

**Project Completion Report- 15 July, 2010 to 31<sup>st</sup> August, 2013**

**1 Operational frame (info)**

If the situation has changed dramatically, explanations are needed.

The Project *“Improving livelihood of Dalit community by soil and water conservation and promotion of collective sustainable agriculture in Drought prone region of South Bihar”* is being implemented in four districts of South Bihar where the land and water conditions have deteriorated to such an extent that the farmers are forced to give up farming on their land and opt to migrate to work as labour in other states for livelihood. The intervention largely focusing on marginalized Dalit community, who were earlier landless but have received land under Bhoodan movement and land reform acts after years of Struggle.

The Project promotes conservation of land and water resources in the degraded and marginalized zones of South Bihar by the process of people’s centred effort and governance. The emphasis is given to harvest rainwater for improving soil moisture and in-situ conservation of rain water. The Project activities entail integrated and sustainable approach for securing livelihood of the Dalits by construction of physical structures for irrigation and reduce run-off losses along with promoting collective sustainable agriculture practices through community participation, institution building and trainings.

Local and traditional knowledge is integrated in planning, execution and evaluation of the activities keeping in mind the major thrust of the project to ‘revive the lost indigenous knowledge’.

The Project duration is of three years from July 2010. In this three years effort are being made to capacitate the community for management and governance for regulated use of the resource by the community members along with physical interventions. The community members are mobilised to take over the ownership and responsibility of the resources for their collective and judicious use. The community is organized into various functional committees and user groups.

Project Areas					
Sr. No.	Partner Organisation	District	Block	Panchayat	Villages
1	NCVK, Nawadah	Nawadah	Nawadah	Bhadokra	Paharpur
				Samay	Stalin Nagar
2	GSS, Islampur	Nalanda	Islampur	Chandhari	Kewali (East)
					Kewali



					(West)
					Kewali (South)
3	Prayas, Gaya	Gaya	Amas	Amas	Bhoopnagar
			Bankey Bazar	Bankey Bazar	Duari
4	Dr.BRAKEVS, Buxar	Buxar	Itarhi	Unwas	Unwas
				Jaipur	Jaipur
				Jaipur	Saanth

The project areas in the four districts of south Bihar are drought prone with complete lack of irrigation infrastructure. Rain fed dry land farming is common characteristic of all the areas in the project. This is characterized by low input based cropping system with monoculture of paddy which often fails due to vagaries of monsoon. The unproductive nature of soil, part of which is also unlevelled infertile land is in state of erosion due to unchecked run-off water which can be otherwise conserved and recycled for use as protective irrigation. This has also impacted adversely to the cropping system. The soil is gradually and increasingly losing its fertility as the requisite measures to improve the status of soil had not been taken. We are adopting a package of practice over a period of three years basing on the principle of rain water harvesting, organic farming, and integrated nutrient supply system. In most of the cases land at present is fragmented in to small plots and we are trying to make it successful by mobilising farmers to practice cooperative farming. This project is working in the direction to pool the resources of land and labour from the people in to single unit where large scale collective farming can be adopted by the community.

**2 Project (info)**

Description of implementation of the project according to planification and eventual modifications during the implementation.

**Partner selection and Village selection**

There are four NGO partners selected for this project to work in four most drought-prone districts of Bihar e.g Buxar, Gaya, Nawadah and Nalanda and accordingly NGO partners have started implementing the activities in their respective areas.

Following criteria were applied in village selection:-

1. Socially & economically deprived community
2. Availability of donated land to the dalit families
3. Inaccessibility – Infrastructure, no market linkage
4. High migration rate ( Seasonal & throughout the year))



5. Lack of awareness about Government schemes
6. Lack of leadership in the community
7. Poor health status, especially women & children

### **Project area**

<i><b>District</b></i>	<i><b>Block</b></i>	<i><b>Villages</b></i>
Nawadah	Nawadah	Stalinagar and Paharpur
Nalanda	Islampur	Kewali east, Kewali south, Kewali west
Gaya	Umas and Bankey Bazar	Bhoopnager and Duari
Buxar	Itari	Jaipur, Unwas and Saanth

### **Overall Strategy**

The three domains on which the Project viability and sustainability depends are-

- Collective social action
- Economic security
- Land and water conservation/regulation

The Project in its first six months have executed to ensure inter-linkage between the above domains of the Project. All the project activities were directed to strengthen a particular domain and its relation with the others. The effort is continuing to establish a strong linkage between the three domains for the sustainability, so that after the project completion all the three domains synergies for community development and to facilitate access to sustainable livelihood opportunities by the Dalit poor. The VDCs (Village Development Committee) are expected to act as vehicle of change assigned with the multiple responsibilities of Social regulation and social integrity. This is being taken up in the first year while working with the communities – it was noticed that they are becoming able to formulate their aims and set their priorities regarding social issues and collective action. The strategy also incorporates establishing linkages with the Agriculture institutions/functionaries and other stakeholders. This is to sensitize and capacitate the service providers. Linkages with various stakeholders is now acting as pressurizing instrument for the pro Dalit policy formulation and effective implementation of Government agriculture schemes/yojanas for the Dalit community.

The VDCs have been formed and being strengthen to take the responsibility of resource management even after the completion of project.



As per the plan creation of a community fund and grain bank managed by the (VDC) has been established. The contribution is being made by all stakeholders in cash/kind. And, it is also found that community people have started using this fund for some common purposes. The VDCs are being continuously capacitated to manage the resources and book keepings.

## **2.1 Project objectives and modifications (info)**

In the case without modification: recall shortly the overall objective (goal) of the project and the specific objectives (purpose).

In the case with modification: if there have been modifications announced to Swiss Solidarity and accepted by them (between the time of approval and the sending of reports) they have to be mentioned here.

### **GOAL**

Empowered Dalit Community lives inclusive and democratic institutions through effective and sustainable utilization of existing land and other natural resources

### **PURPOSE**

Improved socio-economic status of Dalit community by collective action in land development and agriculture with gender equity and social targeting (priority groups).

## **2.2 Description of the project ( Activities and results achieved)**

### **2.2.1. Bihar Resource Centre level activities**

#### **A) Institutional development / Organizational Strengthening**

- a) Two days orientation session was organized on 1<sup>st</sup> & 2<sup>nd</sup> August, 2010 at BRC-CWS office and all project staffs including secretary / chief functionaries of the partner organizations participated in the meeting. The very purpose of the orientation session was to familiarize the different actors about: the overall frame of the project, strategy to be adopted for each activity, LFA: focus on what we need to achieve, indicators and action plan preparation, role & responsibilities of each staffs.
- b) The regular orientation of the field staff/ responsible staff on process documentation and MIS has also been done. They are now able to report systematically in the format provided by BRC-CWS.
- c) Financial management orientation has also been conducted at BRC-CWS office on 17<sup>th</sup> & 18<sup>th</sup> November, 2010 and the accountants of all partner participated in the training. The following topics covered under the training programme:



- Training on financial requirement under the Collective Farming and Dalit Livelihood project and reporting format
- Time line for financial reporting
- Discussion on narrative reporting quarterly/ half yearly/annual
- Format and sequence of reporting
- Discussion on objectives, expected outcomes and achievements
- Visibility strategies including use of banners, display of photographs, case studies etc.
- Time line for reporting (Reporting periods)
- Current status of project implementation
- Future plan of action and time plan
- Staffs status and their responsibilities

The training programme was quite useful for them and they have started reporting in the prescribed format. We are also in regular touch with them to clarify their doubts related to accounting and financial management.

- d) Half yearly review meeting with all partners is also being organised on regular basis. The secretary of the organization along with coordinator and field motivators participate in the meetings. It was basically organised to evaluate the progress in implementation of programme/activities in last six months. The processes, problems and good practices by the implementing organization shared in details.

There were some deviation observed during the field monitoring visits was also discussed and suggested to take the corrective measures in that regard. The partners were suggested to take the proper advice before implementing any engineering work. Similarly they were also suggested to concentrate more and more on community strengthening and ensure their participation in all activities.

- e) Two day partner level review meeting with all partners is also being organised at regular intervals. In the review meeting, all the partners along with their coordinator and field motivators participated. All participants visited the field of host partner on the very first day of meeting and on second day it was a critical evaluation of progress and presentation by each partner of their own progress. It was basically organised for cross learning for all partners. There were suggestions invited for better implementation as well as replication of best practices by the other partner. This practice helped the partners to understand and learn from each other's mistakes and inspiration for replication of good things. The review meeting is being organised on rotation basis at each partner's field area. The next review meeting is planned to be organised at Nawadah.

**f) Exposure Visit to Watershed Area-**

Two days exposure visit of the partners' organization was conducted on 11<sup>th</sup> & 12<sup>th</sup> July, 2012. The main purpose of the activity was to give exposure of successful watershed programme to the partner organization and get learning from successful examples. One representative from each partner organization has participated in the exposure visit.

We have gone to village Auradih which is part of Tyma watershed area in Jharkhand. Watershed committee has welcomed us and some formal discussion took place on what and how has been done. After that we visited the different structures of the watershed along with committee members. They were giving description of all the activities which has been done in the village. We have seen different structures which are made for soil and water conservation.

We visited the Tyma watershed area which is developed by the Pradan (An NGO) with the help of local community. The project was funded by NABARD. The whole watershed area is of 1016 hectares which is distributed in 4 villages. Whole activity has been done with community participation. A watershed committee of villagers is formed in which participation of all villages is given.

Tyma is well known for 5 percent rain water harvesting structures, series of check dams, 40 x 30 ft levelled plots, mango orchards, Teak plantations, Tassar rearing, drip irrigation, multiple cropping, people's participation and cooperative farming through watershed approach in Gola block of Ramgarh district in Jharkhand. A decade back TYMA area was poverty ridden, single cropped, drought like situation, migration to near by towns for employment opportunities, forest dependence for livelihood.

Transformation from waterless to water rich condition took place in the span of 8 years between 2000 to 2008 by interventions of watershed approach sponsored by NABARD, facilitated by NGO- PRADAN ( Professional Assistance for Development Action ) and implemented by people themselves in 4 villages of Auradih, Sangrampur, Hulu, and Sarlakala. The name Tyma is a small riverlet of the catchment area of main river Bhairavi and this river finally joins Damodar river and it is called river of sorrow because of severity in causing erodability and ruthlessness to carry top soil.

Tyma is situated at a distance of 9 km from Gola block in Ramgarh district in Jharkhand state. TYMA watershed consists of total gross, area of 1016 ha having 35 percent of forestland, 33 percent net sown area and 21 percent of cultivable wasteland with undulated surface. The watershed has 632 households including 61 percent of tribal population and 64 percent families under BPL. Family with food security all round the year was only 33 percent. Rest of the families were depended on forest for livelihood viz: fodder, fruits, fuel wood and NTFP. Majority of the women used to cut the trees in nearby forest and carry through head load to sell the fuel wood in the block head quarter for living. Most villagers migrated to distant areas in search of jobs, leaving behind the old and disabled to fend for themselves. Mono cropping is prevailed in this area. The above facts formed the baseline of the area in year 2000.



The watershed project was started in 2000. Capacity Building and Training to various stakeholders was under taken in that year. Baseline Survey, Detailed Project Report preparation etc. was started in 2001. Actual implementation phase began in 2002 and was completed in 2008. The total budgetary outlay was of Rs 80 lakh by which NABARDs assistance was Rs: 62.64 lakh while people's contribution was Rs: 6.79 lakh and Loan from Bank was Rs: 10.57 lakh.

The following structures are constructed in the Tayma Watershed area:-

1. Plantation- Plantation of different trees like sheesham, Sagwan etc, is done on the top of the mountains and as its slope is more than 30 %.
2. 5 % model- The 5 % structures are smaller water retention structures each of which measured approximately 5 % of the land size and the size adopted was 5 X 7X 3 feet (L-B-H). These structures are excavated on the top most corner of the already terraced farms. They serve the purpose of collection and storing of water apart from ensuring in-situ moisture level of the plot. The earths excavated from these plots were used in stabilizing the already existing bunds. This soil and water conservation technique was introduced with a view to provide support irrigation to standing paddy crops during periods of stress. This intervention is critical and helped saved crops for most of the farmers, thereby playing a vital role in their livelihood.
3. 30-40 model- In the **Uplands**, *water conservation treatment to reduce the run off velocity* that is described as the 30: 40 models. *30 feet* bunds were built *along the slope*, and *40 ft* bunds were built *across the slope* thus ensuring water velocity was reduced. The area that was dug out to provide mud for the bunds became a water reservoir. Soil erosion was thus reduced, and moisture content of the soil increased.
4. Trenches- Trenches are made along the contour or along a uniform level. These trenches break the slope lengths; reduce the velocity of surface runoff.
5. Earthen Dam- Earthen check-dams, designed on the basis of engineering principles, are constructed for creating water reservoirs and for reducing the runoff flow velocity. Cost is quite low. They are useful for the surface water storage structures as well as improving the groundwater.
6. Farm Bunding- Bund is formed along the field. Bund helps in soil and water conservation.
7. Seepage Tank- Many rivulets (*Nala*) in the project area, damage the fields severely during rainy season. But these can be used for storage of water also by deepening the *nala* at various places. These are also useful in well recharging. These ponds are used many times, as after being used by the farmers; these again get filled



with water due to recharging. 11 seepage tank is constructed in the Tayma Watershed area.

8. Lift Irrigation- Lift irrigation is installed in the wells by the SHGs and they are cultivating vegetable through the irrigation from these lift irrigations.

The whole approach is ridge to valley approach. On the ridge area they have done plantation, construct trenches, 30-40 model and 5 % model is constructed and in the valley area seepage tank, 5 % model, horticulture, farm bund and earthen dam are constructed.

Watershed Structures whether Check Dams, ponds, 5 percent water harvesting structures, 30 by 40 ft levelled plots, open wells, bundings and all Water bodies as well as biodiversity production systems has to be regularly protected, maintained and managed to get maximum usefructs benefits. We have learned several things from these visits and thankful to Pradan and villagers specially Ganesh Manjhi(Secretary of Tayma Watershed Committee), Jaydhan Murmu ( President of Tayma Watershed Committee), Lukshu Hembrom and Bahadur Tanti.

On the second day, we have visited Peterwar Rural Poultry Self supporting Co-operative Committee Ltd. The CEO of the Co-operative Dr. Deepak Kumar had given brief genesis and the history of this co-operative.

The Co-operative is started by the Pradan. Its coverage area is 24 villages having 707 members from SHGs. Average turnover is 1 crore rs per month and 100 quintal poultry per month. This year target is to reach 20 crores.

Then we have visited some of the villages and met with the women who are doing poultry. They have shared their experience with us. The women also shared about their SHGs and their future plan regarding the co-operative. Also the women said that how this co-operative has changed their life. At the end we have visited the Hatchery and feed mill. Thus the exposure visit was ended with thanks note to Dr. Deepak Kumar.

**g) Internal Evaluation:**

**Date: 5<sup>th</sup> February to 12 February, 2013**

**Project Area/Villages:** Nalanda (3), Nawadah (2), Gaya (2) and Buxar (3)

**Evaluation Team:**

1. Mr. L. V. Prasad (Theme Director-Livelihood, CO-CWS)
2. Mr. Ajay Kumar Singh (State Director-BRC-CWS)
3. Mr. Kavindra Kumar Pandey (Sr. Programme Officer-Technical, BRC-CWS)
4. Mr. Kapileshwar Ram (President, Dalit Adhikar Manch)
5. Ms. Rinku Devi (Treasurer, Dalit Adhikar Manch)





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**Outcomes of the interventions and Recommendations:**

Initiatives taken up in the project are showing positive results, and indicating that the results are likely to be sustainable and the kinds of initiatives taken up have scope for adoption and replication.

It is clear that significant efforts have gone into the work by the target families and implementing organisations. Continuous support and guidance from CWS has had considerable impact on the project and the learning of the partners. The relentless pursuit of staff responsible for implementation is visible.

It is quite important to note that most partners are either new or had minimum experience on implementing these kind of activities. Hence sincerity to learn and dedication to implement the project is obvious. However one or two organisations need to keep pace with the rest.

It is also important to note that the project was initiated with communities who have been by and large landless, a few of them even nomadic, illiterate, with limited capital, with no or minimum control and access over local resource and minimum political power in the village. Hence, against such background, the results achieved so far is remarkable and the entire effort is on the path to become a model intervention.

**Significant achievements:**

1. A high build up in confidence levels of community, including women to take up community level interventions and activities at family level and community level to improve livelihoods.
2. Increased confidence levels and belief have lead to positive and good contributions on community level initiatives/activities, which may be difficult even in better educated and economically stronger communities.
3. A high level of ownership on community resources is demonstrated, and the level of unity and management skills exhibited to manage common resources and community initiatives is appreciable.
4. Women have shown remarkable progress to manage self-help activities in the village. Their confidence level, as result of positive achievements and gains, has boosted and their self-esteem has also improved. A clear change in economic conditions at family level is clearly perceived and appreciated by women.
5. There seems to be significant reduction in child labour and many children, including girls in the targeted villages have joined back schools.
6. Forced migration in search of livelihoods has drastically come down in most of the targeted villages.
7. There are visible signs that leadership at community level is increasing and unity at village level is also good and strong. Obviously impact of the interventions through this project has paid results on this aspect.
8. Committed efforts to get homestead lands, and receipt of Bhoodan land and other government lands for agriculture to Dalit families has paid result and is visible. The efforts must continue to make it available to all Dalit families.



It is clear that various activities taken up in this project have contributed to socio-economic growth of the village. Results of most interventions can be rated from good to excellent. As a result, the enthusiasm levels of communities are high across the villages.

It is worth to be noted that most of the actions are interconnected and have complemented each other for positive gains.

**Suggestions:**

Since the nature of work taken up is vast and filled with struggle, despite the remarkable results, there are a few suggestions that are essential to sustain the positive efforts taken up in the project area. While some facts could have been missed out, due to limitations of time to spend with community by the evaluation team, the present effort is only to provide major suggestions that emerged out during the internal evaluation:

1. VDCs should be further strengthened to take up developmental and governance level initiatives at village level. Where there are two or more hamlets, care should be taken to ensure that there is equitable participation and process of dealing with issues and sharing benefits. While the overall improvement in participation of women, with significant gain in knowledge levels, is enormous, their participation in VDC in few villages has to pick up with clear articulation of roles and responsibilities.
2. In one or two villages, rate of interest against money lent to members is around 5%. While the decision has been taken at the group level, they should be explained on the reasons and benefits of limiting interest levels to 2% or less. Further, since there seems to be good savings in a few villages, an assessment is necessary to identify and prioritise needs for taking money so that there is better and effective use of savings. This exercise should be taken up at community level so that community understands and appreciates the process. However these should be initially left at the level of suggestions to the groups and should be slowly incorporated in the groups' byelaws.
3. Several and united efforts have gone into providing land entitlements, the efforts should continue to complete the process for the remaining individuals.
4. Benefit sharing on common activities is a very difficult task, though it appears easy at the periphery. Special efforts are necessary to identify the various inputs and contributions going into the activity by the community and also the sacrifices made, such that equitable justice is ensured to all for benefit sharing and are all reaching to the maximum extent. A special component to study, understand and implement on this may be essential to establish the process in the extend activities to be taken up.
5. So far additional income generation activities through goat and duck distribution provided good results in almost all villages. The distribution process and benefit sharing in all project villages is also quite encouraging. However experiences in many places have been otherwise. Hence constant monitoring and support is necessary. In the second component, tie ups with veterinary departments and medical inspections and support may be useful to ensure that the activity runs smoothly and effectively.
6. Efforts on water conservation and management have proved to be highly beneficial. The contributed quite well to the promotion of agriculture, fish cultivation and for



domestic purpose. In few cases, farmers also reported that cattle were accessing water from such water structures. In the extend phase, efforts should be taken up to ensure that water sources, particularly ponds are constructed in such a way that they are accessible to livestock in the village. Further if necessary fresh sources should be made available to livestock as regular availability of fresh water to cattle and goats will keep them healthy and productive.

7. While vermin-compost has proved to be useful, it is essential to promote more practices to provide organic manure for better results. In this regards, training on more methods like 'Panchagavya', 'Jeevamrutam' green manure etc are important.
8. While the fields, where interventions were taken up, were noted to be healthy and pest free, at some point it is essential to equip the community with the knowledge and techniques of producing bio-pesticides. Hence this component may also be necessary and taken up in the extended phase.
9. While good efforts have gone into promotion of grain banks, further strengthening will help community. Grain bank management, distribution and record maintenance should be taken up for the benefit of community.
10. To gain overall command and control on farming, it is essential that farmers require command over seed management too, in addition to other inputs like organic manures and pesticides i.e., in terms of seed availability and use. Hence the next phase should focus on establishing strong seed bank systems, while using traditional seeds in the seed banks.
11. It is quite common that farmers over a period of time get attracted to commercial crops in lure of higher returns (due to wrong exposure from various sources and false beliefs). Constant education on the need and importance to keep significant levels of land always under food crops is essential (as landholding size is small). Hence proactive role through various educative activity and demonstrations in this regard may be essential.
12. The stronger focus should be given on right to land for Dalit community. Networking may also be done with like minded organisations advocating for right to land for Dalit.
13. Land development and livelihood should be the priority in the next phase and fund through MGNREGA may also be mobilised for the same.
14. Advocacy efforts must also be focused in extend phase to replicate the best practices emerging from the interventions in other regions, as well as at district and state level advocacy on land right to Dalit should be done with proper planning and efforts.
15. Organisational development trainings and orientation of partners should be the focus in the beginning of the phase.

## OUTPUT I

- ❖ **Dalit community is organised with focus on priority groups and women, which is involved directly in the program interventions.**

### A. Formation of Village Development Committee (VDC)



The formation of village level institutions such as VDCs (Village Development Committees), formation and strengthening of Self-help Groups (SHGs), Core Committees and User's Group has been done properly and are functioning reasonably well.

In all 10 villages VDCs has been formed with its core committees to implement the collective decisions taken by the VDCs. Gender balance has also been tried to be maintained at its optimum level

and it is in 40/60 ratio at almost all villages. Inclusion of disadvantaged groups such as single women, widows as well as physically challenged people has also been ensured.

Usually, VDCs meeting is being organised on monthly basis but in case of urgency it may be convened twice or thrice in a month.

The villagers collectively decided and implemented all activities and ensured fair participation from all groups. Monitoring of the programme as well as selection of beneficiaries has also been taken up by the community. The monitoring of engineering components has also been done by the community and payment made to them accordingly.

Apart from this the Panchayat representatives are also being involved on regular basis in the meetings

and they are oriented regarding collective management and governance of resources and sustainable agriculture aspects. With this effort VDC members are able to mobilize government funds for construction of vermin-compost pits in the project villages and have mobilized fund for construction of pond and land leveling through MGNREGS (Mahatma Gandhi National Rural Employment Guarantee Scheme).



Village fund has also been created by community in almost all project villages and members are regularly saving money on monthly basis. Motivators and the coordinator mobilised the community to maintain village funds which can be used during crisis periods as well as this fund may also help to mitigate their other problems. Community started saving money

through village funds. Bye Laws has also been prepared for the same and community is accordingly depositing money into the funds. There are instances that community has used this money for collective farming as well as their individual agriculture purposes. In Gaya the community has provided loans to the members for purchasing goats, for those who couldn't be accommodated in the goat distribution process. Similarly they have also used this money for fish cultivation and have earned good profit approximately Rs. 25,000 out of it. In other villages too the practice is being continuing accordingly.



Collection of food grains for Grain Bank. Buxar

The variation in the amount of savings as mentioned in the table is only because of delay in starting village fund activity in some villages. In case of Nawadah it was difficult for the community to arrange money in the beginning for the village funds as there were continuous droughts in the region and people were not in a position to save.

The Status of Village Funds is as follows:

<b>Village Fund (Gram Kosh) Details</b>	
Partner Organisation	Total Fund (In Rs.)
NCVK, Nawadah	1700
GSS, Nalanda	23500
PGVS, Gaya	71430
DrBRAKEVS, Buxar	72480
<b>Total</b>	<b>169110/-</b>

The status of Grain Bank functioning in villages is also given below:

<b>Grain Bank Details</b>	
Partner Organisation	Total Grains (In Quintal)
NCVK, Nawadah	1.76
GSS, Nalanda	3.8
PGVS, Gaya	18.38
DrBRAKEVS, Buxar	9.40
<b>Total</b>	<b>33.34</b>

The details of VDC and Core Committees are given below:

Sr. No.	District	Name of village	Member in VDC	Member in core committee		
				Female	Male	Total
1	Nawadah	Paharpur	69	5	6	11
2		Stalin Nagar	61	5	6	11
3	Nalanda	Kewali (west)	115	4	5	9
4		Kewali (east)	25	3	4	7
5		Kewali (south)	85	3	4	7
6	Gaya	Bhoopnagar	40	3	6	9
7		Duari	40	4	5	9
8	Buxar	Unwas	63	5	8	13
9		Saanth	79	5	10	15
10		Jaipur	69	4	8	12
<b>Total</b>			<b>646</b>	<b>41</b>	<b>62</b>	<b>103</b>

Apart from this the Panchayat representatives are also being involved on regular basis in the meetings and they are oriented regarding collective management and governance of resources and sustainable agriculture aspects. With this effort partner NGOs are able to mobilize government funds for construction of vermin-compost pits in the project villages (in Gaya & Nalanda districts) and have mobilized one pond in Bhoopnagar (Gaya). The vermin-compost pit has also been mobilized in other project villages in Nawadah and Buxar. The community people are regularly being encouraged to adopt the environmentally safe/secure agricultural practices.

**B. Strengthening/ formation of women Self Help Groups**

New Self Help Groups have been formed and existing SHGs as well were strengthened in all villages. There are a total of 40 SHGs functioning in 10 villages. All SHGs have their by-laws in place and organise meetings regularly. They have also fixed the contribution amount for each members and money is collected on regular basis. Contribution amount varies from Rs. 20 to Rs. 50 depending on the group. Most of SHGs are also practicing inter loaning among the members and providing loan on interest rate of Rs. 2 / per Rs. 100 on monthly basis. Outsiders are supposed to pay interest rate at Rs. 3/- on Rs. 100/month. In few villages

it was also observed that SHGs are taking Rs 5/- on Rs. 100/- month. This is according to the bye laws decided by the group.

Each SHG has 12 to 20 members depending on the groups and the villagers present in the village. All groups have elected President, Secretary and Treasurer. Meeting register and other related documents are regularly maintained by them. They are also oriented about the ongoing project supported by Caritas Swiss and are encouraged to participate in all activities being carried on in their respective villages. The two days capacity building training has also been organised for executive members (President, Secretary and Treasurer).

SHG's have helped most of the villagers come out of the clutches of moneylenders who were charging high interest rates, sometimes even up to 20% per month. This has also helped to raise the confidence levels of the community, particularly women. Women in meeting have directly attributed their increase in confidence level to savings and loaning from their SHGs and the inputs obtained through interactions in the SHG and VDC meetings. Women are able to invest more money for agriculture and other income generating activities. Strong SHG has also helped raise loans from government and it is benefitting community.

At presently Jeevika (NRLM, National Rural Livelihood Mission) is being in the process of formation in these districts and as soon as it becomes functional the SHGs would be linked with the same to get government facilities. Recently it is being established in all districts and may start operating soon.

Following table presents the status of SHGs functioning in each project villages:

Details of SHGs				
Sr. No.	Partner Organisation	Village	No. of SHG groups Strengthened	Total Savings (In Rs.)
1	NCVK, Nawadah	Paharpur	3	1,45,512/-
		Stalin Nagar	4	
2	GSS, Islampur	Kewali (East)	2	1,23,440/-
		Kewali (West)	3	
		Kewali (South)	3	
3	Prayas, Gaya	Bhoopnagar	3	54920/-
		Duari	4	
4	Dr.BRAKEVS, Buxar	Unwas	10	225510/-
		Jaipur	4	
		Saanth	4	
Total			40	5,49,382/-





### C. Formation of Users' groups

The users' groups have also been formed and they are regular participant of VDC meeting. The various users groups on the basis of their common interest have been formed and list of beneficiaries has also been prepared. They were also oriented that selection of final beneficiaries will be done on priority basis keeping in mind the vulnerability of the beneficiary based on baseline survey and VDC meetings. Presently all groups are functional and actively participating all village level activities.

There are following users' group:

1. Diesel Pump set User group
2. Goat Beneficiary User Group
3. Duck Beneficiary User Group
4. Kitchen Garden Beneficiary User Group
5. Vermin-compost Pit Beneficiary User Group
6. Pond/Ahar- Pyne User Group
7. Lift irrigation user group
8. Check Dam users group

### D. Visualizing priority Groups

The priority groups are being identified by the community with the help of field staffs. Various meetings have been conducted at village level to make people aware about the need of priority groups. Villagers are given responsibility to decide the priority group through their VDC meeting on the basis of given guidelines in which single women/widow and physically challenged are given priority. The base line data/ information have also been referred for the purpose. The district wise details have been given below:

<b>Details of Priority Groups</b>		
<b>District</b>	<b>Widow/Single women</b>	<b>Disabled</b>
Nawadah	30	22
Nalanda	21	8
Gaya	17	13
Buxar	29	7
Total	97	50

## E. Capacity Building Training

Capacity building of VDC members has been organised at village level to orient the members regarding the project and its implementation processes. They are also oriented regarding rules and regulation of VDC and its core committees. The process of documentation has also been made clear in consecutive meetings by field motivators.

Democratic and participatory processes are being promoted among the VDC members. The list of users groups are the result of this democratic processes.

## F. Capacity building of SHGs leaders-

Two days non-residential training has been organised by all partners for SHG members (President, Secretary and Treasurer). It was a combined training for all SHGs in respective districts. The major content covered under this training was as follows:

- Origin of SHG
- Need and process of formation of SHG
- Characteristics of good SHG
- Roles and responsibility of members
- Documentation (saving register, loan register, meeting register etc.)
- Benefits of SHGs and various government schemes
- Account opening and bank linkages
- Process of bank linkages
- Grading and sanction of loans



SHG Training, Kewali, Nalanda

At the same time NGO field worker also support the community/ SHG for proper maintenance of the records on day to day basis, linkages with banks, loan repayment , fund mobilization with the community, interest rate fixing etc.

## Output indicators

- VDCs formed in all villages are oriented on the project objectives and functioning in well manner.
- Bye laws are also in place for all VDCs in the villages.
- There are 40 SHG groups functioning in all project villages. All together they have saved Rs. 5,49,382/- and inter loaning within themselves. Presently Jeevika (under NRLM) is being established in all districts and once it becomes functional all SHGs would be linked with the same to get the benefits of various government schemes.
- The village fund and grain bank have also been established in all project areas and there are Rs. 169110/- have been deposited and 33.34 quintal grains have been collected. The village fund is being used for common purposes and grain is being collected for unforeseen circumstances as well as supporting people during dire need for the same.
- Farmers have been oriented and 187 are practicing collective farming in different groups (Nawadah-15, Gaya -60, and Buxar-22 and Nalanda-90).
- Community participation including the priority groups and women has been ensured in all meetings and decision makings. The ratio of participation 40-60% has been ensured.

## OUTPUT – II

- ❖ **Degraded land distributed to Dalit families is developed by soil & water conservation & development techniques.**

## ENGINEERING INTERVENTION

### A) Soil & Water Conservation measures

#### a. *Pond Excavation and renovation*

Eight new ponds have been excavated and two have been renovated. Apart from this, one new pond has been mobilised from the government through MGNREGS in Gaya district.

**Nalanda:** There are 4 new farm ponds with approximate dimension of 50ftx45ftx9ft has been constructed in Kewali (South, East & West) villages. Pond has sufficient catchment area as well



as sufficient storage capacity. The ponds have a capacity to irrigate 40 acres of land. It has an inlet to regulate inflow and an outlet to discharge excess water. The pond is surrounded by a small bund, which prevents erosion on the banks of the pond. Presently community is using it to irrigate 12 acres of Paddy crop. Out of that they have received 214 quintal of paddy which is equivalent to Rs. 2, 24, 700/- at present government rate for paddy. Apart from crop cultivation, ponds are also used for domestic purpose, such as bathing, cleaning of clothes etc. The ponds are helping to conserve rainwater by improving percolation, thus improve groundwater recharge also. This, reportedly, has resulted in a general rise of the groundwater level by almost 1 m. This provides buffer for unmanaged terrestrial habitat around ponds and in upland areas for 100 feet or sometimes more than that. The farm pond is managed by community and its user groups are properly maintaining the same. Two ponds have also been used for fisheries and the community has dropped 1100 fish seedlings in these ponds. The overall investment is Rs. 5500 for seeds and other expenditures are Rs. 6000. The expected production of fish is supposed to be 900 pieces of approximately 500 grams/fish. The market rate for 1 kg fish is Rs. 80/- and the profit will be around Rs. 36,000/-, the net profit will be around Rs. 24,500/-.

Thus the farm ponds have substantially supported the village economy and per capita income levels have also increased for the members of the community. An appreciable point in this and other villages of intervention is that the villagers have taken up cultivation as well as fisheries collectively.

**Nawadah:** In Paharpur village, the village pond has traditionally played an important role for irrigation, drinking and domestic use. Its dimension is 602ft x70ftx6ft. It has sufficient catchment area. De-silting was taken up and bund has been strengthened. Outlet at three places and inlet at 2 places had been provided in the pond.

As a result of the community effort, the renovated pond under this project has helped to generate an



additional irrigation potential of about 25 acres and for fish production and as well helps water conservation. Community participation and self-supporting systems for sustainable management of water bodies are covered by the programme. Environmental benefits, in addition to irrigation benefits are also gained through improved water use from the renovated pond.

Renovated ponds have capacity to provide critical irrigation to paddy crops in about 18 acres of land. In addition, it is also used for fish farming by women Self Help Groups (SHGs). Indirect benefit is reported and noticed for about 13 acres of land in the form of protection from soil erosion, the



intensity of which has reduced after the renovation of the pond. Outlet and inlet has been constructed as per technical guide lines.

**Buxar:** Four farm ponds had been constructed and it helps to irrigate 28 acres of land. All are rectangular in shape. They harvest rainwater and store it for future use. It has an inlet to regulate inflow and an outlet to discharge excess water. The silt traps of iron nets have also been planned by the community and will be placed during the rainy season. Fish nets are being used by the community when there is an overflow from the pond. Also during irrigation through pump sets the community attach a fish net in the delivery pipe to avoid flush out of fishes from the pond. Ponds are surrounded by small bunds, which prevent erosion on the banks of the pond. The depth and size are as per provided design. Water from the farm pond is delivered to the fields manually, and by pumping. They provide water to growing crops and for distress irrigation. This is helping to enhance productivity and increase crop intensity and the diversity of crops that can be grown. Bunds had been used to raise trees. Farmers are able to apply adequate farm inputs and perform farming operations at the appropriate time, thus increasing their productivity and their confidence in farming. Ponds are supplying water for domestic purpose and livestock and they have also resulted in the promotion of fish farming and also recharge groundwater.

Pond Constructed/Renovations						
Districts	Village	Number of Ponds	Beneficiaries		Person Days Generated	Proposed Person Days for Construction
			Women	Men		
Nawadah	Stalin Nagar, Paharpur	2	105	75	5603	4510
Nalanda	Kewali (South),	4	24	36	1260	1173
	Kewali(West)					
	Kewali (East)					
Gaya						
Buxar	Jaipur	4	17	33	1571	1296
<b>Total</b>		<b>10</b>	<b>146</b>	<b>144</b>	<b>8434</b>	<b>6979</b>

There were total of 290 beneficiaries involved in pond construction/renovation work including 50.34% participation of women. The identified priority group including 146 women and 144 men in all villages has been given preference in the work. A total of 8434 person days has been generated. The proposed person days were only 6979 but due to nature

of soil (Hard Soil) and construction experience of the partners it gone higher than what it was estimated. The proposed budget of Rs. 102/ also increased at the time of implementation, as the minimum wages had gone up to Rs. 144/day in the region. Also increase in the rate of bricks, cement and mason charges increased the budget from the estimate provided in the budget. Community contribution in this regard was very encouraging and the details have also been recorded and maintained by the active participation of core committees and our field motivators.

*b. Renovation/ de-silting of Ahar Pynes*

**Gaya:** Renovation of Ahar in the Bhoopnagar Village- Ahar (storage Pond) has been constructed with an impervious (clay or clay-based) soil. Compaction process has been taken up based on the suggested guidelines. Two Hume pipes have been fixed to allow water to be released downstream for irrigation purpose. The slopes on upstream and downstream have been properly maintained, so seepage line may not be created and the degree of concentration and the rate of flow might be low.



Spillway wing wall of the Ahar has been raised up to 2ft. for the removal of excess water. It has large catchment area and good source of water. Around 65 acres of land comes under its command area. It is very useful for irrigation for two crop seasons- Kharif and Rabi. Its total



water storage capacity is 7,181,299 gallon. Landless community has used this Ahar for fish farming which provide them good income as well as rich source of protein for their diet.

Construction of irrigation Channel in the Bhoopnagar Village- Around 460ft. long irrigation channel has been constructed in the right alignment, its bottom width is 5ft and top width is 15ft and

depth 2ft. It helps to properly divert water from Ahar to cultivated land and also feeds other water bodies. It was planned to increase the irrigation area and storage area of the structure and to install a gravity irrigation mechanism in it. Increase in the storage area would further reduce the intensity of soil erosion that the overflow from the structure was causing.



In Bhoopnagar village a total of 100 acres of land belongs to Dalit community that was received under Bhoodan scheme. Out of the total land, community has presently started cultivation on around 60-65 acres of land due to renovation of Ahar and Pyne in the village. Earlier, before renovation, the community was only able to cultivate on around 20 acres of land and that too only in Rabi season. Now the community is comfortably producing Khariff crops as well as Rabi crops along with good quantity of vegetable production. They are expecting a good profit out of that. Apart from cultivation, the community also used this Ahar for fish production and earned around Rs. 25, 000/- even after lots of self consumption. This is also to note that earlier the per/acre production (particularly Paddy) through traditional method was up to 550 kg of grains and now it has gone up to 14.30 quintal per/acre. The cropping pattern has changed in the way that community is using the up lands for growing pulses and less water consuming variety of crops.

*c) Construction of Soil recharges pits*

**Nalanda:** Four recharge pits were constructed for water conservation. The recharge pits are circular in shape. It has a good catchment area of about 15 acres. The dimension of recharge pits is 8ft.dia and depth 7ft. Recharge pits is filled with bricks and sand. Top of pit is covered with perforated covers. Bottom of pit is filled with sand. These pits are suitable for recharging of shallow aquifers. The percolation rate of a recharge pit is much less than of an open well. The water percolates slowly because there is no hydrostatic pressure in the pit. According to the community, the recharge pits have helped to increase water table in the region. Now two hand pumps which had gone defunct earlier (due to decrease in water table), have gone live now and have started to give water.



**Nawadah:** Five recharge pits have been constructed with prescribed dimensions, and it has good catchment area and are functioning properly, bottom is filled with sand and upper layer is filled with stone ballast. It also helps to increase water table.

**Gaya:** Recharge Pits (Duari) – Six recharge pits have been successful in increasing the water table in the area. Its dimension is 8ft depth and 7 ft in diameter. It is filled with sand and stone ballast.

**Buxar:** Five recharge pits had constructed in proper dimension it has good catchment area and functioning properly, bottom is filled with sand and upper layer is filled with Brick pieces. Farmers in Unwas village are cultivating Mint leaf crops, in fields around the recharge pits.

Overall, with time and effort, community has understood and realised the benefit of recharge pits. The community is able to understand and attribute the increased groundwater level (Nalanda district) and increased moisture levels in the land (Buxar) to these recharge pits. Emphasis on regular maintenance of recharge pits needs to be continued for some more time and similarly should also be guided for a year or two on maintenance.

d) *Land Leveling*

**Nalanda:** 11.85 acres of land has been levelled properly in Kewali west and Kewal south by GSS. The areas located at the top of the plot, where land transformation was greater and maximum soil depth is 60 cm, record soil moisture contents in the top layer are up to 5% lower than down slope, although with great variability across the plot (based on report of Rajendra Agriculture University Pusa). At high intensities, soil moisture increases only in the surface layer but no significant increases were observed in deeper layers. However, under low intensity rainfalls the increase in soil water content occurred in the whole profile. Runoff rates were also variable. In other areas outside the preferential flow path, runoff increased from top to bottom. However, sediment concentration in runoff showed different pattern sediment increased lineally in the flow paths but not in other areas, due to local topography impacts crop yield was negatively affected.



Now due to land levelling and bunding of the plots, moisture content in the plots is increasing and water retention capacity of the plot has also increased.



The above photograph shows the condition of soil before land levelling in Nalanda and after land levelling cultivation.

**Nawadah:** Land levelling had been done in five acres of land available for agriculture practices. All lands have been occupied by the farmers for variety of crops cultivation such as paddy, wheat and pulses. The land productivity is also increasing day by day due to different crop cultivation as well as use of vermin compost.

**Gaya:** Land leveling has been done in 7.8 acres of land in Bhoopnagar and 7 acres of land in Duari villages. Leveled land has improved the water holding capacity and improved crop establishment. Land leveling has also increased the yield in these villages. A large part of this increase is due to improved weed control. Improved water coverage from better land leveling reduces weeds by up to 30%. This reduction in weeds results in less time for crop weeding. A reduction from 10 person days to 3 person days per acre has been achieved.



**Buxar:** 18.66 acres of land has been levelled properly in Jaipur, Unwas and Santh village. Land levelling has helped to improve soil condition and all 15.5 acres of lands has been brought under cultivation. Land levelling has helped to improve water retention capacity of soil and improved agriculture in the villages.

A total of 173 beneficiaries involved in land leveling work including 43.93% participation of women. The identified priority group including 76 women and 97 men in villages has been given preference in the work. Total 4697 person days has been generated. Details of community contribution has also been recorded and maintained by active participation of core committees and field motivators.



<b>Total Land Available with Dalit Community In Project Villages</b>					
<b>Sr. No.</b>	<b>Village/District</b>	<b>Bhoodan &amp; Other Lands (In Acres)</b>	<b>Total Land Developed (In Acres)</b>	<b>Proposed land to be Developed (In Acres)</b>	<b>Total Land Occupied for Agriculture (In Acres)</b>
1	Bhoopnagar (Gaya)	100	7.8	7	60
2	Duari (Gaya)	40	7	5	12
3	Paharpur (Nawadah)	57	0	0	10
4	Stalin Nagar (Nawadah)	22	5	5	12
5	Kewali (East)	42	11.85	10	40
6	Kewali (West)	25			
7	Kewali (South)	25			
8	Jaipur (Buxar)	33	18.66	15.5	25
9	Saanth (Buxar)	18			10
10	Unwas (Buxar)	25			25
<b>Total</b>		<b>387</b>	<b>50.31</b>	<b>42.5</b>	<b>194</b>

The above table also describe that there were total of 387 acres land (including Bhoodan, Homestead and other Government lands) available with Dalit families in the project villages. Out of this total land, community has started cultivation on 194 acres of land and are growing variety of pulses, oil seeds, vegetables along with paddy and wheat. For example in case of

Gaya (Bhoopnagar), before our intervention the community was able to manage cultivation on only 15-20 acres of land but now they have occupied almost 60 acres of land for their agricultural purposes and are earning good profit out of that. The communities in all most all villages have also adopted the method of SRI and SWI for cultivation. Apart from this the community is growing cash crops particularly vegetables and supporting their families with extra income. The net income has also been increased by 30-40 percent in all most all villages.

Thus, a total of 50.31 acres of land has been leveled through the project intervention though only 42.5 acres was proposed and 99 farmers have got benefited from the same. Almost all land has been brought under cultivation and producing good crops in both Kharif and Rabi seasons. The farmers have sown paddy, wheat, gram, pulses (like Arhar, Kurthi & Moong), maze and potato. They are expecting good earnings from the same in this season.

<b>Land Levelling</b>					
<b>Districts</b>	<b>Village</b>	<b>Land (In acres)</b>	<b>Beneficiaries</b>		<b>Person Days Generated</b>
			<b>Women</b>	<b>Men</b>	
Nawadah	Stalin Nagar	5	19	14	545
Nalanda	Kewali (South & West)	10	20	30	1175
Gaya	Duari, Bhoopnagar	12	20	20	1458
Buxar	Jaipur	15.5	17	33	1519
<b>Total</b>		<b>42.5</b>	<b>76</b>	<b>97</b>	<b>4697</b>

e) *Farm Bunding*

**Nalanda:** Village Kewali is situated at the foothills of the Rajgir hills. Farming is the main occupation for livelihood. Soil has shallow depth, prone to moderate to severe soil erosion. Soil erosion is a serious problem faced by farmers here. The annual rainfall is 813.2 mm in the area. The top soil – the productive layer has been deteriorating day by day causing decrease in productivity of soil due to erosion by air and splash. To sustain the productivity of soil, soil erosion has to be prevented with implementing proper soil and water conservation measures.



As a part of Natural Resource Management component, Farm bunding (trench cum bund

across the slope) was carried out as intervention. A cross section of 0.8 m for bunding was selected.

Village Development Committees was organized to address the importance of farm bunding. Selection of the farmers was done. The layout and marking for trenching and bunding was carried out. They were asked to take up earth work in their own field. Digging of trenches and making bunds out of this soil across the slope, along the border has provided opportunity for money. Around 6 acres and 50 decimal lands covered through farm bunding. 32 people were involved in it in which around 352 person days of employment generated. 40 families have been benefitted from it. Apart from this, in all districts where land levelling has been done, farm bunding has also been done covering 42.5 acres of land. It has been done for conservation of soil and water. As a result of farm bunding and field levelling, farmers have reported to be happy with the results. At one end, while land has been brought into cultivation, increased moisture in the field is showing good output and farmers are satisfied with the results. With some motivation, more farmers from the targeted villages are likely to take up farm bunding.

f) *Earthen check dam*



**Gaya:** Check Dam (Duari Village) along with Diversion Channel - Earthen check dams has been constructed in Duari village for storage of water for irrigation and also to improve ground water condition through infiltration and percolation. It has good catchment area and dimension is 450 ft long and top width is 8 ft. and bottom width is 35 ft and height is 11 ft. It helps in raising water table, increasing crop productivity and enhances

availability of drinking water. The drainage bund is constructed with a core wall made of clay taken from the bottom of ponds up to the Mean Water Level of the bund and depth. Stone pitching of 1ft. thickness has been laid on the upstream face of the bund within 50ft. length. A side outlet has also been constructed.

Though it is constructed recently, this particular check dam is estimated to irrigate around 80 acres of land in the locality covering 3 villages and approximately benefiting 150 families.

Loose boulder check device - Loose boulder check device that were constructed on the drain with a view to check the velocity of water flowing in



small drains, have checked soil erosion considerably. Loose boulder device also protected earthen bund of check dam.

**Gully Plug** - Two gully plugs were constructed on small drains. The plugging constructed by the boulders (Stone) and wall of these gully plugs have been constructed with boulders (stone) across the gully and it allows water stream to flow through it. As flowing water is obstructed, and velocity decreases so the water flows for more time, so the rate of infiltration is increased.

**Diversion Channel** - 300 ft. diversion channel has also been constructed. The area is subjected to heavy soil erosion due to the intense runoff and sandy nature of the soil. Another problem prevalent in the area is that runoff coming from the hill fills the agricultural fields with sand thus affecting the crop yield drastically. Stream causes soil erosion and sand filling in the agricultural fields. The interventions were planned to provide the much needed water for irrigation to it.



Then further down of it four loose boulder structures have been constructed at suitable places. Finally, the above mentioned diversion channel has been constructed to divert runoff by the earthen drain bund for agriculture purpose with the objective of the constructed diversion channel.

**Small Reservoir (Bhoopnagar)** - A small reservoir has also been constructed by Bhoopnagar Community member by labour contribution for water storage and fisheries with technical assistance from BRC-CWS. This is a good effort by the community, but strengthening of bund and construction of spillway channel is required before rainy session. It has sufficient catchment area and good source of water.

**Buxar:** 150 ft. long and 12 ft. high check dam has been built in the Saanth village. It has good command area and 30 acres of land has been irrigated by this check dam. It has a sufficient water storage capacity for two crop seasons - Kharif and Rabi. This activity has been very successful in improving the land condition and thereby bringing additional land (approximately 16 acres) under cultivation. The field reports say that the yield of paddy and pulses has been increased due to irrigation.

**Spillway Channel-** Spillway channel has been constructed in the Saanth Village. The interventions were planned for the discharge of the surplus water to the main stream, so that check dam has no danger from excess water. But, spillway channel has been badly damaged due to heavy rain and heavy discharge of water. The process of mobilisation of government fund is going on the community to get it done as soon as possible.

g) *Lift irrigation*

**Buxar:** Input of water is important from the agricultural point of view. Some times in some places water cannot be provided to the fields as the level of the field is higher than that of the source of water. In this case, water is required to be lifted at a convenient higher spot from which it can be supplied to the fields under command. So, the lift irrigation is constructed in Unwas Village by DRBRAKEVS (Buxar). Water is lifted from river through intake well and conveyed through pipes to the fields. The diameter of intake well is 12 ft and depth is 23 ft. It took 37 days to complete the intake well in which 12 villagers got employment. An electric motor of 10 hp is provided to the villagers for lifting water through the intake well and 1200 ft of delivery pipe is provided to irrigate their fields. About 30 acres of land will be irrigated by this lift irrigation.



The participation of community was very encouraging as they have made good contribution (Physical and monetary) to complete the work. Similarly, a 5 HP pump was proposed but the community in their VDC passed a resolution for 10HP pump after recommendation from engineer and made the contribution for the same. They have also lisoned with the concerned department for the electric connection in the name of village committee.

h) *Contour continuous trenching ( CCT)*

**Gaya:** Trenches has been built along the slope contour to work properly; using baffles or soil mounds to divide the trench reduces the danger of excessive flow if they are not quite level. Trenches have high visual impact, but tend to disappear with time as they are filled with sediment and covered by vegetation. The soil and water conservation structures have been constructed with the prime objective of conserving soil and moisture against the erosion process occurring due to natural agents like rainfall and runoff. Contour trenches are quite successful in achieving their objectives of construction.



i) Staggered Continuous Trenching (SCT)

252 recharge trenches had constructed at Paharpur village. It is a continuous trench excavated in the ground and some trenches has refilled with boulders and broken bricks. It is usually made for harvesting the surface runoff. The length of the trench is 10 ft. decided as per the amount of runoff expected. The recharge trench of size 0.50 to 1.0 m wide and 1.0 deep is constructed. The recharge trench should be periodically cleaned of accumulated debris to maintain the intake capacity.



j) *Pumping Set:*

pumping sets along with accessories has been purchased and handed over to the village committees with proper maintenance committees at place (1 in Nalanda, 1 in Nawadah and 2 in Buxar). Apart from this one 10HP pump has been purchased for lift irrigation in which community has also added their own contribution. Another pump has been purchased by the community in Gaya getting support from our small equipment support.

Two bore wells have been installed through community contribution in Duari village (Gaya) and Stalin Nagar (Nawadah). Its depth is 120ft. and it provides irrigation facilities for at least 16 acres of agricultural land in the Kharif season and Rabi season. Bore well is maintained by the community member and beneficiaries have to pay diesel and some amount for maintenance.

About 50 acres of land has been irrigated in one season in all project villages. On an average 10 – 12 acres of land has been irrigated in each district.

k) *Kitchen Gardening & Tree Plantation:*

Plantation of trees has been done in all villages. Pond bunds, embankments and other less fertile lands and court yards have been used for plantation of trees as well vegetables. Plantation is done on the bunds of 10 Ponds, Ahar, and other lands. A total of 5170 trees of different varieties were planted including Mango, Guava, Papaya, Lemon, rosewood etc. fencing has also been done for almost all plants and for fruit plants pitch irrigation has been done to protect the plants and its growth. The community has also shown seeds/plants of vegetables in their court yards for domestic purposes.



Apart from this, we have mobilized 250 saplings of plants from Block office in Gaya district and have been planted. They used the money of Gram Kosh (Village Fund) and purchased saplings from block office on subsidized rates.



### **Community Contribution**

- a. Trained community members are regularly contributing in mobilization and awareness building of the community members.
- b. The calculation of community contribution has been again modified from the proposed one. As per our proposed budget Rs. 102 has been fixed for wages/day per person. According the government rate the minimum wages for unskilled worker was fixed as Rs. 120 up to March 31st, 2012 but now it has been fixed at Rs. 144/- day for unskilled worker with effect from April, 2012. So it was decided to calculate the rest of amount as labour contribution. The issue was well discussed with the VDC and we collectively decided to record the rest amount as community contribution. In this way, we have successfully fulfilled the criteria of minimum wages as well as community contribution as it was proposed in our project.

### **Bad Weather Condition:**

Above mentioned all structures are meant to provide soil and water conservations in the selected villages but due to bad weather conditions prevailing since last year is becoming harsh on community. Deficient rain conditions particularly in Gaya, Nawadah and Nalanda has added to their already existing bad conditions. In case of Buxar, this year it has been flooded and farmers suffered due to water logging. The flood was not caused by excess rain rather discharge of water in the river from other states due to heavy rain in the upper regions of India.

### **Output indicators**

1. The construction work of 10 ponds, 19 recharge pits, 1 Ahar pine system, 1 check dam, contour trenches on 8 acres of land, 250 staggered trenches and land leveling on 50.31 acres of land has been completed. Apart from this one lift irrigation system has also been completed in Unwas village, Buxar.
2. There are total approximately 10,899 person days has been generated for the community.
3. The communities have been mobilized and have started cultivating less water intensive crops such as millets, pulses, oilseeds etc. This practice has been adopted



particularly by farmers doing collective farming in Gaya district. But the practice of cultivating paddy and wheat has not been stopped as it is the staple food for the community.

4. The community people in Duari village of Gaya district have purchased one diesel pump set from their own village fund and have been supported by our small equipment support.
5. Till now we have developed all 50.31 acres of land by land leveling and get good crops during the Kharif and Rabi seasons.
6. The community people have also mobilized MGNREGS funds for 10 acres land leveling in Bhoopnagar village.
7. Farm bunding has been done on 6.5 acres of land in Nalanda district. It has also been done in case of land leveling on 50.31 acres of land.
8. User groups have been formed for each activity and they are performing well.
9. Maintenance committees have been constituted in all the 10 villages.
10. 46.05 Acres of land brought under collective farming will benefit 187 HH's (Nawada-15, Gaya-60, Nalanda-90 and Buxar-22) in all covered villages under the project.
11. 4 pumping sets along with accessories has been purchased and handed over to the village committees with proper maintenance committees at place. Apart from this one 10 HP pump has been purchased for lift irrigation in which community has also made their own contribution. Another pump has been purchased by the community in Gaya getting support from our small equipment support.
12. There were total 5170 trees have been planted of different varieties including Mango, Guava, Papaya, Lemon, rosewood etc. the fencing has also been done for almost all plants

### **OUTPUT –III**

#### **❖ Capacitated Dalit families are practicing collective farming and sustainable agriculture through democratic practices**

Capacity building and training activities have been organised during the reporting period in almost all project villages. In many villages farmers have also started doing collective farming. Training activities help them to know the new technology and knowledge of agriculture. It helps them to improve their agricultural production, thus increasing the food availability through out the year. Also, improve agricultural production helps them to reduce their cost of fooding, later which will help them increase their expenses on the health and the education. There are several agricultural training activities proposed during this year like refresher training on soil and water conservation etc. Farmers are actively participating in the training programs and it has significant impact on the agricultural production. Following are the details of the activities:



## Capacity building activities

Vermi – Compost training has been organised by DRBRAKEVS, Buxar in all three villages (Jaipur, Unwas and Santh). Similarly, it has been organised in other project villages too. Local resource persons were invited to conduct this training.

One day training was organised at each village in Santh, Jaipur and Unwas respectively. There were total 78 farmers including 57 male and 28 female participated in the training programme.



Vermi compost Pit, Gaya

In Gaya district, one day combined training organised for 70 participants including 30 female and 40 male from Bhoopnagar and Duari villages. The block level agricultural adviser participated as resource person in the training programme. Similarly, in Paharpur and Stalinnagar, one day training is organised in which 28 men and 35 women were participated. Also, one day training is organized in Kewali, in which 102 participants are participated including 40 male and 62 female were present.

The farmers learnt the method of vermin compost, materials required in making, its local availability and uses of vermin compost. The making of vermin compost was also practically demonstrated by the resource person at each village. There are total 11 Vermin compost pit has been constructed in all 3 proposed district (Gaya, Nawadah and Nalanda).

## Agriculture Training on (Soil and water Conservation)



Soil & Water Conservation Training, Buxar

Soil and water conservation training programme has been organised in all project districts. The selected farmers participated in the training and learnt the basics of soil and water conservation through class room lectures and demonstration of some models and pictures. The specialist of this subject was arranged as a resource person locally.

In Gaya district training was organised in the month of June and total 55 participants including 16 female and 39 male participated in the training programme. Block level agricultural engineer and advisers were arranged as resource person and capacitaed the participants regarding need and benefits of soil and water conservation in the area.

Similarly in Nawadah , Nalanda and Buxar training has been organised in the months of May and June, 2011. Resource person for the training was arranged locally. There were total 262

participants including 134 female and 130 male participated (Nawadah- 32 Female & 45 Male, Nalanda- 34 Female & 16 Male and Buxar- 68 Female & 69 Male).

### **Refresher Training on (Soil & Water Conservation)**

Refresher training on soil and water conservation been organised in Nalanda, Buxar, Gaya and Nawada districts. The selected farmers participated in the training and learnt the basics of soil and water conservation through class room lectures and demonstration of some models and pictures. The specialist of this subject was arranged as a resource person locally.

In Nawada district, 58 participants participated in the training including 19 female and 39 male participated in the training programme. Block level agricultural engineer and advisers were arranged as resource person and capacitaed the participants regarding need and benefits of soil and water conservation in the area.

Similarly in Nalanda, refresher training is organised in which 52 participantants are participated including 34 Female & 18 Male. Resource person for the training was arranged locally. In Buxar 133 people participated in refresher training on Soil and water conservation including 59 men and 74 women and in Gaya, 54 people participated in the referesheser training programme.

### **Soil Testing**

The sample of soils from each villages has been collected and sent for test in district agriculture office. Total 100 samples covering 10 farmers from each village has been sent for test.

The test results of all the samples have been received and accordingly treatment are being done.

Collection of Soil Sample, Buxar



### **Distribution of Green Manure Crop**

The distribution of green manure crop has been done in Gaya, Nawada and Nalanda districts. In Buxar due to deficient rain it has not been done.

In Gaya, the partner organisation have managed the distribution of organic manure from the training programme it self and supprted 60 families with green manure for 60 acres of land. In Nalanda, 60 families got the support and used 30 acres of land for green manure. Similarly, in Nawada 45 families got the support and used 20 acres of land for cultivation.

In Gaya recently the the green manure has been distributed among the farmers. 50-50 KGs of Dhaincha seeds and Arhar seeds have been given to the farmers who are involved in collective farming.

### **Agriculture Training on (Dry land farming)**



Training on Dry land Farming, Buxar

Dry land farming training programme has been organised in Buxar, Gaya, Nawada and Nalanda district. The selected farmers participated in the training and learnt the basics of dry land farming through class room lectures and demonstration. The specialist of this subject was arranged as a resource person locally.

In Buxar district, training was organised in which total 82 participants including 34 female and 48 male participated, in Gaya, 31 male and 19 female participated, in Nawada 22 men and 33 women are participated and 75 participants including 37 female and 38 male participated from Nalanda in the training programme. In Nawada there are 55 farmers participated in the training programme including 22 male and 33 female participants. Agricultural scientist, from KVK facilitated the training program as resource persons and capacitated the participants regarding need and benefits of dry land farming in the area.

They have given important knowledge about the zero-tillage and its benefit like it required less water. Also less time required for ploughing and sowing. Due to this, cost of cultivation is reduced.

### **The content of Dry land farming included:**

- Meaning and understanding of dry land farming
- Cropping pattern for dry land areas
- Methods and techniques of farming in dry land area
- Multi cropping pattern including fruits and vegetables
- Importance of SRI method
- Technique of SRI cultivation
- Demonstration of SRI techniques



Demonstration of Seed Processing for SRI, Gaya

### **Training –cum demonstration of Organic manure**

One day training programme on preparation of organic manure has been organised in Paharpur village of Nawada district and in Nalanda.

There are total 117 farmers including 46 female and 71 male participated in the training programme in Nawada and 52 participants in Nalanda including 23 men and 29 women. Majority of farmers having problematic land area have participated in the training. Locally arranged agriculture scientist participated as resource person and capacitated the farmers regarding need and methods of preparing organic manure. Follow up training will be organised later to help farmers in preparation of organic compost by themselves. The women farmers have been specifically targeted for the purpose. As per the data given above almost 40% women participation has been ensured. Also, 12 people got sunhemp as bio-fertiliser for their field. This will help them to reduce their cost of cultivation specially of fertiliser cost and help them to move towards the sustainable agriculture. Also this year, farmer got sunhemp seed in May, 2012.

Training on Organic Manure and pesticide, Nawada



This year also the training programme has been organised for farmers in Gaya, Nawada and Nalanda district.

In Gaya total 90 people participated including 50 male and 40 female participants. Similarly, in Nawada and Nalanda total 122 people (Nawada- 70 and Nalanda-52) including 43 male (Nawada-20 and Nalanda-23) and 69 female (Nawada- 40 and Nalanda-29). The resource person from local KVK and agriculture expert was arranged. The community learnt the various methods and techniques of preparation of organic manure and it was demonstrated practically. The seeds of sunhemp and other organic manure has also been distributed among the villagers for collective farming.

### **Training on preparation of organic pesticide**

Similarly, training on preparation of organic pesticide has also been organised in Gaya, Nawada and Nalanda districts. The composition of participants was same as it was for organic manure.

The use of various locally available materials for preparing the pesticides become known to them. Such as use of leaves of neem, cow dung, cow urine, leaves of guava, neem oil etc. They have learned three types of pesticide useful according to the severity of problem.

Now people are fully convinced and are using the organic pesticides for their crops and saving the expenditures earlier invested in chemical pesticides.



### Capacity Building on Kitchen Garden and Tree Plantation

Training for the capacity building of farmers on Kitchen Garden and Tree Plantation was organized by PGVS, DRBRAKS, GSS and NCVK at Gaya, Buxar, Nalanda and Nawada respectively. 25 female and 27 male from Gaya, 22 male and 51 female farmers from Nawada, 70 male and 83 female from Nalanda and 89 male and 53 female from Buxar participated in the training programme. Training was facilitated by the agricultural expert and organized with the following objectives:

- To Generate awareness about kitchen garden
- Its benefit and uses
- Uses of waste water nearby
- Crop rotation
- To produce crops used in the kitchen themselves
- To make them aware about nutritious food

After the training 55 families have started kitchen garden. They have come to know the best use of waste water. They could not able to meet nutritious food but kitchen garden will help them to get it.



Training on Kitchen Garden, Nawada

### Establishment of kitchen garden - distribution of sapling



Kitchen Gardening, Nawada

The distribution of saplings for establishing kitchen garden has been done in Buxar, Nawada, Gaya and Nalanda districts. The saplings of fruits as well as vegetables has been distributed among the beneficiaries.

In Gaya, 60 families got the saplings of five different fruits (mango, guava, lime, papaya, and jackfruit) and vegetable seeds of bitter gourd, tomato, bottle gourd, chili, brinjal and ladies figure. Apart from this 100

saplings of fruits have been planted on community land collectively. Similarly in Nalanda, 45 people got the 6 saplings of fruits including mango, guava, lime, papaya and banana. In Nawada, 38 families got supported with seeds of vegetables including garlic, coriander, spinach etc. In case Buxar there were 102 beneficiaries supported with saplings of fruits as well as vegetables seeds. The saplings of fruits includes mango, guava, papaya, lime etc. and seeds of brinjal, tomato, chilies, bitter gourd, gourd etc.

Mango sapling, Nalanda



The community is very hopeful to get the vegetables for their own use as well as earning money after selling the balanced vegetables.

Kitchen gardening has become the practice of some families and are on regular basis doing their own according to their capacity and resources available. Particularly women are seems to more interested in that.

### **Orientation Workshop on Community Farming**



Collective farming, Gaya

One day orientation programme has been organised in all covered districts. There were 117 farmers participated in Buxar including 85 male nad 32 female. In Nawada 163 farmers participated in the orientation programme including 90 male nad 73 female farmers. Similarly in Nalanda and Gaya 61 and 71 farmers participated respectively including 39 male in Nalanda, 35 in Gaya and 22 female in Nalanda and 36 female in Gaya.

The agricultural scientists from local KVK (Krishi Vikas Kendra) were called as a resource persons. The topic covered by them was as follows:

- What is community farming
- The importance and need of community farming
- How to calculate the investment and distribution of produce
- The role and responsibility
- Cultivation, harvesting and management etc.



### **Collective Farming:**



The community has well adopted the concept of collective farming in almost all villages and have started practicing the same in a group. Men and women groups are doing it separately on select lands. The women SHGs in a group doing collective farming together and have good understanding of collective farming and its benefits. Rest of the lands are used by the community for individual farming. Apart from this, fishery is also being done collectively and the profit is being shared equally

by group members. 18 vermi-compost pits were constructed and the compost is exclusively

being used for collective farming on common lands. The use of organic pesticides was also encouraged among the farmers involved in collective farming and they were also supported with sprinkle machines through small equipment support.

**Gaya:** In total, 18 acres of land has been brought under collective farming in village Bhoopnagar and Duari in Gaya district. The community people are practicing this farming since the first year of our project implementation. They have produced mainly black gram, local pulses, maze, paddy, wheat and potatoes collectively. The concept is very much clear among them and collectively shared the investments as well as profits after deducting the investment. Apart from this they have also produced vegetables on collective land particularly brinjal and got a profit of around Rs. 3000/- out of that.



Similarly in **Nalanda** 90 farmers have adopted the practice involving 13 acres of land and 20 have earlier done collective farming on 2.8 acres approximately and have produced tomatoes. Till now they have produced 90 kgs of tomatoes and sold it at Rs. 12/- per kg. Also 25 farmers have used SRI method of cultivation for paddy and 10 farmers have also used this method for oil seeds production particularly after coming from the exposure visit to KVK and

have produced good yield from this technique. Recently there are more farmers got ready to adopt the method of collective farming and have planned to do farming on 13 acres of land involving almost 90 families in that. The crops include paddy, chilli and tomato which may give them good earning as it happened in previous season.



In **Nawadah** 15 farmers have collectively done farming on 2.14 acres of land and have produced pulses and paddy. It has become difficult for the farmers to spread it on other land due to scanty rain in the district. Once again it is facing the situation of draught.

In **Buxar** total 12.91 acres of land has been cultivated under collective farming by 4 groups involving 22 farmers. They have produced around 190 quintals of paddy and sold it at the rate of Rs. 1000/ quintal. After deducting the investments, they have shared the produce/profit equally among themselves. Now they have sown wheat and have also taken up cultivation of peppermint collectively. Fisheries have also been taken up collectively by the community in Ponds as well as Ahar and Check





Dam reservoirs. In Nalanda two ponds has been used for fish cultivation and the community has dropped 1100 seeds of fish in these ponds. The overall investment is Rs. 5500 for seeds and other expenditures are Rs. 6000. The expected production of fish is supposed to be 900 pieces of approximately 500 grams/fish. The market rate for 1 kg fish is Rs. 80/- and the profit will be around Rs. 36,000/-, the net profit will be around Rs. 24,500/-. Similarly, in Gaya the community produced approximately 375 kgs of fish and have earned Rs. 30,000. The net profit was Rs. 20,000 and has been saved in Gram Kosh (Village Fund). In Buxar, one pond has also been used for fisheries and has produced 70 kgs of fish which was an additional income for the group.

### Exposure Visit of Farmers

An exposure visit is organized by the PGVS Gaya, GSS Nalanda, NCVK Nawada and DRBRAEKS Buxar including 22, 35, 36 and 42 farmers respectively. It is organized at Gram Nirman Mandal, Nawada. It is a Gandhian organization established by Jai Prakash Narayan. It has vast experience in farmers training and having modern technology for the farmers. Main aim of the visit that farmers can acquainted with the knowledge of new technology and other new aspects of agriculture. Also farmers have exposure to new technology that are now used and promoted by the govt. It has also Krishi Vigyan Kendra (KVK) and scientists of KVK provide knowledge to the farmers about the new technology. I have also participated in the exposure visits.

Exposure visit, Kauakol, Nawada



Interaction with scientist (exposure visit), Kauakol, Nawada

On the first day, farmers get the knowledge by the KVK scientist Rai Jee about the different types of soil i.e. upland, medium land and low land found in the southern Bihar and the main problem of irrigation. Different variety of paddy those are suitable to different types of land and their production. Also they get to know about their crop duration. Farmers get to know about the different diseases of paddy and their remedies. Also they know about the seed treatment. Also they get to know about different types of pest that attack on the paddy. They get to know about the nutrients management as when to use Urea, when to use DAP as it should be used at last ploughing as it is not mobile whereas urea is quite mobile. Also uses on vermin compost in the field. After that KVK scientist Rai Jee, give information about the paddy cultivation through SRI methods. In this method, seed treatment, distance between plant to plant and row to row



distance. Their water management and weed management training is provided to them. Also they get to know about the raising of nursery for SRI and transplanting methods in the SRI. Also get knowledge about the nutrient management through weeding and vermin compost etc.

After that farmers have seen the different farming implements that are now used in the fields like disc harrow, paddy transplanter, offset disc harrow, cultivator, wheel how, Mould board plough etc. They get to different uses of these implements according to soil conditions and crop conditions.

After that we visited their orchards and in which mango trees, guava trees and other plants are planted. We also visited their horticulture nursery where mango plants, guava, pomegranate etc are planted and they will be sold to farmers after 15 June. KVK scientist Ahmedji also taught the farmers to make Kalami Mango and its different processes.

Next day, another scientist of KVK took a class on collective farming and its benefits. Also she taught the different process of making the vermin compost and its benefits. Also give information on the nutrient management after using the vermin compost in the fields. Also she taught about green algae which are quite beneficial for the farmers and reduce the cost of cultivation. It is beneficial for the soil and water conservation also. Also she talked about the overall agriculture system in which agriculture, horticulture, fishery, livestock, mushroom cultivation etc. all are incorporated.

After that we visited the vermin compost pit in the KVK and see the process of packaging of vermin compost in the bags. After that vote of thanks is given by me and exposure visit ended on the note that farmers will use the techniques that they have learned in the Gram Nirman Mandal.

#### **Livestock promotion & management:**

Livestock production & management is one of the important activities which has recommended in entire villages of operation as it is a good source of ensuring food security during the lean season or crisis period.

#### **a. Capacity building training on poultry & small animal rearing- ( Goatry & poultry) Veterinary Training Programme:**

Two days veterinary training has been organized at the village level on basic knowledge & skill require for poultry, piggery & goat rearing. External resource person particularly veterinary doctors has been arranged to impart training to the priority groups. The main content covered in the training were common diseases, causes, sign & symptoms of diseases, fodders, home management & clinical management. Apart from this awareness regarding various government funds available for animal husbandry and training has also been provided to the beneficiaries. Refresher training will be organized for the same trainees next year.

There are total 512 beneficiaries including 280 female and 232 male got benefited from this training programme. In Gaya total 141 beneficiaries including 69 women (almost 49%), in

Nalanda 108 persons including 68 women (almost 63%), Buxar 180 persons including 92 women (51%) and in Nawadah 83 beneficiaries including 51 women (61%) participated and got the benefit of the training programme. Jointly in all district the participation of women up to 55% has been ensured.

### **Distribution of goats**

Community was also supported with goatry and poultry and have been capacitated on rearing of the same. Livestock production & management was one of the important activities which has been recommended in entire villages of operation as it was supposed to be good source of ensuring food security during lean season or crisis period.



Local goat varieties were distributed among identified priority groups. A total of 221 goats were distributed to the poorest of poor families in Nawadah (45), Nalanda (50), Gaya (31) and Buxar (95). Priority was given to those who do not have lands or do not have any means of livelihood. Support covered a majority of women beneficiaries including 32 widows, single women and physically challenged. Among men priority was given to land less and disabled people and a total of 23 such men have received this support.

A total of 274 baby goats (male, female) (Gaya- 70, Buxar-111, Nawada-51 and Nalanda-42) have reproduced from the goats distributed in the community. 155 baby male goats have been sold by the beneficiaries on handsome prices ranging from Rs. 800 to Rs 2000 per goat. Female baby goats have been redistributed among the community and a total of 37 new beneficiaries have been added to the list.

### **Distribution of ducks**

Similarly, in case of duck distribution a total of 213 ducks have been distributed among the community with 2 ducks to each beneficiary. All these ducks have approximately produced 4501 eggs out of which the beneficiaries have sold 2170 eggs at Rs 8-10 per egg. 454 ducklings have been produced and redistributed among the other beneficiaries from the distributed ducks. Rest of the eggs have been consumed by the community.



Distribution has been done with participation by VDCs and core committees. VDC and core committees, with the help of local staff and in reference to base line survey, identified priority groups and accordingly distributed goats and ducks among the beneficiaries.

Redistribution of goats and ducks has also been ensured and documented by the community as well as partner organisation. This practice will continue till all identified beneficiaries are benefited through this support.

### Small Farm Implements

It was decided by VDCs of Nalanda, Nawadah and Buxar to purchase a pesticide spray machine as it was generally rented by the community. Now there are 10 spray machines each in Nalanda and Nawadah district has been distributed among the community. Similarly in Buxar also 4 spray machine has been distributed as well as 4 digging equipment has also been distributed among them. The committee has also been formed to take care of maintenance and record of use by the community. They have also fixed some charges for the others if they want to use for their own purposes. There will be some fund deposited to the committee by the beneficiaries for up keeping of the machines.

In case of Gaya, there are only one pumping set has been distributed and is placed in Bhoopnagar village. The VDC of Duari village decided to purchase one for the village from village fund. There were some sort of funds thus we have contributed them from our small farm implement support and now the community is using it for cultivation.



### Output Indicators

- Approximately participation of women (40%) and men (60%) in all the interventions (farm based and non-farm based) has been ensured. In case goat and ducks support more than 60% women have got the benefit.
- 46.05 Acres of land brought under collective farming will benefit 187 HH's in all covered villages under the project.
- Total 10,899 person days of employment till date have been generated through various construction works completed.
- Training on soil and water conservation has been organized in all covered districts and total 319 people participated including 150 women. Similarly in refresher training 297 people participated including 143 women participants.
- Training on kitchen garden has been organized in all covered project areas in which total 420 participants including 212 women participated.



- Training on dry land farming was organized in which total 262 people were participated including 123 women.
- There are total 259 persons participated in the training on preparation of organic manure and pesticide in which 115 women participated.
- Veterinary training has also been organised in covered areas and total 512 persons participated including 280 women.
- One day orientation of 412 farmers has also been done on community farming in which 163 women actively participated.
- 135 farmers from all project villages have gone to KVK in Kauakol in Nawadah district.
- 213 ducks has been distributed among beneficiaries in Buxar, Gaya, Nawadah and Nalanda.
- All these ducks have approximately produced 4501 eggs out of which the beneficiaries have sold 2170 eggs at Rs 8-10 per egg. There are also 454 ducklings have been produced and redistributed among the other beneficiaries. The other eggs have been consumed by the community.
- 221 goats have been distributed among beneficiaries in all districts.
- There are total 274 baby goats (male, female) has been reproduced by all distributed goats in the community. 155 baby male goats have been sold by the beneficiaries on handsome prices ranging from Rs. 800 to Rs 2000 per goat. The female baby goats have also been redistributed among the community and total 37 new beneficiaries have been added to the list.
- Vermin compost training organised in each covered village of all four districts covering total 331 farmers including 152 women.
- 10 samples of soil from each covered village have been sent for test. All reports have been received.
- 18 compost pits has been constructed in proposed three districts (Gaya, Nawadah and Nalanda).
- In the village Bhoopnagar (Gaya) and Duari (Gaya) 4 and 2 compost pits has been constructed respectively by mobilising labour contribution. Similarly, plastic pits has been mobilised through government schemes in Nawadah district.

## **OUTPUT - IV**

### **❖ Ground Prepared for Advocacy & lobbying initiatives**

Being part of our advocacy efforts on land rights for dalits, BRC-CWS and partner organizations are regularly relating with various other NGOs, intellectuals, activists and donor organizations active in Bihar. Recently BRC-CWS and partners participated in a 10



days foot march organized by various civil society groups on land rights issues of Dalits as a part of Bhoomi Adhikar Andolan.

Recently in reference to above foot march the Bihar government has announced to distribute 3 decimal (home stead land) Bhoodan land to Maha Dalit families.

In respect to advocacy for land to Dalit families' initiatives have also been taken by partner organisations in their respective districts. Application has been submitted for receipt of 57 acres of land in Nawadah district and a public hearing was also organised at Gaya for the same. Similarly, struggle for land receipt is going on for 20 acres of land in Duari village of Gaya. Bhoodan land has been successfully demarcated in Bankey Bazar Block, Gaya but possession has not been ensured due to interference of MCC in the district. Distribution of 3 decimal homestead lands is also under process in Gaya district. From 700 beneficiaries surveyed for homestead land, only 58 received homestead land in Dighasin village.

In Nalanda 66 beneficiaries have received 3 decimal homestead land while around 1 acre of land in Kewali (West) village has been freed from landlords and given possession to the Dalit family (Tohar manjhi). Similar struggle is continuing to get possession over other lands.

In Nawadah, 26 people in our project villages have got registry and possession on 3 decimal homestead lands. Similarly in Buxar 103 people in our project villages have received 3 decimal homestead lands while a total of 428 people in Buxar district have received the land through the efforts of DAM. In Gaya, there are 58 people, particularly in Bankey Bazar block, who have received the paper and possession of 3 decimal homestead land.

Altogether indicators towards achievements of advocacy are as follows:

1. There are 1129 families/beneficiaries have received home stead land.
2. 288 families/beneficiaries have got the Bhoodan Land certificate.
3. 2564 days of work has been ensured for our beneficiaries in MGNREGS. In some cases in Nalanda 100 day's job has also been ensured.
4. 10 acres of land has been developed through mobilisation of MGNREGS funds.
5. The Dalit Adhikar Manch at national level advocacy initiatives have submitted 14 point agenda to the present National Land Reform Committee and Ministry of Rural Development and out of that 6 points have been recognised by the said committee. The committee has accepted the fact that there should be 10 decimal of homestead land given to the beneficiaries and demand for cultivable land is also justified.

### **Environment Day Celebration among school children:**

The environment day celebration has been organised mostly in schools with children. They were oriented towards the environment and its up keeping and the benefits of safe environment for us. In Nawada, Nalanda, Buxar and Gaya it has been celebrated accordingly with children. During the celebration children also planted some trees in the school and committed to plant at least one tree on their own B'Day. They also committed to keep the surrounding clean and also ask their parents to follow the same. The VDCs member were also involved in the celebration along with Panchayat representatives.



Environment day celebration,  
Buxar

### *❖ Study on the Bhoodan land distribution among Dalit Community in Bihar:*

The study on Bhoodan Land has been completed and titled as “**Bhoodan after Sixty Years: A potential non-violent alternative**”. This is in the form of handbook and is written by Mr. Kumar Shubhamoorty, chairman of Bhoodan Yajna Committee, Bihar. Dalit Adhikar Manch also supported us by providing some field level case studies.

This hand book on Bhoodan Land is an attempt to capture the status of Bhoodan Land distribution among the landless families as well as to analyse the functioning of Bhoodan Yajna Committee, rules and regulations, role of the government and bureaucracy in its historical perspective. The hand book might prove to be the ready reference for the like minded Civil Society Organisations and activists working on similar issues in Bihar and may help them to advocate for the same.

500 copies of English version were printed and we are planning to print the Hindi version to use it as an effective tool for further advocacy. The Hindi version is also almost completed.

### ***MDG (Millennium Development Goal) Rally:***

A ‘make a noise rally’ had been organised on 17<sup>th</sup> September, 2010 by partner organisations in Buxar, Nawadah and Patna.

Around 200-300 people started their march from Bus Stand, Nawadah to collectorate making noise through whistles and clapping. The purpose of the event was to awaken the government to make proper arrangements to achieve the set goals by 2015.

**Convergence with other government schemes and programs**

The beneficiaries from various government schemes are the result of village, Panchayat, block and district level convergence meeting with representatives and government officials. We have worked on 23 schemes. All four partners tried to get schemes for their community. It has been planned to cover all schemes from the government gradually.



10400 (Nawadah-1150, Nalanda-1341, Gaya-647 and Buxar-6928) people/beneficiaries have obtained benefits from various government schemes.

<b>Beneficiaries of Government Schemes in Project Districts</b>						
<b>Sr. No.</b>	<b>Name of Schemes</b>	<b>No. of Beneficiaries</b>				
		<b>Nawadah</b>	<b>Nalanda</b>	<b>Gaya</b>	<b>Buxar</b>	<b>Total</b>
1	Draught Relief Fund	35	70	52	200	357
2	Child Scholarship, Drees Schemes & School Admission	242	394	171	593	1400
3	ICDS	11	65	0	0	76
4	Chief Minister Girl Child Marriage Scheme	17	25	7	35	84
5	Indira Awas Yojana	116	75	21	479	691
6	Hand Pump Installation	13	9	4	6	32
7	Family Planning Schemes	7	5	12	2	26
8	Old Age Pension	139	50	46	317	552
9	Widow Pension	7	5	16	31	59
10	Disability Certificate/handicap pension	39	4	41	22	106
11	Construction of Compost Pit	5	5	2	0	12
12	Construction of Pond	2	4	4	0	10
13	Renovation of Check Dam	0	0	1	1	2
14	Distribution of Bhoodan Land Certificate	0	45	121	122	288



15	Distribution of Homestead Land	26	66	58	979	1129
16	Job Card Distribution	154	38	0	2344	2536
17	Health Card Distribution		162	8	165	335
18	MGNREGA Work	207	645	80	1632	
19	Insurance of Labour	47	0	0	0	47
20	Blanket Distribution	63	0	0	0	63
21	Kisan Credit Card	0	53	0	0	53
22	Kabir Cremation	8	6	3	0	17
23	Bal Janani Suraksha Yojna	12	14	0	0	26
		1150	1675	647	6928	10400



Job Card distribution, Nalanda

From draught relief fund, government has distributed Rs. 600 to each family and all our partners have jointly covered 357 beneficiaries. The special efforts was done by our motivators in Gaya district to provide this benefit to the genuine beneficiaries who were earlier not covered in the list prepared by block office. 1400 children linked with the scholarship and dress schemes in project area. Similarly, the partners in their project area have tried to link them with other schemes as it is

mentioned in the above table.

One thing worth mentioning here is that in Bhoopnagar village of Gaya we successfully mobilised the government funds for construction of 1 pond and renovation of check dam in the village through NREGA schemes and also people got jobs under it. Similarly in Paharpur village in Nawada 1 pond has been renovated through MGNREGS as well. The villagers have also successfully mobilised fund for construction of 4 vermin compost pits in the village. This is an effort towards development of sustainable agriculture practice in the area and we hope to make it more strong.

In Nawadah, with our efforts and liaisoning with government departments we have mobilised, one primary school in Paharpur village, drinking water facilities. Similarly in Stalin Nagar village 6 plastic bed for vermi-compost preparation and 21 farmers (5 in Paharpur and 16 in Stalin Nagar) have received seeds as well as other support for cultivation such as, paddy seeds, fertiliser, DAP, Zink, organic manure and pesticide powder etc.

In Nalanda the community have forced the local administration to establish one primary school for Dalits in the village earlier which was sanctioned for some other village.



## Output indicators

- 10 days foot march organised demanding land rights to Dalit from Bodh Gaya to Patna.
- 3 decimal homestead lands to Dalit families have been announced by the government and 66 beneficiaries in Nalanda, 58 in Gaya, 26 in Nawadah and 979 in Buxar have received the land.
- 700 families have been surveyed for homestead land in Bankey Bazar block Gaya district.
- Demarcation of Bhoodan Land has been done in Bankey Bazar block of Gaya district.
- 288 families/beneficiaries have got the Bhoodan Land certificate.
- 2564 days of work has been ensured for our beneficiaries in MGNREGS. In some cases in Nalanda 100 day's job has also been ensured.
- Make a noise rally was also organised in Nawadah, Buxar and Gaya districts in reference to Millennium Development Goals.
- 10400 (Nawadah-1150, Nalanda-1675, Gaya-647 and Buxar-6928) people got the benefits of various government schemes.
- Study on Bhoodan Land has been completed and is ready for further advocacy with government. There are 500 copies printed in English.

## 2.3 Experiences and difficulties in project implementation (info)

Description of difficulties encountered (or if not with regard to risks and hypotheses identified in the project request) and of measures applied to overcome these difficulties.

- Spillway channel in Buxar got damaged due to excess of water release from the canal as well as hail storm in the region. The process for mobilisation of fund from government is going on and hopefully will get it done soon.
- In Gaya regular intervention of MCC (Naxals) also disturbed and affected the timely implementation of the work.
- Bank linkages for SHG groups are currently not being done. As per government norms all SHGs are supposed to be established through Jeevika (BRLP(Biahr Rural Livelihood Project)/NRLM (National Rural Livelihood Mission). Now as soon as Jeevika get functional in respective Panchayats the SHG groups will be linked with the same.
- Drought situation persisting continuously for second year is de-motivating the community and we are not getting the desired results as per our objectives.

## 2.4 Indicators and comparative indicators (info)

If there was no log frame attached to the project request, the indicators have to appear under this point.



If the objectives and results have suffered modifications announced and approved by Swiss Solidarity, the adaptation of indicators has to be signalled.

Log frame along with the achievements is attached with this report.

## **2.6 Conclusions (info)**

Ending or continuation or transfer of project has to be explained.

1. A high level of ownership on community resources has been demonstrated, and the level of unity and management skills exhibited to manage common resources through community initiatives.
2. The village committees such as VDCs, SHGs, Users groups and other maintenance committees are quite functional and collective decision making is being established as a practice in almost all villages.
3. Around 30 to 40% increment recorded in the food production against the base line data. For example, there were 387 acres of land available with the community and almost 50% of land (194 acres) has been brought under cultivation which in turn contributed in more production of crops. Similarly, landless families also increased their income through nonfarm activities taken up in the villages.
4. Women have shown remarkable progress to manage self-help activities in the village. Their confidence level, as result of positive achievements and gains, has boosted and their self-esteem has also improved. They have participated in all community level activities and have established their say in the decision making as well. A clear change in economic conditions at family level is clearly perceived.
5. Seasonal migration in search of livelihoods has drastically come down in most of the targeted villages.
6. Leadership at community level is also increasing and unity at village level is also becoming strong.
7. Committed efforts to get homestead lands, and receipt of Bhoodan land and other government lands for agriculture to Dalit families has paid result and is continuing further.

It is clear that various activities taken up in this project have contributed to socio-economic growth of the village. As a result, the enthusiasm levels of communities are high across the villages. It is noted that most of the actions are interconnected and have complemented each other for positive gains.



This project is moving towards creating a model to be adopted by the government and others and further development of Dalit community and their livelihood. As it is still in its formative stage we need to strengthen the community more and more to make it self sustainable. There must be some more efforts needed to leverage the programme with government and other sources. Some additional support should also be provided to make the community self reliant.

Given the socio-economic and educational background of the community it is important to invest some more time and resources to make them fully reliant and sustainable.

### **3 Coordination of the actors in the field (info)**

#### **Assessment of the cooperation of the actors in the field**

- CWS-Bihar Resource Centre has organised orientation meeting with organisation heads, project coordinators and field motivators regarding project activities planning and implementation as well as a separate training was organised for accountants responsible for uniform system of financial reporting quarterly.
- Monthly meeting of staffs at partner's level organised to take the updates of planned activities.
- Review meeting at NGO levels and half yearly meeting at BRC-CWS with all partners and staffs has also been organised for uniform implementation of project activities.
- CWS also organised quarterly review meeting with partners for follow up the plan and re-oriented them for effective implementation of planned activities. It is being organised on rotation basis and partners are supposed to visit other's field area for cross learning's.
- The project coordinators and field motivators are regularly interacting with community and orienting them regarding the activities and facilitating them on various occasions.
- The partners are on regular basis interacting with government officials and putting pressure on them for effective implementation of government schemes. Except few all of them were found cooperative and supportive. The partners are also in touch with Krishi Vikas Kendra of the district and they are happily extending their cooperation whenever it is required.
- Other Civil Society Organisations are also contacted for their support mostly as resource person for training on capacity building of farmers.
- The regular monitoring visit by programme staff from CWS-BRC has also supported the partners to implement activities and submit the reports on time.
- The exposure visit of farmers to KVK in Nawadah and exposure visit of partners to the watershed areas was also accompanied by the staff from BRC-CWS.



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**6 Intermediate or final financial report / Financing plan (info)**

The structure of the accounts has to be the same as for the budget approved. All important changes with the regard to the original budget/the modification approved have to be explained. In the final financial report, the item “contingencies” has to be justified. It has to be in total agreement with the objectives of the project.

- The revolving fund has not been given to SHGs as it was realised that group has collected good amount of money and are rotating it successfully among them self.

**7 Visibility (info)**

The measures taken have to be described shortly and can be illustrated by pictures.

- The banners related each activity is prepared to make it visible.
- Press note and coverage in local papers for activities has been done and also been reported to Caritas.