



## Role of Self Help Groups in Watershed Management, and Environmental Sustainability: Experiences of Mysore Resettlement and Development Agency (MYRADA) in Karnataka State, India

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### ABSTRACT

United Nations Conference on Environment and Development (UNCED) in 1992, places great emphasis on the adoption of 'participatory techniques' to encourage full public participation in water resources management and development. Experiences of some Non Governmental Organizations (NGOs) showed watershed management through Self Help Groups (SHGs). SHGs are the voluntary Organizations, which disburse micro credit to members, which facilitates them to enter into entrepreneurial activities. This enables in mobilizing people's participation right from its conception to the implementation of project. In India, during mid 1980s SHGs were promoted by Mysore Resettlement and Development Agency (MYRADA) and this Organization has 30 years experience in accompanying SHGs. The present paper intends to study MYRADA's experiences about watershed management and environmental sustainability, especially where SHGs are active, and the role of women's SHGs for water resource management. The paper concludes with some of the recommendations on how SHGs can become agents for water conservation and environmental sustainability.

### INTRODUCTION

The World Bank's overarching objective is to reduce poverty by supporting the efforts of countries to promote equitable support for the provision of potable water, and sanitation facilities for efficient and sustainable development. It is argued that national water strategies should be formulated to sustainable development dealing with water resources in an economically viable, environmentally sustainable and socially equitable manner. The World Bank's approach to water resources management is designed to help countries achieve these objectives more effectively while sustaining the water environment (World Bank 1993).

SHGs in India during the mid 1980s were promoted by Mysore Resettlement and Development Agency (MYRADA) and also they are an effective strategy for poverty alleviation in the initial years (late 80s and early 90s) the SHGs had no place in watershed management strategy. MYRADA's experience in the late 80's, however, indicated that they could play a significant role in promoting equity and self-reliance and in developing the supporting systems required for an institution to survive.

Today the place of SHGs in watershed strategy is accepted and the Government of India has recognized the role of SHGs in watershed management. The primary objectives of SHGs are to pro-

mote “equity” through empowerment of the poor and marginalized, and to provide livelihood support (credit, skills and marketing). Several studies indicate that the SHGs play a key role in introducing the objective of equity in watershed programs. The members are from poorer families and are largely women. This paper intends to study MYRADA’s experiences in watershed management to show role of SHGs also women in environmental sustainability in several areas of Karnataka State.

## MATERIALS AND METHODS

This paper is based on techniques such as participant observation, unstructured, structured interviews, and personal discussion with MYRADA and published articles. The paper first gives an introduction to MYRADA’s experiences about watershed management and study some of the reason related to involvement of SHGs, especially women’s SHGs. The paper addresses the main question that how can SHGs play an effective role in watershed management? The paper also describes the impact SHGs have had on watershed institution particularly in promoting equity, increase in productivity and income, transparency and sustainability.

**SHGs and environmental sustainability:** Research and policy has tended to focus on the relationship between poverty and environmental degradation in terms of pointing out that the poor are both victims and agents of environmental degradation in that they are more likely to live in ecologically vulnerable areas, agents in that they may have no option but deplete environmental resources, thus, contributing to environmental degradation (SIDA 1996, Leach & Mearns 1991, UNEP 1995). Therefore, increasing awareness and poverty alleviation are essential to support environmental sustainability and likewise ‘social sustainability’ is the term used to refer to the social conditions necessary to environmental sustainability (Hardoy et al. 1992).

SHGs in India during the mid 1980s were promoted by MYRADA and also they are an effective strategy for poverty alleviation, human development, social empowerment and social sustainability. On the other hand one of the most important issues related to water resource management in India is watershed management. Watershed or catchment conservation started in India in the 1950s as an attempt to provide a framework of conserved soil and water for sustained agricultural production and the place of the SHGs groups in watershed strategy is accepted. They were called “socially viable groups.

The term SHGs is used to describe a small group of 10 to 20 poor women who come together on voluntary basis to accumulate savings through thrift and self management, in order to prove their credit worthiness to financial institutions. The concept builds on mutual trust and help, shared ownership, peer pressure, emphasizing group solidarity and togetherness (Shashikala 2007). The core elements of empowerment have been defined as agency (the ability to define one’s goals and act upon them), awareness of gendered power structures, self-esteem and self-confidence (Kabeer 2001, Monkman 1998). This awareness occurs through the social cohesion the group brings and the local networks to which the group exposes its members (Campbell & Jovchelovitch 2000). Thus, an important aspect of SHGs is the implicit assumption that through participation in the groups, women will gain, generate and acquire power, and improve their ‘position’ within the family and the society (Mazumdar 1986). Social position or status of women is an aspect of positional power that refers to the power or authority assigned to specific positions and roles in a society (Stamm & Ryff 1984).

Karnataka does not figure on the top of the tables published by financial institutions that show the number of SHGs formed in each State. This is mainly because the tables capture data after 1991-92 when the National Bank for Agriculture and Rural Development (NABARD) launched the SHG-

Bank Linkage Program. However, between 1984 and 1985, MYRADA, a non-governmental organization engaged in rural development and based in Karnataka, promoted several cooperative societies that were enabled to give loans to their members. Over half a million SHGs have been linked to banks over the years but a handful of States, mostly in South India, account for almost 60% of this figure (Harper 2002, NABARD 2005). Andhra Pradesh has over 42%, Tamil Nadu and Uttar Pradesh have 12% and 11% respectively, and Karnataka about 9% of the total SHGs (Chakrabarti 2004).

**The case study MYRADA:** MYRADA is managing rural development programs in three States of South India and providing ongoing support including deputations of staff to programs in 6 other States. MYRADA was started in 1968 mainly for the resettlement of Tibetan refugees. Later on it has taken up several programs for rural development. It also promotes the self help affinity strategy in Cambodia, Myanmar and Bangladesh through its various programs. MYRADA reaches out to people in various districts of Karnataka, Tamil Nadu and Andhra Pradesh. While the objective is to help the poor to help themselves, MYRADA achieves this by forming Self Help Affinity Groups (SHGs/SAGs) and through partnerships with NGOs and other Organizations. MYRADA is committed to doing its part in contributing to achieve the Millennium Development Goals (MDGs). Promotion of gender equality, empowerment of women and ensuring environmental sustainability are some of the important goals that MYRADA is concentrating.

MYRADA has ten rural training centers in the states of Karnataka, Tamil Nadu and Andhra Pradesh. Over 7000 training programs are conducted on projects annually, of which 90% are for community-based Organizations from its project areas and from elsewhere.

**Areas of capacity building support:** Broadly the areas that MYRADA trains/mentors in or exposes to are:

**Concept of SHGs:** For credit management and empowerment, facilitating SHG development, monitoring in SHGs (including participatory impact monitoring), capacity building for SHGs, Federations of SHG building linkages between SHGs and other institutions.

**Watershed management through people's institutions:** Concept of participatory watershed management, building people's institutions for watershed management, planning of watershed management programs, monitoring and evaluation (including participatory impact monitoring), resource mobilization for watershed management, building visions for sustainable resource management, etc.~

**Participatory Community Development Approaches:** Participatory planning, implementation, monitoring and evaluation of development interventions. Building ownership in community development, building appropriate people's institutions for resource management, PRA, project management for NGOs.~

**Appreciative Inquiry:** MYRADA has been involved in a recent experiment in applying appreciative inquiry for community development. For more details refer to their website at <http://www.myrada.org>

MYRADA's experience in several similar watershed projects implemented on 95, 000 ha, among these projects learning have been drawn particularly from a SUJALA (name of project) and Karnataka Watershed Development Society (KAWAD) in which several innovations have official watershed strategy by Government Departments managing these projects; both are watershed projects of the Government of Karnataka in which MYRADA is involved in implementation as well as in providing professional support in specific areas. SUJALA, the watershed project of the Government of Karnataka supported by the World Bank provides a place for the groups at the 150-200 ha level. These groups

called Area Groups [which are similar to the Water Management Associations (WMAs)/User Groups (UGs)] are organized as the middle tier in the three tier institution structure supporting the watershed program in the field, namely:

- The SHGs of the poor (15 to 20 members including landless); these are participatory bodies.
- The Area Groups comprising all the families cultivating or using resources in the micro catchment of about 150-200 ha; these are also participatory institutions similar to the WMAs and user Groups.
- The watershed Committee (comprising representatives from SHGs, Area Groups, other stake holders at the 500 ha level; these are representative institutions.

The experiences of KAWAD in (Bellary district) and SUJALA, the two watershed programs managed by the Government of Karnataka (with which MYRADA is also involved) provide insights into institutional arrangement and policies that can be considered for inclusion in national policy related to watershed management (Fernandez 2003).

## RESULTS AND DISCUSSION

**SHGs and watershed management:** MYRADA's experience has shown that, there are three important objectives in watershed management namely: productivity, sustainability and equity.

Sustainability is the key objective, especially when the poor and marginal groups are involved. The objective of sustainability can be achieved only by the people provided, they are willing and strategically supported to develop and manage their institutions and resources. Have the interveners any role to play? Yes, They have, because the will and confidence of the people that they can work together has been badly weakened; because privileged families continued to assert traditional rights without discharging balancing responsibilities to society which they were earlier called upon to perform; because the institution of conflict-resolution have by and large disintegrated; and because the objective of equity does not flow naturally from the existing socio-political and cultural milieu. Unless these hurdles are moved, the ability of the people to sustain and manage their resources will be undermined. This is where NGOs have a role to play. MAYRADA's watershed projects to indicate that if the objective of equity was not sustained, the pressures eroding the management of watershed's resource and, therefore, of sustained productivity tend to increase, thus, diminishing returns in the long run.

It is also clear that people are unable to pursue all the three objectives of productivity, sustainability and equity at the same time. Experience in several micro-watersheds indicates that the objective of equity was difficult to achieve, it was even more difficult to sustain for example the discussions were initiated and dominated by the farmers with holding in the lower reaches who were sitting in front of the group. They also belonged to a higher caste than the others (Fernandez 1994).

MYRADA believe, it is not enough to reach the people to fish when they cannot even reach the river due to several obstacles on their way. These obstacles were based on dependency for jobs and leans and on social compulsions arising from caste and community (Fernandez 2003). It was here that MYRADA's SHGs concept become relevant within watershed management content (Fernandez 1994). MYRADA's experience indicated that SHGs can play a significant role in promoting equity and self-reliance and in developing the supporting systems required for and institutions to survive. Today the place of the SHGs groups in watershed strategy is accepted. They were called socially viable groups (Fernandez 2003).

MYRADA believe, NGOs need to develop a culture which will stabilize the growth of credit management group (CMGs) not just as Organizations as institutions which develop and accept higher norms of behaviour pattern. In MYRADA's watershed projects, SHGs are formed at least 4 to 6 months before the watershed program commences; the members have participated in several capacity building sessions before being involved in watershed management. Besides, the management of saving and credit itself is an instrument of confidence and skill building. Successful management of their common fund gives the groups confidence that they can achieve certain objectives provided they were willing to observe certain rules and create a culture that motivates people to support each other (Fernandez 1994).

The first Government sponsored watershed program, which gave the SHGs a role in watershed strategy, was KAWAD. The KAWAD project design ensured that SHGs were formed and trained much before the watershed program was introduced or the watershed committee at the 500 ha level formed. Each SHG in the watershed area was given the right to have one representative on the watershed committee. In the same cases where the SHGs were few, they had two representatives each on the committee. As a result, almost half the committee members were from SHGs. The SHGs were given the responsibilities to monitor the work done under the watershed program (Fernandez 2003).

MYRADA's experience indicates that the SHGs promote an institutional culture and introduce the financial and management systems in the WMAs that lay the basis for the resources of watershed to be managed in a sustainable and equitable manner. The WMAs prompted by the SHGs, which have had the experience of managing their common fund in deciding on loans and repayments, worked out procedures and systems to be adopted to ensure transparency and quality. The WMA members begin to understand that transparency in cash transactions is critical to building a sustainable institution. As a result the WMA members have learned to verify the quantity and quality of works done and the amount to be paid, sanctions for poor quality or shortfalls are imposed usually they take shape of delayed or revised payments.

During the period that MYRADA managed programs in an area, the SHGs were encouraged to form federations with objectives of improving basis of their sustainability. The SHGs decided on the number in each federation and on the rules and functions. Over 200 such federations have emerged in MYRADA's projects. Over 40 Resources Centers (RCs) have been promoted in areas from where MYRADA has withdrawn. The RCs support about 120-150 community based organization (CBOs), mostly SHGs but also other groups including watershed institutions. CBOs are linked with RCs and in some project areas with federations. It can be concluded, therefore, that given the appropriate support system, the SHGs have shown a high degree of sustainability (Fernandez 2003). These are institutions together with the SHGs form an institutional framework that seems to be the most appropriate to achieve the objectives of the watershed program namely equity, increase in productivity and income and sustainability.

**Role of women:** A more philosophical stream of Women, Environment and Development (WED) sees women's position as essentially closer than men's to nature because their work has always entailed a close relationship with nature. Women are depicted as naturally privileged managers of environmental resources. An econometric model of WED emphasizes women's work, the sexual division of labour that has led to women's particular role in managing natural resources (Bradiotti et al. 1994). Women's greater dependency on Common Property Resources (CPR) has been documented for India. Agarwal (1994) shows that rural women depend more than men on employment in agricultural and on the natural resources base and common property resources. Women's share of labour force



Fig. 1: Women's SHGs Meeting in watershed project (H D Kote Taluk, Karnatka State, 2007).



Fig. 2: Women's SHGs in watershed project through MYRADA (H D Kote Taluk, Karnatka State, 2007).

participation is 85 percent, and male labour force participation in agricultural is declining.

The benefits emerging from adopting a gender concern in water resources management may be identified at both policy and program levels. Awareness of gender issues in water resources management is believed to contribute towards a realistic formulation of water policies and implementation plans from local to national level (Guijt 1994).

The WMAs/User Groups often do not incorporate the concerns and needs of women and they do not take positive efforts to reduce their social marginalization. Once again the intervention of the NGO is required to ensure that the condition of women in terms of access to resources as well as their position in terms of their relationship with men and with society is improved qualitatively and in sustainable manner; the SHGs can play a significant role here.

MYRADA's experiences in watershed projects have shown that there were no women present initially, but as the meeting went on they strolled in, more as inquisitive bystanders than as participants, hence, now women's SHGs are so active in watershed management. Also several studies indicate that more than 80 per cent SHGs in India are of women members (Puhazhendhi & Jayaraman 1999). Also studies about Women's SHGs have shown that whenever they are involved in some training programs, they learnt to speak and realize the need to participate and create spaces for themselves and able to meet each other and discuss about problems.

Women's SHGs are also seen to be involved in entrepreneurial activities like setting up of a flour mill, etc. Their awareness on health relates issues like personal hygiene, communicable diseases, effects of malnutrition, environmental issues and sanitation have increased. The presence and success of some of the women's SHGs have had a triggering effect, inculcating interest in order to come together and organize them in addition there are women Pattadhar groups in the command and catchment areas. These groups have been formed by NGOs in some projects. The objective is to give women a role in decision making in the Water Users Groups formed in the command which tend to be made up of men and controlled by them. Similar groups have also been promoted in the catchment area by some NGOs to influence the WMAs. However, the appropriate membership and functions of such groups are still unclear. Experience in some projects indicates that their functions can be taken on more effectively by existing groups of women.

The impact potential of SHG members on the functioning of the WMAs in terms of achieving the objective of equitable sharing of natural resources and the objective of providing space for women's concern to be addressed, is far greater than that of a women Pattadhar Group whose members own land in the command. However, more trials in the field are required to ascertain whether the women Pattadhar groups really have a unique role to play in promoting women's interests in the command and catchment areas which cannot be achieved by existing SHGs (Fernandez 2003).

## **CONCLUSION AND RECOMMENDATIONS**

Briefly, case studies of several watershed programs indicate that the existing government delivery mechanism is not just inadequate, it is inappropriate to achieve the effective participation of people to build their institution and to insure sustained development and an equitable sharing of benefit. Analyse the impact of several Government guidelines related to watershed management in the people's institutions that have emerged where NGOs have a role in watershed programs and experiences have also shown that it is the NGOs which have the skills, freedom and institutional space to form these participatory institutions; they must, therefore, be involved from the beginning in the water-

shed program.

The lesson that emerged from this experience was that though the watershed was one geographical entity on which all the land holdings, whether public or private, large or small, were inter-linked, yet it was not a community. Several interests collided, relations among them were exploitative and loyalties were far stronger at the levels of the small sub-groups than at the level of the community. Introduction of measures, therefore, were also assessed within this complex set of relationships. If equity was to be achieved, the strategy had to make adequate space in which these groups could grow and attain the skills and confidence required for effective participation within the watershed and linkages with the wider community. The need for equity: it is by broadening the set of options that the landless and near landless find for sustainable opportunities for their livelihood. Equity is perhaps the most difficult objective within the context of watershed programs, Therefore, SHGs concept became relevant through MYRADA. MYRADA's experiences have shown that SHGs did promote equity as well as sustainability of the WMAs.

It began as a keynote for a workshop but was later developed in response to request from MYRADA staff to cover the implications of the latest guidelines called "Hariyali" which become effective from April 2003. The Hariyali guidelines have also given a place for SHGs in watershed strategy, though it appears to be move due to the popularity that the SHG strategy has acquired on its own than due to an understanding of how SHGs can impact on watershed institutions as described above as well as on the Gram Panchayat and Gram Sabha. Though, the Gram Panchayat in preferable to the watershed committee at the 500 ha level, it is necessary to ensure that the Gram Panchayat gives space for the participatory institutions like the Gram Sabhas, SHGs and watershed groups to grow. The responsibility for forming these participatory groups must be left to NGOs and not to the Government officials. SHGs find a place in Hariyali as institutions below the user groups. Their main objective is to promote the interests of the landless. Scheduled castes (SCs), Scheduled tribes (STs) and women; there is no mention about the role they need to play to influence the decision taken in the Gram Sabhas or in the user groups related to watershed programs; there is no provision for their membership in the user groups or in the Panchayati Raj Institutions (PRIs) when their watershed is discussed.

The Gram Panchayat shall constitute SHGs in the watershed area with the help of the Watershed Development Team (WDT) from amongst the landless/asset less scheduled tribe person and the like. These groups shall be homogenous groups having common identity and interest who are dependent on the watershed area for their livelihood. Separate SHGs should be organized for women, SCs, STs, etc. (Fernandez 2003).

Also women's SHGs have vital role in water resource management such as watershed management. The micro-watershed management requires that all families in villages are involved. Hence, a strategy is necessary to mobilize people; experiments of MYRADA in watershed projects show that whenever women are involved in projects, they have influenced their family members, so that their family members also participate in projects. Moreover, women tend a greater involvement in environmentally sustainable activities and environmental management than men, therefore, involvement of women in development programmes through SHGs can effectively increase awareness of society toward environmental sustainability. Following are some of the important recommendations:

MYRADA's experiences indicated that SHGs have a vital role in people's institutions for the sustained and equitable management of micro-watershed, so collaboration between Governmental Organizations (GOs) and NGOs for involvement of SHGs not only in watershed management but



also in other issues related to environmental sustainability is necessary and important. Moreover, the majority of local NGOs works with SHGs and have knowledge about environmental issues especially about water resource management so they can involve SHGs through training, sensitization and mobilization using Participatory Rural Appraisal (PRA) methods and community development in rural and urban areas.

Creation of awareness among local people especially women about environmental issues is important. Although involvement of Women's SHGs in watershed management have shown that they play important role to achieve equity in watershed projects in rural areas but women who live in urban areas, don not know about SHGs as much as in women in rural areas. If women of urban areas also join SHGs, it can help them to improve knowledge and their attitude about environmental sustainability through water resource management, then they are able to involve their families too.

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