

Integrated Development Of The Village Valadar Through Wasteland Development Initiative

**Managing CPRs
(Common Property Resources)
Through Community Participation**



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1. BACKGROUND

The coastal belt of Kodinar has been known since time immemorial for its Asiatic lions residing in the dry-deciduous Gir forests. Besides this, the area has growing number of orchards of Chikoo and Mangoes. The Kesar varieties of mangoes of this region are famous throughout India Besides this, Junagadh district is known as the groundnut bowl of the country with the major chunk of the country's supply of groundnut coming from this region. This is so because of the fertile black cotton soil, considered to be extremely conducive for cultivation of groundnut and horticultural crops.

2. THE INITIATIVE

Managing Common Property Resources like Forestland, Pastureland (Gauchar land) is difficult. This is so because everybody's property is nobody's property (or concern). Over-Grazing on the commons has resulted in rapid degeneration of the Gauchar-lands thereby reducing the availability of fodder during the crunch seasons. Common land is either encroached upon or subjected to other socially undesirable activities like illicit soil mining etc. In such a scenario it is very difficult to develop Natural Resources through people's participation. To develop Common Property Resources we need to bring attitudinal change for their development in the society.

Valadar village

Valadar with a population of 1486 in the Kodinar Taluka is located to the north of Ambujanagar (approx. 23 Kms). The total area of the village is 1276.67 hectares while

only 115.85 hectares is irrigated. A huge chunk of land i.e. 309.37 hectares is lying as Wasteland. Durbar, Patel, Muslim and Harijan are the major communities residing in this village. The soil type is Black Cotton soil as well as Red soil.

Ambuja Cement Foundation (ACF) is active in the Kodinar and surrounding areas and has been working in the field of participatory Natural Resource Management, Health, Women/Child Development.

The farmers of Valadar are progressive and the village boasts of one of the largest horticultural coverage in the entire Kodinar Taluka. ACF initiated Wasteland Development Project in Valadar in the year 1994. Valadar is one of the active villages under the Government sponsored Integrated Wasteland Development Project (IWDP) which was started in 1999-2000. ACF has also been working as the programme implementing agency (PIA) under this project.

3. INTERVENTION IN WASTELAND DEVELOPMENT.

The Panchayat in this area had a few hectares of Panchayat Gauchar (Pasture Land), which was lying fallow a few years ago. ACF initiated community Wasteland development programme in Valadar village in the year 1994 –95 with people's participation. The village community was involved right from planning, implementation and management of the project. They made plan for the plantation of horticultural species on the above land to get sustained income. In the initial stage 4 hectares of Wasteland were taken up for the purpose of developing it. For this project a sum total of Rs.221983 has been spent in the period 1998-03.

4. STEPS UNDERTAKEN.

4.1 Institution Building

For any development intervention to be successful it is imperative that the institutional mechanisms are in place to facilitate sustainability of the development that has taken place. The village Panchayat was actively involved right from the beginning of this project. The village Panchayat is an institution where difference of opinion are always there among rival groups, however if motivated properly with long term vision the villagers are willing to cooperate for the common cause and development as a whole.

4.1.1 Watershed And Wasteland Development Committees.

ACF has formed village level watershed committee and Watershed Association to manage Integrated Wasteland Development Project. The watershed association has also been registered through ACF so as to route all the financial transaction of the project through them.

4.1.2 Gau Seva Samaj:

ACF facilitated the registration of Gau Seva Samaj. It is an institutional mechanism to help manage the entire project with active participation of the village community. Since the people are spiritually attached to the Cow (Gau) therefore the committee was named after it. The members of the committee and village Panchayat body are same. The villagers have selected most of the Gau Seva Samaj members from the village Panchayat body on consensus basis. This institution is completely an apolitical body. Many other villages have been successfully carrying out such projects on a voluntary basis since last 35 years in the Saurashtra region. The village Panchayat body received Rs.60,000/- from Government as award for their exemplary collective action under the head of "Samaras Panchayat". The members were selected through consensus instead of being elected .

5. HORTICULTURAL AND FODDER DEVELOPMENT

5.1 Pastureland Development

Four hectares of wasteland has been developed as pasture land with plantation of horticultural crop (Kesar varieties of Mangoes). ACF has planted 175 saplings of this species in the above area.

5.2 Forestland Development

Besides this a total of two hectares have been developed as forest/pastureland. On the distance of every two meters, species like *subabool*, *amla*, etc have been planted.

5.3 Fodder Cultivation

Besides undertaking sapling plantation this piece of land enabled harvesting of fodder crop, which were distributed amongst the nearby cattle-rearers. Thus while the saplings were yet to bear fruit, the village land was able to provide income to the Panchayat through such fodder crops. The Panchayat body utilized the award Rs.60,000/- which it got for the "Samaras Panchayat" for the village development. This included construction of boundary structure for *Gaushala* and storage for fodder.

6. AGRICULTURAL DEVELOPMENT

6.1 Improved agricultural practices

Farmers are also given training on how to improve agricultural practices. On the given piece of land some of the most advanced practices like Drip Irrigation were demonstrated and installed. The major benefit of drip irrigation is that it enables conservation of water. Water is discharged directly to the roots of the plant and optimal utilization of available water takes place. Till date three farmers have installed drip irrigation on their own orchards. Other farmers were also given training regarding Animal Husbandry, Horticulture, Groundnut and Cotton Cultivation regarding improved sowing practices,

pest control etc. The Village also got the prize in the Krishi Mela for the use of advanced practices like Drip Irrigation.

6.2 Panchayat Owned Orchard

In concurrence with its own withdrawal strategy, ACF has handed over the above-mentioned project area to the Panchayat for management on its own. The Panchayat outsourced the orchard to private contractors for sale of fruits. Thus a model of income generation for the Panchayat has been demonstrated. This can serve as example for other Panchayats to follow suit. This initiative has become one of the major motivators for the people of this village to shift to horticultural crops which not only yield higher rate of returns but are also conducive for the environment. Under IWDP project 2500 saplings of mango have been planted during the year 2002. Total 50 farmers have been benefited.

6.3 Cost-Benefit Analysis

Besides these ACF has been regularly conducting training programs where the farmers are made to perform cost-benefit analysis of the various crops that they cultivate to make them aware of the various expenses and returns that each crops brings to them. This also makes them aware of the relative usage of water for different crops. Thus effort has been made to make the farmers prudent about groundwater usage.

7. WASTELAND DEVELOPMENT THROUGH WATERSHED APPROACH

Soil and Moisture Conservation through Watershed Development has been undertaken in this area based on the premise that efforts towards increase in the availability of water resources can enable utilization of land resources as well as bring about improvement in agriculture. This also means that the land lying fallow will be brought under some sort of green cover. ACF has already undertaken construction of waterharvesting structures like check dams, percolation tanks which have enabled moisture conservation in the village. Under the IWD project a series of Water Harvesting structures has been planned. There is a plan to construct 8 Check dams in Valadar within a period of four years. Out of these construction of five structures has been completed. All the sites of the check dams have been selected by the villagers themselves with the technical support of ACF.

Out of the total project cost of Rs 16 Lakhs, till date Rs. 14.47 Lakhs have been spent on various activities of Soil and Water Conservation as shown below. Through the building of water harvesting structures, a total surface storage capacity of 4.15 million cubic feet has been built up benefiting 196 wells/farmers in the vicinity and irrigating an area of 600 hectares. The water table increase was substantial from a meager average of 5 feet previously to 45 feet as seen now. The community contribution was Rs 1.05 Lakhs, in the above-mentioned project.

Table 1: Year-wise Expenditure By Ambuja Cement Foundation Under Various Heads.

Head /	98-99	99-00	00-01	01-02	02-03	TOTAL
Activity	Amt.Rs.	Amt.Rs.	Amt.Rs.	Amt.Rs.	Amt.Rs	Amt.Rs

Wasteland Development	55551	115845	19870	30717	20000	241983
Soil & Water Conservation	0	0	0	0	0	0
Waterway	68036	0	0	0	0	68036
Mobile Dispensary	2156	15737	17964	10735	25167	71759
Training	0	0	0	0	0	0
Children/Women	0	16793	783	6391	1587	25554
Drinking Water	0	0	0	0	0	0
Water Well/Rrwhs	0	0	18280	0	0	18280
Check Dams (Total Five)	0	0	200000	438000	203000	841000
Percolation Tank	0	0	199000	0	0	199000
Well Recharge	0	0	0	85000	0	85000
Horticulture	0	0	0	100000	120000	220000
Earthen Bunding	0	0	0	40000	42000	82000
Total For Village	125743	148375	455897	710843	411754	1852612

8. IMPACT OF WATERHARVESTING STRUCTURES

Many NGOs and Government officials of the Saurashtra region have visited the project and have appreciated efforts made by ACF with community participation.

Table 2: Impact of the watershed structures

Work undertaken	Storage capacity in McFt.	No of wells benefited	Area covered in hectares	Farmers benefited	Water table in Feet	
					Before	After
Checkdam-1	1.11	110	385	110	6	45
Checkdam-2	.78	18	45	18	5	47
Checkdam-3	.68	24	60	24	6	52
Checkdam-4	.52	17	42.5	17	4	48
Checkdam-5	.48	12	30	12	4	49
Percolation tank	.58	15	37.5	15	6	51
	4.15	196	600	196		

Wasteland Development and Watershed Development Go Hand-In-Hand

(1) Shri Hajabhai Ranmalbhai Modha:

Shri Hajabhai owns 80 acre of degraded and highly undulating wasteland. He also has 3 wells. In the month of May 2002 water table was 3, 8, and 16 feet respectively in the three wells. After the first rainfall, water table has risen in these wells to 40, 45, 45 feet respectively.

The site where the first check dam was constructed belongs to Hajabhai. As Hajabhai realized the importance of water conservation, he willingly provided his private land for construction of the check dams. The check dam site is adjacent to the Gir forest and its catchments area lies in the forest area. There is an underground big hollow aquifer here, which connects to existing wells of the village. As the villagers had rightly predicted, this check dam proved extremely useful in increasing water table in most of the surrounding wells.

After the first rains, the entire rainwater run-off was captured. It has been assessed that 27 existing wells were directly benefited and their water table was substantially increased. Average increase in water table was up to 33 feet. While in May '02 there was no water in three wells, now the water table level in these wells stands at 29 feet.

Hajabhai had planted 1600 mango and 2000 drumstick saplings this year. Had this check dam not been constructed, his saplings would not have survived with such a less rainfall during the year. Over and above he also claims that his groundnut crop in 20 acres is saved due to increased water table.

(2) Shri Punabhai Bhavanbhai:

Shri Punabhai Bhavanbhai owns 17 acres of land out of which only 2 acre of land was irrigated. He owns one well with depth of 74ft. In the month of May 2002 level of water table was 7ft. After the first rainfall, the level of water table has risen to 30ft. Earlier he had planted 400 mango and 80 Chikoo saplings. Also he has sown sugarcane and groundnut in his fields. These crops could be saved in time only due to the rise in water level. He now plans to sow wheat in 6 acres of land.

(3) Shri Vitalbhai Rawjibhai:

Shri Vitalbhai Rawjibhai has 10 acres of land. Out of these in 5 acres he planted horticultural plants like mango and Chikoo. On one acre of land sugarcane crop is standing while in the other 3 acres groundnut and tomato are sown. The depth of his well is 44 ft. In the month of May the well used to go dry. After the first rains this year water level in the well rose to 25ft. Due to increase in water table he has saved these crops and now he is planning to sow wheat in the remaining two acres of land. In the previous years (before 2001) due to shortage of water he could not even think of growing wheat.

9. MICROFINANCE AND INCOME GENERATING ACTIVITIES

In Valadar village two SHGs have been working. Each SHG group has 10 members. The SHG members are doing agriculture and wage labors. They started the mandal three years ago. Thus this collective activity is also an output of the institution building process, which ACF undertook earlier on. Presently they save Rs. 30 every month. While the

adolescent girls save these rupees from their pocket money, wage labor women save rupees from their daily earnings.

Since the SHG members did not have full time employment like agriculture or wage-labor therefore they started the income generating activity. ACF helped them, by imparting training for the soap and washing powder-making activity. They have already manufactured one batch and sold the product within the village itself. ACF initially helped them with 10,000 rupees as grant and the SHG contributed 10,000 rupees of its own saving fund. The SHG members are looking forward to expansion and exploration of further markets for their products.

9. IMPACT OF SHG AS AN INSTITUTION(Told by the group members)

- Own revolving saving fund has been created.
- Additional/supplement income source initiated
- Existing means of livelihood were improved because of better linkages.
- The socially secluded womenfolk of the village community became more vocal and capable of running their own matters without male support.
- Respect and involvement in the family grew, as they became providers of contingent monetary needs.
- A feel of togetherness arose amongst the members thereby breeding a heightened sense of security.

Ms. Hiraben Khatubhai Jhala is the president of the Valadar SHG. She took over the management of the new SHG after the members reposed faith in her honesty and integrity. Earlier on, there were discrepancies in the management of the funds and therefore she was handed over the responsibility. Initially the community was bit unsupportive given the fact that the women members are not allowed to interact outside the family due to orthodox caste system. Although the family was with her but still she was shunned by the society. Gradually her drive to develop herself as well as her people, coupled with the active support of the family allowed her to gain leadership. She also went for a 5-day training to Junagadh where she learnt how to manage an SHG/mandal. She also learnt about the new Agri-Practices. She coordinates between the SHG and other agencies, and also takes care of the savings. She feels that the mandal (SHG) has been instrumental in creating alternate sources of income as well as instilling a newfound confidence in the members.

10.CONCLUSION

The case of Valadar is a classic example of how strong institutions can enable a community to facilitate its own development. The existing formal institutions of Panchayat exhibited cohesion keeping aside their rivalry, to bring about changes in their immediate environment. This also facilitates easy withdrawal of the development agency since the villagers themselves can take up steps for improvement in livelihood. So much so that today the villagers are saving and lending amongst themselves through Micro Finance based activities.

ACF initially took up Wasteland Development so as to raise consciousness amongst the villagers regarding their Common Property Resources like Gauchar-land (Pasture). As was seen in this case not only Wasteland but Agriculture, Horticulture, Animal Husbandry Watershed Development took place in the village one after the other. The best part of the whole story is that how villagers are managing their Common Land and cultivating Horticultural and Fodder crops. Even during the Water Harvesting Project, villagers themselves directed the ACF staff towards the sites with Underground water aquifers from which maximum benefit will come about. Individual farmers are learning new ways and means to make improvements in their existing livelihoods. This area has the highest ratio of Horticultural crops today as compared to other villages in the Block. Practices like Horticulture and Drip Irrigation are increasingly gaining acceptance. Thus the farmers are increasingly becoming pragmatic and shifting to high-yielding Horticulture crops. Thus ACF has demonstrated that institution building is far more important than anything else while working with the communities.

ANNEXURE ONE

Cost-benefit analysis of different crops grown by the farmers							
Expenses	Ground-nut	Cotton	Wheat	Pulses	Pearl millet	Horti-cultural	Vegetable crops
Seeds/sapling	800	450	500	100	300	2500	300
Fertilizers/Manure	465	700	750	500	968	2500	1500
Pesticides	500	1200	0	0	0	0	1000
Irrigation	0	1000	1000	700	800	750	2000
Weed eradication	200	800	200	200	400	450	800
Ploughing	300	300	200	0	300	1100	260
Harvesting	600	2000	300	200	800	3500	3000
Transport	100	0	150	100	200	3250	2000
Total cost	2965	6450	3100	1800	3768	14050	10860
Production in kg	400	500	1000	400	1200	3000	3000
Rate in Rs /kg	15	20	7.5	12.5	5	15	8
Total revenue	6000	10000	7500	5000	6000	45000	24000
Net-profit	3035	3550	4400	3200	2232	31950	13140
Figures in Bigha (1 acre = 2.5 Bigha = 1600 SqM, 1 hectares = 6.25 Bigha). 1 Bigha = 16 guntha, 1 hectares = 100 Guntha, 1 guntha = 10* 10 SqM. Assumptions <ul style="list-style-type: none"> • In horticultural crop it is assumed that one Bigha holds 25 trees • Till the horticultural crops grow mature the farmer can cultivate other crops through mixed cropping. 							

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