Cumulative Progress Report: April, 2011 to August 31, 2014

Bundelkhand Rural Poverty Alleviation Program (BRPAP), Tikamgarh

under

Bundelkhand Initiative

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1. Summary

SDTT has embarked on a Bundelkhand Initiative to address poverty and inequity in the region through multi-sectoral civil society projects based on a clear strategy. The Initiative is being rolled out through projects in two contiguous districts: Lalitpur in UP and Tikamgarh in MP.

Under the initiative, ABSSS, headquartered in Chitrakoot, UP, is running a Project, entitled Bundelkhand Rural Poverty Alleviation Program (BRPAP), in 40 villages of Tikamgarh block of Tikamgarh district.

Of the 40 villages, 20 villages are selected for core intervention, while the remaining 20 are extension villages. The duration of the Project is 3 years.

The main objectives of the ABSSS Project are as follows:

- To form and build capacity of community organizations especially of women and marginalized social groups for democratic realization of entitlements.
- To enhance participation, savings, role and decision-making power of women in household and community development.
- To enhance income & living standards of the people of target group from land and agriculture through scientific natural resource management and improved agricultural practices & animal husbandry.
- To strengthen capacity of NGO and community in MGNREGA, RTF, etc
- To leverage available public funding (government) resources for optimum realization of above objectives

The major activities of the Project are:

- Establishing community based organizations (CBOs) on common platform with focus on women
- Watershed development
- Agriculture development
- Horticulture, forestation, other new livelihood opportunities
- Improve livestock productivity
- Build target group capacity to claim entitlements
- Capacity building of NGO and community

A total of 2565 households (HHs) live in the 20 villages/hamlets covered intensively by the Project. Of these 30% belong to SC groups, 14% belong to ST groups and 56% belong to OBC groups.

An in-depth socio-economic survey of 95 target group HHs in 20 Project villages revealed that agriculture and wage labour were the main sources of livelihood, engaging over four-fifths of the HHs. Around a third of HHs had at least one member who migrates to distant locations for 3-9 months. Around half the HHs got income from fruit and forest species trees,

growing on their own lands or in forestlands, but quantum of income from this source was low. Only a fourth of HHs got income from animal husbandry.

Barring 6% of the total families, all families owned some agricultural land. However, 44% of the total families owned less than 2.5 acres (1 ha) and another 38% owned between 2.5 to 5 acres (1 to 2 ha). Of the total 6823 acres of cultivable land, around 60% (4037 acres) was irrigated, and of this, around 67% was irrigated by dug wells. Nearly two-thirds of farmers, cultivating around 40% of the cultivated land, did not have wells.

Wheat, soyabean, and urad were the major crops, accounting for 60% of the total cropped area, with wheat occupying 26% of the area, followed by soyabean (19%) and urad (17%).

FY 2013-14 was the 3rd and final year of the Project (barring extension, if any), which was implemented by ABSSS in an area where it had no previous work experience or even contacts. Hence, there was a backlog in the first year, which was attempted to be covered in the second and third years.

Difficulty was faced in forming new women's SHGs as similar groups are being formed in the area by DPIP and Tejaswani programmes. Despite this limitation 75% of the target for new CBO formation was achieved. A total of 40 SHGs had opened bank accounts. Loans were given by the SHGs for purchase of agriculture inputs, meeting expenses on account of illness, meeting daily consumption needs and for starting a business. A total of 2601 SHG meetings were held till June 2014.

Little soil and water conservation works could be initiated during the 1st year because of the late start of the Project. Hence momentum was built up during the 2nd year and continued in 3rd year. Till July 31, 2014, land bunding was carried out in 12 villages for a total of 207 beneficiary households, on a total of 490 acres against target of 380 acres. Of the 207 beneficiaries, over 80% belonged to SC/ST groups.

Farmers in the area were largely unwilling to forfeit some of their land for construction of farm ponds. However, through persistent efforts, the Project could motivate 17 farmers to construct farm ponds. As a result of this effort, a total of 59 acres owned by 26 farmers (almost all from SC/ST groups) could be brought under irrigation. Additionally, two ponds on community lands were renovated, benefitting 31 farmers (27 of SC/ST groups) and 104 acres.

While new wells could not be constructed due to Project budgetary limitations, 21 existing group wells were deepened and optimized, benefitting a total of 98 families, of whom 68 belonged to SC/ST groups.

The Project introduced drip irrigation for vegetable-cultivation, encouraging 38 families to HHs to use this technique for taking up vegetable production in a sustainable way. The Project facilitated securing of government subsidy for the drip irrigation systems, and also supported farmers to take up vegetable cultivation, through supply of quality inputs and technical guidance.

An innovative activity undertaken in the early part of the Project period was installation of a diversion based irrigation (DBI) system in the Adivasi village of Sauryana, with labour contribution from the beneficiaries.

Agriculture development was done through three activities:

- farmer training programmes
- promotion of PoPs with input support, and promotion of Jeevamrut
- scaling up.

Around 600 farmers were encouraged to follow KVK-recommended PoPs for main kharif and rabi crops. Under scaling up activity, seeds and/or seed treatment and use of cultures were promoted by providing inputs and guidance to a total of 3047 farmers. The Project encouraged nearly 100 families, particularly SC/ST farmers, to take up demo vegetable production on a small scale, with help of Project support, in the form of quality seeds and fertilizers. These families were also encouraged to grow fruit trees with the Project providing saplings of fruit trees like pomegranate, lemon, karonda, guava, amla and mango.

Through efforts of the Project, 62 ST families of Sauryana Adivasi village got homestead land titles and possession on plots with aggregate value of Rs 4.34 lakhs. These families also benefitted from PDS regularization. In Amarpur village, Project intervention helped ST families establish possession and entitlement over 18.5 acres of land.

The Project made successful efforts to secure community contribution and public investment in Project area. The community made a total contribution of Rs 19 lakhs, mainly in the form of labour. Excluding value of individual entitlements realized (Rs 33.22 lakhs), the total government funding secured through convergence was Rs 72.82 lakhs.

The Commissioner, Rural Development (MGNREGA), CEO Zilla Panchayat, CEO Janpad Panchayat, District Collector and officials of more than a dozen departments visited the Project area in January 2013 and assured support under MGNREGA if net planning of area was done. Subsequently, the Project facilitated preparation and submission of plans for bunding a total of 224 acres owned by 236 farmers in 6 villages under MGNREGA.

All the village-level workers of the Project were selected from the community and were given handholding support to perform expected tasks. The Project maintained close contact with local KVK, which responded warmly with support for training programmes, PoP design and guidance on crop management. Continuous support was also got from Pradan, the technical consulting organization appointed for the Project.

For making people outside Project area aware of the Project, efforts were undertaken to invite a number of different experts and officials to visit Project sites. Visit of District Collector, MGNREGA Commissioner, Zilla Parishad CEO and other officials to Project area in January 23, 2013 received extensive coverage in local/regional newspapers.

Apart from a number of training programmes for women SHGs and farmer groups, exposure visits were organized to help build the community's confidence and resolve to undertake development work.

Including the Director, all staffs were located in or near the Project area. Weekly meetings were held at the Project office to assess the progress of activities against objectives. Reviews were conducted by the Director on a monthly, quarterly, half-yearly and annual basis to assess the impact of the programmes. Expenditure under major budget heads till August 31, 2014, against total sanctioned budget for the reporting period, was 20% less than the budget amount, and within permissible variation.

The Project had following major impacts:

- Establishment of good agricultural practices in Project area.
- Demonstrated benefits of land bunding.
- Demonstrated benefits of PoP with Jeeavamrut, resulting in higher yields and higher returns.
- Increase in area of cultivation and production due to renovation of wells.
- Improved incomes through vegetable cultivation.

Through Project training and demonstrations, a number of farmers took to good practices like line sowing, optimum use of seeds, and seed treatment before sowing.

Over 200 farmers were mobilized to agree for bunding on their lands and bunding resulted in ten-fold increase in area and production in rabi cultivation.

Huge increases in yield were demonstrated for kharif and rabi crops. In case of all crops except mustard, PoP input costs were significantly higher than input costs under traditional methods. However, increased yield through use of PoPs more than made up for the increased input cost. The net value of produce obtained through PoPs was 2 to 27 times net value of produce obtained from traditional methods.

Deepening/renovation of dug group-wells more than doubled users' rabi agriculture production.

While drip-irrigation vegetable cultivators were earlier getting net return at rate of around Rs 15,000/ ha from cultivation of staple crops in kharif and rabi, they got almost that much income (average around Rs 13,000) from only one-sixth of a hectare.

Overall, the Project demonstrated that there is good scope for increasing incomes of small and marginal farmers through an integrated strategy of SWC, promotion of PoPs for staple crops, use of Jeevamrut and vegetable cultivation on small plots of around 1500 sqm.

Bhagwat Prasad
Director

2. Background of Project

SDTT has embarked on a Bundelkhand Initiative to address poverty and inequity in the region through multi-sectoral civil society projects based on a clear strategy.

The Initiative is being rolled out through projects in two contiguous districts – Lalitpur in UP and Tikamgarh in MP—which will be in the form of demonstration models that can be scaled or replicated in the rest of the region. The civil society organizations (CSOs) invited to work in these two districts are reputed NGOs of the region that have worked with SDTT in the past. ABSSS was one of the invitees and responded positively to the opportunity offered by SDTT.

The ABSSS Project, entitled Bundelkhand Rural Poverty Alleviation Program (BRPAP), was implemented from March 2011 to August 2014 in 40 villages of Tikamgarh block of Tikamgarh district, MP. Of the 40 villages, 20 villages were selected for core intervention, while the remaining 20 were extension villages. The Project management had applied for an extension in August 2104.

The main objectives of the ABSSS Project were as follows:

- To form and build capacity of community organizations especially of women and marginalized social groups for democratic realization of entitlements.
- To enhance participation, savings, role and decision-making power of women in household and community development.
- To enhance income & living standards of the people of target group from land and agriculture through scientific natural resource management and improved agricultural practices & animal husbandry.
- To strengthen capacity of NGO and community in MGNREGA, RTF, etc
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The major activities of the Project were:

- Establishing community based organizations (CBOs) on common platform with focus on women
- Watershed development
- Agriculture development
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- Improve livestock productivity
- Build target group capacity to claim entitlements
- Capacity building of NGO and community.

2a. Baseline information on Project area

Geographical profile

The 20 Project villages are located in Tikamgarh block of Tikamgarh district, MP, at a distance of 20 to 40 km from Tikamgarh town, which is the headquarters of the district. Tikamgarh district lies in the northern part of MP, and is bounded by of Sagar district in the south, Chhattarpur district in the east, Lalitpur district of UP in the east and Jhansi district of UP in the north.

The northern part of the district is at height of about 200m above the mean sea level (amsl), while the southern part is at a height of around 300m. Thus, the district's topography is marked by a gentle slope from south towards north.

According to geological formations, the district can be classified into two broad regions:
- Hill ranges rising to height of 200-400m amsl.
- Inter-hill valleys.

The hill ranges are made up of hard compact and resistant granite masses intruded by quartz reef. The valleys are covered by colluvial and detrital of parent rock along with organic material. The thickness of alluvial fill varies from 10-16 meters.

Soils derived from parent rocks are of four types:
- Coarse-grained reddish brown soils known locally as Rakar
- Coarse-grained grey to greyish brown soils known as Parua
- Clay loam black soils known as Kabar
- Clayey-black soils known as Mar

Table 2.1: Soil status

Parameter	Value	Rating
pH	7-7.6	Normal
EC	0.10-0.20	Normal
Organic carbon	0.27-0.70%	Low to Medium
Available phosphorous	2-12kg/ha	Low
Available potash	50 to 200kg/ha	Low to Medium

Soil parameters, as obtained from soil tests conducted in the Project villages, are generally as shown in Table 2.1

Climate and rainfall

The climate of Tikamgarh district is characterized by a hot summer and general dryness except during the southwest monsoon season. The normal maximum temperature during the month of May is 41.8° C and minimum during the month of January is 7.0°C. The mean maximum and minimum temperatures are 32.4°C and 17.5°C respectively.

The normal annual rainfall received by Tikamgarh district is 1057.1 mm. Maximum rainfall (about 90%) is received during southwest monsoon period from June to September. During the southwest monsoon season the relative humidity generally exceeds 87% in August. The driest part of the year is the summer season, when relative humidity is less than 35%. May is the driest month of the year.

Data on rainfall (Table 2.2) for 12 years shows that in 7 years before the start of the Project, rainfall was much below normal, and in one year (2007), it was 50% below normal. In 2 years, rainfall was much above normal. Highest rainfall generally falls in June-July. Due to the sloping topography, and the granite substratum, most of the water is lost in runoff.

Table 2.2: Rainfall data for 12 years

No	Year	Rainfall in mm in month (1-12)												Total
		1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	mm
1	2002	0	0	0	0.4	8	101	1	602.9	67.3	0	4.5	0	785.1
2	2003	0	24.2	0	0	0	98.8	213.8	172.4	444	0	0	5	958.2
3	2004	2.5	0	0	0	14	119	114.2	424	53	35	0	0	761.7
4	2005	0	0	27.4	0	0	38	556	74	111	0	0	0	806.4
5	2006	0	0	80	0	12	8.4	516.6	160.6	45	19.4	0	0	842
6	2007	0	44	10	0	6	12.1	64.9	134	60	0	0	2	333
7	2008	0	0	0	0	2	754	262	313	57	13	5	0	1406
8	2009	31	0	0	0	17	49	238	205	117	152	52	4	865
9	2010	0	34	0	0	0	15	201	191	157.01	16	13	0	627
10	2011	0	4	0	0	8	606	299	305	207	0	0	0	1429
11	2012	7	0	0	9	0	27	461	404	69	0	0	0	977
12	2013	0	86	7	0	0	170	620	476	5	81	NA	NA	1445

Land Use

Tikamgarh is a predominantly rural district with urban population restricted to 30% of total population. According to 2006-07 data from District Statistical Handbook, nearly 60% of the land is cultivated, and of this, over 50% is under double cropping. Only 5% of the land is under different categories of forestland. However, in one of the Adivasi villages covered by the Project (Sapon), the forestland is much in excess of the cultivated land.

Peoplescape

A total of 2565 families live in the 20 villages/hamlets covered intensively by the Project. Of these:

- 30% belong to SC groups
- 14% belong to ST groups and
- 56% belong to OBC groups.

The main SC groups are Ahirwar, Vanshkar, Chadar and Khangar. The main ST groups are Saur and Gond. The general population (less than 1% of total) consists of a few Thakur, Jain and Brahmin families.

A total of 16 of the 20 villages have a significant SC population, and in 5 villages (Madnikhera, Satyanagar, Gopalpura, Bhagalpura and Matapur), the SC population is predominant. Half the villages have a significant ST population, and in 3 villages (Sapon, Sauryana, and Basiyan Khera) and Haidarpur adivasi basti, the ST population is predominant.

Livelihood pattern

An in-depth socio-economic survey of 95 target group HHs in 20 Project villages revealed that:

- Agriculture and wage labour were the main sources of livelihood, engaging over 80% of the HHs.
- Around 18% of HHs had at least one member who migrates annually to distant locations for 8-12 months.
- Around 50% the HHs got income from fruit and forest species trees, growing on their own lands or in forestlands, but quantum of income is from this source was low.
- Only 25% of HHs got income from animal husbandry.
- Around 20% of HHs had small businesses, usually in trading.
- The number of HHs with at least one person having a salaried job was negligible.

Average gross income of surveyed HHs was Rs 56,000 per annum, which means that excluding cost of production in agriculture, average net income was less than Rs 40,000. This was reflected in living-standard indicators:

- While most HHs lived in semi-pukka houses made of mud and stones, only 17% HHs owned motorcycles
- only 13% owned TV sets, and
- only 14% used a \kerosene or gas stove for cooking.

Land ownership

Barring 6% of the total families, all families owned some agricultural land. However, as data in Table 2.3 indicates, 44% of the total families owned less than 2.5 acres (1 ha) and another 38% owned between 2.5 to 5 acres (1 to 2 ha). Thus, 80% of the population comprised marginal and small farmers.

Table 2.3: Land owning pattern in 20 villages

Land owned in acres	No of families
0	145
<2.5	1116
2.5-5	986
5-10	260
10-20	52
>20	6

Water & Irrigation Status

In all villages, there were functioning handpumps. However, in 13 villages there were only 2 or less than 2 handpumps, and shortage of drinking water was experienced in summer months. In 10 villages, there were a total of 15 ponds, used mainly for washing and feeding water to animals. In all but 3 of the 20 villages, there were public wells. The water was used mainly for domestic consumption.

Groundwater tapped through private dug wells was the main source of irrigation in the entire Tikamgarh district, and the situation is the same in the 20 Project villages. Of the total 6823 acres of cultivable land, around 60% (4037 acres) was irrigated, and of this, around 67% was irrigated by dug wells. Three villages are near a river and in 15 villages there is a nalla nearby, and in 10 villages a total of 18 checkdams have been built by the government across these nallas or rivers. There is no canal irrigation in the selected villages.

It was seen that normally 80% of wells had water in Kharif and Rabi, and some amount of water in summer. Nearly two-thirds of farmers, cultivating around 40% of the cultivated land, did not have wells.

Cropping Pattern

Of the total 6823 acres of cultivable land, around 80% (5485 acres) was sown in the Kharif season, and around 70% (4919 acres) was sown in the Rabi season. However, including around 7% of the sown area under different vegetables, only around 38% of the cultivable land was double-cropped, compared to the district average of 50%. A tiny part of the land was under cultivation in summer under some vegetable crops. Wheat, soyabean, and urad were the major crops, accounting for 60% of the gross cropped area (10925 acres), with wheat occupying 26% of the area, followed by soyabean (19%) and urad (17%). The important minor crops accounting for over 5% of cultivated area were mustard, til and paddy.

Around one-fourth of households cultivated vegetables in kitchen gardens and/or parts of their land. The major kitchen garden vegetables were tomato, brinjal, bottle gourd, pumpkin and bhendi (lady's finger). Except for onion, which was grown by a couple of farmers in areas over 1 acre, average area under vegetable cultivation per cultivating household ranged from 0.3 to 0.7 acres.

Livestock

There were around 2700 heads of cattle owned by HHs in 20 villages. The productivity of the animals was quite low, with average daily milk production per cow being only 0.8 litres. Average milk production per buffalo was 2.7 litres. Only around a third of all HHs owned bulls. Most HHs depended on use of tractors for ploughing. Goat ownership was largely seen in SC/ST HHs.

Public Infrastructure

The 20 villages are well served by public infrastructure in terms of primary schools and electricity supply. In other respects, especially health and transport infrastructure, the villages are poorly served. However, most services are available near the village (within distance of 5 km).

Access to Entitlements

A total of 2562 children were enrolled in schools in the 20 villages, but around 25% were not attending regularly. There were a number of families that saw no benefit in sending children, especially girls, to school regularly. Around 17% of HHs were not covered by PDS—they did not have any kind of card. Around 77% of HHs had MGNREGA cards. However, only a third of card-holding HHs had got work in the preceding 12 months.

Food Insecurity

The in-depth study of 95 sample-HHs revealed that no HH suffered from chronic starvation. However, 48% HHs had less than 3 full meals a day, and 11% HHs reported that they sometimes cooked and ate grains of wild grasses

3. Program Findings

This section discusses the Project's achievements vis-à-vis its objectives. It also throws light on Project design and implementation.

3a. Fulfillment of Objectives

The Project was implemented by ABSSS in an area where it had no previous work experience or even contacts. Hence, there was a backlog in the first year, which was attempted to be covered in the second and third years.

Forming And Building Capacity of CBOs, especially of Women

The Project staff could strengthen rapport with the community, secure involvement of key community leaders, and strengthen three kinds of CBOs: women's SHGs, farmers' groups, groups of teenage girls (kishori mandals).

Difficulty was faced in forming new women's SHGs as similar groups are being formed in the area by DPIP and Tejaswani programmes. Despite this limitation 75% of the target for new CBO formation was achieved (163 CBOS formed against target of 225). Details of CBO memberships are given in Table 3.1. As can be seen, 66% of members belonged to SC/ST groups.

Table 3.1: Details of CBOs formed

Type of CBO	Total formed	Total members	SC members	ST members
Women's SHGs	95	1179	310	384
Kishori mandals	21	159	96	63
Farmers' groups	47	372	205	87
TOTAL	**163**	**1710**	**611**	**534**

Table 3.2: CBO capacity building target and achievement

Head	Target	Achievement
Capacity building of SHGs (programmes)	6	11
Farmer group training programmes	6	12

Much effort was made to strengthen formed CBOs through capacity-building and training programmes, and target for the Project period was exceeded as shown in Table 3.2. Details of training programmes held to build capacity of SHG members are shown in Table 3.3. Capacity-building of farmer group members was done through technical training programmes, as discussed later.

All SHGs and farmers' groups met at least once a month, with 84% average attendance for SHGs and 75% attendance for farmers groups. Kishori mandals were to be linked to

education and health programmes to be conducted under the SDTT Bundelkhand Initiative by a resource agency, but as these programmes were not rolled out, regular meetings of Kishori mandals could not be sustained.

Table 3.3: Capacity building programmes for SHGs

No	Date	No of participants	Resource person(s)
	2011-12		
1	May 5	34	Project staff
2	May 9	31	-"-
3	May 11	34	-"-
4	May 21	28	-"-
5	May 22	22	-"-
6	June 15	46	-"-
7	June 18	19	Mahila Vikas Adhikari
8	June 31	30	-"-
	2013-14		
9	Aug 29-30	44	Project staff
10	Aug 31-Sep 1	44	-"-
11	Sep 2-3	33	-"-

Enhance Savings of Women and Role in Decision-Making

Women in the Project have traditionally been following 'purdah' (except in adivasi settlements) and their role in household finances and decision-making was minimal. To reverse this situation, the Project used SHGs as a platform for initiating household savings that would be controlled by women, and a platform for discussing women's rightful position in the home and the village.

While some members of groups decided to save Rs 50 a week, most groups decided on a norm of Rs 10 per member per week. A total of 40 SHGs had opened bank accounts. Details of savings are shown in Table 3.4. Loans were given by the SHGs for purchase of agriculture inputs, meeting expenses on account of illness, meeting daily consumption needs and for starting a business. A total of 2835 SHG meetings were held till June 2014.

Table 3.4: Details of SHG Finances till August 2014

Indicator	Amount (Rs)
Total savings	7,80,981
Cash in bank	3,65,509
Cash in hand	3,40,703
Inter-loaned	74,769

Scientific INRM, Improved Agriculture Practices, & Animal Husbandry

This objective head included:

- soil and water conservation (SWC)
- water resource development and management (WRD &M)
- dryland agriculture development
- horticulture, livestock and alternative livelihoods development.

Soil and Water Conservation (SWC)

Little soil and water conservation works could be initiated during the 1st year because of the late start of the Project. Hence momentum was built up during the 2nd year and continued in 3rd year. Till July 31, 2014, land bunding was carried out in 12 villages for a total of 207 beneficiary households, on a total of 490 acres as against target of 380 acres. Of the 207 beneficiaries, over 80% belonged to SC/ST groups (Table 3.5). A total of 11424 person-days of employment were generated through the SWC work, and 77% and 31% of the employment benefit went to SC/ST persons and women respectively. Around 6% of the labour cost of Rs 15.16 lakhs was contributed by beneficiary families.

Table 3.5: Details of land bunding

Beneficiary families				**Target for entire project period (acre)**	**Covered area till Aug. 31, 2014 (acre)**	**Total volume (cum)**
SC	ST	OBC	Total			
52	123	32	207	380	490	31050
25%	**59%**	**15%**	**100%**	**100%**	**129%**	

Case study: Bunding and seed support changes fortunes of Adivasi family

With a total of 25 members (including children of four married sons) and only 6 acres of land, the joint family of Hardas, an Adivasi of Matyakhera village, was compelled to migrate regularly to meet basic living needs. The terms of employment at the migration destination were severe. Starting from 2007, Hardas was made to work for years as a bonded labourer by a contractor in Jammu and Kashmir, who gave Hardas only two meals a day as payment for work. Even when Hardas fell seriously ill, the contractor refused to release him. Somehow Hardas managed to escape from the clutches of the contractor in 2011.

But the future still looked bleak, till his wife joined an SHG promoted by ABSSS under the SDTT-supported BRPAP. Through an SHG meeting, she came to know of the land bunding activities being undertaken under the programme, and after discussing this with her family, she proposed through her SHG that field bunds should be constructed around the family's agricultural lands. Nearly 500 cubic metres of earth work was done and the family received Rs 20,609 as wage labour, which helped them meet their food needs.

In 2013, under the scaling up activities of BRPAP, the family was given high quality urad seeds, and harvested 7.40 quintals of urad worth over Rs 22,000. Hardas's family was then again given seed support in 2013-14 rabi, and could harvest 55 quintals of wheat worth Rs 82,500. With this income, the family's fortunes have completely changed: it can now think of meeting its needs through agriculture. Regular distress migration has become a thing of the past.

Water Resource Development and Management (WRD &M)

Under the head of WRD &M, activities to be conducted included construction of farm ponds and other structures, deepening of wells and promotion of water economization systems like drip irrigation.

Farmers in the area were largely unwilling to forfeit some of their land for construction of farm ponds. However, through persistent efforts, the Project could motivate 17 farmers to construct farm ponds, with Project support, under the condition that the saved rainwater would be used by nearby farmers. As a result of this effort, a total of 59 acres owned by 26 farmers (almost all from SC/ST groups) could be brought under irrigation. Additionally, two ponds on community lands were renovated, benefitting 31 farmers (27 of SC/ST groups) and 104 acres.

While new wells could not be constructed due to Project budgetary limitations, 21 existing group wells were deepened and optimized, benefitting a total of 98 families, of whom 68 belonged to SC/ST groups. HHs contributed nearly 50% of labour cost. Group-well users (mostly belonging to extended families) have informally laid down rules for drawing water.

Responding to potential for vegetable cultivation in the area (with proximity to weekly markets), the Project introduced drip irrigation for vegetable-cultivation in a significant way, encouraging 38 families to HHs to use this technique for taking up vegetable production in a sustainable way. While each drip system cost Rs 70,000 per acre, the Project arranged for subsidy to tune of Rs 56,000 per farmer/acre from horticulture department and met around 13% of the cost (Rs 9000 per farmer/acre) through Project funding. The remaining cost of Rs 5000 per farmer/acre was met by beneficiaries themselves.

An innovative activity undertaken in the early part of the Project period was installation of a diversion based irrigation (DBI) system in the Adivasi village of Sauryana, with labour contribution from the beneficiaries (see box).

Table 3.6: Water resource devp target and achievement (nos)

Type of structure	Target	Achievement
Farm pond	20	17
Well (deepening and optimization)	20	21
Other water harvesting (eg ponds)	04	3*
Water economization systems (drip)	20	50*

*Target exceeded without exceeding sanctioned Project budget through convergence and beneficiary contribution
* During the year approval obtained for rest of the budget under Dryland agriculture- PoPs

Construction of Farm Ponds

Water Harvesting Structure: Mairikhera

Water Harvesting Structure: Medanikhera

Well **Renovation at various villages**

Water Economization Approaches:

Case study: Diversion based irrigation brings joy to 40 Adivasi families

Forty Adivasi families in Sauryana village owning a total of around 75 acres of land were compelled to migrate regularly for their survival, as the lands they owned were entirely un-irrigated and hence almost entirely uncultivated. Even after a minor irrigation dam was constructed near the village, the families could not get benefit from it, as the dam is at an elevation, and there were no channels to bring the water to their lands.

In 2007-08, a landlord from the neighboring Laar village offered to give the 40 Adivasi families a temporary pipeline to draw the water from the dam through gravity-based diversion. However, the terms laid down by the landlord were highly exploitative. The families had to lay the pipeline through their own effort. They then had to give half their produce to the landlord as "payment" for the water they had drawn for irrigation. The poor Adivasi families required capital to purchase inputs and get their lands ploughed with the help of a tractor. They had to take a loan for these purposes from the same landlord, and to repay the loan, they had to give nearly half their produce to the landlord. Thus, they were left with barely any produce for their own use.

When ABSSS came to know of this exploitation, it proposed that a permanent, gravity-based diversion irrigation system could be installed for the benefit of the families, if they were ready to contribute through their labour, and set up a formal system to regulate and manage use of water for irrigation. The families agreed to both conditions, and after getting due permission, in December 2011, a channel of around 660 metres length was dug for laying a pipeline. The channel was strengthened with bricks and sand. An underground PVC pipeline was laid in the channel, from the irrigation department's dam to a chamber, from where water is released through mud channels to individual fields, at specific times.

Beneficiary farmers did all the labour work of excavating a channel for laying the pipe, and constructing the chamber. They also contributed construction materials for the chamber. The project had to incur expenditure of only Rs 1.30 lakhs for the PVC pipe. With this minimal investment, around 75 acres of fallow land was brought under cultivation. In 2013-14, the total wheat production from the 75 acres was 630 quintals, worth Rs 8.50 lakhs. Around 7 families having poor quality land have used the irrigation water to manufacture and sell bricks. The gross annual income from this enterprise is around Rs 1.60 lakhs.

The simple and innovative irrigation system in Sauryana has drawn the attention of many senior government officials. As a result, the village has received several other benefits: 62 families have received residential land pattas, pension papers of 10 families were cleared, 40 families received grants for construction of toilets, and one new handpump has been installed in the village.

Well Renovation:

Dryland Agriculture Development

Agriculture development was done through three activities:

- farmer training programmes
- promotion of PoPs with input support, and promotion of Jeevamrut
- scaling up.

A number of farmer training programmes were organized as shown in Table 3.7.

Table 3.7: Details of farmer training programmes

S no	Start date	Period (days)	No of farmer partici-pants	Resource person	Topic
1	May 27, 2012	5	8	Subhash Palekar	Zero budget farming
2	June 26, 2012	1	48	Dr RK Prajapati, and Dr VL Sahu, KVK Tikamgarh	Good agriculture practices
3	Aug 25, 2012	5	51	Subhash Palekar	Zero budget farming
4	June 9, 2013	5	147	Subhash Palekar	Zero budget farming
5	June 26, 2013	1	NA	Dr RK Prajapati, and Dr VL Sahu, KVK Tikamgarh	Kharif cropping
6	Aug 18, 2013	1	52	SS. Kushwaha, Deputy Director- Horticulture	Vegetable farming
7	Aug 27, 2013	1	82	Dr RK Prajapati	Kharif cropping
8	Sep 5, 2013	1	55	Project staff	Pest management
9	Oct 11, 2013	1	60	Dr Ram Vishal Singh Pal, NFSM, Banda	Rabi crop planning
10	July 2&3, 2014	2	212	Dr S.S. Gautam, Project coordinator KVK Tikamgarh, Dr. S.S. Kushwah DD Horticulture Tikamgarh, Sh. Ram Vishal singh Ex.DD Agriculture UP, Dr D.S. Tomar Asst. Prof. College of Ag. Tikamgarh, Sh. MK Nayak Asst. Prof. College of Ag. Tikamgarh, Smt. Nidhi Pathak Scientist KVK Tikamgarh, Sh. B.N. Singh DD Agriculture Tikamgarh.	Livelihood promotion through Horticulture and Vegetable cultivation

Around 600 farmers (Table 3.9) were encouraged to follow KVK-recommended PoPs for main kharif and rabi crops. Support was given in the form of certified and seeds of recommended and locally available varieties, fertilizers (DAP, urea, MOP, zinc sulphate, sulphur), cultures (Rhizobium, Azotobacter, PSB) and Trichoderma. Further, farmers were motivated and trained to use Jeevamrut.



Table 3.8: Crop-wise area covered under PoP support

Crop	Area (acres)
Soyabean	61
Urad	4.8
Til	57.8
Paddy	19.1
Mustard	90.5
Gram	53
Wheat	103.5
TOTAL	**389.7**
Original target for entire Project period	**375**
Revised target for Project period*	**378**

*Target calculated from approval given for additional expenditure on PoP by SDTT on Nov 27, 2013

Table 3.9: PoP beneficiary farmers by season/year and social group

Season/Year	No of beneficiary farmers by social group								
	SC	%	ST	%	OBC	%	GEN	%	TOTAL
Rabi 2011-12	16	46%	9	26%	8	23%	2	6%	35
Kharif 2012	20	31%	24	38%	19	30%	1	2%	64
Rabi 2012-13	92	29%	109	34%	110	34%	8	3%	319
Rabi 2013-14	62	52%	24	20%	33	28%	1	1%	120
Kharif 2013	15	31%	19	39%	14	29%	1	2%	49
TOTAL	**205**	**35%**	**185**	**32%**	**184**	**31%**	**13**	**2%**	**587**
				66%					

Crop-wise and year-wise breakup of PoP support in terms of acres covered is given in Table 3.8, which shows that Project exceeded the revised target of 378 acres sanctioned by SDTT

on Nov 27, 2013. As data in Table 3.9 shows, 66% of nearly 600 PoP beneficiary farmers were from SC/ST groups.

Table 3.10: Scaling beneficiary farmers by season/year and social group

Scaling beneficiary farmers by season/year and social group									
Season/Year	**No of beneficiary farmers by social group**								
	SC	**%**	**ST**	**%**	**OBC**	**%**	**GEN**	**%**	**TOTAL**
Rabi 2011-12	1	4%	20	71%	7	25%	0	0%	28
Rabi 2012-13	385	32%	441	37%	290	24%	84	7%	1200
Rabi 2013-14	429	39%	294	27%	360	33%	9	1%	1092
Kharif 2013	255	35%	195	27%	275	38%	2	0%	727
TOTAL	**1070**	**35%**	**950**	**31%**	**932**	**31%**	**95**	**3%**	**3047**
				66%					

Under scaling up activity, seeds and/or seed treatment and use of cultures were promoted by providing inputs and guidance to a total of 3047 farmers, exceeding the Project target of 3000 farmers, as shown in Table 3.10. Over 66% of beneficiary farmers were from SC/ST groups.

Table 3.11: Dryland agriculture development other targets and achievement

Head	**Target**	**Achievement**
Training of farmers and village resource persons	12	13
Soil tests	225	70
Value chain studies	4	4

Cumulative achievements against other targets for dryland agriculture development are shown in Table 3.11. While reviewing the achievements, it may be noted that enormous time goes in getting soil test reports. Project decided not to send samples till results of earlier samples were received. SDTT sanction was obtained to use budgeted amount for PoPs.

(Collector & District Magistrate-Dr. Sudama Khande, Deputy Director Agriculture- Sri B.N. Singh, Deputy Director Horticulture- Sri KushwahJi & Other District level Officials observing vegetable field & discussing with farmers)

Horticulture, Livestock and Alternative Livelihood Development

While small-scale vegetable cultivation is done in the Project area, many SC/ST families have never grown vegetables due to lack of knowledge and confidence. Also, use of good vegetable seed varieties is uncommon. Hence, the Project encouraged nearly 100 families, particularly SC/ST farmers, to take up demo vegetable production on a small scale, with help of Project support, in the form of quality seeds and fertilizers. These families were also encouraged to grow fruit trees with the Project providing saplings of fruit trees like pomegranate (5320 nos), lemon (700), karonda (750), guava (675), amla (275) and mango (155). The saplings were obtained from reputed nurseries. Technical guidance was provided to beneficiary farmers.

To initiate livestock development activities, a study was conducted on livestock population and management practices in Project area. However no HHs could be given input or technical support for higher income through livestock, mainly due to lack of accessible veterinary services in Project area.

Table 3.12: Horticulture/livestock/alternative livelihoods development targets and achievement

Head	Target	Achievement
Horticulture (acres)	35	35.14
Livestock (HHs)	15	0
Alternative livelihoods (HHs)	15	2*
Migration study	1	1

*Excluding 8 HHs who took up new livelihood without direct Project support, but enabled by Project investment

As SHGs formed by the Project are still in infancy stage, Project did not think the time was ripe to give grant support for alternative livelihood activities. However, without direct Project support, 8 HHs started brick-making as an alternative income-generating activity on degraded soils, using water made available through a diversion-based irrigation scheme implemented by the Project in the previous year. Two HHs with no source of income were given livelihood support. A study was conducted on migration patterns. The cumulative achievements against targets for horticulture/livestock/alternative livelihoods development are shown in Table 3.12.

Overall, we will rate achievement under this objective as very satisfactory.

Building Capacity to Claim Entitlements

The Project's fourth main objective is to strengthen the capacity of CBOs to claim entitlements under MGNERGA, Forest Rights Act (FRA), etc. Through efforts of the Project, 62 ST families of Sauryana Adivasi village got homestead land titles and possession on plots with aggregate value of Rs 4.34 lakhs. These families also benefitted from PDS regularization. In Amarpur village, Project intervention helped ST families establish possession and entitlement over 18.5 acres of land, for which the Forest department had earlier given pattas but did not allow Project to do bunding on the lands, and seized tractors used by the families to cultivate the land. After submission of all evidence of entitlement and many rounds of discussion with Forest department, the families could get legal possession over the lands, which are totally worth nearly Rs 28 lakhs (@ Rs 1.5 lakhs/acre) as per local market rates.

Other entitlement-related activities were as below (there are no targets under this head in approved proposal):

- Letters send by target community to Collector, CEO-ZP, SDOP-PHED Tikamgarh regarding link road from Sauryana to Nagara
- Drinking water problems take up by Lakshmi SHG
- Old age pension obtained by 10 families through community advocacy
- Regularization of mid-day meal and hand pump repairs through community advocacy, benefitting 960 HHs.
- Karmkar Yojana benefits arranged for 25 HHs.

Table 3.13: Value of entitlements realized

Head	Value
Residential lease to 62 tribal families	434,000
Pension for 10 families	36,000
Benefits of Karmkar Yojna for 25 families	37,500
Installation of Handpumps	40,000
Possession over 18.5 acres land	2,775,000
TOTAL	3,322,500

As Table 3.13 shows, total value of entitlements realized was Rs 33.22 lakhs. We will rate work done under this objective head as satisfactory.



Leveraging Public Funding and Other Resources

The Project made successful efforts to secure community contribution and public investment in Project area. As Table 3.14 shows the community made a total contribution of Rs 19 lakhs. Under various heads, community contribution was generally in the form of labour. However, under head of water economization approach, beneficiaries also made cash contributions (refer earlier discussion on drip irrigation systems).

Table 3.14: Community contribution to Project

Head	Value of contribution (Rs)
Well deepening	1,119,567
Farm pond construction	20,683
Construction of other water sources	15,528
Land bunding	106,220
Water economization	506,661
Horticulture	132,924
TOTAL	**1,901,583**

Table 3.15 shows investment from different government schemes secured by Project for benefit of target community.(Correspondence and supporting documents made to secure funding are available in Project office). Excluding value of individual entitlements realized (Rs 33.22 lakhs as shown in Table 3.13), the total government funding secured through convergence was Rs 72.82 lakhs.

Table 3.15: Govt funding secured in Project area

Item	Value (Rs)
Gram Beej Yojna (quality seeds)	20,000
New water sources (checkdams)	3,690,000
New water sources (well construction)	5,74,000
Drip irrigation systems	2,997,994
TOTAL	**7,281,994**

For the benefit of Project communities, the Project submitted required information to NABARD for a watershed development programme in the Project area. The estimated budget of the programme is Rs 2.63 crores. NABARD officials have already made preliminary appraisal visits.

To leverage funds available under MGNREGA, Project arranged for community meetings where development works were identified. Subsequently, estimates were prepared by the Project and same were approved by gram sabhas and sent to block officials for technical and financial sanction. The total value of the works awaiting sanction is Rs 1.53 crores.

The Commissioner, Rural Development (MGNREGA), CEO Zilla Panchayat, CEO Janpad Panchayat, District Collector and officials of more than a dozen departments visited the Project area in January 2013 and assured support under MGNREGA if net planning of area was done and submitted. Subsequently, the Project facilitated preparation and submission of plans for bunding a total of 224 acres owned by 236 farmers in 6 villages under MGNREGA. Technical and financial sanctions are awaited.

Overall, we will rate achievement under this objective as satisfactory.

3b. Project Design and Implementation

The Project was designed by ABSSS following specific guidelines given by SDTT under Bundelkhand Initiative, and reviewed by Pradan.

The Project was based on the multi-sectoral approach of the SDTT Bundelkhand Initiative, which seeks to address the complex of social, economic and political challenges to development in the region through a comprehensive intervention, as the issues are interlinked. Accordingly, the Project was designed on four strategic pivots:

- Building voice of the poor, especially women, and increasing accountability in delivery of essential services
- Demonstrating sustainable land-based livelihood models
- Leveraging government resources
- Strengthening NGO and community capacity

The core implementation strategy was working with the community. Initially, village level meetings were conducted to orient the community about the organization and Project objectives and activities. While these meeting were initially informal gradually they were turned into formal meetings. Once CBOs were formed, all activities were rolled out through them. Farmers' groups and SHG were involved in:

- Prioritization of activities at different villages
- Selection of sites/beneficiaries
- Local coordination for implementation
- Monitoring work.

Notably, all the village-level workers of the Project were selected from the community and given handholding support to perform expected tasks.

The Project maintained close contact with local KVK, which responded warmly with support for training programmes, PoP design and guidance on crop management. Continuous support was also got from Pradan, the technical consulting organization appointed for the Project.

3c. Project Outputs and Dissemination

The Project undertook several studies:

- Rapid baseline study of 20 project villages
- In-depth study of 95 HHs
- Value chain study of major and minor crops (including vegetables)
- Value chain study of income from tree produce
- Study of SC/ST households doing regular seasonal migration in Project area
- Study of livestock ownership and management practices of target groups HHs
- Study of viability of small plot vegetable production with subsidized drip irrigation

The above studies were discussed internally, disseminated to technical advisors and SDTT officials, and made available through ABSSS website.

For making people outside Project area aware of the Project, efforts were undertaken to invite a number of different experts and officials to visit Project sites. Key visitors, apart from SDTT officials and Project consultants, are shown in Table 3.16.

Table 3.16: Key visitors to Project

Date	**Visitor(s)**	**No. of persons**
May 12, 2012	Ram Gopal, IIT, New Delhi	1
July 1, 2012	SK Sonkar, DDM- NABARD, Tikamgarh	1
August 1, 2012	-"-	1
December 1, 2012	Ashish Yadav, BBC, New Delhi	5
December 28 & 29, 2012	Gram Unnati Sanstha, Mahoba	20
January 1, 2013	PL Solanki, Zilla Panchayat (CEO), Tikamgarh	3
January 23, 2013	Rural Development Department (Comissioner), District Collectorate, ZP, Janpad Panchayat	15
March 1, 2013	Bundelkhand Sewa Sansthan	20
March 1, 2013	Sanjeev Kumar, Goat Trust, Lucknow	1

March 1, 2013	Sagun Qureishia, Samhit Vikas Sewa Sansthan, Chattarpur	16
August 18, 2013	SS Kushwaha, Deputy Director, Horticulture	1
August 27, 2013	Dr RK Prajapati,KVK, Tikamgarh	1
October 07 & 08, 2013	Ram Ayer, P.S Chari, NABARD, Bhopal	1
October 16, 2013	Society for Pragati Bharat, Lalitpur	60
October 16, 2013	Sai Jyoti Pragati Sansthan, Lalitpur	30
October 20, 2013	Dr RK Prajapati, KVK, Tikamgarh	1
November 9, 2013	Dr Ram Vishal Singh, Principal Advisor, National Food Security Mission, Banda (UP)	1
November 11, 2013	Arunodaya Sansthan, Mahoba	15
November 11, 2013	Bundelkhand Sewa Sansthan, Lalitpur	20
February 3, 2014	Bundelkhand Sewa Sansthan, Lalitpur	15
February 12, 2014	Dr Himanshu Kulkarni, New Delhi	1
March 26, 2014	Yuvaraj Singh, MLC, Mahoba	1
April 13,2014	Devashish, Ashish Pandey, SRIJAN	2
May 7, 2014	Dr SS Gautam, Dr RK Prajapati, KVK Tikamgarh	2
July 18, 2014	Dr Sudam Khande, District Collector, Tikamgarh; Mr. Anay Dwivedi, CEO Zilla Panchayat, Tikamgarh; Mr. BN Singh, Dy Director Agriculture, Tikamgarh; Dr. S.S Kushwaha, Dy Director, Horticulture, Tikamgarh	4

Visits of District Collector, MGNREGA Commissioner, Zilla Parishad CEO and other officials to Project area received extensive coverage in local/regional newspapers like *Jan-Jan Jagran*, *Nav Bharat*, *Bundelkhand Jagran*, *Dainik Bhaskar*.

3d. Capacity Building

Apart from training programmes mentioned earlier under section 3a, exposure visits were organized to help build the community's confidence and resolve to undertake development work:

- In October and December 2011, a total of 14 project participants visited Srijan site at Jatara.
- In February 2012, 6 participants visited Pradan site at Kesla.
- In October 2012, a total of 15 Project participants visited ABSSS's integrated watershed development programme sites in Chitrakoot, over 3 days.
- In December 2012, a total of 30 participants visited sites of Bundelkhand Sewa Samiti (BSS) and Pradan at Lalitpur
- In January 2013, a total of 27 participants visited ABSSS's integrated watershed development programme sites in Chitrakoot and Banda, over 3 days.
- In July 2014, a total of 212 participants made a 2-day visit to the KVK campus at Tikamgarh, to get exposure to improved practices in fruit and vegetable cultivation.

Project staff attended capacity building programmes as below:

- Accounts staff attended a 2-day training programme on accounting systems in Jhansi, organized by Pradan.
- 8 Project staff attended a 4-day training programme on SHG promotion in Jhansi, organized by APMAS.
- Project Agronomist attended a 3-day programme on livelihoods planning in Kesla, Hoshangabad, organized by Pradan.

4. Project Management

The Project was managed by professional staff comprising:

- 1 Director (part time)
- 1 Programme Coordinator
- 2 Subject matter specialists (agriculture; women's mobilization)
- 2 Cluster coordinators
- 7 village level workers

On need-basis Project uses services of consultants in the field of improved agriculture, and field-based documentation and research.

Including the Director, all staffs were located in or near the Project area. The ABSSS accountant made regular visits to Project office.

Weekly meetings were held at the Project office to assess the progress of activities against objectives. Reviews were conducted by the Director on a monthly, quarterly, half-yearly and annual basis to assess the impact of the programmes. Through regular CBO meetings and field visits, senior Project staff was attuned to specific problems/issues hindering implementation, and capacity-building and other needs that had to be met. Annual financial audit has been undertaken by the statutory auditor.

Table 4.1 shows expenditure under major budget heads till August 31, 2014, against total sanctioned budget for reporting period March 2011 to August 31, 2104. As can be seen, total amount spent was 20% less than budget amount, and within permissible variation.

Table 4.1: Expenditure under major budget heads against sanctioned budget

Budget head	Total budget amount	Total expenditure	Variation
Personnel	6845954.00	5552534.00	-19%
Capital Cost	304000.00	304699.00	0%
Program Cost	12160000.00	9680377.50	-20%
Overheads	968283.00	765901.00	-21%
TOTAL	20278237.00	16303511.50	-20%

5. Impact

The Project had following major impacts:

- Establishment of good agricultural practices in Project area.
- Demonstrated benefits of land bunding.
- Demonstrated benefits of PoP with Jeeavmrut, resulting in higher yields and higher returns.
- Increase in area of cultivation and production due to renovation of wells.
- Improved incomes through vegetable cultivation.

Establishment of Good Agricultural Practices

The Project area was characterized by poor agricultural practices like broadcast sowing, excessive use of seed quantity and use of seeds without treatment. Through Project training and demonstrations, a number of farmers took to good practices like line sowing, optimum use of seeds, and seed treatment before sowing. Farmers doing line sowing reduced seed quantity and seed cost by roughly 30%. Around 3000 farmers covered under scaling up activity of the programme did seed treatment and culture treatment before sowing, and got benefits in terms of reduced incidence of disease and better germination. The Project also introduced SRI in the area, and demonstrated tremendous benefits (see box).

Case study: Record yield of paddy through SRI

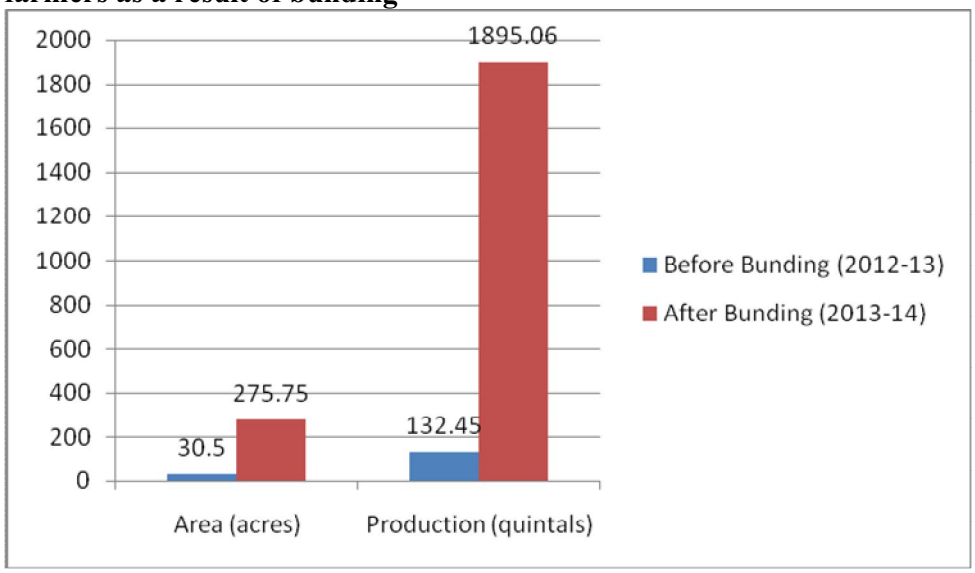
While most of the Project area is unsuitable for paddy cultivation, paddy has been traditionally grown in a few low-lying areas with dark soils. However, yields were very low and farmers barely recovered cost of cultivation. Hence, under the Project, 9 farmers (6 from SC/ST groups) from 6 villages were motivated to practice SRI on a pilot scale, and get first-hand experience of the benefits. The low-duration Narendra-97 variety, which gives good yields, was chosen and the farmers were given on-site training for the entire SRI process, from field preparation and seed treatment, to line sowing, nursery preparation, transplanting and weeding. Cultivation was done on plots ranging from 500sqm to 3200sqm. Recommended doses of urea, DAP and potash were given. Farmers also received training and used Jeevamrut and Agneyastra. The result was a record yield of paddy in the area, with average yield of 3730kg/ha.

Demonstrated Benefits of Land Bunding

Land bunding for the purpose of soil and water conservation was unknown in Project area and the target group farmers showed high resistance when the Project proposed bunding. However through exposure visit and meetings, over 200 farmers were mobilized to agree for bunding on their lands.

Figure 2, which shows data for 126 farmers of 8 villages whose lands were bunded in 2013-14, shows that bunding resulted in ten-fold increase in area and production in rabi cultivation.

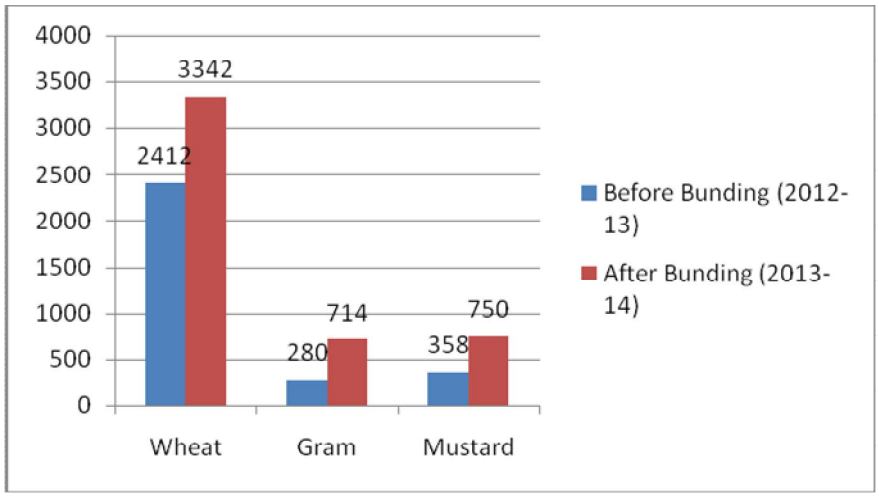
Figure 2: Increase in rabi area under cultivation and production of 126 beneficiary farmers as a result of bunding



The increase in area was highest in the ST-dominated village of Sauryana, where 31 beneficiaries used to keep most of their total of 69 acres of land fallow in rabi. After bunding, they started cultivating all this land.

The increase in production was not only due to increased area under cultivation. Yields of rabi crops also increased as shown in Fig 3. Another notable impact of bunding was that it led to diversification of crop production, with 14 acres coming under barley (jau) production for the first time, and some HHs starting to cultivate vegetables also.

Figure 3: Increase in average yields (kg/ha) of rabi crops of 126 beneficiary farmers as a result of bunding



Demonstrated Benefits of Pops

The Project demonstrated to community the benefits of using PoPs incorporating improved seed varieties, optimum seed quantity, seed treatment, line sowing, SRI and optimum nutrient dose, including use of Jeevamrut. PoP support was given for demo plots of 1-acre. Through these measures, significant increases in yields were demonstrated.

Demonstrated benefits in kharif crops can be seen in Figure 4 which shows 2013 crop-wise kharif yield data of (i) 49 sample PoP farmers (ii) 727 farmers covered under scaling up, (iii) 45 comparison farmers and (iv) average yield in Project area in a normal monsoon year (data from Project value chain study). It must be noted that due to excessive and untimely rains, leading to flooding of fields when crop was standing, the comparison farmers lost heavily in 2013-14 kharif. But under guidance of Project staff, PoP farmers took measures to ensure that excess water was drained away and got very good yield. Even farmers covered under scaling up, who did not all take measures to drain excess water, got better yields than the comparison farmers. Except in case of til, which does not respond well to excess rain, the PoPs with use of Jeevamrut demonstrated huge yield benefits compared to average non-PoP yields in abnormal as well as normal monsoon conditions.

Fig 4: Difference in yields (kg/ha) of kharif crops in 2013 (abnormal monsoon)

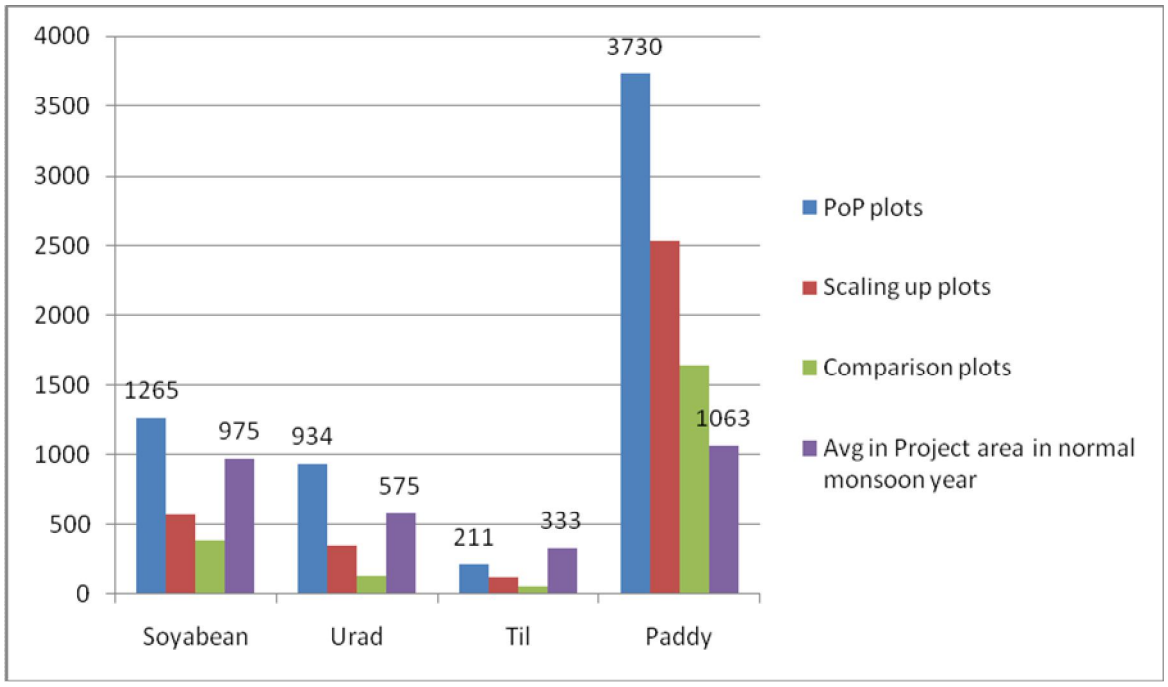
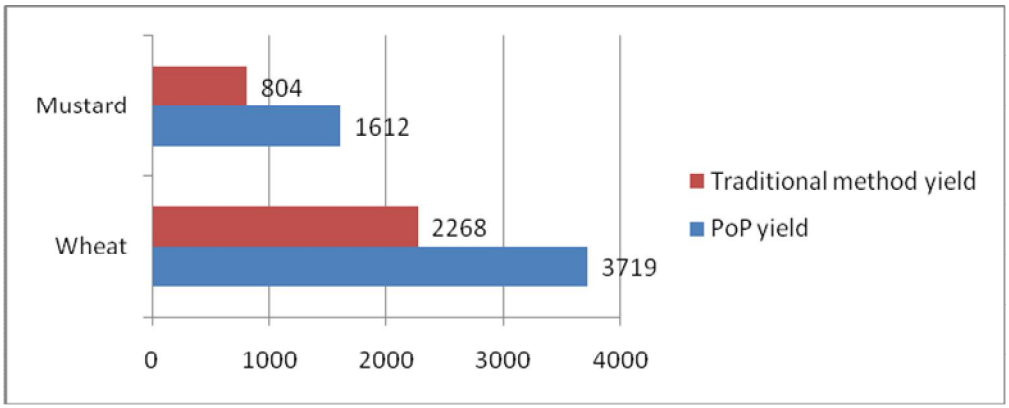


Fig 5: Differences in yields (kg/ha) of wheat and mustard in 2013-14



Likewise huge increases in yield were demonstrated for rabi crops like wheat and mustard as shown in Fig 5, which shows average yields obtained in 2013-14 by 33 PoP wheat farmers and 12 PoP mustard farmers, along with average yields obtained by farmers in comparison plots, using traditional methods. (PoPs were also promoted for gram and field pea in the year, but much of the crop was destroyed by untimely rains).

In case of all crops except mustard, PoP input costs were significantly higher than input costs under traditional methods. Particularly in case of til and urad, the use of certified seeds nearly doubled the input cost. However, as shown in Table 5.1, increased yield through use of PoP more than made up for the increased input cost. The net value of produce obtained through PoP was 2 to 27 times net value of produce obtained from traditional methods.

Table 5.1: Per hectare net value of production in PoP plots and comparison (traditional methods) plots in 2013-14

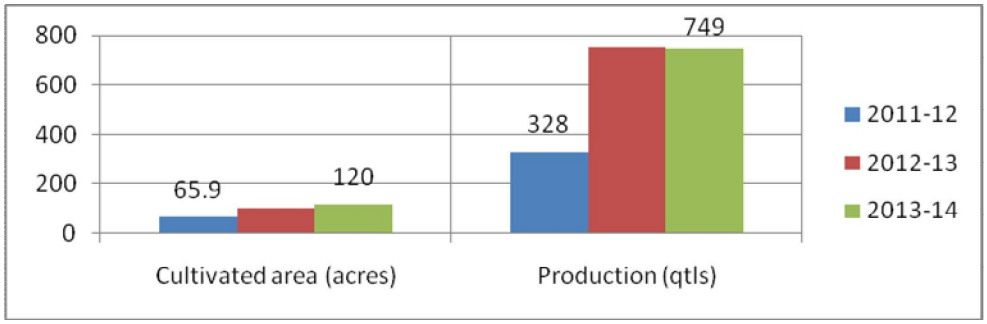
Crop	PoP plot details				Comparison plot details			
	Input cost* (Rs)	Prod (kg)	Gross value (Rs)	Net value (Rs)	Input cost* (Rs)	Prod (kg)	Gross value (Rs)	Net value (Rs)
Til	7550	211	15,853	8303	4517	52	3958	-559
Urad	14,483	935	42,087	27,604	7014	174	7825	811
Soyabean	14,666	1274	38,235	23,569	11,023	392	11,760	737
Paddy	17,342	3996	59,935	42,593	14,644	1640	24,598	9954
Wheat	19,870	3719	50,205	30,335	17,080	2268	30,624	13,545
Mustard	10,726	1612	48,377	37,651	11,199	804	24,126	12,927

*Input costs include cost of seeds, seed treatment materials, Jeevamrut, fertilizers and pesticides, but exclude other costs, such as cost of labour, ploughing and irrigation, which are assumed to be same in PoP and traditional methods per ha of cultivation.

Increase in Area under Cultivation and Production Due to Deepening/Renovation of Wells for Group Use

Deepening/renovation of dug group-wells more than doubled users' rabi agriculture production as seen in Fig 6, which shows rabi cultivation and production data of 62 users of 12 wells in 7 villages from 2011-12 (before deepening/ renovation of wells) to 2013-14. Increased availability of water led to increased area under cultivation as also increase in irrigation rounds, as a result of which yield increased. (Cultivated crops were wheat, gram mustard and barley).

Fig 6: Increase in rabi cultivated area and production of 62 users of 12 group from 2011-12 (before deepening/ renovation) to 2013-14



Increased Incomes through Vegetable Cultivation

The Project encouraged nearly 100 families, mostly from SC/ST groups, to take up vegetable cultivation to increase their incomes. A total of 38 farmers (28 from SC/ST groups) were given Project support to avail of a government drip irrigation scheme and do vegetable cultivation in plots of 1000-2000 sqm. Almost all these farmers had previously done little or no vegetable cultivation and were getting net return at rate of around Rs 15,000/ ha from cultivation of staple crops in kharif and rabi. However, as can be seen from Table 5.2, beneficiary farmers got almost that much income (average around Rs 13,000) from only one-sixth of a hectare.

The net income they obtained was at the rate of around Rs 92,500/ha (Rs 450,000 from a total area of 48,682 sqm, or around 5ha), which was 8 times the average net returns from cultivation of wheat (Rs 11,000 ha) obtained in the Project area.

Significantly, the huge increase in net income per unit of land was possible without increasing stress on water sources, as the use of drip irrigation led to 85% saving in water (if farmers had used the conventional flood irrigation system to water their vegetable plots, they would have used six times more water).

The average net income per farmer was close to the amount payable for the drip irrigation system (Rs 14,000). Thus, the Project established that investment for subsidized drip irrigation can be recovered in the first year itself, even if vegetable cultivation is done on area of only 1500-2000 sqm.





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Following good returns obtained by them, 14 farmers also decided to take advantage of the government scheme for drip irrigation. As a result, around 17 acres have been brought under drip irrigation in the Project area for the first time.

Table 5:2: Net income (Rs) from vegetable cultivation of 35 beneficiary farmers (Oct 2013-June 2014)

A	B	C	D	E	F	G
S no	**Vegetable**	**Area (sqm)**	**Prod. (kg)**	**Gross income (Rs)***	**Cost of cultivation, including labour** (Rs)**	**Net Income (E-F)**
1	Chilli	18,003	10,967	245,047	119,720	125,327
2	Tomato	14,011	18,677	198,174	85,467	112,707
3	Brinjal	9784	27,762	219,185	52,589	166,596
4	Cauliflower	2394	1180	15,145	14,384	761
5	Peas	966	234	4820	5804	-984
6	Potato	2153	2689	41,190	13,779	27,411
7	Onion	1371	2675	27,345	8774	18,571
8	TOTAL	48,682	64,184	750,906	300,517	450,389
Average area under vegetables per farmer (sqm)						1391
Average net income per farmer (Rs)						12,868

*Calculated on the basis of actual prices obtained for vegetables sold in the local market by beneficiaries (average Rs 22/kg for chilli, Rs 10/kg for tomato, Rs 8/kg for brinjal); value of produce used for home consumption was ignored.

**Including value of household or other labour, the cost of cultivation for different vegetables ranged from around Rs 5 to Rs 6 per sqm.

Overall it can be said that the Project demonstrated that there is good scope for increasing incomes of small and marginal farmers through an integrated strategy of SWC, promotion of PoPs for staple crops, use of Jeevamrut and vegetable cultivation on small plots of around 1500 sqm.

Case study: Dharmibai shows the way in Ramnagar

Belonging to an SC group, Dharmibai of Ramnagar village had never done vegetable cultivation on a commercial scale. However, in 2013, she mooted the idea in a meeting of the SHG promoted by ABSSS in the village. Her idea was that if she could do some vegetable cultivation, her 6-member family could save on the expenses of purchasing vegetables twice a week to meet their food needs. The Project staff got down to helping her achieves her objective. Under Project guidance, in June 2013, a number of pits were dug by her family members over an area of 1800 sqm, to plant pomegranate saplings and vegetables.

Neighbouring farmers made fun of Dharmibai, because while they had sown urad and soyabean in their fields, Dharmibai's family had focused only on making preparations for horticulture cultivation. While their fields had standing crops in July-August, the lands of Dharmibai's family had no plants. However, Dharmibai remained undeterred, and she had

the last laugh. For, while the urad and soyabean crop in the village was almost completely destroyed by rains in September-October, causing a loss of around Rs 3000 per farmer, she was ready for horticulture plantation by then, with pits filled with manure, and knowledge of Jeevamrut preparation, given by Project staff.

In October 2013, she planted pomegranate, chilli, tomato, brinjal and cauliflower, and by mid-January 2014, she had not only got vegetables for home use, but she could also sell vegetables worth around Rs 10,000. She sold the vegetables herself, taking the produce to a market 12km from the village.

Till the end of May 2014, she could get gross income of nearly Rs 80,000 from sale of vegetables (details shown in the table below). Her success has motivated many other farmers in the village to take up small-plot vegetable cultivation.

Details of Dharmibai's vegetable production (Oct 2013-May 2014)

Vegetable	Area (sqm)	Production (kg)	Sale Value (Rs)
Chilli	1040	1891	53,840
Brinjal	416	1945	20,190
Tomato	384	663	5960
TOTAL	1840	4499	79,990

Dharmibai, meanwhile, has set her sights higher: she hopes to arrange for group collection of vegetable produce, so that traders can be asked to pick it up from the village itself, and growers can avoid the trouble of going to the market every few days to sell their produce.

6. Overall assessment

As the listing of outcomes in Table 6.1 shows, the Project recorded satisfactory performance. In keeping with ABSSS mission and Project objectives**, the Project ensured that at least 66% of beneficiaries were from SC/ST groups**. While some target could not be met (eg, related to livestock and livelihoods), this was due to the fact that (i) the organization was not previously established in the area and (ii) the Project has too many diverse objectives, with the result that it became necessary to focus on core activities like soil and water conservation and demonstration of higher agriculture yields, which would impact a large number of households.

Table 6.1: Project outcomes

Budget Code	Head	Outcomes	% of target achieved
D1	CBO formation	163 CBOs formed	75%
		Rs 7.80lakhs saved by 95 SHGs	NA
D2	Soil and land management	43 MGNREGA plans submitted	>100%
		Bunding done over 490 acres	>100%
D3	Water resource development	17 farm ponds constructed	>100%
		21 group-wells optimized	>100%
		2 other structures constructed	67%
		50 drip systems installed	>100%
D4	Livelihood-Dryland agriculture	13 resource persons trained	>100%
		70 soil tests done	100%*
		390 acres covered under PoPs	>100%**
		Scaling support for 3047 farmers	>100%
		4 value chain studies done	100%
D5	Livelihood-horticulture, livestock development, etc	Support for vegetable and fruit cultivation over total 35.14 acres	>100%
		Livestock development	Nil
		Alternative livelihood support for 2 HHs	13%
		1 migration study done	100%
D6	Building capacity for entitlement realization	11 capacity building programmes for SHGs organized	>100%
		9 farmer training programmes organized	>100%
		4 brainstorming sessions held	>100%
		1 in-depth study done	100%
		1 baseline study done	100%
		Entitlements worth around Rs 33.22 lakhs realized	NA
NA	Convergence	Govt funding of Rs 72.82 lakhs obtained	NA

*Target revised and budgeted amount shifted for PoP support with SDTT approval
** Target revised according to additional expenditure sanctioned by SDTT

7. Recommendations

Based on the learning experiences from the Project, ABSSS suggests that when the Trust considers similar Projects in other regions, or the same region, it should:

- Give a lead time of at least 12 months for organizations new to a Project area, for earning trust of community, and networking and establishing working relationships with government functionaries and development agencies.
- Schedule sanction of Project/funds in such a way that capital intensive soil and water conservation works can be undertaken in the first year before the start of the monsoons
- Limit the number of objectives to be met within a short period of 3 years, so that the Project is able to deliver in a focused manner.
- Support programmes for increasing land-based incomes of small and marginal farmers in Tikamgarh and similar areas, through integrated efforts aimed at (i) conserving soil and water resources, (ii) improving soil conditions, (iii) making optimum use of other locally available resources like cowdung and cow urine (iv) reducing dependence on costly plant management chemicals, and (v) promoting sustainable cultivation of cash crops like vegetables.

ANNEXURE

GPS Quardinate of Structures under ABSSS JTT BRAP Project: Tikamgarh (MP)

S.N.	Structure Name	Location (Village/ GP)	North Latitude	East Longitude	Elevation (Feet)
1	Premiya pond	Mairikhera	24°41.285′	78°58.523′	1144
2	Pond	Madnikhera	24°28.121′	75°57.693′	1227
3	Gravity Flow Irrigation- Inlet	Lar Sauryana	24°39.917′	78°59.921′	1151
	Gravity Flow Irrigation- Outlet		24°39.645′	79°00.016′	1125
4	Ramesh Farm Pond	Mairikhera	24°41.157′	78°58.440′	1118
5	Sheela Farm Pond	Sapon	24°35.274′	78°56.407′	1246
6	Gulabbai Farm pond	Sapon	24°35.240′	78°56.370′	1208
7	Kallu Farm Pond	Amarpur	24°36.930′	78°59.269′	1170
8	Tankhu Farm pond	Amarpur	24°37.025′	78°58.574′	1235
9	Ballu Farm pond	Amarpur	24°37.095′	78°58.514′	1218
10	Chatra Farm Pond	Amarpur	24°57.097′	78°58.588′	1216
11	Heera Farm pond	Amarpur	24°37.163′	78°58.589′	1224
12	Harbubai Farm Pond	Lar Sauryana	24°39.320′	78°59.688′	1128
13	Kanchhedi Farm Pond	Lar Sauryana	24°35.193′	78°57.200′	1210
14	Kashiram Farm pond	Lar Sauryana	24°39.278′	78°59.593′	1159
15	Pyarelal Farm Pond	Lar Sauryana	24°39.310′	78°59.562′	1150
16	Rukman well	Sapon	24°34.949′	78°56.728′	1189
17	Kalanbai Well	Nainwari	24°40.807′	78°58.842′	1140
18	Maya Well	Mairikhera	24°41.072′	78°58.449′	1164
19	Gyasi Well	Mairikhera	24°41.125′	78°58.439′	1160
20	Jasoda Well	Nagara	24°39.449′	78°00.121′	1101
21	Mankunvar Well	Nagara	24°39.380′	78°00.545′	1100
22	Geeta Well	Matapur	24°30.148′	78°59.262′	1151
23	Seema Well	Satyanagar	24°32.084′	78°59.475′	1139
24	Chiraibai Well	Satyanagar	24°32.120′	78°59.533′	1139
25	Sukrat Well	Sapon	24°32.143′	78°59.738′	1129
26	Parwati well	Gopalpura	24°34.454′	79°01.265′	1148
27	Dhokiya Well	Rajapur	24°36.928′	79°01.522′	1065
28	Pyaribai Well	Mairikhera	24°37.157′	78°58.593′	1226
29	Jankibai Well	Sapon	24°35.039′	78°55.805′	1258
30	Gulabbai Well	Sapon	24°35.246′	78°56.433′	1254
31	Kastooribai Well	Sapon	24°35.196′	78°57.196′	1218

Land Bunding: Cumulative Progress Report period: April , 2011 to August 31 , 2014

S. No.	Name of Villages	Beneficiaries/Users No.					Area in Acre	Total volume (cum)	Total Value (Rs.)	Physical contribution (Rs.)	Total payment (Rs.)	Person days			Person days as per social Categories				
		SC	ST	OBC	GEN	Total						F	M	Total	SC	ST	OBC	GEN	Total
1	Sauryana	0	33	0	0	33	82.5	4145.92	216771.00	15386.00	201381.00	685	974	1650	73	1531	46	0	1650
2	Sapon	0	20	0	0	20	41	2192.70	94716.71	4294.00	100423.00	79	561	640	0	628	12	0	640
3	Ratanganj	0	6	6	0	12	21	1034.77	53286.26	1452.00	51834.00	65	457	522	42	98	382	0	522
4	Nagara	16	0	17	0	33	81	6032.20	316325.52	56439.00	259893.00	433	1549	1982	535	80	1367	0	1982
5	Mairikhera	0	12	0	0	12	32	2337.03	109516.16	2680.00	106839.00	336	473	809	12	680	117	0	809
6	Dari	10	4	0	0	14	48	3354.90	174027.25	10192.00	163835.00	524	965	1489	132	1243	114	0	1489
7	Ramnagar	17	0	3	0	20	35	2603.51	136405.26	3308.00	133094.00	305	656	961	789	49	123	0	961
8	Matiya-khera	0	9	0	0	9	24	1799.59	80581.95	792.00	78574.00	256	375	631	0	550	81	0	631
9	Amarpur	9	12	3	0	24	38	2536.52	141662.11	4779.00	136881.00	380	634	1014	35	789	190	0	1014
10	Badi bandhiya	0	9	2	0	11	21	1431.37	91074.54	6898.00	84177.00	195	423	618	12	592	14	0	618
11	Antora	0	3	0	0	3	8	144.97	7054.18	0.00	7053.00	20	33	53	0	53	0	0	53
12	Haidarpur	0	15	1	0	16	58	3437.00	192204.15	0.00	192209.00	296	759	1055	0	881	174	0	1055
	TOTAL	**52**	**123**	**32**	**0**	**207**	**489.5**	**31050.5**	**1613625.09**	**106220.00**	**1516193.00**	**3574**	**7859**	**11424**	**1630**	**7174**	**2620**	**0**	**11424**
		25%	**59%**	**15%**	**0%**	**100%**				**7%**	**94%**	**31%**	**69%**	**100%**	**14%**	**63%**	**23%**	**0%**	**100%**

Construction of Farm Ponds: Cumulative progress report: period April, 2011 to August 31, 2014

S. No.	Name of Villages/Beneficiaries	Villages	Beneficiaries/Users No.					Covered Area in Acres	Work Volume in cubic meter	Payments details			Person days			Social category wise persons days				
			SC	ST	OBC	GEN	Total			Total Payments	Payments to labor	Contribution	F	M	Total	SC	ST	OBC	GEN	TOTAL
1	Gulabbai	Sapon	0	1	0	0	1	2	*167.34*	51115.00	46857.00	4258.00	19	26	45	0	31	14	0	45
2	Sheelabai	Sapon	0	1	0	0	1	2	*146.04*	47006.97	40580.00	6426.00	48	24	70	0	57	13	0	70
3	Harbai	Sapon	0	0	1	0	1	3	*39.54*	52707.00	45451.00	7256.00	32	46	78	0	0	78	0	78
4	Ramesh	Mairykhera	0	1	0	0	1	3	450.45	27915.00	27915.00	0.00	13	22	35	0	35	0	0	35
5	Chatra	Amarpur	2	0	0	0	2	5	527.73	51448.00	49490.00	1958.00	1	56	57	0	14	43	0	57
6	Heera	Amarpur	0	1	0	0	1	4	417.63	46703.00	46703.00	0.00	4	35	39	0	3	36	0	39
7	Tankhu	Amarpur	0	1	0	0	1	1	432.00	49111.00	49111.00	0.00	0	22.5	22.5	0	0	22.5	0	22.5
8	Kaluwa	Amarpur	0	1	0	0	1	2	419.37	48346.00	48346.00	0.00	4	34	38	0	0	38	0	38
9	Ballu	Amarpur	0	1	0	0	1	3	495.00	50576.00	50576.00	0.00	2	29	31	0	0	31	0	31
10	Ganpat	Amarpur	0	2	0	0	2	3	421.08	47870.00	47870.00	0.00	5	5	10	0	3	7	0	10
11	Lallabai	Amarpur	7	0	0	0	7	10	408.90	47856.00	47856.00	0.00	0	8	8	0	5	3	0	8
12	Pyarelal	Sauryana	0	1	0	0	1	3	688.50	54354.00	54354.00	0.00	30	81	111	10	101	0	0	111
13	Kanchhedi	Sauryana	0	1	0	0	1	5	607.00	28022.00	28022.00	0.00	0	15	15	0	9	6	0	15
14	Kashiram	Sauryana	0	1	0	0	1	3	739.13	59150.00	59150.00	0.00	38	108	146	7	87	52	0	146
15	Harbubai	Sauryana	0	1	0	0	1	4	520.08	56622.00	56622.00	0.00	19	71	90	0	90	0	0	90
16	Maina	Sauryana	0	2	0	0	2	3	437.69	48988.00	48988.00	0.00	0	24	24	3	9	12	0	24
17	Meena	Sauryana	0	1	0	0	1	3	840.00	65011.00	64226.00	785.00	0	23	23	0	23	0	0	23
	Total		**9**	**16**	**1**	**0**	**26**	**59**	**7757.47**	**832800.97**	**812117.00**	**20683.00**	**215**	**630**	**842.5**	**20**	**467**	**356**	**0**	**842.5**
% of SC, ST & OBC & contribution			**35%**	**62%**	**4%**	**0%**	**100%**				**98%**	**2%**	**26%**	**75%**	**100%**	**2%**	**55%**	**42%**	**0%**	**100%**

Renovation of Wells: Cumulative progress Report; Period : April, 2011 to August 31, 2014

S. No.	Name of Beneficiaries	Name of Villages	Beneficiaries/Users No.					Covered Area in Acres	Work Volume in cubic meter	Payments details			Person days			Social category wise persons days				
			SC	ST	OBC	GEN	Total			Total Payments	Payments to labor	Contribution	F	M	Total	SC	ST	OBC	GEN	TOTAL
1	Smt. Maya W/o- Mr. Param Lal	Mayari-khera	0	7	0	0	7	14	63.87	86005.00	37600.00	48405.00	110	257	367	0	367	0	0	367
2	Smt. Pyari Bai W/o- Gayasi	Mayari-khera	0	4	0	0	4	10	211.60	159695.00	81240.00	78455.00	175	495	670	32	622	16	0	670
3	Smt. Kalan Bai W/0- Mr. Ram Kishan	Nainwari	5	0	0	0	5	8	0.00	29016.00	16180.00	12836.00	26	60	86	86	0	0	0	86
4	Smt. Dhukhiya W/o- Mr. Dhruv	Rajapur	6	0	0	0	6	12	203.49	145462.00	105510.00	39952.00	91	192	283	273	0	10	0	283
5	Smt. Jashoda Bai W/o- Mr. Lakhan	Nagara	0	0	6	0	6	8	84.78	68189.00	33925.00	34264.00	80	215	295	16	16	263	0	295
6	Smt. Parwati W/o- Mr. Ghanshyam	Gopalpura	0	0	6	0	6	10	74.58	114199.00	68948.00	45251.00	100	267	367	49	0	318	0	367
7	Smt. Chirai Bai W/0- Mr. Chhandu	Satyanagar	0	4	0	0	4	12	84.78	93011.00	52765.00	40246.00	76	200	276	276	0	0	0	276
8	Smt. Geeta W/o- Mr. Nathua	Matapur	0	0	0	0	0	8	42.39	138248.00	75794.00	62454.00	168	357	525	486	0	39	0	525
9	Smt. Rukman W/o- Mr. Hari ram	Sapon	0	6	0	0	6	12	84.78	284864.00	136447.00	148417.00	379	698	1077	0	1077	0	0	1077
10	Smt. Sukrat W/o- Mr. Karia	Satyanagar	1	0	0	0	1	5	0.00	31447.00	22923.00	8524.00	10	54	64	64	0	0	0	64
11	Smt. Seema W/o- Mr. Ramesh	Satyanagar	1	0	0	0	1	4	0.00	12828.00	3720.00	9108.00	34	25	59	59	0	0	0	59
12	Smt. Man Kunwar W/o Mr. Govardhan	Nagara	0	0	8	0	8	12	0.00	191730.00	59000.00	132730.00	160	727	887	0	0	887	0	887
13	Jasrath	Badibandhia	0	6	0	0	6	9	0.00	103412.00	69500.00	33912.00	85	152	236.5	21	216	0	0	236.5
14	Harbubai	Souryana	0	3	1	0	4	6	0.00	109117.00	65541.00	43576.00	96	193	289	10	279	0	0	289
15	Devwanti	Nainwari	0	0	5	0	5	7	0.00	61613.00	32725.00	28888.00	19	165	184	78	12	94	0	184
16	Lachchhibai	Ramnagar	8	0	0	0	8	8	0.00	111857.00	70000.00	41857.00	134	137	271	271	0	0	0	271
17	Sheelabai	Mairikhera	0	0	0	0	0	0	0.00	53313.00	27120.00	26193.00	74	85	159	159	0	0	0	159
18	Jankaibai	Sapon	6	0	0	0	6	12	0.00	140202.00	52740.00	87462.00	159	237	396	186	210	0	0	396
19	Harcharan	Ratanganj	0	0	4	0	4	15	0.00	129532.00	81490.00	48042.00	109	197	306	0	0	306	0	306
20	Kamtu	Matiyakhera	0	6	0	0	6	10	0.00	314923.00	197610.00	117313.00	224	601	825	0	593	232	0	825
21	Gulabbai	Sapon	0	5	0	0	5	10	0.00	138032.00	106350.00	31682.00	114	136	250	0	250	0	0	250
	Total		**27**	**41**	**30**	**0**	**98**	**192**	**850.27**	**2516695.00**	**1397128.00**	**1119567.00**	**2423**	**5450**	**7873**	**2066**	**3642**	**2165**	**0**	**7873**
% of SC, ST & OBC & contribution			**28%**	**42%**	**31%**	**0%**	**100%**				**56%**	**44%**	**31%**	**69%**	**100%**	**26%**	**46%**	**28%**	**0%**	**100%**

Other Water Harvesting : Cumulative progress Report- April, 2011 to August 31, 2014

S. No.	Name of Villages/Beneficiaries	Beneficiaries/Users No.					Covered Area in Acres	Work Volume in cubic meter	Payments details			Person days			Social category wise persons days				
		SC	ST	OBC	GEN	Total			Total Payment (Rs.)	Contribution	Payments to labor	F	Male	Total	SC	ST	OBC	Gen	TOTAL
1	Sauriyana: Gravity flow Irrigation	2	40	5	0	47	70	0	155062.00	28574	126488								
2	Madani Khera	20	0	1	0	21	64	2836.9	376572	15528	361044	901	615	1516	1516	0	0	0	1516
3	Maiyari Khera	0	6	4	0	10	40	2044.22	255492.88	0	255491	278	444	722	130	542	50	0	722
	Total	**22**	**46**	**10**	**0**	**78**	**174**	**4881.12**	**787126.88**	**44102**	**743023**	**1179**	**1059**	**2238**	**1646**	**542**	**50**	**0**	**2238**
		28%	**59%**	**13%**	**0%**	**100%**				**6%**	**94%**	**53%**	**47%**	**100%**	**74%**	**24%**	**2%**	**0%**	**100%**

Water Economization Approaches/Devices: Cumulative Progress report; April 2011 to August 31, 2014

S. No.	Name of Villages	HHs/benefited families					Area in Acre	No. of WEAD	ABSSS's/JTT contribution	Contribution/ Convergence		Total	Total cost
		SC	ST	OBC	GEN	Total				Farmers	Horticulture Department		
2	Maiyari khera	1	2	0	0	3	1.5	3	42423	0	169698	169698	212121
3	Gopal pura	7	0	0	0	7	3.5	7	98987	0	395962	395962	494949
4	Sapon	19	3	10	1	33	16.9	33	280580	273004	1788897	2061901	2342481
5	Drips in Darguwan	0	0	2	0	2	1	2	0	42430	98990	141420	141420
6	Drip in Nainwari	0	0	1	0	1	0.5	1	0	21215	49495	70710	70710
7	Drips in Ramnagar	2	0	0	0	2	1	2	0	28288	113132	141420	141420
8	Drips in Badmadai	0	2	1	0	3	1.5	3	0	49503	162627	212130	212130
9	Drips in Sauryana Lar	0	3	0	0	3	1.5	3	0	42432	169698	212130	212130
10	Drip in Nagara	0	0	1	0	1	0.5	1	0	21215	49495	70710	70710
	TOTAL	**29**	**10**	**15**	**1**	**55**	**27.9**	**55**	**421990**	**478087**	**2997994**	**3476081**	**3898071**
		53%	**18%**	**27%**	**2%**	**100%**			**11%**	**12%**	**77%**		

	BRPAP PROJECT OTHER CONTRIBUTION & CONVERGENCE					
S.No.	**Particulars**	**2011-2012**	**2012-2013**	**2013-2014**	**2014-15**	**TOTAL**
1	**Community Contribution**					
1.1	Well deepining	0.00	407168.00	150262.00	562137.00	**1119567.00**
1.2	Farm Pond	0.00	17940.00	1958.00	785.00	**20683.00**
1.3	Others Water Sources	0.00	11820.00	3708.00	0.00	**15528.00**
1.4	Land Bunding	0.00	60015.00	34749.00	11456.00	**106220.00**
1.5	Water economization approach	28574.00	0.00	478087.00	0.00	**506661.00**
1.6	Horticulture	0.00	0.00	132924.40	0.00	**132924.40**
	Sub-Total (1)	**28574.00**	**496943.00**	**801688.40**	**574378.00**	**1901583.40**
2	**Actual Realization of Convergence:**					
2.1	Gram beej Yojna	20000.00	0.00	0.00	0.00	**20000.00**
2.2	Others Water Sources	0.00	917000	2773000.00	0.00	**3690000.00**
2.3	Claim to Entitlement Realization:	0.00	0.00	0.00	0.00	**0.00**
2.3.1	Residential lease to 62 Tribal families	0.00	434000.00	0.00	0.00	**434000.00**
2.3.2	Pension for 10 families	0.00	36000.00	0.00	0.00	**36000.00**
2.3.3	Benefits of Karmkar Yojna for 25 families	0.00	37500.00	0.00	0.00	**37500.00**
2.3.4	Installation of Handpumps	0.00	40000.00	0.00	0.00	**40000.00**
2.4	Horticulture	0.00	0.00	0.00	0.00	**0.00**
2.5	Water economization approach	0.00	0.00	2997994.00	0.00	**2997994.00**
	Sub-Total (2)	**20000.00**	**1464500.00**	**5770994.00**	**0.00**	**7255494.00**
3	**Convergence Plan submitted to Govt.**					
3.1	Plan submitted not yet approved funding Rs 1.53 crores under MGNREGA)	0.00	15326695.00	0.00	0.00	**15326695.00**
3.2	In principle approved funding: Rs 2.63 crores from NABARD under NABARD WDF Scheme	0.00	0.00	26340000.00		**26340000.00**
	Sub-Total (3)	**0.00**	**15326695.00**	**26340000.00**	**0.00**	**41666695.00**
	GRAND TOTAL	**48574.00**	**17288138.00**	**32912682.40**	**574378.00**	**50823772.40**