

Watershed Management, Self Help Groups and Inter-Institutional Linkages

Kailash C. Sharma*

1.0 Introduction

Watershed is a manageable hydrological unit encompassing agricultural lands and other lands starting from the highest point of an area to the drainage outlet of the area. In other words, a watershed is defined as any surface area from which rainfall is collected and drained through a common outlet. There is no defined size of a watershed. It may range from a few hectares to several thousand hectares. However, watersheds are usually classified into micro, mini and macro watersheds according to size. These sizes are, of course, relative and also tentative. A combination of micro watersheds makes a mini watershed which, in turn, is a part of macro watershed.

Generally speaking, watershed management involves harnessing rainfall, improvement measures on barren hill slopes, privately owned lands, commonly owned lands and water resources in rainfed areas with people's participation. It begins with two most important resources i.e., water and land.

Management of macro watersheds for ecological reasons such as reduction of siltation in reservoirs has been there in India since long in the form of river valley projects. However, management of micro watersheds for ecological reasons and livelihood reasons has been of recent origin (Farrington, et, al 1999). In a sense, the later is more challenging because it is not only about soil, water and vegetation but is also about increasing the productivity of resources that is sustainable from both view points – ecology and institutions.

* Faculty Member, Bankers Institute of Rural Development, Lucknow, India. Thanks to Professor Vishwa Ballabh for his suggestions and references. However, the usual caveat applies.

This paper is about watershed management and the role of NGOs and villages level institutions, particularly self-help groups, in making it sustainable. It also discusses the inter-institutional linkages required for sustainable watershed management.

The paper follows the following outline. Section 2 presents the fundamentals of watershed management. Section 3 is largely devoted to the role of village level institutions in watershed management. The case of Khulgad Micro Watershed in Uttar Pradesh hills is also discussed in this section. Self-help groups as a panacea to overcome dependency syndrome and therefore making watershed management self-sustained is discussed in section 4. Examples of SHGs in Karnataka and Gujarat are given in this section along with SHG-Bank linkage. The danger from Swarnajayanti Gram Swarozgar Yojana (SGSY), a Government of India anti-poverty programme launched since April 1999, to SHG movement is also discussed in the section. Section 5 describes the inter-institutional linkages required for sustainable watershed management.

2.0 Fundamentals of Watershed Management

Watershed Management has a strong technical component encompassing the following:

1. Conserving as much rain water as possible at the place where it falls and draining excess water safely to storage ponds.
2. Avoiding gully formation and putting checks at appropriate intervals to control soil erosion and to recharge ground water.
3. Utilizing land according to its capability.

However, the medium of watershed management is people's participation. Without people's participation the technological aspects have limited relevance. In the past, the technical details were emphasized and less attention was given to people's participation. The result was the obvious, most watershed development projects failed. Experience of some NGOs in watershed management showed that the key lies in mobilizing people's participation right from conception to implementation of the project. Point here is not to devalue technical knowledge required for watershed development but to state its

complementarity with people's active participation at all levels for successful watershed management. People's participation to sustain requires sound institutions at grass root level.

3.0 Institutions

Institutions are the rules and regulations that guide human interaction in society (North, 1990). Further, institutions are essentially the rules of the game in a society which are framed by people themselves. These rules and regulations when enforced form the basis of incentive structure in inter personal exchange in economic, social and political fields. Institutions are all pervading in society. For example, government is a kind of institution, non-government organisation (NGO) is an institution, market is another and Self Help Group (SHG) is yet another and they all vary from society to society and are in a state of constant flux.

Collective management of resources is a prerequisite for successful watershed management and it requires strong village level institutions. In the absence of strong village level institutions, common resources are exploited. Therefore, institutions, be formal or informal in terms of organizational set up are needed for sustainable watershed management.

3.1 Village Institutions

India, being a democratic republic, has autonomous democratic institutions at village level under the name of village panchayat system. The literal meaning of 'panchayat' is a committee of five members. The panchayat system is ancient in village context and has seen its ups and downs in the history of India during Mughal, British and modern times.

The village panchayat system has three organs - gram sabha, gram panchayat and nyay panchayat. General body of the village is called gram sabha and the executive is called gram panchayat. A population of 250 or more constitutes a gram sabha, it could also be a group of small villages. Elected sabhapati is the head of gram panchayat. There is one elected

upsabhapati also. Gram panchayat has atleast 15 elected members with due reservation for women (30 per cent), scheduled caste (15 per cent) and scheduled tribe (7.5 per cent). Gram panchayat is responsible for overall development activities in the village. The institution of nyayan panchayat is to take care of legal disputes in the village and is constituted out of few gram sabhas. There are 10-25 members in nyayan panchayat. The head of nyayan panchayat is called sarpanch and is a member of nyayan panchayat and is elected by members of nyayan panchayat.

The village panchayat system, in principle, provides the foundation of democratic institutions at village level. Unfortunately, the village panchayat system has deteriorated over time due to increased political interference from above and is not able to perform its development and judicial functions. Also, it is experienced that the existing system is dominated by few influential persons at village level. The government is trying to make village panchayat system more effective by providing autonomy in financial dealings at village level.

The 73rd and 74th Amendments to the Constitution of India relate to panchayat system. As a result of 73rd Amendment, there will be about 257 thousand village panchayats, about 6500 panchayat samities at middle level and about 500 zilla parishads at district level all over India. In addition, a district planning agency is mandated under the 74th Amendment to coordinate rural and urban development at district level. The intention behind these constitutional Amendments is to improve the delivery of certain public goods and services such as water supply, sanitation, primary education, health, environment, etc. that are the core responsibility of government.

Rajaraman et al (1996) have argued that the amended panchayat system can deliver goods and services only if additional revenue generation at the disposal of panchayats is given due credence. Otherwise, the dependence of panchayats on government would be perpetual and the dream of decentralisation in decision making and governance would not be realised. Therefore, a lot of groundwork is to be done before the system could really deliver the goods. Nonetheless, some amount of decentralisation of decision making and empowerment

of women (due to 30 per cent reservation for women members) has taken place through revival of panchayat system after the constitutional Amendments have been enforced in varying degrees across the states of India.

The role of strong institutions at grass root level is crucial for successful watershed management as mentioned earlier. As the existing institutions are not performing as expected, the need for evolution of alternative institutions is strongly felt. The process of institution building is essential but is time taking and difficult. This is where the role of good NGOs becomes crucial for mobilising people for collective action. Initially, confidence and friendship are developed with the local people. Then, they are encouraged to participate in decision making regarding improvement in the watershed. Once a sort of trust is established a somewhat formal institution is built for collective action.

A village level institution is considered successful if it has effective leadership, conducts regular executive body meetings, villagers develop a sense of belonging and involvement and they contribute their mite in resource development. Further, there is transparency in maintaining accounts, communications are made to all members, non-cooperators or recalcitrant elements are controlled by social fencing and usufruct is distributed in an egalitarian manner.

There are many examples where genuine NGO efforts coupled with effective people's participation have succeeded in rehabilitating micro watersheds. One such case from the hills of Uttar Pradesh is presented here for illustration.

3.2 Khulgad Micro Watershed in Uttar Pradesh Hills

Uttar Pradesh hills are economically backward and are ecologically fragile. About 90 per cent of the population in the hills is rural and depends on land for basic needs of food, fuel, fodder and timber. Government, scientists, technologists and NGOs are greatly concerned about the land degradation and the consequent loss of productivity of land in the hills. Inappropriate land use, indiscriminate felling of trees, open grazing system and

an ever increasing human and bovine population are the major factors that are hastening the process of land degradation in the hills. This has adverse effects on the quality of life of the people, particularly women who have to spend more time in fetching fuel wood, fodder and water. The approach to solve these problems, thus far, has been mainly technological and a top down type. The involvement of the people through their grass root level institutions to manage their resources has been largely missing.

An NGO of professionals, the Central Himalayan Environment Association (CHEA), started an action research project to develop a methodology for natural and human resource planning and management with people's participation in the Khulgad micro watershed of Almora district in Kumaon hills of Uttar Pradesh in 1986. Financial support for the project came from Ford Foundation, New Delhi. One of the main objectives of the action research was to analyse the land use pattern and to implement sustainable interventions for improvement in the existing land use through people's participation. Mainly agro forestry and social forestry activities were popularised.

3.3 Land Use changes in Khulgad Micro Watershed

Since common property regimes form the bulk of the land use in the hills, village level institutions were formed to manage them. People were mobilised to form village level institutions to manage land and water resources under private and common ownership. It is interesting to note that collective action is required even for management of private land. Decision on crop rotation is an example in the hills for which people have to take collective decision. The CHEA promoted Gram Sansadhan Prabandh Samitis (GSPSs) (Village Resource Management Committees) and Mahila Mangal Dals (MMDs) (Women Welfare Groups) at village level. These village level institutions involving men and women respectively have been largely successful in these villages.

This section reports land use changes that have taken place during 1966-1996 in the five villages in the Khulgad micro watershed. These villages represent the mid-hill zone (1000 mt above sea level to 2000 mt above sea level) of Kumaon Hills. Population

pressure is very high in this zone and the consequent dangers of land degradation are serious as is the case with many hill regions in India.

Data relating to land use during 1966 are obtained from the settlement records and maps in Land Settlement Report 1960-66, Land Record Office, Collectorate, Almora. The land settlement took place in Kumaon Hills during 1960-66. Data relating to land use during 1986 were obtained by the CHEA staff using survey method. Similar method was used by CHEA staff for 1996 to obtain the relevant land use data for 1995-96.

Land use data for 1986 are compared with 1966 land use data to examine the land use changes during the period. Agro forestry and social forestry are popularised by CHEA for improving the land use after 1986. Table 1 shows the land use in the study villages for the years 1966, 1986 and 1996 i.e., it shows land use over a period of 30 years. The following observations regarding land use dynamics during 1966-1986-1996 in the study villages as a group, for brevity, are made from Table 1:

1. During 1966-86, i.e., the period before watershed development project commenced in the area, agricultural land had become cultivable waste (about 3 per cent of total land). Other land use changes during 1966-86 were not significant. Agricultural land becoming cultivable waste is a form of land degradation thereby reducing area under agriculture.
2. During 1986-96, the CHEA project period, cultivable wastes have been partly converted into social forestry area (about 3 per cent of total land). Some civil and panchayat forests have been converted into social forestry area (about 1 per cent of total land); partly pasture and grazing lands have been converted into social forestry area (about 1 per cent of total land in the villages). Thus, the area under social forestry has increased by about 5 per cent of total land in these villages. Some uncultivable waste land (less than one per cent of total land of the study villages) has also been put under social forestry during 1986-96 project period.

Table 1
Land Use Changes in Five Villages of Khulgad Micro Watershed (1966-1986-1996)
(ha)

Land Use	Jolswarh	Latwal gaon	Salla Rautela	Champa	Deoli khan	All Villages
Agriculture land						
1966*	46.5 (70)@	17.3 (31)	80.8 (40)	48.9 (39)	150.0 (55)	343.5 (48)
1986**	44.4 (66)	13.5 (24)	76.8 (38)	46.9 (37)	143.3 (53)	324.8 (45)
1996***	30.1 (45)	2.5 (5)	52.1 (26)	18.4 (15)	120.3 (44)	223.4 (31)
Civil and Panchayat Forest						
1966	-	-	64.2 (31)	46.2 (37)	50.4 (19)	160.8 (22)
1986	-	-	64.2 (31)	46.2 (37)	50.4 (19)	160.8 (22)
1996	-	-	64.2 (31)	46.2 (37)	46.4 (17)	155.4 (21)
Pasture and Grazing Land						
1966	4.5 (7)	-	-	6.9 (5)	8.9 (3)	20.3 (3)
1986	4.5 (7)	-	-	6.9 (5)	8.9 (3)	20.3 (3)
1996	0.4(1)	-	-	6.9 (5)	7.0 (3)	14.3 (2)
Cultivable waste						
1966	11.3 (17)	10.0 (18)	10.7 (5)	11.8 (9)	2.1 (1)	45.9 (6)
1986	13.2 (20)	13.8 (25)	14.7 (7)	13.8 (11)	8.8 (3)	64.3 (9)
1996	8.4 (13)	10.3 (18)	9.1 (4)	11.8 (9)	6.8 (3)	46.4 (6)
Uncultivable waste						
1966	3.2 (5)	21.0 (38)	30.5 (15)	4.5 (4)	50.1 (18)	109.3 (15)
1986	3.2 (5)	20.7 (37)	30.5 (15)	4.5 (4)	50.1 (18)	109.0 (15)
1996	2.0 (3)	20.7 (37)	30.5 (15)	4.5 (4)	47.3 (17)	105.0 (15)
Other land						
1966	1.3 (2)	7.3(13)	17.9 (9)	8.1 (6)	9.9 (4)	44.5 (6)
1986	1.6 (2)	7.6 (14)	17.9 (9)	8.1 (6)	9.9 (4)	45.1 (6)
1996	1.6 (2)	7.6 (14)	17.9 (9)	8.1 (6)	9.9 (4)	45.1 (6)
Agro Forestry						
1996	14.3 (21)	10.9 (20)	24.7 (12)	28.4 (22)	22.9 (8)	101.2 (14)
Social Forestry						
1996	10.2 (15)	3.5 (6)	5.6 (3)	3.4 (3)	10.7 (4)	33.4 (5)
Total Land	66.8 (100)	55.5 (100)	204.1 (100)	126.4 (100)	271.4 (100)	724.2 (100)

* Data for 1966 are obtained from Settlement Records and Maps, Land Settlement Report 1960-66, Land Record Office, Collectorate, Almora.

** Data for 1986 are from Land Use Survey by CHEA Staff, 1986.

*** Data for 1996 are from Land Use Survey by CHEA Staff, 1995-96.

@ Per cent of total land in parenthesis (rounded off).

Source: Author would like to thank the CHEA for the data.

3. Social forestry projects are undertaken on degraded civil and panchayat forests, pasture and grazing lands, cultivable waste lands and non-cultivable waste lands in the proportion of 16, 18, 54 and 12 per cent respectively. Thus, most common social forestry projects are on cultivable waste lands and most uncommon social forestry projects are on uncultivable waste lands in the study villages.

4. The net result of the CHEA project activities during 1986-96 is that the cultivable wastes in 1996 have come down to their 1966 level in absolute terms in the study villages.

5. Area under agriculture per se has declined during 1986-96 (about 14 per cent of total land area in the study villages) due to increase in area under agro forestry (fruit and fodder trees) on agricultural land. It is interesting to note that the area under agriculture has significantly declined during 1986-96. It is not because of agricultural land becoming cultivable waste as happened during 1966-86. This is due to tremendous increase in area under agro forestry in the study villages during the project period. It is to be noted, however, that there are measurement problems of assigning exact area under agro forestry (farm forestry) in the hills as agriculture is still practiced on part of the land under farm forestry.

Overall, the CHEA project activities have made significant progress in reversing the land use trends in favour of agro forestry and social forestry in the study villages. It is optimistic to note that it is possible to reverse the land use dynamics in favour of environment if suitable interventions are implemented with people's participation. The above changes in land use have been possible with involvement of people's institutions at village level called Gram Sansdhan Prabandh Samitis (GSPSs) (Village Resource Management Committees) and Mahila Mangal Dals (MMDs) (Women Welfare Groups) in these villages as mentioned earlier.

All development work in the villages was steered by GSPSs. The MMDs supplemented and strengthened GSPSs in their programme implementation. The role of CHEA was

limited to financial and technical help besides arranging training programmes and visits to successful projects elsewhere. GSPSs were persuaded to divert slopy marginal lands under crop production to perennials such as fruit trees and fodder trees (farm forestry). Crop production was limited to lands with good soil depth and mild slope. Progressive farmers were identified and acted as change agents.

The GSPSs persuaded the farmers to stop open grazing on cultivated lands (Monsar Bandh) to make farm forestry successful. The civil and panchayat forest, grazing and pasture lands and waste lands (cultivable and non-cultivable) were used for massive afforestation programme. The afforestation programme was implemented by GSPSs with the participation of village people contributing their labour. Saplings were provided by CHEA. The MMDs took the responsibility of egalitarian distribution of grass which was available from the first year itself.

3.4 Dependency Syndrome

The dependency syndrome in participatory mode of development is, however, prevalent almost everywhere wherein people have become conditioned to expecting subsidised inputs from government sponsored programmes of watershed development or any other external agency. Therefore, watershed management activities are carried out as long as there is support from outside either directly or indirectly. Once support from outside is withdrawn, the watershed management activities also come to a halt. This is not sustainable watershed management. For watershed management to become sustainable, the people should own it and should be able to fund it on their own. This can be achieved through the institution of Self Help Groups and their linkage with the formal financial institutions.

4.0 Self Help Groups

Self Help Groups (SHGs) are informal groups that are formed around a felt need and are used for collective action. An SHG, both in concept and in practice, is a group of individuals who come together voluntarily for a common purpose. Most common SHGs are constituted

of members known to each other, belonging to the same village or hamlet and community. Thus, they are homogenous affinity groups and economic homogeneity is the most common factor. SHGs have a membership ranging from 5 to 20 members with a majority of them with about 15 members.

The purpose for which SHGs are formed varies from programme to programme and is contingent on the need for collective action. The purpose may vary from managing a common resource such as irrigation facility, afforestation on common land, school, etc. to prohibition of liquor.

In the context of making watershed management self sustaining, SHGs are formed around the theme of savings and credit. SHG members pool in their savings on a regular basis to form group savings. This group fund is then rotated as consumption, production and investment credit amongst the members through norms formulated by group members. Thus, the basis of such SHGs is the mutuality and trust in depositing individual savings in a group fund (SDC, 1998). This is quite a challenging task in the current social environment where people have been cheated by "fly by night" finance companies offering highly attractive returns. Therefore, formation of SHGs in today's social context is not an easy task, especially in resource poor regions. It requires intensive efforts of NGOs or self help promoting institutions (SHPIs) for about six months before local people start seeing sense in it. The initial cost of group mobilisation is high but it comes down as the message of its utility spreads among the villagers. The group savings are supplemented by outside fund – be in the form of bank loan or grant from NGOs who promote them.

The management of SHGs in a sustainable manner is a challenging task. It is interesting to note that SHGs with exclusive women members are more sustainable than those of men members. In fact, more than 80 per cent SHGs in India are of women members. Further, SHGs promoted by NGOs are being recognised by financial institutions and government of India as powerful vehicles for empowerment of women through participation and employment generation (Puhazhendhi and Jayaraman, 1999).

4.1 SHGs in Karnataka

Initially, SHGs in Karnataka were promoted by Mysore Rehabilitation and Development Agency (MYRADA), an NGO, to get over the problem caused by an inadequate rural banking system. These groups were later used for planning and maintaining structures in micro watersheds. The groups functioned through exercising moral pressure on their members to remain together as a group. Needless to state, the recovery of loans by self help groups was nearly 100 per cent whereas it was far less in the formal rural banking system. Mukherjee (1999) reports the contribution of SHGs in watershed development projects in Karnataka where NGOs have been involved as follows:

1. Self help group members were willing to contribute 10 to 33 per cent of the amount required for agreed work of soil conservation. The SHGs also agreed to maintain the soil conservation structures out of their own funds.
2. Reduction in unit costs up to 50 per cent was achieved for structures at the initiative of SHGs.
3. The SHGs undertook activities which had the potential of quick returns.
4. SHGs of women and landless were formed in addition to the usual SHGs.
5. SHGs gave loans not only for watershed development related activities but also gave loans for consumption purposes.

4.2 SHGs in Gujarat

SHGs have started playing a significant role in Aga Khan Rural Support Programme (India) (AKRSP (I)), an NGO programme in Gujarat. These are formed under the saving and credit activity of the programme. The objective behind the saving and credit activity is to develop a sustainable system of saving generation and credit rotation for small farmers and others at village level. It aims at empowering women by enabling them to have their own savings and control over the use of their savings. As a matter of policy, more and more women groups are being involved in savings and credit activities of AKRSP (I).

The experience of AKRSP (I) shows that SHGs function as a source of development finance to maintain improvements gained from other components of their programme including watershed development (AKRSP (I), 1999).

4.3 SHG-Bank Linkage

Linking of SHGs with the vast network of formal rural financial institutions (RFIs) including commercial banks, regional rural banks and cooperative banks is a potent way for evolution of sustainable SHGs. This is because both institutions, i.e., RFIs and SHGs are going to stay whereas the project and the NGOs who promote SHGs are going to withdraw in due course of time. An Action Research project under the Uttar Pradesh Sodic Land Reclamation project in Rai Bareilly and Aligarh districts is an attempt to evolve sustainable SHG-bank linkage models to achieve the ultimate goal of sustainability of land reclamation process in the project area. This is because the sustainability of land reclamation process is dependent, to a great extent, on SHG members being able to obtain institutional credit for various purposes from RFIs once the project comes to an end after 5 years (UPLDC, 1999).

4.4 SHG and SGSY

The true spirit of SHG evolution or formation is in a direction away from subsidies. SHGs promote self-help among the poor. It has been shown all over the country including Uttar Pradesh that this is possible. A new programme called Swarnajayanti Gram Swarozgar Yojana (SGSY) has been launched since April, 1999 by Government of India. This is a holistic programme covering all aspects of self employment such as organisation of poor people in self help groups, training, credit, technology, infrastructure and marketing. SGSY will be funded by the Central Government and State Governments in the ratio of 3:1. This is a welcome policy initiative in the direction of promotion of SHGs. However, it is a matter of concern also as SGSY is a credit-cum-subsidy programme. Therefore, there is a danger of involving a subsidy oriented programme in a movement which is, by and large in its real spirit, without any subsidy.

The process of SHG formation is people-based. The maturity of SHGs depends on evolving group dynamics and can take up to a year or more time. Therefore, hastening the process of SHG formation could do more harm than good.

There is a need to develop guidelines for establishing linkage of existing SHGs with development programmes such as SGSY. SHGs have considerable potential, but their linkage with SGSY which is a credit-cum-subsidy program needs careful deliberations. One way to do that is to set up steering committees at appropriate levels. These steering committees comprising those with experience in SHG development should be formed at district and state level. A large number of NGOs and bank officers from all over the country have already been trained in the subject and are successfully working towards SHG development. Such training institutions and trained persons should be identified and involved in the steering committee deliberations at state and district levels for ensuring formation of good quality groups under SGSY and SHGs in general. If care is not taken, then, the dream of self sustaining SHGs may not be realised.

5.0 Inter-Institutional Linkages

Watershed management is a multi disciplinary and multi institutional effort. Therefore, the crucial role of coordination and collaboration among various disciplines and institutions involved need not be overemphasised. This is easier said than achieved in practice. This is partly due to lack of commonly shared vision of watershed management and lack of mutual appreciation of various institutions involved in the process. However, it is clear that watershed management involves diverse groups including farmers, state and central government institutions, quasi-government agencies and NGOs. Each group differs widely in objectives and interests but together they shape the face of watershed development. Because of weak inter-institutional linkages, there is, at times, duplication of efforts. Limited resources are thinly distributed with insignificant impact or even failure at the end.

For watershed management activities to be carried out on a sustainable basis, it is important to consider the inter-institutional linkages. In this regard, the types of institutions and the way they relate to each other in providing synergy becomes crucial.

Basically, there are two kinds of institutions that need to link and interact frequently with each other in watershed management – one involving the internal stake holders and the other involving the external stake holders (Mascarenhas, 1999). The first is at village or community level in the form of SHGs or user groups. Obviously, these need to be federated at the watershed level for providing a forum for collective action. Also, these need to be linked to local panchayat institutions. This is because panchayats are a constitutional requirement and are part of the national democratic system as mentioned earlier in section 3.1. They are being strengthened to decentralise administration including development administration at village level. Most government sponsored development programmes are implemented through panchayat institutions.

A common mistake in watershed development projects is that the withdrawal and handing over process starts towards the end of the project. In principle, it should be kept in mind right from the day one and preparation for withdrawal should begin right at the start. If it is done right from the beginning, then, community institutions would be in place that are capable of sustaining the activities of watershed management after the project comes to a close.

The second set of institutions in watershed management consists of all those external stakeholders such as government departments, NGOs and donor agencies. Each of these institutions has a role to play in watershed management and brings with it certain strengths and areas of expertise. These institutions need to work together for synergy and to give top priority to capacity building and financial sustainability of village level institutions right from the beginning.

Collaboration among the government departments and NGOs has been an outcome of greater emphasis on people's participation in development activities. The challenge of

reaching out large number of poor people in resource poor regions has forced governments to involve NGOs, who are, hopefully, better suited for the task of mobilising people's participation (Arya, 1999). Therefore, recognition of complementarity between government and NGO efforts has, by and large, improved the work environment of watershed development projects. International donors are also appreciative of such collaboration which results in increased outreach and enhanced effectiveness of the watershed development projects.

For unifying the multiplicity of watershed development programmes within the framework of a single national initiative, a fund has been created with the National Bank for Agriculture and Rural Development (NABARD), the apex bank for rural credit, during 1999 at the behest of Ministry of Finance, Government of India. The fund is called Watershed Development Fund (WDF) and is created with a contribution of Rs 1000 million from NABARD and a matching up-front contribution from Government of India. Thus the total amount of the fund is Rs 2000 million.

The objective behind setting the WDF is to strengthen the ongoing effort of participatory watershed management. The fund is to be utilized to create necessary conditions to consolidate and replicate the isolated successful initiatives under different programmes by the Government, semi-government and NGO sectors. It is envisaged that all the parties involved – watershed communities, NGOs, government, research institutions and banks will work in collaboration to make a real impact in participatory watershed development.

Two-third of the allocation for the fund will be for loans to the state governments for watershed development and remaining one third will be used for grant based activities concerning promotional efforts and capacity building of micro watershed projects. So there is a conscious effort to encourage financially viable watershed development activities through the operation of WDF.

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