



Progress Report

Harit Sankalp Gaia Project

A

**Final Report
June 2007 to June 2009**

**Submitted to
The GAIA Movement Trust**

**By
Humana People to People India**

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Final report for project 'Harit Sankalp'

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The Project at a glance

1	Name of the Project	Harit Sankalp (Green Action) Project, Alwar, Rajasthan
2	Operation area	10 villages of Behror Block in District Alwar
3	Project Leader in training	Satish Kumar Chhichholiya
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6	The Project idea and who the Project reaches	The idea of the Project is to turn around a cycle of environmental degradation in a rural community of Rajasthan from being out of balance with nature, to become a model of environmental sustainability. The Project is a campaign where 3,000 households in 10 villages will be mobilized to live up to demands to bring the environment into balance with nature and to ensure equilibrium. These parameters include demands within waste management, soil and water conservation, sanitation and wasteland development
7	The people at the Project	Project Leader - Satish Kumar Chhichholiya Outreach Workers - Ravi Yadav, Rajpal Yadav and Mahesh Chand Meena Development Instructors from TCGD India: Pardo and Vijanyan
8	The history in brief	The Project was started on the 1 st of June 2005 in Behror Block of Alwar District with the aim to create a model where people take charge of the local environment. The project duration was extended by 2 years from June 2007. The project has been running in partnership with The Gaia Movement Trust.
9	Partners in Development	The Gaia - Movement Trust Living Earth Green World Action

The project in numbers – July 2007 to June 2009

Activities	Total goal (2 year)	Achievement		
		1 st year	2 nd year	Total
Parameters for Households				
1. Households conducting 3 actions to improve the environment	2250	1131	848	1979
2. Households with systems to collect rainwater	2204	23	62	85
3. Households with systems to reuse wastewater for irrigation	1664	839	487	1326
4. Households with vermi-culture systems for organic waste	1966	504	365	869
5. Households with at least 5 trees	1080	3117	1145	4262
6. Households with kitchen gardens for vegetable production	1619	901	626	1527
7. Households with drip irrigation/ sprinkler systems in the kitchen gardens	2091	220	125	345
8. Households with toilet	1884	679	257	936
9. Households with smokeless kitchens	1787	933	381	1314
10. Farmers with model fields for sustainable farming on 0.25 hectares	1802	813	297	1110
11. No. of farmers practicing organic farming in some part of their land	2231	522	603	1125
12. households with good systems to separate animals from people	1405	1117	425	1542
Parameters for villages				
1. V villages where the panchayat (Village Council) actively supports the Harit Sankalp (Green Action)	10	10	10	10
2. Villages where drainage canals along with roads and plants such as trees and vetiver are used to reduce muddy areas in the rainy season	6	6	6	6
3. Villages with efficient waste systems and recycling of viable items	10	9	9	9
4. Villages where the areas under tree cover increases	7	7	7	7
5. Villages with beautiful common areas	9	9	9	9
6. Villages with sufficient supply of safe and regularly tested water	10	0	10	10
7. Villages with 50 hectares water catchments area preserved	10	3	6	6
8. Villages with systems around 5 wells to improve groundwater recharge	9	3	6	6
9. Villages with a Children's Forest for Future with 10,000 trees planted	10	0	10	10
10. Villages having a micro plan on environment	10	0	6	6

The project idea

The idea of the project was to turn around a cycle of environmental degradation in a rural community of Rajasthan from being out of balance with nature, to become a model of environmental sustainability. The project was a campaign where 3000 households in 10 villages should be mobilized to live up to demands to be in balance with nature and in equilibrium. These parameters included demands within waste management, soil and water conservation, sanitation and wasteland development.

Activities carried out – The 12 household parameters

1. Households conducting 3 actions to improve the environment

Goal: 2,250 - result 1,979

In the last quarter, April to June 2009, 191 families adopted three actions to improve the local environment. The actions included awareness about GAIA parameters, and implementation of 2 parameters in their house holds. The families adopted 2 of the 12 parameters during the action.

A total of 113 vermi culture units were established and 26 families adopted rooftop rain water harvesting system. Other activities taken up by the families during the action were 6 dry dug well recharge systems, 40 smokeless stoves and 12 toilets constructed.

The project organized presentation in schools and for farmers as a result farmers have shown keen interest in making rain water harvesting structures, soakage pits, model gardens and are attracted to adopt new farming techniques.

Awareness was created among the farmers and the woman about the different government schemes that are available, which could directly benefit them.

Comment: - We have reached 87.95% of the goal. There are a number of poor families who had problems with using money and time on participating and others who lack space for implementing the Gaia parameters.

2. Households with systems to collect rainwater

Goal: 2,204 – Result: 85

The project has mobilized 26 families to adopt house hold rain water harvesting in the last quarter. We had a big challenge to convince the families it would benefit them to invest in rainwater harvesting. The project had only funds for setting up examples so the families would have to invest their own money. But the 85 structures we managed to get implemented have had a big impact. So now lots of farmers are interested.

(The Gujjar community in Rajasthan disturbed the whole state for two months during their violent campaign for getting reservation as scheduled cast, which also delayed this activity because people were afraid to go out and the government offices were not working properly.)

Comment: - To establish a useful household rainwater harvesting structure a family needed to invest 5-7000/- IRS. But now the community is realizing that it is very important for them as the groundwater depletion continues and the monsoon has been irregular again this year. This has resulted in 2 village committees providing 10 Ha land for construction of 2 tanks, and 20 farmers in each village have agreed to adopt model gardens with use of water from the tanks.

3. Households with systems to reuse wastewater for irrigation

Goal: 1,664 – Result: 1,362

Reuse of wastewater for irrigation took off when the idea that the water was dirty and could not be used was proved incorrect.

Comment: - In the two year campaign we have achieved 80% of the goal, mostly due to the fact that many houses already have systems for collecting waste water, like soakage pits, and some families did not have space for making a kitchen garden.

4. Households with vermi-culture systems for organic waste

Goal: 1,966 – Result: 869

During the last quarter additional 113 farmers have established vermi-culture units and have also adopted other methods of organic farming, including deep cultivation, use of bio pesticides and vermicompost in some part of their land.

They are growing organic vegetables and are making an extra income from these crops.

Comments: - Here we have achieved 44.20 % of the goal.

One reason for not starting is, that organic farming results in reduced production for the first two years, which makes the farmer think twice before trying. Most farmers have problems with earning enough already and cannot afford to experiment. It takes some time to understand how excess use of chemical fertilizer leads to long term damage of the soil.

5. Households with at least 5 trees

Goal: 1,080 – Result: 4,262

The project surveyed different kinds of trees that can be planted in the villages for the benefit of people. The suitable identified trees included Ber (Green Berry), Balart (Eagle Morelos), Lemon, Papaya, Jatropha (Indian Lilac), Kane (Indian Oleander), Jamul (Jamb Fruit), Banyan and Papal (Ficus).

30 farmers have made nurseries for Jatropha and have planted the trees as fences.

In the last quarter the project mobilized 700 families and 1200 trees were planted in their households. Another 700 trees were planted in common areas, including schools and boundaries of big fields.

Comments:- There has been a very good adoption of this parameter and the goal is reached by 400%. It can in part be attributed to school presentations where very many students became interested. In addition, the project nursery has provided saplings free of cost to the

students. We also organized a good number of various tree species from the forest department.

6. Households with kitchen gardens for vegetable production

Goal: 1,619 – Result: 1,527

We achieved 94.31 %.

Comments:- First we developed a good demonstration garden in the project office and after that we selected 5 - 7 active farmers from each village and provided seed to them. These farmers were able to produce more vegetables than their neighbors, so models were developed for being replicated. Good support from a local seeds company helped the project in getting seeds free of cost so that saplings raised from them could be provided free of cost to the participants.

7. Households with drip irrigation/ sprinkler systems in the kitchen gardens

Goal: 2,091 – Result: 345

The farmers had many doubts about how it could be possible to save water during irrigation without damaging the crop. But through presentations and meetings the project mobilized some farmers to adopt drip and sprinkler systems for irrigation.

So in the last quarter 20 farmers adopted drip system and 45 farmers adopted sprinkler system.

Comments: - There was a misconception within the farming community that sprinkler irrigation could be used only on sandy soil. Moreover this parameter involved investments which many farmers could not afford although a lot of farmers were interested.

8. Households with toilet

Goal: 1,884 – Result: 936

In the two years we have achieved to have 936 families construct toilets, or 51% of the goal. Construction of a toilet in this area cost 5 – 7,000/- Rs, which villagers resisted to invest initially. The project could give 1,000 Rs in support to the poorest families.

Comments: - Our campaign has anyway had the impact that the community has realized that use of toilets are beneficial for health and thus are important, especially for women who often have to wait for darkness to come before they can go to the field for defecation. Thus most of the new houses being constructed have toilets attached.

9. Households with smokeless kitchens

Goal: 1,787 – Result: 1,314

The project has mobilized families to make smokeless stoves and has at the same time provided cement ventilation pipes to the poorest families as a support.

A total of 68 families have adopted smokeless kitchen during the last 3 months.

Comments: - 1,314 families, (74 % of the goal), now have a clean and smokeless environment in their kitchens and have also reduced consumption of wood for fuel. Rich people already have smokeless houses as they use LPG gas. But for the poor families the smokeless stove means that they are able to cook inside their houses without air pollution.

10. Farmers with model fields for sustainable farming on 0.25 hectares

Goal: 1,802 – Result: 1,110

Our goal was to mobilize 1,802 farmers and we achieved 1,110. The families have made model gardens for sustainable farming. We were supported by the Horticulture and Agriculture Departments. After some meetings with the Horticulture Department and the farmers it was agreed, that the department would give 75% of the establishment cost in subsidy, the farmers would contribute 25% and the Green Action Project should facilitate the initiative. Last year 84 farmers adopted the model garden and because of this we received even more support from the Horticulture Department. We organized trainings at the department and they provided us with tomato seeds for experiment. After using the seeds the farmers increased their production. In this way the Green Action Project involved many families to invest in their future and improve their income.

Comments :- The goal was not reached because farmers have very traditional ideas about their production. They are not used to look for new methods and resist new ideas. However, as the results of the first model gardens were good we managed to mobilize many farmers to try out the new methods and step by step we increased the number of families involved in our program.

11. No. of farmers practicing organic farming in some part of their land

Goal: 2,231 – Result: 1,125

Our goal was to help 2,231 farmers to start practicing organic farming in some part of their land through use of vermi culture and reduction in use of chemical fertilizer. When the project started farmers were not ready to adopt this activity because they lacked knowledge and they did not want to risk losing income by changing methods.

After some intervention by our Field Officers we managed to mobilize a few farmers to use the organic methods such as vermicompost, vermi wash, deep cultivation, green manure and crops rotation. We made sure that they would only use some part of their land, because this was an experiment, and if the results were satisfactorily the farmers could decide to implement organic farming on more land next year. In that experiment the results were actually low because it was the first time organic methods were used and the farmers earlier had used a lot of chemical fertilizers. But in spite of that many farmers began to understand the real meaning of creating a sustainable agriculture and why it would improve the soil health and their own health as well. So the experiment meant that many farmers were mobilized to participate in our activities because they started to understand the long term benefits.

Comments : - The total number of families was not reached because not all the households have agriculture land and the families with small plots did not want to risk any loss. The farmers that have more land can use some part of their land for experiments and can afford to wait 2-3 years for the results to show.

12. Households with good systems to separate animals from people

Goal: 1405 – Result: 1,542

Comments: - This parameter the project has achieved 110 %. We have mobilized people through animal husbandry trainings and presentations on why it was important to separate animals from human dwellings and how it could be done at a low cost.

OTHER ACTIVITIES

Farmer's clubs

Progressive farmers from the operational area have gained knowledge on the scopes of modern methods of farming and chose to get organized in farmers clubs to get maximum benefits.

The project has by now formed 24 Farmer's Clubs, 15 men's and 9 women's clubs, of which 4 have also opened a common bank account. The Farmers Clubs are receiving orientations about government schemes and are also saving money. The top 3 Farmers Clubs have a saving of \$ 4,200, \$ 3,400 and \$ 2,045 respectively. The farmers plan to use the money for paying their share of contribution to get government subsidised schemes and for exposure visits. The Farmer's Club in village Gunti plans to establish a soap factory from their saving.

Exposure visit for farmers

The project has organized 10 exposure visits for the farmers, including one from each village to visit the Farmer Training Centre in Neemrana. The objective of this visit was to demonstrate water efficient agriculture crops, low cost rainwater harvesting, waste water management, bio pesticides and cultivation of medicinal and aromatic plants.

15 farmers from Gunti and Gadoj visited the community rain water harvesting tank in Nangliya village and learned about water efficient crops.

In an exposure visit to the Horticulture Department in Alwar, 15 progressive farmers from Rewali, Kankarchjja and Gunti saw different models of low cost rainwater harvesting structures established at the centre for demonstration, besides a 10 acres pond dug in a wasteland to collect wastewater and rainwater. The pond can sustain irrigation to 20 acres of land in the neighbourhood where fruit trees along with intercropping of traditional crops is being done.

The farmers also witnessed different practices of organic farming and its use in horticulture and agriculture, including antibacterial net for nurseries, bio pesticides, vermi wash and vermi culture and how to produce them.

Activities carried out – The 10 village parameters

The goal was that these should be carried out in all the 10 villages.

1. Villages where the panchayat (Village Council) actively supports the Harit Sankalp (Green Action)

During the two years campaign the project has had a very good cooperation from the village leaders. They have supported our activities by calling meetings and helping to get government funds for our activities.

2. Villages where drainage canals along with roads and plants such as trees and vetiver are used to reduce muddy areas in the rainy season

With this parameter we have reached very good results in all the 10 villages. In 2005 none of the villages had draining systems. First we tried to solve the problem by constructing soakage pits and it helped to some extent. But at many locations it was necessary to construct proper drainage systems. As the village leaders realized that they could achieve help from the government to construct them, they have all cooperated in obtaining the funds and got the work done.

3. Villages with efficient waste systems and recycling of viable items

The project has worked hard to get waste systems to work. Now, some waste is used for compost and some is buried at locations where tanks have been dug for collection of waste. To get rid of plastic, metal and other solid waste we have invited waste collectors from the nearby town to collect it free of cost. Now they are coming regularly because the waste is collected at few places and is easy to collect. 9 out of the 10 villages now have a good system for recycling of waste.

4. Villages where the areas under tree cover increases

The project has succeeded to increase the tree cover in all the 10 villages. We have build up a good relationship with Government bodies such as the Horticulture Department, the Agriculture Department and the Forest Department. When we sent a letter to the Forest Department asking for trees as donations because we wanted to start this activity in the government schools, the forest department provided us a lot of different trees and we planted at several schools. The staff and students at the schools are involved and they are taking care of the trees.

Our youth club members have participated in the several tree planting actions. The majority of the farmers have adopted trees in their gardens and on their land as an income generating activity. The environment is becoming greener day by day with all trees that we have planted.

5. Villages with beautiful common areas

During the two year of campaign we have made sure that all the villages have a common beautiful area. In some villages we went to the temples and asked permission from the priests to develop their outdoor areas. Many people are coming to the temples to pray, so it is a very good way to reach more people. After making vermi culture, recycle pits, tree planting, toilets and smokeless chulas we have managed to reach people. Members from one of the Youth Clubs have collected money to buy 700 Ashoka trees. These were planted along the road and youth are taking care of them. We have developed one library per village with the purpose of providing useful information for improving knowledge in the villages. Subjects such as global warming and climate changes are known and are used to create a sustainable environment.

6. Villages with sufficient supply of safe and regularly tested water

All the villages have sufficient water supply from hand pumps and common water tanks and we have mobilized the villages to make sure that the drinking water is tested. Every half year we have had a campaign to test water.

Before we started the water testing, most people did not have any opinion about the quality of water. Now they understand that water is getting contaminated by outlet of water from factories, excess use of fertilizer in crops and dirty water seeping down into the wells. Now farmers are interested to get their water tested after the rainy session.

7. Villages with 50 hectares water catchments area preserved

The project has established rainwater harvesting structures in Gadoj and Gunti villages under a government scheme in the Horticulture Department. The structures have a catchments area of 100 Ha and have a dimension of 40 x 50 feet's and a depth of 15 feet's each.

10 Ha land were provided by the village councils for establishment of 20 model gardens by 20 farmers from each village who had agreed to maintain model gardens around the tanks with use of the collected water.

After the project has finished a 3rd tank has been approved.

8. Villages with systems around 5 wells to improve groundwater recharge

The project has assured that all villages have established water harvesting in connection with five dry dug wells in each village. This has been done under a government scheme. We mobilized the farmers that had dry dug wells, and the farmers received direct support with a considerable amount of money, between 2,000 Rs and 4,000 Rs each, for the construction. After having completed all the protocols, the farmers are now ready to harvest rain water and in this way get water back in their dry wells.

9. Villages with a Children's Forest for the Future with 10,000 trees planted

The project has organized several meetings with villagers to explain the importance of having a clean environment and why it is important to plant trees. First it was difficult to find places to plant so many trees, but finally we identify some waste land and we managed to plant 10,000 trees for a future forest. We have also planted many different types of trees in the model gardens where the government has given 75% subsidy to farmers to establish the gardens. The model gardens cover 40 ha, so we can say that we have succeeded in planting a forest for the children to benefit from in the future.

10. Villages having a micro plan on environment

All the 10 villages have a micro plan for the environment, and we have made sure that all the villages have documents with all the information. Often meetings have been organized to assure that villagers are taking care of the environment. During the meetings many things have been discussed, and solutions for problems have been found.

The Project has given responsibility to the Village Committees, the Farmer's Groups and the Youth Group to continue to take care of the environment.

Villagers are satisfied with our project and they apply their knowledge on their fields. Everybody has profited, but the most important thing is that people understand the importance of living in balance with nature and that our environment is much cleaner.

Effects of the projects activities

- The Horticulture Department, Alwar, is impressed with the implementation and has committed to extend all support to the project, which has also been shown by inviting farmers from the project area to participate in an exposure visit to Madhya Pradesh, accepting proposals to dig the 3 village ponds with 100 ha catchments area and support farmers to establish model gardens.
- The farmers have started developing interest in the government schemes and as a result more and more farmers are participating in the trainings to learn new methods of farming and adopting them
- Most of the families have understood the value of using vermicompost as fertilizer and are considering making a production unit themselves.
- The families have understood the value of making rainwater-harvesting structures and many of the new houses that are coming up have built in a water harvesting structure.

Conclusion

The families in the operational area have responded to the project intervention by adopting practices, which are in accordance with having a sustainable environment. There has been a mass awareness in the community with regard to some of the burning issues of the environment of which the worst is the rapidly depleting ground water table. The community has started to argue on the need to save water for future generations. This is a big success for the project as during the initial stage of the project implementation, there was resistance from the community towards acceptance of the dire consequences one would have to face as a result of the excessive exploitation of ground water and mass wastage of water. The attitudes of the respondents have changed. There has been an uprising in the community to save water, which is evident from the fact that after the rallies taken out in the village, the families have started to ensure that water taps are closed when they are not in use and that water is not wasted.

The overall results of the project from July 2005 to June 2009

Activities	Goals 4 years	Achievement				
		1 + 2	3	4	Total	%

Parameters for Households

1. Households conducting 3 actions to improve the environment	2250	0	1131	848	1979	88
2. Households with systems to collect rainwater	2250	46	23	62	131	6
3. Households with systems to reuse wastewater for irrigation	2250	586	839	487	1912	85
4. Households with vermi-culture systems for organic waste	2250	283	504	365	1152	51
5. Households with at least 5 trees	2250	1170	3117	1145	5432	241
6. Households with kitchen gardens for vegetable production	2250	631	901	626	2158	96
7. Households with drip irrigation/ sprinkler systems in the kitchen gardens	2250	159	220	125	504	22
8. Households with toilet	2250	366	679	257	1302	58
9. Households with smokeless kitchens	2250	463	933	381	1777	79
10. Farmers with model fields for sustainable farming on 0.25 hectares	2250	448	813	297	1558	69
11. No. of farmers practicing organic farming in some part of their land	2250	17	522	603	1142	51
12. households with good systems to separate animals from people	2250	845	1117	425	2387	106

Parameters for villages

1. V villages where the panchayat (Village Council) actively supports the Harit Sankalp	10	10	10	10	10	100
2. Villages where drainage canals along with roads and plants such as trees and vetiver are used to reduce muddy areas	10	4	10	10	10	100
3. Villages with efficient waste systems and recycling of viable items	10	0	9	9	9	90
4. Villages where the areas under tree cover increases	10	3	10	10	10	100
5. Villages with beautiful common areas	10	1	10	10	10	100
6. Villages with sufficient supply of safe and regularly tested water	10	10	0	10	10	100
7. Villages with 50 hectares water catchments area preserved	10	0	3	6	6	60
8. Villages with systems around 5 wells to improve groundwater recharge	10	1	3	6	6	60
9. Villages with a Children's Forest for Future with 10,000 trees planted	10	0	0	10	10	100
10. Villages having a micro plan on environment	10	0	0	6	6	60

The overall result of the project shows that 79% of the Family Parameters and 87% of the Village Parameters have been reached.

The project was also meant to be an experiment with engaging families and villages in improving the local environment by using easily understandable parameters to measure how the effect of the project was spreading.

In this regard we can say, that the Green Action Project in Behror, which was also our first project based on environmental actions, has been very successful. It has not only provided a fundamental change in the way the farmers participating in the project have opened their minds to understand the larger aspect of global warming and climate change and have realize how they can take charge of their local environment. It has also provided the basic experiences for Humana People to People India in regard to environmental problems and has paved the way for new projects where the experiences have been used in design of the project as well as in choosing parameters that suited the particular areas.

Other partnerships obtained on the basis of the Green Action project in Behror are:

The Challenge Program for Water and Food, with emphasize on water harvesting and water efficient food production, where 47 structures for ground water recharge in various manners were set up in 7 villages of Behror Block, Rajasthan, supported by IWMI.

Green Action in 5 neighboring villages sponsored by Concern India Foundation

Green Action with emphasize on promoting Jatropha plantation and use of biofuel as a clean fuel for cooking, running in 25 villages of Virat Nagar, Rajasthan, with support from World Bank and Toyota Motor Corporation

Green Action with emphasize on water efficient agricultural methods, running in 10 villages of Dausa, Rajasthan, supported by Toyota Motor Corporation.

The Green Post Tsunami Action project which dealt with supply of fresh water for drinking and agriculture by use of Rope pumps, introduction of new agricultural techniques such as System of Rice Intensification and demonstration of Ecosanitation in 60 villages of Tamil Nadu, supported by EU.

Green Action Neemrana, dealing with water harvesting, just started in 10 villages of Neemrana, Rajasthan, with support from SKOL Breweries.

We hereby take the opportunity to thank the GAIA-Movement Trust Living Earth Green World Action for your trust and support throughout the 4 years the project has been running.