve the life conditions of the poor people. Western Orissa Rural Livelihoods Project

(WORLP) deals with the issue of poverty in Bargarh, Bolangir, Kalahandi and Nuapada districts.

Data Collection and Data Analysis

Random sampling procedure has been followed in the study. Interview and Focus Group Discussion (FGDs) was done with women groups belonging to different social category. To examine the women participation in watershed, both primary and secondary information has been collected. Secondary information and interview with PIA was also done to collect the relevant information. Data is analysed by using both the qualitative and quantitative techniques.

Objectives of the study

- To check the SCs STs; women participation in watershed in different phases of implementation.
- The paper has studied the problems in women participation in watershed programme

II

Seven type of people's participation given by Pretty (1994), Sattetthwaite (1995), Adnan, Brustnow (1992) and Hart (1992), (cited in Pretty 1995), has taken in the study to evaluate the SCs and STs; women participation in Asurmunda watershed area.

Manipulative participation

In this type of participation, people do not participate effectively; they do not exercise any power to influence the process of decision-making. Here, beneficiaries used to participate for the sake of participation. In the real field situation it was found that, women groups do not have effective voice in decision-making in watershed implementation. During the focus group discussions with the women groups, it was found that monthly meetings were held in the village. And many women were attended the meeting only for the sake of membership.

Passive participation

In the studied village it was found that in the selection of watershed secretary of village and watershed meetings, there was no active participation of all women groups. Many of the tribal (50%) and Schedule Caste farmers (60%) and women groups (70%) were not at all aware of the election and meetings. However, big farmers and literate villagers, mostly belonging to general categories (70%) in the study area knew about the election. The election was held once in three years. In the meetings, majority of the villagers and women groups were only listeners. The reasons for non-representation of all social categories were due to lack of knowledge and ignorance.

Participation by consultation

In the unstructured interview with the key informants such as village Sarpanch, SHGs members, Aganwadi members etc, regarding SCs and STs, women's consultation for implementing the watershed, most of the key informants (80%) were of the opinion that Planning Implementing Agency (PIA) has consulted them regarding water and fuel problems but was not concerned about their personal problems. They were mainly asked about water, health and livelihoods related problems. Only few suggestions have been taken into consideration by PIA, other poor and landless farmers have complained that they were not

consulted. Watershed Committee (WC) was formed with the involvement of villagers with disproportionate representation from various social categories; it was more from high caste and upper class households (70%).

Participation for material incentives

In the FGDs with the women groups it was found that 95% of them has contributed their labour during the cleaning of village roads and labour works in watershed activities. In return they received cash money and during this period they did not venture into any work for daily wage earning (for example collecting of saal leaves from forest). Although daily wage labour incentive encourages them for participation during watershed programme, but it also poses the question of sustainability in the post project period both in terms of their livelihoods and participation.

Functional participation

In this type of participation people may participate through groups to meet the objectives set by the external agencies. This type of participation was not seen in the studied area. Because, as per the observation of the villagers, watershed Users Groups (UGs), SHGs, and watershed committee created during the implementation of watershed are not as functional in post project period (65%), further these groups are not very much self-regulated after the completion of the project.

Interactive participation

In the studied area, interaction between women groups and PIA was taking place mainly in the form of village meeting, election of watershed secretary and SHGs meetings. It was informed by the most of women that they never approached the PIA for any of their personal problem, like alcohol drinking and wife beating problems etc. During the structured interview (table no. 1.1) with the women groups, it was found that majority of them were listeners (nearly 50%) in the meeting. However, 11 % of the women were participated in the discussion taking place in watershed meeting. And very few (14.74%) gave some suggestions regarding the watershed activities. Remaining (23.96%) have only attended the meeting; they were unaware of what was happening in the meeting. The reason behind this is that they were ignorant of the watershed programme and also felt marginalized. They revealed that mainly male members of their family speak in the meeting.

Table. 1: Types of interaction in meetings between PIA and women groups

| Types of role of women in the meetings | Community/Caste of the Respondent | | | | Total | % |
|--|-----------------------------------|-----------------|------------------|-----------------|-------|-------|
| | SC ¹ | ST ² | OBC ³ | GC ⁴ | | |
| Participated in discussion | 8 | 04 | 10 | 3 | 25 | 11.53 |
| Listener | 30 | 15 | 60 | 3 | 108 | 49.76 |
| Gave suggestions | 5 | 3 | 20 | 4 | 32 | 14.74 |
| Only attended, did not listened | 20 | 8 | 22 | 2 | 52 | 23.96 |
| Total | 63 | 30 | 112 | 12 | 217 | 100 |

Source: Field study

¹ Total number of SC Women in village-63

² Total number of ST Women in village -30

³ Total number of OBC Women in village -112

⁴ Total number of GC Women in village-12

Table. 2: Reason for attending the meetings

| Reasons for attended the WS meetings | Community of the Respondent | | | | Total | % |
|--------------------------------------|-----------------------------|----|-----|----|-------|-------|
| | SC | ST | OBC | GC | | |
| To accompany friend/relatives | 10 | 4 | 10 | 2 | 26 | 11.98 |
| Village leader called | 8 | 3 | 15 | 2 | 28 | 12.90 |
| Officials called | 7 | 3 | 10 | 1 | 21 | 9.67 |
| Engaged in domestic work | 18 | 7 | 27 | 2 | 54 | 24.88 |
| Free food | 15 | 10 | 40 | 3 | 68 | 31.33 |
| To know detail about WS | 5 | 3 | 10 | 2 | 20 | 9.21 |
| Total | 63 | 30 | 112 | 12 | 217 | 100 |

Source: Field study

Among various reasons given by the respondent to attend the meeting (table 1.2), free food provided on the day of meeting to the community played a dominant role (31.33%). Many of the women did not attend the meeting because of their engaged in domestic work (24.88%). Another important factor which forces theme to attend the watershed meeting is to accompany their friends or relatives (11.98%), it could be because of strong social solidarity or competition. Apart from these, some of the women have attended the meeting because village leader (12.90%) and officials (9.67%) called them. A small portion of the women population (9.20%) in the village was attended the meeting to know about watershed.

Self-mobilization

In this type of participation people the initiatives to change the system. Though people take help from external agencies for technical and other advices, they maintain control over how resources are used. But as per information given by the respondents, the process of self-mobilization in their village was very slow; because, for any initiation or resource use they were mainly dependent on the PIA. Even after the completion of the watershed, very few women are aware of watershed activities. Table.3; below shows the gender-wise awareness regarding watershed activities.

Table.3: Gender-wise watershed awareness

| Caste of the respondent | Gender of the respondent | | Total |
|-------------------------|--------------------------|--------|-------|
| | Male | Female | |
| SC | 30 | 10 | 40 |
| ST | 20 | 6 | 26 |
| OBS | 80 | 20 | 100 |
| GC | 5 | 3 | 8 |
| Total | 135 | 39 | 174 |

Source: Field study

In comparison to men, the awareness level of female members is very less. Majority of the females, during interview were informed that, mainly male members of their family attend the meetings and watershed elections that is the reason they are not very much aware of the watershed activities.

III

WOMEN PARTICIPATION AND INTITUTIONAL ARRANGEMENTS IN WATERSHED

Despite of formulating good provisions in watershed guideline for the participation of women, marginalised and landless people, the involvement of all these groups is not up to the mark in the Asurmunda watershed. In studied area male members are main decision makers in the house and in watershed meetings, which is typical characteristic of Indian rural village. But it was also found that women are not totally financially dependent on men, number of the households collect saal leaves and make disposable plates out of it, apart from this they also collect some herbs and plants and sell them in the markets. Though women play an important role making lives easier but her representation is not equal with men, in Asurmunda Watershed Development Committee (WDC), table below (Table.4) give the representation of women from different social category in the committee, which shows that out of twelve members only two women members (OBC, SC) are there in committee, no tribal and general category women are members in WC.

Table. 4: Gender-wise members in Watershed Development Committee (WDC)

| Name of the member | Designation | Male/Female | Caste | Farm Category | Qualification |
|--------------------|-------------|-------------|-------|---------------|------------------|
| Dasarathi Bag | President | M | SC | Marginal | 10 th |
| Aditya Pr. Das | Secretary | M | Gen | Marginal | B.A |
| Sarat Biswal | Member | M | OBC | Landless | 8 th |
| Kulamani Padhan | Do | M | OBC | Landless | 9 th |
| Dukhishyam Bag | Do | M | SC | Landless | 9 th |
| Santosini Padhan | Do | F | OBC | Marginal | 7 th |
| Samari Bag | Do | F | SC | Marginal | 7 th |
| Suresh Padhan | Do | M | OBC | Landless | 7 th |
| Trinath Padhan | Do | M | OBC | Marginal | 8 th |
| Ranka Bariha | Do | M | ST | Marginal | 5 th |
| Sitaram Bariha | Do | M | ST | Marginal | 5 th |
| Harischandra Bag | Do | M | ST | Landless | 7 th |

Source: Field study

Similarly in User Groups, the female membership is very low, most of women participants have stated that, water sharing, awareness about cropping pattern, land development activities, these activities are related to agricultural practices and agricultural work is mainly done by the male, though they help in agricultural tasks but their contribution is not recognised fully. That is why male membership is high in both WCs and UGs. Apart from this women are also restricted by social obligations and households' works, which derives them from the participation. Table; 5, reveals that though nine UGs were formed during

the watershed but no women has membership in any of User Group, all members are male members of the village.

Table. 5: Gender-wise membership in User Groups (UGs)

| Name of the User Group | Activity (*WHS) | Total Member Enrolled | | | | | | | | | | **WDF Contribution |
|------------------------|-----------------|-----------------------|----|-----|--------|----|----|-------|----|----|-------|--------------------|
| | | Male | | | Female | | | Total | | | | |
| | | SC | ST | OBC | SC | ST | OC | SC | ST | OC | Total | |
| Nuamunda | Old WHS | 0 | 8 | 4 | | | | | | | 12 | 7570 |
| Gandamunda | New WHS | 4 | 0 | 8 | | | | | | | 12 | 4000 |
| Padhanmunda (A) | New WHS | 0 | 0 | 9 | | | | | | | 9 | 2000 |
| Padhanmunda(B) | New WHS | 0 | 0 | 10 | | | | | | | 10 | 4000 |
| Belbahali munda | New WHS | 11 | 0 | 0 | | | | | | | 11 | 2000 |
| Ghudakhalmunda | New WHS | 0 | 0 | 4 | | | | | | | 4 | 15000 |
| Jamadarmunda | New WHS | 8 | 0 | 0 | | | | | | | 8 | 7400 |
| Tali Bandh | New WHS | 0 | 0 | 10 | | | | | | | 10 | 4000 |
| Bandhbahalimunda | New WHS | 0 | 0 | 8 | | | | | | | 8 | 2300 |

*New Water Harvesting Structure, ** Watershed Development Fund Contribution

Source: Field study

The finding shows the marginalization of women in watershed development programme. Apart from disproportional representation of women groups in WCs and UGs in studied area there are some specific problem identified by the female respondents during focussed group discussions. And these problems are improper health facilities, early marriage, improper nutrition, illiteracy and social, economic and political deprivation.

CONCLUSION

Watershed development programme plays an important role to enhance the livelihoods and other natural resources and agriculture. And community is expected to participate in it to make programme more successful. But women participation, especially SCs and STs, women involvement is less in comparison to men. Many socio-cultural factors are responsible for it. But for empowerment of the SCs and SCs women groups they should actively involve in the central role of decision making process of the watershed development. Women should be encouraged to take part in watershed development activities but it should not impose extra burden on them. The fruit of the watershed development programme should be equally distributed among the all section of society with special emphasis to gender issues. On the other hand an effort to empower women through the process of watershed development programme has taken as one of key area of the development projects.

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