# N M SADGURU
# WATER AND DEVELOPMENT FOUNDATION

Nation's premier NGO in Natural Resources Management

## ANNUAL REPORT

Year Ending 31st March 2015 - Published on 5th April 2015

**HIGH VALUE CROP UNDERTAKEN BY FARMERS: PROMOTION OF HIGH TECH AGRICULTURE**

*Tomato under net house being plucked by tribal women*

*Bumper chilly crop under poly house*

# ORGANISATIONAL PROFILE

Began in 1974, N M Sadguru Water and Development Foundation is a non-government, non-political, not for profit, secular organization, registered under the Public Charitable Trust Act and the Societies Registration Act (1860) and the Foreign Contribution (Regulation) Act. It is recognized by the departments of Rural Development of the Government of three states of Rajasthan, Gujarat and Madhya Pradesh. The organization is receiving funds from the states and central government, national and international funding agencies for its rural/tribal poverty reduction programmes centered around Natural Resources Management.

Its main objectives are to improve the living conditions of rural and tribal people by developing environmentally sound land and water resources programmes; improve the environment and eco-system; arrest the distress migration; improve the socio-economic status of rural people and strive for their overall development. This is promoted by facilitating the growth of community based institutions that support and sustain the Natural Resources Management programmes.

The project area is classified as a drought prone semi-arid region of the country and is pre-dominated by tribals and rural poors representing the poorest section of our society. The project area is presently extended across three states in sixteen districts of Rajasthan, Gujarat and Madhya Pradesh, covering approximately 3,30,234 households and more than 19,83,781 people in 1,425 villages under various NRM activities. Another about 400 villages have been covered by other NGOs who were initially supported by the Organizations during their infancy period.

Besides implementation of livelihood programmes centered around NRM, the organization has been at a great scale imparting training, capacity building and technical inputs to large numbers of government and non-government organizations at its state of art training institute at Chosala, Dahod, Gujarat, which has not only excellent physical infrastructure and facilities, but, manned by highly qualified and richly experienced staff known for their expertise and performance in the respective field. Usually, groups from the government and non government organizations from 20 Indian states take benefit of our training and capacity building and often international groups also come for the training-cum-exposure. Through our training and capacity building, we have influenced watershed development programme in about 68.95 lakh of acres (27.98 lakh ha.).

## PROGRAMME AREA - STATES OF SADGURU FOUNDATION

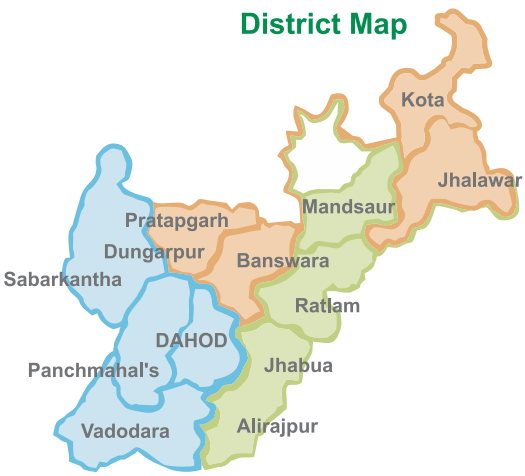


# MISSION

SADGURU endeavors to develop and expand environmentally, technically and socially sound natural resource interventions leading to empowerment of rural community including women to ensure equitable and sustainable developmentandpovertyreduction.

# VISION

Empowerment of tribal and rural communities with natural resources restored, developed and expandedintheselectedprojectareas.



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## FROM DIRECTOR

Once again we are publishing our Annual Report for the year ending 31st March, 2015, on the traditional and self imposed deadline of 5th April, 2015. We have been doing this for year after year. Our regular readers also now expect our report in their hands in the first week of year ending. We cannot disappoint them.

However, this time it was not an easy task to keep our tradition. Our colleague Rani Emmanuel who was doing all the hard work from collecting and compiling data to the printing of the report was not available this time due to her premature and untimely death in February, 2015. For all this 30 years we were largely dependant on her for most of the work related with Annual Report. This loss made our work difficult, physically and emotionally.

As usual, pattern and style of presentation of this report is more of visuals rather than narration. No one has time and interest in reading narrative progress report of NGO. We have therefore, for last several years, presented progress in visual form in which all visuals carry some important success story in the respective field. Only major difference we have made this time is by reproducing excerpts from three very important studies by independent agencies and individuals on the impact of the activities of our institution. We have presented these excerpts as separate chapter in the report. This excerpts from three studies more than adequately reflect great impact of our programs for the rural and tribal poors.

While we are considered as highly successful NGO for poverty reduction program around natural resources management we also have our share of constant worries and uncertainties in respect of financial support. Irrespective of capability, competency, high level of performance, even the best of NGOs have to constantly struggle for the financial support. We go pillars to post with bagging bowls for fulfilling our sublime mission to serve the tribals and rural poors. This country has not developed any mechanism in which the best of civil society organisations- development NGOs- need not move around seeking financial support for serving the society. Major role in this area has to be played by the government which has the maximum resources and responsibility for such causes. Big corporate houses and philanthropist organisations can also be helpful in this direction. With almost 50 years in the service of most needy section of the society people like me have come with a terms with reality that we have got to face the situation perpetually. No other way. However, we hope, the government will restore their conducive policy towards NGOs prevalent during 1970-2000 which was golden period encouraging development NGOs in rural development. Ironically, it was the government which helped large number of NGOs to reach the stage that they have reached with such support. Now the same government is not conducive towards NGOs because of blacksheeps in NGO sector. Such elements exist in all sectors and the government has to use its system to distinguish between good and bad NGOs, encouraging good NGOs and either ignoring or penalizing wrong doers.

Against so many difficulties that we regularly face we are grateful to our supporters which includes the governments, corporate houses, corporate trusts and above all the community which make us proud of our association with them.

With all the pangs and pain of being NGO, our satisfaction lies in doing good work at a massive scale for the needy people. This report amply represents such satisfaction, compensating our ordeal.

For our progress, achievements we have been greatly supported by our Board of Trustees and Advisory Board. Their knowledge and experience constantly help us.

In achieving milestones after milestones our dedicated staff contributes relentlessly. I always feel that ours is a team of ordinary people doing extra ordinary work. Kudos to them all.

***HARNATH JAGAWAT***

## Good Bye Rani

**February 1961 – February 2015**

*Rohini (Rani) Emanuel after serving 30 years with our organization passed away on 17.02.2015 suffering from Cancer. 30 years back Rani joined as stenographer with Director and her latest position was of Secretary to the Directors. In her premature death we have lost exceptionally efficient colleague full of sincerity and dedication towards her work. She was the most punctual with utmost discipline in her work and overall behaviour. Sadguru Foundation is known for its timely preparations and submission of all reports and for exceptional speed with which annual report of the organization is prepared and published within five days of the year ending. Rani's hard work was behind finalization of all the reports, documents and annual reports. Rani, because of her various qualities will always be remembered by the organization. It is not very common to have such colleague with several qualities. Whenever, important documents will be prepared particularly every time annual report of the organization is prepared, the organization will remember her.*

*The saddest part is that she will never be available for anything. She will not be available for preparing meticulously minutes of the Boards and AGMs. She will not be available for the preparations of Boards meetings which was her job to do. She will not be available for anything that requires to be done promptly, quickly and diligently by the office of the Director. All in all it is a big loss and big void.*

*Rani, we will always miss you and hope for your soul to rest in peace. It is appropriate that this issue of our annual report is dedicated to Rani, as all the annual reports for almost 30 years were prepared with her active and hard work. This is first time in 30 years that this report is prepared without her fastest fingers on her favourite keyboard.*

*Good Bye Rani.*

***Directors and Colleagues***

## BOARD OF TRUSTEES

As on 31st March 2015

**Mr. M. S. Sahu, IAS (Retd.)**
Former Additional Chief Secretary, Government of Gujarat and presently Chairman CSR Authority of Gujarat.

**Mr. Hrishikesh A. Maftalal**
Chairman, Arvind Mafatlal Group of Industries

**Ms. Mamta Verma, IAS**
Industries Commissioner, Gujarat

**Mr. Arun Kumar Nigam, IAS (Retd.),**
Former Secretary to the Government of Gujarat.

**Prof. Tushaar Shah**
Former Director, IRMA & Presently, Senior Fellow, International Water Management Institute.

**Dr. Mihir Parikh**
Former Professor in USA & currently with NDA is leading international legal and tax counselling firm.

**Mr. R. Venkataramanan**
Representing Tata Trust on our Board, Executive Trustee, Sir Dorabji Tata Trust and Allied Trusts, Mumbai.

**Dr. K. N. Shelat, IAS (Retd.)**
Former Principal Secretary, Agriculture, Gujarat, and currently founder member of International School for Public leadership and Executive Chairman of National Council for Climate Change Sustainable Development and Public Leadership. (NCCSD)

**Ms. Sharmishtha Jagawat**
Trustee & Director, Social Worker, Working in the field of Rural Development and Tribal Development for last 51 years.

**Mr. Harnath Jagawat**
Trustee & Director, Social Worker, Working in the field of Rural Development and Tribal Development for last 43 years - previously Senior Executive in Corporate Sector.

## ADVISORY BOARD / DISTINGUISHED INVITEES

As in March 2015

### GUJARAT

**Dr. Y. K. Alagh,** Former Minister, Planning, Government of India and internationally renown economist - presently Chancellor, Central University, Gujarat

**Mr. A. D. Ratnoo, Retd. CGM,** NABARD

**Principal Secretary,** Agriculture, Gujarat - Ex-officio

**Principal Chief Secretary,** Energy, Sachivalaya, Gujarat - Ex-officio

**Mr. A. M. Tiwari, IAS,** Managing Director, GACL

**Chief General Manager,** NABARD, Ahmedabad

**Commissioner,** Tribal Development, Gujarat - Ex-officio

**Collector,** Dahod, Gujarat

**District Development Officer,** Dahod, Gujarat

**Project Administrator,** Tribal Sub Plan, Dahod, Gujarat

**Representative of CInI,** Jamshedpur / Ahmedabad

### RAJASTHAN

**Additional Chief Secretary,** Agriculture, Rajasthan

**Commissioner,** Agriculture, Rajasthan

**Commissioner,** Tribal Area Development, Udaipur, Rajasthan

### MUMBAI and DELHI

**Representative of Jamsetji Tata Trust,** Mumbai

**Representative of Navajbai Ratan Tata Trust,** Mumbai

**Representative of Axis Bank Foundation,** Mumbai

**Representative of Coca-Cola Foundation,** New Delhi

* Our Advisory Board consists of senior officers of all the Government Departments and other agencies providing sizeable financial support in different activities during the specific period. This forum of Advisory Board provides an opportunity to the funding agencies to review our work and make suggestions. One of the main aims of Advisory Board is to make the organization transparent before the funding agencies. Because of large numbers of funding departments and agencies, the Advisory Board is also large in its composition.
Mostly, we invite our Advisory Board members in our Board of Trustees meeting, suggesting its importance of Advisory Board that we give.

## BANKERS

**Bank of Baroda, Dahod**
Main Bankers - with more than 70 accounts of different funding organizations

**Axis Bank**
Dahod, Gujarat- for funds related to Axis Bank Foundation

**Bank of Baroda**
Banswara, Rajasthan - for South Rajasthan operations

**State Bank of India**
Dahod, Gujarat - for Rajasthan and Madhya Pradesh State operations

**State Bank of Bikaner & Jaipur**
Chaumahela Branch (Rajasthan) for Jhalawar, Rajasthan operations

**State Bank of India**
Dhanpur for Dhanpur taluka, Dahod, Gujarat

**State Bank of India**
Sitamau Branch, district Mandsaur, Madhya Pradesh for Integrated Village Development Micro Plan watershed and Integrated Watershed Development Programme operations

**State Bank of India**
Garoth Branch, district Mandsaur, Madhya Pradesh for Integrated Village Micro Plan Watershed project.

**State Bank of India**
Basai Branch, district Mandsaur, Madhya Pradesh for Integrated Village Micro Plan watershed project.

**Punjab National Bank**
IWMP - 10, Watershed Project in Jhabua, Madhya Pradesh.

**Panchmahal Vadodara Gramin Bank**
Garbada for Garbada and Garbada taluka financial operation.

## AUDITORS

**M/s. Mannan A.R.**
Chartered Accountants, Baroda - statutory auditors.

**M/s. A.W. Pathan & Company**
Chartered Accountants, Dahod - Internal auditors, auditors for certification work and Tax consultants.

## LEGAL STATUS OF ORGANIZATION

- Registered under Bombay Public Trust Act 1950 - No. F/113 Panchmahals dated 21.02.1986
- Registered under Societies Registration Act 1860 - No. GUJ/124 Panchmahal dated 21.02.1986
- Registered under Foreign Contribution Registration (Regulation) Act (FCRA) 1976 - No. 042070038 dated 31st July 1987

Registered under Income Tax Act, 1961 U/S 12(A) (a) No. BRD/SIB110-9-S/86-87 dated 18.08.1986

- Registered under Income Tax Act 1961 U/S 80G (5) Registration No. S.BRD/AA-AA-III/Tech/104-140-N/2008-2009
- dated 16.06.2009 validity period from 01.04.2009 to 31.03.2012. The validity continue to be valid in perpetuity - vide CBTD Circular No. 7/2010(F.No.197/21/2010-ITA-I) dated 27.10.2010

Income Tax Permanent Account No. : AAATN1972A

- Notified u/s 10(23c) of Income Tax Act 1961 for 100 % exemption of income of the Trust. Notification No.
- BRD/CC/Tech/10(23c)(iv)/10-11 dated 12.05.2010. Validity for the period from A.Y.2010-11 to 2011-12 The validity continue to be valid in perpetuity - vide CBTD Circular No. 7/2010(F.No.197/21/2010-ITA-I) dated 27.10.2010

NOTE : From 1974 to 1985, the organization was working under the banner Shri Sadguru Seva Sangh Trust, Mumbai, and since 1986 working under the independent status and entity, in it's present name.

# SUMMARY - PROGRESS AT A GLANCE

(DURING THE YEAR 2014-15)

**VILLAGE INSTITUTIONS**

159 new village institutions were established.

**WATER SECTOR**

Ten new Community Lift Irrigation schemes were installed.

Five new Check dams were constructed with four under construction.

495 new open dug wells were recharged / deepened.

One drinking water systems were installed.

**IRRIGATION COVERAGE**

During Rabi 2014-2015 totally under different methods 1,20,880 acres were irrigated by 1,45,350 numbers of beneficiaries / households.

**MICRO WATERSHED DEVELOPMENT**

During the reporting year, totally 8,157 acres were treated in three states Gujarat, Rajasthan and Madhya Pradesh

**IMPROVED SEEDS OF MAIZE**

In Kharif 2014-15 totally 24,905 farmers used improved variety of seeds of maize produced by our farmers in Rabi 2013-14

**VEGETABLE CULTIVATION**

1,820 farmers opted for seasonal vegetable cultivation. In addition past farmers and other farmers motivated by our farmers opted for vegetable were more than 28,000 farmers.

**TRELLIS SYSTEM**

960 number of trellis system were installed.

**SPICES CULTIVATION**

1,545 farmers opted for Spices cultivation.

**HORTICULTURE**

1,117 new plots were developed.

**FLORICULTURE**

146 new permanent plots were developed.

## AGRICULTURE MECHANISATION

Under 18 tractors given by the government to women SHG federation, 16 villages are taking benefit of their services.

## VERMI COMPOST

1,242 numbers of units were developed.

## SOCIAL FORESTRY / AGRO FORESTRY

15,95,721 seedlings were planted during year.

## BIO GAS PLANTS

147 plants were installed during the year.

## TRAINING PROGRAMME

Totally 15,093 participants participated in 379 training programmes related with NRM.

## TOTAL HOUSEHOLDS REACHED

During the reporting year totally 93,009 households were covered under different programmes with substantial overlapping of households.

## FINANCE

During reporting year totally ₹ 47.69 crores were utilised from the mobilisation from different sources, out of this about 30% that is nearly ₹ 14 crores were raised from the government sources. Substantial amount of this was routed through our village institutions and given directly to the beneficiaries by the government under different programmes. Also in some programmes, such as agriculture productivity enhancement, farmers put in their own money, not depending on government subsidies.

## EMPLOYMENT GENERATION

Under different programmes including on farm employment totally 85,41,528 person days were employed.

## ISO CERTIFICATION

Institution possesses ISO 9001 : 2008 certificate No. SG11 / 03558 valid till 31.07.2017.

## ACCREDITATION BY CREDIBILITY ALLIANCE

We are also member of Credibility Alliance and have got accreditation from Credibility Alliance for strict transparency norms and building a well governed and trust-worthy voluntary sector with strong norms and conducts to be effective on the basis of capability, transparency and integrity. Our membership of Credibility Alliance is 000496GJ08 and is valid till 26.03.2019

## CARE RATING

We have been rated under NSIC-CARE Performance and Credit Rating for Micro & Small Enterprises and obtained highest rating of SE IA which indicates 'highest performance capability and high financial strength'. Not only such highest rating is rare, it has great significance because this is given after very strict scrutiny. Hardly any NGO in our country might have got such highest rating.

1 CHAPTER

# CBOs: BECOMING MAJOR PLAYERS

In our field level operations virtually everything is being attended by different CBOs. All our field activities are factually managed by our CBOs, which are usually users group for the specific activities. Over the years these CBOs have become very strong and powerful and have become major players in our NRM activities. This is real strength of Sadguru Foundation in implementing massively and successfully all the NRM based programme at very high scale.

During the year 2014-2015 these CBOs and their federation were dominant players in the implementation of all our programmes.

Before we describe in very brief summary on the programmes implemented by CBOs, let us have a look at the nature of CBOs and their federations.

| Sr. No. | Nature of Institutions | Vis set up during the period | Total Nos. of members |
|---|---|---|---|
| 1. | Registered irrigation cooperatives | 365<br>(06) | 26,797<br>(239) |
| 2. | Informal check dam management groups (without savings and credit) | 249<br>( - ) | 2,602<br>( - ) |
| 3. | Women horticulture cooperatives (taluka level equivalent to taluka level federation) | 07<br>( - ) | 6,947<br>( - ) |
| 4. | Informal women groups under various programmes - SHGs and others | 1,618<br>(104) | 17,682<br>(1,219) |
| 5. | Youth club and farmers groups under different activities | 121<br>( - ) | 1,459<br>( - ) |
| 6. | Watershed associations | 39<br>( - ) | 18,434<br>( - ) |
| 7. | Drinking water committees | 39<br>(19) | 397<br>(223) |
| 8. | Milk producers cooperatives {43 (05) women cooperatives and 53 (05) mixed of men & women} | 96<br>(10) | 6,226<br>(671) |
| | **TOTAL** | **2,534<br>(139)** | **80,544<br>(2,352)** |

Figures in parenthesis are of the reporting year 2014-15.

## FEDERATIONS

**All major village institutions are** federated and there are now 26 federations of different kind of village institutions as follows ;

| Nature of federations | Nos. |
|---|---|
| Lift Irrigation Federations | 5 |
| Horticulture cooperatives at taluka level acting as federation | 7 |
| SHG Federation, Dahod, Gujarat | 5 |
| Watershed SHG Federation (Informal) | 7 |
| Rajasthan SHG Federation, Banswara (Informal) | 2 |
| TOTAL | 26 |

Important role played by CBOs and their federations during 2014-2015 is briefly described here below through large number of visuals reflecting the impact. The visuals presented in the chapter do describe the impact, not requiring separate narratives and therefore narrative is reduced as much as possible.

## CROP PRODUCTIVITY ENHANCEMENT

The reporting year was very important in terms of very good progress in crop productivity enhancement which was fully managed by various CBOs and their federations such as Lift Irrigation Co-Operatives and their federations, Self Help Groups and their federations and Horticulture Co-operatives. Under this program total 7 federations took up this program at a big scale. With the package of improved technology 40,605 farmers were involved in this program. It is observed that the crop yield in these plots was 2-3 times higher than the past and in comparison to non- participant farmers.

## IMPROVED VARIETY OF MAIZE SEEDS

In Kharif 2014 totally 24,905 farmers used improved variety of maize seeds which were produced by our own farmers during Rabi 2013-2014. As the seeds of improved varieties are produced by our own farmers, our farmers get good seeds at right time and reasonable rate in their own villages.

*Tribal farmer producing quality Maize seeds at village Ninamana Khakhariya in Rabi 2014-15. Our farmers with the support of CInI and Sadguru had raised 476 plots of seeds production in Dahod in Gujarat. The production of improved seeds under this programme will provide quality seeds.*

*Maize seeds production plot in village Ghada, Dhanpur, Dahod. This was under CBOs programme for producing seeds at good scale. In this village itself the seeds programme was taken up in 52 acres by equal number of farmers. Totally, the seeds production programme of Maize was taken up on 694 acres in our project villages of Gujarat and Rajasthan during Rabi 2014-15. The expected yield of this programme is very good at around 47.50 quintal per hectare. This will meet requirement of improved seeds for thousand of farmers. We want to expand this programme in coming years so that almost entire district gets improved seeds from local productions.*

*Plot of Maize seed production in village Balasindur, Banswara, Rajasthan. This village has undertaken seeds production by entire village in 65 acres. For last three years this village has been producing high quality Maize seeds and earning good amount from this enterprise and at the same time providing good seeds to large number of farmers. This programme was also undertaken by Banswara Lift Irrigation Federation.*

*Mr. Arun Pandhi, Chief Development Manager, Sir Ratan Tata Trust & Allied Trusts and Dr. N. S. Malhi, Vice Chancellor, Guru Kashi University, Punjab and Consultant to SRTT visiting a plot of Maize crop under collaboration of International Maize and Wheat Improvement Center, Maxico on 3rd September, 2014*

*Excellent crop of new variety (Doller) of Gram cultivated by a tribal farmer at vililage Vankol, Jhalod, Dahod under POP aiming at crop productivity enhancement, undertaken under CBOs activity.*

*DDO and Director, DRDA, Dahod addressing a meeting of Community Resource Persons (CRPs) and Para Professionals of Mahila Kisan Sashaktikaran Project being implemented by Sadguru Foundation (19th September, 2014)*

*New variety of Wheat HI-1544 Sharbati introduced by villages under lift irrigation command in village Ghorwada, Banswara, Rajasthan. This was first season and first year of LI operation in the village in which 100 % designed command was achieved.*

## IMPROVED VARIETY OF WHEAT SEEDS

On availability of irrigation as a cereal crop wheat and gram are the main crops in Rabi season in the region under our program managed by CBOs. Improved seeds are supplied to the farmers. During Rabi 2014-2015, totally 15,700 farmers were supplied improved variety (HI-1544) of wheat seeds. This variety, which is known in Gujarat as Sharbati wheat fetches good market price. The production of this variety is in the range of 40-50 quintals/Ha with its market price ranging Rs.17-23 per kg depending on the quality of grain.

These programs of crop productivity enhancement and improved seeds were duly monitored and technically guided by technically competent resource persons engaged by our partner Tata Trusts and CInI.

## BUSINESS ACTIVITIES BY CBOs

For last couple of years CBOs and their federations have engaged themselves in Business activities such as installation of micro irrigation systems, production of improved seeds and selling the same to the farmers, procurement and selling of farm inputs at good scale etc. While doing so one CBO has taken dealership of Jain Irrigation systems since long and others have taken franchise dealership for seeds and other farm inputs of reputed companies like Pioneer, Seed Corporation of Gujarat and others. These activities have been carried out quite successfully on a big scale and it is expected that the CBOs will intensify these business activities and also diversify to other activities. Many CBOs and their federations have accumulated good amount of funds and such funds are available as a temporary bridge finance to other CBOs and federations as and when needed.

## MILK PRODUCER'S COOPERATIVES

There are now 96 milk cooperatives with 6,226 members either newly formed or revived the defunct cooperatives. This programme is now gaining popularity among tribal households which are traditionally not known for milch animals and milk production as livelihood system.

## NEW PHASE OF TATA SUPPORTED PROGRAMME

Tata Trust has been one of our long supporters for different rural development programs. New phase of Tata supported program has been launched for the period 2015- 2019. For this phase Sir Ratan Tata Trust will provide some agreed support for different agreed programs.

Total outlay of this program is about 155 crores which is expected to be mobilised from various sources such as the Government, NABARD, Axis Bank Foundation, Tata Trusts, Mafatlals, etc., with very high percent of contribution to be raised by the farmers themselves, mainly for agriculture and allied activities. The entire program will be based on leveraging the funds from different sources as above and few more during the implementation.

The main objective of this program is to substantially raise income level of 45,000 households in stipulated period. About 250 villages are likely to be covered in Six Talukas of district Dahod. In working methodology it would be a cluster approach with identified clusters. At the grass root level almost entire program will be mainly implemented with the support of different community based organisations (CBOs), primary and their federations. Nine federations will be actively involved in the implementation. In order to achieve high level of income most of the households will be involved in more than one activity. Most of the activities are also based on our past proven and highly successful efforts in improving the economy and overall living condition of marginal tribal farmers.

**Launching of Tata Trust and others supported New Phase of program**

New phase of rural development program with the support of Tata and other sources was launched on 26.03.2015 at Sadguru Foundations office by District Collector- Shri. M. A. Gandhi, IAS, in presence of Director DRDA - Mr. Ninama, District Agriculture Officer - Mr. Charel and SRTT and CInI Representative Mr. Samir Bhattacharya and team.

*Project Launch Workshop: Mission 2020 –Dahod Cluster Development Plan.*

Women dairy group training of village Bhutardi, taluka Garbada, Dahod on 21.07.2014

Shantaben Bhuriya leader of our SHG group in Garbada taluka and member of milk dairy is now increasingly involved in milk production. She has four cross breed Holstien Friesiens cows and four Mehsana buffaloes. Everyday she sells milk worth Rs. 3,560/- with gross monthly income of Rs.1,06,800 and net income of more than Rs.80,000/- per month. This is milk revolution in the tribal region of Dahod which has not been traditionally known for milch animals and milk production. This activity by Sadguru Foundation is relatively recent and now there are around 700 tribal households each are earning between Rs.10,000/- and above per month some even touching Rs.30,000/- to Rs.80,000/- per month from this venture. We are expecting about 4000 tribal households to earn monthly income in above range in next two years. By the way Shantaben Bhuriya is leading 219 women SHG groups in Garbada and her dynamic leadership is contributing in agriculture production as well as milk production in her region.

## SHG MEMBER TRANSFORMING HER CONDITION

**OLD HOUSE** **NEW HOUSE**

Nimaben Bhabhor is a member of SHG group of Kharoda, Tandi faliya, Dahod. As from her own description before joining SHG group five years ago her overall condition was very bad forcing her and her husband to migrate for the livelihood. In 2009, when she returned to her village she came to know about SHG group operating in her village. She became a member of the group. She got a loan of Rs. 15,000/- and opened a small grocery shop. With her skilful and sincere running of grocery shop her daily sale increased between Rs.2,200/- to Rs.2,800/-. From grocery she has diversified to clothes, cutlery items, etc, resulting in good turnover and income. With her steady income she could improve her agriculture also. From this good income she has now constructed Pakka house costing about Rs. 4.00 lakhs of which Rs. 2.50 lakhs were from income of her shop and remaining taken a loan which was easily available on account of her improved condition. Two comparative photos of her old Kacha house and new Pakka house attached with the story tell the story of her transformation.

*Mr. Sumnesh Mathur, Chief Engineer (General), Water Resources Department, Rajasthan, discussing with Sadguru's technical staff on optimum harvesting approach implemented by Sadguru Foundation for River Panam, Dahod, Gujarat. The Chief Engineer was accompanied by Additional Chief Engineer and Superintendent Engineer during this visit, specially suggested by the State Government to see our approach and work in water resources. (24-25 November 2014)*

2 CHAPTER

# WATER TO THE HANDS OF TRIBALS*

Water has been prime program of Sadguru Foundation. The institute began its activity with water resources development four decades ago, pioneering this activity in NGO sector. As far as possible this activity is entry point activity, depending on the available potential, willingness of the community and availability of financial resources when the institution enters in new village.

Under this program four types of programs are usually undertaken. They are community lift irrigation schemes, community masonry check dams, ground water development (wells), recharge tanks and drinking water schemes.

During the reporting year physical progress in different above programs was as follows;

## COMMUNITY LIFT IRRIGATION SCHEMES

During the reporting year, ten new community lift irrigation schemes were set up benefitting 509 households having 794 acres of irrigation potential. Their list is furnished on Annexure-5.

Cumulatively, 401 community lift irrigation schemes have been executed by our organization over the years having designed command of about 52,344 acres in one season of Rabi, benefitting 27,200 households.

*This title is partially borrowed from the book written by Robert Chambers, Saxena and Tushaar Shah in 1987 with the title "TO THE HANDS OF THE POOR : WATER AND TREES"

*Borbhatod Check dam across river Hiren in district Banswara constructed under RKVY, Rajasthan. This check dam is supporting four community lift irrigation schemes and large number of portable pump sets being used by the farmers for irrigation and totally around 800 acres of the land is irrigated from the storage of this check dam. There are 10 such check dams – anicuts on this river harvesting water almost optimally and with five more such anicuts planned on this river it would be optimum harvesting of this local river which would benefit 30 villages on both sides of the river. This is unique feature of Sadguru approach in which entire river is harvested through series of such small structures which benefit maximum with environment friendly structure causing no damages to anything.*

## COMMUNITY MASONRY WATER HARVESTING STRUCTURES - CHECK DAMS

During reporting year, five check dams were executed benefiting 478 households having 1900 acres of irrigation potential. Their list is furnished on Annexure - 6. This progress was lower than planned because of non availability of the funds from the government, particularly in Gujarat on committed projects. Delay in technical clearance also causes slower performance. These ups and downs are common and expected when we depend largely on the government sources. We will mention more on this, particularly, slowing down in the government chapter.

At the end of the year, four check dams were under construction – two in Gujarat and two in Rajasthan. However, it has to be mentioned that size of our check dams is relatively very big and our one check dams is equivalent to 4-5 or sometime more check dams of the size usually seen in the government and other NGOs check dams. Thus, the number of check dams is to be viewed against this reality of bigger check dams and much more water storage in our check dams than that of the government and other NGOs.

Cumulatively, 376 check dams have been executed by our organization over the years having potential to irrigate about 56,976 acres in one season of Rabi, benefiting 24,418 households.

It is pertinent to mention that the figure of benefiting households in L.I Schemes and Check Dams are taken from the government revenue records mainly at the time of survey. These records are always outdated as the division in the land with division in household is not updated for many many years. In our observation therefore, the number of households to be benefited under L. I. Schemes and Check Dams are usually at least double than the government record.

## GROUND WATER DEVELOPMENT

It has been acknowledged by everyone including Central Ground Water Board that Sadguru's project areas have witnessed ground water increase. This is due to massive network of water harvesting structures, massive plantation and substantial watershed development activities. Recent study (study by renowned organization under the guidance of internationally known NRM experts) have found that Sadguru's check dams being of relatively bigger size improve ground water from 5-10 kilometres on both sides of the structure. This is revolutionary finding. Obviously this has resulted in large numbers of open dug wells, resulting in agriculture development through these wells.

However, during the reporting year, Sadguru was directly involved in the development of 495 open dug wells / recharging wells / wells deepening, in the project area. With this increase, the institution has contributed in the development of cumulatively 18,459 wells, directly, without accounting for wells coming up due to ground water improvement as an indirect impact of different NRM programme.

## IRRIGATION COVERAGE IN RABI 2014-2015

Combining all above three programs of water resources development actual irrigation achieved during Rabi 2014-2015 was 1,20,880 acres by 1,45,350 farmers. This is massive achievement of actual irrigation. Incidentally, we don't get report of irrigation from large number of lift irrigations schemes that we have executed on behalf of other NGOs. Also, some schemes have been defunct in Gujarat as well as Madhya Pradesh due to electricity problem of disconnection on account of non payment of bills during failures of monsoons when schemes could not run and yet minimum charges were levied which farmers could not pay. In Rajasthan there is a rational policy of not taking minimum charges during non-use or non-operation of scheme. Other two states do not follow this user's friendly policy

## DRINKING WATER SCHEMES

During the reporting period one drinking water scheme was created by our organisation in a hamlet of one village benefitting 25 households

Cumulatively 99 drinking water systems have been

*Pump house of newly constructed community lift irrigation scheme at village Chari, Dhanpur, Dahod. The scheme was constructed under RKVY, Gujarat. It has pumping capacity of 80 HP, designed command of 210 acres in one season. This lift irrigation scheme is situated on Chari check dam on river Panam constructed with the support of Tribal Development Department, Gujarat.*

*There are now 401 community lift irrigation schemes installed in the border district of Gujarat, Rajasthan and Madhya Pradesh offering immense benefits to the deprived tribal community of most interior regions in Western India.*

*Water gushing out from water distribution chamber of community lift irrigation scheme at village Chari, Dhanpur, Dahod. In the first year itself the co-operative managing lift irrigation scheme has saved more than Rs.50,000/- after meeting all the operational cost.*

installed so far which are managed fully by the community under women managed Pani Samittee.

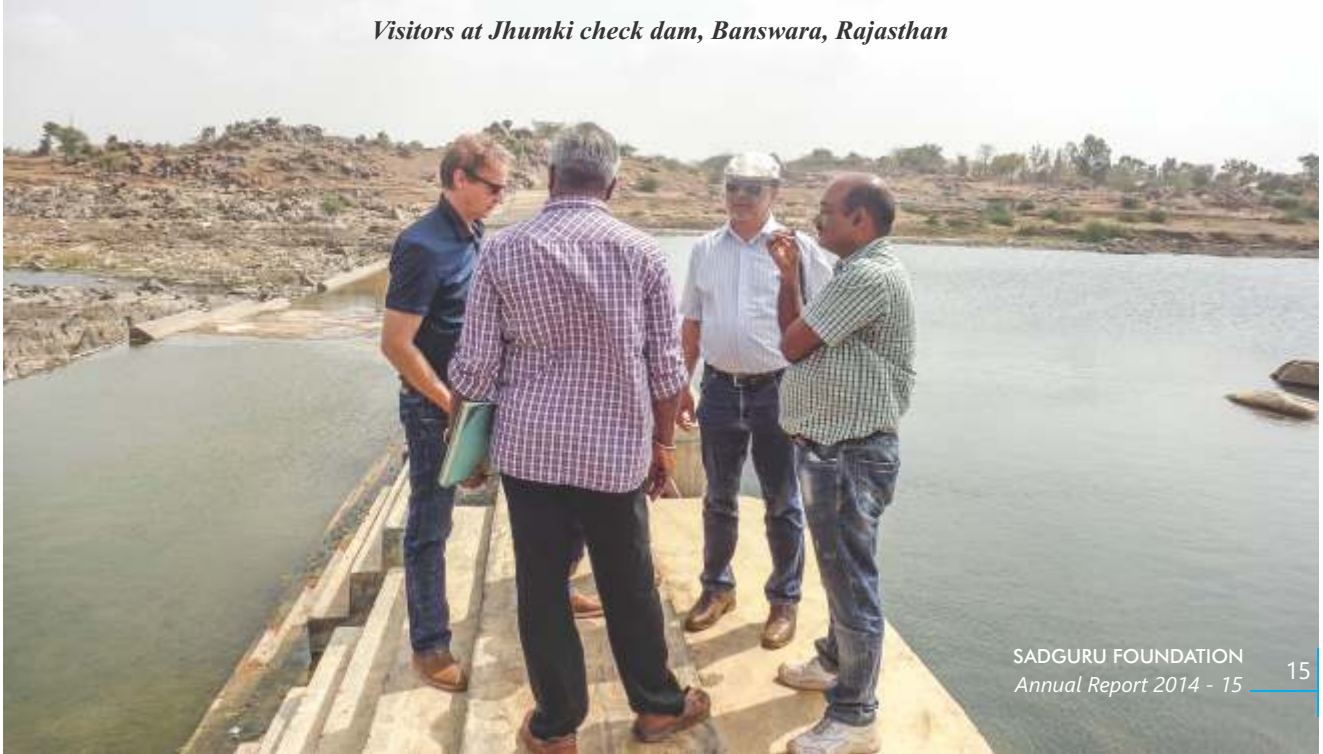
In collaboration with Tata Trusts, CInI and the government, it is planned to undertake big programme for drinking water in Dahod, expecting government support.

This large program has not yet got started as it is still in the stage of DPR approvals, fixing of agency for execution, etc. Actually the quality of these schemes is not going to be in our hands as the Pani Panchayat and Government department will be entrusting the execution to the private contractors and the record of private contractors is not at all good. The government should make exception to the NGO like Sadguru to entrust the execution which would guarantee quality workmanship. We have expertise and experience of executing drinking water schemes. We have long experience and we offer excellent workmanship it would be in order that the government recognises such NGOs for execution of drinking water scheme. In drinking water scheme the same technology of Lift Irrigation is applicable and in design execution of Lift Irrigation projects we are nationally and internationally known for our very high quality. Why should government not utilize our expertise? We know there are NGOs who might have not worked satisfactorily in the field of drinking water but that does not mean that there are not good NGOs which can offer excellent schemes. It is also pertinent to mention that many private contractors have not implemented drinking water projects satisfactorily and yet government entrust the work to private contractors. This double standard need to be addressed by the government in the interest of quality work.

**At the instance of TATA Trust officials from WATERNET, Netherlands visited our water centered activities on 24.06.2014**

*At the field of farmers*

*Visitors at Jhumki check dam, Banswara, Rajasthan*



*As an impact of watershed development under Indo German Watershed Project at village Chediya, Dahod, water table has increased in as many as 70 wells in this watershed project, ensuring vegetable and orchard activity at a good scale in the village.*

3 CHAPTER

# MICRO WATERSHED DEVELOPMENT: ONE OF THE BEST PROGRAMME FOR RURAL COMMUNITY

Micro Watershed development could be considered as one of the best program in rural development aiming at improving the quality of life of villagers through increased productivity of the land, availability of water, surface and ground, increase in vegetation cover improving cattle health resulting in higher milk schemes and improving overall environment by tree plantation.

If this program is implemented in technically sound manner and socially with total participation of people it is capable of transforming that village(s). But if this program is not implemented on this line the impact would not be as per expectation.

Sadguru has been implementing this program for a long in a very successful manner. Sadguru watershed development program has been acknowledged as excellent by virtue of technically sound and socially strong aspects.

The best aspect of Sadguru foundation for this program is massive convergence of various programs which have limited or no scope under the original program design due to limitations of funds and other factors. In Sadguru Foundation watershed program we ensure immense convergence of various activities outside the original design and as a result the impact of our watershed project is glaringly different.

Right now during the reporting year various watershed development program were implemented by Sadguru foundation in three states, Gujarat, Rajasthan and Madhya Pradesh with the funds provided by NABARD, Government of Rajasthan under IWMP and government of Madhya Pradesh under IWMP and Coca Cola foundation, Anandana Foundation.

Totally 8,157 acres were treated under this programme in our different areas in Gujarat, Rajasthan and Madhya Pradesh during 2014-2015.

The state wise achievements in watershed programme during the reporting period 2014-15 were as follows ;

| Sr. No. | State | Area treated in acres | No. of beneficiaries | |
|---|---|---|---|---|
| | | | Households | Persons |
| 1. | Gujarat | 322 | 100 | 600 |
| 2. | Rajasthan | 3,051 | 749 | 4,494 |
| 3. | Madhya Pradesh | 4,784 | 935 | 5,610 |
| | **TOTAL** | **8,157** | **1,784** | **10,704** |

Madhya Pradesh achievements were highest among three states. In Gujarat, we are holding NABARD projects, which are in final stage of completion, hence, no scope for better physical progress.

Cumulatively, over the years, we have treated 1,04,633 acres of the land, directly under our activities.

So far the government of Gujarat do not allot watershed project under IWMP to NGOs. However, in recent meeting of the state level watershed agency it was decided to entrust IWMP watershed to reputed NGOs. We are awaiting for the implementation of this decision in Gujarat.

Some details of ongoing projects in three states are furnished on Annexure - 7 which shows that at present we are holding watershed projects worth 31,889 ha. in three states with maximum in Madhya Pradesh.

## NATIONAL INFULENCE IN WATERSHED DEVELOPMENT

In our training institute we have been regularly imparting training and technical inputs to various groups representing watershed development programs in about 20 states. These groups belong to the government as well as NGOs holding watershed development projects. Till now upto 31st March, 2015 through such training and capacity building we have influenced 68.95 lakh acres of land at national level. This is a massive contribution of Sadguru foundation at national level.

*Papaya cultivation is taken up under the Integrated Watershed Management Project in district Mandsaur, Madhya Pradesh, which is giving very good income to the cultivators. 92 farmers opted for Papaya cultivation. It is expected that this 92 farmers may get yields of 7000 qntl. of Papaya and even at the rate of Rs.20/- per kilo, each of this farmers at an average likely to get Rs.1.50 lakhs from this cultivation.*

*Tadvi Sukliben with her plantation of Teak trees. She has planted 250 teak plants during outgoing monsoon under watershed development programme in her village Chilakota. Teak plantation is on fast increase in our project area which is going to be very useful long term plantation ensuring very good income.*

*Local Community Resource Persons and Para Professionals Workers (all women) visiting nursery plot of Chilly, Brinjal and Marigold at village Abhload under MKSP. External resource person of CInI explaining details to the workers.*

4 CHAPTER

# AGRICULTURE ADVANCEMENT: TRIBAL MARGINAL FARMERS TURNING INTO PROGRESSIVE FARMERS

Indian tribal community is not traditionally a farming community. Their history of farming is of about 150 years while for other farmers in India there is history of farming of 5000 years. Earlier all throughout centuries the tribals used to depend on the forest based livelihood. In later half of 18th Century (1864-1884), when Britishers nationalised the forests which were mainly owned by the tribals, the tribals had worst of both. Their forest based livelihood was snatched away by a stroke of pen and they were forced to go for agriculture based livelihood, which was unknown to them. With this recent history of agriculture based livelihood they are still struggling with agriculture. Their agriculture production is very low, their cropping pattern not much changed and diversified, they have inadequate or no irrigation, though all tribal regions have ample water and massive network of rivers and rivulets. Against this background, Sadguru foundation started working with the tribals for the improvement of their living conditions by helping them adapting to better agriculture practices and managing to provide irrigation facility through an appropriate technology.

Entire report is full of visuals and stories of agriculture development and diversification which has transformed the entire tribal regions, wherever, Sadguru Foundation has brought in interventions. Also chapter 1 on CBOs focuses on agriculture activities through CBOs.

The statement on Annexure -1 produces the agriculture activities for the reporting year and Annexure - 2 produces agriculture and related activities for the cumulative period.

In this chapter some brief narrative is presented with relevant photographs reflecting the nature of activity

***Orchard wadi at village Mahunala, taluka Dhanpur, district Dahod under TDF programme supported by NABARD***

and impact that has transformed the agriculture development in the regions that Sadguru Foundation have been actively involved.

## MASSIVE AGRICULTURE DEVELOPMENT

As shown in chapter one of CBOs more than 65,000 tribal households/ farmers were covered under agriculture development during 2014-2015 (Kharif 2014 and Rabi 2014-2015). Massive efforts for this large number of farmers were made to provide them with package of practices, scientific agriculture, agriculture extension, multiplication of seeds, etc,. In large number of households the production have been doubled or tripled due to such practices.

## DIVERSIFIED CROPPING PATTERN

Farmers were motivated to diversify to spices cultivation, pulses, etc in reasonably good numbers.

## VEGETABLE CROPS

Nearly 3000 farmers opted for vegetable crops both under seasonal vegetables as well as under trellis system. The farmers were also motivated to raise nursery of high quality, Chillies, Brinjals, and Tomatoes. Under these nurseries five lakhs seedlings were raised and supplied to 1000 farmers. Similarly, 70 lakhs seedlings of quality onion were raised. For these vegetable crops quality seedlings and quality seeds were supplied to 5600 farmers during the season including for kitchen gardens and regular cultivation. This is very good coverage under quality seeds and seedlings.

Another about 20,000 farmers, who cultivated vegetable crops in the past in our programmes, continued vegetable cultivation of their own without our support. Thus, vegetable cultivation has been now one of highly diversified and popular activity in our project area.

*Newly raised wadi under TDF programme supported by NABARD at village Mander, taluka Limkheda, district Dahod*

*Turmeric plot at village Sandpaliya taluka Santrampur district Panchmahal being visited by beneficiaries of NABARD TDF project-4 Taluka Limkheda, District Dahod*

*Managing Director of Gujarat Livelihood Promotion Company looking minutely into the records being kept by Women SHGs under Mahila Kisan Sashaktikaran Programme at village Bhutardi, Garbada, Dahod on 26th September, 2014*

Mr. Venkatraman, Executive Trustee, Sir Dorabji Tata Trust and Allied Trusts and representing Tata Trust on Sadguru's Board visiting Degawada village of Limkheda, Dahod on 8th August 2014. This village has multi interventions for twenty years with major activity being lift irrigation. Entire village is covered in one or more agriculture activity in this village. Also every household of this village has one or two persons engaged in off-farm livelihood in different sector. As a result of on- farm and off-farm activities by entire village the economic condition of every household is very good. The villagers attribute this improvement to community Lift Irrigation schemes installed by our institution 20 years ago. As we had mentioned in earlier annual reports villagers consider pump house as temple and celebrate every annual day by whole night prayers at the pump station.

## FLORICULTURE

830 new farmers opted for floriculture plots both long term and seasonal and now there are totally 5,679 plots in our project area, which includes carried forward plots of past years.

## FRUIT ORCHARDS - WADI

Under this program 1,117 farmers opted for fruit wadi which was mainly under NABARD programme for the tribal farmers under Tribal Development Fund (TDF). Sadguru is holding 8 wadi projects 4 in Gujarat and 4 in Rajasthan under TDF (Tribal Development Fund) and these projects are in different stages. Totally 8000 farmers are involved in this programme and in coming years beginning from 2015-2016 we are likely to have more such projects in both the states.

Cumulatively, 31,910 farmers have been engaged in equal number of wadis in our project areas which would ensure long term benefits to large number of farmers.

## AGRO FORESRTY

For restoration of tree cover and eco-system and also for an appropriate land use practice massive tree plantation has been taken up by the institute for last 32 years (since 1982). Every year 15,00,000 or more forest plants are planted by the tribal farmers on their waste land, field bunds , etc.

During the monsoon 2014, totally 15,95,721 plants were planted by 6,215 number of farmers in our project areas. Cumulatively, all these years farmers in our project area have raised 6,75,38,564 trees, with 50% survival in long term, it is still a massive tree cover under this programme. The independent research organisation in NRM have in their study highlighted the tree wealth in the hands of our farmers resulting from this programme. This is reflected in the excerpts reproduced from the study in a chapter - 10 under the title "They said on Sadguru"

## VERMICOMPOST

During the year 1242 farmers opted for vermicompost in the same number of units. Cumulatively 13,895 units have been installed in our project region over the years. On one side this large number of farmers have substantially turned to organic farming using vermicompost instead of chemical fertilizers and at the same time they are saving substantial money due to non –use or less use of chemical fertilizers.

## AGRICULTURE MECHANIZATION PROGRAMME

Our women SHG federation of Dhanpur has been managing the programme of agriculture mechanization with 18 tractors provided by the Tribal Development Department, Gujarat and John Deere Company. Though the programme has been managed satisfactorily by women SHG groups and it is useful, there are several constraints in managing this programme which are to be addressed by the government, through pragmatic and tribal friendly conditions. For last 2 years some important issues on this programme are being awaiting resolution by the government. We hope the same would be resolved earliest.

## MAHILA KISAN SASHASTIKARAN PARIYOJANA (MKSP)

MKSP programme has been implemented by our organization. This programme aims at empowering and capacity building of farm women in sustainable agriculture and allied areas.

Our organization has been mandated to target 9,000 women farmers and 120 villages in three talukas of Dahod in three years. Out of this at the end of first year 3,927 women farmers were covered under this programme. 326 numbers of existing SHGs were involved in this programme and additional 61 SHGs were formed during the year in the programme. However, some of the activities could not be taken up or completed due to cash flow problem.

Under this programme in the first year 3,927 farmers were provided training in 57 training programs and 10 training programmes were conducted for CRP and PRP.

Under this programme as mandated we promoted 3,927 kitchen gardens on 5 guntha by each women farmer.

At the national level in the review meeting in Hyderabad our approach of intensive convergence of other agricultural activities by our farmers was highly appreciated.

To end this chapter we need to mention that the photographs presented in this chapter and other chapters pertaining to agriculture development vividly speak on the impact of these activities of agriculture and allied programs. We are not describing very small programmes like pump- sets distribution etc, as they form small portion of overall activities.

*Smt. Anandiben Patel, Chief Minister, Gujarat awarding certificate to our tribal women at the function organised at Dahod by the government.*

5 CHAPTER

# GOVERNMENT: PRIME SUPPORTERS

All throughout the existence of Sadguru Foundation the government has been our prime supporter by way of entrusting us the implementation of different programmes and providing financial support for the same. Off course, this support faces some ups and downs occasionally. Change of government, change in government policy towards NGOs and attitude of individual bureaucrats play an important role in such ups and down. However, on the whole this support, with some fluctuation continues all these years.

During the reporting year the government financial support was to the extent of Rs.14 crores. This includes the financial support from NABARD as it is the government organization and also the funds provided by the government to the beneficiaries and their organizations under the programs executed by us. For example 85% of the project funds of watershed development was given to the watershed committee of the villagers under the government policy.

## PROSPECTS OF GOOD SUPPORT FROM RAJASTHAN GOVERNMENT

We have received fairly good support from Rajasthan government over the years mainly for water resources development resulting in good progress in this field in Rajasthan. The present state government under the Chief Ministership of Smt. Vasundharaji Raje is very supportive to the NGOs in general and Sadguru Foundation in particular. She has been very keen that Sadguru Foundation expands its activities in Rajasthan. With this favourable environment we expect good support from the Rajasthan government particularly in the field of water resources, watershed and agriculture. Already the state government department of agriculture have approved the amount of Rs 34 crores for implementing large number of Lift irrigation schemes and anicuts in Rajasthan. We have started implementation of the same. We hope the process of technical sanction in the state gets speeded up so that we can complete the project in time.


*Hon'ble C.M., Rajasthan, Smt. Vasundharaji had called a special high level meeting at Chief Minister's office, Jaipur on 15-09-2014 for discussing involvement of Sadguru Foundation in the development of small scale water resources development in Rajasthan. Four Cabinet Ministers, Chief Secretary, Four Additional Chief Secretaries, Secretary, Water Resources, Secretary, Rural Development and a team of Sadguru Foundation, participated in this high level meeting. The Hon'ble Chief Minister, Government of Rajasthan appreciated the work of Sadguru Foundation in Rajasthan and expected our important role in the development of water resources in the state.*

*Shri Mansukhbhai Vasava, Minister of State, Tribal Affairs, Govt. of India, talking with the Directors of the Sadguru Foundation at our institute on 16-11-2014*

## GUJARAT SCENERIO

In Gujarat we have been recently implementing Lift Irrigation programmes under the Gujarat State Water Resources Development Corporation, as this is the agency, the Government, Department of Water Resources has decided to implement the Lift Irrigation schemes. Every year we get few L. I. Schemes from this state corporation. We are expecting this corporation and other government departments to allot us more L. I. Schemes and Check Dams in Gujarat.

Besides above corporation we get few L.I. Schemes every year under the Vikas Shil Taluka Fund at District level.

We have completed one phase of approved water resources project under RKVY, Department of Agriculture Gujarat and we are awaiting above department to facilitate in taking up second phase of this project costing about 11 crores.

Recently the State Level Committee of watershed development in Gujarat has decided to involve reputed NGOs in the implementation of IWMP. We are awaiting appropriate actions in the matter.

We are expecting Gujarat government to restore its NGO friendly policy for highly reputed NGOs to implement the government programmes.

We need to be grateful to the Gujarat government, the than Additional Chief Secretary Energy and respective electricity company to resolve all the electricity issues to our satisfaction which were pending for a long. This would help large number of our tribal irrigation co-operatives. We specially express our gratitude towards Shri D.J.Pandian, who was at that time ACS, Energy and presently Chief Secretary, Gujarat Government.

## MADHYA PRADESH

In Madhya Pradesh only government program that we have been implementing is Integrated Watershed Management Project (IWMP). There are 3 such projects being implemented by us in M.P. and as their size is larger it amounts to totally 17,215 ha which is considerable hactarage. In all the three states Madhya Pradesh has been more supportive in involving NGOs in watershed development.

We intends to approach the state government for our involvement in other fields like agriculture, small scale water resources, etc. as suggested by our Board in its last meeting.

*Shri A. J. Shah, IAS, Managing Director, Gujarat Livelihood Promotion Company addressing a meeting of Women Para Professionals and Community Resource Persons (CRP) at village Bhutardi, district Dahod, on 26-09-2014 in connection with the work and progress in Mahila Kisan Sashaktikaran Pariyojana (MKSP). About 150 women worker participated in this meeting. The M.D. was very pleased in interacting with women workers and appreciated their active role, showing the empowerment of tribal women under above project.*

*Mr. Prakashraj Purohit, IAS, Collector, Banswara visiting distribution outlet of one lift irrigation scheme in Banswara on 29th November 2014. Sadguru's technical staff explaining the technical details.*

*Collector, Jhalawar, Shri Vishnu Charan Mallik, IAS, visiting our activity and discussing with our Project Manager at Parasali lift irrigation scheme on 03.05.2014.*

*Mr. M. A. Gandhi, IAS, Collector, Dahod visiting floriculture plot at village Kamboi, taluka Limkheda, district Dahod on 28th February 2015. There are 148 farmers cultivating floriculture in this village earning very good amount from a small patch of land.*

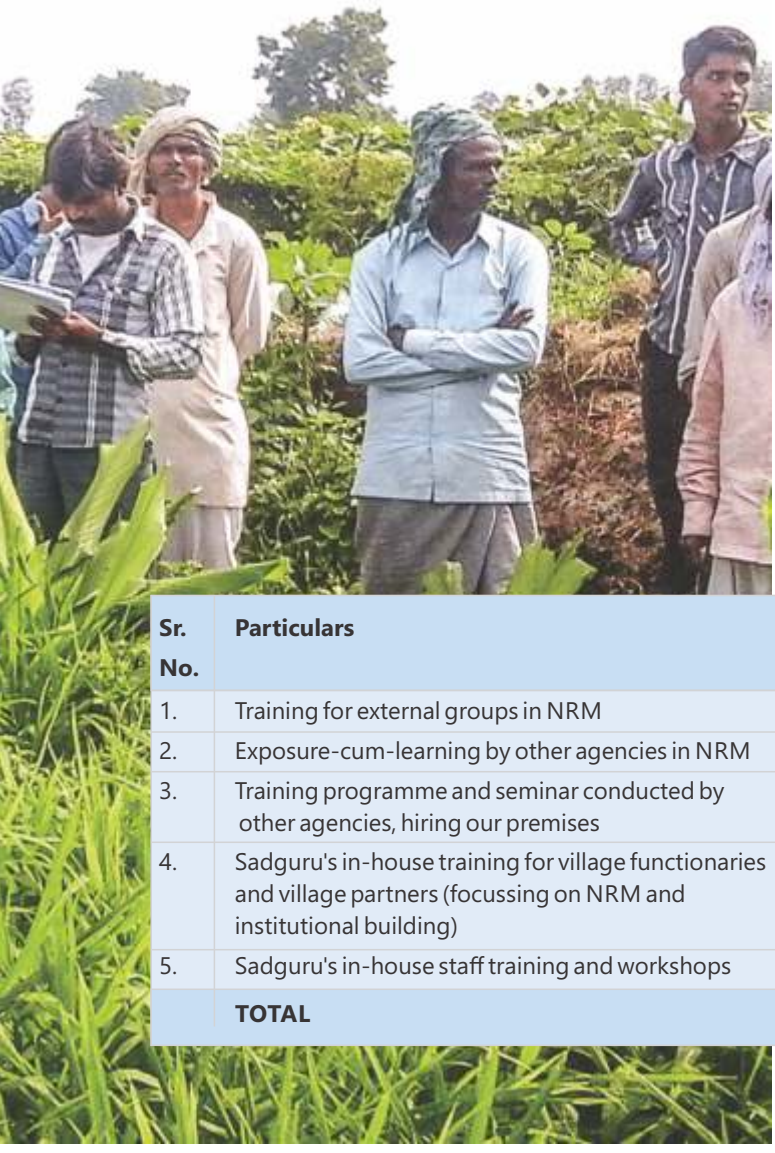
*Collector, Mandsaur, Shri Sanjeev Singh, IAS, and Zila Panchayat CEO, Rani Batad, visiting our activity of Papaya plot in Watershed Project IWMP-1 in village Guradiya Vijay on 07.11.2014.*

*Dr. Kota Tirupataiah, IFS, Additional Director General, Dr. MCR HRD Institute, Hyderabad visited our institute and activities on 26th February 2015. Dr. Tirupataiah has been associated with the rural development in Central and State Government for many many years in different high positions. He was very happy with our institute and its activities.*

*Farmers of District Dhar, Madhya Pradesh, visiting Ginger plots at village Ninamana Khakhariya of district Dahod during their training programme. The group consisted of 40 tribal farmers deputed by Government Watershed project.*

6 CHAPTER

# TRAINING AND CAPACITY BUILDING: A MASSIVE EFFORTS



The training and capacity building from the stake holders and external groups in NRM is highly focused activity of Sadguru Foundation. It has been a massive efforts and coverage as reflected in this chapter. Covering 15,093 participants in 379 training programmes of different period is huge task and therefore massive accomplishment. This number also speaks on available facilities and software in our institute. Many times 4-5 groups received training and exposure at a time in our institute, resulting in above achievements and coverage. Often our facilities are utilised by reputed organisations like NABARD, BIRD-Lucknow, SIRD-Rajasthan, Larsen and Turbo, various banks and various government departments which speaks on facilities and environment of our institute. At the same time benefits of training and exposure events are taken by reputed organizations such as Reliance Foundation, Rajiv Gandhi Watershed mission M.P., Tata Steel Rural Development Society, Jamshedpur, Irrigation Department of West Bengal, XISS- Ranchi, IIFM- Bhopal, etc.

## SUMMARY OF TRAINING PROGRAMMES

During the year 2014-15, the training programmes at our training institute were broadly as follows;

| Sr. No. | Particulars | No. of trainings | Training days | No. of participants | | |
|---|---|---|---|---|---|---|
| | | | | Male | Female | Total |
| 1. | Training for external groups in NRM | 74 | 234 | 2,904 | 149 | 3,053 |
| 2. | Exposure-cum-learning by other agencies in NRM | 34 | 75 | 962 | 319 | 1,281 |
| 3. | Training programme and seminar conducted by other agencies, hiring our premises | 30 | 64 | 1,124 | 283 | 1,407 |
| 4. | Sadguru's in-house training for village functionaries and village partners (focussing on NRM and institutional building) | 212 | 273 | 4,160 | 3,885 | 8,045 |
| 5. | Sadguru's in-house staff training and workshops | 29 | 30 | 1,047 | 260 | 1,307 |
| | **TOTAL** | **379** | **676** | **10,197** | **4,896** | **15,093** |

The above table indicates the scale and massiveness of our training and capacity building efforts during the year.

*Dr. Sanjay Singh, Principal Scientist of Central Horticulture Experimental Station (ICAR, New Delhi), Godhra conducting workshop for the Horticulture Supervisors of Sadguru on Migrating Mango from Humid Region to Semi-arid ecosystem for field supervisors on 8th January 2015. Mango being prominent fruits species being raised at large scale by the farmers, this workshop was very useful.*

*Visit of MLA of Morva Hadaf, district Panchmahal, Smt. Nimishaben Suthar, visited our training institute on 7th June, 2014 in connection with Hi-tech Horticulutre training programmes being conducted by our institute for 1000 tribal youths sponsored by Vikasshil Taluka Grant, Panchmahal*

*Engineers from Tata Still Rural Development Society (TSRDS), Jamsedpur discussing on water resources development with our technical staff in our institute. They visited our institute for three days from 22-25 September 2014 for learning technical and social aspects.*

The above information pertains to training programme at our training institute and does not include large numbers of half day training and orientation programmes held in our field offices and villages, which are attended by thousands of beneficiaries touching more than 60,000 participants in a year, as regularly every day such programmes in the field are conducted by our different line departments simultaneously.

**IMPORTANT TRAINING PROGRAMMES**

During the reporting year 2014-15, large numbers of training programmes were conducted, as reflected in above summary table. As many as 37 training programmes were conducted for watershed groups from different states mainly Gujarat, Madhya Pradesh and Orissa in which 1,202 participants took benefit. Some important training programmes during the year are shown on Annexure - 8.

**TRAINING PROGRAMMES INFLUENCING WATERSHED DEVELOPMENT AT NATIONAL LEVEL**

Since the beginning of training institute in 1995, large numbers of groups connected with watershed development programmes have taken benefit of our training programmes in our training institute.

**Students of Journalism of University of Cincinnati, USA**

*15 Students and two faculty of University of Cincinnati, USA undergoing course in journalism and environment science, visited our institution for five days programme from 16.03.2015 to 20.03.2015 to understand, learn and write on development interventions of Sadguru Foundation. They visited and studied different villages and interacted with the farmers and others. This was the fourth group of students from above university visiting our institute.*

Cumulatively, since 1996, totally, 4,806 watershed projects from different states have taken benefit of our training programme in watershed and at an average of six participants from each project, it comes to about 28,830 participants from above projects. By virtue of this large scale training provided by our training institute, it has influenced watershed development in 68.95 lakh acres (27.98 lakh ha.). This is massive influence of our training programmes at national level.

**FEEDBACK FROM PARTICIPANTS AND VISITORS**

All the participants of different programmes have admired our training programmes, methodology, contents, quality and field exposure and also the facilities and overall environment of the training institute. Few of the feedbacks are reproduced here below ;

"The group of 21 NABARD officers from 13 states visited Sadguru's horticulture development activities (NABARD TDF wadi) in the field and interacted with various programme beneficiaries. They were very much impressed with the work done by the organisation in remote tribal areas. They told us that during the five days programme, we here learnt both theory and practical and also unanimously told that Sadguru is fantastic learning centre, well discipline and self govern organisation. No other NGO can able to replicate such types of convergence of various programmes as Sadguru has done."

**BIRD Lucknow**
9-13 February 2015

"We visited community managed lift irrigation schemes and water harvesting structures in various villages of Banswara district of Rajasthan. Excellent technical work done by the Sadguru foundation, besides this technical work, we are very much impressed that community managed both the water resources structures themselves. Excellent work done by the organisation for rural tribal poor people."

**Mr. Naba Krishna Haldar**
West Bengal Accelerated Development of Minor Irrigation Project,
(Government Engineers)
23-25 November 2014

"Very nice place.... Sadguru has identified the basic need i.e. water, agriculture and other activities and its work around it. They are working in this field for three states i.e. Gujarat, Rajasthan and Madhya Pradesh."

**All Students**
IIFM, Bhopal, Madhya Pradesh
10 December 2014

"We visited sadguru's integrated natural resources development activities like community managed lift irrigation schemes and water harvesting structures, agriculture and horticulture development activities in various villages of Rajasthan and Gujarat. Technically sound work done by the organisation. Beside this we interacted several programme beneficiaries, we found that they are benefiting from these activities and they can manage the activities themselves."

**Tata Steel Rural Development Society**
Jamshedpur
22-25 September 2014

*Engineers from the Irrigation Department, West Bengal during their field visit to one of our check dam during 25-27 November 2014. They were on three days technical training on water resources.*

Sadguru had created magic by transforming lives of tribal people in its project villages. We have never seen like this before.

**Students and Faculty of**
**University of Cincinnati, USA**
visiting Sadguru's programme
from 16-20 March, 2015

*The tribal youths being imparted training in class room at Jagannath Cultural Academy and Research Centre (JCARC) at Adalaj, 25 such youths were trained by above institution in the first batch of trainees with the technical support of ASPIRE of Pune during the period February-March 2015. This programme of skill development will continue for different groups of our tribal youths, ensuring job placement in the industries immediately after the training. Incidentally at the time of preparing this report all the trainees of first batch have been duly and fully employed by International Firm and other Industries nearby Ahmedabad. This imperative trend of Skill training and immediate employment will pave way for large number of tribal youths for off-farm employment, which is a need of hour for the tribal youths.*


*Unemployed tribal youths from Dahod joining skill development training at Jagannath Cultural Academy and Research Centre (JCARC) at Adalaj, Gandhinagar. The programme was inaugurated by Shri Saurabh Patel, Finance Minister, Govt. of Gujarat on 1st February 2015. The training institute is chaired by Shri S. K. Nanda, IAS, and Shri M. S. Sahu, IAS, (Retd). as Vice Chairman, This was the first training programme for the tribal and rural boys and large number of such training programme for technical skill are to be conducted by the above organisation. Sadguru Foundation is major partner of above organisation in skill development.*

*A good financial plan is a road map that shows us exactly how the choices we make today will affect our future.*

Alexa Von Tobel

7 CHAPTER

# FINANCE

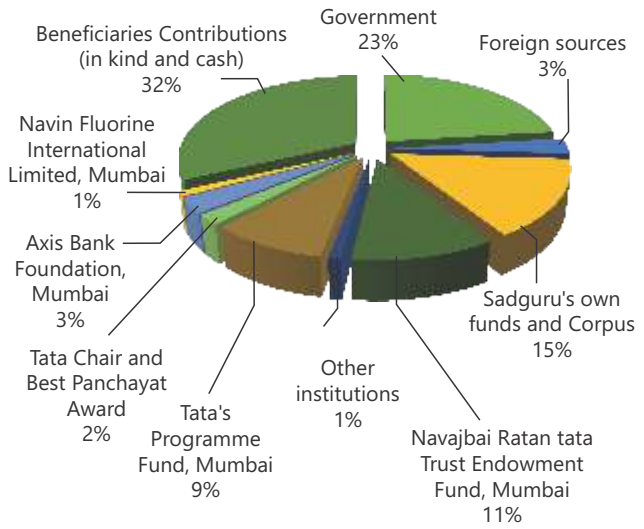
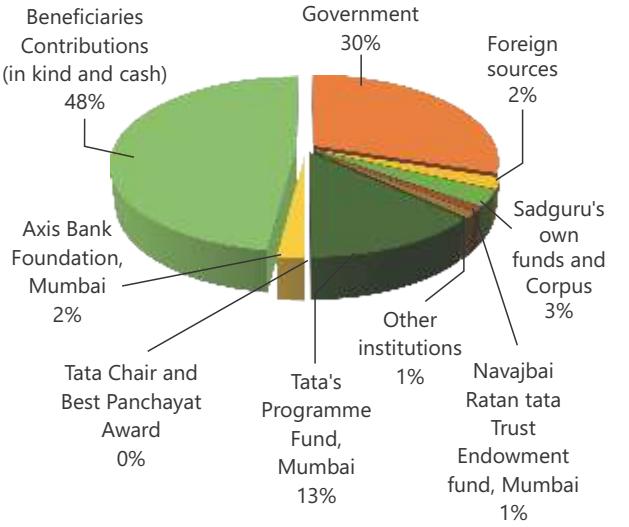
This chapter presents the financial summary related to the organisation's rural development interventions for the year 2014-15.

It us un-audited and provisional as the formal audit takes some time.

The table below reflects our funding partnership i.e funds received and its application during the reporting year 2014-15 ;

(In ₹ Lakhs)

| Sources of funds | Funds received (including opening balance of previous year) | Total application during the year | Closing balance as on 31.03.2015 |
|---|---|---|---|
| Government fund (mainly from Gujarat, Rajasthan, Madhya Pradesh, GoI, NABARD and also funds received by village committees, horticulture cooperatives, SHG federations etc. | 1676.85 | 1407.64 | 269.21 |
| **Foreign sources** | | | |
| 1. The Coca Cola company- Atlanta, USA | 61.49 | 43.76 | 17.73 |
| 2. Other Donors | 97.64 | 8.99 | 88.65 |
| 3.Collective For Integrated Livelihood Initiatives - WATSAN Project | 29.36 | 28.01 | 1.35 |
| **Total** | **188.49** | **80.76** | **107.73** |
| **Sadguru own funds and Corpus** | | | |
| 1. Sadguru's own funds including corpus donation (Sir Ratan Tata Trust- Corpus fund: Sir Dorabji tata Trust Corpus fund: other donors including individuals and corporate sector:training income etc.) | 1045.66 | 151.79 | 893.87 |
| 2. Navajbai Ratan tata Trust Endowment fund, Mumbai | 826.84 | 52.35 | 774.49 |
| **Total** | **1872.50** | **204.14** | **1668.36** |
| Other institutions | 59.11 | 42.79 | 16.32 |
| Navajbai Ratan Tata Trust, Mumbai | 565.37 | 553.03 | 12.34 |
| Jamsetji Tata Trust, Mumbai | 82.07 | 82.07 | 0.00 |
| Sir Dorabji Tata Trust,Mumbai-Tata Chair | 138.61 | 9.37 | 129.24 |
| Sir Dorabji Tata Trust,Mumbai-Best village Panchayat Award | 26.12 | 0.00 | 26.12 |
| Axis Bank Foundation, Mumbai | 189.49 | 86.59 | 102.90 |
| Navin Fluorine International Limited,Mumbai. | 50.00 | 0.00 | 50.00 |
| Beneficiaries Contributions (in kind and cash) | 2302.55 | 2302.55 | 0.00 |
| **GRAND TOTAL** | **7151.16** | **4768.94** | **2382.22** |
| **₹ In crores** | **71.51** | **47.69** | **23.82** |

| SOURCES OF FUNDS | SOURCEWISE APPLICATION OF FUNDS |
|---|---|
|  |  |



Note:

1. Previous year's figures have been regrouped / rearranged wherever necessary.
2. Due to rounding up in rupees in lakh, there would be slight discrepancy in the actual amount.
3. The government grant of Rs. 303.55 lakhs received by various Watershed Village committees of Gujarat, Rajasthan and Madhya Pradesh region is included in government receipt. Similarly an expenditure of Rs.354.31 lakhs incurred by various Watershed Village Committees is included in government expenditure. However this is not reflected in our books of accounts, though related with our activities.
4. An amount of Rs.2258.06 lakhs is included as receipts and expenditure under the source of beneficiaries' contribution in cash / kind. This amount received and spent directly by CBOs-village institutions, horticulture co-operatives, watershed committees, federations of CBOs, etc. However, these receipts and expenditure is not reflected in our books of accounts, though related with our activities.

**Beneficiary's contribution and amount spent by village level committees of watershed Programme, Horticulture Cooperatives and SHG Federations - CBOs Federations and Individual Farmer**

The major break up beneficiaries' contribution in cash and in kind as shown in the above table under beneficiaries contribution is as follow. This amount is not reflected in our Books of Account as it was in kind as well as spent by village level committees etc, though related with our programmes.

(In ₹ Lakhs)

| Particulars / Programmes | Beneficiaries contribution in cash / kind | Expenditure directly incurred by village level committees from government grant | Total |
|---|---|---|---|
| Horticulture, orchard development & Agro- Forestry | 118.62 | 0 | 118.62 |
| Watershed Development | 10.82 | 354.31 | 365.13 |
| Crop productivity enhancement during Kharif and Rabi season | 2128.62 | 0 | 2128.62 |
| **GRAND TOTAL** | **2258.06** | **354.31** | **2612.37** |
| **₹ In crores** | **22.58** | **3.54** | **26.12** |

## DEVELOPMENT INTERVENTIONS EXPENDITURE DETAIL DURING 2014-15

During the reporting year 2014-15, the funds were spent in the below mentioned rural development interventions which is consistent with the organisation's objectives and also that of Donors objectives for which the funds given.

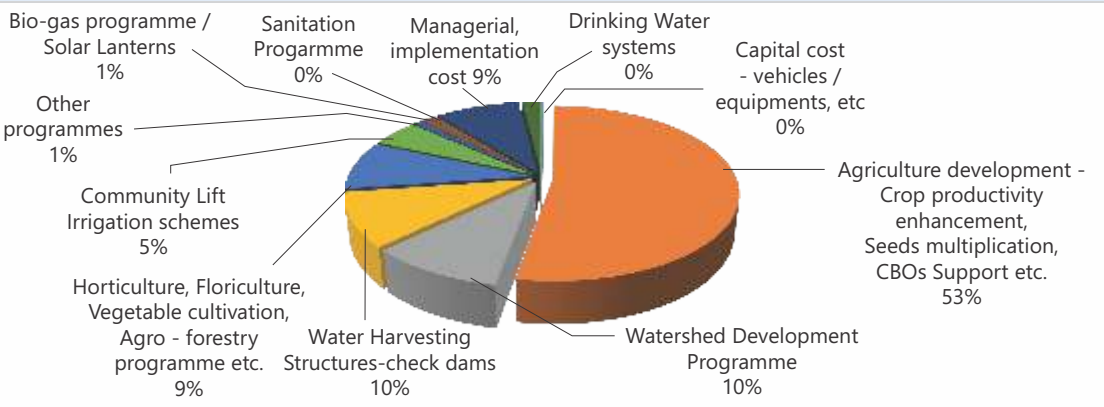
### Development Interventions

(in ₹ Lakhs)

| A. PROGRAMME INTERVENTIONS | EXPENDITURE |
|---|---|
| 1. Agriculture development -Crop productivity enhancement, Seeds multiplication, CBOs Support etc. | 2503.59 |
| 2. Watershed Development Programme | 493.97 |
| 3. Water Harvesting Structures-check dams | 455.82 |
| 4. Horticulture,floriculture,Vegetable cultivation,Agro- Forestry programme etc. | 414.22 |
| 5. Community Lift irrigation schemes | 260.39 |
| 6. Other programmes-advocacy and net working, dairy development, APMC Tractor programme, women SHG federations, Improving Water Management performance through POS machine etc. | 47.90 |
| 7. Rural Energy-Bio-Gas programme /Solar Lanterns | 44.23 |
| 8. Sanitation Progarmme | 18.75 |
| 9. Drinking Water systems-House to House drinking water systems/ construction of new dug wells & bore wells for installation of hamlet based community drinking water systems for drinking and irrigation | 8.32 |
| **TOTAL (A)** | **4247.19** |
| **B. NON PROGRAMME INTERVENTIONS** | |
| 10. Managerial / implementation cost (includes salary, honorarium, building recurring & maintenance cost, other administrative and over head cost etc.) | 412.37 |
| 11. Training and Technical Support | 94.03 |
| 12. Capital cost- vehicles / equipments, etc | 15.35 |
| **TOTAL (B)** | **521.75** |
| **GRAND TOTAL (A+B)** | **4768.94** |
| **₹ In crores** | **47.69** |

The expenditure of ₹ 47.69 crores during the year, including cash and kind by the beneficiaries, has been the highest ever by the organisation.

**EXPENDITURE ON DIFFERENT ACTIVITIES**




## THE MANAGERIAL / IMPLEMENTATION COST

The managerial / implementation cost during the year 2014-15 was 9 % of the total utilization of the funds. Part of managerial cost vis-a-vis human resources cost of the project staff was charged to the project cost. This is extremely reasonable cost.

## THE MAJOR FUNDING PARTNERSHIP DURING THE YEAR 2014-15

The broad list of the funding partners during the reporting year 2014-15 is given in Annexure-9. This includes the funders for the reporting year and also of the funders of the past years on account of the unspent balance.

## AXIS BANK FOUNDATION: A NEW MAJOR NON - GOVERNMENT FUNDING PARTNER

During the reporting period, Axis Bank Foundation, Mumbai became our new major non-government funding partner. This ABF funds have been approved for the period of four years commencing from October, 2014. This new funds is to be utilised in our project areas in Gujarat and Rajasthan. The amount of ABF will be helpful in leveraging good amount for other sources for various activities meant for tribals and rural poors.

## BENEFITS AND PERKS TO THE STAFF

Our regular and permanent staffs are offered various perks and benefits and are reflected in Annexure - 10.

## AUDITS AND INSPECTIONS AND VERIFICATION OF OUR ACCOUNTS

During the reporting year there were totally 20 audits and inspections of our accounts were carried out, out of which 8 numbers of audits and inspections were carried out by practicing Chartered Accountant's firms.

Followings are the list of audits and inspections took place during the reporting period;

1. An official from CInI, Ahmedabad, reviewed and inspected WATSAN-Sanitation funded programme (April 2014).
2. A firm of Chartered Accountant from Mandsure, M/s. Mayank V Jain verified the accounts of IWMP-6 funded watershed funded projects for the year 2012-13 and 2013-14 (April 2014)
3. ISO Surveillance external audit for the system / process was conducted by competent authority for recertification process (May 2014).
4. Officials from NABARD, Gujarat, verified and inspected NABARD funded horticulture project in Dahod (May 2014).
5. Officials from NABARD, Rajasthan, verified and inspected NABARD funded horticulture project in Banswara (May 2014).
6. A firm of Chartered Accountant, M/s. Rozmin N Ajani, Hyderabad, verified the entire accounting system of the organisation's for the revision of organisation's finance manual.(July 2014)
7. PWC - a team for impact assessment work of NRTT funded project have taken overall view on the organisation's accounting system (August-2014).
8. A firm of Chartered Accountant from Kota (Raj.) verified the accounts of IWMP-9 &13 funded watershed funded projects for the year 2012-13 and 2013-14 (August 2014).
9. An official from CInI, Ahmedabad, reviewed and inspected WATSAN-Sanitation funded programme (September 2014).
10. A Government official from Bhopal (MP), reviewed and inspected the accounts of IWMP-1 & 6 funded watershed funded projects for the year 2013-14 (September 2014).
11. A Team from CInI, Ahmedabad, reviewed and inspected WATSAN-Sanitation funded programme (November 2014).
12. A firm of Chartered Accountant from Jamshedpur, M/s.R Gopal & Associates have taken review of the organisation's accounting System (December 2014).
13. Officials-Manager Account/Audit from NABARD, Gujarat, verified and inspected NABARD funded horticulture project in Dahod (December 2014).
14. A firm of Chartered Accountant M/s. S B Kapadia & Co verified the accounts of Nabard funded watershed funded projects IGWMP for the year 2013-14 (December- 2014).
15. Officials from Axis Bank Foundation, Mumbai have taken overall view of the organisation's accounting system. (December 2014).
16. Officials from NABARD, Gujarat, verified and inspected NABARD funded horticulture project in Dahod (January 2015).
17. A Team from CInI, Ahmedabad, reviewed and inspected WATSAN-Sanitation funded programme (February 2015).
18. Officials from NABARD, Gujarat, verified and inspected NABARD funded horticulture project in Dahod (February 2015).
19. M/s. A. W. Pathan & Co., Chartered Accountants, Dahod, audited the organization's accounts in capacity of Internal Auditors on quarterly basis.
20. M/s. A. R. Mannan, Chartered Accountants, Vadodara, audited the organization's accounts as required statutorily on half yearly basis.

8 CHAPTER

# OTHER INFORMATION

**Some non-NRM programmes, activities are described in this chapter.**

## NON CONVENTIONAL ENERGY PROGRAMME

### BIO GAS PLANTS

During the reporting period 2014-15, totally 147 bio gas plants (18 in Gujarat and 129 in Rajasthan) have been installed in Gujarat and Rajasthan. All these plants have been functioning well. Cumulatively, 2,975 Bio-Gas plants have been installed.

### SOLAR LANTERNS

During the reporting period, 958 solar lanterns were provided to tribal households in Banswara (800) and Dahod (158). With 1,586 solar lanterns provided to the tribal households in the previous years, in total 2,544 solar lanterns provided to the tribal households.

### SANITATION

Under Individual household Toilets (IHHL) 159 sanitation blocks were constructed for tribal households in Dahod, Gujarat. With earlier 650 toilet blocks constructed, the total has come to 809 sanitation blocks. In the reporting year the toilets were constructed under TADP and Swach Bharat Mission. This programme is now high priority program for Government of India and State Government, but, due to some policy constraints NGOs and other agencies will

*Sanitation blocks constructed at village Bawka, Dahod, Gujarat under the entry point activity of watershed development project. 159 sanitation blocks for 159 tribal households have been constructed recently in this village. It was planned to construct 1600 toilet blocks for the entire village with the support of the government, but, this may not be materialised due to policy issue.*

have difficulty in participating in this programme due to cash transfer to the individual account. This is apparently a good policy but in this case of toilet construction the subsidy amount will be transferred on physical progress and poor tribals cannot invest in this program. And therefore they need to be supported by some good intermediary agencies like good NGOs, banks, etc. but without guarantee of repayment no one would offer bridge finance for the construction of toilets under this program. The government will have to work out some pragmatic policy in which honest organisation can offer support in the construction of the toilets and the payment to such organisation is ensured in some manner. If this is not done this program will not make good progress in the tribal region, particularly, quality work may not take place and in large number of cases it would be a repeat of Total Sanitation Program (TSP) which miserably failed.

**SANSAD ADARSH GRAM YOJANA (SAGY)**

Dahod, MP has selected village Munadha, taluka Jhalod to develop it under Sansad Adarsh Gram Yojana. Our institution is assigned to undertake different development activities in this village. In our knowledge of all such selected villages in the entire Gujarat which has 26 lok sabha members and few more in Rajya Sabha, we are the only NGO associated with Sansad Adarsh Gram Yojana.

We have in a short period initiated some activities. Brief list of activities initiated by Sadguru Foundation in this village is as follows;

i. To create awareness in the village and play effective leadership role in building People's Organisation/ Groups for various development activities.
ii. To facilitate convergence/ integration of various programmes of NABARD, state/ Central Government and other agencies in the village.
iii. To help/ prepare a Village Development Plan to ensure socio- economic and livelihood advancement with enhanced credit support and financial inclusion of all families in the village.
iv. To identify capacity building needs of the villagers.
v. To assist in infrastructure development in the village through participation of people / local institutions.
vi. To monitor progress of implementation of the plan.

**BROAD ACTIVITIES TO BE FOCUSED BY SADGURU FOUNDATION**

I. Interface with village communities and assessing their varied needs through participatory rural appraisal (PRA) techniques.
II. Facilitate formation of Self Help Groups Initiatives in order to meet credit needs of village households.
III. Watershed Development/ Multi-activity approach/ livelihood based activities.
IV. Development through "Wadi" approach and vegetable cultivation
V. Off- farm / Non-Farm activities including skill developments of youths, marketing related intervention.
VI. Environment/ Ecology related interventions.

**PHYSICAL ACHIEVEMENTS SO FAR TILL 31st MARCH, 2015 ARE:**

| Sr. No | Activity | No. of Unit |
|---|---|---|
| 1 | Biogas | 8 |
| 2 | SHG formation | 14 |
| 3 | Milk dairy Co-operative | 51 member |
| 4 | Well Deepening | 25 |
| 5 | Vegetable cultivation | 30 |
| 6 | Base line survey at household level | 947 |

As per plan these and other activities will be expanded in the year 2015-2016.

**PARTNERS IN NETWORKING**

We are partners in some important networking such as ;

VANI, network of NGOs
SAJJATA Sangh network organization in NRM, Gujarat
PRAVAH drinking water network in Gujarat
IRENet, a network for rural energy
Mahila Swaraj Abhiyan, a network of Gujarat NGOs working for women

**STAFF DEPUTED FOR TRAININGS AND WORKSHOPS**

As many as 71 staff attended seminars / trainings / workshops during the reporting year 2014-15 at various places outside our Institute.

*Shri Hrishikesh Mafatlal, Chairman, Mafatlal Industries and Trustee of Sadguru Foundation visiting newly constructed toilet blocks at village Bawka in Dahod district on 8th December 2014.*

Under Sansad Aadarsh Gram Yojana, in Dahod district, village Mundha, taluka Jhalod has been selected. Sadguru Foundation has been entrusted role to undertake or to motivate villagers for various development activities. One of the activities undertaken by Sadguru is formation of milk co-operative. The villagers took interest and agreed in a village meeting to form milk co-operative. In the beginning 50 members have joined this co-operative and more are expected in future. The co-operative is duly registered with the Panchamrut Dairy and started giving milk to this dairy. In this village Sadguru has initiated other activities like agriculture extension, deepening of wells, installation of biogas plants, etc. In very near future present activities will be intensified and new activities will be taken up as per the potential and need.

## THE STUDIES / REPORTS / DOCUMENTS DURING THE YEAR 2014-15

1. The Impact of Sadguru Foundation Compilation of Success Stories from Annual Reports from 2000-01 To 2014-15 (April 2014)
2. David Groenfeldt : Water Ethics: A Values Approach to Solving the Water Crisis (Water Resources Management An International Journal – Published for the European Water Resources Association (EWRA) Vol – 28 , No- 06 ) by Prof. Dr. G. Agoramoorthy (Professor at the College of Environmental Science, Tajen University, Taiwan &Tata-Sadguru Visiting Chair at Sadguru Foundation, Dahod, Gujarat,India (April 2014)
3. The Impact of Sadguru Foundation Compilation of Success Stories of Dahod District, Gujarat from Annual Reports from 2000-01 To 2014-15 (May 2014)
4. Green Revolution by Marginal Tribal Farmers Through water Centered NRM Program in Semi Arid Tribal Dry Lands in District Dahod, Gujarat, with the Partenership of Department of Tribal Development and Other Government Departments, Non Government and Corporate Houses and Prominent NGO Progress at a Glance from 2001-02 to 2014-15 (May 2014)
5. Presentation for Hon. C.M., Rajasthan on June 2014 (June 2014)
6. Sadguru Foundation`s Agenda for the Meeting With Hon.Cm, Rajasthan on 14.06.2014 at Banswara (June 2014)
7. Sadguru`s Capacity Building Trainings Improve the Livelihoods of Rural Women Farmers by Prof. Dr. G. Agoramoorthy (Professor at the College of Environmental Science, Tajen University, Taiwan &Tata-Sadguru Visiting Chair at Sadguru Foundation, Dahod, Gujarat, India (June 2014)
8. Climate Change Mitigation in India`s Drylands Case Study of Sadguru`s Ecofriendly Check Dams by Prof. Dr. G. Agoramoorthy (Professor at the College of Environmental Science, Tajen University, Taiwan &Tata-Sadguru Visiting Chair at Sadguru Foundation, Dahod, Gujarat, India (June 2014)
9. Agriculture Based Livelihood Activities – A Proven Model for Poor Farmers in Dahod District of Gujarat by Kanhaiya Choudhary (June 2014)
10. Significant Development (Important Information ) (July 2014)
11. Presentation for Axis Bank Foundation, Mumbai on (July 2014)
12. Small Farmers Progressive Farmers (SFPF) Potential of Floriculture in Peri-Urban and Tribal Areas Dahod, Gujarat and Baliyawas, Haryana by Alankrita Goswami and Shivansh Mishra (Development Internship Segment PRM 34, Submitted to International Water Management Institute, Faculty Guide: Prof. Pramod Kumar Singh) (July 2014)
13. Towards Optimum Development Through NRM Centered Programme in Consortium Mode (Draft Concept Note) by Harnath Jagawat (July 2014)
14. Green Revolution by Marginal Farmers Through Water Centered Agriculture and Allied Program in Semi Arid Tribal Dry Lands in Rajasthan and Gujarat with Support of the Government , Non Government, Corporate Houses (Presentation before CM, Rajasthan 15.09.2014)(September 2014)
15. (Preliminary Draft) Rajasthan Participatory Water Harvesting Campaign (Rajasthan Jal Yagna) by Harnath Jagawat (November 2014)
16. Sadguru Model of Rural Development Mitigates Climate Change in India's Drylands by Prof. Dr. G. Agoramoorthy (Professor at the College of Environmental Science, Tajen University, Taiwan &Tata-Sadguru Visiting Chair at Sadguru Foundation, Dahod, Gujarat, India (January 2015)
17. Water to Economy – A Regional Footprint Analysis of Sadguru's Work in Dahod, Gujarat by Sunderrajan Krishnan & Rajnarayan Indu (INREM Foundation, Anand, Gujarat (February 2015)

## STAFF TURNOVER

Only two staff from regular position left the organization during the reporting period which came to about 2 % of the total staff.

It would be interesting to mention the longitivity - stability of our present staff with us which is given in the table below ;

| Sr. No. | Years | Numbers |
|---|---|---|
| 1. | More than 20 years | 33 |
| 2. | Between 15-20 years | 12 |
| 3. | Between 10-15 years | 19 |
| 4. | Between 5-10 years | 12 |
| 5. | Less than 5 years | 08 |
| | **Total** | **84** |
| | Department heads and equivalent senior staff with more than 10 years | 10 |

About 78 % (say 80 %) of the staff have been with us for 10 and more years and 55 % of them for 15 and more years.

The above information indicates good stability of our staff which results in very good performance in all our activities.

## TRANSPARENCY

The organization observes total transparency on all aspects of its functioning. Virtually everything is shared with the staff as well as any other stakeholders and on asking information are made available. All our informations, annual reports, audited accounts, etc. are put in public domain on our website.

## ISO CERTIFICATION

Institution possesses ISO 9001 : 2008 certificate No. SG11 / 03558 valid till 31.07.2017.

## ACCREDITATION BY CREDIBILITY ALLIANCE

We are also member of Credibility Alliance and have got accreditation from Credibility Alliance for strict transparency norms and building a well governed and trust-worthy voluntary sector with strong norms and conducts to be effective on the basis of capability, transparency and integrity. Our membership of Credibility Alliance is 000496GJ08.

## CARE RATING

We have been rated under NSIC-CARE Performance and Credit Rating for Micro & Small Enterprises and obtained highest rating of SE IA which indicates 'highest performance capability and high financial strength'. Not only such highest rating is rare, it has great significance because this is given after very strict scrutiny. Hardly any NGO in our country might have got such highest rating.

## VISITORS

Totally 5,904 visitors visited our activities during the reporting year 2014-2015, the list of which is prepared separately for those who may need it as it is not convenient to incorporate entire list in this report on account of the number of visitors.

| Category | Numbers of Visitors |
|---|---|
| Government Organizations | 1,499 |
| Non-Government Organizations | 3,469 |
| Academic Institutes | 335 |
| Journalists/Consultants | 7 |
| International Visitors | 37 |
| Others | 557 |
| Total | 5,904 |

## EMPLOYMENT GENERATION

During the reporting year 2014-2015 the direct employment generation under various activities of Sadguru was as follows;

| Sr. No. | Programme | Total Employment in person days | Women Employment in Person days | Percentage of women employment |
|---|---|---|---|---|
| 1. | Construction of Lift Irrigation projects | 66,070 | 42,945 | 65% |
| 2. | Construction of Check Dams | 98,715 | 68,101 | 70% |
| 3. | Watershed Development | 44,179 | 24,298 | 55 % |
| 4. | Social Forestry - Agriculture programmes | 49,47,924 | 9,89,582 | 20% |
| 5. | On Farm Irrigated Agriculture 2014-15 on 1,20,000 acres | 33,84,640 | 20,30,784 | 60 % |
| | **TOTAL** | **85,41,528** | **31,55,710** | **37%** |

*Mr. Jaison Jecob officials from AXIS Bank Foundation visiting our check dam at Jhumki, Banswara, Rajasthan, on 2nd May 2014.*

*Bhagini Geeta Didi from Mount Abu Bhramkumari Vishwa Vidyalaya gave lecture on spirituality and self management at Chosala on 31.07.2014.*


*Our stall at the international expo of vibrant Gujarat and global summit - A prestigious event organised by Gujarat Government from 7-13 January, 2015 at Gandhinagar, among NGO sector. We were the only participant in above event.*

9 CHAPTER

# CREDIBILITY ALLIANCE - INFORMATION ON DESIRABLE NORMS

As a member of Credibility Alliance and having Accreditation certificate from Credibility Alliance, we have to furnish information under minimum norms as well as under desirable norms, which are furnished in this separate chapter in this annual report of 2014-15..

**ORGANIZATION INFORMATION**

**Name of organization and address**

Already given in the beginning and end of this report. Registered address of the organization is not different from the address for communication.

**Registration under different Acts**

1. Registered under Bombay Public Trust Act 1950 - No. F/113 Panchmahals dated 21.02.1986

2. Registered under Societies Registration Act 1860 - No. GUJ/124 Panchmahal dated 21.02.1986

3. Registered under Foreign Contribution Registration (Regulation) Act (FCRA) 1976 - No. 042070038 dated 31st July 1987

4. Registered under Income Tax Act, 1961 U/S 12(A) (a) No. BRD/SIB110-9-S/86-87 dated 18.08.1986

5. Registered under Income Tax Act 1961 U/S 80G (5) Registration No. S.BRD/AA-AA-III/Tech/104-140-N/2008-2009 dated 16.06.2009 validity period from 01.04.2009 to 31.03.2012. The validity continue to be valid in perpetuity - vide CBTD Circular No. 7/2010(F.No.197/21/2010-ITA-I) dated 27.10.2010

6. Income Tax Permanent Account No. : AAATN1972A

7. Notified u/s 10(23c) of Income Tax Act 1961 for 100 % exemption of income of the Trust. Notification No. BRD/CC/Tech/10(23c)(iv)/10-11 dated 12.05.2010. Validity for the period from A.Y.2010-11 to 2011-12 The validity continue to be valid in perpetuity - vide CBTD Circular No. 7/2010(F.No.197/21/2010-ITA-I) dated 27.10.2010

**Information on Board members**

The information on Board members as on 31st March, 2015 is reflected in the beginning of this report. As well as later part of this chapter.

**Numbers of Board meetings held in a year**

Two Board meetings were held during the reporting year (2014-15) on 08.08.2014 and 13.02.2015. The numbers of Board members attended the first meeting was six out of total eleven members (and four advisors) and second meeting was attended by six out of total ten members (and six advisors). In the first meeting, two new Trustees were appointed. Both the time requirement of quorum was met.

**Names and addresses of auditors**

| Sr. No. | Name | Addresses |
|---|---|---|
| 1. | **Mr. A. R. Mannan** | Chartered Accountant<br>Camps Corner, 3rd Floor, Near Narhari Hospital, Fatehgunj, BARODA - 390 002 Gujarat |
| 2. | **Mr. A. W. Pathan** | Chartered Accountant<br>Star Complex, Second floor, Darpan Cinema road, DAHOD - 389 151 Gujarat |

**Names of Bankers and legal advisors**

**Main Bankers :**

**Bank of Baroda,**
Hanuman Bazaar,
DAHOD - 389 151
Gujarat

**Axis Bank,**
Station Raod,
Dahod.-389151
Gujarat

Other Bankers with our accounts are listed in the beginning of report along with list of Board members.

**Legal Advisor**

Not applicable

**Details of number of staff and their range of salary**

| | **Gross Monthly Remuneration** | **Designation** |
|---|---|---|
| Highest paid employee | ₹ 49,605/- | Director Finance |
| Second highest paid employee | ₹ 48,212/- | CEO cum Director Operations |
| Third highest paid employee | ₹ 42,002/- | Dy. Director |
| | **Gross Monthly Remuneration** | **Designation** |
| Lowest paid employee | ₹ 12,131/- | Hostel Attendant |
| Second lowest paid employee | ₹ 12,221/- | Driver |
| Third lowest paid employee | ₹ 12,441/-/- | Office Assistant |

| **Remuneration Directors** | **Gross Monthly Remuneration** |
|---|---|
| Mr. Harnath Jagawat | ₹ 28,235/- |
| Mrs. Sharmishtha Jagawat | ₹ 28,235/- |

Two full time Directors-cum-Trustees have been paid remuneration after the year 2000. Till the year 2000, both of them were on the pay roll of Corporate House and paid by the Company as per long term arrangements. They have voluntarily opted to take lower remuneration than most of the senior officers of the Organization. One Director ranks 16th and second Director ranks 17th in remuneration status.

**Details of number of staff and their range of salary (regular permanent staff)**

Slab of gross salary (in ₹) plus benefits paid to ;

| Staff (per month) | Male | Female | Total |
|---|---|---|---|
| Less than 5000 | - | - | - |
| 5,000 - 10,000 | - | - | - |
| 10,000 - 25,000 | 48 | 17 | 65 |
| 25,000 - 50,000 | 17 | 02 | 19 |
| 50,000 - 1,00,000 | - | - | - |
| Greater than 1,00,000 | - | - | - |
| **TOTAL** | **65** | **19** | **84** |

Village level honorary workers mainly employed on seasonal basis and temporary basis as well as temporary project staff for project period are not included in above information, as they are in huge numbers due to seasonality of some of our works.

**Networks and Linkages**

Networks and linkages with other organizations is mentioned at relevant place in Chapter - 8.

**Historical origins, brief history, milestones of the organization**

The organization started working since 1974 with the main objective to improve the living conditions of rural poors and tribals in the most backward areas in Western India. Right from the beginning it focused on water resources and land resources development. In the beginning of first twelve years it worked under the banner of another Trust, Shri Sadguru Seva Sangh Trust, and from February 1986 it started working as independently registered organization as agreed by the earlier sponsors. Right from the beginning, it has the support of Government and business houses. Over the years it has acquired expertise in land and water resources development and presently it covers 3,30,234 households and more than 19,83,781 people in 1,425 villages under various activities described in the present Annual Report. Last fourteen years physical progress is furnished separately Annexure – 3 and the impact of various activities is reflected as narratives and visuals in the present annual report of the year 2014-2015.

**PROGRAMME INFORMATION**

**Mission of Organization**

Mission of organization is stated in the beginning of this report

**Main Activities and objectives**

Main activities are various programmes like community lift irrigation, water harvesting structures - check dams, agriculture development, horticulture development, floriculture development, milk producers cooperatives (women), etc., all aimed to improve the living conditions of poors. Besides programmes, the community institutions are built up and developed for managing the programmes by people themselves as narrated in Annual Report. Massive training in NRM (Natural Resource Management) is provided to more than 15,000 participants during the reporting year as reflected in this Training chapter of this report.

At present the geographical area is spread over in sixteen districts of three states ; Gujarat, Rajasthan and Madhya Pradesh, mostly contiguous though in different states. The training and technical inputs are provided to different groups of 20 states and few international participants.

**Review of Progress**

The entire present annual report is full of progress and various other details including studies, evaluations and reviews by various agencies. The list of such studies is furnished in Chapter - 8. Also there is separate chapter in this annual report giving excerpts of three important studies carried out by independent experts and agencies during the reporting period in Chapter -10 of this report

**Information regarding internal and external evaluations**

Regularly internal and external evaluations as well as audits take place by various agencies and donors including AG auditors i.e. CAG of Government of India through it's regional offices. The list is shown in this report in Chapter - 7

**Major plans for future**

- Intends to replicate and expand with integration in different villages and areas with diversification and focus on marketing and agro processing, etc. More attention to new districts and more intensification in less intensified areas, districts / talukas / villages.

- To provide training, other inputs including technical support to NGOs and other groups for the replication of our programmes for rural poors and tribals in present project areas and other areas on demand on support available in other areas.

- To focus on community based organizations (CBOs) to make them more responsible and effective in different programmes. For sometimes great efforts are being made to make CBOs more active and responsible as reflected in the chapter-1 on the CBOs of this annual report.

- Giving focus on Skill Training to the rural and tribal youths to prepare them for off-farm livelihood as the farming activity will not absorb all youths of farming community

- To play more effective role in advocacy and policy changes.

**ADDITIONAL INFORMATION**

Besides accrediated by Credibility alliance, we are also duly certified as follows;

- Obtained highest possible rating by Credit rating under NSIC- CARE for performance and credit. This is rare in NGO sector

- Holding ISO 9001: 2008 certificate.

**FINANCIAL INFORMATION**

**Audited statement of accounts**

Our annual report is published within a week on completion of outgoing financial year. Audited accounts are not furnished in annual progress report. Audited accounts are published after duly auditing which takes about 2-3 months. They include all the schedules and will be available on request free of cost. However, financial information for reporting year is furnished in Chapter-7, giving un-audited financial progress.

However, audited accounts of previous year 2013-14 were published and sent to all including Credibilty Alliance. Our audited balance sheet is put in public domain on our website.

Our audited accounts are full accounts and not abridged balance sheet. However, in our audited balance sheet of the year 2014-15 we will try to incorporate abridged balance sheet, otherwise full accounts and balance sheets will be submitted as and when audited.

Our system of accounts is on mercantile basis.

**Annual Report**

The annual report is presented within a week of the completion of outgoing financial year. However balance sheet does not form part of annual report as it will take some time in auditing of our accounts. This is our practice for several years and accepted by all funding agencies and government departments.

We have in this report furnished provisional un-audited statements of accounts showing percentage wise expenditure, etc. in our Chapter – 7 on Finance.

This chapter on finance shows achievements and main features of our financial performance during the reporting period.

**Board members who are related to one another by blood or marriage**

Following Board members are related as husband and wife ;

1. Mr. Harnath Jagawat

2. Ms. Sharmishtha Jagawat

Though they are related by marriage, they are in the Board by virtue of their qualifications, experience and husband-wife team who was responsible for the creation of this NGO as Founder Trustees. They have lifelong commitment for rural development and both have been working for more than 4 decades nurturing, strengthening and making NGO as one of the most successful, with national and international reputation with the support of highly qualified professional team.

## Details of Board members as on 31st March 2015

| Sr. No | Name & qualifications | Present Address | Gender | Date of birth | Occupation | Position in the Board | Remarks |
|---|---|---|---|---|---|---|---|
| 1. | Shri M. S. Sahu, IAS (Retd.); B.Sc; Engineering (Electrical) | Former Additional Chief Secretary, Industries, A-302/5,Parijat Redency, Near Petrol Pump, Simandhar Derasar Road,Bodakdev, AHMEDABAD - 380 054 Email: m.sahu@nic.in Cell : 09978406417 | Male | 10.01.1954 | IAS, Retired as Additional Chief Secretary, Gujarat | Trustee & Chairman | Associated with Rural development in his various capacity as IAS officer and association with our organization since 1984 till today |
| 2. | Ms. Mamta Verma, IAS; MA in Psychology | Industries Commissioner, Udhoy Bhavan, gandhinagar Gujarat Home Address : 226 / KH, Sector 19, GANDHINAGAR Email: mamtaias@rediffmail.com Cell : 09978407301 | Female | 01.04.1972 | IAS Officer, service in Govt. | Trustee | Involved in rural development as Collector, Dahod and associated with our organization since 2004 |
| 3. | Mr. Arun Kumar Nigam IAS, (Retd.) | 524/1, Sector - 8 B, Gandhinagar Email: arunkumarnigam@yahoo.com Cell No. 09998001878 09426344661 | Male | 15.06.1944 | IAS (Retd.) Former Secretary with Government of Gujarat | Trustee | Associated with rural and tribal development in his different capacity with the government and Trustee with our organization since 2012 |
| 4 | Prof. Tushaar Shah; PhD | Principal Scientist, International Water Management Institute, Elecon. "Shwet Karan", Mangalpura, ANAND - 388 001 Email: t.shah@cgiar.org Home Phone No.: 02692-263817 Cell no : 09925049040 | Male | 05.09.1951 | Former Director, IRMA & Presently, Senior Fellow, International Water Management Institute | Trustee | Associated with rural development during his tenure as Director, IRMA and thereafter associated with water resources at national and international level and serving as trustee of our organization since 2012 |
| 5. | Dr. Mihir Parikh; PhD | 57, Arihantnagar, B/h. Dwarkanagar, Bamroli road, GODHRA - 389 001 Panchmahals Email: emihir@gmail.com Cell No. 09987781585 | Male | 20.04.1967 | Former Professor in USA & presently, Head of Research and Knowledge Management with International Tax Consultant firm M/s Nishith Desai Associates, Mumbai | Trustee | Associated with rural development as a trustee of our organization since 2012 |

| Sr. No | Name & qualifications | Present Address | Gender | Date of birth | Occupation | Position in the Board | Remarks |
|---|---|---|---|---|---|---|---|
| 6. | Mr. R. Venkataramanan Advance management Programme, LLB, MBA (Finance), B. Sc. | Sir Dorabji Tata Trust and Allied Trusts,26th floor, World Trade Centre, Cuffe Parade, MUMBAI - 400 005 Email: rvenkat@tata.com | Male | 03.10.1974 | Executive Trustee, Sir Dorabji Tata Trust and Allied Trusts | Trustee | Associated with rural development as an official of Tata Trust and nominated trustee of Sadguru Foundation as a representative of Tata Trust since 2013 |
| 7. | Mr. Hrishikesh A. Mafatlal | Mafatlal Industries Ltd., Mafatlal House, 5th floor, H. T. Parekh Marg, Backbay Reclamation, MUMBAI - 400 020 Email: tvs@mafatlals.com Cell No.: : 09820006800 | Male | 24.11.1954 | Chairman & Managing Director, Mafatlal Industries Ltd. | Trustee | Associated with rural development for more than 35 years, supporting rural development |
| 8. | Dr. Kirit Shelat, IAS (Retd) | 6, Manikamal Society, Surdhara Circle, Opp. Doordarshan Tower, Thaltej, AHMEDABAD - 380 054 Email: drkiritshelat@gmail.com Cell No.: 09904404393 | Male | 09.01.1946 | Former Principal Secretary, Government of Gujarat | Trustee | Nearly 40 years associated with rural development & related activities |
| 9. | Ms. Sharmishtha Jagawat MSW - Diploma in Community organization, Israel | N M Sadguru Water and Development Foundation, Post Box No. 71, Dahod - 389 151, Gujarat Email: nmsadguru@yahoo.com Telephone : 09825038601 | Female | 22.09.1939 | Full time Director, N M Sadguru Water and Development Foundation | Director & Trustee | Actively associated with tribal and rural development for last 51 years |
| 10. | Shri Harnath Jagawat MSW | N M Sadguru Water and Development Foundation, Post Box No. 71, Dahod - 389 151, Gujarat Email: nmsadguru@yahoo.com Telephone : 09825047367 | Male | 12.09.1936 | Full time Director, N M Sadguru Water and Development Foundation | Director & Trustee | Associated with tribal and rural development for last 43 years; earlier served a head of HRD in corporate sector for about 10 years |

**Board Rotation Policy in organization**

We don't have rotation policy parse, but, our Board of Trustees is reconstituted periodically as per the provision of the Trust Deed. The members of retiring Board or outgoing Board are eligible to be re-elected / re-nominated in re-constituted Board. In this matter our trust deed as well as Bombay Public Charitable Act are followed.

**Details of International travel by staff / volunteers and Board Members at the expense of the organization in the last financial year**

I. Mr. Kanhaiya Choudhary, CEO, and Mr. Vijay Sanadiya, Senior Programme Officer, went to Brazil under sponsorship of NABARD as a NABARD team.
II. Mr. Manahar Patel, Senior Programme Executive, visited Thailand under the sponsorship of Jain Irrigation system.

**Details of air travel by staff / volunteers and Board Members at the expense of the organization in the last financial year within country during the year 2014-15**

As per your advisory note, it is not obligatory to give details of air travels undertaken within country, however, it may be provided if required at any stage.

10 CHAPTER

# THEY SAID ON SADGURU: EXCERPTS FROM THREE STUDIES CARRIED OUT BY INDEPENDENT AGENCIES ON SADGURU DURING THE YEAR

## 1. A Study by Price Water Cooper (PwC)

**During reporting year a study on Sadguru was carried out by PwC at the instance of Sir Ratan Tata Trust.**

**Following are excerpts from the above study;**

**Community based water resource development**

" Key benefits of water resource development as observed in primary survey are:

- Additional access to irrigation for up to 7-8 months in rabi and summer season
- Introduction of a second crop in rabi (wheat, rabi maize, gram)
- Introduction of groundnut crop in summer season
- Introduction of vegetables
- Increase in the productivity and income "

**Enhanced knowledge and adoption of improved practices:**

" High levels of satisfaction with the quality and timeliness of the customized farm advice and technical capability of the service providers. Confidence levels of the farmers regarding continuation of most of the recommended practices without further support were consistently high at 92.85%. 100% sample beneficiaries reporting demonstration in maize seed production expressed confidence in adoption and continuation of the practice without further handholding support. 80% of the farmers reporting demonstration of vegetable introduction expressed confidence in their learning. "

**Changes in the package of practices:**

" Some of the results of estimation of adherence of sample beneficiary farmers in key areas of recommendation can be summed up as follows:

Complete shift from use of local indeterminate varieties to high yielding composite and hybrid seeds
Decrease in the seed rate as a result of line sowing
Adoption of seed treatment by all farmers
Complete shift from seed broadcasting to line sowing maintaining distance between rows and individual plants
Increase in the application of fertilizer particularly urea as per recommended dosage and time of application although it needs a further increase as compared to the recommended dosage for the region "

**Productivity enhancement for maize and wheat:**

A snapshot of the findings is provided below:

| **Maize** | **Productivity (quintal/acre)** | |
|---|---|---|
| | **Before (project interventions)** | **After (project interventions)** |
| Beneficiary farmers (before vs after) | 5.23 | 10.59 |
| | Treatment (Beneficiary farmers) | Control (non-beneficiary farmers) |
| Current comparison between treatment vs control farmers | 10.59 | 5.39 |
| Wheat | Before (project interventions) | After (project interventions) |
| Beneficiary farmers (before vs after) | 4.25 | 11.22 |
| | Treatment (Beneficiary farmers) | Control (non-beneficiary farmers) |
| Current comparison between treatment vs control farmers | 11.22 | 5.92 |

**Income enhancement and food grain sufficiency:**

" A comparison of gross income both "before" and "after" scenario for treatment (beneficiary) farmers and also "with" and "without" analysis for treatment and control farmers per acre of land is done for gauging the outcome of the N. M. Sadguru program. The findings of the same are summarized below: "

| | **Gross Potential Income** | |
|---|---|---|
| | **Before (project interventions)** | **After (project interventions)** |
| Beneficiary farmers (before vs after) | 13,403 | 1,16,444 |
| | Treatment (Beneficiary farmers) | Control (non-beneficiary farmers) |
| Current comparison between treatment vs control farmers | 1,16,444 | 18,654 |

| | **Annual food sufficiency (avg. farmer household) in months per acre** | |
|---|---|---|
| | **Before** | **After** |
| | **(project interventions)** | **(project interventions)** |
| Beneficiary farmers (before vs after) | 8.6 (No marketable surplus) | 17.5 (Marketable surplus worth INR 4,162) |
| | Treatment (Beneficiary farmers) | Control (non-beneficiary farmers) |
| Current comparison between treatment vs control farmers | 17.5 (Marketable surplus worth INR 4,162) | 8.9 (No marketable surplus) |

**Promotion of community based agri extension:**

" We received a positive feedback about the quality of the extension system by the members of the farmers club in the area visited. Farmers also showed confidence in retention of the service providers, which is evidently supported by strong community based organizations and enhanced income of a large section of farmers due to adoption of high value crops. "

**Strengthening of agri input supply:**

" Maize seed sufficiency is also focused in project geographies where irrigation has been made available for the cultivation of maize in Rabi season. Specialized training is also being provided to the farmers covered under this program and quality maize seeds are being channelized through various Lift Irrigation cooperatives to the member farmers in such geographies. Certification, grading, packaging and marketing of the seed produced under this program has also been institutionalized. "

***Beneficiary perception on the project interventions***

" The primary survey in the project area revealed an overall positive attitude of the farmers on the benefits of the project interventions. The key benefits as perceived and reported by the farmers are:

- Increased knowledge and awareness of the scientific cultivation practices of maize and wheat particularly the benefits of using quality seeds, seed treatment, maintaining crop geometry with optimum spacing and optimum N:P:K levels and crop protection
- Increase in the productivity as a result of the adoption of these practices
- Increased access to water for irrigation
- Diversification to high value crops
- Increased farm income
- Access to extension through service providers who are from the same community and have good rapport and ease of communication with the farmers in the villages under intervention
- Availability of quality inputs
- Increased access to drinking water
- Increased access to household energy "

***Programme processes and management***

1. ***Technical Capability of the Implementing organization:***

   " In our observation, N M Sadguru Foundation has deployed a highly qualified and experienced multi-disciplinary team for planning, design and management of the program with an average work experience of over 17 years and 60% staff is post graduates. "

2. ***Project implementation strategy encompassing the involvement of the community and partnership with external resources:***

   " The engagement of Community Based Organizations (CBO's) such as LI federations, SHG Federations and member cooperatives has been central to interventions under the program. Participation of CBOs has been high in planning and implementation of water resources development, productivity enhancement and input sufficiency. Selection and monitoring of performance of the extension service providers is also led by the community. For technical assistance in developing and validation of PoPs and field support by external resource persons, N M Sadguru Foundation works in coordination with local KVKs in the project geographies. N M Sadguru also coordinates with Maize Research Station, Anand Agricultural University for procurement of breeder seeds for maize seed production program. "

3. ***Utilization of the financial resources under the project:***

   " Due to the nature and scale of the interventions which are based on the creation of community assets, focus of the program is mainly on channelizing funds from government schemes and harnessing the technical expertise of the staff for planning need based interventions with community participation and implementing them on a shorter timeline. "

4. ***Project MIS and reporting:***

   " We observed that financial reporting under the program is done as per the standard formats. However, there are no standard formats for other reports such as the Annual Progress Reports. Standardized reporting will enhance the comprehensibility of performance and assimilation of learning from project implementation. "

***5. Sustainability of the interventions at community level and also project closure and hand over strategy for smooth transition:***

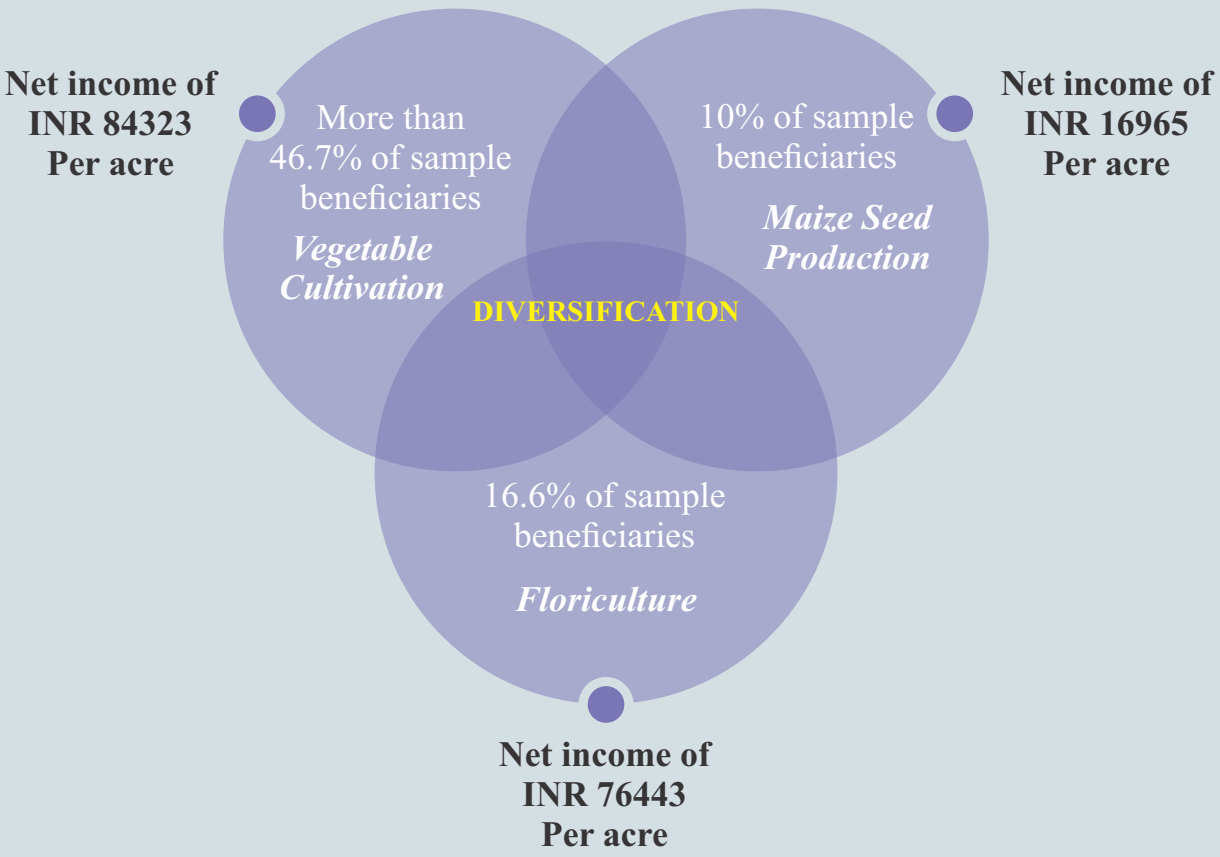
" In our experience, hand holding support for cultivation through scientific practices and one time mobilization of the community to drive the project interventions is necessary but not sufficient for sustainability of these interventions in the long run. "

***Crop diversification and economics***

" In addition to productivity enhancement of staple crops, Sadguru has focused on enhancing the income of farmers through introduction of vegetables (after irrigation availability through water resource development) mainly smooth gourd and lady finger in the project area. For smooth gourd, Sadguru has promoted trellis system of cultivation which is a semi-permanent structure comprising of concrete pillars and metal wires. There is an initial cost to the setup which can be recovered within first production season as returns from smooth gourd are around INR 1.5 lakh for an acre of land. Cultivation of spice crops such as onion and garlic has also been promoted by Sadguru Foundation which further enhances the income from the given area of land significantly.

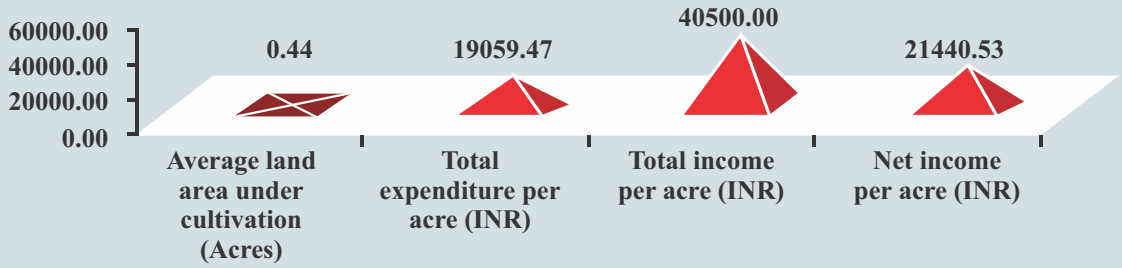
The figure given below gives a snapshot of diversification achieved through the program and the returns from the activities discussed above

**Promotion of Crop Diversification Under N M Sadguru Program**

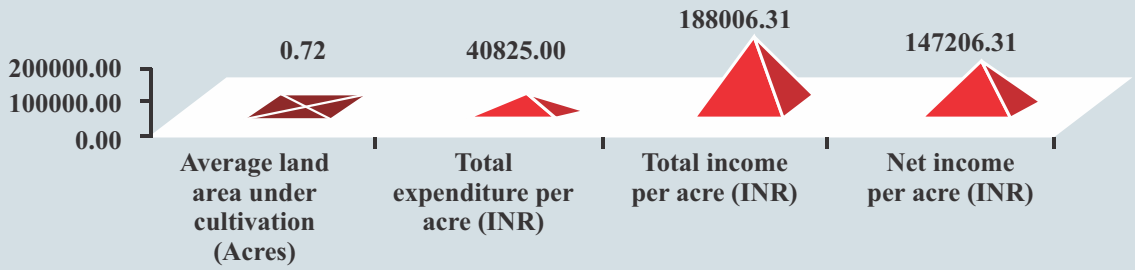



Following is a snapshot of the economics of cultivation of vegetables, floriculture and maize seed production on the basis of data reported by the sample beneficiaries: "

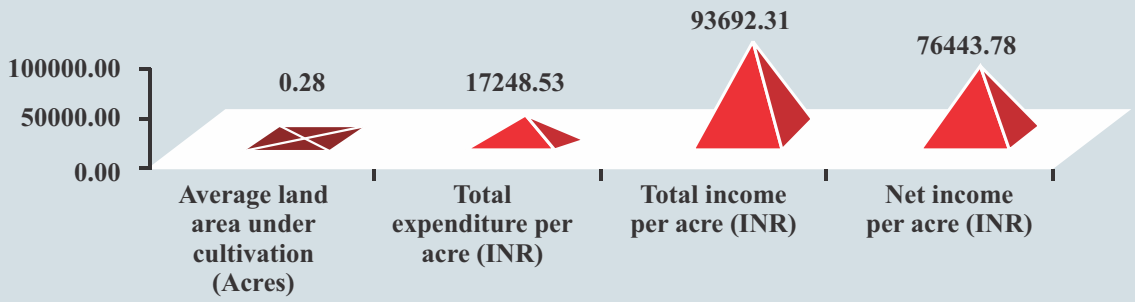
### Snapshot of Economics in Vegetables for beneficiary farmers



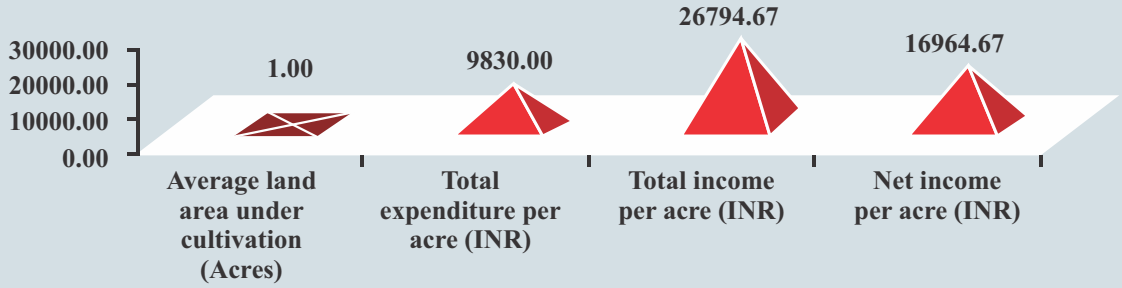

### Snapshot of Economics in Vegetables for beneficiary farmers (Smooth Gourd)




### Snapshot of Economics in Floriculture for beneficiary farmers (Marigold)




### Snapshot of Economics in Maize Seed Production



## 2.
# A Study by INREM Foundation

" A study was carried out by INREM Foundation, Anand which was carried out by highly qualified professionals under the guidance of Dr. Tushaar Shah and Prof. Katar Singh. This study was conducted to find out impact of Sadguru's activities mainly water and land centered in its project area of district Dahod, Gujarat. Preface of this study was written by eminent and well known economist, Dr. Tushaar Shah. In his preface Prof. Tushaar Shah writes ; "

" In the late 1980s, Robert Chambers and I visited scores of development initiatives around India to understand what works best for improving the livelihoods of poor people. Sadguru Foundation in Dahod was one of those NGOs with which we spent quite sometime especially because all of Sadguru's work targeted poor Adivasi communities. The book that we co-authored in 1987, *"To the hands of the poor: Water and trees"* (Chambers, Saxena and Shah1987) was deeply influenced by our Sadguru experience. It put into bold relief how community-based management of common property natural resources can improve livelihoods of the poor through sustainable intensification of hitherto rainfed agro ecosystems.

The present study which documents the economic impact of Sadguru Foundation's work in Dahod district validates the hypothesis we advanced over 25 years ago. The Dahod district, where Sadguru Foundation began its work first, has been a prime beneficiary of the Foundation's labours. And this study shows that the results have been amazing. In several small river basins, the Foundation has created distributed storages, in the form of check dams, to capture and hold over 20 million cubic meters of flood water from monsoon. Scores of lift irrigation systems established on these checkdams directly irrigate some 6500 ha; in addition, some 4000-5000 ha downstream get benefited through well irrigation from groundwater recharge. Because of these efforts, Dahod has emerged to be by far the best irrigated district of Gujarat, even better than districts like Anand and Surat in the core command areas of large irrigation systems. Sadguru Foundation has not stopped at just providing means of irrigation; it has also pursued an 'irrigation++ strategy' by helping Adivasi farmers to move up the agricultural value chain by growing high value crops such as flowers, fruit and vegetables.

Arguably, as striking as the impact on agriculture has been the impact of Sadguru's work on the forest economy. The study estimates that the current value of trees that Sadguru helped to plant years ago is well over Rs. 14,000 crore. Annuity of these assets at a 8% discount rate would make Sadguru's impact on Dahod's forest economy as significant as its impact on irrigated agriculture. "

Excerpts from the text of the study are reproduced below.

**Background**

" Dahod district of Gujarat is mainly a tribal area, at the western edge of central tribal India, hilly and located on eastern part of the state. Mainly it is a place where farmers have always taken a single rainfed crop. Today, we see that the Gross irrigated area / Net irrigated area (GIA/NIA) ratio of Dahod is 1.96, which is far more than any other district of Gujarat. The magnitude of this ration is clear when when we see that the second highest GIA/NIA in Gujarat is that of Kheda district with 1.46, and then Anand with 1.43 and so on, until districts such as. The Dangs with GIA/NIA equal to 1.0. How has this happened? "

" NM Sadguru Foundation was established in Dahod, Gujarat in 1974. Sadguru's work has aimed at improving the lives of tribal people by making better use of available natural resources, sustain these resources and break away from the viscous cycle of extreme poverty. Sadguru Foundation is one of the pioneering organisations in India that have shown the way out of poverty through land and water resource management activities. "

" INREM foundation is a research institution probing societal issues concerning water, public health, agriculture and environment. The institution develops innovative inter-disciplinary solutions and brings them into the wider domain of practice by participating with communities and government. INREM works in the middle space between

grass-root community based work, research on natural resource issue and policy formulation to bring about innovations to larger discussion."

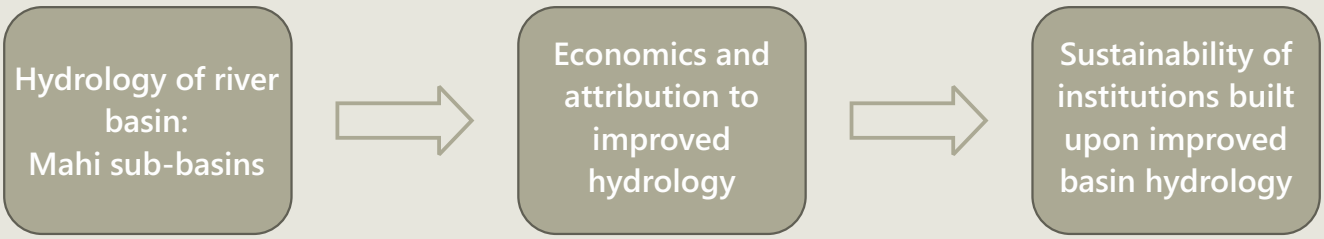
" Sadguru foundation has given task to INREM to study the overall impact of Sadguru's work in terms of water and looks at the linkages between overall impact on regional hydrologic changes to river basin, aquifer and agriculture economy in Dahod, Gujarat. "

**Hydrologic Impacts of Sadguru Intervention in Dahod district**

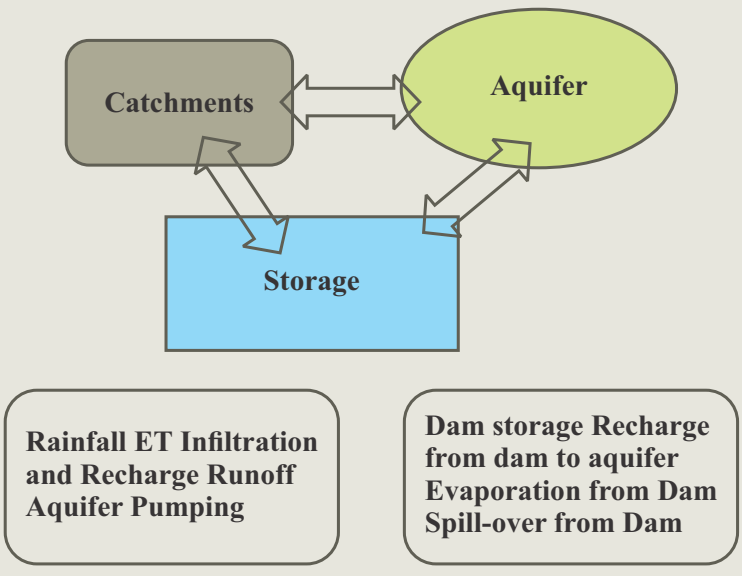
" Sadguru intervention in water harvesting is through check dams a total 152 check dams are constructed in dahod district. These dams are across the Kali (I and II), Khan, Machhan, Hadaf, Kharad, Khobdi, Panam and other rivers and rivulets. Total capacity of 403 mcft (11.42 mcm) has been generated from these check dams (estimates for year 2011-12). Total volume of more than 1100 mcft has been stored in these check dams by virtue of filling several times. Lift Irrigation based irrigation is being transmitted with the command area and also outside of them through ground water based irrigation by wells upto distance of 5-10 km is observed through the cropping intensity map of dahod district i.e. twice the distance beyond the Lift Irrigation command area. Though Lift irrigation direct benefit is in 6479 Ha of land and 4000-5000 additional agriculture land gets benefitted in the district indirectly through groundwater recharge. This increases the equity of farmer's access to river water even if field locations are farther away. "

" Apart from Dahod district, looking at Sadguru intervention as whole in the remote tribal areas of three states- Gujarat, MP and Rajasthan, we see a total of 356 check dams with a total storage of 2011.60 mcft, i.e. more than the size of a medium scale irrigation reservoir, but spreading the benefits in a distributed manner to tribal farmers irrigating 55236 acres (22348 Ha) of agriculture land. "

**Linking hydrology with improved economy and institutional sustainability**




**The conceptual picture of river basin hydrologic model**



**A river coming to life**

The Khan river as any in this part of western to central India would have gone completely dry within two or three months of the monsoon, i.e. by December or January. It is rare even in high rainfall years to find water in these rivers. But seeing is believing! This photograph taken in June of 2013 just before the monsoon which arrived later that year is an affirmation of what we see predicted by the hydrologic model of Khan river basin.

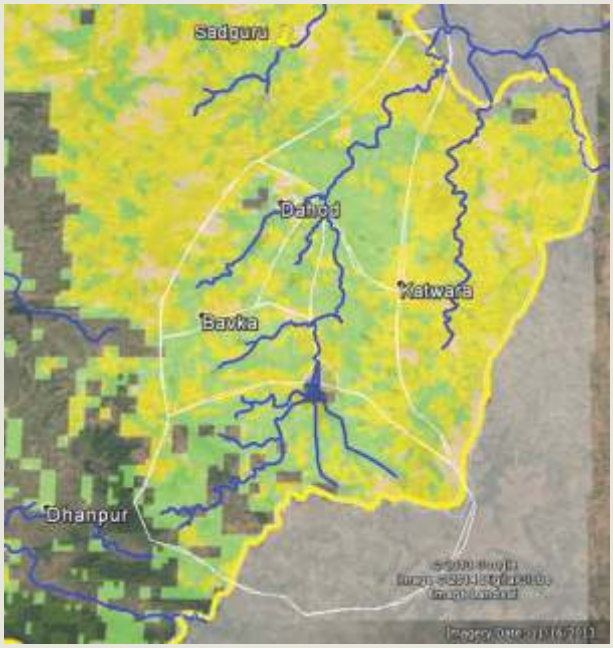
If rivers can survive, they bring with them a whole ecosystem to life! Let us have more such river basins across India.

**A symbiosis of large and small dams**

The debate of large vs small dams seems frivolous when we see the situation of Dahod. In India and worldwide, this question keeps arising as to which is of more value: large or small. The Dahod river basin hydrology would convince anyone about capturing the right opportunities and bringing in people's participation to get the benefit of large dams through smaller dams.

The Pata Dungri dam (photo here) and other dams in Dahod district such as the Kali dam and Macchan dam all have smaller dams downstream which capture the baseflows and subsurface flows from the larger dam throughout the year. The smaller dams also capture return flows from irrigation, thereby creating a symbiotic system between the larger and smaller dams. In terms of efficiency, and buffering against climatic extremes, this system is much better than reliance on any one option. Sadguru's work in Dahod shows that this combination is possible and we should try to achieve it where possible.

## Hydrologic model of Khan river basin




### Khan river basin boundaries, streams, and cropping intensity map

" The Hydrology model of the Khan river sub-basin which flows into the Anas, and then into Mahi river. The Khan river basin is located in Dahod, Gujarat and Jhabua, MP. It has a highest elevation of around 1300 ft above MSL and flows into Anas at around 900 ft above MSL with the main flow of river about 40-42 kms in length. This is an important river for Dahod since the city is located inside this river basin and the main reservoir supplying water to the city is the Thakkar Bapa Reservoir, also known as Pata Dungri is located in the Khan river basin. "

" Both upstream and downstream to the Pata Dungri dam, there is intensive activity of small to medium size dam storage with check dams. There is lifting of water straight from the dams and used through lift irrigation (LI) cooperatives promoted by Sadguru foundation. "

" Also, a small canal command area lies downstream of the Pata Dungri dam. Interesting fact is that water seepage from the dams flows onto the river flow and the water drainage out of Dahod city also connects back to the river before it joins the Anas. "

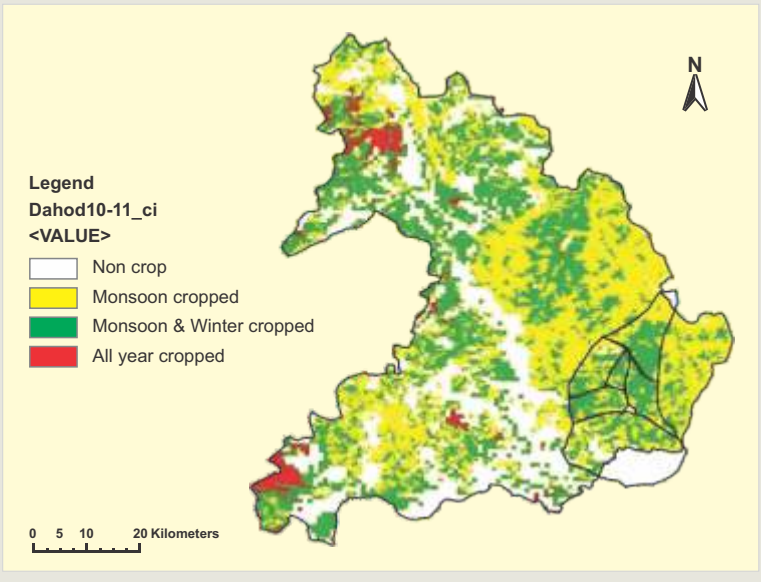
" As a result there is intensive recycling of water within the Khan river basin. This recycling of water also acts like a system which is benefitting farmers through the check dams and LI cooperatives. If not for these dams, this water would have flown by to the Anas and then downstream. "

" The cropping intensity (CI) map (a 1 sq km scale) of the river basin shows intensive agriculture (CI:2-2.5) close to the river , where check dams are located. As one extends farther from these areas, the CI drops to 1.5 to 2, which is also on the higher side, thereby meaning that there is a groundwater based irrigation system being practiced in this zone. "

" The overall river basin area is roughly 620 sq kms. Out of this, the Pata Dungri catchment is 276 sq kms in area, final Anas sub basin 116 sq kms, Bavka sub-basin 59.25 sq kms, Devdha sub-basin 64.59 sq kms, Kharaj sub-basin 22.34 sq kms, Dahod sub-basin 74.67 sq kms. "

### Satellite map of Khan river basin, Dahod


### Agricultural Intensity pattern in Dahod district



**Ground Water Recharge**

" The six dam sets have average annual recharge of 0.6683 MCM 23.5162 MCM 0.1407 MCM 0.6500 MCM 1.4001 MCM and 0.3398 MCM respectively. This caters to additional irrigation area which is based on groundwater based irrigation through wells. Apart from the larger dam, we have a total average of 3.19 MCM every year as recharge from the Sadguru check dams in Khan river basin. Taking an estimate of Ha/MCM from the LI commands as 22348 Ha for 27.68 MCM, we get 807.3 Ha/MCM of unit irrigated area per MCM of irrigated water. Using this, we get a potential groundwater irrigated area of 2249 Ha in Khan river basin alone using groundwater irrigation from Sadguru check dams. "

" Similar analysis needs to be done for other such river basins in Dahod such as Kali 1, Kali 2, Macchan and Hadaf which are also intensely rainwater harvested. These river basins together have an overall catchment area of 161 sq kms, which assuming similar behavior such as the Khan river basin would possibly have a groundwater recharge irrigated area of another 5912 Ha adding to the 2249 Ha above from Khan river basin. "

" This extrapolating to the other intensively harvested river basins in Dahod, shows us the total groundwater irrigated area possibly attributed to Sadguru check dams as around 8161 Ha which is quite significant. "

**Agriculture Economy Generated by Sadguru Intervention and in entire Dahod District**

" One way to look at linking water based interventions of Sadguru to cumulative impact on the economy is to look at the Agriculture GDP generated by such interventions and then compare it with the overall Agricultural GDP of Dahod district."

" Multiple sources of reliable information was procured from sources such as Dahod APMC, National Dairy Development Board, Agriculture department of Gujarat government and others including Sadguru's in-house surveys. Field checks and surveys were done to cross check unit numbers such as cost of cultivation. More information on this procedure is provided in the Appendix and spreadsheets of these calculations are available upon request. "

" We take the sections of cereals and pulses; non-food commercial crops, vegetables, horticulture, floriculture and dairy and then separately consider agro-forestry which has a massive contribution in terms of both direct and ecological benefits, but agro-forestry has been taken as a long term asset of the district, hence the occasional income from agro-forestry has not been considered in GDP calculation. "

" As shown in Table2 the total Net Agriculture GDP of Dahod district is estimated to be Rs 1568 crore and gross Argiculture GDP is Rs. 2036.79. This needs to be looked at in the context of Gujarat state where the estimate of overall Agriculture GDP is around Rs 43,794 crore in 2009-10 (GOG 2011). "

" Table 2 shows that the contribution of Sadguru interventions to this economy is Rs 116.35 crore (gross) and 79.47 (net). This comes to around a highly significant about 5.68% (gross) and 5.075 (net) of the overall Agriculture economy of the district. Given the fact that Sadguru interventions are mostly with tribal farmers who are not traditionally farmers, this percentage is even more significant. These tribal farmers, who were earlier not at all part of the district economy, are now being able to play a significant role and almost entirely due to various intervention from Sadguru, based on its own programmes as well as in partnership with various government initiatives. "

***A valley of roses in Kamboi***

*The roses are grown in small pieces of flat lands in the hilly village of Kamboi. The village is 15 kms from Dahod and 25 kms from Chosala Sadguru campus. A village of 500 households – is populated by the social class of OBC, Bhills and Pateliyas. Two farmers started growing roses seven years ago; now there are 50 farmers growing roses, marigolds and chrysanthemums.*

" Mr Hemsingh Parmar of Kamboi has only 1½ acre of land. Out of this small piece of land he grows roses (gulabs), chrysanthemums (sevantis) and marigolds (haajaris) in one acre and rest of the land he grows wheat etc for his consumption. He has drip irrigation systems in his field. His annual income is more than Rs. 2 lakhs selling only roses since last 5 years. He purchased motorbike, made his house pucca and also constructed a dug well. There are other villages also like Kamboi namely Rozam. It is a good example of floriculture in Dahod! "

**Table 2: Agriculture GDP of Dahod and of Sadguru farmers for the year 2011-12**

| Items | Dahod | Sadguru | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Area (ha) | Gross GDP (Rs. core) | Total cost (Rs. core) | Net GDP (Rs. core) | Area (ha) (Rs. core) | Gross GDP (Rs. core) | Total Cost (Rs. core) | Net GDP |
| Total of Cereal and Pulses | 300004 | 617.73 | 238.73 | 379 | 10450 | 39.00 | 19.00 | 20.00 |
| Non-food Commercial crops | 2000 | 9.79 | 0.96 | 8.84 | - | - | - | - |
| Total Vegetables | 7810 | 711.63 | 66.39 | 645.24 | 895 | 22 | 7 | 15 |
| Total Fruits and Orchards and Horticulture (Mango) | 2850 | 148.73 | 7.29 | 141.44 | 1236 | 29 | 3 | 26 |
| **Total Floriculture** | **230** | **8.59** | **0.18** | **8.41** | **10** | **0.36** | **0.08** | **0.28** |
| Total Dairy | - | 550.12 | 165.04 | 385.08 | - | 25.99 | 7.80 | 18.19 |
| **Grand total (in core)** | **313290** | **2047** | **479** | **1568** | **12591** | **116.35** | **36.88** | **79.47** |
| Percent share of agri-GDP by Sadguru in Dahod district | | | | | | 5.68 | | 5.07 |
| with multiplier effect of 2.07 GDP is | | | | | | 240.85 | | 164.50 |

(http://data .worldbank.org/indicator/FP.CPI.TOTL.ZG-accessed 31 Dec 2014)

***Vegetables are constant source of income***

*Dabhra village is on the side of Ahmedabad-Indore highway, in the Panam river bank. In this village about 80% household are growing vegetables. Ranchodbhai and family lives as joint family with their two sons – Bharatbhai and Bhagatsingh. Ranchodbhai has 15 acres of land. Before Sadguru's intervention they were doing vegetable but not so systematically – said Bharatbhai. They now do all kinds of seasonal vegetables.*

Their wives Ramtiben and Ramilaben mainly taking daily care of fields and take vegetables packs by local pick up van or jeep to Dahod market which about 20-25 kms away from Dabhra village. Both Ramilaben and Ramtaben bring Rs. 500 each on an average every day now. They go about 25 days in a month to sell vegetables to Dahod. Bharatbhai said that they have saved this year about Rs. 1 lakh by selling vegetables only. This saving is after all meeting all expenses in family – such as education cost of the whole year of 4 daughters of these two brothers. All 4 girls are going to college now. They have one dug well and one bore well, two motorbikes. They have plan of buying one pick up van of Rs. 4 lakh this year.

***Bamboos are perennial source of income***

*The bamboo plants are ever green and perennial. Though depends of variety, it does not need much care in general. One shoot of a bamboo can give even up to 140 shoots – means bamboos. The very normal variety of bamboo can fetch Rs 50/- in Dahod. There are many bamboo plots in Sadguru especially in Limkheda area. Many farmers put bamboo plants along boundary lines of their fields. It is a least cost plant. They earn a good amount of money out of very small investment.*

**Summary of results indicating impact of Sadguru Foundation interventions in Dahod district**

| Description | Result |
|---|---|
| **Hydrologic Benefits** | |
| Total storage capacity of Sadguru check dams in Dahod district | 544.5 Mcft |
| Estimate of total water storage in Dahod Sadguru check dams | 1100 Mcft in 2011-12 |
| Groundwater recharge benefit distance beyond direct command area | 5-10 kms |
| Total direct command area irrigated by lifting water from check dams | 6579 Ha |
| Command area of Individual pumps lifting water from check dams | 3975 Ha |
| Total additional area benefitted by groundwater recharge from LI command areas | 8161 Ha |
| Total direct and indirect irrigated area from Sadguru check dams | 18,715 Ha |
| Total storage of all Sadguru check dams | 2011.75 Mcft |
| Total irrigated area from all LI schemes | 22348 Ha |
| Total water usage in Sadguru LI schemes of Dahod district | 27.68 MCM |
| Ratio of LI Water usage to total check dam storage in Dahod | 1.79 |
| **Economy Impacts Benefits** | |
| GIA/NIA ratio of Dahod district | 1.96 |
| Dahod District Agricultural GDP (only cereals, commercial crops, vegetables, horticulture floriculture and dairy ) | Rs 2036.80 crore (gross)<br>Rs 1568 crore (net) |
| Sadguru interventions agricultural GDP (only cereals, vegetables , horticulture, floriculture and dairy) | Rs 116.36 crore (gross)<br>Rs. 79.47 crore (net) |
| Sadguru impact on GDP with Multiplier effect of 2.07 | Rs 240.85 crore (gross)<br>Rs 164.50 crore (net) |
| Economic value of estimated surviving plantation (Teak and Eucalyptus) | Rs13,727 crore |
| Economic value of estimated surviving Bamboo plants | Rs 910 crore |
| Total estimate natural asset base | Rs 14637 crore |
| Potential benefit to economy at 8% annual harvesting | Rs 1127 crore |
| Percent share of agricultural GDP by Sadguru in Dahod District | 5.68% (gross)<br>.5.07 (net) |
| **Replacement Costs** | |
| Inflation and Depreciation adjusted cost of check dams in Dahod district from Sadguru's work | Rs 31.98 crore |
| Estimated Price/Mcft for Replacement | Rs 13.32 lakhs /Mcft |
| Replacement cost of Check dams asset base in Dahod district from Sadguru's work with unit cost/storage analysis | Rs 72 crore |
| Replacement cost for Sadguru Lift Irrigation Infrastructure in Dahod district | Rs 70.8 crore |
| Total replacement cost of Sadguru check dams and LI schemes in Dahod district | Rs 142.8 crore |

# 3.
# A study by International Researcher and Scholar, Prof. Gowindasamy Agoramoorthy

Prof. Govindasamy Agoramurthy, International Researcher and writer teaching in Tajen University, Yanpu, Pinstung, Taiwan, Tata- Sadguru visiting chair wrote a book based on a study and titled "Sadguru Model of Rural Development Mitigates Climate Change In India's Drylands".

Excerpts of the study are as follows;

" By 2020, India has got to increase productivity above 340 million tons of food grains in view of its population growth. Scientific report warns that people are turning resources into waste faster than nature can turn waste back into resources and by 2050, humanity will demand resources at double the rate at which the earth can generate them. Five major factors that determine the extent of global overshoot or demand on bio- capacity includes population, consumption of goods/ services per person, resource use intensity, bio- productive areas, and bio-productivity per hectare. India has to make appropriate plans with persistence to eliminate the overshoot of the above five factors from now onwards. One crucial aspect to eliminate drylands using the Sadguru Model of Rural Development as shown in this book. "

" During the last eight years, I have visited the tribal areas in Gujarat, Rajasthan and Madhya Pradesh, and was even shocked to see villages still without electricity, infrastructure, sanitation and other basic human needs. These villages remain less progressive since they lie in the unproductive drylands of the vast wilderness where the often ignored tribal communities inhabit. Government officials seldom venture out to explore these villages due to the nightmare of logistics in remote locations. The drylands of western India receive only four days of heavy rain per year and that too after three years of severe drought. Thus saving every bit of rain drop is crucial to sustain humans and other life forms in this harsh wonderland. Can water actually eliminate poverty in tribal areas? "

" Headed by India's renowned rural development social work couple, Harnath Jagawat and Sharmishtha Jagawat, and armed with a team of dedicated dam- building and irrigation engineers, the small Sadguru Foundation embarked on an unlimited mission four decades ago to build series of cost – effective lift irrigation systems and check dams in small, medium and large rivers across the tribal areas with a sole purpose to hold water for irrigation. Till December 2012, a total of 326 such check dams and 328 lift irrigation systems in west India's tribal drylands has been constructed, which in turn converting 2,72,975 acres of wasteland to productive agricultural land through community irrigation cooperatives. This massive effort by NGO ultimately benefited 224,069 families or 1,344,414 people in tribal villages of western India. "

" Finding water in the drylands of India is a luxury, but the Jagawats have succeeded in not only harvesting rain water using check dams on rivers but also lifting water from low-lying sources (tanks, ponds, and rivers) to upland farms. They have dutifully followed what the national father, Mahatma Gandhi had highlighted on the philosophy of rural village business at the grassroots and rigorously tested Gandhi's economic principle in the field using the power of water as a basic need to sustain and reward life. Traditionally, people in the tribal areas used to grow one seasonal crop based on the often poor rainfall. Droughts plague the dry lands every few years and this harsh natural reality trigger the people migrate to nearby towns and cities in search of work for survival. Ever since Sadguru Foundation established check dams and lift irrigation cooperatives, migration to urban areas in search of labour jobs virtually stopped, crop productivity increased and poverty eventually decreased. Tribal cooperatives manage the irrigation infrastructures and farmers pay a modest sum for the use of water to irrigate their fields. "

**Check Dams Mitigate Climate Change**

" Water has emerged as one of the most important commodities of the 21st century. Nevertheless, water is a shared responsibility of consumers, communities, governments and corporations (UN 2006). The global demand for freshwater over the next 25 years is expected to exceed by 40 per cent with serious ecological, economic and social consequences (Hoekstra 2013). To make matters worse, desertification has become a serious environmental threat

with major implications for sustainable development (D'Odorico, et al., 2013). The further degradation of the fragile dry lands will impact the environment gravely and experts have warned that 50 million people worldwide will be displaced as a result of intense desertification within the next decade (Haag 2007). "

" India harbors a population of 1.2 billion inhabitants and 69 per cent of the landmass falls under the category of drylands accounting to about 564 million acres out of the total 810 million acres of land area (National Report to UNCCD 2011). Besides, India has the second largest arable land in the world following the United States. But the country's agriculture is dominated by small farms where 60 per cent of landholders own 17 per cent of farmlands with an average holding of 2.5 acres. In contrast, 7 per cent of medium-to-large landholders (>10 acres) own 40 per cent of farmlands (European Commission 2007; Agoramoorthy 2012a). Moreover the small landholders are subsistence farmers with low investment potential hence they cannot sustain farming without financial backing. The collapse of Doha 2006 WTO Development Round negotiations for instance has showed the alarming trend (Pritchard 2009). "

" Climate change impact models have predicted that India will face extreme weather conditions that include consecutive droughts, severe monsoons, serious floods and rapid rise in sea level (Schellnlmber et ai., 2006; Mujumdar 2013; Shinde and Modak 2013). Therefore sustainable development is crucial to minimize climate change impacts. Sustainability refers to meeting future demands without compromising the integrity of Earth's natural environment including the delicate ecosystems (Daly and Cobb 1989). The large-scale land use patterns for example across India has contributed to drastic decline in the surface and ground water resources (Giordano and Villholth 2007; Agoramoorthy 2012b; Chinnasamy et al., 2013) "
" Ground water, which is crucial for agriculture, has been severally depleted across India. The cultivable land remains static at 120 million hectares relying mainly on monsoon water. India's green revolution has gone brown due to the creation of agrarian crisis, environmental disasters, stagnating yields and water scarcity (Atkins and Bowler 2001). "

" The major downside of India's sustainable agriculture strategy is the historic neglect of catchment areas in remote drylands that have been inhabited and farmed by tribal communities for centuries. India's leading rural development stalwart, Harnath Jagwat has pointed out a large area 1,500 km long and 500 km wide stretching across central India from Dungarpur in the west to Dumka in the east, which has the potential to provide better prospects for future sustainable agriculture development (Jagawat 2005) "

" Climate change has therefore become an important economic and political concern since it will directly and indirectly impact the livelihoods of over 700 million people who inhabit rural areas across India. Therefore all future sustainable developmental activities to be implemented by the government, NGO and corporate sectors across India must integrate strategies to mitigate climate change. This report has compiled scientific data on how the NM Sadguru Water and Development Foundation implements "water-centered" sustainable rural development activities to mitigate climate change locally and regionally "

**Rivers and Dams**

" Rivers are considered sacred in India for centuries. The Puranas (Hindu holy text) for example portray that a person can gain salvation by bathing in the Ganges and the same goal can be achieved merely by catching the sight of Narmada. But the survival of many rivers across India is at stake now due to aggressive developmental activities (Agoramoorthy 2012a). "

" India cannot entirely depend on large dams for irrigation because it harbors enormous areas of rural dryland beyond the reach of big dams (Jagawat 2005; Agoramoorthy 2012b). Therefore rainwater harvesting through small dams (also known as check dams) is absolutely necessary if the country needs to combat local climate change scenario involving water. Besides, not all rural areas can access irrigation water from major dams therefore the minor check dams are extremely necessary. "

**Cost, Conservation and Community Benefits**

" By strictly following the basic design of the Grant Anicut model, the Sadguru foundation constructed a total of 356 such check dams between 1990 and 2012 across the tribal drylands of western India covering states of Gujarat, Rajasthan and Madhya Pradesh. "

**Ecological Benefits of Check Dams**

" After building the check dams in rivers, water conservation was possible in the drylands especially during the dry season when the entire landscape is dehydrated therefore the conserved water promoted local climate change mitigation measures. This eventually increased agricultural productivity ultimately leading to eradication of poverty and restoration of natural resources in terms of ground water recharging, growth of forest vegetation,and supporting numerous flora and fauna. "

" Water is depleting fast in semi- arid regions of western India. But the water, growth of forest vegetation along rivers and storing water in rivers during the dry season. The dams made all neighbouring villages water surplus, and those villages were once water deficit. Local villagers who have never seen their rivers full of water in dry season, celebrated near check dams in many villages. Interviews of villagers reflected that all farmers were aware of the increase in ground water recharge, its positive impact on agriculture, drinking water and natural resources. "

" Check dams are to reduce high level of uoride(beyond 1.5 ppm) in ground water reducing health hazards (Bhagavan and Raghu 2005) since fluoride poisoning is common in the drylands region of western India. Besides, check dams constructed near forest areas provide water during the dry season to large number of wildlife, especially mammals such as elephants, gaur, tiger, leopard, deer, etc. "

**Conclusion**

" The integrated approach to water resources management has the potential to protect the integrity and function of river basins and aquifers. This is vital since rivers are crucial for human survival. It's crucial for the government to build more check dams across rivers to supplement big dams in partnership with NGOs and business corporations. Thus the role of check dams highlighted here is simple, eco- friendly, cost – effective. If it is adopted across the vast drylands of India and elsewhere, it has the potential to increase agricultural output, guarantee food security, enhance ground water resources, and above all mitigate climate change. "

**Household Biogas Plants Mitigate Climate Change**

" After Sadguru started the biogas projects in villages, the kerosene usage was dramatically reduced by 62 per cent (from an average of 120.68 ± 50.8 liter/ year reduced to 46.33 ± 24.71 liter/ year. The kerosene usage was positively correlated to the family size before and after the establishment of the biogas plant ($p < 0.05$; Pearson Correlation). What is more interesting is the chemical fertilizer usage was also significantly reduced by 50.1 per cent (from an average of 472.24 ± 159.77 kg / year reduced to 235.48 ± 94.52 kg / year) easing the stress on soil and associated ecosystems. "

" The usage of firewood, kerosene and fertilizer after the biogas plants implementation significantly reduced (paired t- test, $p < 0.001$). among the three items namely firewood, kerosene and fertilizer, the cost of firewood reduced more than the other two. The cost of firewood reduction (61.02 ± 27.60 USD) was significantly higher than the cost of kerosene reduction (37.49 ± 18.46 USD) and the cost of fertilizer reduction 22.65 ± 15.25 USD ($F_{2,372} = 105.15$, $p < 0.001$). Before the biogas, the cost of the firewood and kerosene in most households exceeded the annual salary of a tribal family. Thus people were often forced to harvest firewood from the forest illegally. Biogas plants being an eco-friendly technology safeguard local ecology and forest resources. "

" Asia and pacific have 23 per cent of the world's land area but 58 per cent of its people (Brown, et al., 1999; Agoramoorthy and Hsu, 2001). Patterns of unsustainable resources use and conflicting policies are already causing

continued loss of forest and biodiversity in Asia, including the bio- logical hotspots of India (Mittermeier, et,al., 2000; Agoramoorthy and Hsu, 2002; Agoramoorthy, 2006). Although forest biodiversity has been given significance in India, the scientific base of knowledge on forest ecology and ways of adding values to it are unfortunately still weak (Agoramoorthy,2007). "

" The simple and cost effective biogas technology highlighted in this paper provides an alternative renewable energy source that has great potential to significantly reduce pressure on forest resources and enhance local ecology. Therefore this eco- friendly technology deserves attention and it should be promoted aggressively throughout the world including the most and least developed countries. "

**Floriculture mitigates Climate Change**

" Between January 2006 and December 2007, data on the impact of floriculture development in local community were collected from 25 villages in Dahod district of Gujarat State. The floriculture project has been implemented by a local non- profit agency called Sadguru Foundation based in Chosala village of Gujarat State. "

" The total flower production, income and size of plot were positively correlated to each other (Pearson Correlation, $p < 0.001$, $n = 377$). Therefore, we standardized the production and income as the amount of products (kg) per 100 $m^2$ and income (USD dollars) produced selling minus the previous product earning. A general linear model was constructed separately to analyse the effect of flower types on dependent variables such as flower production, income increment as well as daily income per person (SAS Institute). "

" A small village located in Dahod district called Rozam became the ' Village of Flowers' after the initiations of floriculture development. The village is inhabited by 100 per cent tribal population. Prior to 2006, the women cultivated mainly maize, corn, wheat and other pulses. After the women practiced floriculture, their economic benefits significantly improved. For example, a women named Ramila cultivated crops such as Rose and Marigold worth USD 1400 within three months. By seeing the huge profit, she started a nursery the following year with 2000 plants by grafting the mother plants and sold them at the rate of USD 1 per 10 plants. She earned a profit of USD 200 just from the plants. After seeing the instant economic benefits obtained by Ramila, other women in the village started nurseries. About 80 per cent of farmers in the village started floriculture development since 2007 beside their usual cereal crops. Additionally, 60 nurseries became operational as of September 2008. The floriculture development not only increased income 29.5-18.3 times of the previous income revenue but also pulled the impoverished tribal women out of poverty.

" Marketing of flowers for the rural women was not at all a problem due to the constant demand for flowers in the local market in Dahod town, which is just 5-15 miles away from the study villages. When the market in Dahod town faced flower shortages during religious festivities and marriage ceremonies, people went to villages to purchase flowers from the women. During normal days, women on average made a profit of USD 5-15/ day and festival / marriage days brought USD 8-24 / day, depending on landholding. Prior to floriculture, the tribal women had no idea about cultivating flowers since they knew to grow only local crops. Staff from Sadguru Foundation's floriculture division taught a few women farmers in each village on how to grow flowers. Then they became self – sufficient in growing and selling flowers."

**Discussions**

" India's floriculture development gradually increased from 9900 acre in 1962 to 220,000 acres in 2000, which is in fact lower than China (Reddy et,al., 2002). The proportion of total floricultural area is 99 per cent in Colombia, 70 per cent in Netherlands and 57.51 per cent in Italy while it is only 0.56 per cent in India (Thippaiah, 2005). Besides, floriculture is generally viewed by government agencies and corporations as marginal farming by predominantly done by women so on comprehensive efforts have been made to make this a successful enterprise. Although India's flower export reached USD 14 million during 2006-07, it plummeted during 2007-08 by reaching USD 7 million (Bhattacharya, 2009). At present, India accounts for 0.65 per cent of the USD 11 billion global flower trade. However, Kenya still maintains the record as one of the top suppliers to the Netherlands- the world's flower centre, accounting

for 37.8 per cent of supplies during 2008 (Bhattacharya, 2009). Even at the time of global economic slump during 2008, Kenya managed to earn more than USD 360 million from sales through the Dutch auctions.

So, why India is doing poorly in the global flower market ? In fact, the flowers exports started with government backing in the 1990s, but infrastructure inadequacies coupled with lack of initiative from the growers withering away flower progress in recent years. India has not been able to build up volumes and quality consistently and the overall lack of minimized the global output. Kenya on the other hand, has maximized the advantage of being closer to the European market, which cuts their freight costs by half compared to India. Besides, Kenya has huge farms, 40 ha on average, compared to India's 4 ha average supported by hi- tech floriculture that gives the country an economic advantage (Bhattacharya, 2009). So India can learn from the Kenya's experience to enhance floriculture development sustainably in future and the previously untapped rural women potential can be utilized."

" This case study shows that tribal women who can grow flowers in rural areas have gained opportunities to interact with business communities and traders; they were no longer shy to approach government officials and NGOs on behalf of their villages to negotiate assistance for sustainable development projects. The floriculture business in villages has empowered development projects. The floriculture business in villages has empowered women to take up unconventional jobs such as site supervisors, nursery raisers, or village agricultural extension workers. Women did not participate in these activities previously. After floriculture development, women started to participate in the local politics as elected members of village councils (Panchayati Raj). The rural cottage – style flower industry has apparently transformed rural women to mobilize as a group to take various activities such as dairy co-operatives, savings and credits, floriculture groups, horticulture groups, etc. In those villages, they became more vocal in community development processes. The small- scale floriculture in rural areas undoubtedly energized and empowered tribal women to enhance their livelihoods, economy and local ecology therefore it has the potential to contribute immensely for India's sustainable development in future."

" Unlike water – intense crops such as sugarcane, rice or wheat, floriculture practice the tribal women in this case study neither consumed more water nor damaged local ecology. The women had to pay for water (electricity on an hourly basis) to grow flowers so they naturally reduced water waste. Drip and sprinkler irrigation systems were used to grow flowers, which significantly reduced irrigation water wastage and enhanced local ecology in rural areas. The Planning Commision of India has admitted in its tenth plan document that the water use efficiency in most canal irrigation systems connected to mega dams as low as (30-40 per cent, against an ideal value of 60 per cent) due to wastage, silting, weed growth, broken structures and poor maintenance ( Planning Commission Report, 2007; Agoramoorthy and Hsu, 2008c)."

**Conclusions**

" India has the second largest arable land in the world after USA. India's agriculture is dominated by small holdings where 60 per cent of small landholders own 17 per cent of farmlands with an average holding of 1 ha while 7 per cent of medium – to – large landholders (> 4 ha) cling on to 40 per cent of farmlands (European Commissio, 2007). The small landholders are often poor subsistence farmers with low investment and less productivity. As the service economy grows, the share of agriculture will diminish posing complications for India's future agriculture trade, policy and food security (European Commission, 2007). The prediction has reflected in a recent survey where rural areas have diversified from agriculture / horticulture to other sectors and 33.5 million people (54 per cent) who worked in service sector were from rural areas in 2007 (Times of India, 2009). Unlike India, farmers are minority (4 per cent) in developed countries, but their per capita income is huge since they receive strong capital support and subsidy from government. Therefore farming in developed nations cannot sustain without the financial backing of the government and the collapse of Doha 2006 round of negotiations in agriculture has showed the chilling trend (Swaminathan, 2007). In contrast, farming in developing countries such as India has been practiced primarily by marginal farmers and women who have been struggling to meet local food demands with little and erratic government subsidy / support. Therefore upgrading of technology and boosting financial assistance towards small farmers is the need of the hour to decelerate food security and climate change."

" Deforestation driven by agricultural expansion and aggravated by the extraction of forest biomass at

unsustainable levels has long been known as a leading trend in the history of India's land use pattern. Displacement of forest vegetation by agriculture has by no means limited to the British colonial period. Writings of the Chinese traveller Huien Tsan (624-642 AD) indicate that extensive agricultural development had already taken place centuries ago on the Gangetic plains of India what are now Uttar Pradesh, Bihar and West Bengal States (Grove, 1998). Therefore sustainable production / consumption has been given importance by the Johannesburg Plan of Implementation agreed at the World Summit on Sustainable Development (2002). The plan mandates socio-economic development at the grassroots in villages within the carrying capacity of local ecosystems to decelerate climate change induced by carbon emission. As rural women across India are involved in agricultural activities from sowing to harvesting, future agro-technology should be not only 'eco-friendly', but also 'women- friendly'. To top it all up, the rural women-led floriculture practiced in the drylands should be encouraged by state / federal governments and conglomerates because it has the potential to enhance sustainable production to relieve poverty mandated by the Johannesburg Plan of Implementation".

## STATEMENT SHOWING PROGRESS UNDER VARIOUS PROGRAMMES DURING THE REPORTING YEAR 2014-15

ANNEXURE - I

| Sr. No. | Programme | Physical Achievements | Acres Covered | Nos. of Beneficiaries Households | Persons |
|---|---|---|---|---|---|
| 1a | Community lift irrigation schemes (Nos.) | 10 | 794 | 509 | 3,054 |
| 1b | Mini lift irrigation schemes by watershed development (Nos.) | - | - | - | - |
| 2a | Water harvesting structures - check dams (Nos.) | 5 | 1,900 | 478 | 2,868 |
| 2b | Water harvesting structures - by watershed development (Nos.) | 20 | 472 | 209 | 1,254 |
| 2c | Trellis wadi by watershed department (Nos.) | - | - | - | - |
| 3 | Construction of new dug wells & bore wells for installation of hamlet based drinking water systems (Nos.) | 1 | - | 25 | 150 |
| 4 | Social forestry (Nos. of Saplings) | 15,95,721 | 1,596 | 6,215 | 37,290 |
| 5 | Fruit Nursery (No. of Plants) | 11,950 | 195.80 | 1,170 | 7,020 |
| 6 | Fruit orchard wadi / Horticulture Development (Nos.) | 1,117 | 829.25 | 1,117 | 6,702 |
| 7a | Floriculture plots (long term) (Nos.) | 146 | 17.38 | 146 | 876 |
| 7b | Floriculture plots (seasonal plots) (Nos.) | 684 | 155.54 | 684 | 4,104 |
| 8a | Vegetable crops (trellis system) (Nos. of plots) | 960 | 246.09 | 960 | 5,760 |
| 8b | Vegetable crops (seasonal plots) (Nos. of plots) | 1,820 | 652.77 | 1,820 | 10,920 |
| 9 | Pump sets (Nos.) | 45 | - | 45 | 270 |
| 10 | Vermi compost (Units) | 1,242 | - | 1,242 | 7,452 |
| 11 | Construction of wells development and wells recharging (Nos.) | 10 | - | 10 | 60 |
| 12 | Construction of Poly House (Nos.) | - | - | - | - |
| 13 | Construction of Net House (Nos.) | 5 | 0.625 | 5 | 30 |
| 14 | Construction of Tunnel Net House (Nos.) | - | - | - | - |
| 15 | Pulses crops (Plots) | 111 | 90 | 111 | 666 |
| 16 | Green House (Nos.) | - | - | - | - |
| 17 | Spices cultivation (Nos. of Plots) | 1,545 | 277 | 1,545 | 9,270 |
| 18 | Kitchen Garden | 4,127 | 456.75 | 4,127 | 24,762 |
| 19a | Agriculture extension, demonstration, multiplication of seeds, production, certification, packaging and marketing, etc. (acres) | - | 24,905 | 24,905 | 1,49,430 |
| 19b | PoP under KMS (Nos. of Farmers) | 32,650 | 32,650 | 40,605 | 2,43,630 |
| 20a | Training on Agriculture Extension Group - A | 11 | - | 299 | 1,794 |
| 20b | Training on Agriculture Extension Group - B | 10 | - | 284 | 1,704 |
| 21 | Open Pipe Line | 500 | - | 500 | 3,000 |
| 22 | Intensive micro watershed development - soil and moisture conservation works (Acres) | 8,157 | 8,157 | 1,784 | 10,704 |
| 23 | Percolation Tanks (Nos.) | 38 | 316 | 131 | 786 |
| 24 | Wells Renovation (Nos.) | 176 | 21 | 228 | 1,368 |
| 25 | Drip Irrigation System (W/s) (Nos.) | 2 | 0.10 | 2 | 12 |
| 26 | Sprinklar Unit (W/s) (Nos.) | - | - | - | - |
| 27 | Check Wall | - | - | - | - |
| 28 | Gabion Structure (Nos.) | 16 | - | 22 | 132 |
| 29 | Masonry Stone Outlet (Nos.) | 5 | - | 5 | 30 |
| 30 | Wells Deepning (Nos.) | 309 | - | 299 | 1,794 |
| 31 | Tank (Renovation & Desilting) (Nos.) | - | - | - | - |
| 32 | Roof Water Harvesting Structures | 3 | - | 3 | 18 |

| Sr. No. | Programme | Physical Achievements | Acres Covered | Nos. of Beneficiaries Households | Persons |
|---|---|---|---|---|---|
| 33 | Drinking Water Tank (Nos.) | - | - | - | - |
| 34 | Culvert (Nos.) | - | - | - | - |
| 35 | School Boundary Wall | - | - | - | - |
| 36 | Community Hall (Nos.) | - | - | - | - |
| 37 | Farm Pond | 6 | 25 | 17 | 102 |
| 38 | Tin. Shade | 1 | - | - | - |
| 39 | Feed Manger | 6 | - | 213 | 1,278 |
| 40 | Smokeless Chulha | 34 | - | 34 | 204 |
| 41 | Promotion, development and strengthening of milk cooperatives (Nos.) | 10 | - | 671 | 4,026 |
| 42a | Purchase of buffaloes (Nos.) | 50 | - | 50 | 300 |
| 42b | Vaccination camp (Nos.) | 14 | - | 819 | 4,914 |
| 42c | Account managing training | 2 | - | 134 | 804 |
| 42d | Animal breeding, sterility and artificial insemination camps (Nos.) | 7 | - | 242 | 1,452 |
| 42e | Fodder cutter equipments (Nos.) | 80 | - | 80 | 480 |
| 43a | Bio gas plants (Nos.) (Gujarat) | 18 | - | 18 | 108 |
| 43b | Bio gas plants (Nos.) (Rajasthan) | 129 | - | 129 | 774 |
| 44 | Solar lanterns (Nos.) | 958 | - | 958 | 5,748 |
| 45 | Sanitation - rural latrines (Nos.) | 159 | - | 159 | 954 |
| | **Total** | **-** | **73,757.30** | **93,009** | **5,58,054** |

There is about 50 % overlapping due to some households benefitting in two or more activities, particularly in item 19a and 19b in above table

## CUMULATIVE ACHIEVEMENTS TILL MARCH 2015

# ANNEXURE - II

| Sr. No. | Programme | Physical Achievements | Acres Covered | Nos. of Beneficiaries Households | Persons |
|---|---|---|---|---|---|
| 1. | Community Lift Irrigation Schemes (Nos.) | 401 | 52,344 | 27,200 | 1,63,200 |
| 2. | Community Water Harvesting Structures-Check dams (Nos.) | 376 | 56,976 | 24,418 | 1,46,508 |
| 3. | Wells Recharging (Nos.) | 18,459 | 36,156 | 18,464 | 1,10,826 |
| 4. | Wells Deepening (Nos.) | 839 | - | 839 | 5034 |
| 5. | Drinking Water System (Nos.) | 99 | - | 3,704 | 24,559 |
| 6. | Intensive Watershed Development (Acres) | 10,4633 | 1,04,633 | 32,171 | 1,93,026 |
| 7. | Social Forestry (No. of seedlings) | 6,75,38,564 | 70,702 | 1,32,456 | 7,94,736 |
| 8. | Fruit Nursery (No. of Plants) | 30,45,643 | 27,514.80 | 31,594 | 1,89,564 |
| 9. | Joint Forest Management (Acres) | - | 13,390 | 4,339 | 26,034 |
| 10. | Horticulture Development (No. of Plots) | 31,910 | 17,985.75 | 31,910 | 1,91,460 |
| 11. | Vegetable Crops (Trellis System) (No. of plots) | 4,946 | 1,961.84 | 4,946 | 29,676 |
| 12. | Floriculture Plots (Long Term) (No. of plots) | 5,679 | 638.71 | 5,679 | 34,074 |
| 13. | Construction of Poly House (Nos.) | 2 | 1 | 2 | 12 |
| 14. | Construction of Net House (Nos.) | 191 | 79.33 | 191 | 1146 |
| 15. | Biogas (No. of Plants) | 2,975 | - | 2,975 | 17,850 |
| 16. | Rural Sanitation (No. of Blocks) | 9,346 * | - | 9,346 | 56,076 |
| | **TOTAL :** | **-** | **3,82,382.42** | **3,30,234** | **19,83,781** |

Nos. of beneficiaries and acres have been overlapped to some extent in more than one programme.

***** Sadguru constructed 650 sanitation blocks, while rest were constructed by Taluka Panchayat, Jhalod, for which we were involved in monitoring. Most of blocks constructed by Taluka Panchayat are not in good condition and not functioning.

## PHYSICAL PROGRESS OF DIFFERENT NRM ACTIVITIES

# ANNEXURE - III

FROM 2001-02 TO 2014-15 (FOURTEEN YEARS)

| Sr. No. | Programmes | Physical Achievements of twelve years | Acres Covered | Nos. of Beneficiaries Households | Persons |
|---|---|---|---|---|---|
| 1a. | Community lift irrigation schemes (Nos.) | 206 | 20,933 | 10,355 | 62,130 |
| 1b. | Mini lift irrigation schemes by watershed development (Nos.) | 3 | 45 | 36 | 216 |
| 1c. | Mini lift irrigation schemes by forestry department (Nos.) | 16 | 70 | 132 | 792 |
| 2a. | Water harvesting structures -check dams (Nos.) | 190 | 32,831 | 10,400 | 62,340 |
| 2b. | Mini Water harvesting structures - by watershed development (Nos.) | 124 | 1,824 | 1,348 | 8,088 |
| 2c. | Trellis wadi by watershed department (Nos.) | 42 | 0 | 42 | 252 |
| 3 | Construction of new dug wells & bore wells for installation of hamlet based drinking water systems (Nos.) | 93 | 0 | 3,214 | 21,239 |
| 4 | Social forestry (Nos. of Saplings) | 2,04,11,995 | 27,658 | 83,412 | 5,00,472 |
| 5 | Fruit orchard wadi / Horticulture Development (Nos.) | 29,359 | 17,154.25 | 29,359 | 1,46,154 |
| 6a. | Fruit nursery (Nos. of Nurseries) | 183 | 0 | 183 | 1,098 |
| 6b. | Fruit nursery (Nos. of Plants) | 30,45,643 | 27,514.80 | 31,594 | 1,89,564 |
| 7a. | Floriculture plots (long term) (Nos.) | 6,037 | 980.38 | 6,037 | 36,222 |
| 7b. | Floriculture plots (seasonal plots) (Nos.) | 3,679 | 719.54 | 3,679 | 22,074 |
| 8a. | Vegetable crops (trellis system) (Nos. of plots) | 4,896 | 1,983.09 | 4,857 | 29,142 |
| 8b. | Vegetable crops (seasonal plots) (Nos. of plots) | 17,781 | 4,840.77 | 17,781 | 1,06,686 |
| 9 | Pump sets (Nos.) | 274 | 0 | 274 | 1,644 |
| 10 | Vermi compost (Units) | 11,773 | 0 | 11,773 | 70,638 |
| 11 | Construction of wells development and wells recharging (Nos.) | 1,959 | 394 | 1,959 | 11,754 |
| 12 | Construction of Poly House (Nos.) | 232 | 79 | 232 | 1,392 |
| 13 | Net house (Nos.) | 13 | 0.63 | 13 | 78 |
| 14 | Construction of Tunnel Net House (Nos.) | 40 | 0.29 | 40 | 240 |
| 15 | Pulses crops (Plots) | 1,844 | 1,008 | 1,844 | 11,064 |
| 16 | Green House (Nos.) | 2 | 1 | 2 | 12 |
| 17 | Joint Forest Management (Acres) | 465 | 465 | 236 | 1,416 |
| 18 | Kitchen Garden (Nos.) | 4,427 | 481.75 | 4,427 | 26,562 |
| 19a | Agriculture extension, demonstration, multiplication of seeds, production, certification, packaging and marketing, etc. (acres) | 24,240 | 39,295 | 49,145 | 2,94,870 |
| 19b | PoP under KMS (Nos. of Farmers) | 47,436 | 40,043 | 55,391 | 3,32,346 |
| 20a. | Training on Agriculture Extension Group - A | 36 | 0 | 1,222 | 7,332 |
| 20b. | Training on Agriculture Extension Group - B | 36 | 0 | 1,194 | 7,164 |
| 21 | Open Pipe Line | 500 | 0 | 500 | 3,000 |
| 22 | Spices cultivation through women horticulture co-op. (Nos. of Plots) | 12,268 | 2,958 | 12,268 | 73,608 |
| 23 | Intensive micro watershed development - soil and moisture conservation works (Acres) | 72,118 | 72,118 | 21,267 | 1,27,602 |
| 24 | Percolation Tanks (Nos.) | 104 | 1,147 | 613 | 3,678 |
| 25 | Well Renovation | 417 | 681 | 875 | 5,250 |
| 26 | Drip Irrigation System (W/s) | 818 | 379.61 | 818 | 4,808 |
| 27 | Sprinklar Unit (W/s) | 34 | 34 | 34 | 204 |
| 28 | Check Wall | 1 | 12 | 8 | 48 |
| 29 | Wire mesh gabion (Nos.) | 67 | 26 | 129 | 774 |
| 30 | Masonry gabion structures (Nos.) | 6 | 119 | 56 | 336 |
| 31 | Masonry outlet (Nos.) | 46 | 0 | 46 | 282 |
| 32 | Well Deepning (Nos.) | 879 | 0 | 869 | 5,214 |

| Sr. No. | Programmes | Physical Achievements of twelve years | Acres Covered | Nos. of Beneficiaries Households | Persons |
|---|---|---|---|---|---|
| 33 | Tank (Renovation & Desilting) (Nos.) | 4 | 331 | 106 | 636 |
| 34 | Roof Water Harvesting Structures | 4 | 0 | 4 | 24 |
| 35 | Gram vatika (Nos.) | 2 | 0 | 2 | 0 |
| 36 | Grade stabilizer structures (Nos.) | 3 | 6 | 10 | 60 |
| 37 | Farm pond (Nos.) | 20 | 134 | 93 | 758 |
| 38 | New wells (Nos.) | 61 | 667 | 716 | 4,296 |
| 39 | Boribandh (Nos.) | 9 | 0 | 45 | 270 |
| 40 | Intake well of L I (Nos.) | 1 | 75 | 68 | 408 |
| 41 | Drinking Water Tank | 10 | 0 | 172 | 1,032 |
| 42 | Culverts (Nos.) | 1 | 0 | 12 | 72 |
| 43 | School Boundary Wall | 3 | 0 | 0 | 0 |
| 44 | Community Hall (Nos.) | 1 | 0 | 28 | 168 |
| 45 | Tin. Shade | 1 | 0 | 0 | 0 |
| 46 | Feed Manger | 6 | 0 | 213 | 1,278 |
| 47 | Smokeless Chulha | 34 | 0 | 34 | 204 |
| 48a. | Promotion, development and strengthening of milk cooperatives (Nos.) | 53 | 0 | 3,409 | 20,454 |
| 48b. | Purchase of buffaloes (Nos.) | 158 | 0 | 158 | 948 |
| 48c. | Vaccination camp (Nos.) | 30 | 0 | 1,942 | 11,652 |
| 48d. | Account managing training | 6 | 0 | 316 | 1,896 |
| 48e. | Animal breeding, sterility and artificial insemination camps (Nos.) | 24 | 0 | 821 | 4,926 |
| 49f. | Fodder cutter equipments (Nos.) | 280 | 0 | 280 | 1,680 |
| 50 | Bio gas plants (Nos.) | 1,783 | 0 | 1,783 | 10,698 |
| 51 | Solar lanterns (Nos.) | 2,352 | 0 | 2,352 | 14,112 |
| 52 | Sanitation - rural latrines (Nos.) | 9,075 | 0 | 9,075 | 54,450 |
| | **Total** | **-** | **2,97,009.10** | **3,89,303** | **23,07,807** |

## RAINFALL DATA OF LAST FIFTEEN YEARS

# ANNEXURE - IV

| Sr. No. | Years | Rainfall in mm Dahod, Gujarajt | Banswara, Rajasthan | Jhalawar, Rajasthan |
|---|---|---|---|---|
| 1. | 2000 | 338.00 | 491.00 | 726.10 |
| 2. | 2001 | 544.00 | 644.00 | 768.60 |
| 3. | 2002 | 605.00 | 525.00 | 484.60 |
| 4. | 2003 | 917.00 | 841.00 | 749.00 |
| 5. | 2004 | 1041.00 | 1018.00 | 907.50 |
| 6. | 2005 | 560.00 | 945.00 | 676.00 |
| 7. | 2006 | 1204.72 | 2586.00 | 1359.62 |
| 8. | 2007 | 746.00 | 1413.02 | 656.00 |
| 9. | 2008 | 671.00 | 624.00 | 687.00 |
| 10. | 2009 | 385.00 | 464.00 | 721.00 |
| 11. | 2010 | 702.00 | 594.00 | 575.00 |
| 12. | 2011 | 668.00 | 1455.20 | 1236.80 |
| 13. | 2012 | 952.00 | 1217.60 | 684.20 |
| 14. | 2013 | 1082.00 | 1127.40 | 1311.09 |
| 15. | 2014 | 743.00 | 689.80 | 857.70 |
| | **AVERAGE** | **743.00** | **975.00** | **826.00** |

## LIST OF COMMUNITY LIFT IRRIGATION SCHEMES

# ANNEXURE - V

### COMPLETED DURING THE YEAR 2014-15

| Sr. No. | Name of L. I. Scheme | Taluka / district / state | Estimated cost in ₹ Lakh | Potential area covered in rabi season (acres) | Nos. of beneficiaries Households | Persons |
|---|---|---|---|---|---|---|
| 1. | Ghorwada | Kushlagarh / Banswara / Rajasthan | 34.20 | 90.00 | 71 | 426 |
| 2. | Jeevakhunta | Kushlagarh / Banswara / Rajasthan | 34.21 | 83.00 | 58 | 348 |
| 3. | Mahudi | Kushlagarh / Banswara / Rajasthan | 41.78 | 116.00 | 64 | 384 |
| 4. | Maiyawat | Kushlagarh / Banswara / Rajasthan | 32.64 | 75.00 | 82 | 492 |
| 5. | Ramjini nal | Shahera / Panchamahal / Gujarat | 37.64 | 49.00 | 16 | 96 |
| 6. | Tarkoni nal | Kadana / Mahisagar / Gujarat | 37.82 | 52.50 | 28 | 168 |
| 7. | Dhamarda | Dahod / Dahod / Gujarat | 49.52 | 96.00 | 53 | 318 |
| 8. | Ghada Vachla Faliya | Dhanpur / Dahod / Gujarat | 32.47 | 60.00 | 48 | 288 |
| 9. | Gumali- 1 | Dhanpur / Dahod / Gujarat | 33.95 | 90.00 | 40 | 240 |
| 10. | Gumali -2 | Dhanpur / Dahod / Gujarat | 39.91 | 82.50 | 49 | 294 |
| | **TOTAL** | - | **374.14** | **794** | **509** | **3,054** |

## LIST OF CHECK DAMS

# ANNEXURE - VI

### COMPLETED DURING THE YEAR 2014-15

| Sr. No. | Name of site | Taluka / district / state | Storage Capacity (mcft) | Potential created for irrigation (acre) | House holds |
|---|---|---|---|---|---|
| 1. | Borebhatod | Sajjangarh/Banswara/Raj. | 35 | 800 | 250 |
| 2. | Magarda Damrasath | Sajjangarh/Banswara/Raj | 10 | 400 | 54 |
| 3. | Magarda Khetelasath | Sajjangarh/Banswara/Raj | 5 | 200 | 63 |
| 4. | Borekhedi (Mahudi faliya) | Kushalgarh/ Banswara/ Raj. | 6 | 200 | 54 |
| 5. | Potaliya | Kushalgarh/ Banswara/ Raj | 12 | 300 | 57 |
| | **TOTAL** | - | **68.00** | **1,900.00** | **478** |

## STATEMENT SHOWING WATERSHED DEVELOPMENT PROJECTS BEING IMPLEMENTED BY SADGURU FOUNDATION IN THREE STATES AT THE END OF 31ST MARCH, 2015

# ANNEXURE - VII

| Sr. No. | State | District | Taluka | Name of Programme | Village | No. of Villages | Area Sanctioned (ha.) | Area Treated (ha.) | Remaining to be treated |
|---|---|---|---|---|---|---|---|---|---|
| 1. | Gujarat | Dahod | Limkheda | IGWDP | Chilakota | 01 | 1,138 | 1081 | 57 |
| 2. | Gujarat | Dahod | Limkheda | IGWDP | Chediya | 03 | 881 | 806 | 75 |
| 3. | Gujarat | Dahod | Jhalod | IGWDP | Modi Handi | 02 | 882 | 840 | 42 |
| 4. | Gujarat | Dahod | Limkheda | IGWDP | Ambava | 03 | 768 | 743 | 25 |
| | | | | | **Total** | **09** | **3,669** | **3470** | **199** |
| 1. | Rajasthan | Banswara | Bagidora | IGWDP | Khunta-1 | 07 | 1,006 | 855 | 151 |
| 2. | Rajasthan | Banswara | Bagidora | IGWDP | Khunta-2 | 04 | 748 | 645 | 103 |
| 3. | Rajasthan | Banswara | Bagidora | IGWDP | Khunta-3 | 08 | 872 | 782 | 90 |
| 4. | Rajasthan | Banswara | Kushalgarh | Coca Cola | Coca Cola | 20 | 3,073 | 2366 | 707 |
| 5. | Rajasthan | Jhalawar | Gangdhar (Dug) | NABARD - WDF | Sindhala-Somchidi | 02 | 848 | 848 | 0 |
| 6. | Rajasthan | Jhalawar | Gangdhar (Dug) | Khitiya | Khitiya | 01 | 858 | 756 | 102 |
| 7. | Rajasthan | Jhalawar | Gangdhar (Dug) | IWMP-09 | Hakiya Ghelot, Badaka, Devariya Kaval, Hadmatiya Mera, Hadmatiya Ratana, Jakhani, Khejadiya, Kuindala, Makoiya, Nipaniya Jhala, Parasali, Ravanguard, Semali Gehlot, Sindala, Somchidi (15 village) | 15 | 3,801 | 379 | 3422 |
| 8. | Rajasthan | Jhalawar | Pirawa | IWMP-13 | Aadakhedi, Ramti, Rasulpura, Rampuriya, Sarkheri, Kharadiya Sherpur, Holiyabori, Kagatpura, Sarvar, Laxmipura, Daulatpura, Devachi, Hamavada Gaja, Hamavada Pitha, Sherpur (15 village) | 15 | 5,079 | 562 | 4517 |
| | | | | | **Total** | **72** | **16,285** | **7193** | **9092** |
| 1. | MP | Mandsaur | Sitamau | IWMP-1 | Basai, Nirdhari, Rawat Khera, Dariya Moti, Kotadi, Gordhanpura, Goradiya Bijay, Harna Vada, Kantiya, Dhandi (10) | 10 | 4,235 | 3958 | 277 |
| 3. | MP | Mandsaur | Sitamau / Garoth | IWMP-6 | Surajana Juna, Embi, Dhakarkhedi, Lodakhedi, Ramnagar, Dhaturiya, Devpura Nagar, Parasali, Kherkhedi, Dhabala Deval, Enatraliya, Dhankhedi, Gelana, Semali Kakad, Bavdikheda, Salariya (16 Village) | 16 | 7,700 | 1325 | 6375 |
| | | | | | **Total** | **26** | **11,935** | **5283** | **6652** |
| | | | | | **GRAND TOTAL** | **107** | **31,889** | **15,946** | **15,943** |

Important training programmes and exposure visits conducted by various Government, Non-Government organizations and academic institutes at Sadguru Training and Research Institute, Chosala, from April 2014 - March 2015

| Sr. No. | Date | Title of Training | Duration (Days) | No. of Participants M | F | Total |
|---|---|---|---|---|---|---|
| 1 | 20 -21 May 2014 | Exposure cum Learning visit to Sadguru's Horticulture Development Programme | 2 | 16 | 2 | 18 |
| 2 | 20-22 May 2014 | Exposure cum Leaning visit to Sadguru's Horticulture Development Programme | 3 | 25 | 0 | 25 |
| 3 | 21-27 May 2014 | Orientation Training Programme on Watershed Development and Management | 7 | 61 | 3 | 64 |
| 4 | 09 -15 June 2014 | Training Programme on Watershed Development & Management for Watershed Committee Member's of IWMP., M.P. | 7 | 24 | 5 | 29 |
| 5 | 24-27 June 2014 | Sharing of Sadguru's and Participating organizations experiences on Promotion of Village Institutions for Livelihood Enhancement | 4 | 17 | 4 | 21 |
| 6 | 22-25 September 2014 | Exposure visit, Learning visit to NRM Activities in SWDF, Dahod | 4 | 8 | 0 | 8 |
| 7 | 06-11 October 2014 | Training programme in water Quality Fluoride Mitigation for NGO's Staff | 6 | 27 | 6 | 33 |
| 8 | 23-25 November 2014 | Exposure cum learning visit to Sadguru Water Resources Management | 3 | 8 | 0 | 8 |
| 9 | 24-25 December 2014 | Exposure visit to NRM activities of Sadguru Foundation | 2 | 35 | 10 | 45 |
| 10 | 15-16 December 2014 | Exposure cum learning visit to Sadguru's NRM activities | 2 | 15 | 10 | 25 |
| 11 | 02-03 January 2015 | Empowerment of village level Institutions for post Watershed Management | 2 | 26 | 8 | 34 |
| 12 | 09-13 February 2015 | Training programme on Tribal development projects For NABARD Officers | 5 | 20 | 1 | 21 |
| 13 | 11-13 February 2015 | Training Programme for Social Mobilizer of WASMO | 3 | 29 | 6 | 35 |
| 14 | 23-27 February 2015 | Training on Integrated Watershed Management | 5 | 12 | 0 | 12 |
| 15 | 24-25 February 2015 | Exposure visit of beneficiaries of CBO's & SPO Watershed Management | 2 | 39 | 11 | 50 |
| 16 | 16-20 March 2015 | Students of Journalism from Cincinnati University, USA | 4 | 03 | 14 | 17 |

The broad list of the funding partners during the reporting year 2014-15 is as follows;

**Governments**

1. Different departments of governments of three states i.e. Gujarat, Rajasthan and Madhya Pradesh
2. Central Government
3. NABARD in Gujarat and Rajasthan
4. KVIC - Khadi and Village Industries Commission in Gujarat and Rajasthan

**Corporate & Corporate Trusts**

1. Sir Ratan Tata Trust, Mumbai (Corpus Fund)
2. Sir Dorabji Tata Trust, Mumbai (Corpus Fund)
3. Sir Dorabji Tata Trust, Mumbai (Tata Chair Fund)
4. Sir Dorabji Tata Trust, Mumbai (Best Panchayat Award – Endowement Grant)
5. Jamsetji Tata Trust, Mumbai
6. Navajbai Ratan Tata Trust, Mumbai
7. Navajbai Ratan Tata Trust Endowement Fund, Mumbai
8. Anandana Coca Cola India Foundation, New Delhi
9. Coca Cola Company, Atlanta, USA
10. Seth Navinchandra Mafatlal Foundation Trust, Mumbai
11. Navin Fluorine International Limited, Mumbai

**Bankers**

1. Axis Bank Foundation, Mumbai.

**Others**

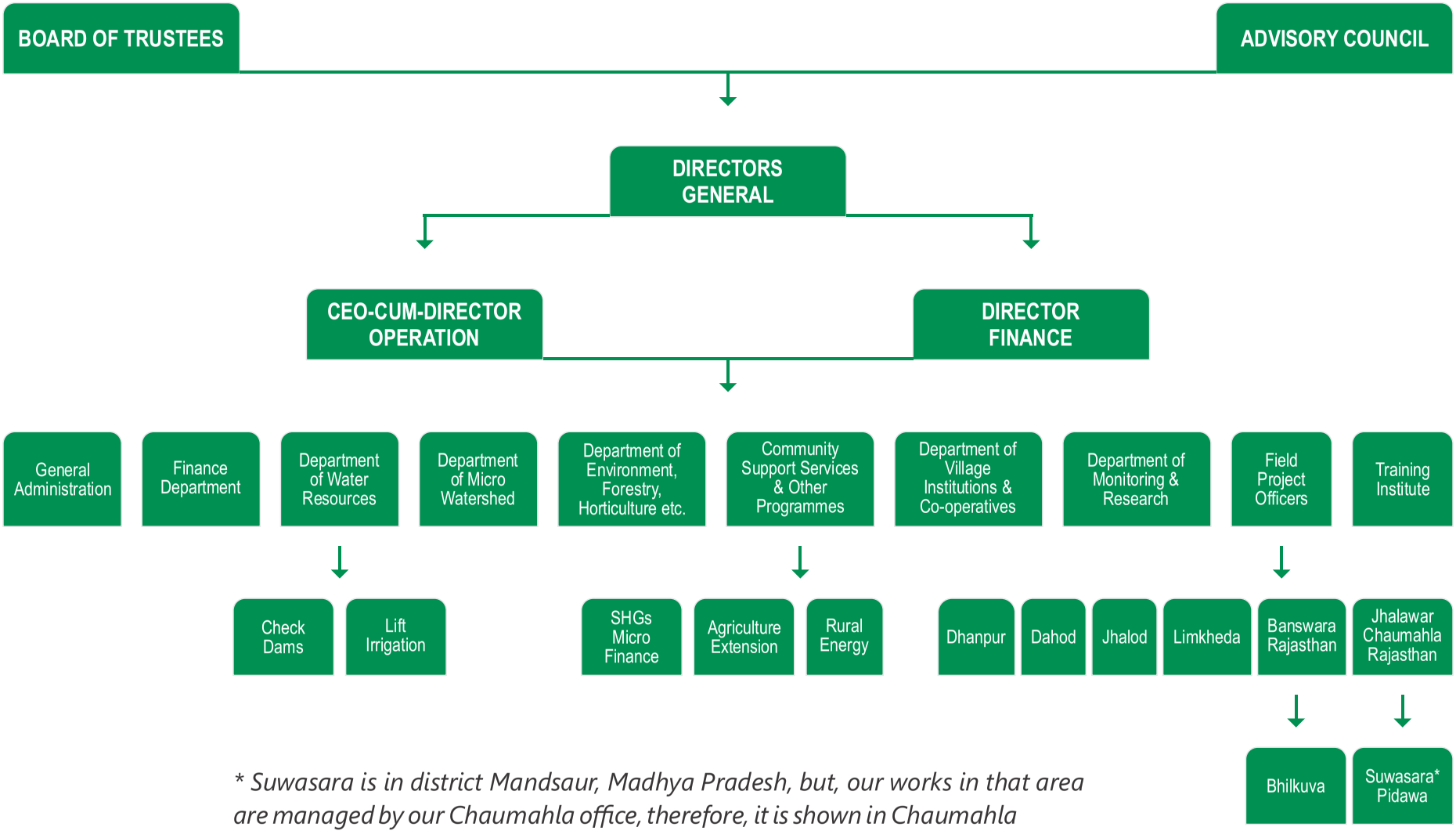
1. Collectives for Integrated Livelihood Initiatives (CInI – An associate organisation of the Tata Trusts) for implementation of integrated drinking water and sanitation programme under FCRA and Cluster Development Plan.
2. Beneficiaries' contribution in cash and kind.
3. Individuals from India and abroad.
4. Training cost from various groups.
5. Various Watershed Committees, Horticulture Cooperatives, CBOs, Federations, etc.

1. Fairly good annual increment.
2. Reasonable house rent allowance is given with relaxation for higher house rent allowance on actual basis.
3. Annual bonus @ 10 % of annual basic salary.
4. Contributory Provident Fund @ 12 % of basic salary contributed by Sadguru and 12% by the staff.
5. Gratuity as per Gratuity Act and permissible under Income Tax Act 1961.
6. Superannuation Pension Scheme linked with Group Insurance Plan with LIC fully contributed by Sadguru @ 15 % of basic salary.
7. Maternity benefits to female staff combined with paternity leave.
8. Time bound career development - promotion plan, in which every staff has guarantee of minimum three promotions in a span of 10 years.
9. Group personal accident policy.
10. Group personal life insurance plan with Life Insurance Corporation of India covering maximum benefit up to ` 25,000/- per staff in case of accident and death.
11. Home travel assistance (LTC) once in a year up to a family of four persons to senior staff not having their home town in Dahod.
12. Subsidy on premium for Mediclaim policy for both spouses for ` four lakh (` two lakh for each spouse).
13. Emergency funds for the assistance in the event of abnormal and chronic sickness.
14. Creation of contributory welfare fund for the staff.
15. Fixed medical allowance.
16. Reimbursement of fixed telephone charges provided to senior staff.
17. Working lunch allowance.
18. Shoes allowance.
19. Ample training opportunities in India.
20. Totally free transportation for official work - field as well as to office.

## GLOSSARY

| | | |
|---|---|---|
| ABF | : | Axis Bank Foundation |
| AG | : | Auditor General |
| CAG | : | Controller and Auditor General |
| CBOs | : | Community Based organizations |
| CEO | : | Chief Executive Officer |
| CInI | : | Collectives for Integrated Livelihood Initiatives |
| CRP | : | Community Resource Person |
| DPR | : | Detailed Project Report |
| GNFC | : | The Gujarat Narmada Rural Development Cooperative Society |
| IGWDP | : | Indo German Watershed Development Program |
| ISO | : | International Organization for Standardization |
| IWMP | : | Integrated Watershed Management Plan |
| NABARD | : | National Agriculture Bank for Rural Development |
| NGO | : | Non Government Organization |
| NRM | : | Natural Resources Management |
| NRTT | : | Navajbai Ratan Tata Trust |
| NVDA | : | Narmada Valley Development Authority |
| POP | : | Package of Practices |
| PRP | : | Para Professionals |
| PWC | : | Price Water Cooper |
| RKVY | : | Rashtriya Krishi Vikas Yojana |
| SAGY | : | Sansad Adarsh Gram Yojana |
| SDTT | : | Sir Dorabji Tata Trust |
| SFPF | : | Small Farmers Progressive Farmers |
| SHGs | : | Self Help Groups |
| VANI | : | Voluntary Action Network India |
| WDT | : | Watershed Development Team |

# ORGANOGRAM OF ORGANIZATION




** Suwasara is in district Mandsaur, Madhya Pradesh, but, our works in that area are managed by our Chaumahla office, therefore, it is shown in Chaumahla*

*Tribal girl in her precious orchard giving permanent income and healthy environment*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