

Project Profile

Agricultural Diversification



Gujarat CSR Authority

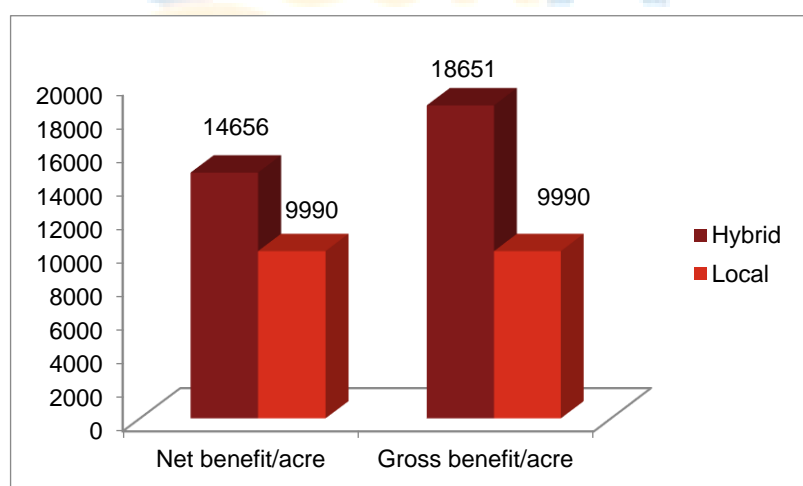
Project Profile – Agricultural Diversification

Background & rationale

Although majority of medium and major irrigation projects of Gujarat originate in Integrated Tribal Development Project (ITDP) areas, due to the topography; their command area fall in non-ITDP talukas. As a result, even though these areas have good rainfall, a large part of ITDP talukas remain without irrigation and thereby adversely affect the means of livelihood of such households (dominated by ST families). Problems of drought add to the problem of agriculture. With meticulous planning and allocation of resources, achievement of higher irrigation in most of the tribal regions through surface water harvesting as well as through ground water recharging is possible. In most tribal regions, lift irrigation technology is the most appropriate due to undulating topography and uplands. When irrigation development is combined with plantation and horticulture, it can give very good results for the economic development of the tribal regions and majority of the participating farmers can earn enough to surpass the poverty line on a sustainable basis.

Various projects on agriculture diversification in the ITDP areas have been approved by the Government of Gujarat under the Rashtriya Krishi Vikas Yojana, which are implemented by Tribal Development Department (TDD) in different districts for cultivation of crops over the years. Programmes like Project Sunshine and Jeevika implemented during 2008-12 under the Integrated Wadi and Agricultural Diversification Project in districts of south and north Gujarat have shown positive results in increasing the income of the farmers (Refer Figure 1). These are convergence projects, which aimed to leverage funding from NREGS, Micro-irrigation promotion schemes of Government of Gujarat and institutional finance for impactful agricultural diversification projects. Additionally, an Agricultural Diversification Project (ADP) was introduced during 2012-13.

Figure 1: Increase in Maize Production (in Rs.)



Source: Social Impact Assessment report, Anand Agriculture University¹

Most of the tribal populations are engaged in agriculture, therefore, improvement in agricultural diversification, irrigation facilities and marketing of the same, will have a defining impact on their incomes and lives. Greater focus on holistic support for agricultural diversification is needed in order to support agriculture in tribal areas and reduce their dependence on monsoon for irrigation and other issues which impact their land productivity.

¹ Livelihoods Initiatives-Agriculture, Tribal Development Department (2014)

Under agricultural diversification, farmers are also provided with high quality seeds and fertilizers and training in sound agricultural practices.

Objectives of the project:

For the short term, the objectives of the project shall focus on:

- increase in the area under irrigation;
- increase in the productivity of land and efficient use of water by crop diversification; and
- increase in the income of the beneficiaries through diversification & better post-harvest management.

For the longer term, the objective is to improve the viability of agricultural diversification for socio-economically weaker ST farmers i.e. those coming under the strata of poorest of the poor.

Expected Benefits

The support provided by companies would result in tangible and intangible benefits for sponsor company as outlined below:

Tangible Benefits	Intangibles
<ul style="list-style-type: none"> ❖ Community support & appreciation ❖ Social license to operate, through cooperative community engagement ❖ Recognition through awards for the impact created and spill overs to other areas 	<ul style="list-style-type: none"> ❖ Enhanced reputation by way of supporting projects benefitting communities at the 'bottom of the pyramid' ❖ Social branding ❖ Enhanced credibility within community and sector ❖ Contribute towards the fulfilling the Tribal Development goals

Opportunities for CSR intervention

The key activities of the project are the following:

- upgradation of existing check dams and construction of new check dams and with lift irrigation creating additional irrigation potential of land in the tribal districts;
- taking up micro-irrigation schemes in areas where there is a requirement;
- formation and nurturing of community groups (for micro-financing); and
- taking up wadi & agriculture diversification activities like banana and vegetable cultivation etc. and high yielding maize cultivation for farmers in **drought prone** ITDP talukas.

Funding requirements are proposed for supporting the following:

- training and capacity building of the farmers
- inputs relating to cost of seeds and fertilizers
- cost of extension services to help farmers change over from low value to high value crops with modern farming methods i.e. modern tools, marketing and storage etc.
- management costs for the implementation of the project

The source of funds could be partly funded from each of the following sources i.e. National Rural Employment Guarantee Scheme (NREGS), Gujarat Green Revolution Company (GGRC), TDD contribution, institutional credit. These may include - Special Central Assistance (SCA) to Tribal Sub-plan, grant under Article 275 (1) of

Constitution, Special Grant (SG) received under XIII Finance Commission, BCK Grant and New Gujarat Pattern of Tribal Development Department, Rashtriya Kishi Vikas Yojana of Agriculture & Cooperation Department, MIS grant mobilized by GGRC, MG NREGS of Rural Development Department, loans from GTDC and beneficiary contribution will be explored.

Potential project area

Saturation approach: under the proposed project, plantations of land will be taken up in phases with an aim of saturation across the entire state. Saturation of large areas will enable the project to provide high quality inputs in a cost effective manner and will also ensure better utilization of facilities and human resources, in addition to making the delivery of key financial and technical services and arranging market tie-ups more feasible.

Target group

The project aims to cover poor families for plantation type projects or all the willing & eligible families in a taluka. Non-poor families can also be covered to receive the applicable subsidies and support from the other on-going schemes, thus facilitating financial assistance. Eligibility criteria for selection of beneficiaries are the following:

- households in the periphery of command area of check dams
- small land holders not having irrigation facilities
- households having BPL score <20 (less than) as per the government criteria

Project implementation

The proposed project will be implemented over a four-year period and will have three phases –

- the first phase will be the preparatory phase with focus on community mobilization;
- the second phase will focus on construction activities; and
- the third phase will focus on value addition and increase in agricultural productivity.

The formation of user groups (UG) will be the key method through which project activities will be implemented. The formation and training of the UG will be taken up by experienced NGOs. The UGs will comprise members who will benefit directly from the project activities. The detailed implementation plan for the agricultural diversity project is provided below.

A. Implementation

The strategy for the Project will include the following:

- **Adherence to quality:** the quality of the project is proposed to be achieved through a variety of practices, including accurately targeting the farmers and displaying their details on a free-access website, seeking membership contribution from farmers, activating the helpline of TDD, timely deployment of sanctioned staff, GPS based monitoring of the field, extension visits of project functionaries on regular intervals, etc.
- **Inclusion of Forest Rights Act (FRA) recognised land, Primitive Tribal Groups (PTG) & Women-headed households:** once the forest land is transferred to ST families, it will be necessary to ensure that these plots have access to water and irrigation so that it can be used for

agricultural purposes. Preference will be given to such land and land belonging to PTG and women-headed households. Also, few 'all-women' villages will be identified for intensively working with women.

Table 1: Beneficiary contribution

Plantation Type	Year-1	Year-2	Year-3	Year-4
Wadi (long term plantations)	2,000	1,000	500	500
Vegetables & Banana	2,000	3,000	4,000	4,000
Maize & other dryland crops	500	1,000	2,000	2,000

- **Selection of NGOs:** The process for selection of NGOs will be rigorous and will be done through the process of open advertisement. A limited number of NGOs will be selected and these selected ones will have the potential to scale up the project to cover the whole taluka. They will also have the capability to lead the project through all its stages, from soil and water conservation and irrigation, to post harvest management.

List of success indicators

Project Outputs

- Number of farmers benefitting from the project, with an emphasis on vulnerable households (including STs, SCs, WHHs)
- Increase in productivity of crops (from baseline levels) over project period
- Increase in income levels of farmers benefitting from the agri-diversification project
- Increase in the cropping cycles and variety of crops being harvested

Desired Outcomes

- Increased awareness on the techniques of agri-diversification practices leading to improved productivity across the project areas
- Increased area being brought under cultivation due to improved and efficient irrigation facilities
- Sustained and gradual increase in farmer income levels
- Increased coverage of ST families benefitting from the project

Potential impacts

- Improved socio-economic status of the farmers due to increased & sustained incomes

Project components

Component 1: Water harvesting and distribution interventions

The Project will support the construction of the check dams/group wells and will also link it to the development of lift irrigation schemes wherever feasible to improve the productivity of the land. The distribution of collected water to fields by lift irrigation schemes would be done.

Component 2: Micro Irrigation Systems (MIS)

To enhance the water use efficiency, micro irrigation (MI) systems will be promoted for ST farmers, especially those engaged in horticulture and floriculture. Currently, up to 75% subsidy is being offered to ST farmers to help them install the MI systems.

Component 3: Agricultural Diversification and Wadi Development

Inter cropping and agricultural diversification will be promoted wherever possible for the farmers to generate cash income quickly and with less risks some of the crops being proposed for this purpose area

- Mango, cashew and other horticultural plantations;
- Vegetable cultivation;
- Banana cultivation;
- High yielding maize cultivation

The input suppliers and participating NGOs will be selected through competitive systems. These suppliers will also arrange for marketing part of the produce. Improved vegetables and floriculture varieties would be promoted with enhanced productivity and quality, for which good quality seeds and saplings would be sourced. After ensuring water security, there is considerable potential for agricultural diversification as it can be implemented effectively with good returns to farmers even in small plots of land. With support for modern tools, post-harvest activities and risk coverage, it is possible for the farmers to increase their incomes quickly with lesser risks.

Component 4: Community Participation through Users' Groups

The ownership by the target groups will be ensured through community participation from planning to project implementation, and by transferring post-project management to the community institutions set up for the specific purpose. Village level institutions in the form of user groups will be formed to largely focus on equity, efficiency, participation, sustainability and accountability.

Component 5: Institutional Credit

It is imperative for ST farmers to have reliable credit facilities at the right time as farming is seasonal in nature. To facilitate institutional credit, the cooperation of Tribal Development Department and the banks will be sought to extend bulk loans to Users' Groups would be explored. If banks do not disburse timely loans, Tribal Development Corporation could also be explored to offer loans at a concession to the community. All loans will be repayable only after the farmer starts receiving returns on his investments.

Component 6: Post-harvesting support (modern tools, post-harvest storage, processing, packaging and marketing)

With enhanced irrigation facilities, inter cropping and agricultural diversification, the yield of farmers will increase. In order to ensure that the farmers get maximum economic advantage of their product depending on type of crops and produce, post harvesting facilities would be created. The strategy for the same would be decided after as and when the project is implemented. Based on the needs additional facilities for storage, cold chain, markets etc. would be created. The aim of this component would be to bring about improvements in post-harvest handling and marketing for fewer losses. Reducing post-harvest losses would make agricultural diversification more attractive for small-scale farmers.

Component 7- Training and Capacity Building

The training component in past efforts have been weak as a result of which results have not always been encouraging. Under the proposed project, this component would be considerably strengthened and will include the capacity building of the beneficiaries and NGOs. The training will be imparted through formal as well as informal means, and exposure visits and demonstrations will be the prime training tools that will be used for ST farmers. The major areas where training will be given to project participants include agriculture, natural resource management and community-organization related procedures.

Component 8 - Institutional Arrangement

Funds will be released by the Corporates / TDD, Government of Gujarat, to the GCSRA, which will then identify the projects, finalize implementing partners, guide them in engagement of project personnel, facilitate the individual projects and release funds and monitor the performance.

There will be three tiers of management for the proposed project, including at the state level, district level and at the grassroots level through NGOs. GCSRA would provide technical support like development of project proposals, selection of project partners and key implementing personnel, assistance in implementation of the projects, guidance for mid-course corrections & modifications and monitoring & evaluation of these special projects. At the field level, these projects will be implemented with the help of district level line departments and partner NGOs.

Companies affiliated with GCSRA can hire the Authority's services to target a particular taluka or few talukas to take up agricultural diversity project. GCSRA would ensure all compliance requirements are fulfilled by the implementing agency/agencies including reporting. At the end of the FY, GCSRA would issue a CSR compliance certificate to the corporates.

B. Implementing agency

The Project shall be implemented by GCSRA as an oversight & monitoring agency, with support from NGO/Implementing agency (having expertise in implementing agricultural diversity projects within rural communities) being tasked with the responsibility of grass root implementation. The GCSRA / implementing agency shall work in collaboration with Corporates and local communities.

Roles and responsibilities

- **GCSRA:** advisory and monitoring agency for the CSR project i.e. strategic plan for the project, coordination between donors, technical agencies, government departments, monitoring & evaluation, documentation and (physical/financial) reporting for the project, issuing compliance certificate for the CSR activities. The roles shall include:
 - to select partner NGOs & finalize terms, manage them & review their performance concurrently;
 - to maintain coordination at district level with line departments & convergence (funding, schemes, monitoring etc);
 - to release funds
 - to develop monitoring system for the project (including real time monitoring);
 - to develop project implementation manual, state level IEC material and print them;
 - to obtain technical Sanctions for civil structures; and to ensure quality
- **NGO:** implementation and community mobilization, identification of HHs as target population, support for implementation of the project, monitoring, progress reporting as per the results framework. The role of the NGO is as follows:
 - to interface with farmers & other stakeholders;
 - to manage Taluka level implementation of project, including vendor management;
 - process documentation, monitoring and progress tracking & reporting;
 - to ensure compliance with project guidelines, especially the 3-sigma requirements;
 - to arrange monthly review meeting, trouble shooting & feedback to GCSRA
- **Corporates:** funding the initiative

C. Partnerships (other than NGOs)

- **Government Institutions:** Department of Tribal Development, Department of Irrigation and Department of Rural Development, Govt. of Gujarat and convergence with other schemes as shown in table below will be done.

Table 2: Convergence with other schemes

Activity	Scheme	Funding Department
Watershed development, including soil & moisture conservation, development of farm ponds, Bori Bandhs, group wells & check dams.	NREGP	Rural Development Dept
Lift Irrigation	Vanbandhu Kalyan Yojana (TASP) and Support under Article 275 (1) of Constitution, and Gujarat pattern (District level funds)	Irrigation and TDD
Micro-irrigation		GGRC and TDD
Wadi and agriculture diversification	NREGP and SCA to TSP	RDD & TDD
Farm Mechanisation and micro-finance	Support under Article 275 (1) of Constitution	TDD
Post-harvest facilities - cold storage, procurement centres and refrigerated vans		TDD

- **Community:** Households to contribute nominal amount of the overall project cost as a margin money
- **Microfinance institutions:** for financing of the margin money component (if required)
- **Fertilizer companies:** to provide good quality fertilizers at subsidised rates
- **Agriculture universities:** for providing Technical expertise in training or provide guidance on the project

D. Anticipated benefits from the project

- Improved quality of life of the ST beneficiaries due to increased income and food security
- Steady employment of family labour and more profitable use of equipment in diversified farming
- Soil erosion and soil fertility will be controlled & checked, as land kept under cultivation throughout the year by adoption of crop rotations

Workplan

#	Activity Description	Y1				Y2				Y3				Y4			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1.	NGO/implementation agency on-boarding																
2.	Situational assessment of the project Talukas (developing a baseline)																
3.	Community sensitization and mobilisation																
4.	Consultations with local stakeholders and identification of the ST HHs																
5.	Implementation of the project – training, construction/repair of dams etc., cropping, harvesting, marketing etc.																
6.	Monitoring of NGO on monthly basis																
7.	Joint visits with local / Govt. officials on the progress																
8.	Monitoring of CSR activities by GCSRA																
9.	Reporting																
10.	Impact Assessment																

Estimated Financial Costs

The tentative project cost (along with physical targets) is detailed as below. A typical unit wise estimate is provided which can be funded by corporates over the programme term is cited below. The estimated cost is indicative in nature, this may differ from the actual cost depending upon the project requirement and area to be covered.

Table 3: Programme outreach (illustration)²

Particulars	Outreach
User groups	3
MIS (acres)	200
Wadi (acres)	250
Vegetables (acres)	50
HYV Maize (acres)	500
Acreage	1,000
Hectares (1 acre =0.405 hectare)	405

Indicative cost of phase 1 – Watershed & Irrigation Activities: **INR 48,56,227**

Indicative of phase 2- Agriculture Diversification and Post Harvesting Activities: **INR 1,11,71,275**

Tentative project cost (including 4% GCSRA Administrative cost): INR 1,66,68,602

Table 4: Estimated budget – (illustration)

Phase 1: Watershed & Irrigation Activities ³			
Activities	% budget	Unit Costing	
Preparatory phase, including:			
Entry point activities	4	1,94,249	
Institution and capacity building	5	2,42,811	
Watershed Works Phase:			
Watershed development works	56	27,19,488	
Livelihood activities for asset less persons	9	4,37,060	
Production system and micro enterprises	10	4,85,623	
Project Administrative costs	10	4,85,623	
Monitoring	1	48,562	
Evaluation	1	48,562	
Reporting	1	48,562	
Consolidation phase (exit process)	3	1,45,687	
Total	100	48,56,227	
Phase: 2 Agricultural Diversification & Post Harvesting Activities ⁴			
Activities	Unit cost	Unit target	Total Cost
Development of Wadi	20,000	250	50,00,000
Vegetable cultivation	40,000	50	20,00,000
HYV Maize	8,000	500	40,00,000

² illustrative targets prepared based on the Jeevika proposal for Surat district

³ Watershed guidelines : please refer

<http://dolr.nic.in/dolr/downloads/pdfs/Common%20Guidelines%20for%20WDP%202008%20Revised%20Edition%202011.pdf>

⁴ as per Jeevika proposal

Storage godowns (5)	10,000	5	50,000
Mechanisation & post -harvest activities			1,05,263
Contingencies (0.1% of project cost)			16,011
Sub-total			1,11,71,275
GCSRA Administrative costs @ 4%			6,41,100
Indicative Project Cost			1,66,68,602

Monitoring

- GCSRA will act as the monitoring agency for the CSR project implementation and ensure compliance as per requirements, and will issue CSR compliance certificate to companies against the investment made
- Based upon the perceived progress over the years, GCSRA will provide support to the company to develop a results framework, under which, performance indicators shall be defined and the baseline levels as well as targets defined over a 2-4 year horizon, on an annual basis.
- Once defined, the targets can then be broken down into half-yearly input-output-outcome targets, with impact criteria defined over 2 years post the project implementation.
- Once the framework is finalised, GCSRA will conduct monitoring/impact assessment of the projects

Reporting requirements

The implementing agency would be responsible for the following:

- ensure regular monitoring and follow up and updation of records and generate progress reports for GCSRA and company as per agreed timelines
- ensure reporting on CSR activities to GCSRA on monthly, quarterly and annual basis as against the funds disbursed to them

GCSRA would be responsible for collating the data and then reporting on the overall CSR activity management and annual compliance, followed by the issue of a compliance certificate on the same to the sponsor companies.