RAPID IMPACT ASSESMENT OF RKVY PROJECT CONDUCTED BY THIRD PARTY AND IMPLEMENTED BY SADGURU FOUNDATION IN DISTRICT BANSWARA

Borbhatod check dam across river Hiren constructed in year 2014 under RKVY. This check dam is supporting four community lift irrigation scheme

Authors of study

Sohan Devpura
Additional Director, Watershed, Rajasthan (Retd.)
&
Suresh Deval
Joint Director, Watershed, Rajasthan (Retd.)

November, 2014

ACKNOWLEDGEMENT

It has been a matter of great priviledge for us to be involve in the rapid study and assessment of RKVY project implemented by highly reputed NGO Sadguru Foundation in district Banswara. We are greatful to the organisation to entrust this study to us as it has been always a matter of pride for anyone to undertake such study of the partnership work of the government and reputed NGO.

In the study we were helped by many people and to mention few of them we are acknowledging the help of Shri. Kanhaiya Choudhary, CEO, Sadguru Foundation ; Shri Hitesh Shah, Dy. Director and Head of Lift Irrigation Department, Ms. Sunita Choudhary, Dy. Director and Head of Water Harvesting Department ; Shri Radheshyam Yadav, Sr.Programme Executive and Head of Village Institution Department and all other staff of the above three departments. We are also thankful to the villagers, their institutions, their co-operative, their federation for providing information on the project and interact with us on various aspects of the project. And last but not the least we are indeed very grateful to two full time Directors of Sadguru foundation Mr. & Mrs. Jagawat for assigning this work and extremely supportive in conducting this study.

Finally, we must acknowledge and compliment excellent work been done by Sadguru Foundation and the exposure to its work is something worth remembering

By

Sohan Devpura

Additional Director, Watershed Department, Rajasthan (Retd.)

&

Suresh Deval

Joint Director, Watershed Department, Rajasthan (Retd.)

NOVEMBER, 2014

INDEX

Annexure

1 – BACKGROUND OF STUDY

1.0 Back Ground

“N M Sadguru Water Development Foundation” (also known as ‘Sadguru’) – a reputed national NGO, established in 1974 with its head office at Dahod, Gujarat, is dedicated to the betterment of rural and tribal people by helping them make better use of available resources, appropriate technology and participatory managerial practices. Sadguru endeavors to develop & expand environmentally, technically, socially sound natural resource interventions leading to poverty alleviation, through community participation, and empowering women and other disadvantaged groups, to ensure equitable and sustainable development. Its main objectives are to improve living conditions of rural and tribal people by developing environmentally sound land and water resources programs; improve the environment and eco-system, arrest the distress migration, improve the socio-economic status of people and strive for their overall development. This is promoted by facilitating the growth of community based institutions that support and sustain Natural Resource Management (NRM) program.

As a part of its NRM program, Sadguru is implementing environmentally sustainable harnessing of water resources by construction of check dams and community lift irrigation schemes in economically backward areas of Gujarat, Madhya Pradesh and Rajasthan. With best use of available water resources and demonstrating the economic and environmental benefits of other land and water based activities, Sadguru Foundation has been very much successful in reversing the process of migration of tribal and backward people who were forced out from their land due to recurring draught. It has transformed large semi-arid area into lush green fields where once again interdependence between humans and nature flourish.

Sadguru Foundation has always received active support from Government in its efforts of working on water resources development for the tribal dominated area of Banswara. The present project of lift irrigation schemes and check dams in Banswara district is being implemented under Rashtriya Krishi Vikas Yojana (RKVY) funded by Government of India (GoI) through Agriculture Department (AD) of Government of Rajasthan. Sadguru Foundation is the implementing agency and District level committee under the chairmanship of District Collector, with Deputy Director, Agriculture as member secretary and other technical members is the nodal agency for monitoring of the project.

1.1 Rashtriya KrishiVikasYojana (RKVY)

The National Development Council (NDC) of Government of India launched RKVY in May, 2007 as a special Additional Central Assistance Scheme to incentivize States to draw up plans for their agriculture sector more comprehensively, taking agro-climatic conditions, natural resource issues and technology into account, and integrating livestock, poultry and fisheries more fully for sustainable development of Agriculture. The pattern of funding is

100% Central grant and the eventual goal is that the additional investments made through the RKVY scheme will lead to at least 4% growth in agriculture. The states are given sufficient flexibility under the scheme to make appropriate local choices so that the outcomes are as envisaged in the RKVY objectives. This program covers all aspects of self-employment such as organization of poor into self-help groups, training, credit, technology, infrastructure and marketing around agriculture and allied activities based around farm lands.

Based upon the local situation and need of the people, Sadguru Foundation prepared a proposal for construction of Water harvesting structures and Lift irrigation schemes in Banswara district with an estimated cost of Rs.1460 Lac to be implemented in three years and submitted to Agriculture Department, Government of Rajasthan. The proposal was approved by the State Level Steering Committee (SLSC) of GoR on dated 06.07.2009 (vide AS No. F7(292)CSS-PLAN/RKVY/2009-10/2768-99 dated 15.07.2009) . The project aims to achieve sustainable improvement in the living standards of rural poor through the utilization of available water resources, in the backward district of Banswara, developing the capability for community management. The overall objective of the project is “To achieve sustainable improvement in the living standards of the rural and poors through the water resources development resulting in agriculture development which would ultimately help the rural poors to bring them above the poverty line through irrigation and agriculture development and bring in sustainable development”.

Original project consists of 15 Lift irrigation schemes and 16 Check dams. At the time of study totally 27 projects were completed. On completion, all completed projects are being managed by community through their own formal and informal village institutions duly trained and capacity built up by NGO.

1.2 The Present Review

As per the MOU between the State Agriculture Department and implementing agency, Sadguru Foundation, an impact assessment of the works is to be done for which NGO hired the services of experts to undertake third party impact assessment. Sadguru Foundation decided to carry out impact assessment of the project by highly experienced professional, Shri Sohan Devpura and Shri Suresh Deval. Both are technically qualified engineers and both have more than Thirty years of experience in the government on high position and thereafter have retired from the government service of the Government of Rajasthan. The consultant has carried out rapid impact assessment study of the project being implemented by Sadguru Foundation.

This report is based on study of RKVY Projects completed and under progress by Sadguru in Banswara district, with full help and active cooperation from Sadguru officials as well as full support of beneficiaries of the villages visited. During the three days (October 29-30-31,2014) of field visit all lift irrigation schemes and check dams were visited. During the field

visit schemes were examined for the impact to the beneficiary and sustainability of the projects. The consultants also had detailed deliberations and desk review with regards to technical features, running, operation, maintenance and benefits accruing from these schemes with Sadguru officials and available villagers.

1.3 Term of Reference

The specific terms of reference for review study were: -

i. Quality of workmanship, both material utilized and works
ii. Impact of the projects to the beneficiary
iii. Impact of the project on ground water increase

1.4 Broad Methodology

Broadly following methodology was adopted for the rapid study;

i. Sites visit to all the projects for physical verification and observation of quality
ii. Group meetings with the farmers on the benefit and management
iii. Meeting the members of managing committee of each L. I. Co-operative
iv. Observation of records maintained by L. I. Co-operative on operations
v. Talk with the office barrers of L. I. Federation, which supports individual L. I. Cooperative.
vi. Perusal to the plan estimate design of the schemes.
vii. Discussion with the Sadguru Foundation on design workmanship and various aspect of implementation .

2 – Project at a glance

2.0 Introduction

N. M. Sadguru Water and Development Foundation is implementing project of lift irrigation schemes and check dams in Banswara district under RKVY. The implementation of this Project started in the year 2009 and the project implementation has been delayed due to the reasons beyond the control of implementing agency briefly described main causes of delay separately under the caption “Some hurdles in timely implementation”. The schemes implemented under this project have potential of covering an area of 1957.9 ha (4836 acres) under irrigation benefitting 2166 households as per revenue land records. However, on the basis of operational holdings the number of beneficiaries would be much more than the revenue records as happens in most of such schemes.

2.1 Rajasthan- Brief Scenarios

Rajasthan is the largest state of the Republic of India in terms of area. It encompasses most of the area of the large, inhospitable Great Indian Desert (Thar Desert), which has an edge paralleling the Sutlej-Indus river valley along its border with Pakistan. The region borders Pakistan to the west, Gujarat to the southwest, Madhya Pradesh to the southeast, Uttar Pradesh and Haryana to the northeast and Punjab to the north. Rajasthan covers an area of 342,239 km² (132,139 mi²).

The Population of Rajasthan according to the 2011 census stands at about 68 million, making it the 8th most populated state in India. The state makes up about 5.6% of the country's population.

Rajasthan's economy is primarily agricultural and pastoral. Wheat and barley are cultivated over large areas, as are pulses, sugarcane, and oilseeds. Cotton and tobacco are cash crops. Rajasthan is among the largest producers of edible oils in India and the second largest producer of oilseeds. Rajasthan is also the biggest wool-producing state in India. There are mainly two crop seasons. The water for irrigation comes from wells and tanks.

Literacy rate in Rajasthan has seen upward trend and is 66.11 percent as per 2011 population census. Of that, male literacy stands at 79.19 percent while female literacy is at 47.76 percent.

The Climate of the state can be divided into four seasons: Summer from April to June is the hottest (tem 32 to 45 degree C), Monsoon from July to September, 90 % of rains occur during this period, Post Monsoon season from October to December and Winter season from January to March, January is the coolest month.

The climate of Rajasthan state varies from arid to sub-humid. The annual rainfall in the state varies significantly. The general trend of Isohyets is from north-west to south-east. There is a very rapid and marked decrease in rainfall west of the Aravalli range making western Rajasthan the most arid part. The average annual rainfall in this part ranges from less than 10 cm in north-west part of Jaisalmer (lowest in the state), to 20 to 30 cm in Ganganagar, Bikaner and Barmer regions, 30 to 40 cm in Nagaur, Jodhpur, Churu and Jalor regions and more than 40 cm in Sikar, Jhunjhunun and Pali regions and along the western fringes of the Aravalli range. On the eastern side of the Aravalli range, the rainfall ranges from 55 cm in Ajmer to 102 cm in Jhalawar. **In plains, Banswara (92.0 cm) and Jhalawar (95 cm) districts receive the maximum annual rain.** Mount Abu (Sirohi district) in the south-west, however, receives the highest rainfall in the state (163.8 cm). The yearly total rainfall is highly variable at different places all over the state and it is most erratic in the western half with frequent spells of drought, punctuated occasionally by heavy downpour in some years, associated with the passing low pressure systems over the region.

2.2 Banswara District- Brief Scenario.

Banswara district is the southern gateway of Rajasthan. Banswara shares its border with Dahod district of Gujarat state in the South-West. District Banswara is predominantly inhabited by the tribal, with 76.4 % and 4.45 % population (census 2011) being schedule tribe and schedule caste respectively in this district. This is among the largest tribal populated districts in our country as well as in the whole of Rajasthan State. This district is also predominated by the rural population. The total population of the Banswara district is 1.79 million, which is 2.61 % of total population of the state according to census 2011. Out of this total population, 92.9 % of the population resides in rural areas. The population density of district Banswara is 397 persons per Sq. Km. Average annual rainfall of Banswara is 1107 mm. District Banswara is at the bottom of virtually all kinds of development and progress in the State scenario. It is among the poorest in the State. Among the tribal regions also, Banswara is at the bottom of all, not only in poverty, but also in almost all Human Development Index including Human Development measures and gender related development measures. In light of the overall backwardness and being at the bottom of the economic and human development, the tribal regions, particularly, Banswara district deserves highest attention of the Government and other development agencies for the improvement of the overall conditions in the District.

2.3 The project

Sporadic rainfall in the area and deficiency of water in critical stage of crop maturing results in failure of Kharif crop in rain-fed area and Rabi crop in post monsoon season. The proposed project has been formulated and is being implemented to assure crop production in Rabi season and to assure water availability during critical stage of crop during Kharif season. Ultimate aim of this project is check crop failure during Kharif season and help beneficiary cultivators to get sustainable agriculture production during Rabi season. Under the project, Sadguru Foundation has taken up construction of Check dams for impounding water and lifting the same for agriculture use in various blocks of Banswara district.

2.4 Objectives

The project aims to achieve sustainable improvements in the living standards of tribal and rural poor through irrigated agriculture development. The key benefits of the project are: -

- Food security achieved
- Increase in Household income and improvement in overall economic and social conditions
- Better drinking water availability for the villagers and their live stock
- Decentralized resource management and utilization, ensuring efficient and equitable distribution
- Institutional building of the farmers to sustain programme by the community and its institution and nurturing the same

2.5 Project sector

The livelihood of the local people of Banswara district is dependent upon rain fed agriculture, which fails to meet even the bare minimum requirements, since rains are erratic and unreliable compounded by recurring draught conditions. The situation is further worsening due to small land holdings in the area. Based on the available local resources, local needs and the use of appropriate technology, the project aims around small scale water resources development in terms of community managed lift irrigation project6s and two masonry water harvested check dams/ anicuts.

The projects of Lift irrigation schemes and check dams (anicuts) are taken up in the non command of Mahi large project and therefore the area where these small projects are taken up are benefiting most deserving people of non-command area which need appropriate systems for the livelihood through water resources.

i. Community based Lift Irrigation Projects

Community managed lift irrigation scheme at village Muniya Khunta and Jalampura, Banswara, Rajasthan constructed under the present RKVY project.

The project area topography and other relevant factors offer a great scope for the lift irrigation, as the other conventional irrigation by gravity flow is not suitable to the local conditions where terrine is undulating and land holdings are small.

For the operation and management of the lift irrigation schemes, each scheme has a formally registered lift irrigation cooperative society. At present cooperative has been formed for each L I scheme. All the beneficiary farmers are members of the cooperative society.

Each of the lift irrigation cooperative society has management committee chosen by members with size ranging from 9-11. Management committee in turn appoints a working team of four people to look after day-to-day management including pump operation, valve operation, watchman and a secretary. The members of the committee are chosen hamlet wise so as to ensure that each hamlet is actively associated in the management of the system.The management committee of a lift irrigation cooperative society is responsible for scheduling water distribution, pricing and recovery of water charges, finance and accounting, operation and maintenance of the system and conflict resolution. In addition to these functions, the management committee is also responsible for operation and management of the check dam. This is important activity for safety and proper functioning of the check dam.

Community managed lift irrigation scheme at village Magarada Khetla Sath, Banswara, Rajasthan constructed under RKVY project

ii. Community Water Harvesting Structures - Masonry Check Dams

Community water harvesting structure at village Jhumki, Banswara, Rajasthan constructed under RKVY project in the year 2010

Construction of masonry check dams across various rivers and rivulets is another important program taken up under RKVY and is being executed by Sadguru. Endowed with good rainfall, run-off and massive drainage network, the region has immense scope for the water harvesting structures - check dams. The surplus runoff presently going unutilized has been impounded through relatively small masonry structures across the main streams, which is available for the benefit of the community and the region. The topography, nature of rivers, geology of foundations etc. are very favourable for very good and equally useful masonry structures. All the check dams constructed have gates so that during floods (when gates are removed prior to onset of monsoon and stored in the stores constructed on the banks) the silt is also drained off. This specific arrangement helps in avoiding siltation in the reservoir and design capacity is maintained all the time. The gates are again installed at the last spell of the flood / monsoon season. The installation and removal of gates is being done by the cooperatives using the stored water of check dam or the informal water user group constituted in case of small check dam without L I scheme.

Community water harvesting structure at village Kundal, Banswara, Rajasthan constructed under RKVY in the year 2012

3 – Impact of Project

This chapter illustrates assessment of the impact of the water resources development projects being implemented under RKVY in Banswara district. Based on the data collected for the eighteen completed projects following observations are described;

3.1 Area brought under irrigation

After completion of 27 schemes at the time of study, a total of 3052.50 acres of land has been brought under irrigation after completion of 27 schemes this is important to mention that these land despite being near the river and rivulets were not able get irrigation in Rabi season as there was no water storage. Due to the undulation it is not possible to take water to a height and distance where lift irrigation schemes have been able to do.

In the very first year after commissioning of schemes irrigation starts and within two to three years full potentials of irrigation is achieved. Scheme wise coverage of irrigation in -- schemes is shown in the table in the annexure-1. A list of 27 schemes is attached in Annexure-2a &2b.

3.2 Impact on increased agricultural production and food security

In order to measure the increased agricultural production after Water resources intervention done under RKVY project in Banswara district, it categories these impact into following different sections.

3.2.1 Increased crop area (more land under irrigation)

Prior to the Water resources intervention the farmers were dependent on rainwater for agricultural production. A very few HHs were having private well that could support critical irrigation only in kharif season. As the groundwater table was also very low before the intervention the wells were getting dried and could provide a very negligible irrigation for Rabi crops. Figure: 1 and Figure: 2 show the changing scenario of the crop area of the village.

As a result, in 27 schemes completed so far crop area in Kharif has increased up to 114% where as that in Rabi season has increased up to 300 %. Overall increase in crop area is up to 165%. Increase in crop area in Rabi season is significant in improving yields in kharif also as it is the result of irrigation availability from the schemes. Though there is not much in increase in crop area in Kharif but with available support of critical irrigation result is significant.

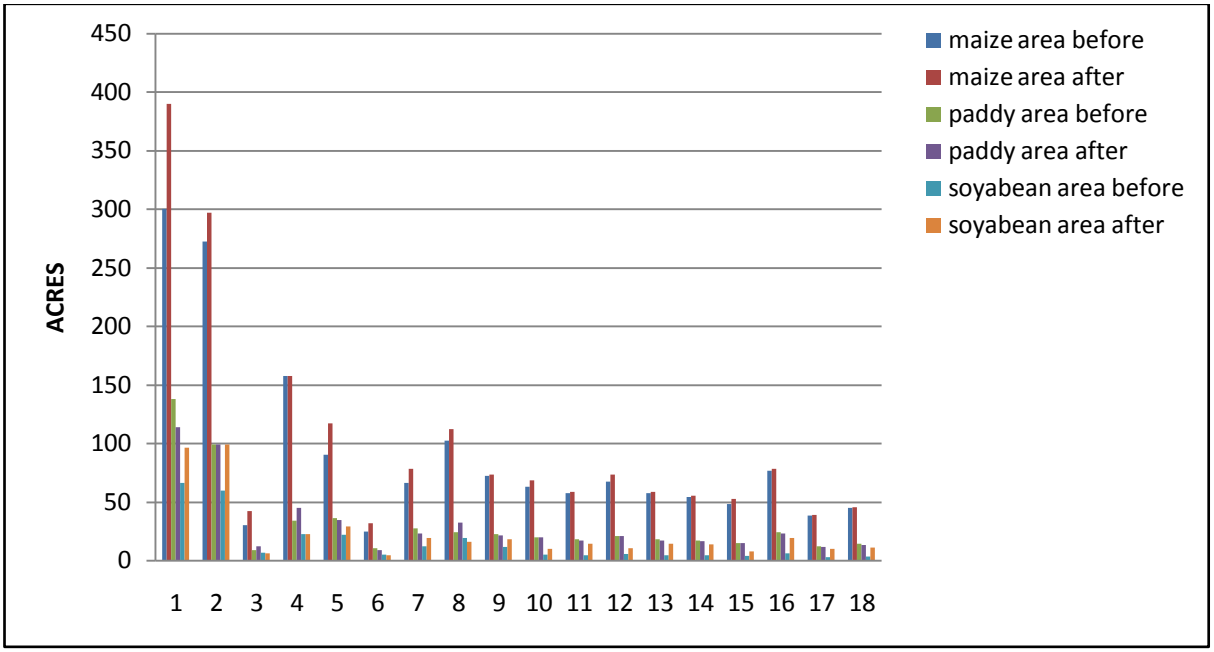


Fig-1: Change in Crop Area in Kharif Season (Scheme wise).

9 schemes completed recently their benefits will be available in Rabi 2014-15. Hence not shown in above table. Considering similar agro-climatic conditions and peoples response with Sadguru support the benefits in 9 schemes will be similar to that of 18.

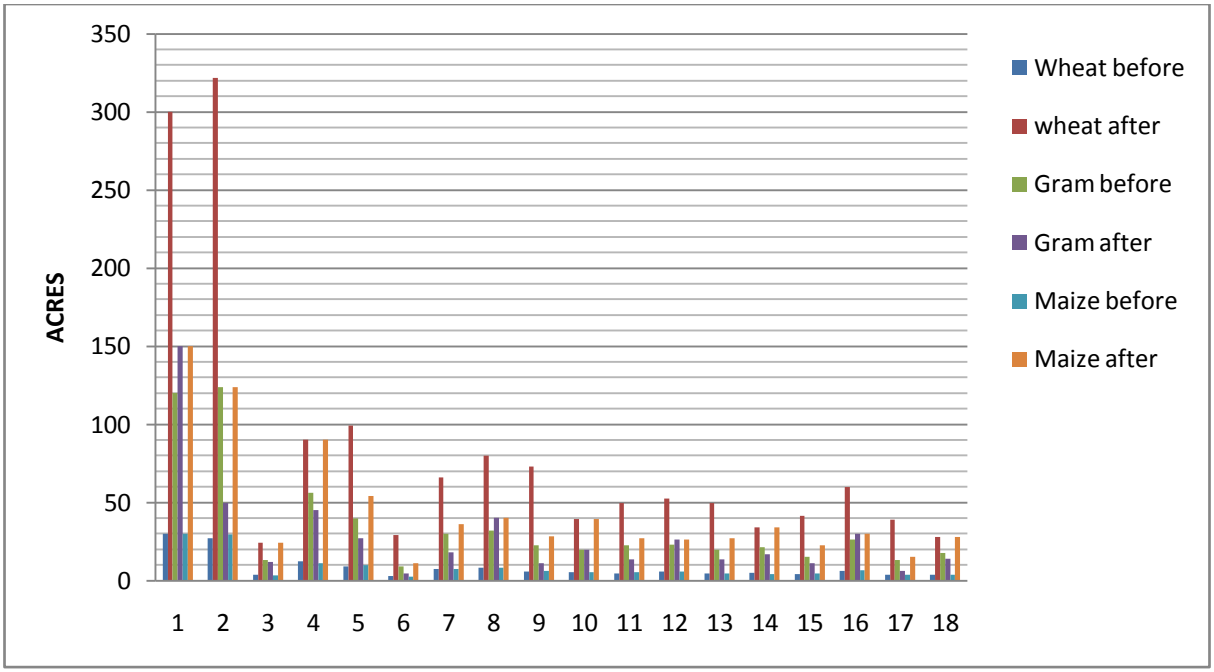


Fig-2: Change in Crop Area in Rabi Season (Scheme wise)

9 schemes completed recently their benefits will be available in Rabi 2014-15. Hence not shown in above table. Considering similar agro-climatic conditions and peoples response with Sadguru support the benefits in 9 schemes will be similar to that of 18.

3.2.2 Increased cropping intensity (more crops per acre per year)

Cropping intensity has increased by more than 300 % in Rabi season mainly because assured irrigation availability and by 14 % in Kharif as a result of critical irrigation support in case there is long gap of rains during monsoon. Overall cropping intensity has increased up to 165 % in two seasons.

3.2.3 Increased crop production (more crop production per season)

Analysis has been done for three crops; Maize, Paddy and Soya bean in Kharif and Wheat, Gram and Maize in Rabi season. These are primarily used for both consumption purpose at the household level and sale of additional grains in the market especially of wheat, gram and soya bean. Kharif season crops were cultivated before schemes also and in Rabi only some area less than 35 % were cultivated with similar crops, however, after schemes they have continued these crops with assured irrigation support which has ensured guaranteed increased production of these crops after schemes. This has resulted in the food security of the household. Figure-3 and Figure-4 clearly show the difference between the scheme wise production of the crops before and the present status. **So we can see that the average production has many folds as compared to the production before the intervention**. Emphasising further, the agricultural production Water resources development through check dams and LI schemes could be guaranteed which was extremely uncertain before the intervention because of the uneven erratic rainfall of the area. Overall production in total of 18 schemes has increased from 24841 quintals to 82590 quintals i.e by 332%.

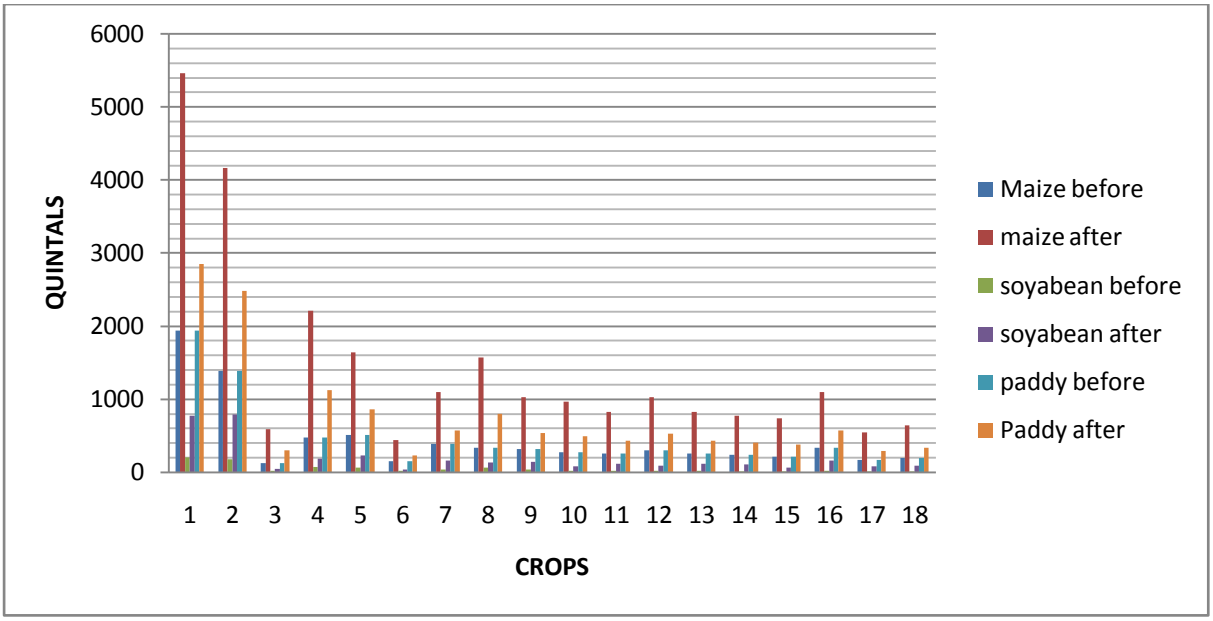


Fig-3: Increase in Crop Production in Kharif Season (Scheme wise).

9 schemes completed recently their benefits will be available in Rabi 2014-15. Hence not shown in above table. Considering similar agro-climatic conditions and peoples response with Sadguru support the benefits in 9 schemes will be similar to that of 18.

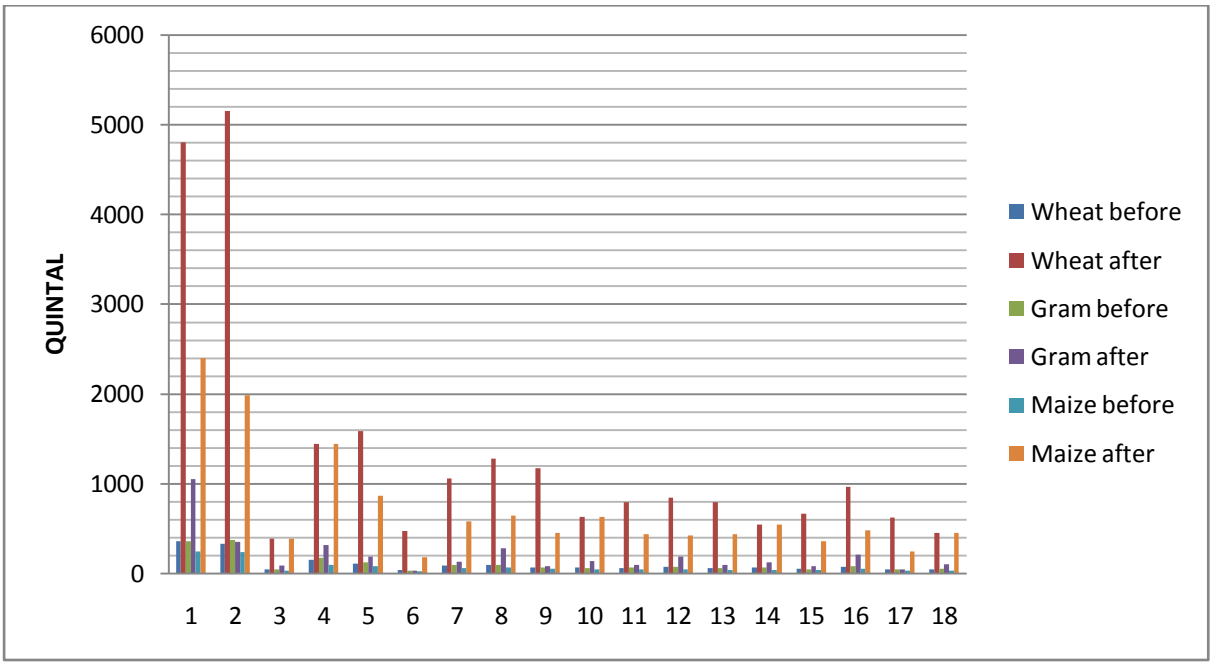


Fig-4 : Increase in Crop Production in Rabi Season (Scheme wise)

9 schemes completed recently their benefits will be available in Rabi 2014-15. Hence not shown in above table. Considering similar agro-climatic conditions and peoples response with Sadguru support the benefits in 9 schemes will be similar to that of 18.

3.2.4 Increase in yield per acre

There is significant increase in crop yield per acre after the scheme because of the assured irrigation. After getting irrigation farmers tend to put better inputs and invest more which results in appreciable increase in yield of crop. Besides, Sadguru foundation has been supporting farmers of these schemes in agriculture productivity enhancement through knowledge management by a team of Community Resource Persons and Para professionals. This effort is being done by the organisation at a massive scale and not as part of RKVY project. The outcome of this effort has brought significant result so far. Objective of this effort is to guide farmers for adoption of better quality seeds, seed treatment before sowing, proper spacing between row to row and plant to plant and proper package of practices. Because of massive programme of PoP the agriculture production have improved both in Kharif and Rabi in the projected villages. This is a special feature of the support provided by the implementing agency during the post construction stage.

As a result as evident from the table- 1 below net percentage increase in crop yield ranges between 33% to 166%. In case of wheat earlier only very small percentage of land use to have this crop but post schemes area under wheat has increased and yield has also increased. The table-1 and Fig-5 below show the yield of crops before and after the scheme;

Name of crops	YIELD PER ACRE IN QUTL BEFORE SCHEME	YIELD PER ACRE IN QUTL AFTER SCHEME	Net Percentage increase in yield after scheme
MAIZE	7	16	128.5
PADDY	14	25	78.5
SOYABEAN	3	8	166.6
WHEAT	12	16	33.3
GRAM	3	7	133.3

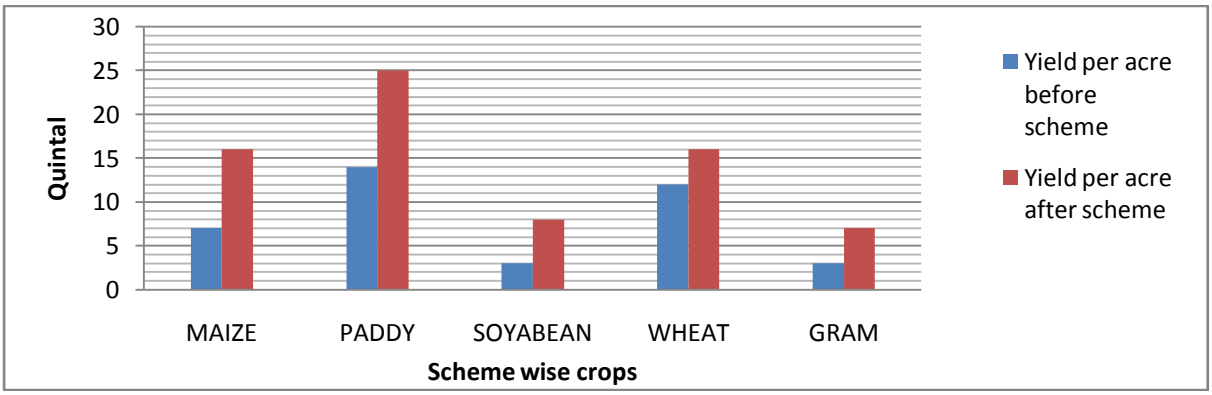


FIG:5 CROP YIELD PER ACRE BEFORE AND AFTER SCHEME

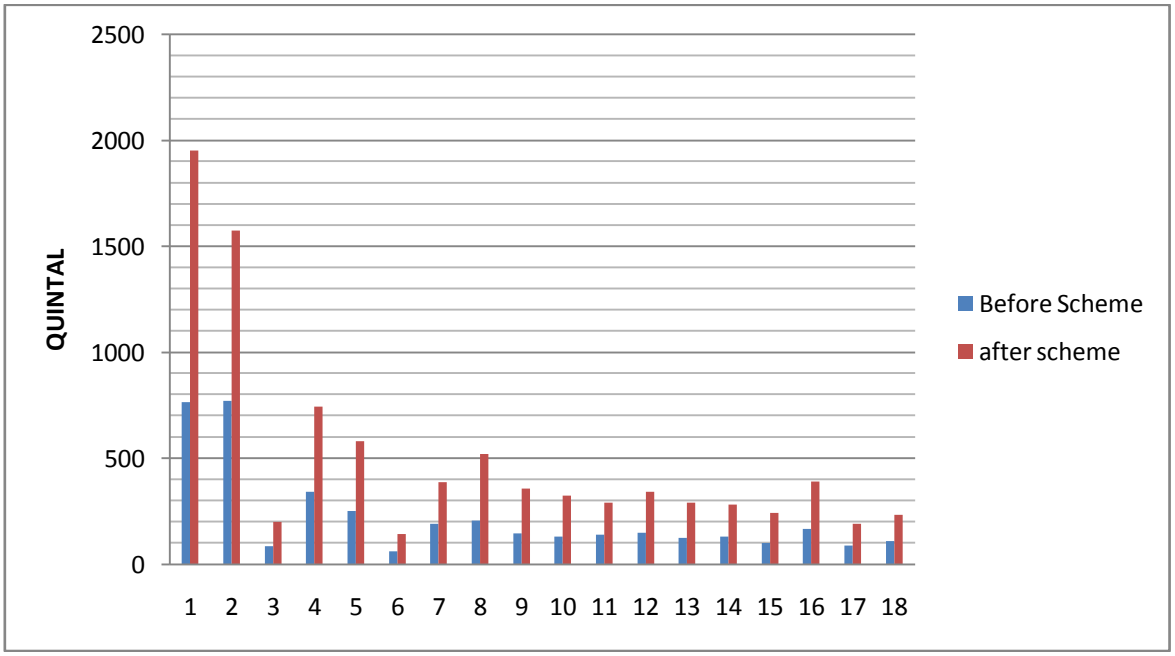
9 schemes completed recently their benefits will be available in Rabi 2014-15. Hence not shown in above table. Considering similar agro-climatic conditions and peoples response with Sadguru support the benefits in 9 schemes will be similar to that of 18.

Ground water increased in existing well

3.2.4 Increase in Fodder

Farmers have been able to have significant increase in fodder production also. Fodder production in Kharif is almost similar but there is significant increase in fodder in Rabi season from 3938 to 9028 quintals. Overall fodder production has increased from 12910 Q to 17894 Q (138.6%).

Increase in fodder production before and after scheme is illustrated by the figure-6



SCHEMESWISE CROP

FIG.:6 FODDER PRODUCION BEFORE AND AFTER SCHEME

9 schemes completed recently their benefits will be available in Rabi 2014-15. Hence not shown in above table. Considering similar agro-climatic conditions and peoples response with Sadguru support the benefits in 9 schemes will be similar to that of 18.

3.3 Other Benefits

Besides cropping pattern change, increased crop and fodder production there are other important change in the overall scenario in the project villages which were witnessed. During the focused group discussion with the community various other impacts besides above were shared by the community which could be detailed as below;

3.3.1 Increase in Ground Water

Prior to the construction of check dams and lift irrigation schemes there was hardly any water for irrigation in the project villages.. Now they have sufficient water storage in the check dams and irrigation is being taken in their land with support of community lift irrigation schemes and small portable pumps. These have also helped in recharging the ground water in the project villages and the surrounding area as a result of which drinking water availability in the open wells and hand pumps has improved. It was shared by the farmers that earlier during the month of May and June many of the hand pumps used to dry up but with the increase in ground water many of these hand pumps have enough water during peak summer period.

3.3.2 Change in Migration

Migration of the villagers has reduced because of assured irrigated rabi season crop. Earlier they had no opportunity in the village but post L I scheme they have planned agriculture to execute and assurance of getting good production which has motivated them to live in the village. As reported by the villagers now unlike earlier trend only few members from the family and village opt to migrate outside whereas rest of the family and children have preferred to live in the village only. There is drastic reduction in the forced migration when one has to go for bread earning.

This change in migration pattern hopefully would have positive impact in the school attendance of children and their basic education in the coming years.

3.3.3 Impact on food security

Only Kharif season crop was never sufficient for enough food production in the village hence there was food insecurity among most of the families. But with the support of irrigation by L I scheme now farmers are able to take rabi season crop giving them enough food grain. As reported by farmers, they have great feeling of food security in the village now. This scenario would further help them plan for other development avenues in the village. Like farmers have reported that now with more fodder available in the village some farmers are planning to buy milch cattle. This endeavour of farmers will not only give them better income but also take care of nutritional aspect of family members with availability of milk to the family members' diet.

3.4 Training and Capacity building

Training and exposure is important component to build capacity of the community and strengthen community organization. Therefore a no. of trainings/ meetings in the villages and at Sadguru's Training Institute at Chosala with the beneficiary farmers were organised which became instrumental for promotion of L I co operatives. Executive members of co operatives were imparted leadership training and operators and valve men were imparted job specific trainings. Secretaries were given the orientation of record keeping and accountings. These aspects of implementing agency ensured post project benefits of the projects, a unique feature of implementing agency

3.4.1 Community involvement including post project management by the community

The lift irrigation schemes are managed and operated exclusively by community based predefined rules and procedures. These rules and procedures are being formulated and accepted by the community itself. The field staff of Sadguru helps the community in this regard. Prior training is also imparted to the community.

The distribution of water to the individual beneficiary is being done by the community themselves. The charges are also fixed by the community itself to meet the power charges and other contingencies including salaries to staff deployed for operation and maintenance and repair of pumps (which of course is very rare) etc.

3.4.2 Institutional building

The constitution and functioning of L I Co operatives as described earlier clearly indicates that cooperatives of the villagers seem to be helping them uncover the benefits of cooperation and working together. They are fully aware of the importance of L I co operatives through capacity building training by Sadguru foundation. This has fostered a village level institution building process, which in turn, would cultivate their future developmental efforts and help evolve a cohesive culture.

3.4.3 Cooperative Management

The implementation of these schemes in the cooperative manner described earlier articulate a lot about partnership between several stakeholders in the process of development. It clearly brings out the role of government agency as 'provider' of the resources and as monitoring authority, the role of NGO as the 'facilitating' agency in the development process and the role of beneficiaries in getting ready to manage their own affairs. The collaboration provides one of the most glaring examples of achieving ultimate development objective in democratic manner. Based on the experience of more than 350 water resources in the district by Sadguru Foundation, it can be said that these community-managed schemes have been extremely effective, both economically and socially, and are eminently replicable.

3.5 Technical competency of Sadguru and quality of works

Sadguru as an organization has about 30 engineers. The team involved exclusively in water resources development comprises of 16 engineers. Thus Sadguru Foundation is well equipped with the experienced and knowledgeable technical personals required to implement the community based water-harvesting schemes including check dams and lift irrigation schemes. The technical competency of the Sadguru Foundation has a great impact over the successful implementation of schemes and post project management.

The consultants very clearly observed exceptionally high quality of workmanship of the project with quality material used in the construction. We can say the quality of works has been among the best to be seen anywhere for such schemes.

3.6 Some Hurdles in Implementation

Considering the track record and competency of implementing agency this project has been delayed in completion. One of the main reason for such delay was very much delay in the technical clearance, particularly for the check dams, where at one time some projects were delayed for more than 18 months in getting prior permission from the technical department. Another reason for the delay was non availability of cash flow on some occasion. However, it must be appreciated that in many occasion to continue the progress the implementing agency utilize some funds as bridge finance from its own sources. On many occasions huge amounts was utilized by the implementing agency as bridge finance.

4-Concluding Remarks

4.0 Strategy

Sadguru Foundation has adopted a strategy of improving livelihood of poorest of the poor through effective water resource management. It is a proven model of natural resource intervention being implemented in the district and the state which is helpful in improving the economy of the village and impacting the life of the people. Further, it has potential to trigger subsequent social development.

4.1 Technology

In the undulating terrain combination of small scale water harvesting schemes and Lift Irrigation schemes are extremely useful. The technological approach and design used is of high quality. The WHS have withstood the fury of rain and flood. WHS and L I Schemes have met the requirements of farmers in terms of timely and equitable distribution of water.

As mentioned earlier the quality of work was excellent.

Also Operation and maintenance of the schemes are user-friendly and cost effective and managed by the community itself without any external support.

4.2 Economic Impact

There is huge economic impact of these schemes in terms of direct as well as indirect benefit. Farmers are able to achieve more than four times or more grains which help them to meet their food security from a smaller per capita land holding. Price of the land has gone after getting irrigation availability. Overall these schemes have many indirect benefits leading to multiplier effect on the village and on the regional economy.

4.3 Social impact

Entire approach of the implementation of the water resources schemes under RKVY has development oriented social impact. The schemes serve to encourage an institution building process within the village community rebuilding their confidence in themselves.

4.4 Role of government

Role of the government is very crucial as it provides the financial resources for such development model around small scale water resources development. NGO plays important role of implementation of quality schemes and facilitation of building village institutions and their capacity building so that beneficiaries get ready to manage the resources effectively and sustainably.

Overall this project is extremely effective in terms of economic and social benefits. We term the project and its impact was excellent and such partnership with the government and highly reputed NGO need to be replicated for the better implementation and better impact of similar project in the state.

Annexure-1

NAME OF CHECK DAMS AND LIFT IRRIGATION SCHEME EXECUTED UNDER RKVY IN BANSWARA DISTRICT

Sr. No.	Name of Scheme	Year of Construction /Commissioning	Potential irrigable acres in one crop season	Actual area irrigated under scheme (acres)		
				2011-12	2012-13	2013-14
	Check dam					
1	Jhumki	2010-11	600	450	550	600
2	Chananwala	2010-11	500	430	480	495
3	Veerpur	2010-11	50	40	50	60
4	Ubapan	2011-12	200		210	225
5	Kundal	2011-12	200		160	180
6	Mormahuda-2	2011-12	50		40	45
7	Sarpota	2011-12	150		110	120
8	Ruparail	2011-12	200		145	160
9	Borbhatod	2013-2014	500			
10	Magarda Damrasath	2013-2014	400			
11	Magarda Khetelasath	2013-2014	200			
12	Borekhedi (Mahudi falia)	2013-2014	200			
13	Potaliya	2013-2014	300			
	Lift irrigation scheme					
14	Wageri-1	2010-11	112.5	105	110	112.5
15	Wageri-2	2010-11	97.50	80	90	98
16	Choura Bada	2010-11	90.00	80	85	90
17	Muniya Khoonta-	2011-12	112.50		100	105
18	Muniya Khoonta -2	2011-12	90.00		80	90
19	Jalampura	2011-12	90.00		80	85
20	Bochharda -Damor Falia	2011-12	75.00		65	75
21	Magarda Damrasath Faliya	2011-12	120.00		100	120
22	Magarda Khatelasath Faliya	2011-12	60.00		50	60
23	Jhoomaki (Kushaldgadh)	2012-13	75.00			70
24	Ghorwada	2013-2014	90.00			
25	Maiyawat	2013-2014	75.00			
26	Mahudi	2013-2014	116.27			
27	Jeevakhunta	2013-2014	82.50			

Schemes at number 9-13 and 24- 27 will have irrigation first time in Rabi 2014-2015 therefore irrigation achieved is not shown at the time of study.

Annexure-2a

Detail of Water Harvesting Structures executed under RKVY- Banswara of Rajasthan

Sr. No.	Name of of Check dam	Technical Sanction No. & Date	Tehsil	Gram Panchayat	Source (River /Rivulet)	Area (Acre)	Benefici-aries (No.)	Status
1	Jhumki	No. SE/WRJPC/UDP/ Tech/Estimate/ 2009/5820, 16-12-2009	Sajjangarh	Mahudi	Hiren	600.00	350	Completed.
2	Chananwala	AJJS/Ban/Tak/ 2009/4958, 30-11-2009	Kushalgarh	Bildi	Hiren	500.00	250	Completed.
3	Veerpur	AJJS/Ban/Tak/ 2009/4961, 30-11-2009	Talwada	Veerpur	Kagudo	50.00	30	Completed.
4	Ubapan	SE(c)/Mahi/Tech/ F284/11/2586 09-12-2011	Banswara	Makanpura	Bunand	200.00	42	Completed.
5	Kundal	SE(c)/Mahi/Tech/ F284/11/2588 16-12-2011	Banswara	Makanpura	Bunand	200.00	39	Completed.
6	Mormahuda-2	AJJS/Ban/Tak/ 2011/2818 26-08-2011	Banswara	Dhanpur	Rivulet	50.00	7	Completed.
7	Sarpota	AJJS/Ban/Tak/ 2011/2829 26-08-2011	Kushalgarh	Chhoti Sarwa	Telni	150.00	24	Completed.
8	Ruparail	AJJS/Ban/Tak/ 2011/2821 26-08-2011	Kushalgarh	Chhoti Sarwa	Telni	200.00	13	Completed.
9	Borbhatod	No.SE/WRC/ BSW/TECHF/ 2013/2097, 15-04-2013	Kushalgarh	Bildi	Hiren	500.00	150	Completed.
10	Magarda Damrasath		Kushalgarh	Magarda damasath	Hiren	400.00	54	Completed.
11	Magarda Khetelasath		Kushalgarh	Magarda damasath	Hiren	200.00	63	Completed.
12	Borekhedi (Mahudi falia)		Kushalgarh	Choti Badwas	Hiren	200.00	54	Completed.
13	Potaliya		Kushalgarh	Potaliya	Hiren	300.00	56	Completed.
					Total	3550	1132	

Annexure 2b

THE DETAILS OF THE LIFT IRRIGATION SCHEMES UNDER RKVY PROGRAMMES IN DISTRICT BANSWARA OF RAJASTHAN

Sr. No.	Name of Lift Irrigation Scheme/ Tehsil	Technical Sanction No. & Date	Year of Sanction	Installed Pumping Capcity (H.P.)	Water Lifting Height in Meter	Estimated Cost (Rs. InLakhs)	Ultimate Designed Command (Acres)				No. of Benefi-ciaries HouseHolds (As per Revenue Record)	Status
							Kharif	Rabi	Summer	Total		
1	Wageri-1 (Kushaldgadh)	5410/ 21.12.2009	2010-2011	60	50	34.90	112.50	112.5	0.00	225.00	91	Completed.
2	Wageri-2 (Kushaldgadh)	5412/21.12.2019	2010-2011	60	52	37.53	97.50	97.50	0.00	195.00	75	Completed
3	Choura Bada (Kushaldgadh)	5414/21.12.2009	2010-2011	60	61	38.96	90.00	90.00	0.00	180.00	95	Completed
4	Muniya Khoonta- 1(Kushaldgadh)	10525/16.03.2011	2011-2012	90	52	36.93	112.50	112.50	0.00	225.00	135	Completed
5	Muniya Khoonta -2(Kushaldgadh)	10529/16.03.2011	2011-2012	75	54	32.53	90.00	90.00	0.00	180.00	111	Completed
6	Jalampura (Bagidora)	10527/16.03.2011	2011-2012	75	51	33.12	90.00	90.00	0.00	180.00	60	Completed
7	Bochharda -Damor Falia(Kushaldgadh)	10531/16.03.2011	2011-2012	90	64	38.54	75.00	75.00	0.00	150.00	67	Completed
8	Magarda Damrasath Faliya(Kushaldgadh)	10533/16.03.2011	2011-2012	40&50	44&50	33.41	120.00	120.00	0.00	240.00	44	Completed
9	Magarda Khatelasath Faliya(Kushaldgadh)	10632/23.03.2011	2011-2012	20&12.50	37	17.24	60.00	60.00	0.00	120.00	50	Completed
10	Jhoomaki (Kushaldgadh)	796/02.05.2012	2012-2013	40	36	18.46	75.00	75.00	0.00	150.00	31	Completed
11	Ghorwada (Kushaldgadh)	800/02.05.2012	2012-2013	75	55	31.09	90.00	90.00	0.00	180.00	71	**Physically completed and will be functional in next Rabi season 2014-15**
12	Maiyawat (Kushaldgadh)	797/02.05.2012	2012-2013	60	52	29.67	75.00	75.00	0.00	150.00	82	
13	Mahudi (Kushaldgadh)	791/02.05.2012	2012-2013	30 &50	36&55	37.98	116.25	116.27	0.00	232.52	64	
14	Jeevakhunta (Kushaldgadh)	788/02.05.2012	2012-2013	75	57	31.10	82.50	82.50	0.00	165.00	58	
						451.46	**1286.25**	**1286.27**	**0.00**	**2572.52**	**1034.00**	

Table--: Crop Area before and after scheme

Sr. No.	Name of Scheme	Year of Construction /Commi-ssioning	Potential irrigable acres	Actual Area irrigated 2013-14	Before scheme crop area in acres								After scheme crop area in acres							
					Kharif				Rabi				Kharif				Rabi			
					Maize	Paddy	Soyabean	Total	Wheat	Gram	Maize	Total	Maize	Paddy	Soyabean	Total	Wheat	Gram	Maize	Total
1	Jhumki	2010-11	600	600	300	138	66	**504**	30	120	30	**180**	390	114	96	**600**	300	150	150	**600**
2	Chananwala	2010-11	500	495	272.25	99	59.4	**430.65**	27.225	123.75	29.7	**180.675**	297	99	99	**495**	321.75	49.5	123.75	**495**
3	Veerpur	2010-11	50	60	30	9	6.6	**45.6**	3.6	13.2	3.3	**20.1**	42	12	6	**60**	24	12	24	**60**
4	Ubapan	2011-12	200	225	157.5	33.75	22.5	**213.75**	12.375	56.25	11.25	**79.875**	157.5	45	22.5	**225**	90	45	90	**225**
5	Kundal	2011-12	200	180	90	36	21.6	**147.6**	9	39.6	9.9	**58.5**	117	34.2	28.8	**180**	99	27	54	**180**
6	Mormahuda-2	2011-12	50	45	24.75	10.35	4.95	**40.05**	2.7	9	2.475	**14.175**	31.5	9	4.5	**45**	29.25	4.5	11.25	**45**
7	Sarpota	2011-12	150	120	66	27.6	12	**105.6**	7.2	30	7.2	**44.4**	78	22.8	19.2	**120**	66	18	36	**120**
8	Ruparail	2011-12	200	160	102.4	24	19.2	**145.6**	8	32	8	**48**	112	32	16	**160**	80	40	40	**160**
9	*Wageri-1*	2010-11	*225*	220	140.8	44	22	**206.8**	11	44	12.1	**67.1**	143	41.8	35.2	**220**	143	22	55	**220**
10	*Wageri-2*	2010-11	*195*	195	107.25	29.25	21.45	**157.95**	10.725	39	10.725	**60.45**	136.5	39	19.5	**195**	78	39	78	**195**
11	*Choura Bada*	2010-11	*180*	180	90	27	18	**135**	9	45	10.8	**64.8**	117	34.2	28.8	**180**	99	27	54	**180**
12	*Muniya Khoonta-*	2011-12	*225*	210	105	42	23.1	**170.1**	11.55	46.2	11.55	**69.3**	147	42	21	**210**	105	52.5	52.5	**210**
13	*Muniya Khoonta -2*	2011-12	*180*	155	85.25	35.65	15.5	**136.4**	7.75	34.1	7.75	**49.6**	100.75	29.45	24.8	**155**	85.25	23.25	46.5	**155**
14	*Jalampura*	2011-12	*180*	160	116.8	24	16	**156.8**	9.6	40	8	**57.6**	104	30.4	25.6	**160**	64	32	64	**160**
15	*Bochharda - Damor Falia*	2011-12	*150*	145	72.5	29	17.4	**118.9**	7.975	29	8.7	**45.675**	101.5	29	14.5	**145**	79.75	21.75	43.5	**145**
16	*Magarda Damrasath Faliya*	2011-12	*240*	230	115	34.5	25.3	**174.8**	11.5	50.6	12.65	**74.75**	149.5	43.7	36.8	**230**	115	57.5	57.5	**230**
17	*Magarda Khatelasath Faliya*	2011-12	*120*	115	86.25	11.5	12.65	**110.4**	6.9	25.3	6.9	**39.1**	74.75	21.85	18.4	**115**	74.75	11.5	28.75	**115**
18	*Jhoomaki (Kushaldgadh)*	*2012-13*	*150*	140	77	32.2	15.4	**124.6**	7.7	35	7.7	**50.4**	91	26.6	22.4	**140**	56	28	56	**140**
					2038.75	**686.8**	**399.05**	**3124.6**				**1204.5**	**2390**	**706**	**539**	**3635**	**1909.75**	**660.5**	**1064.75**	**3635**

9 schemes completed recently their benefits will be available in Rabi 2014-15. Hence not shown in above table. Considering similar agro-climatic conditions and peoples response with Sadguru support the benefits in 9 schemes will be similar to that of 18.

Table--: Yield of Crop before and after scheme

Sr. No.	Name of Scheme	Year of Construc-tion / Commi-ssioning	Potential irrigable acres	Actual Area irrigated 2013-14	Yield of Crop (Qutl)															
					Before scheme								After scheme							
					Kharif				Rabi				Kharif				Rabi			
					Maize	Paddy	Soyab ean	Total	Wheat	Gram	Maize	Total	Maize	Paddy	Soyab ean	Total	Wheat	Gram	Maize	Total
1	Jhumki	2010-11	600	600	2100	1932	198	**4230**	360	360	240	**960**	5460	2850	768	**9078**	4800	1050	2400	**8250**
2	Chananwala	2010-11	500	495	1905.75	1386	178.2	**3469.95**	326.7	371.25	237.6	**935.55**	4158	2475	792	**7425**	5148	346.5	1980	**7474.5**
3	Veerpur	2010-11	50	60	210	126	19.8	**355.8**	43.2	39.6	26.4	**109.2**	588	300	48	**936**	384	84	384	**852**
4	Ubapan	2011-12	200	225	1102.5	472.5	67.5	**1642.5**	148.5	168.75	90	**407.25**	2205	1125	180	**3510**	1440	315	1440	**3195**
5	Kundal	2011-12	200	180	630	504	64.8	**1198.8**	108	118.8	79.2	**306**	1638	855	230.4	**2723.4**	1584	189	864	**2637**
6	Mormahuda-2	2011-12	50	45	173.25	144.9	14.85	**333**	32.4	27	19.8	**79.2**	441	225	36	**702**	468	31.5	180	**679.5**
7	Sarpota	2011-12	150	120	462	386.4	36	**884.4**	86.4	90	57.6	**234**	1092	570	153.6	**1815.6**	1056	126	576	**1758**
8	Ruparail	2011-12	200	160	716.8	336	57.6	**1110.4**	96	96	64	**256**	1568	800	128	**2496**	1280	280	640	**2200**
9	*Wageri-1*	2010-11	*225*	220	985.6	616	66	**1667.6**	132	132	96.8	**360.8**	2002	1045	281.6	**3328.6**	2288	154	880	**3322**
10	*Wageri-2*	2010-11	*195*	195	750.75	409.5	64.35	**1224.6**	128.7	117	85.8	**331.5**	1911	975	156	**3042**	1248	273	1248	**2769**
11	*Choura Bada*	2010-11	*180*	180	630	378	54	**1062**	108	135	86.4	**329.4**	1638	855	230.4	**2723.4**	1584	189	864	**2637**
12	*Muniya Khoonta-*	2011-12	*225*	210	735	588	69.3	**1392.3**	138.6	138.6	92.4	**369.6**	2058	1050	168	**3276**	1680	367.5	840	**2887.5**
13	*Muniya Khoonta -2*	2011-12	*180*	155	596.75	499.1	46.5	**1142.35**	93	102.3	62	**257.3**	1410.5	736.25	198.4	**2345.15**	1364	162.75	744	**2270.75**
14	*Jalampura*	2011-12	*180*	160	817.6	336	48	**1201.6**	115.2	120	64	**299.2**	1456	760	204.8	**2420.8**	1024	224	1024	**2272**
15	*Bochharda – Damor Falia*	2011-12	*150*	145	507.5	406	52.2	**965.7**	95.7	87	69.6	**252.3**	1421	725	116	**2262**	1276	152.25	696	**2124.25**
16	*Magarda Damrasath Faliya*	2011-12	*240*	230	805	483	75.9	**1363.9**	138	151.8	101.2	**391**	2093	1092.5	294.4	**3479.9**	1840	402.5	920	**3162.5**
17	*Magarda Khatelasath Faliya*	2011-12	*120*	115	603.75	161	37.95	**802.7**	82.8	75.9	55.2	**213.9**	1046.5	546.25	147.2	**1739.95**	1196	80.5	460	**1736.5**
18	*Jhoomaki (Kushaldgadh)*	*2012-13*	*150*	140	539	450.8	46.2	**1036**	92.4	105	61.6	**259**	1274	665	179.2	**2118.2**	896	196	896	**1988**
								25083.6				**6351.2**	**33460**			**55422**				**52215.5**

9 schemes completed recently their benefits will be available in Rabi 2014-15. Hence not shown in above table. Considering similar agro-climatic conditions and peoples response with Sadguru support the benefits in 9 schemes will be similar to that of 18.

Table--: Fodder Yield before and after scheme

Sr. No.	Name of Scheme	Year of Construc-tion / Commi-ssioning	Potential irrigable acres	Actual Area irrigated 2013-14	Yield of Fodder (Qutl)															
					Before scheme								After scheme							
					Kharif				Rabi				Kharif				Rabi			
					Maize	Paddy	Soyabean	Total	Wheat	Gram	Maize	Total	Maize	Paddy	Soyabean	Total	Wheat	Gram	Maize	Total
1	Jhumki	2010-11	600	600	1200	483	132	**1815**	105	540	120	**765**	1365	342	192	**1899**	900	525	525	**1950**
2	Chananwala	2010-11	500	495	1089	346.5	118.8	**1554.3**	95.2875	556.875	118.8	**770.9625**	1039.5	297	198	**1534.5**	965.25	173.25	433.125	**1571.625**
3	Veerpur	2010-11	50	60	120	31.5	13.2	**164.7**	12.6	59.4	13.2	**85.2**	147	36	12	**195**	72	42	84	**198**
4	Ubapan	2011-12	200	225	630	118.125	45	**793.125**	43.3125	253.125	45	**341.4375**	551.25	135	45	**731.25**	270	157.5	315	**742.5**
5	Kundal	2011-12	200	180	360	126	43.2	**529.2**	31.5	178.2	39.6	**249.3**	409.5	102.6	57.6	**569.7**	297	94.5	189	**580.5**
6	Mormahuda-2	2011-12	50	45	99	36.225	9.9	**145.125**	9.45	40.5	9.9	**59.85**	110.25	27	9	**146.25**	87.75	15.75	39.375	**142.875**
7	Sarpota	2011-12	150	120	264	96.6	24	**384.6**	25.2	135	28.8	**189**	273	68.4	38.4	**379.8**	198	63	126	**387**
8	Ruparail	2011-12	200	160	409.6	84	38.4	**532**	28	144	32	**204**	392	96	32	**520**	240	140	140	**520**
9	*Wageri-1*	2010-11	*225*	220	563.2	154	44	**761.2**	38.5	198	48.4	**284.9**	500.5	125.4	70.4	**696.3**	429	77	192.5	**698.5**
10	*Wageri-2*	2010-11	*195*	195	429	102.375	42.9	**574.275**	37.5375	175.5	42.9	**255.9375**	477.75	117	39	**633.75**	234	136.5	273	**643.5**
11	*Choura Bada*	2010-11	*180*	180	360	94.5	36	**490.5**	31.5	202.5	43.2	**277.2**	409.5	102.6	57.6	**569.7**	297	94.5	189	**580.5**
12	*Muniya Khoonta-*	2011-12	*225*	210	420	147	46.2	**613.2**	40.425	207.9	46.2	**294.525**	514.5	126	42	**682.5**	315	183.75	183.75	**682.5**
13	*Muniya Khoonta -2*	2011-12	*180*	155	341	124.775	31	**496.775**	27.125	153.45	31	**211.575**	352.625	88.35	49.6	**490.575**	255.75	81.375	162.75	**499.875**
14	*Jalampura*	2011-12	*180*	160	467.2	84	32	**583.2**	33.6	180	32	**245.6**	364	91.2	51.2	**506.4**	192	112	224	**528**
15	*Bochharda - Damor Falia*	2011-12	*150*	145	290	101.5	34.8	**426.3**	27.9125	130.5	34.8	**193.2125**	355.25	87	29	**471.25**	239.25	76.125	152.25	**467.625**
16	*Magarda Damrasath Faliya*	2011-12	*240*	230	460	120.75	50.6	**631.35**	40.25	227.7	50.6	**318.55**	523.25	131.1	73.6	**727.95**	345	201.25	201.25	**747.5**
17	*Magarda Khatelasath Faliya*	2011-12	*120*	115	345	40.25	25.3	**410.55**	24.15	113.85	27.6	**165.6**	261.625	65.55	36.8	**363.975**	224.25	40.25	100.625	**365.125**
18	*Jhoomaki (Kushaldgadh)*	*2012-13*	*150*	140	308	112.7	30.8	**451.5**	26.95	157.5	30.8	**215.25**	318.5	79.8	44.8	**443.1**	168	98	196	**462**
								11356.9				**5127.1**	**8365**			**11561**				**11767.625**

9 schemes completed recently their benefits will be available in Rabi 2014-15. Hence not shown in above table. Considering similar agro-climatic conditions and peoples response with Sadguru support the benefits in 9 schemes will be similar to that of 18.

Sr. No.	Name of Scheme	Year of Construction / Commissioning	Potential irrigable acres	Actual Area irrigated 2013-14	Before scheme								After scheme							
					Kharif				Rabi				Kharif				Rabi			
					Maize	Paddy	Soyabean	Total	Wheat	Gram	Maize	Total	Maize	Paddy	Soyabean	Total	Wheat	Gram	Maize	Total
1	Jhumki	2010-11	600	600	300	138	66	504	30	120	30	180	390	114	96	600	300	150	150	600
2	Chananwala	2010-11	500	495	272.25	99	59.4	430.65	27.225	123.75	29.7	180.675	297	99	99	495	321.75	49.5	123.75	495
3	Veerpur	2010-11	50	60	30	9	6.6	45.6	3.6	13.2	3.3	20.1	42	12	6	60	24	12	24	60
4	Ubapan	2011-12	200	225	157.5	33.75	22.5	213.75	12.375	56.25	11.25	79.875	157.5	45	22.5	225	90	45	90	225
5	Kundal	2011-12	200	180	90	36	21.6	147.6	9	39.6	9.9	58.5	117	34.2	28.8	180	99	27	54	180
6	Mormahuda-2	2011-12	50	45	24.75	10.35	4.95	40.05	2.7	9	2.475	14.175	31.5	9	4.5	45	29.25	4.5	11.25	45
7	Sarpota	2011-12	150	120	66	27.6	12	105.6	7.2	30	7.2	44.4	78	22.8	19.2	120	66	18	36	120
8	Ruparail	2011-12	200	160	102.4	24	19.2	145.6	8	32	8	48	112	32	16	160	80	40	40	160
9	Wageri-1	2010-11	225	220	140.8	44	22	206.8	11	44	12.1	67.1	143	41.8	35.2	220	143	22	55	220
10	Wageri-2	2010-11	195	195	107.25	29.25	21.45	157.95	10.725	39	10.725	60.45	136.5	39	19.5	195	78	39	78	195
11	Choura Bada	2010-11	180	180	90	27	18	135	9	45	10.8	64.8	117	34.2	28.8	180	99	27	54	180
12	Muniya Khoonta-	2011-12	225	210	105	42	23.1	170.1	11.55	46.2	11.55	69.3	147	42	21	210	105	52.5	52.5	210
13	Muniya Khoonta -2	2011-12	180	155	85.25	35.65	15.5	136.4	7.75	34.1	7.75	49.6	100.75	29.45	24.8	155	85.25	23.25	46.5	155
14	Jalampura	2011-12	180	1600	1168	240	160	1568	96	400	80	576	1040	304	256	1600	640	320	640	1600
15	Bochharda –Damor Falia	2011-12	150	145	72.5	29	17.4	118.9	7.975	29	8.7	45.675	101.5	29	14.5	145	79.75	21.75	43.5	145
16	Magarda Damrasath Faliya	2011-12	240	230	115	34.5	25.3	174.8	11.5	50.6	12.65	74.75	149.5	43.7	36.8	230	115	57.5	57.5	230
17	Magarda Khatelasath Faliya	2011-12	120	115	86.25	11.5	12.65	110.4	6.9	25.3	6.9	39.1	74.75	21.85	18.4	115	74.75	11.5	28.75	115
18	Jhoomaki (Kushaldgadh)	2012-13	150	140	77	32.2	15.4	124.6	7.7	35	7.7	50.4	91	26.6	22.4	140	56	28	56	140
	TOTAL			**5075**	**3089.95**	**902.8**	**543.05**	**4535.8**	**280.2**	**1172**	**270.7**	**1722.9**	**3326**	**979.6**	**769.4**	**5075**	**2485.75**	**948.5**	**1640.75**	**5075**
	%				**60.89**	**17.79**	**10.70**	**89.38**	**5.52**	**23.09**	**5.33**	**33.95**	**65.54**	**19.30**	**15.16**	**100.00**	**48.98**	**18.69**	**32.33**	**100.00**

9 schemes completed recently their benefits will be available in Rabi 2014-15. Hence not shown in above table. Considering similar agro-climatic conditions and peoples response with Sadguru support the benefits in 9 schemes will be similar to that of 18.