





ANNUAL REPORT - 2013-14





PROJECT SUPPORTED BY







PROJECT IMPLEMENTED
BY
MYRADA





Highlights of 2013-2014

883.83 TCM capacity structures created and 10.02 Billion Lts of

Water collected.

1.41 lakh direct and 2.47 lakh indirect Labour Days

4099 Ha are treated and 142.16 Ha waste land brought under cultivation 3064 farmers benefited.

978 Women are benefited, 813 members belong to SC & ST Category.

Apart from NABARD support 1392 HH livelihoods supported through MFIs and Local Banks linkage programs.

204 SAGs formed, 12 Federations, 5 CMRCs, 5 EC body's – Implementing Programme.

4660 tonnes increased yield for 3129 farmers over 5 districts.

1.58 cr rupees community contribution mobilized and 28 lakh common funds collected.

494 HH get farm based livelihood support, 105 HH get off - farm based livelihoods support through NABARD.

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1. EXECUTIVE SUMMARY

MYRADA1 went into a 4 year tripartite agreement with a section 25 company, Hindustan Unilever Foundation and National Bank for Agriculture and Rural Development (NABARD, an established development bank), to initiate a unique PPP model project (Public Private Partnership). The goal of the project is to improve the natural resources and increase the water resource and retention through conservation and proper management practices. The project's aim includes improving and increasing the income of the poor especially the small, marginal farmers and also the landless through farm and non-farm based interventions.

The duration of the project is 4 years with an aim to develop the selected watersheds encompassing natural resources, livestock and the livelihood of the people through a community-led participatory method.

The 5 selected districts i.e. Bidar, Bellary, Chitradurga, Gulbarga and Kolar are rainfed and drought prone. Natural resources in these districts are deteriorating to a great extent due to the felling of trees, soil erosion and over exploitation of water for both domestic and agricultural purposes and in turn affecting the livelihoods of the people.

The overall aim of the project is to improve the natural resources and increase the water resource and retention through conservation and proper management practices. The project's aim includes improving and increasing the income of the poor especially the small, marginal farmers and also the landless through farm and non-farm based interventions. The approach adopted to achieve this is through the involvement of the affected community in planning and implementation of the project which in turn will ensure its sustainability in the long run.

In the selected districts, over 7269 ha of land in 23 villages was identified for the intervention, impacting directly or indirectly over 4629 families with 3060 land holding families being impacted through watershed development activities and 600 landless families through non-farm based livelihood activities.

¹MYRADA, a 46 year old organization, has been engaged in the area of development for over 4 decades and has been extensively involved in building institutions of the poor, management of natural resources, livelihood promotions, health and education. MYRADA's strength lies in its ability to ensure the participation of the stakeholder community in the effective implementation of the programmes. Over the years, MYRADA has received funding from Indian as well as International donors for the implementation of several developmental projects/ programmes in the 3 south Indian states of Karnataka, Andhra Pradesh and Tamilnadu.

From the inception of the project till the end of 31 March 2014,MYRADA has taken several steps to ensure that there is improvement of soil and retention of water on lands being developed. Structures ranging from those that control soil erosion (bunds and plantations) to those that conserve water (dams and recharge pits) have been constructed in all 5 districts benefitting over. There has been an average of 25% in crop yield across the districts as well as significant improvement in the nutrient content of the soil.

In the context of livelihoods, much work has gone into the skills training of farmers to adopt newer technologies and inputs for improvement of fodder availability for livestock. For landless families, there has been a significant increase in the number of livestock they own and manage through this project. In addition, over 1400 persons have been trained in non-farm skills.

Some of the key steps over the 3 years includes:

- Setting up of offices, hiring staff and necessary training imparted to the team on the different aspects of the project.
- Undertaking awareness exercises in the villages through Gramsabha, orientation to Gram Panchyat members, Community based organizations and the government departments.
- Participatory Rural Appraisals (PRA) exercises and collection of baseline data.
- Formation of Self-help Affinity Groups (SAGs) and Federations and strengthening of existing SAGs and federations.
- This was followed up by rapport building exercises with the community through entry level activities such as providing street lights, water troughs for the cattle, cloth washing platforms, de-silting the community wells or kalyanis etc.
- Drawing up of net plan and Micro plans along with the farmers.
- Formation of Executive committees with representation of the villagers to manage and monitor the watershed activities.
- Creating suitable structures such as
 - o Earthen bunds, boulder bunds, gully plugs, silt traps etc. to reduce run –off and soil erosion.
 - Structures for protective irrigation, surface water retention /harvesting and storage for percolation; waste weirs, farm ponds and de-silting.
- Introducing water management techniques such as drip irrigation system, sprinkler irrigation, paired row method, crop diversification etc.
- Collecting community contribution in terms of cash or kind and a maintenance fund in cash towards the implementation and maintenance of the watershed.
- Stakeholders training in the management of water and increase in agriculture production.
- Income Generation Activities (IGA) in on-farm and off-farm activities.

The project has encountered several challenges during the last 2 years beginning with the Department of Watershed Development (DWD) in some cases not issuing No Objection Certificate (NOC) to implement watershed activities and in Gulbarga some farmers had already given permission to set up a cement factory on their land. These led to a reduction of the treatable land from 8500ha to 7269 ha. Other factors such as poor monsoons, topography

of the land not suitable for planned activities, not finding labor to work on the land, non-availability of funds at the appropriate time to take up land development activity etc., were some of the other challenges faced. Several steps have been taken to address these challenges and find necessary solutions to mitigate them.

For the first time in the history of MYRADA, two important approaches towards performance assessment have been adopted. To assess water availability and ground water recharge over a period of time, an approach known as <u>Water budget</u>² has been adopted. Similarly to assess the performance of the project a reporting framework known as the "<u>Triple bottom line</u>³" score card has been adopted.

The highlight of the project has been a publication of a "Technical Manual on Watershed Implementation" in Kannada with the co-ordinated efforts of several MYRADA staff.

The project has completed 2 evaluations undertaken by two independent agencies. One evaluation was undertaken by NABARD and other by Deloitte engaged by HUF on their behalf. The evaluation reports have been examined and appropriate actions are being taken to implement the same in the project.

Myrada has learnt a lot in this process. The monitoring and documentation system introduced by HUF (Dashboard indicators and Score card as examples) has been received positively and will be applied to other projects that Myrada will take in future. For the first time in the history of Myrada, SAG women were given the task of monitoring the watershed activities and have established that they can manage it efficiently and effectively.

²Water budgets provide a means for evaluating availability and sustainability of a water supply. A water budget simply states that the rate of change in water stored in an area, such as a watershed, is balanced by the rate at which water flows into and out of the area. An understanding of water budgets and underlying hydrologic processes provides a foundation for effective water-resource and environmental planning and management. Observed changes in water budgets of an area over time can be used to assess the effects of climate variability and human activities on water resources. Comparison of water budgets from different areas allows the effects of factors such as geology, soils, vegetation, and land use on the hydrologic cycle to be quantified.—source - U S Geological Survey Circular 1308

³Triple bottom line (TBL) accounting expands the traditional reporting framework to take into account social and environmental performance in addition to financial performance. The triple bottom line is made up of "social equity, economic, and environmental" factors – Source Wikipedia.

2. PROJECT AREA PROFILE

The project is being implemented in several districts which come under the Krishna, Godavari and Palarbasins. While Bidar comes under the Godavari, Gulbarga, Chitradurga and Bellary (Tungabhadra- sub division) districts come under the Krishna basin. Kolar is under the geographical area of the Palar river basin, though the actual project area is not covered under any specific basin.

Krishna Basin: - The Krishna Basin extends over Andhra Pradesh, Maharashtra and Karnataka, with a total area of 2, 58,948 Sq.km⁴(nearly 8% of the total geographical area of India). The basin has a maximum length and width of about 701 km and 672 km and is bound by Balaghat range on the north, by the Eastern Ghats on the south and the east and by the Western Ghats on the west. The source of the 1400 km long Krishna is nearJorvillage of Satara district, Maharashtra at an altitude of 1,337 m just north of Mahabaleshwar, and ends in the Bay of Bengal. Its principal tributaries joining from right are the Ghatprabha, the Malprabha and the Tungabhadra whereas those joining from left are the Bhima, the Musi and the Munneru. 75.86% of the total area of the basis in covered by agricultural land and 4.07% of the basin is covered by water bodies.

The average annual <u>rainfall</u> in the Krishna basin is 784 mm. About 90% of annual rainfall is received during the South West Monsoon period, of which more than 70% occurs during July, August and September.

Godavari Basin: The Godavari basin extends over states of Maharashtra, Andhra Pradesh, Chhattisgarh and Odisha in addition to smaller parts in Madhya Pradesh, Karnataka and Union territory of Puducherry having a total area of 3,12,812 Sq.km with a maximum length and width of about 995 km and 583 km. The Godavari River rises from Trimbakeshwar in the Nashik district of Maharashtra about 80 km from the Arabian Sea at an elevation of 1,067 m. The total length of Godavari from its origin to outfall into the Bay of Bengal is 1,465 km. At the border of Maharashtra and Andhra Pradesh, in Bidar district of Karnataka, the waters of the Manjirariver joins it from the South. The largest tributary of the Godavari is the Pranhita with about 34.87% coverage of drainage area. The Pravara, Manjira and Maner are right bank tributaries covering about 16.14%, the Purna, Pranhita, Indravathi and Sabari are important left bank tributaries, covering nearly 59.7% of the total catchment area of the basin. The major part of basin is covered with agricultural land accounting to 59.57% of the total area and 3.6% of the basin is covered by water bodies.

The annual <u>rainfall</u> varies from 1,000 to 3,000 mm in this reach. East of the Western Ghats, the rainfall decreases rapidly to less than 600 mm. There is a belt some distance East of the Western Ghats and in width varying from about 80 km. in the South to about 97 km. in the North with less than 600 mm, of normal annual rainfall. The belt which is about 10,360 sq.km. in area, includes portions of Aurangabad and Ahmednagar districts of Maharashtra. After this area the rainfall again gradually increases to about 900 mm towards the East coast.

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⁴Source National Water Resource Information of India

PROJECT AREA PROFILE – AT THE TIME OF INITIATION

ENVIRONMENTAL ASPECTS:

Erratic rainfall and increasing surface water runoff leading to loss of top soil has severely affected rain fed agriculture. The structures for water collection were either insufficient or damaged. Though there is a rise in the ground water levels during the rainy season, this is short-lived due to severe exploitation and natural discharge during pre-monsoon period. The general trend shows a receding of ground water levels from December to May.

Most of soil pattern in the project area is either black shallow soil or red soil. Because of less rainfall the moisture level iscomparatively low in red soil areas.

MIX OF COMMON AND PRIVATE LANDS

The table below describes the proportion of land under commons in each district.

Sl. No	Name of Project Area	Common land	Private Land
1	Kolar	346	1006
2	Chitradurga	232	1137
3	Bellary	249	851
4	Gulbarga	62	1986
5	Bidar	114	1284
	Total project area	1003	6264

AVERAGE AREA UNDER IRRIGATION

Sl.		Irrigated		Farn	ners in Nui	nbers	
No	Project Area	area in HA	Small	Marginal	Medium	Big	Total
1	Kolar	17	6	2	5	4	17
2	Chitradurga	37	17	3	7	10	37
3	Bellary	-	-	-	-	-	-
4	Gubarga	-	-	-	-	-	-
5	Bidar	-	-	-	-	-	

AVERAGE INTENSITY OF CULTIVATION:

Name of Project Location	Crop / Cultivation Intensity	Migratory pattern of Cropping Area		
J	/ Cropping Pattern	Khariff	Rabbi	
Kolar	Single	Finger millet	Nil	
Chitradurga	Single / Double	Mage / Sunflower	Groundnut	
Bellary	Single	Bajra	Nil	
Gulbarga	Double	Bengal Gram	Green Gram	
Bidar	Double	Bengal Gram	Green Gram	

LAND AND WATER: ACCESS: CONTROL: PRODUCTIVITY MATRIX

		Access			Control			Productivity		
	SC/ST	Others	Women	SC/ST	Others	Women	SC/ST	Others	Women	
LAND	Low	High	Low	Low	High	Low	Low	High	Low	
Pvt	Low	High	Low	Low	High	Low	Low	High	Low	
Common	Low	High	Low	Low	High	Low	Low	High	Low	
WATER	Low	High	Low	Low	High	Low	Low	High	Low	
Pvt	Low	High	Low	Low	High	Low	Low	High	Low	
Common	Low	High	Low	Low	High	Low	Low	High	Low	

DEMOGRAPHIC DETAILS

Sl. No	District	Villages	Number of HH	Special categories		Popu	lation co	vered
				ST & SC	OBC	Male	Female	Total
1	Kolar	8	830	138	693	2050	1972	4022
2	Chitradurga	7	832	560	272	2031	1998	4011
3	Bellary	2	695	279	416	1966	1835	3801
4	Gulbarga	4	1579	282	1297	5926	5545	11471
5	Bidar	2	693	240	453	2201	1095	1296

LIVESTOCK POPULATION OF PROJECT AREA

Sl. No	Name of Project Area	Cattle	buffalo	Goat	Sheep	Bull	Others	
1	Kolar	756	313	360	1132	154	2715	
2	Chitradurga	258	298	193	1	351	282	
3	Bellary	317	219	108	312	298	423	
4	Gulbarga	349	113	216	320	581	415	
5	Bidar	222	184	96	44	209	147	

INFRASTRUCTURE OF PROJECT AREAS:-

Sl. No	District	Schools	PHCs	GPs	Cooperative Societies	NGOs	Others
1	Kolar	8	0	1	0	0	0
2	Chitradurga	3	1	1	1	0	0
3	Bellary	1	1	1	1	0	00
4	Gulbarga	1	1	1	0	0	0
5	Bidar	1	1	1	0	0	0

AVERAGE LAND HOLDING IN THE PROJECT AREA

Sl. No	Name of Project Area	Total Land Holdings in NO	BigFarmers	Medium Farmers	Small Farmers	Marginal Farmers	Landless Farmers (Agri Labor)
1	Kolar	1352	4	76	123	478	149
2	Chitradurga	1398	0	107	360	282	83
3	Bellary	1100	67	160	86	54	184
4	Gulbarga	2048	9	44	167	315	457
5	Bidar	1369	32	116	105	94	257

{Marginal farmersrefers to those who have less than 2 acres, small farmers from 2 acres to 5 acres, medium farmers from 5 to 8 acres, big farmers above 10 acres}

3. PROJECT GOAL AND OBJECTIVES

Goal of project: "Community led sustainable management of water resource for promotion of livelihoods and secure natural resource base"

Objectives:

- (i) To increase the ground water recharge in the watershed area.
- (ii) To increase water use efficacy in agriculture and domestic sectors by adoption of water management techniques.
- (iii) To increase health and nutrients of the soil of watershed area.
- (iv) To increase income of the poor through (landless, small and marginal farmers) through farm and non-farm based interventions.
- (v) To promote community based organization to manage the implementation of the project and sustainable management of water resources.

4. PROJECT INTERVENTIONS CARRIED OUT FROM INCEPTION

4.1. Initial activities

Plans: The target for the 4 years includes placement and identification of staff, orientation and training to staff as well as CRPs (Community Resource Persons), awareness creation, PRA and baseline data collection, promotion of 75 SAGs/federations and their capacity

building, identification of existing SAGs/Federations and their capacity building, exposure to 869 (InState590, outside270) farmers to other developed watersheds, entry point programmes and completion of micro and net plans for 7269 ha.

Cumulative progress:

a) Selection of staff: The identification and placement of staff at the project offices in the 5 districts and at the head office in Bangalore was complete by the end of March, 2012. There have been some staff attritions which has been duly filled and the new staffs have been oriented on the projects aim/goal. Similarly in the field community mobilizers, CRPs have been identified and oriented on the purpose of the program. Retention of these CRPs was also an issue and they have been addressed as well through the engagement of

MYRADA used this opportunity to train a number of staff on the PRA methodology in Hoallakeretaluk, Chitradurga District. The staff trained had not been part of such an exercise earlier. It served 2 purposes, one was the capacity building of the staff to take up this exercise in their respective projects and other was the process of completing the PRA exercise to collect the information for this particular project A total of 36 participants underwent training.

part time CRPs for some activities. Pre-emptive action has been taken to ensure the smooth functioning of the project in this regard.

The Community Managed Resource Centre (CMRC) institution formed by MYRADA is an integral part of this project. The CMRCs takes on the responsibilities and provides services to its community and member SAGs (see www.myrada.org for further details on CMRCs). One CMRC was selected for the project. The CMRCs have an Executive

Committee with 30% of the members being women and one member has to be from the landless in line with the guidelines set out by NABARD. A sub-committee has to monitor certain activities including conducting review meetings, monitoring the activities, ensuring the collection of contribution from community etc.



b) Awareness creation "

Several awareness creation activities were undertaken in the selected villages of the districts and the targeted population included farmers, women, Gram Panchyat government departments members. representatives. As part of the awareness several one-day orientation program programs to GP members and GramaSabhas were conducted in the villages. The crux of the awareness program was not just to inform the people about the project, but also to make them aware that their full



participation in the project is a must to ensure the success of the program.

c) Other introductory activities:

In Bidar district during this reporting period, an animal health camp as part of the awareness program was undertaken. The first check-up in august 2012 covered 1485 animals in the month of March 2013. 2294 animals were checked. 90% of the cost towards this program was borne by the community.

Rapport building with the community is an essential part of the implementation strategy. De-silting of tanks in Kolar, installation of street lights and cleaning of the roads in Chitradurgaare some examples of initial activities.

Arranging exposure visits to well-developed water shed areas is also a part of this activity. A total 869 farmers from all 5 project locations were taken on an exposure visit to other MYRADAwatersheds during the reporting period.

d) Baseline data

This exercise included collecting data from all the project areas before initiating implementation of the programme. This data captured the socio-economic status of the beneficiaries, the crop patterns, the seasonal pattern, water consumption, the status of livestock's etc.

In a watershed the net planning activity helps in identifying the feasible activities, decide the suitable location for each activity and precise measurements of the selected spot. A major part of this net planning is also to undertake "micro planning" with individual farmers, for common lands and for the landless to identify their needs and plan according to their capacities. The net plan helps to plan the program looking at all viable options for that particular watershed. It takes minimum of 3 months to complete the Net plan for a particular watershed. A net plan can also be modified after the start of implementation,

based on the emerging needs and viability. For example in Kolar district, after completing an year of implementation, they have felt the need to take up vermicomposting, kitchen gardens and roof water harvesting which have now been included. After the completion of the net plan in all 5 districts, the project budget was increased by 5% based on the needs identified.

e) Community building activities:In line with MYRADA's underlying philosophy of "building poor people's institutions", MYRADA committed to promoting a minimum of 75 Self Help Affinity groups (SAG) and federations in the project districts. MYRADA till date has promoted 226 SAG's.In addition, existing SAGs and federations have been identified and their capacity enhanced through training.

In a watershed, the monitoring and maintenance works are usually handled by a Watershed committee. But in this particular project, for the first time in the history of MYRADA, the SAGs (most of them women SAGs) were directly responsible for the disbursement of funds and management of their watershed activities. All these SAG's have also been linked to financial institutions and banks for credit.

During this period 7 Federationsof SAGs were promoted. These federations have a definite role in the implementation of this project. They are responsible to monitor and maintain the soil and water management activities of the watershed in their respective villages. They also disburse the funds to the farmers for these activities through the

4.1.2 SOIL AND WATER CONSERVATION ACTIVITIES-

Plans: 30000 million litres/ 30 billion litres of additional water will be conserved in the

proposed watershed locations through increased ground water re-charge, over 2 -3 months water holding or moisture retention is increased through soil retention measures, biomass increased on private and common land on at least 5000 ha and increased water for cattle at a minimum of 50% of what was available in the baseline.

Progress: In watershed development the major activity is to reduce soil erosion and conserve water through planned land development activities. The positive results of these efforts can be seen with the improvement of crops yields. Subject to



other conditions such as the arrival of the annual rainfall, availability of labour, topography etc., remaining favourable.

a) Soil and water retention measures:

MYRADA in the last 3 years has taken several steps in the right direction to ensure that there is improvement of soil and retention of water on lands being developed. As part of the project and in consultation with the farmers and engineers several activities have been carried out on the lands.



Structures built:

Structures such as earthen bunds, contour bunds, field bunds, plantations etc., have been taken up in order to control soil erosion. At the same time to conserve water, structures such as check dams, bore well recharge pits, percolation recharge pits etc., have been taken up. Till date structures amounting to 880 tcm have been put up in order to conserve soil and water. The water retention on these lands till date is 9.45billion litres. The target in terms of water conservation is low after 3 years of implementation i.e., 58.3 % of what has been proposed. This is due to the reduction in the number of rainy days in the selected districts. Bellary, Chitradurga and Kolar had less number of rainy days (compared to the

annual average).

Due to the structures put up, there has certainly been a steadyield increase in the moisture content of the soil as well as its water holding capacity. It has been noted that due to the increase in the moisture content and the water holding capacity, the cropping pattern has changed where in the farmer has taken up an additional crop from what he/she has been growing on their land.



For eg. In Gulbarga the farmers grow red grams as regular crop. Now, in addition, they are also taking up Jowar in Rabi season.

Till date **4099** ha of both private and common land has been treated in the 5 selected districts. The table below shows the overall volume of structures that have been created till date on both private and common lands towards achieving the above. The list of structures built is detailed in Annexure I {11.11 to 11.2 h}

Biomass activities: On several bunds, block and avenue plantations have been taken up. These will not only reduce soil erosion, increase the assured income of the farmer but also immerses the bio mass. These plantations help in improving the microclimate. Some examples of plants in block and avenue plantation include neem, cassia, Hemotaand Jethropa.



ON common and some private lands, farmers have taken up dryland horticultural activities and planted tress such as mango, chikku and tamarind. Protective irrigation technologies such as bottle irrigation, drip irrigation, paired row, alternate furrow method, mulching etc. have been used to reduce the mortality rate of these plantations, thereby improving sustainability of these plants. This will result in the healthy growth of these plants leading to a creation of bio-mass. The table below shows the number of farmers that have taken up protective irrigation techniques. On the private and common lands.

	Table No .02		
Sl. No		Method's	No. of Farmers
1	No .of farmers/farm	ns covered in drip/pot/sprinkler irrigation	44
2	No .of farmers/farm irrigation	ns covered in paired row/alternate furrow method	116

The districts selected for these interventions are all rain dependent and the community targeted are all from the poor category with very small land holdings. They are always dependent on alternative incomes for their livelihoods. So, many of the farmers and the landless have purchased milch animals which give them the needed alternate income. Several structures have been created and existing structures have been renewed through de-siltation in order to meet the water needs of these animals. Examples are cattle ponds, percolation pits and check dams etc. seeAnnexure I- (11.1 h to 11.1 Ba for details)

4.1.3 WATERUSE EFFICIENCY IS INCREASED IN AGRICULTURE AND DOMESTIC USE:

Plans: 50% of water consumption is reduced in around 300 hectares of land through adoption of protective irrigation, production is increased/ equal when compared to flooded irrigation, wastage of water is reduced by 15% as against baseline –water use for domestic and agriculture, increased awareness amongst farmers on management of water, water management strategies are increasingly adopted through spread - effect of demonstrations.

Progress:

Water use efficiency is increased in agriculture and domestic use, several sustainable agricultural practices have been adopted to ensure that the water is conserved and used efficiently and the nutrients in the soil has increased. Alternative furrow method or paired row method of farming, structures such as farm ponds, check dams, activities such as desilting of ponds and tanks, technologies such as sprinkler system and drip irrigation etc., have been adopted on the lands towards protective irrigation. 142.22 ha till date has



been brought under protective irrigation through methods.

Till date 61ha of land have come under protective irrigation technology in the project. Though there are many farmers who have followed indigenous protective irrigation

methodology in the past, the intervention has helped them to adopt other technologies as well. To demonstrate the drip-irrigation technology to the farmers, a few farmers were selected and on their lands drip irrigation system was applied. This has motivated several other farmers to take up drip- irrigation on their lands. As most of the farmers have no irrigation facility on their land, they bring water from ponds and tanks and use it for protective irrigation purposes. Department of Horticulture has been giving a subsidy of 90% on sprinkler irrigation systems and several



farmers have adopted this technology as well. 184 farmers have taken up protective irrigation practices on their lands.

Flooded irrigation or surface irrigation is one of the most widely practiced irrigation system in the world, wherein the water is flooded into the land and allowed to soak in. This is mainly possible where there is an abundance of water and this system has been widely criticized for wastage and water use efficiency. As the focus of the project is to use water efficiently for both agriculture and domestic purposes, it is necessary to demonstrate that the same results or better results can be achieved through better management of water. The water requirement differs from crop to crop and by introduction of protective irrigation techniques suitable to a particular crop and efficient usage of water, it can be proved that the same or better yield of the crops can be achieved.

In agriculture wastage of water is being reduced through the following methods:

- By creating structures such as, earthen bunds, boulder bunds, gully plugs, silt traps etc to reduce run –off and soil erosion.
- Towards protective irrigation, surface water retention /harvesting and storage for percolation; by following alternative furrow method or paired row method, waste weirs, farm ponds and de-silting etc.,
- By practicing several water management techniques such as drip irrigation system, sprinkler irrigation, paired row method, crop diversification etc., are being introduced.
- By introduction of sustainable agriculture practices such as inter-cropping, mulching, application of farm yard manure, application of vermin-compost etc.

On the domestic front, 5 roof- water harvesting structures have been introduced in Chitradurgato reduce the wastage of water and to increase the availability of water for both people and livestock.

Over the last 3 years several awareness campaigns, trainings have been given to the farmers on soil and water conservation activities, soil health management, agri/livestock productivity enhancement and water use efficiency. Along with this several demonstration plots have also been shown to create awareness. A total of 6540 persons were covered through 951training sessions on the above mentioned subjects.

As part of the project strategy 102 ha have been used as demonstration plots in all 5 districts to teach effective water management strategies. As mentioned above, this has led to 184farmers adopting these techniques on their individual lands.

Work on waste land

There are several farmers who but have not been cultivating on their land owning to various factors. The topography of their land is such that they have many stones and boulders on them or there are several weeds and wild bushes growing in them. Poor farmers find it difficult to invest in labour to get these cleared and decide not to take up cultivation on these lands. As part of the project, it has been proposed that 300 ha of such land will be brought under cultivation by giving assistance in clearing the land and make it cultivable through sustainable agricultural practices. 142.22 ha of uncultivable land have been brought under cultivation under this project till date in Bellary, Bidar and Chitradurga.

4.1.4 INCREASE IN HEALTH AND NUTRITION OF THE SOIL

Plans: Increased crop yield per unit (Q/ha), increase in soil nutrients; cumulatively increase in area under cultivation/irrigation.

Progress:

Through the practice of sustainable agriculture practices such as application of vermicomposting, farm yard manure and mulching etc., the nutrients of the soil and the micro-organisms in the soil increase. Soils testing before the intervention and twice after the intervention on sample lands along the watershed (i.e. on the upper, middle and lower lands) have shown a definite improvement in the nutrients of the soil.

A sample survey of 6% of the land under intervention in all the 5 districts has shown that there has been asignificant increase of crop yield.

District /Crop	Before treatment yield	After treatment yield
Gulbarga/ Red gram	5.2 quintals/Ha	7.5 Q/Ha
Kolar/ finger millet	4.81 Q/Ha	6.73 Q/Ha
Bidar/ red gram	1.5Q/Ha	3.5 Q/Ha
Chitradurga/ cotton	6 Q/Ha	8 Q/Ha
Bellary/ groundnut	24.5 Q/Ha	26.3 Q/ha

4.1.5 INCREASED INCOME OF FARMERS AND THE LAND LESS – THROUGH FARM AND NON-FARM BASED ACTIVITIES.

Plans: Increased income of farmers by 50% of the baseline, increase in fodder production by 50% of the baseline, incomes increased for landless and marginal farmers by 50%, over 1.58crores in credit is mobilized for SAGs towards livelihoods promotion, skill training for 400 youth from poor families.

Progress: The purpose of the project is not only to protect the environment from degeneration but also to ensure that the incomes of the farmers improve through these efforts. All the investment made on the land should result in better incomes for the farmers. By adopting sustainable agricultural practices, not only has the farmer benefited in terms of better yields, but has also benefited through the reduction



in the cost of cultivation. By building linkages with producer

companies, markets etc., the opportunity to increase the income has also gone up. Around 375 farmers have participated in decisions making meetings on marketing linkages.

<u>Fodder production</u>: In dry land agriculture, availability of fodder for livestock is a challenge. This has to be addressed in order to ensure the survival of the livestock as well as protecting the crops from grazing by the livestock. The project has taken steps to

increase the availability of fodder through the promotion of fodder seeds such as Gliricidia, Hemata, Nepier seeds etc. A total of 35000 Kgs of seeds have been distributed to the farmers towards fodder development. Agro-forestry is also promoted through the introduction of neem trees, tamarind trees, Subabul, cassia semia etc. on common lands for both fodder and fuel.

Addressing of equity and livelihood issues of the poor in any watershed is essential. In the selected project area, 1400 families belong to the landless and the marginalized and their livelihood options are minimal as they in most cases are dependent on the landed for employment. Women have to usually discontinue their education earlier. Lacking the opportunities to acquire any skill unless passed on from the family, they work as unskilled labour with wages being lesser than that for a man. Giving the landless, marginalized and especially the women an opportunity to pick up some skills will not only improve their livelihood options but also will lead to an improvement in the overall income of the family. In order to do this the project has taken the initiative to identify and train the youth on both farm and non-farm livelihood skills.

While undertaking the house to house survey as part of the micro-planning procedure, the project staff have identified the youth who have shown interest in acquiring the skills. They have been then contacted through the respective SAGs, Federations and the CMRCs to ascertain from them on the type of skill that they would like to opt for and in some cases they have also been counselled by the project staff on the advantages of choosing a particular skill. After getting clarity on the skills to be imparted, suitable resource persons have been identified and the skills have been given to these youth.

Examples of farm based skills imparted are livestock management; while n on farm based skills ranged from masonry, carpentry on one side to tailoring, food products etc. The complete list of skills and details are in in Annexure I (1.3.1 to 1.3.35)

The table below gives the details of the number of livelihoods trainings and participants who underwent them.

	Farm t	pased	Non-farm based		
District	Training session	Participants	Training session	Participants	
Kolar	36	527	13	129	
Chitradurga	38	744	19	141	
Bellary	18	260	8	55	
Gulbarga	16	225	7	48	
Bidar	19	270	0	0	
TOTAL	127	2026	47	373	

Due to the efforts made under the project, we are confident that it is been possible to show that there has been a substantial increase in the income for the landless and the marginal farmers due to them being trained under the livelihood management.

Summarised below is an overview of the number of families that have benefited from livelihood linkages and direct employment on water harvesting structures.

Sl. No	Project Area	No. persons undergone Trainings	Number of Families	Number of Man-days Generated	Number of HH Linked to Livelihoods
1	Kolar	1011	830	42150	66
2	Chitradurga	911	577	20600	106
3	Bellary	567	384	51945	204
4	Gulbarga	538	606	82766	174
5	Bidar	327	343	55585	204

5. PLAN VS. ACHIEVEMENT (INCLUDING TOTAL PROJECT PLAN)

The detailed physical and financial progress is in Annexure –I

6. ANALYSIS OF PROJECT IMPLEMENTATION

6.1 HIGHLIGHTS, CHALLENGES AND SOLUTIONS DURING PROJECT IMPLEMENTATION

	Highlights 3013-14	Challenges	Plans to overcome challenges
Capacity Building of communities	Number of Persons Trained 3291.	Re scheduling of trainings due to farm work Convincing the stakeholders to Commuting to other village for training.	Rescheduling the training by organizing trainingsin the villages of the targeted stakeholders by using available space withoutcompromising onthe quality of training.
Capacity Augmentation of NGOs through staff, assets, trainings, etc	13 Training are conducted for Capacity building of staff on Water and Natural resource management ect	Nil	Nil

Promoting Community Institutions	226 SAGs 5 CMRCs 7 federations promoted under the program.	Nil	Nil
Water based investments	9.24 billion liters of water harvested,101 Farm ponds,12 check dams created under the programme.	1. Availability of labor 2. Working manually on Hard soil is difficult. 3. Hourly labor charges less compared to the market rate.	to employee migrant workers. Using machinery for hard soil (by obtaining permission from NABARD). Increasing the labor wage through community contribution.
Land Based investments	4099 Ha treated under the programme.	1. Availability of labor 2. Working manually on Hard soil is difficult. 3. Hourly labor charges less compared to the market rate. 4. Loss of crop due to heavy rainfall in Bidar and Gulbarga and loss of crops due to less rainfall in Chitradurga ,Bellary and Kolar	1. to employee migrant workers. 2. Using machinery for hard soil (by obtaining permission from NABARD). 3. Increasing the labor wage through community contribution. 4. Creating more drainage channels through community contribution in Bidar and Gulbarga and creating water harvesting structures for moisture retention, promoting farrow cultivation and horticulture as alternative income source
Engagement with other stakeholders	3060 House Holds benefited under programmes.	How to include other stakeholders who are not direct beneficiaries of the project	Through linkages to financial institutions and banks
Maintenance of Assets created under project	Total assets created under the program Water harvesting structures 880- TCM.	Maintenance of created assets post the project period.	Creation of CMRC, SAGs, Federations to maintain the assets from the beginning of project. Collecting 15% of the cost of structure as maintenance fund for post project management of structures.
Employability created under the programs	3,19,951 man-days created .	Nil	Nil

Livelihoods opportunity created under the program	1400 landless and marginal families supported	Nil	Nil
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6.2 Success of various interventions undertaken under this project:

	T				
S1. No	Intervention Indicator	Explanation	Evaluation on its success in the project		
1	d- No till farming (irrigated)	Techniques to reduce tillage; land levelling to reduce run off and better drainage	Majority of farmers in project area adapted the 0.52 and 0.72 sections bunds for reduction of soil to reduce run off. Average slope in project area is 3%. Due to the interventions on the land, the water standing capacity and the moisture level of the land is higher. The texture of the soil will be soft and the land fertility also increases. Due to these factors there will be a reduction in tillage.		
2	d- No till farming (RAIN FED)	Techniques to reduce tillage; land levelling to reduce runoff and better drainage	MIS Data shows 40% of famers have adapted the contour bunds to reduce the run off in lands leading to less tillage.		
3	d- Irrigated Fertilizer balance	Apply optimal mineral balance to improve mineral absorption and sufficient supply of micro-nutrients	NA		
4	d- System of Rice Intensification /Four step paddy	improve rice planting irrigation and production practices (Four step method)	NA		
5	d- Rain fed fertilizer balance	Apply optimal mineral balance to improve mineral absorption and sufficient supply micro-nutrients	Case study of Bellary Project:- After NRM and Sustainable agriculture training, the village association / SAGs/EC body have taken a decision to procure vermicompost and gypsum, for sowing during Kharif season. As per the plan 100 mts of Vermicompost and 75 qtof gypsum was procured and distributed among the 45 members of SAGs. These 2 bio-fertilizers are important to increase soil fertility and micro-nutrients.		

6	d- Irrigated Drainage	Construction of adequate drainage structures will increase yield and reduce need for irrigation	NA
7	d- Rain fed drainage	Construction of adequate drainage structures will increase yield and enable cultivation of land during monsoon	Sincethe last two years Bidar district and Gulbarga districts have received more rain days compared to their average rainy days. This leads to water stagnation in the fields and affect the yield of the crops. Adequate structures created will reduce such water stagnation in the future.
8	d- Irrigated germplasm	Increase average yield potential by dissemination of existing higher yielding seed varieties that are best adapted to the specific, regional conditions applied to irrigated lands	NA
9	d- integrated plant stress management (rain fed)	Efforts to improve yield by resistance to biotic (climate) and biotic (pests, disease) stresses. Combine impact of improved practices (such as integrated pest management) and innovative crop protection technologies	Obtained the support of the local agriculture department and support of KrishiVignyana Kendra to provide different types of training on IPM (integrated Pest Management) which involves use of low cost eco-friendly technology to address the issues of pests and diseases on crops.
			Example :- Yellow Sticky Boards , Chilli Garlic Oil and tippy traps
10	d- Rain fed germplasm	Increase average yield potential by dissemination of existing higher yielding seed varieties that are best adapted to the specific, regional conditions applied to irrigated lands	Yield potential is being increased by using certified seeds under NABARDs WDF project.
11	d- increased fertilizer use (irrigated)	increase fertilizer use to reduce mineral exhaustion and increase yields; applied to irrigated lands	NA
12	d- Irrigation Scheduling	Prevent farmers from over-irrigating; linked to controls/ subsidies for groundwater pumping in India	Introduction of drip and sprinkler irrigation systems have reduced over irrigation and flooding on the lands. Availability of water harvesting structures have reduced the need for ground water pumping.
13	s- pre- harvest treatment	Prevent pre-harvest crop losses through treatment of fruits, vegetables and high value crops prior to harvest	Obtained the support of the local agriculture department and support of KrishiVignyana Kendra to provide different types of training on IPM (integrated Pest Management) which involves use of low cost eco-friendly technology to address the issues of pests and diseases on crops. Example: Yellow Sticky Boards, Chilli

			Garlic Oil and tippy traps
14	s- post harvest treatment	prevent post-harvest crop losses through washing and chemical, post- harvest treatment	Adapting sustainable agriculture practices have ensured that there are no post-harvest crop loss
15	d- Reduction of transport losses (transport storage, marked)	prevent post-harvest crop losses during storage and transportation through measures such as building better storage and improving transportation efficiency	MYRADAis promoting second level institutions across its operation areas. The second level institutions play an important role in assisting the farm to market chain linkages such as the Tur Producers Company in Gulbarga play an important role in value addition, storage and marketing of food grains.
16	d- Soil techniques/ no-till agriculture (irrigated)	Techniques to reduce tillage; laser land levelling to reduce runoff and better drain lands	NA
17	d- Sprinkler irrigation	increase yield and irrigation efficiency (e.g. through reduced evaporation)	NA
18	d- Improved fertilizer u balance	apply optimal mineral balance to improve mineral absorption and sufficiently supply micro nutrients	NA
19	d - Genetic crop Development	Continued development and adoption of varieties that enable farmers to attain higher yields; includes both conventional breeding and genetic engineering	NA
20	d- Drip irrigation	Applying water through low pressure tubing requires less water than flooding	In Chitradurga 12, Bellary 34 and Kolar 32 farmers have adopted the drip irrigation technology on their lands with the support of horticulture department and PRI
21	s- Canal Lining	line on farm canals with cement /plastic to reduce seepage	NA
22	s- agricultural rainwater harvesting with fertigation	Boost productivity of currently rain- fed crops by applying water during dry spells; requires construction of small reservoirs for rain water collection	121 farm ponds have been planned to address the need for protective irrigation. In the first year 101 farm ponds were successfully completed and have been utilized for the protective irrigation from second year onwards.
23	s- aquifer recharge	collection of Rain water and artificial recharge of aquifer with collected water	68 bore well recharged, 101 farm ponds, 8 check dams are completed in second year of the programme. Most of structures filled up during last rainy days, except in the district of Kolar. All structures enable the recharge of the underground water table.
24	s- ground water	extract water resources beneath the	As at above

	pumping	ground through well and pumps	(23)
25	s- Last mile irrigation	Bridging the gap between irrigation potential created and utilized. Involves creation of command area, setup of management systems and completion of the last mile of delivery infrastructure.	NA
26	s- rain water harvesting	collection of rainwater on rooftops for domestic use (in India for ground water recharge)	12 roof rainwater harvesting units are completed in addressing the drinking water problems and domestic usage. Another 20 units as planned with the support of PRI and community
27	s- Small scale irrigation infrastructure projects	Minor irrigation infrastructure projects such as small dams build closer to communities, water used during in season dry spells or to augment rainfall	No dams are constructed under the project

6.3 KEY PERFORMANCE INDICATORS INTERPRETATION AND PLAN VS. ACHIEVEMENT

Sr. No	Triple bottom line indicator	Unit	Project Target	Plan : 2013- 14	Achievement 2013-14	Plan: 2014-2015
1	Governance for Water	Numbers	21	21	21	Nil
1.1	Institutional setup	Numbers	21	21	21	Nil
1.1.1	Village institutions formed: – Water Institution	Numbers	21	21	226	Nil
1.1.2	Village institutions formed: – Water allied and livelihood oriented institutions	Numbers	21	21	226	Nil
1.1.3	Cluster/Block & District level institutions formed	Numbers	5	5	8	Nil
1.2	Knowledge system	Numbers	9	9	4	5
1.2.1	Persons who have undergone exposure/ training on Improved agriculture & water management	Numbers	2378	2378	3290	1400
1.2.2	Experience sharing newsletter documented	Numbers	20	20	16	4
1.2.3	Persons engaged in water related issues with state government or participated in state forums	Number	0	0	365	400
2	Quantity of water	Numbers	700 TMC	700 TCM	880 TCM	117 TCM

2.1	Water availability (Cumulative and collective contribution) in Billion Litters	Billion Litres	30 billion litres	30 billion litres	9 billion litres	21 billion litres
3	Benefits to the community	Number of families	4629	4629	3064	1565
3.1	Labour days generated due to project works	Number	669710	669710	319951	198255
3.2	Agriculture Production – Production achieved due to improve availability of water or improved agriculture practices	Tons	700	700	5275	2400
3.3	Area stabilized – Area treated and stabilized due to improved availability of water (Ha)	Hectares	7267	7267	4090	2967

6.4 DETAILED EXPLANATION OF KEY PERFORMANCE INDICATORS (KPIs)

Need for KPIs: The KPIs give us an indication on where we are headed in terms of the project progress. It helps us to assess the progress on a regular basis and gives us an indication on whether we are on the right track. The KPIs helps us in planning and implementing the project better and taking pre-emptive actions in case of any deviations in the project. These indicators are necessary in order to monitor and evaluate the progress of the project in different stages of implementation.

To compare the changing situation of the area with other areas in the vicinity, it is necessary to have a baseline data of the other areas. If this baseline is available to us, the KPIs will help us to understand how the situation of the area and the development of the area is changing compared to the other areas in the vicinity.

Factors contributing to the knowledge of water based development practice in India.

MYRADA has been working in the area of watershed development for over 30 years and is now considered as one of the best resource organization in watershed development. MYRADA has shared its knowledge in this area through training, bringing out several manuals and through its RMS papers in order to contribute to the knowledge of water based development practice in India. Several NGO and institutions in India and abroad have approached MYRADA for knowledge sharing over the years and MYRADA has willingly shared it with them.

In this project as well, MYRADA endeavors to share its knowledge and in fact has already started applying some of the learning's of this project such as Water budgeting, score card, dash board etc., in other newly undertaken watershed projects.

A technical manual on Water budgeting and watershed management was brought out in Kannada (the local language) as part of this project in order to educate the community animators.

Activities that lead to the resulting KPI.

KPI Indicators	Activities that lead to the resulting KPI
Generating man days and providing labor days / creating employment locally to improve the livelihoods of marginal and landless families	Different training to SAGs/Federations /EC/CMRC Skill Trainings or livelihoods training for SC/ST and marginal farmers
To harvest rain water and improve the ground water table and stop soil erosion and improve the soil fertility	Creating the 880TCM Water Harvesting Structures which includes creation of Check dams ,Farm Ponds , Gokattas, rooftop rainwater harvesting structures etc.
Providing alternative livelihoods option to marginal and landless families	Providing the alternative Farm based and non-farm based livelihoods support to farmers through training and linkages.
Improving the soil fertility leads to improve yields and crop growth.	Creating the 880TCM Water Harvesting Structures which includes creation of Check dams ,Farm Ponds , Gokattas, rooftop rainwater harvesting structures etc.

Measurement of KPIs: Differentsources were used to interpret the KPIs. Examples include the measurement books, community resolutions, attendance registers, training reports, farmer's cards, sample surveys etc. The pictures below are taken from the measurement book and resolution book of the SAG.





Measurement b Resolution book from SAG in Kolar in Kolar

Possible innovations used in KPI measurements: MYRADAhas introduced Farmers Cards for better monitoring and follow-up of each beneficiary of the project.It helps the farmers understand the progress and development on his/her field and livelihoods status.For the first time in the history of MYRADA the watershed project implementation has been undertaken by Women Self Help Affinity groups.

Use of KPIs in showing improvement in pre project situation: KPIs help us to visualize the project and plan the project systematically. It helps us plan each activity and establish indicators for each stage of the project. It gives the project a structure in which it has to be implemented and monitored.

Underlying intangibles that the KPIs signify: The KPIs usually helps us establish the tangibles in a project and track them through different stages. But there are always several underlying intangibles that KPIs signify which in many situations does not get mentioned. Such intangibles can be the increase in the social capital, increase in the level of confidence in women to undertake activities which they were unwilling to do so, responsibility sharing by the community to manage common properties etc.

6.5 QUOTES FROM DIFFERENT STAKEHOLDERS.

- 1. "We have not seen bunds since long time for our lands. Every year when rain comes all top fertile soil will run off. We request government department to undertake soil and water conservation work, but they not responding yet. AfterHUF-NABARD-MYRADA program came here we are happy to be part of it. I am expecting 30% more yield in this year Khariff season".-(Ashokappa, Neharu Colony, Holallkere, Chitradurga—Individual farmer—direct beneficiary)
- 2. "In our government program we build the big structures but after some time it collapses due to the lack of maintenance. In this program facilities have been made to take care of such structures. Wethank HUF-NABARD-MYRADA" (Leader of SAG in Kolar)
- 3. "All government programs have less particiapation of women. In this program women of villages have taken the lead role for implementation and monitoring of activities" (Panchayat leader)
- 4. "We are happy to associate with institution like MYRADA for community development. After implementing of this program, more peoplehave started coming to our office for seeds, plants, bio fertilizers and to get information on IPM and government programs. Thanks to HUF-NABARD-MYRADA for creating massive awareness on sustainable agriculture" (Extension Officer from Agriculture department, Bellary)

5. Co-funder – "We are happy to associate MYRADA like pride institutions in rural development most of beneficiaries coming here are poor and marginal before intervention the beneficiaries spend lots of money and time for getting linkage form our institutions. After this program implementation our representative will go to door step of beneficiaries to provide loan and financial information's; thanks to HUF-NABARD-MYRADA for implementing program in these backward districts". (Sanghamitra official).

6. CASE STUDIES

1. LIVELIHOODS IMPACT

CASE STUDY 01.(LANDLESS LABOURER BENEFITED FROM SKILLS TRAINING & FINANCIAL LINKAGES) Govindachariis 42 years old and lives in Malakanahalli, Malur Taluk, Kolar District. He does not own a land in the village and was selling plastic items such as mugs, buckets etc. in the village. As he was unable to only eke out living out of this, he had migrated to Bangalore looking for employment opportunity. He had found himself a job as a construction labourer and was earning an income of Rs.300 per day which was dependent on him having regular construction work. His wife Ratnamma is a member of SAG promoted by MYRADA. When she found out that the project was giving training for the landless and the marginal farmers under livelihood development, she requested her husband to undergo the training. As his family was earlier involved in carpentry, he opted to undergo a training in carpentry. After undergoing the training he has now set up an unit with the grant given by NABARD of Rs.10,000/- to purchase materials for carpentry work along with a credit of Rs.15,000/- he was able to obtain from Sanghamitra Rural Financial Services through his wife. He is now earning an income of Rs. 25,000/- per month and has also employed 3 people (including his son) to help him in his work. Not only has the training helped Govindachari to get a better income, it has also has created an employment opportunity for others.

CASE STUDY 02. (Migrated SAG member – landless – benefited from livestock)

Kasturi a woman from Chikli village in Bidar district is a member of SAG promoted by MYRADA. She does not own land and works as an agricultural labourer on other lands during the Khariff season and earns Rs.100 per day. Once the agricultural work is completed she would migrate to Hyderabad for 6 months in search of employment. If she did find employment she would earn Rs.200 to 250 per day which was not much as not only had she to fend for herself in the city, she would also have to send money to her family. This was also taking a toll on her health as she had to move from one construction site to another and the living conditions were poor. It was also taking a toll on her family life as she had to be separated from the family on long stretches. She was informed about the Livelihoods training at her SAG meetings. She attended a training programme on cattle management. After completing the training she has purchased a buffalo with the grant assistance of Rs.10,000 provided by NABARD and also through the credit of Rs.15, 000/- that she was able to obtain through her SAG. She is now able to earn a steady income of Rs.100 from the buffalo throughout the year as she sells 4 litres of milk per day and in turn has stopped her from migrating to the city in search of a job.

WATER & AGRICULTURE IMPACT

CASE STUDY 03. (Small farmer who benefitted from soil conservation activities.)

MankulGori s/o Fakhir Ahmed: is the resident of Chikli (J) village, Bidar district, and is a farmer by profession. The main source of income of the family is through agriculture. Mankul has 7 acres of cultivable land, out of which 3 acres of land is treated under the HUF Watershed Programme. Cultivating on his land was difficult as the land was filled with pebbles. Tiiling and sowing in land was hard due to the presence of pebbles on the land and the returns from the land was less due to this issue. The cost of cultivation was high. As part of this project, the pebbles on the land were cleared and these were used to make a bund. This not only helped him to take up cultivation activities on the land but due to the bund there has been reduction in soil erosion and increase in the moisture content.

The yield from the land has increased. 5 quintals of red gram and 18 quintals of jowarwas harvested from the 3 acres of land under treatment. The yield before treatment for the same crop was 3 quintal Red Gram & 15 Quintal Jowar. Mankul said that expenditure before treatment was Rs. 8000/- and after treatment the expenditure is reduced to Rs. 5000/-.

He further shared that this programme funded by HUVF, NABARD and MYRADA has immensely helped him to undertake need based area treatment measures which was very much necessary.

7. PROJECT LEARNINGS

8.1 Project design and Partner Analysis:

MYRADA has been workingin these watershed project areas since 15 years. Experience and experiments in these areas underpin the project design. Aspirations of the community and other stakeholder proposals also play key role for this project design.

The key difference this project seeks to make is as follows:

- To increase storage and conservation of water
- To increase the moisture level on agricultural lands
- To generate bio-mass
- Adapt protective irrigation methods
- To increase yield of crops and fodder
- To increase incomes through livelihoods and agricultural production
- Train youth on different skills
- Build capacity of women in SHGs and federations

8.2 Using the principles underlying HUF project support: with water, agriculture and livelihoods as key components

The team used the principles to develop specific objectives in the project:

- To promote sustainable water management through appropriate management technics to increase efficient use in agriculture and domestic sector.
- To involve the small, marginal land holders and landless in farm and nonfarm livelihood programmes, since they are the important stakeholders in the water shed programme and dependent upon the natural resources for their livelihoods.
- To promote and strengthen the local institutions so that they can manage the watershed programmes and restore health their own environment.
- To conserve water for recharge purpose to mitigate the drought condition and increase the agriculture and biomass production.
- To adopt soil and water conservation methods to improve the soil fertility.
- **8.3 Triple Bottom line scorecard:** Triple bottom line (TBL) accounting system expands the traditional reporting framework to take into account social and environmental performance in addition to financial performance. The triple bottom line is made up of social equity, economic, and environmental factors.

- 8.4 **KPI Directed effort:** The KPIs is a tool which helps us monitor the progress of the project at each stage and helps us keep track of where we are headed in the project.
- **8.5 Assurance Process:** This process, initiated by HUF, is essential to ascertain the performance of the project against the KPI. It has helped MYRADA and the team to monitor the project effectively.
- **8.6** Social Return on Investment Methodology (SROI): A SROI study is being undertaken no this. A more clear response can be given after the completion of the study.
- **8.7 Areas for strengthening:** While the undelaying principals are well understood and internalized using the newly adapted management tools such as the reporting and monitoring systems ie, Water budget, MIS, TBL, score card, dash board etc., would require some more familiarization for improved results.

8.8 Takeaways from the project

There are several takeaways from this project which would benefit the thinking and practice of natural resource based efforts. While MYRADA has been involved in watershed management for several years, we adapted for first time monitoring and evaluating techniques such as Water budgeting, SROI, score card, TBL and dash boards etc.

8. FINANCIAL SYSTEMS

Please see the annexure for fund flow chat of MYRADA HUF watershed development program.

9. COLLECTIVE ACTIONS – PROGRESS SO FAR AND LEARNING:

The project is entering the final year of implementation. The progress in the last 3 years has beensomewhat slow for several reasons. It took some time for the project staff to understand the systems and documentation requirements that was expected of them by the donors. Excessive rainfall in some areas and drought like situations in others also led to the slower progress of the project. Delay in release of funds at the appropriate time ie., when all other conditions remained favorable have also led to the delayed in the progress achieved. Having said this, though delayed the project, is progressing well and results will not be disappointing at the end of the project period.

The learnings from the project to a large extent have been positive. The monitoring and documentation system introduced by HUF has been received positively and will be applied to other projects that MYRADAwill takein future. For the first time in the history of MYRADA,

SHG women were given the task of monitoring the watershed activities and have established that they can manage it efficiently and effectively.

10.1 Project partners

The **community** is the major partner or stakeholder in this project. Their involvement in the project is extremely important to the success of the project. All the other stakeholders of the project are there only during the project implementation period. The interventions made are to expand the livelihood options and increase the incomes of the community. The involvement and understanding of the community will expand that the efforts made will be taken forward by them and they will be replicated in other areas as well.

CMRC, Federations and SAGs are the created as part of withdrawal strategies of MYRADA. Hence CMRC will continue provide services that required by the communities and its member institutions. On fee basis during post project period. CRPs will be adapted by CMRCs to work for other projects.

HUF and NABARD are the funding and monitoring partners whose involvement and support have ensured that 7267 ha of land will been treated leading to improvement in land and conservation and storage of water which in turn led to better livelihood options for the poor and marginal farmers as well as their families.

10.2 Role for communities in this project

The community is the major partner or stakeholder in this project. Their involvement in the project is extremely important to the success of the project. All the other stakeholders of the project are there only during the project period. The interventions made are to ensure the livelihood options and increase the incomes of the community. The involvement and understanding of the community will ensure that the efforts made will be taken forward by them and they will be replicated in other areas as well.

10.3 Partner significance

	Implementation Partner	Funding Partner	Regulatory Partners	Communities
Achieving Project Results	Yes	Yes	-	Yes
Bringing systemic changes at a local level	Yes	Yes	-	Yes
Bringing systemic changes at a macro level	Yes	Yes.		Yes (through replication and learnings)
New thought processes into water based development thinking and action	Yes	Yes	-	May be

10.4 Details of partner involvements

	Implementation Partner	Funding Partner	Regulatory Partners	Communities
Achieving Project Results	The pace of work is bit slow, however the project objectives ie, conserving natural resources and ensuring livelihoods, can be achieved in year 4			Communities are Confident to complete the project work in year 4. They are already enjoying the flow of benefits.
Bringing systemic changes at a local level	Strengthening the local level institutions and practicing good governance	Can learn optimize their future project interventions	At the control state level can study the future of the project and module their fortune interventions suitability	Communities involvement will go a long way in empowering and strengthening the local level institutions
Bringing systemic changes at a macro level	Learning from this programme takes forward our learning to other watershed development implemented by other donors.	Con learner to optics their future project involvements.	At the central and state level can study the future of the project and mold their future interventions suitably.	Communities also will practice their learning to bring systemic changes.
New thought processes into water based development thinking and action	We are also planning to take up study of watershed project post and present using the tools provided by HUF through our CIDORS (Rural training Centre)			For up-dating farmers white card, collection of rainfall data and tracking system of yield increases.

10.5 Role of funding partners so far

Funding Partner						
	HUF	NABARD	Community			
Achieving Project Results	Yes	Yes	Yes			
Maintain Focus on Results	Yes	Yes	Yes			
Inclusive in approach	Yes	Yes	Yes			
Holistic in thought	Yes	Yes	-			
Bringing systemic changes at a local level	Considerably	To some extant	Marginally			
Bringing systemic changes at a macro level	Not so far	Not so far	-			
New thought processes into development thinking and action	Yes	Yes	Marginally			
Any other						

10.6 Contribution of different funding partners

	HUF	NABARD	Community
Capacity Building of communities	0%	100%	0%
Capacity Augmentation of NGOs through staff, assets, trainings, etc	0%	100%	0%
Promoting Community Institutions	0%	100%	0%
Water based investments	80%	0%	20%
Land Based investments	80%	0%	20%
Engagement with other stakeholders	0%	0%	10%
Maintenance of Assets created under project	0%	0%	15%

10. CONCLUSION

This project has been an exciting learning experience for MYRADA. Though MYRADA has been implementing several projects over the past 3 decades on water and soil conservation, this project gave the team an opportunity to understand a new dimension as well as to introduce more robust monitoring systems through the water budget and dashboard indicators.

There were several foreseen and unforeseen challenges over the last 3 years and efforts have been made to address the same in ways possible. Some of the challenges faced included:

- 1. There were less rainy days in some districts leading to less water conservation, less moisture content and in turn lesser yield. Reduced rainy days have also had a direct impact on the plantations with the mortality rates of the plants being higher.
- 2. Progress of the work was also affected due to the unavailability of labour due to migration, NREGA programmes etc.
- 3. Due to continuous drought situation in some areas, people found it difficult to contribute 20% for land development and maintenance activities.
- 4. An unusual heavy rain in Bidar district led to delay in the harvesting of crops and also to water stagnation affecting the crops as well as the structures put up.
- 5. In Bellary, Bidar, Chitradurga and Gulbarga there was a directive from the Department of Animal husbandry not to take up livestock activities due to the prevalence of foot and mouth diseases in cattle. This has led to underachievement in this area.
- 6. Insurance agencies are unwilling to make policies on livestock due to the high mortality rate.
- 7. Discouraging farmers from application of chemical fertilizers and pesticides is a challenge.
- 8. In some areas the small and marginal farmers closed the trenches dug for water harvesting as it occupies space reserved for growing crops. Protecting the trenches is a major challenge in such situations.
- 9. It is a challenge to educate the farmers that adoption of water management technologies such as drip irrigation, pot irrigation, paired row methods, intercropping; application of FYM, vermicomposting will certainly bring results but is a process which needs time.
- 10. Last but not the least, funds not being available in time to take up activities which are seasonal, and when all other things were favourable also resulted in delay in the progress of the project.

In conclusion the next one year is crucial and a well-co-ordinated effort from all stakeholders involved is required in order to achieve the goals set.

LIST OF ANNEXURES

ANNEXURE 1: THE PROJECT DASHBOARD

	HUF,NABARD Watershed Development Program			Cumulative			
	Sl. No.	Indicators	Unit	Approved Targets for 4 years from April 01, 2011 to March 31, 2015	3 rd year Plan	Cumulative Achievement	
	1	Outcome / Impact	-				
	1	Common Mobilization	-				
	1.1	No.of institutions promoted SAGs/Federations	Nos	114	199	199	
	1.1.1	Self-help Affinity Groups	Nos	138	138	138	
	1.1.2	SAGs Federations	Nos	12	11	16	
	1.1.3	CMRC	Nos	5	5	5	
	1.1.4	Executive Committee	Nos	5	5	5	
	1.1.5	Best ranking SAGs and Federations (Minimum 80%)	Nos	161	363	281	
Social Aspects	1.2	No.of Livelihood (farm based/non-farm based) being promoted by each SAGs/Federation/CMRCs (Credit linkage - excluding NABARD assisted families)	Nos	1967	1217	902	
Socia	1.3	No. of Landless/Marginal Farmers/ Women covered under each livelihood program with NABARD assistance	Families	1300	1209	531	
		Farm Based	-				
	1.3.1	Cow (HF, CB, Jercy, Country)	Families	491	490	226	
	1.3.2	Goat	Families	204	159	65	
	1.3.3	Sheep	Families	170	160	82	
	1.3.4	Buffalo	Families	221	201	91	
	1.3.5	Bullocks	Families	37	39	23	
	1.3.6	Donkey	Families	5	5	5	
	1.3.7	Ox	Families	11	5	2	
		Non - Farm Based	_	1139	1059	494	
	1.3.8	Auto Rickshaw	Families	6	6	7	
	1.3.9	Petty Shop	Families	62	62	54	

	1 2 10	T. 1 /G	F 11	22	22	0
	1.3.10	Tailoring/Sewing	Families	23	22	8
	1.3.11	Carpentry	Families	8	6	2
	1.3.12	Arcanut leaf making	Families	2	2	0
	1.3.13	Hotel/Tea shop	Families	3	2	0
	1.3.14	Bullock cart	Families	13	10	5
	1.3.15	Photo Studio	Families	2	2	1
	1.3.16	Cloth/Sari business	Families	4	6	6
	1.3.17	Timber Business	Families	1	1	0
	1.3.18	Threshing machine	Families	10	1	1
	1.3.19	Bike service (work) shop	Families	1	1	0
	1.3.20	Shamiyaana shop (Tent house)	Families	1	1	0
	1.3.21	Stone cutting Business	Families	6	6	5
	1.3.22	Puri (Mandakki) Business	Families	0	0	0
	1.3.23	Tender coconut Business	Families	2	2	1
	1.3.24	Car Purchase	Families	0	0	0
	1.3.25	Tiles laying	Families	3	3	0
	1.3.26	Bed making business	Families	7	7	4
	1.3.27	Fruit Business	Families	3	3	1
	1.3.28	Vegetable Business	Families	1	1	1
	1.3.29	Candle making	Families	0	0	0
	1.3.30	Book shop	Families	1	1	0
	1.3.31	Papad Business	Families	1	0	1
	1.3.32	Floor Mill	Families	2	0	0
	1.3.33	Tractor Purchase	Families	1	3	3
	1.3.34	Dish		1	1	1
	1.3.35	Puncher shop		1	1	1
				165	150	102
-	1.4	No. of programs/awareness demonstrations for providing market information/linkage organized by each CMRC	Nos	13	10	5
	1.5	Agri/ Livestock productivity enhancement measures for selected small, marginal and other farmers, etc. (including 10% of cost for Demonstrations under WDF grant)	Nos	120	120	86
	1.5.1	Animal Health Camp for small, Marginal and other farmers, livelihood Beneficiary in Chikili(J) & 9 Thandas	Nos	3	3	3
						•

1.5.2	Agri/ Livestock productivity enhancement Measures for select small, marginal and other farmer, etc (Ground nut Demo, Maize, Bazra, Sprinkler, Fodder)	На	270	235	291
1.6	Activity specify skill devt Training	Nos	406	368	385
1.6.1	1.6.1 Skill Training (Youths)		35	10	0
1.6.2	Livestock	Nos	155	149	159
1.6.3	Tailoring	Nos	105	103	120
1.6.4	Carpentry	Nos	58	21	41
1.6.5	Welding	Nos	65	59	12
1.6.6	Driving	Nos	20	12	8
1.6.7	Masonry	Nos	52	51	65
1.6.8	Electric repair	Nos	10	10	0
2	Start-up Activities and Planning				
2.1	No.of orientation workshops organized for project staff and CRPs	Ppts	24	26	26
2.2	No. of review meetings held monthly	Nos	192	216	157
2.3	Institutional capacity building trainings		603	603	428
2.3.1	SAG Trainings	Nos	639	754	591
2.3.2	Federation Trainings	Nos	50	66	61
2.3.3	Executive Committee Trainings	Nos	25	29	23
2.3.4	CMRC Trainings	Nos	25	28	22
3	Increased Efficiency of Community in Management of Water Resources				
3.1	Other technical Training and exposure to CRPs/Staff (including productivity enhancement and TOT)	P/d/pp	960	886	511
3.2	No. of exposure visits of selected/beneficiary farmers outside the state	Nos	85	85	279
3.3	Exposures to selected farmers within district/state	Nos	100	100	590
3.4	No. of farmers undergoing training in NRM (Soil and water conservation activities, soil health management, Agri/Livestock productivity enhancement, water use efficiency etc.,)	Nos	1400	1400	1157
4	Capacity Building				
4.1	No. of Gram Panchayat Members undergone orientation on project activity	Members	83	125	121
4.2	No. of Small Farmers Marginal and Landless who have participated in net planning	Nos	3108	3358	3358
5	Policy Contribution				
5.1	Number of case studies to HUVF Learning Hub	Nos	91	70	59
5.2	Lobby / negotiation at CMRC for convergence program	Nos	19	19	19

	5.3	Audio visual produced (through CIDORR)	Nos	22	19	11	
	5.4	Print	Nos	0	0	0	
	6	Outcome/Impact		0	0	0	
Economic	7.3	Amount of Credit Mobilized to SAGs for livelihood promotion Rs. in lakhs	Rs.	744	713	487	
	7.4	No.of youth to get skilled training	Nos	200	200	176	
	7.5	No. of SC/ST youth to get skilled training	Nos	109	109	123	
	7.7	No. of people covered for job placements by CMRCs	Nos	230	195	89	
	9	Outcome/Impact					
	9	Water and Soil Conservation Activities					
	9.1	Increased Ground Water Level in Water Shed Area (Water inventory)	Feet	Test	t not Conduc	cted yet	
	9.2	Change in Water Holding/Moisture Retention Period (in treated area from existing to extra 15 days to one month during good rainfall) Test not conducted month during good rainfall)					
	9.3	Increase in Vegetation Cover on Private Land	На	24690	15747	14491	
	9.4	Increase in Vegetation Cover on Common Land	На	130	130	59	
	9.5	Percentage Increase in Base line Water for Cattle Drinking (50% of the baseline availability)	Months	Test not conducted yet			
	9.6	Target for water conservation	TCM	8320	6314	3150	
ent	10	Increase in water use efficiency (Agriculture and Domestic)					
vironment	10.1	Hectares of Land on which protective irrigation practices adopted	На	155	153	144	
En	10.2	Percentage reduction in use of water per hectare	%	66	56	25	
	10.3	Total no. of demonstrations/ increased awareness programs carried out	No	85	110	172	
	10.4	No .of farmers/farms covered in drip/pot/sprinkler irrigation	Nos	69	69	65	
	10.5	No .of farmers/farms covered in paired row/alternate furrow method irrigation	Nos	90	167	126	
	10.6	No. of roof water harvesting structures covered on community buildings	Nos	5	5	12	
	10.7	Hectors of cultivable waste land brought under cultivation	На	120	120	156	
	11	Productivity Enhancement Activities (SMC)					
		Private Land	На	6264	6264	3476	
	11.1	Common Land	На	1003	1003	823	
		Total Ha Completed	На	7267	7267	4299	

	A	SMC resulting structures				
<u> </u>	1	Rejuvenation of structures				
	a	Farm pond deepening	Nos	3	3	3
	b	Rock Filled Check Dam	Nos	9	9	5
	c	NalaDesilting	Cmt	711	0	0
	d	Cattle Pond Repair	Nos	2	2	0
	e	Horticulture plants gap filling	Nos	2000	2000	42
	f	Check Dam repair	Nos	0	0	0
	2	New water harvesting structures				
	a	F.P (Farm Pond)	Nos	116	58	63
	b	Bore well recharge pit	Nos	6	10	7
	c	Open well recharge pit	Nos	4	6	3
	d	Ravine stabilisation structures	Nos	1	1	0
	e	Check Dam	Nos	0	0	0
	3	SWC measures		0	0	0
	a	Earthen/Field Bund 0.34	cmt	0	0	0
	b	Earthen/Field Bund 0.54	cmt	140361	133503	100751
	c	Earthen/Field Bund 0.72	cmt	144336	86459	83014
	d	W.W1 (Waste Weir 1)	Nos	1929	1551	1058
	e	W.W2 (Waste Weir 2)	Nos	903	709	524
	f	W.W3(Waste Weir 3)	Nos	949	760	486
	g	No. of Deep Trenches (6X1X0.6) size	cmt	220	220	52
	h	F.D (Fodder Development)	Nos	1228	270	433
	i	DLH (Dry Land Horticulture	Nos	22962	17061	17699
	j	B.P (Bund Plantation)	Nos	126650	120650	85379
	k	LR (Land Reclamation)	Ha	1445	1445	1414
	1	Horticulture	Nos	12548	12548	10190
	m	Agro Forestry	Nos	58690	55083	37106
	n	Hemata seeds	Kgs	5969	5919	5007
	0	Hemata sowing	Kgs	140401	140401	98929
	p	Seed dibbling on bund	Kgs	50	50	25
	q	Kitchen Garden	Nos	245	245	0
	r	Roof Rain water Harvesting	Nos	11	8	4
	S	Cattle Pond (Gokatte)	Nos	12	12	11
	u	Block Plantation	Nos	10000	10000	10000
	W	Loose Boulder Check	cmt	150	150	150
	X	Check Dam	cmt	0	0	0
	у	Water way	cmt	14812	14812	7187
	Z	Contour trench	cmt	2890	2890	2579
		Earthen/Field Bund 0.54	cmt	20970	20970	11962
	В	Non - SMC resulting Structures		0	0	0
	a	Diversion Drine / Channel	cmt	10013	5341	3001
	b	No. of Gully Plugs / Boulder Checks	cmt	51	51	43

c	B.B (Boulder Bund)	cmt	14470	6979	7027
d	P.B (Pebble Bund)	cmt	39427	30002	22079
e	Bund revetment	cmt	848	848	88
f	Rubble checks	cmt	10	0	0
g	Rock Filled Check Dam	cmt	0	0	0
	Diversion Drain	cmt	21077	18332	16431
11.2	Common Land				
A	SMC resulting structures				
1	Rejuvenation of structures				
a	NalaDesilting	cmt	2097	2097	161
b	Check Dam desolation / Repair	Nos	4	4	4
c	Cattle Pond Repair	Nos	6	6	4
d	Community Well Repair (Kalyani repair)	Nos	1	1	1
e	Nala Widening	cmt	1628	1628	1420
f	Nala Training	cmt	3141	3141	2937
g	Block Plantation Gap filling	Nos	0	0	0
h	Tank water weir	Nos	1	1	0
2	New water harvesting structures				
a	C.D (Check Dam)	Nos	8	7	6
b	Cattle pond	Nos	3	3	2
С	Ravine stabilisation structures	Nos	6	6	0
d	Mini Percolation Tank (MPT)	Nos	2	2	2
e	Nalabund	Nos	3	3	2
f	Farm Pond	Nos	1	1	1
3	SWC measures				
a	Block Plantation	Nos	101545	79315	69130
b	Block Plantation Trench	cmt	4690	4690	4101
c	Earthen/Field Bund 0.54	cmt	3892	3892	3639
d	Earthen/Field Bund 0.72	cmt	0	864	930
e	Earthen/Field Bund 0.75	cmt	0	0	0
f	W.W 1 (Waster Weir 1)	Nos	0	0	0
g	W.W 2 (Waster Weir 2)	Nos	0	0	0
h	W.W 3 (Waster Weir 3)	Nos	0	24	24
i	Avenue Plantation (Roadside)	Nos	3715	3715	3584
j	Bund Plantation	Nos	0	0	0
k	Hemata seeds	Kgs	371	371	371
1	Hemata sowing	Kgs	11450	11450	5080
m	Side bund	cmt	403	403	401
n	Graveyard Plantation	Nos	200	200	200
0	GP Plantation	Nos	40	40	40
p	Land Reclamation	Nos	0	0	0
q	Gap Filling - Horticulture	Nos	600	600	600
1	1 0	- 100			

a	Boulder bund	cmt	157	0	29
b	G.C I (Gully Checks 1)	cmt	689	689	679
С	G.C II (Gully Checks 2)	cmt	0	0	0
d	G.C III (Gully Checks 3)	cmt	0	0	0
e	Nala Revetment	cmt	367	367	90
f	Diversion channel	cmt	960	960	881
g	Water way	cmt	0	0	0
h	Rock Filled Check Dam	Nos	4	4	4
i	Rubble checks	cmt	105	105	105
f	Boulder Checks	Cmt	4259	414	441
g	Wall writing	Sqt	0	0	5748

ANNEXURE 2: PROJECT IMPLEMENTING PARTNER DETAILS

Name, Address and Contact Number of the NGO

MYRADA, #2, Service Road, Domlur Layout, Old Airport Road, Bangalore -560071

Contact Number: 080 25352028/3166

Name of Head of NGO: Mr. ArivndG. Risbud, Executive Director

ANNEXURE 3: BOARD NOTE ON DEVELOPMENT PERSPECTIVE:

MYRADA's contribution in the area of watershed is formidable in the past three decades not merely because we have successfully treated over 225000 ha of rain- fed land covering over 100000 farmers but also because of a system of managing the process through watershed level community of both farmers and the landless that we have developed and documented. A statement attached throws some light on the temporal spread of our watershed works

In addition to developing a workable scheme MYRADA has taken efforts to develop technical manuals to help in dissemination of the process at the field level. MYRADA's contribution in this field has been recognized both internationally and nationally and our way of doing things has greatly influenced the national policy for watershed in its formative stages. Currently MYRADA's expertise in the area of watershed management—is accepted without much reservation by the public sector as well as the corporate sector donors and this is a position which we should jealously guard.

ANNEXURE4 – WATERSHED PROGRAMS IMPLEMENTED BY MYRADA

		Water	shed Area Tr	eated	Watershed	under Treat	ment
SI. No	District	Watershed Area Treated (Ha)	Time Period	No. of Farmers	Watershed under Treatment (Ha)	Expected period	No. of Farmer
	10 to	725	1993-1998	1,100	717	2008-2013	21
1	Chitradurga District,	2,383	1995-2002	3,466	3,240	2009-2014	2,03
-	Karnataka	17,025	1995-2005	4,417	1,369	2011-2015	82
		19,190	2000-2009	9,900			
	Total	39,323	1 1 Jan 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	18,883	5,326	-	3,07
		34,000	1990-2004	14,100	4,485	2010-2015	2,17
	Gulbarga District,	4,300	1999-2006	2,200			
2	Karantaka	3,500	2003-2008	2,650			
		500	2007-2010	160			
		2,500	2008-2011	1,300			
	Total	44,800	-	20,410	4,485	-	2,17
		600	1987-1989	260	9,570	2010-2016	6,05
3	Mysore District, Karnataka	1,553	2000-2005	1,200			
-	, so contet, Ramataka	2,188	2003-2008	2,000			
		960	2005-2011	632			
	Total	5,301	-	4,092	9,570	4 4 -	6,05
	Chamarajnagar District,	2,030	1991-2003	1,061	233	2011-2017	8
4	Karnataka	816	2002-2009	696			
		416	2007-2010	155			
	Total	3,262		1,912	233	-	8
		4,600	1993-1998	1,700	1,352	2011-2015	80.
5	Kolar District, Karantaka	4,500	1998-2004	1,700			
3		22,830	2003-2008	8,117			74
		555	2008-2012	250			
	Total	32,485	-	11,767	1,352	-	803
	Bellary District,	10,500	2000-2005	2,000	1,035	2011-2015	487
6	Karnataka	3,000	2000-2008	1,000			
	Karriotaka	1,176	2006-2010	370			
	Total	14,676		3,370	1,035	-	487
7	Bidar District, Karnataka				1,338	2011-2015	684
	Total		-	- 1	1,338		684
	Total in Karnataka	1,39,847	- 1	60,434	23,339	_	13,369
	Dharmapuri/	99	2005-2006	60	1,277	2008-2015	545
8	Krishnagiri Distirct/ Hosur	102	2007-2009	45		2000 2013	310
	District, Tamil Nadu	204	2010-2012	180			
	Total	405		285	1,277	_	545
9	Erode District,	1,534	1996-2003	803	,		
9	Tamil Nadu	4,461	2002-2010	1,461			
	Total	5,995		2,264	-		-
		584	1997-2000	480			
	3	50	2000-2003	280			
10	Nilgiris District, Tamil Nadu	350	2000-2004	2,570			
		300	2005-2009	3,770			
		98	2006-2010	912	***		
	Total	1,382		8,012		-	
10.00	Total in Tamil Nadu	7,782	-	10,561	1,277	-	545
	Ananthpur District	3,000	1983-1989	800	24,257	2009-2016	9,190
L1 I	Andhra Pradesh	22,400	1990-2010	7,543	8,729	2010-2017	4,325
	Total in Andhra Pradesh	25,400	-	8,343	32,986	2010-2017	
	Grand Total	1,73,029	-	79,338	57,602		13,515 27,429
Г	Total Ha						
-	Total Ha Total Farmers	2,30,631 1,06,767	*				

ANNEXURE 5: NAMES AND ROLES OF VARIOUS MEMBERS INVOLVED IN THE PROJECT DURING YEAR

Sr. No	Names	Full /Part Time	Permanent /Project staff	Role in Project	Status
1	S.D.Kalyanshetti	Contract		Sr. SMS	Working
2	Ravi Raj Desai	Contract	Full Time	Water shed Manager - Engineer	Working
3	Parmeshwar	Contract	Full Time	Livelihood Promoter	Working
4	Ramesh Polla	Contract	Full Time	Documentation / Accountant	Working
5	HanumanttaTippa	Contract	Full Time	CRP	Working
6	Anita	Contract	Full Time	CRP	Working
7	Mallikarjun	Contract	Full Time	CRP	31.3.2013
8	HanumantAllapur	Contract	Full Time	CRP	31.3.2013
9	Laxmi	Contract	Full Time	CRP	Working
10	Shivashankar	Contract	Full Time	Manager	Working
11	Puttaabasappa	Contract	Full Time	Manager	Mar-12
12	Channanjappa	Contract	Full Time	Documentation Officer	Mar-13
13	Nagaraju	Work Order	Full Time	Watershed Manager	Working
14	Umamaheshwari	Work Order	Full Time	Documentation Officer	Nov-12
15	Venkatachalapathishetty	Work Order	Full Time	CRP	Dec-13
16	Manjula	Work Order	Full Time	CRP	Working
17	Srinivas	Work Order	Full Time	CRP	Working
18	Yellesh	Work Order	Full Time	CRP	Jul-11
19	Ravi	Work Order	Full Time	CRP	Jul-11
20	Irfan	Work Order	Full Time	CRP	Working
21	Parveenkumar	Work Order	Full Time	CRP	Jan-12
22	Vijayakumar	Work Order	Full Time	CRP	Working
23	Nagendra	Work Order	Full Time	CRP	Working
24	Naganna	Trainee	Full Time	Watershed Manager	25.6.2011
25	B.Channaveera	Trainee	Full Time	Watershed Manager	4.8.2012
26	Venkatashivareddy	Contract	Full Time	Watershed Manager	Working
27	Aradhya	Contract	Full Time	Watershed Manager	4.6.2012
28	Bhoodesh	Trainee	Full Time	Accountant/ Doc Officer	30.8.2011
29	Mahesh.G	Consultant	Full Time	Accountant/ Doc Officer	30.11.2011
30	Vinod Kumar	Trainee	Full Time	Accountant/ Doc Officer	30.12.2011
31	KotrayyaSwamy	Consultant	Full Time	Accountant/ Doc Officer	Working
32	Roopa K	Contract	Full Time	Livelihood Promoter	Working
33	HasinaBanu	Work Order	Full Time	CRP	4.8.2011
34	Hampamma	Work Order	Full Time	CRP	30.6.2012
35	Manjula	Work Order	Full Time	CRP	23.1.2012
36	Prabhakara B	Work Order	Full Time	CRP	Working

37	Basavaraja M	Work Order	Full Time	CRP	Working
38	Omprakash	Consultant	Full Time	Watershed Manager Engineer	Working
39	Bheemrao	Contract	Full Time	Programme Assistant	Working
40	Md.Siraj	Contract	Full Time	Part Time Agri– SMS	Working
41	Prithvi Raj	Consultant	Full Time	Accountant / Doc Officer	Working
42	ZakiroddinYunusimiyya	Work Order	Full Time	CRP	Working
43	HanmanthVithal	Work Order	Full Time	CRP	Working
44	Rupavati	Work Order	Full Time	CRP	Working
45	Siddappa	Work Order	Full Time	CRP	Working
46	Subbamma	Work Order	Full Time	CRP	11.1.2012
47	Umakanth	Work Order	Full Time	CRP	11.1.2012
48	Subhash	Work Order	Full Time	CRP	7.1.2011
49	Lathamala	Regular	Full Time	Programme Officer	31.5.2011
50	Nanji Reddy	Regular	Full Time	Programme Officer	31.12.2012
51	Nisar Ahmed	Consultant	Full Time	Programme Coordinator	1.1.2014
52	Vikram P.D	Consultant	Full Time	Central coordinator	1.1.2014

ANNEXURE 6: STATEMENT FROM THE HEAD OF THE ORGANIZATION

The Executive Director states that all data and statements made in this report have been verified and heconfirms he is accountable for the same; He has no objection to the report being used in public domain by HUF/HUL.

ANNEXURE 7: OPINION ABOUT HUF

- 1. MYRADA's strategy is to work with local communities in a local context using the strengths of the community. In the same way, HUF has attempted to work with MYRADA as its community member and tapped into MYRADA's strengths and beliefs along the way. For MYRADA, HUF is considered both a funding and strategic partner. This partnership has potential to the grow into mutually beneficial long term association is the areas of natural resource management.
- 2. This project included several activities that provide opportunities to the communities in the watershed project. Many of these further collective actions of both the farming community as well as the landless in the area. Some of the activities included capacity building of groups, institution building, linkages to livelihoods and skills training. This particular component was funded through the NABARD component of the PPP.
- 3. HUF has taken a very proactive role in the project from its inception. Over the years, there has been an extensive sharing of experiences and knowledge where MYRADA has learnt a lot in terms of documentation and computerized monitoring through the dashboard. We feel HUF has been sensitized to the realities of rural development where plans need to be frequently modified based on ground realities.

HUF has also played a big role in getting the MYRADA team to understand the importance of "water budget". The team now understands that "increase in quantity" of water also includes increase in the duration of water available within a certain area.

HUF has also played an important role in supporting MYRADA through interactive field visits and regular discussions with the team.

- 4. Yes, HUF has assisted MYRADA in understanding the water budget, using dashboard and score cards for regular monitoring. HUF has also supported MYRADA to bring out a capacity building manual on watershed management. This manual will not only benefit the team in MYRADA, but any person working on watersheds.
- 5. MYRADA is very happy with the relationship built between the partners HUF, NABARD and MYRADA.

It would be ideal to have a strong network between the three partners- so that all components can be integrated to maximize both efficiency and implementation. Currently, MYRADA reports separately to NABARD and to HUF. A common report and regular reviews and meetings will improve the performance of the project.

Fund releases need to be planned and executed as per program plan, as most of theactivities are seasonal and time bound.

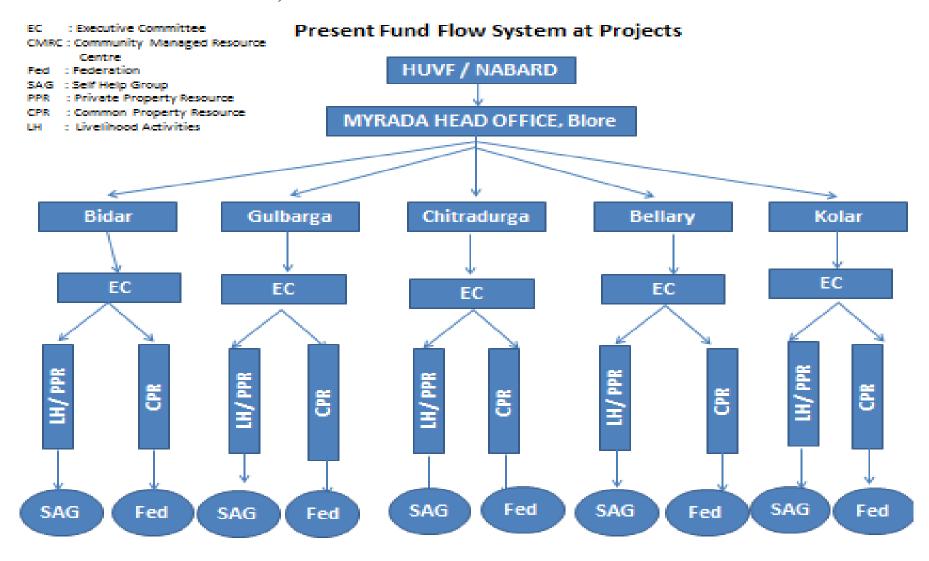
Since this is a cofounded project, the contract or agreement should also be tri-partite; instead of 2 separate agreements. This will ensure convergence at all stages of the project: from planning to evaluation.

ANNEXURE 8: FINANCIAL UPDATES

Utilization Certificate(In Rupees)

Particulars	HUF	NABARD	Banks/Dept. /Community	Total cost
Budget for 4 years.	5,23,25,410	3,63,66,953	3,35,00,570	12,21,92,933
Grants received as on	3,66,84,714	2,00,73,898	1,58,81,449	7,26,40,061
31.03.2014.				
Interest received as on	1,61,845	1,75,066	-	3,36,911
31.03.2014.				
Expenditure as on	3,14,50,667	2,15,92,081	1,58,81,449	6,89,24,197
31.03.2014.				
Balance as on 31.03.2014.	53,95,892	-13,43,117	-	40,52,775

ANNEXURE 9: FUND FLOW IN HUF, NABARD AND MYRADA WATERSHED DEVELOPMENT PROJECT



ANNEXURE 10: PHOTO GALLERY



Community Meetings at Nehru colony – 18.07.2011

Shramadana month of July-2012 at Chitradurga



Filled bunds before and after felling at Chitradurga July 2013





Farm Ponds before and after filling at Chitradurga July11, 2013





Farm based and Non-farm based activities beneficiaries at Chitradurga and Bellary Aug 09, 2013





Farm Based livelihoods supported beneficiaries at Bidar, Aug 09, 2013





Dry land horticulture and water drainage at Kolar and Bidar, March 11, 2013

ANNEXURE 11: PRESS CLIPPINGS



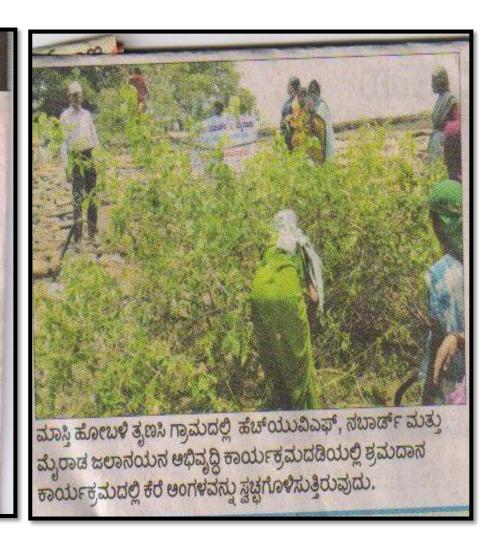


ಉದಯವಾಣಿ

ಬುಧವಾರ | ಮೇ | 23 | 2012

ನಬಾರ್ಡ್ ಯೋಜನೆಯ ಸದುಪಯೋಗಕ್ಕೆ ಕರೆ

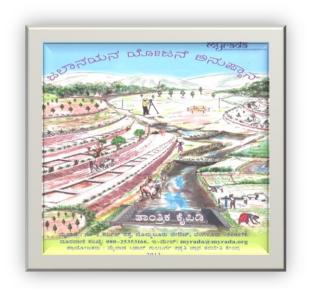
ಮಾಸ್ತಿ: ಹೆಚ್ಯುವಿಎಫ್, ನಬಾರ್ಡ್ ಮತ್ತು ಮೈರಾಡ ಜಲಾನಯನ ಅಭಿವೃದ್ಧಿ ಕಾರ್ಯಕ್ರಮದಡಿ ಸಿಗುವ ಅನುಕೂಲಗಳನ್ನು ಪ್ರತಿಯೊಬ್ಬ ರೈತರು ಸದುಪಯೋಗಪಡಿಸಿಕೊಳ್ಳಬೇಕೆಂದು ತಂಡದ ನಾಯಕ ಶಿವಶಂಕರ್ ಕರೆ ನೀಡಿದರು. ಮಾಸ್ತಿ ಹೋಬಳಿ ತೃಣಸಿ ಗ್ರಾಪಂ ವ್ಯಾಪ್ತಿಯ ಸುಗ್ರೊಂಡಹಳ್ಳಿ ಗ್ರಾಮದಲ್ಲಿ ಜಲಾನಯನ ಅಭಿವೃದ್ಧಿ ಕಾರ್ಕ್ಯಮದಡಿ ಮಣ್ಣು ಮತ್ತು ನೀರಿನ ಸಂರಕ್ಷಣಾ ಕಾಮಗಾರಿಗಳನು ಅನುಷ್ಠಾನಗೊಳಿಸಿರುವ ರೈತರಿಗೆ ಚೆಕ್ ವಿತರಿಸಿ ಮಾತನಾಡಿದರು. ಈ ಸಂದರ್ಭದಲ್ಲಿ ಸಮುದಾಯ ಸಂಘಟಕ ಚನ್ರಂಜಪ್ಪ, ಸಮುದಾಯ ಸಂಪನ್ನೂಲ ವ್ಯಕ್ತಿ ವಿಜಯಕುಮಾರ್, ವೇಣುಗೋಪಾಲಸ್ಥಾಮಿ ಮಹಿಳಾ ಒಕ್ಕೂಟದ ಸದಸ್ಯರು, ಸ್ವ ಸಹಾಯ ಸಂಘದ ಸದಸ್ಯರು, ಮೈರಾಡ ಸಂಸ್ಥೆಯ ಸಿಬ್ಬಂದಿ ಹಾಗೂ ರೈತರು ಕಾಜರಿದ್ದರು. ಇದೇ ಸಂದರ್ಭದಲ್ಲಿ ಈ ಯೋಜನೆಯಲ್ಲಿ ಕಾಮಗಾರಿಗಳನ್ನು ಅನುಷ್ಣಾನಗೊಳಿಸಿರುವ 5 ಮಂದಿ ರೈತರಿಗೆ ಚೆಕ್ ವಿತರಣೆ ಮಾಡಲಾಯಿತು.





ANNEXURE 12: AUDIO VISUAL AIDS

The Technical Manual on Watershed Management in Kannada to empower the field staff on watershed development techniques.



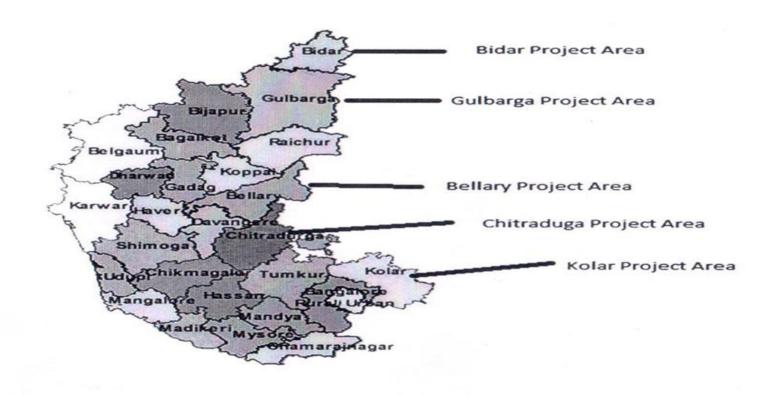
ANNEXURE 13: ANY AWARDS / RECOGNITION THAT INCLUDES THE PROJECT SUPPORTED BY HUF

Chitradurga district – Hollakere, Nehru Colony

Name of Farmer–Ashokappa

Recognition and Issued Agency - Department of Horticulture and Agriculture Government of Karnataka

ANNEXURE 14: PROJECT LOCATIONS MAP



Submitted By:

Mr. Arivnd Risbud Executive Director MYRADA

Executive Director
Arvind G. Risbud