



A SUCCESSFUL CASE OF PARTICIPATORY WATERSHED MANAGEMENT AT RALEGAN SIDDHI VILLAGE IN DISTRICT AHMEDNAGAR, MAHARASHTRA

B. Mishra • AVARD • New Delhi

AN OVERVIEW OF PEOPLE'S PARTICIPATION IN NATURAL RESOURCE MANAGEMENT IN INDIA

Breakdown of traditional sustainable systems

People's participation is viewed as a dynamic group process in which all members of a group contribute to the attainment of common objectives, share the benefits accruing from group activities, exchange information and experiences of common interest, and follow the rules, regulations and other decisions made by the group. Need for people's participation is articulated in terms of efficiency and/or cost-effectiveness, equity in distribution of benefits, sustainability and empowerment of the people.

The concept of sustainable natural resource management is essentially an integration of three factors - first, human beings have a common destiny of interdependence with other living creatures on the earth; second, the main concern of development is not growth at all costs but to render the lives of majority of the people easier and more harmonious; and third, there are thresholds of irreversibility which traditional economics does not take into account. Besides, sustainable resource management is not only for environment management but also for poverty alleviation. The FAO has defined it as the management and conservation of the natural resources base, and the orientation of technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations. Such sustainable development conserves land, water, plant and animal genetic resources, is environmentally non-degrading, technically appropriate, economically viable and socially acceptable.

In the Indian context it may be further explained as a means to meet the basic nutritional requirements of present and future generations, providing employment with sufficient income and quality living conditions for rural people; maintaining the productive capacity of the natural resources while protecting the environment and reducing the vulnerability of the agricultural sector to adverse natural and socio-economic factors and other risks as well as strengthening self-reliance.

Natural resources - mainly land and water under Indian conditions are endowed with rich diversity and vast expanse so any kind of generalization about a country with a sub-continental character can only be a half-truth and misleading. The three clear cut major geographical features - mountains, plains and plateau represent entirely differing eco-systems and are further subject to diverse agro-climatic and physical factors. However, all these varieties are well integrated as parts of one whole. Besides, the cultural thread binds them together to emerge as unity in diversity.

India has a history of cultivation built on irrigated agriculture in the river basins and rain-fed cultivation combined with small scale irrigation works on the drier plains. For thousands of years rural people farmed in a sustainable manner that maintained the traditional agriculture systems and conserved soil and water resources. The farmers' knowledge of their local environment followed by healthy resource management practices continued to meet people's needs without any

The concept of sustainable natural resource management is essentially an integration of three factors - first, human beings have a common destiny of interdependence with other living creatures on the earth; second, the main concern of development is not growth at all costs but to render the lives of majority of the people easier and more harmonious; and third, there are thresholds of irreversibility which traditional economics does not take into account

significant threat to environment. In a nutshell, the ancient Indian agricultural practices had an in-built mechanism for sustainability of natural resources base at the community level.

During the colonial period, the process of commercialization of agriculture started and people's involvement was often forced for selfish reasons without any concern for people's needs or future crisis. Such moves often served as a starting point to mobilize people against the colonial rule in pre-independence days.

After independence, the eradication of mass poverty by over exploitation of natural resources became a major cause of degradation. The Green Revolution brought in adoption of high yielding varieties of wheat in the mid 1960s and of rice in the 1970s and with its crop-specific focus based on excessive use of chemical fertilizers and insecticides, expansion and intensification of irrigation from surface as well as ground water, a shift to mono-cultures and multiple cropping, witnessed spectacular progress in production and saved the country from mass starvation. But at the same time it gave rise to waterlogging and salinity. Large dams and centralized water resources management caused ecological vulnerability of the ancient river systems and destroyed the age old traditional systems of irrigation aligned along natural drainage features. The modern varieties decreased biomass for animals and soil fertility and lowered eco-system productivity. Considerable strains on ground water resources have led to the emergence of new weeds and soil micro-nutrient deficiency. An Indian scientist - philosopher Ms. Vandana Shiva termed the scenario, "Violence of Green Revolution: The Indian Tragedy".

Participation of resource poor farmers

The agricultural land in the country is owned by individuals, whereas large irrigation schemes are owned by the Government. Rich farmers have their own irrigation structures - tanks, lift devices or tube wells. The resource poor farmers can hardly afford to utilize costly inputs. Besides, only about 40% of the people have access to land which also suffers from skewed distribution pattern. About 49% of the cultivated land belongs to 10% of farmers with large holdings of 4 ha and more (1985-86). Only 13% of the land belongs to 50% of the farmers with marginal holdings of 1 ha or less. The common lands too are often encroached on by rich farmers.

Unequal access to land, water and other resources is a major constraint to people's participation in the true sense in many places. This is in two forms: first, extensively large cultivated farms, secondly, due to hereditary rights, the best lands are usually held by old and influential families to the exclusion of poorer households. The remaining, ecologically more fragile land, is therefore under pressure from landless and socially vulnerable people.



Insecurity of tenure in case of sharecroppers keeps them off from improving and conserving the natural resource base. Besides, social insecurity gives rise to conflicting interests between different groups of farmers and farming and non-farming communities which only culminate in degradation of the natural resources.

Similarly, in the case of water resources the participation of poor farmers is minimal. Rich farmers pump out and use most of the ground water reserves without any concern for others. India had well managed traditional community tank irrigation systems in the past with no problems of either sharing of water or its maintenance and repair. But that spirit of caring and sharing has disappeared today.

Prejudice against women

Women are very closely associated with many activities relating to appropriation of natural/agricultural resources and/or their products. They are responsible for collection of fuel wood, fodder, forest produce, collecting grasses from grazing lands (gaucher), fetching water for household use and sharing larger agricultural operations. But this participation by women is treated as invisible. Besides, in many cultures and castes, women are discouraged from participating in the meetings and training programs along with men hence their participation in resource development and conservation programs is negligible. However, many experiences show that when conscientised and given opportunities, rural women do participate actively in the meetings and training camps and are able to identify their problems and suggest solutions.

The growth in any kind of production involves social and ecological costs and there are signs that under the present agricultural development systems these costs are approaching a level where they outweigh the benefits. Over exploitation of natural resources is clearly unsustainable in the long run. However, in most places it is not too late to devise more socially and ecologically cost-effective ways of achieving continued growth to meet the growing needs of the present population while preserving its productive capacity for the future generations.

The growth in any kind of production involves social and ecological costs and there are signs that under the present agricultural development systems these costs are approaching a level where they outweigh the benefits

RECENT PROMINENT INITIATIVES OF PEOPLE'S PARTICIPATION IN RESOURCE MANAGEMENT

Some of the well known recent (over the last 30 years) initiatives /movements are identified here.

Naxalite movement

It was launched in early 1960s and named after the village of its origin, Naxalbari in West Bengal State of India. Its major plank is skewed land tenancy which is the major cause of degradation of natural resources. It facilitates access of poor to natural resources by organizing them and acts against exploitation of the poor by the rich. It believes in use of force to attain political power and believe in the Maoist-Marxist-Leninist philosophy.

Chipko movement

It is a Gandhian movement led by Sunder Lal Bahaguna whose genesis goes back to the early 1970s in the Garhwal Himalayan region of Uttar Pradesh. The movement has mobilized people against commercial felling of trees to safeguard the fragile Himalayan ecology in the larger interests of the people and wildlife.

Save Narmada movement (Andolan)

It is an all India strategic network of social activists and NGOs to mobilize people against the building of Sardar Sarovar (in Gujarat) and Indira Sagar (in Madhya Pradesh) dams. The main issues are displacement of local people without proper resettlement/compensation and demand for the rights of the communities to their own natural resources.

Bodh Gaya Andolan

It started in the 1970s to address the issue of redistribution of some 3600 ha of ceiling surplus land held by the Bodh Gaya Matt. It generated tremendous popular participation and peaceful action.

Ganga Liberation (Mukti) Andolan

The Ganga Liberation Movement started in the early 1980s to abolish waterlord system. Social activists and youth organizations organized the fisherfolk and created pressure on Government to bring necessary legislation to change the exploitative system.

AVARD's irrigation schemes

The schemes started in 1968, created irrigation structures, introduced equitable water distribution/sharing and management systems through popular participation. The schemes also served as rallying points for the people.

Water council (Pani Panchayat)

Initiated by Gram Gaurav Pratisthan, Pune, Maharashtra, it is a community-based water council. The groups of people share water equitably on per capita basis under a non-transferable water agreement. People contribute 20% of the scheme's cost and even the landless partake in these schemes by selling their water to needy farmers.

Sukhomajri

It is a successful effort in community based micro-watershed development by the construction of three small dams in Haryana state of India.

Rope makers of Saharanpur

It is an initiative of community-based action and social movement combined to empower the rope makers in Saharanpur district of Uttar Pradesh to regain their traditional rights to use and sustain their natural resources.

Chakriya Vikas Pranali (The cyclic system of development)

The cyclic system of development is a community-based natural resource management system by bringing landless and landholders together through an equitable system of sharing income and introducing technological innovations and multi-layered multi-cropping based on symbiosis between different species of plants and crops.

MYRADA's Self-Help Groups

The organization enjoys the distinction of organizing people for self-development through their known resources generated by small savings and collective efforts in Karnataka state of India.

Rural Labor Association of Halpati Seva Sangh

The organization, a member of AVARD, has very successfully organized agricultural laborers in defense of their rights and minimum wages.

Ralegan Siddhi

It is a unique example of participatory watershed management and all round development in Ralegan Siddhi village in Ahmednagar district of Maharashtra. This is later presented here in detail.

Self-Help Groups by Taj Mahal Gram Bikas Kendra

The organization, a member of AVARD, has successfully organized poor rural women in Muslim dominated pockets of Howrah district, West Bengal. Over 4,000 women are members who generate resources through small savings and use it for the development of micro-enterprises.

Mahila Vikas Sangh (Women's Development Federation)

It has organized women in a tribal pocket of Bihar through awareness generation, education and monitoring for income generation activities to ensure a better earning for improvement in quality of their lives.

Self Employed Women's Association

Self-Employed Women's Association (SEWA) has organized self-employed women's union through awareness generation, education and training for income generation activities.

THE CASE OF PEOPLE'S PARTICIPATION IN WATERSHED MANAGEMENT IN RALEGAN SIDDHI

Development fundamentally refers to human beings. It should be a human experience to meet people's physical, mental and emotional aspirations and potentials, not just in economic terms but should also lead to a sense of self-sufficiency and fulfillment. Ralegan Siddhi, often termed as an oasis of greenery surrounded by dry and bare hilly tracts is a unique example of transformation from poverty to plenty and a living model of people's participation in natural resource management in a watershed.

Description

The physical setting

Ralegan Siddhi is a small village with an area of 982 ha in Ahmednagar district, Maharashtra India. It is situated on latitude 19° 22' N and longitude 74° 27' E at an altitude of about 755 m amsl. It is 87 km north-east of Pune city and 5 km away from Pune - Ahmednagar State Highway.

It is a drought-prone and resource poor area with annual rainfall ranging between 50-700 mm and temperature varying between 28°C and 44°C. The village is surrounded by small hillocks on the north-eastern and southern sides. The land is undulating and slopes vary from 3-15%. The soils are shallow. In lower areas, patches of black soils mixed with pebbles are seen but towards the higher areas the soils are inferior and unsuitable for cultivation. In about 70% of the area the soils are light to medium in structure.

Demographic features

The 1991 Census enumerated a population of 1982 living in 310 households (presently estimated to be around 325). The sex-ratio being 902 females per 1000 males (1,029 in 1971; 1,013 in 1981), the continued decrease in the ratio is explained as the return of male folk to the village with improvement in the socio-economic conditions of the village. Backward classes (scheduled castes and scheduled tribes) constitute only 14.23% of the total population.

The level of literacy has gone up from 30.4% in 1971 to 39.65% in 1981, and further to 50.95% in 1991. As of now, according to the villagers, no one in the 15-35 year age group is illiterate. Today, the overall literacy rate is estimated to be around 65% which is far above the national average of 52%.

Socio-economic structure

Maratha's of the Khatri caste out-number other castes and constitute nearly two-thirds of the families. Among others are the backward castes including Mhar, Chamar, Bharhadi, Pardi, Sutar, Barber, Fishermen, Matang, etc.



There are only five landless and 13 artisan households in the village. Most of the landholdings are small. About 51% of the landholders own 1-3 ha which is about half the total area as well as population of the village. There are only 12 farmers (about 3%) owning more than 6 ha, who own about 18% of the total area. Though the average size of landholdings (2.5 ha), appears to be relatively large, considering the poor quality of soils and low productivity levels, the holdings are quite modest.

Occupation-wise, cultivators are in a majority, followed by agricultural labor. Agriculture is the mainstay for a majority of the people. Others like grocers, drivers, cobblers, barbers, blacksmiths, broom makers, health workers, teachers, shopkeepers, flour mill operators, welders, and bank employees represent the services and rural artisans. Another interesting factor in the Maratha families is that most of them like to send at least one of their sons for military service. However, the occupational structure of the village has been undergoing change since 1976 in favour of the agricultural sector.

Base-line situation

Not even 30% of the food grain requirements could be met from rain-fed mono-cropping practiced in the village. About 45% of the villagers had a single meal per day and about one-third of the households missed their meals every alternate day

By 1975, prior to the intervention by Anna Hazare, the village had become quite notorious with all sorts of social evils, moral downfall and badly shattered economic conditions. In general, the village presented the profile of a poverty-stricken and debt-ridden society. Scarcity of water was the key to distress which limited the prospects of agriculture. The water table was below 20 m, most of the wells used to dry up during summer and drinking water had to be fetched from the neighbouring villages. The high rate of surface run off due to a high degree of slope and lack of vegetative cover had washed away the top fertile layer of the soils. Barely 20 ha of the village area was under irrigation. As a consequence, the agricultural production was too meagre to support and sustain the livelihoods of the people, particularly the resource poor farmers. Not even 30% of the foodgrain requirements could be met from rain-fed mono-cropping practiced in the village. About 45% of the villagers had a single meal per day and about one-third of the households missed their meals every alternate day.

The poor farmers and agricultural laborers forced by their poor economic conditions had only two options – either to migrate to nearby cities of Pune and Bombay to find some manual jobs or join the army of laborers working under Employment Guarantee Scheme of the Government by commuting a distance of about 22 km daily. Any shortfall in the earnings had to be met by borrowing from the money lenders (Sahukars), the "Shylocks" of the times. The inability to repay the loans often led to further indebtedness and bondage. An enterprising villager being depressed by his impoverished condition went to the neighbouring village and mastered the



technique of distilling liquor by using 'Shindi' grass which grew in abundance in the area. His success attracted many more to the trade and by 1975 as many as 40 illicit liquor distilling stills came up. Even school children fell in to the den of drinking. The widespread alcoholism brought many undesirable and anti-social elements and the village figured prominently in the crime records of the police, who along with moneylenders exploited every bit of opportunity for their selfish ends.

The combination of poverty, unemployment, alcoholism, indebtedness, mutual suspicion, use of money and muscle power for malpractices not only shattered the village

economy but also degraded the social/community life. A majority of the children were denied access to education – hardly 10% children attended schools and drop out rates were high. It was difficult for girls to step out in village streets which were full of rogues and drunkards. Social strife and tension became routine, conflicts and crimes were common. The community was divided along the lines of caste, creed, political following and economic status. Thefts, arrests, extravagance on festivals and marriages, funeral rites, discrimination against lower castes (dalits) and atrocities on women were common. Women had to bear the brunt of drunken males in various forms. Children were denied their basic rights to minimum needs, women were humiliated and all the old value systems and cultural norms of a civilized society had receded to the rock bottom level.

The devastating drought of 1972 made the situation change from bad to worse. The Government in its bid to help fight the drought, constructed a percolation tank but due to faulty design, lack of supervision and high rate of percolation, it failed to serve the purpose. Help also came from Tata Relief Committee and Catholic Relief Society in the form of construction of check dams, deepening of wells and provisions for medical relief. Despite all these, not much could be achieved due to lack of people's participation.

Approaches / Methods Used for People's Participation

The base-line situation shows that the conditions in the village were rather hostile to any reconstructive initiative for an outside agent. In this critical situation, Kisan Baburao Anna Hazare, popularly regarded as "Anna" (elder brother) appeared on the scene (life sketch and achievements in box). He was shocked to see the pitiable condition of the villagers, particularly the resource poor farmers, women and children. The man, Anna Hazare, with a high level of confidence and with his life's sole aim of service to the people, resolved to intervene to bring about a change in the situation. His guiding factor was, "it is better to light a candle than blame the darkness". The approaches/methods used by him for the participation of farmers in natural resource management works are highlighted as follows.

Persuasion

First of all, Anna went through a careful envisioning of the deteriorating situation in village life and decided to initiate through religion, a moral undercurrent by persuading the people for reconstruction of the Sant Yadava Baba temple. But he failed to impress and influence the people at large, primarily because the people were too busy with their own business and worldly affairs.

Gandhian approach

The second step was to set up examples by self-practising rather than mere preaching as Mahatma Gandhi used to do. Initially, it went unnoticed but in due course it gathered momentum. Particularly, he tried to organize the youth of the village under "Tarun Mandal" (youth organization). Besides, participation from all the sections of society was ensured and encouraged. Thus, the construction of the temple was completed by voluntary labor only.

Creation of a common platform

Keeping all the differences and disparities aside, a common platform and meeting ground was created in the form of the Sant Yadav Baba temple. People started sitting in groups during evenings and discussing about the affairs of the village and common concerns. Thus, the process of friendship, cooperation and communication started.

Moral cleansing

Anna Hazare himself took this initiative. During informal chats he started quoting the sayings of great men like Swami Vivekanand, Mahatma Gandhi, Vinoba Bhave,

etc. He also used the ideals of Sant Yadav Baba whose memories were still alive in the minds of the people. Bhajans (hymns) and religious discourses etc. during the early hours of the day through public address system from the temples were used to enlighten the people. Thus, a change in the general attitude of the people was brought about by moral cleansing. This process facilitated the people of different castes and classes to be on an equal footing at the mental/moral level and the differences among the people started sinking. Untouchables (dalits) were allowed to enter the temple and share their thoughts with others.

Selfless leadership

Anna himself invested all the money he had (Rs. 20,000) for purchasing building materials for the temple before asking others to contribute. He started living in the temple with a resolve to remain a bachelor and broke all his family ties as a form of penance. He has not visited his parents, who lived at a stone's throw distance from the Guest House, for the last 17 years. Villagers were impressed by his sense of sincerity, selflessness and sacrifice and he emerged as their undisputed leader.

Identification of the most pressing common problem

The main reason of disintegration, division and distress of the village society was the lack of a sound livelihood support system. The economy of the village was agrarian and shortage of water for irrigation was the major constraint to its development. Thus, assured availability of water was collectively identified as the top priority at a meeting of the villagers.

Initiating the process of change at individual level

The Gandhian dictum is that change should begin at the level of individuals. If the individuals change, the village will change; and if the villages change, the country will change. This can be clearly observed in the approach followed in case of village Ralegan Siddhi. Stress on personal morality, abstaining from alcohol, cigarettes and from non-vegetarian food are essential components of a voluntary personal code of conduct imposed by the community itself on the village. Besides, it has been linked with a broader vision of social morality encompassing social equality and egalitarian distribution of benefits of growth. The concept of personal morality has been chiefly drawn from the Hindu religion. An oath for giving up drinking was taken by the villagers at the temple. Personal and social morality have been interlinked to serve as the foundation of the new social order. Untouchability and discrimination of dalits vanished.

Socialization of costs and surpluses

In the implementation of resource management activities e.g. developing public utilities, tree planting, deepening of wells etc., voluntary labor (Shramdan) is an essential component. This has helped in socializing the costs and has helped develop a sense of belonging among the people, in addition to lowering labor costs of the activities. In addition, 25% of the surplus generated from community resources are set aside as village funds which are utilized for other community projects. Special attention is paid to the development of the deprived sections. This safety set has helped greatly in securing the participation of the resource poor farmers. Assistance to cultivation of the lands of poor and outcastes by better off farmers, provision of grain bank to make foodgrains available during slack periods at low cost, construction of masonry (pucca) houses for outcastes with the support of community etc. have helped in reducing the disparities and strengthening the sense of togetherness.

Democratic decision making process

People in the village are not blind followers of Anna. Every new initiative was thoroughly discussed in village meetings. Pros and cons of any new initiative

The main reason of disintegration, division and distress of the village society was the lack of a sound livelihood support system. The economy of the village was agrarian and shortage of water for irrigation was the major constraint to its development. Thus, assured availability of water was collectively identified as the top priority in a meeting of the villagers

were considered. Plans for implementation of a particular scheme and code of conduct are openly discussed and a select group of people carry out and supervise the works. Thus, at every stage the involvement of people in decision making is very important.

Social reform with strict discipline

Once the decision is taken by the villagers to eradicate a particular social evil, it is implemented with strict discipline in letter and spirit. As in the case of drinking, anyone found drunk in the village used to be tied to the pillar of the temple and beaten by the military belt of 'Anna'. Since it used to be a collective decision nobody could dare oppose it. Similarly dowry and extravagance were curbed.

Need-based and planned socio-economic development

Since all the decisions pertaining to launching of any scheme are taken in the village assembly, the decisions reflect the needs and aspirations of the community. For example, top priority was accorded to rain water harvesting and management of the four village watersheds. Every drop of rain was trapped by developing a drainage system, trenches, check dams, drainage plugs, percolation tanks, etc. by developing and designing micro-watershed specific schemes. This initiative recharged the ground water and now enough water is available all year round at 6.5 m depth as compared to the ground water depth of 20 m earlier. This was followed by regeneration of plants, grasses, development of best locally suited farming systems, continuous watch and monitoring of water distributions to irrigate crops in a judicious manner, selection of crops according to soil moisture and needs of the people. Organic manure is prepared by the farmers by using human and animal wastes as well as crop residues.

Similarly, to meet the basic minimum needs of the people, solar street lights, community latrines, biogas plants for cooking and above all a well managed high school are in place and being satisfactorily run. Today, not only the children from the village but also from cities like Bombay and Pune come to study in the village school. Preference is given to the so called "spoiled" children in admissions to encourage them.

Cooperative management system

Most of the villagers are farmers. Hence, it is beyond their repaying power to go for bank loans for irrigation wells individually. To overcome this problem, a cooperative system of irrigation has been evolved. Two or more farmers develop the source collectively, share the water equitably and repay the bank loan in proportion to the land irrigated by that source. This system has enabled an access to irrigation even to the poorest of poor farmer on equal terms. To avoid any confusion or misuse of water, Water Ration Cards are maintained by farmers. Each farmer can use the water as per his/her allotment. A second turn to any farmer is allowed only after all the farmers have taken their first turn.

Special focus on women

The availability of drinking water, fodder, toilet facilities, bathroom, etc. has reduced the drudgery of women. The moral upliftment of the village has improved the status of women at home and in society due to change in attitudes of men towards women. Mahila mandals (women's groups) manage the women-specific issues. Besides, an all women's panchayat (assembly) is another step to encourage the participation of women. The village milk dairy is run by women. Atrocities on women are taken up very seriously and the culprit is dealt with strictly. Even husbands are not spared. However, it still needs more time for women to attain equality with men. A scheme of sewing, cloth cutting and tailoring has failed particularly due to low demand and lower returns. Lack of marketing strategy is the prime cause of failure. In general due

This was followed by regeneration of plants, grasses, development of best locally suited farming systems, continuous watch and monitoring of water distributions to irrigate crops in a judicious manner, selection of crops according to soil moisture and needs of the people

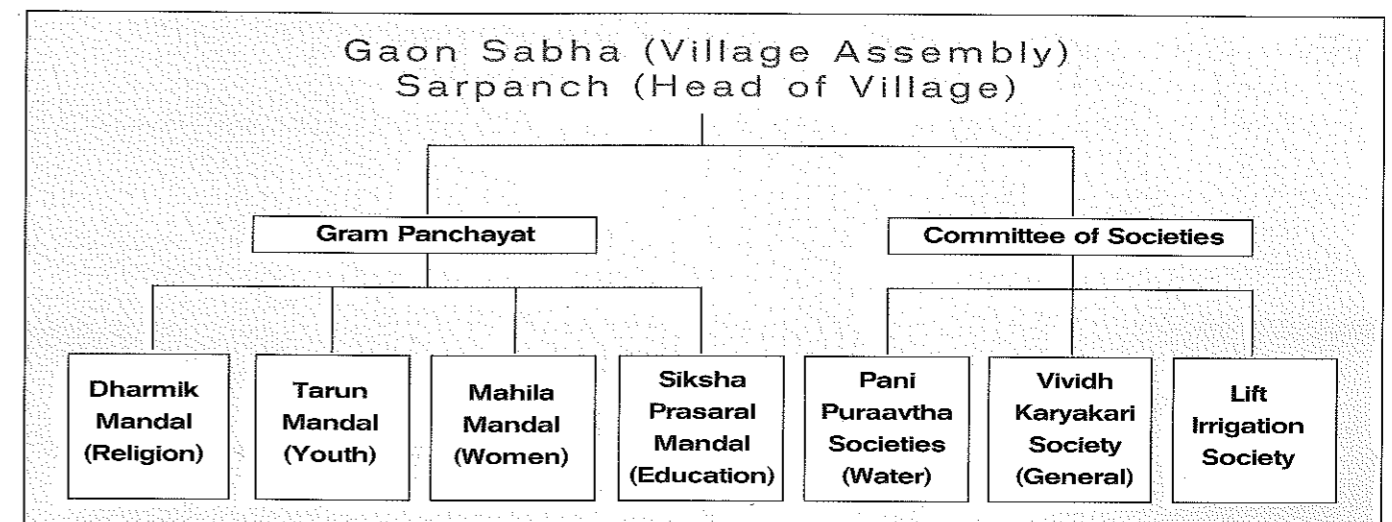
to added development activities, the load on women in field and home activities has increased but they feel that they have regained their lost dignity and have equal participation in the decision making process, today.

Facilitating village organizations

To manage affairs, village organizations have been developed for smooth functioning of each and every activity. The broad administrative organization diagram is given in Fig. 1.

Each of these units are separately registered societies with a fair degree of independence and are competent enough to take operational decisions. Thus, in all the above approaches people and moral values enjoy centre stage, and common good is the sole aim.

Figure 2: Organizational diagram of village Ralegan Siddhi



REFLECTIONS ON THE EXPERIENCES AND INSIGHTS GAINED

The insights gained from the experience of Ralegan Siddhi may be identified as below:

- Involvement and participation of the people is possible provided there is a committed and sincere leadership to educate, organize and motivate the people for the attainment of a common goal.
- Voluntary action either by an individual or people is an extremely vital factor to promote, facilitate and catalyze people's participation in sustainable village development.
- A mix of commitment with flexibility, sensitivity, innovativeness and autonomy are essential for success.
- Holistic approaches to people's participation in sustainable development are necessary for involving people wholeheartedly. The approach being employed must have the potential to generate the spirit of cooperation, caring and sharing, adjustment, harmony, self-help, self-reliance and special emphasis on the resource poor farmers particularly women.
- Need-based planned initiatives and their proper prioritization by the people themselves through democratic decisions with focus on the poorest and weakest and proper consideration for gender issues ensures better and fuller participation.

- If economic downfall is followed by moral downfall, then moral upliftment is also followed by economic upliftment. Assured economic benefits attract participation of the people.
- The first benefit must go to the poorest of the poor and first input must come from the richest of the rich to sustain the emotions and confidence of the poor. It is a successful method to bring people together. Once they come together they talk, discuss, plan and act collectively and share the costs and benefits in a just manner.
- Any process aiming at arousing people's participation must start with the individuals.
- Sustained efforts over a considerably long period of time are required for the people to gain confidence for self-development.
- The basic components of environment, particularly land, water and vegetation are the vital links to bring rural people together as their livelihoods are closely dependent on these natural resources.

LESSONS, ACHIEVEMENTS, WEAKNESSES AND CONSTRAINTS

Lessons

- Leadership in voluntary action does not need any formal degree of education. Anna Hazare is a 7th standard pass retired military truck driver. It demands a high degree of selflessness, egalitarian attitude, foresight and humane virtues to win the trust of the people.
- Moral cleansing is a necessary step to remind people of their moral and social obligations as well as to sensitize them for community/collective action.
- Rich and poor, high and low, men and women, can cooperate with each other if there is a sound reason and shared concern.
- Any effort to arouse people's participation must address the basic day to day needs and must ease out people's hardships and help in their self-development.
- Voluntary codes with strict discipline approved by the people themselves do miracles.
- The efforts at participation must be total. No one in the community must be left out of the fold of the process.
- Strict formal rules and regulations are not necessary for encouraging people's participation in natural resource management in a watershed for sustainable development. People themselves can develop their moral codes for cooperation.
- Shramdan (voluntary labor) is a no cost method to bring people together for common good.
- People understand their environment much better than anybody else from outside. People's participation is an essential element and pre-requisite for any development initiative to be successful. Hence, it needs to be designed into development programs from the beginning.
- The initiatives to mobilize people should be people/community and place specific. Any kind of generalization may be harmful.
- The weak, poor and women need special consideration and concessions for their participation.
- The efforts for participatory watershed development must aim at the improvement in the quality of life of the people and should be designed for people first.

Achievements at Ralegan Siddhi

- Successful abolition of social evils like alcoholism, dowry, corruption and the caste system. These changes paved the way for positive steps to development.
- Successful implementation of voluntary codes e.g. ban on grazing, protection of green cover, check on extravagance on marriages, etc.
- Social acceptance of the use of public toilets for biogas.
- Successful implementation of development schemes through cooperatives with the support of Government and bank loans. No aid is taken either from national or foreign agencies.
- Regeneration of watershed resources through people's participation, a living example of watershed development and management.
- Successful involvement of the people in formation of development schemes in a democratic way through village meetings. It has also shown that participatory sustainable development is possible.
- Non-degrading and sustainable utilization of natural resources as well as generating alternative sources of income to enhance the economy at family and village levels.
- Development of agriculture and allied sectors by better farming practices and cropping patterns, judicious use of water by introducing drip irrigation system, yield enhancement, etc. As a result, the village where nearly three-fourth population was below poverty line, has become self sufficient and is surplus in food grains, today.
- The quality of life of women and people belonging to backward classes because of special attention and focus has improved appreciably.
- Strengthening of infrastructure like drinking water, sanitary facilities, biogas, postal, banking, roads, schools, health centres etc. with the participation of the community and by availing Government schemes.
- Development of managerial skills and capability among people with low level of education, exposure and training.
- Evolving social techniques to establish civil control over public spaces and creation of a civil society which is responsible for itself and its environment and responsive to the needs of its members.
- Enough scope for women for self development.
- An appreciable change in the attitude of the people with a high degree of moral standards and ethics.
- Over all improvement in the quality of life of the people, and conservation and use of the natural resources in a sustainable manner.

Weaknesses

- Though there has been tremendous improvement in the status of women and much has been done yet more remains to be done to involve them fully in the process. This means that women's development needs specialized and extra effort.
- There is no effort towards the development of agro-based rural/small scale industries to enhance the value of the products and keep the participation of the people intact.
- The managerial capability is weak and it is reflected in the failure of the cloth cutting and tailoring scheme resulting in weakening the participation of women.

Constraints

- It is not easy to find a devoted and committed leader like Anna Hazare in the second generation to keep the process going. His efforts to choose a leader so far remains unsuccessful.
- Moral cleansing at individual level in today's materialistic world where personal liberties and human rights come in the way is a very difficult proposition and may pose problems in other areas.
- Ralegan Siddhi village has a more or less homogeneous character having groups of people with not much economic disparity or diversity in caste/religion. The Neo-Buddhists are close to Hindus so there was no problem but in the event of Muslims, Christians or Sikhs being part of the society it may be difficult to organize them along religious lines.
- Anna has been the undisputed leader of the village and nobody objected to the initiatives floated by him. At the most there used to be only mild queries on the part of the villagers, in case of disagreement. It may not be so easy to generalize the dedicated leader driven approach.
- It is easier to transform a virgin and underdeveloped area like Ralegan Siddhi but very difficult to develop semi-developed areas. Though Ralegan Siddhi has made tremendous progress, its impact on the neighboring villagers is minimal so far.

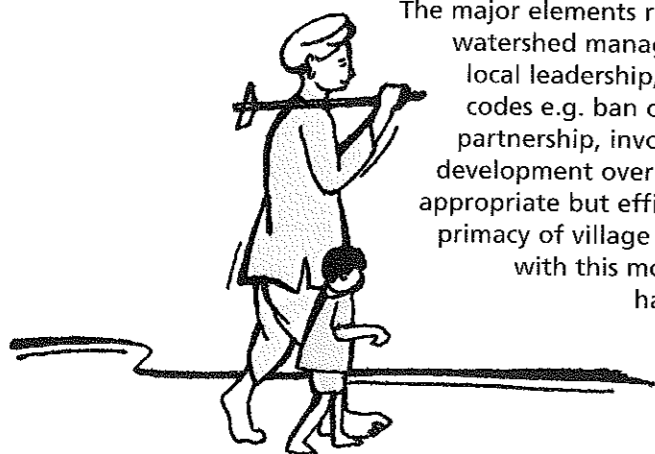
Major elements responsible for the successful people's participation in watershed management at the Ralegan Siddhi village are: emergence of local leadership, underpinning of moral sanctions for all, voluntary moral codes e.g. ban on uncontrolled grazing and tree cutting, etc.

CONCLUSIONS

The case study shows the success of the Gandhian approach to people's participation in watershed management. Since 1975, this has resulted into participation of all the 325 village families, renovation of a temple, stopping illicit liquor distillation, water harvesting in 4 small watersheds, construction of many checkdams, plantation of five hundred thousand forest trees, controlled grazing, raising of ground water level from 20 m depth to 6.5 m, sale of onions worth Rs. 80 million in 1995 alone (exchange rate in June 1995 US\$ 1 = Rs. 31.3), solar street lights, village toilets, biogas, organic farming, introduction of livestock, a high school, institutionalization of decision making at village assembly level, local voluntary organizational capacity building, acceptance and application of voluntary code of conduct, formation of different action committees, etc.

The success has made the Government of India request the leader (Anna Hazare) to take up the program in 300 counties (talukas) of Maharashtra state.

The major elements responsible for the successful people's participation in watershed management at the Ralegan Siddhi village are: emergence of local leadership, underpinning of moral sanctions for all, voluntary moral codes e.g. ban on uncontrolled grazing and tree cutting etc., GO/NGO partnership, involvement of all sections of society, holistic and sustained development over a long period of time (10-20 years), use of simple, appropriate but efficient technology for watershed management, and primacy of village assembly in decision making. The only weakness sighted with this model of people's participation in watershed management has been that it is driven by a strong and highly motivated local leader which is the case of most Gandhian models of development. It is still to be seen if it is replicable when it is tested on the 300 proposed areas.



PRINCIPLES AND PRACTICES OF INTEGRATED WATERSHED MANAGEMENT IN INDIA brings to a wider audience the vast and wide experiences which exist in India. Professionals from various organizations (government, non-governmental and academic) share their past efforts and future aspirations for sustainable watershed management.



The Indo-German Bilateral Project "Watershed Management" is a joint undertaking of Government of India, Ministry of Agriculture, Natural Resources Management Division and the German Ministry for Economic Cooperation and Development.



The German Agency for Technical Cooperation (GTZ) is implementing worldwide, on behalf of the German Ministry for Economic Cooperation and Development their technical cooperation projects.



RODECO Consulting is a leading German engineering consulting company specialized in international projects with emphasis on water resources management, water supply and sanitation.

INDO-GERMAN BILATERAL PROJECT "WATERSHED MANAGEMENT"

B-4/1, Vasant Vihar, New Delhi - 110 057 - India

Phone & Fax: 0091-11-6141539

E-mail: watershedindia@rediffmail.com