Solidaridad

ANNUAL REPORT 2014-2015

PROGRAMMES

Targeted Areas of Project Implementation in India 2014-15

HUF Water Projects and Trustea Growing Areas

Project Title	Commodity	Project Working Areas (States)	Year (Start)
India Tea Sustainability Programme	Tea	Assam, Tamil Nadu, Kerala, West Bengal	April 2012
Water Efficiency and Sustainability in Agri Supply Chains	Sugarcane	Tamil Nadu (Water Project – Sugarcane)	January 2014
Water Efficiency and Sustainability in Agri Supply Chains	Soy	Madhya Pradesh, Maharashtra, Rajasthan (Water Project – Soy)	January 2014
Water Efficiency and Sustainability in Agri Supply Chains	Cotton	Madhya Pradesh, Andhra Pradesh, Gujarat, Karnataka, Tamil Nadu, Odisha (Water Project – Cotton)	January 2014
Water Efficiency and Sustainability in Agri Supply Chains	Tea	Nilgiri District Tamil Nadu (Water Project – Tea)	January 2014

FOREWORD

I have great pleasure in presenting to you the Solidaridad Regional Expertise Centre (SREC) Annual Report 2014-2015.

Shatadru Chattopadhayay
Managing Trustee

This is the third year of publishing the SREC annual report. SREC has grown by leaps and bounds in the past 3 years as we aim to become one of India's leading civil society organisations. We strive for sustainable and ecologically effective agriculture and to stand out through above-average value creation for all of our stakeholders. To achieve this objective, we must create value; value for our donors, for our employees, and most importantly, for our beneficiaries.

The year under review was marked by several significant projects, initiatives and changes. We have now initiated major interventions on improving water efficiency in tea, sugarcane, soybean and cotton production by the smallholder farmers. Water is a critical component of life and plays a vital role in the economic growth of nations. Even though India has substantial natural water resources, the population growth, economic growth and over exploitation has resulted in water stress/scarcity. The future water projections for 2025-2050 indicate water issues are going to aggravate further and shortage is expected to be at least 50% in India. All the policies, guidelines and plans demand urgent measures to manage India's a water resources more effectively and efficiently. Agriculture consumes more than 70% of available water and growth in agriculture will depend on the water availability for future generations. Yet, various plan documents indicate there are adequate options available, besides supply management, to reduce water consumption at the end user level (farm level).

The India specific sustainable programme includes 4 crops (sugarcane, cotton, soybean and tea) covering 10 states and 38 districts and benefitting close to a million smallholder farmers cultivating more than 800,000 ha of land area. This programme is expected to improve the productivity of agriculture and livelihood of the farming community besides managing the environment around agricultural ecosystems.

A lot of water is wasted in transit to the field due to inappropriate irrigation methods, and by growing crops that are not suited to the local environment. Further, unsustainable agriculture dries up rivers, lakes and underground water sources; increases soil salinity and thereby destroying its quality; and by washing pollutants and pesticides into rivers, destroying downstream ecosystems such as corals and breeding grounds for fish in coastal areas. At the same time, sustainable agriculture, as promoted by Solidaridad, could address matters such as soil fertility, biodiversity, water resources and the quality of rural life.

This present project proposal is to supplement the above initiative by specifically focusing on water productivity (more crop per drop). The project is expected to save 1.25 trillion litres of water and increase productivity by 10%. The estimated expenditure is Rs. 7.5 crore for 3 years.

SREC also completed an eventful third year of the tea programme developed in close coordination with the Tea Board of India, along with IDH, Hindustan Unilever Limited as well as Tata Global Beverages Limited. It supported 53 tea gardens in India to conduct gap assessment against the trustea code and improve their practices. The pilots in North Bengal, Assam and Southern India were successfully completed.

With this report, we are inviting you to take a first-hand look at SRECs work during 2014-15 and to learn more about the trends and drivers of our work on how we are supporting smallholder farmers to be more competitive and come out of the cycle of poverty.

MISSION

Solidaridad seeks to combat structural poverty through sustainable agriculture and trade. Solidaridad's mission is based on the following convictions:

- **There is only one Earth, and it is our task to look after it for future generations**
- **Poverty is degrading and should be eradicated from India**
- **The balance between 'growth' and 'distribution' can only be preserved if the poor themselves are agents of development.**

VISION

Sustainable production in agriculture and industry, combined with sustainable trade will make a significant contribution to combat poverty and in preserving people's environment, in the context of a global economy.

STRATEGIES

The increasing demand for food, feed, fibre and fuel has created a paradox. On one hand rising food prices lead to challenges for large numbers of people in the rural areas; on the other, the pressure created on the land to meet the demand threatens the biodiversity and carbon rich natural landscapes. Major Indian businesses and multinationals have heeded the call by Solidaridad, among others, to take responsibility and be part of the solution rather than be part of the problem.

As growth in agricultural productivity does not match growth in demand, increasing areas of natural habitat and volumes of irrigation water are being used to meet this demand, to a point where critical biodiversity, water and environmental regulation thresholds are exceeded, as documented in the UN Millennium Ecosystems assessment. At the same time, 75% of the world's poor live on farms that have extremely low productivity due to a combination of factors such as lack of access to inputs, poor planting material and/or environmental degradation. They usually have limited or no access to markets due to logistical or quality constraints. Better farming is key to reducing poverty and providing access to health and education for rural populations, as well as curbing migration to overcrowded cities. In many cases, crop yields and livestock densities can be increased using existing, proven technology while reducing the environmental impact and external inputs. This will lead to efficiency gains – improving incomes while avoiding unnecessary expansion and degradation.

Solidaridad believes that the necessary changes will have to be driven by collaborations between NGOs, market players and the government.

CORE VALUES

- **We believe in creating win-win solutions for sustainable development through cooperation and partnerships between CSOs, government and businesses**
- **We propagate a balanced approach towards social, economic and environmental aspects so that the needs of both present and future generations are safeguarded**
- **We take a value chain approach from producer to consumer, helping to integrate sustainable practices in agricultural farms and factories**
- **We create support for sustainable economic development, especially among citizens and consumers in the Global North and South**
- **We value integrity, honesty, openness, personal excellence, constructive self-criticism, continual self-improvement, and mutual respect within our organization**

PROGRAMMES

1. TRUSTEA PROGRAMME

INTRODUCTION

The trustea programme seeks to facilitate a locally developed and owned Indian tea code that is meaningful, cost effective and practical to implement without compromising on globally accepted core sustainability principles. From 2012 to end 2016 it seeks to sustainably transform around 500 million kg of tea, targeting 600+ factories, 500,000 tea plantation workers and 40,000 smallholders. Hindustan Unilever and Tata Global Beverages are the funders to the programme and Solidaridad Regional Expertise Centre is the lead implementing partner.

The key milestones under the trustea programme during the reporting period were as follows:

COMPLIANCE SUPPORT TO THE PRODUCERS

Farm Support Centres (FSCs): Solidaridad has set up three farm support centres operating from its field offices in Tinsukia, Coonoor and Dooars. The FSCs are composed of senior and junior experts who provide training and capacity building support to surrounding tea growers and manufacturers. All three FSCs regularly visited tea producers undertaking trustea implementation to monitor the progress made by them against the trustea code. There have been a lot of infrastructure and policy development work done by the tea producers while undertaking trustea implementation.

Some of the examples and progress made are provided through pictures below:

Wash area at the main entrance to the factory

Soak pit provided for waste water from the factory

Plastic strip curtain at the main entrance to the factory

Division map displayed

PROGRAMMES

1. TRUSTEA PROGRAMME

Policies displayed

Buffer zone

Chemical store area after re-modification

Vettiver planting

Newly developed waste water treatment system in a TE

Covering of head and mouth during hand sorting in a TE in Darjeeling

PROGRAMMES

1. TRUSTEA PROGRAMME

TRUSTEA OFFICERS TRAINING

In order to strengthen entities undertaking trustea implementation and to ensure continuous improvement, trustea officers have been identified and have been comprehensively trained on trustea related compliances. During the reporting period, there have been two centralized events, one each in North and South India, apart from various one-to one sessions throughout the year by the FSCs. The training events took up the challenges faced by the trustea officers chapter by chapter. For the purpose of better understanding, the chapter-wise implementation guide was reproduced in PowerPoint slides with appropriate diagrams, pictures and sketches. During the January-December 2014 period, one trustea officer per entity covering all 121 Gap Assessed entities has been trained.

DEMO PLOTS

We have identified and developed certain farms as "demo plots" which demonstrate good agricultural practices and supplement our training efforts. This is an idea meant to develop a system of farmer-to-farmer learning. One demo plot near Tinsukia, at Chandmari TE and two in South India, at Erinkadu and Wentworth, have so far been set up. We are also in the process of setting up one more demo plot in Siliguri. Every month, on a particular date, FSC organizes an event around a demo plot where resource persons from TRA (for North) and UPASI (for South) are also present. More than 15 trainings have been conducted around these demo plots and 2380 smallholders (including 180 women smallholders) and workers given training of trainers. The calendar of training operations has been drawn up in sync with the calendar of operations as per the advice of UPASI and TRA.

The key issues so far covered are:

- Proper pruning at correct height and procedures
- Bush hygiene treatment
- Land levelling, forking, soil testing and conservation methods
- Drainage correction
- Pest control with bio/inorganic methods for better pest management
- Correct tipping and plucking method for preparing the plucking table
- Integrated pest and weed management as season starts
- Field management practices for standard plucking, leaf handling, transportation and control of leaf damages
- Fertilizer application and IFM
- Use of PPE for fertilizer, pesticides, weedicides
- Shade management
- Purpose of buffer zone and compliance procedure
- Waste management
- Training on PPC of the Tea Board

Demo Plot Examples:

Demo plot at Chandmari TE, Assam

Training at Wentworth – Explaining and distribution of farm diary

Workers with PPE at Merryview, North Bengal

Lime wash application at Wentworth demo plot

PROGRAMMES

1. TRUSTEA PROGRAMME

TRUSTEA COMMUNICATION GUIDE

A trustea communication and visibility guide for the use of trustea compliant entities has been prepared and are being considered for use by the stakeholders.

TRUSTEA AUDITORS TRAINING

The First trustea Auditors Training Programme was held from 3rd-6th March, 2014 at Tollygunge Club, Kolkata. Various certification bodies attended the training programme, like INDOCERT, BSI, IMO, Lacon and CUC. People from the Tea Board also participated in the programme. There were a few internal auditors from Solidaridad who also attended the training. The total number of participants who attended the training programme and appeared for the trustea auditor's examination was 37.

Dr. P. C. Anil and Dr. S Ravi Shankar from QCI, Mr. Ranjan Circar, Mr. Vinod Shenoy, Mr. Kulbir Mehta and Mr. S. K. Das from Solidaridad and Mr. Saikat Basu from Verde were the lead trainers of the programme. Mr. Boriah from the Tea Board was present to give the certificates. Representatives from various stakeholders and senior staff members from Solidaridad were also present to motivate the auditors and help to make the programme a success. A follow-up training will be organised during August 2014.

The Second trustea Auditors Training Programme was held at Coimbatore from the 10th-12th February, 2015. Mr. Ambalavanan, Ex Director Tea Board South, felicitated the successful attendees. This training was unique in the sense that it had a good gender balance; being represented by almost 35% lady members. It was attended by 20 participants from 7 certification bodies, besides several representatives from the Tea Industry including KDHP, Tata Coffee, Wood Briar, Parry Agro, and Harrison Malayalam from the auditee companies. All the attendees passed the examination.

The Third Auditors Training Programme was held at Tinsukia, Hotel Aroma Assam, from 2nd-4th March, 2015. Here again another 34 participants from 7 empanelled certification bodies and industry stakeholders attended the programme.

REGISTRATION OPTIONS FOR TRUSTEA

Solidaridad is also providing technical and hand holding support to trustea to transition as a separate legal entity and start working independently and become self-sustainable. A comprehensive document for different options of registration and pros and cons for trustea was prepared and shared with the stakeholders. The prominent options are:

- Registration as a Society under the Societies Registration Act, 1860
- Registration as a Trust under the Indian Trust Registration Act, 1908
- Registration as a Sec-8 Company under the Companies Act, 2013

The registration formalities shall begin as soon as a consensus is reached about the format of registration among the stakeholders.

TRUSTEA CODE AND AUDIT TOOL REVISION

Version 1 of the code was fundamentally appropriate for the purpose, but we needed to ensure that the code, together with the implementation guides and audit protocol, leaves little room for misinterpretation by auditors and producers. There were some concerns about generous scoring and the risks thereof to the credibility of trustea and the reputation of the funding partners.

Hence the trustea code committee was formally entrusted to work on a revision of the code and it started off with a meeting with programme funders, implementers, stakeholders and general public at large. The revised Version 2 of the trustea code became effective from January 1, 2015.

Similarly, the new web and android page application to undertake audits under Version 2 was developed and went live on March 15, 2015.

TRUSTEA WEB PORTAL

The Trustea website was revamped with the following major changes:

a) Videos & Tutorials: A section for videos and tutorials for all members to facilitate programme understanding.
b) Gallery: A section for all events, news, trustea programme etc., and related images with easy navigation and visibility.
c) Archival: Date-wise auto archival of news, events and links to prevent the site from becoming slow through content overload.
d) Mailers: Auto mail template where trustea secretariat can send mass mail with selected templates.

The revised trustea website was launched from March 2, 2015.

PROGRAMMES

1. TRUSTEA PROGRAMME

TRUSTEA INITIATIVES AND BENEFITS TO SMALL TEA GROWERS – A CASE STUDY

Challenges and Background

Indiscriminate use of pesticides and fertilizers, lack of awareness on Good Agricultural Practices, poor yield and returns on the produce are the problems encountered by every Small Tea Grower in India. There have been several instances when Indian tea was hit by western campaigns – that it is not safe to drink due to high MRLs of pesticides and chemicals than the prescribed limits. These campaigns not only hit the image of Indian tea, but also limited the likelihood of its exports, resulting in less pay and subsequently less margin to its growers including STGs.

Some of the prominent campaigns were:

- Campaigns against Unilever and its RA certified suppliers by Dutch NGOs like SOMO (http://somo.nl/publications-en/Publication_3711) in 2012 on safety, labor and welfare issues
- Colombia University Report on violation of workers' rights, health, sanitation, housing et.al in APPL gardens on ETP verified estates (2013)
- Green Peace Campaign on Clean Chai (2014) around pesticide issues

The Solution

Trustea – an Indian Tea Industry sustainability code – aims to sustainably transform tea production and manufacturing practices for the larger benefit of tea and its consumers. Solidaridad Regional Expertise Centre (SREC) is the lead implementing partner for the trustea programme since its inception in 2012. SREC has been playing an instrumental role in the training and capacity building of STGs. One such trustea implementation was undertaken with the green leaf (tea) suppliers of Surya Bought Leaf Factory in 2014.

Training of Small Tea Growers

The STGs were initially reluctant to give any time to the trustea project implementation team as they thought it would be wastage of their time and would prove cost intensive for them to implement. There was indiscriminate use of chemicals, unrecorded use of fertilizers and agricultural practices. The plucking standards were not considered to be good enough for a higher price. The major hurdle to introduce trustea with these STGs was uncertainty of a better price immediately after getting them a trustea certified status. The persistent persuasion and technical inputs of our experienced planters helped to convince them for trustea implementation. The STGs started taking interest when they got practical and cost efficient advice regarding judicious use of chemicals, pesticides and seasonal caring of tea bushes. They were trained to keep records of their crop cycle and maintain documentation for better management and audit purposes. They were organized in groups and guided to comply with.

Result

It took repeated meetings and discussions over 18 months by the Solidaridad team when the STGs supplying to Surya BLF completed all mandatory compliances for trustea certification. They were audited by one of the trustea empanelled certification bodies; consequently 143 STGs were awarded trustea certified status. The growers now use comparatively less pesticide and fertilizers. They follow prescribed formulations for their tea plantations. This could only have been possible because of the training and capacity building of the Solidaridad Tinsukia Farm Support Centre.

The usage of Person Protective Equipment's (PPEs) and safe handling/ spraying of chemicals led to lesser exposure to chemicals and fewer complaints on health grounds. Also, we were informed that cost of production of green leaf gradually reduced, leaving the STGs with a better margin of profit. As the next season approaches, the growers now feel that they shall benefit more due to trustea certified status. Moreover, this intervention also ensures that the tea leaves from STGs are safe (have acceptable MRLs for pesticides and fertilizers) and are in compliance with the Tea Board prescribed plant protection code.

Detailed analysis at the time of the report: It emerged that the STGs received an average price of INR 21.60 per kg of green leaf during the year as against INR 19.50 in 2014. This was almost a 10% increase in prices. The 2015 prices for Surya factory growers were at least INR 5 more than what other non-certified growers in the area were receiving.

2. WATER EFFICIENCY & SUSTAINABILITY IN AGRI SUPPLY CHAINS

The Water Efficiency and Sustainability in Agri Supply Chain is a partnership programme of Solidaridad and HUF which integrates sustainable farm practices with water efficiency practices across four commodities (sugarcane, soy, cotton and tea).

The programme creates a scientific measurement to calculate the water footprint in soy and enhance water savings. It is collaboratively designed and adopted in partnership with major sugar and tea businesses; cotton, soy, sugar and tea research institutes and NGOs in 38 districts spread across 10 States of India. The programme provides an opportunity to use various demand side conservation approaches to save and conserve water at the farm level. It is expected to save one trillion litres of water over the programme period of three years across all four commodities.

The programme aims to:

a. Develop collective and coherent position within four agricultural sub-sectors to meet the requirements of future populations of India to produce more food, feed, fibre and fuel with less water.

b. Adopt large scale water saving mechanisms with interventions across 10 states and 38 districts and four agricultural sub-sectors with the principle of smart and sustainable land and water use leading to a saving of 1.23 trillion litres of water in a 3 year period.

c. Sensitize and help capacity building of more than 627,880 farmers and farm workers including around 1.6 million family members associated with selected crops, on water use.

d. Develop an accurate measurement of water use through a credible water foot-printing exercise across the select water commodities.

THE KEY PERFORMANCE INDICATORS FOR THE PROGRAMME ARE:

Indicators	Project Target
States covered	Madhya Pradesh, Andhra Pradesh, Maharashtra, Tamil Nadu, Rajasthan, West Bengal, Assam, Gujarat, Karnataka and Odisha (10 states)
Districts	List of districts enclosed in Annexure S1 (38 districts)
Water saved by 2016	1.23 trillion litres (tentative)
No of hectares covered	627,880 hectares
No of farmers benefitted	Directly: 242,395
No. of farm workers benefitted	Directly: 537,000
Other beneficiaries	
SC/ST (workers + farmers)	400,000
Women (workers + farmers)	250,000

Apart from the above, the water efficiency programme is also expected to indirectly benefit around 1.6 million family members who are directly dependent on the target farmers and farm workers.

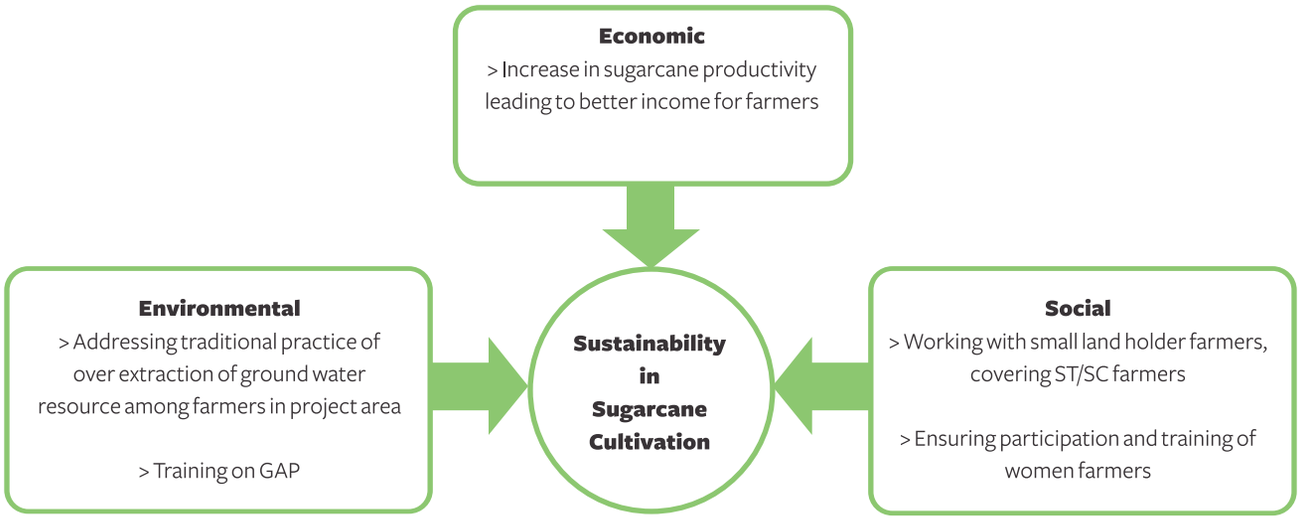
2. WATER EFFICIENCY & SUSTAINABILITY IN AGRI SUPPLY CHAINS

KEY HIGHLIGHTS AND ACHIEVEMENTS DURING THE YEAR

A. Sugarcane

The districts of sugarcane intervention are Cuddalore, Karur, Pudukottai, Theni, Thiruchirapalli, Villupuram and Puducherry. The region is divided among two leading sugar companies (RSCL and EID-Parry) who have joined hands with the project to improve the situation within their sugarcane supplies area. The project emphasizes on irrigation efficiency in the sugar supply chain through participatory irrigation management, raising awareness on use as well as misuse of surface water and groundwater, introduction of methods of irrigation such as drip and sprinkler, and reduction in the wastage of water due to over irrigation.

SUSTAINABILITY ASPECTS OF THE PROGRAMME



FARM SUPPORT CENTRES (FSCS)

The existing sugarcane sustainable supply chain projects of Solidaridad (along with the other three commodities) focuses mainly on productivity gains for farmers, addresses social issues (like labour conditions, occupational health and safety et. al) and also addresses environmental issues like use of harmful chemicals, pest management, waste management etc.

2. WATER EFFICIENCY & SUSTAINABILITY IN AGRI SUPPLY CHAINS

COMPONENTS UNDER FARMER SUPPORT PROGRAMME

1. Technological interventions to improve water productivity

For adopting better irrigation practices, techniques and methods like trash mulching, trash shedding, furrow irrigation and also measures such as improving irrigation efficiency using micro-irrigation systems (drip combined with fertigation) were planned and implemented.

2. Training farmers on cane yield improvement, best management practices and sustainable sugarcane agriculture

Training of farmers was conducted throughout the programme to impact knowledge as well as field exposure on various yield improvement activities such as soil health management, drip irrigation, bio control agents, intercropping and ratoon management.

3. Field demonstrations

Demonstration plots were installed as mockups on fields for the purpose of displaying the techniques and know-how of good agricultural practices.

4. Training farmers on drip system maintenance and fertigation schedules

Training of farmers on drip system maintenance and fertigation involved discussions on success stories of farmers' achievement post installation and usage of the systems. The process included visits to such fields with other farmers to help them understand the system and its operational details.

5. Mobile Van Theatres

There is an increased effort put in by both partners, RSCL and EID Parry, to help farmers and other stakeholders understand what actions are needed to achieve the change. The introduction of Mobile Van Theatre (MVT) was one of the efforts where farmers in far flung areas were reached through easy-to-interact video modules to better understand farm management and benefits of drip irrigation

6. ATSP

Farmers also accessed the machinery requirements such as chip bud, trash shredding, composting and land preparation services through a system institutionalized by companies. Trash shredding (a critical water saving practice) is seen by many farmers as an important activity that not only conserves water but enhances soil fertility and resultant productivity.

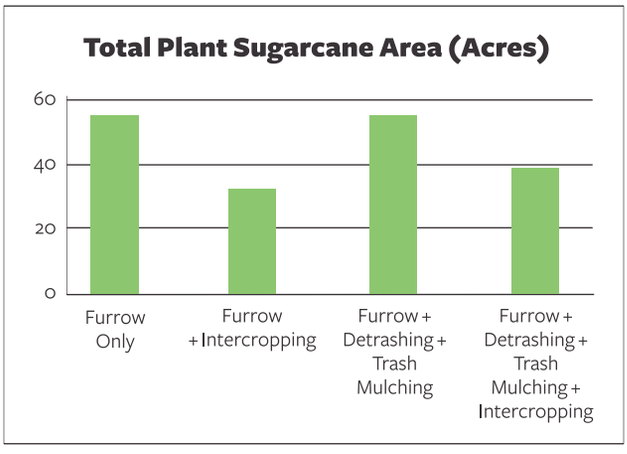
2. WATER EFFICIENCY & SUSTAINABILITY IN AGRI SUPPLY CHAINS

SUGARCANE PROJECT INTERVENTIONS

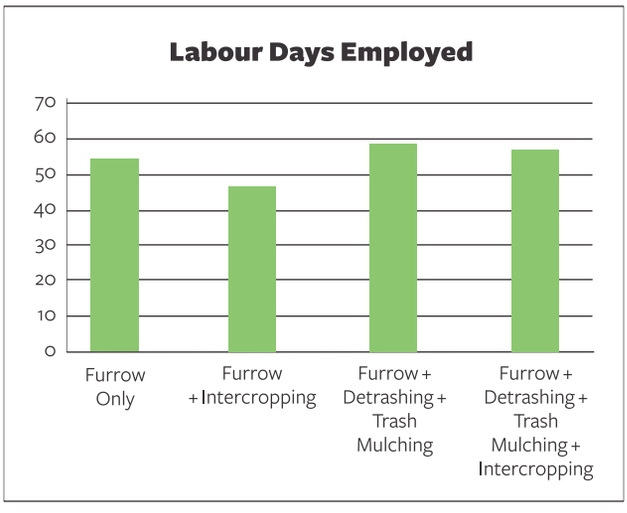
Activities under sugarcane include training of farmers on crop diversification and optimal use of land, and distribution of Drip Diary and Crop Calendar to farmers. Nearly 15500 farmers were trained across the command area of eight sugar mills in Tamil Nadu.

Participation in the above activities has led to a critical change in sugarcane farms. Various water saving initiatives were adopted by the sugarcane farmers who supplied their cane to partner sugar companies. The adoption of these techniques has contributed to a significant amount of saving of water from sugarcane supply of partner companies.

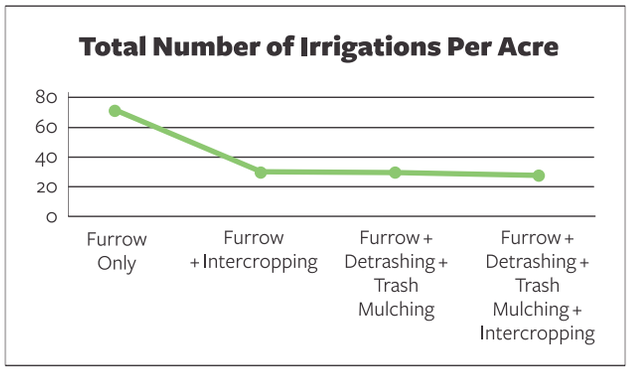
1. Plant Furrow: In total, 183 acres of land under plant furrow have been served for the measurements. Of this, 53.45 acres were under simple furrow method, while others were under different types of treatment (graph below).



For plant crops in furrows, labour requirement across different treatment showed that there is an additional labour day generated when the activities of trash mulch, trash shredding and intercropping is done in combination.

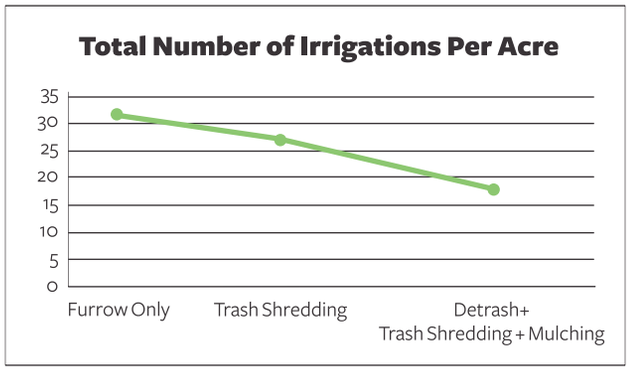


Similarly, over 50 percent reduction in number of irrigation rounds from only furrow method is noted over a crop cycle when furrow is combined with other treatment packages. The graph below presents the reduction of number of rounds of water with the use of different treatment methods.



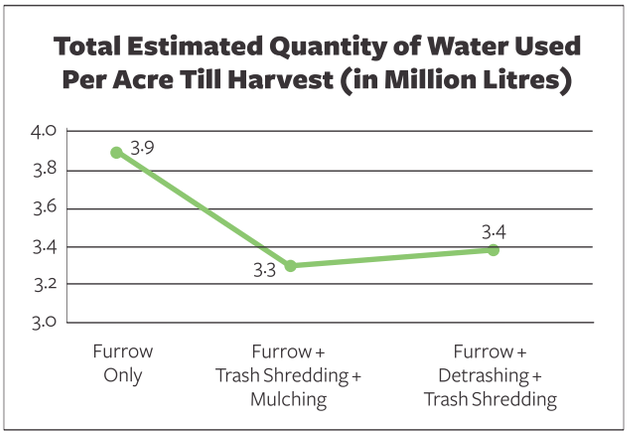
2. Ratoon Furrow: For the survey, data was collected for farmers who were in the third ratoon of sugarcane. The irrigation rounds show a significant reduction in the ratoon category and also a significant variation between each of the treatment categories. Nearly 168 acres of land fall into the two categories of treatment:

1. Furrow only
2. Trash Shredding
3. Detrash and Trash Shredding and Mulching

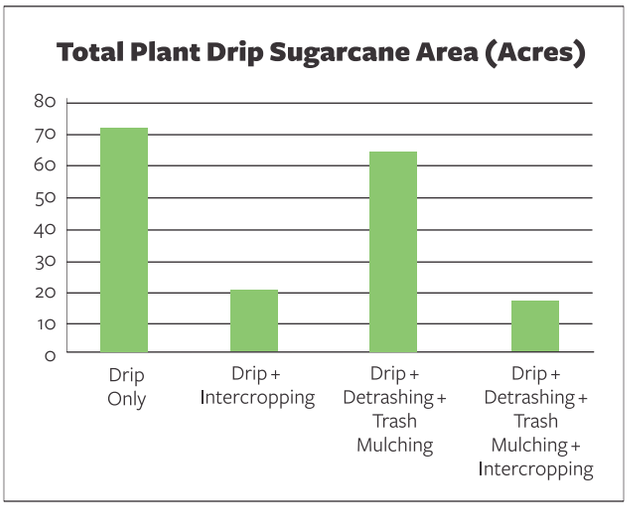


2. WATER EFFICIENCY & SUSTAINABILITY IN AGRI SUPPLY CHAINS

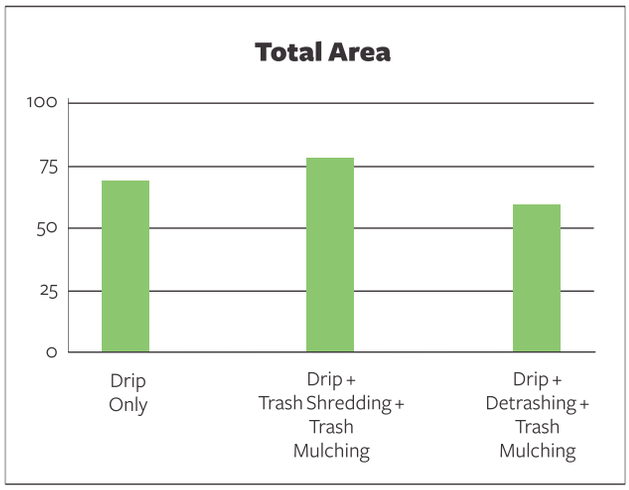
Similarly, a considerable saving in water utilization was observed when a farmer adopted a package of practices in his field. From nearly 3.9 million litres/acre used in furrow only in ratoon crop, the crop water use significantly dropped to 3.3 million litres/acre, and when mechanised trash shredding was applied, it increased (3.4 million litres/acre) amongst farmers who practiced trash mulching and detrash, but did not go for the mechanized shredding. Thus, when a farmer adopts mechanised shredding the coverage is faster and water conservation increases.



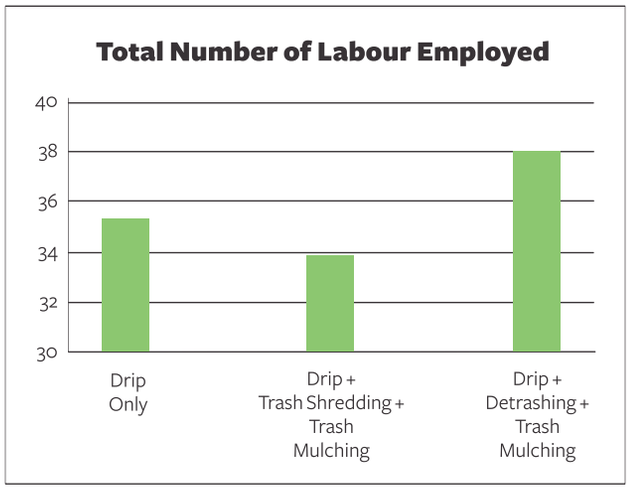
3. Drip Plant Category: In the survey, about 172 acres of land was studied under this category. The distribution of each category is presented in the graph below. The distribution showed that there is less number of drip farmers in plant category going for intercropping only. A majority of farmers who adopted drip and planted the cane preferred to have a single crop. But a significant number of farmers have adopted trash shredding and mulching practices.



4. Drip in Ratoon: In this category, nearly 200 acres of land was studied as sample across all the three treatments adopted by the farmers. The distribution of each category was mostly similar except that a significantly large number of farmers adopted trash shredding as one of critical water saving activities.



In terms of number of persons employed to carry out these activities, it was found that the total number of labour days increased with the addition of activities, but when a farmer employs mechanical trash shredding, the number of labour days get reduced.



2. WATER EFFICIENCY & SUSTAINABILITY IN AGRI SUPPLY CHAINS

BENEFITS FOR THE COMMUNITY AND OTHER STAKEHOLDERS

- The water programme in sugarcane supply chain has been able to engage farmers, businesses and local government departments through its efforts. The project partners, both EID Parry and RSCL, demonstrated leadership in taking this agenda forward and integrating it within their leadership and team. The project was monitored through a project working group formed at every mill level.

- The targets and achievements were monitored on a monthly basis. Both companies integrated this project into and as part of their R & D department, thus ensuring the sustainability of efforts. The integration between R & D and the cane extension team has led to greater outreach to farmers. The farmers, in turn, contributed to the effort by participating in activities, adopting changes in their field, and contributing on their own in setting up infrastructure.

- The farmers also contributed by providing access to their farms in the form of demonstration plots, where their peers came in groups and learned best practices. The significant aspect of this collective effort is development of one unique thought process on the issue of water, where companies realize it is critical for the security of their supplies, as also their long standing relationship with the suppliers (farmers).

  On the other hand, farmers have faced challenges of growing their produce with water scarcity and also increasing their produce with reduced input costs. The value of effort is seen as a collective gain by both mills and farmers.

2. WATER EFFICIENCY & SUSTAINABILITY IN AGRI SUPPLY CHAINS

B. Soybean

Solidaridad has been involved in sustainable soy supply chains in India since the last 7 years and is currently promoting sustainability in soy along with its 5 implementing partners in 13 districts of three states – Madhya Pradesh, Maharashtra and Rajasthan. The overall objective of the programme is to increase agricultural productivity and water efficiency of soy by changing the behaviour of farmers and building the capacities of the extension team – ICS and lead farmers. The programme contributes to engaging multi stakeholders and involving them to make agriculture sustainable by promoting water saving together with good agricultural practices. Hence, the collective and coherent efforts and sustainability through minimizing water footprints saves more water to grow more and improves soil health. All this contributes towards collective engagement and more production without affecting the available natural resources.

PROJECT AREAS

The project aims to demonstrate water management practices to minimize the water footprints in soy. The project area is spread across 13 districts of 3 major soy growing states. The districts of intervention are: Dewas, Ujjain, Agar, Sehore, Dhar, Jhabua, Hoshangabad, Narshinghpur, Chhatarpur, Tikamgrah in Madhya Pradesh; Akola and Wardha in Maharashtra; and Pratapgrah in Rajasthan.

Ground water availability in most of the intervention districts falls under the critical to over exploited category where soil depth in the semi-arid and sub-humid zone is 188 cm.

The project area covers approximately 600 villages with a very high concentration of scheduled caste and scheduled tribe population and a significant proportion of other backward classes (OBC). The sex ratio in most of the districts is above the national average and in certain districts the number of females is higher than the number of males. The average land holding of a soybean farmer is 2.2 hectare.

PROJECT THEME

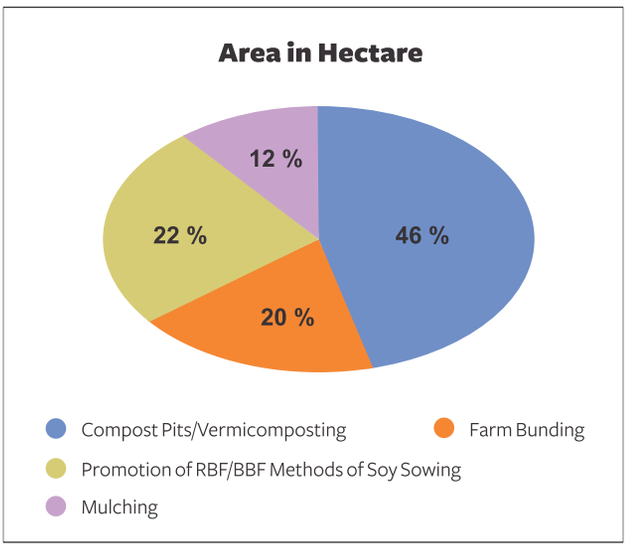
The project brings in many innovations across a large section of farmers and workers (1.6 million family members). However, the potential of scaling up is immense. With this support, water saving activities with tangible targets is integrated into existing supply chain programmes supported by major businesses. The project works with leading agro-commodity businesses, which helps in pulling in the laggards in the businesses and demonstrates the business case for the same.

PROJECT OBJECTIVES

Main Objective: To assist farmers and communities to adopt improved farm practices that increase agriculture production and productivity through water use efficiency. The project themes are aligned with the HUF 2020 agenda "WATER FOR PUBLIC GOOD".

The key project objectives are:

- Develop a collective and coherent position within four agricultural sub-sectors to meet the requirements of future populations of India to produce more food, feed, fibre, and fuel with less water.
- Large scale adaption of water saving mechanisms with interventions across 10 states and 38 districts and four agricultural sub-sectors and the principle of smart and sustainable land and water use leading to a saving of 0.415 trillion litres of water in a 3 year period.
- Sensitization and capacity building of more than 627,880 farmers and farm workers including around 1.6 million family members associated with selected crops on water use.
- Develop an accurate measurement of water use through a credible water foot-printing exercise across the select water commodities.



2. WATER EFFICIENCY & SUSTAINABILITY IN AGRI SUPPLY CHAINS

Solidaridad Regional Expertise Centre is implementing this programme with our partner NGOs ASA, Vrutti, CARD, IGS and SRIJAN, and aiming to reach 74,500 farmers and 91000 hectares and targeting to save 0.03 trillion litres of water in soy cultivation. The main strategies under this project are to demonstrate how water conservation and productivity enhancement can be achieved through agricultural interventions like compost pits/ vermicomposting, Ridge Bed Furrow (RBF) and Broad Bed Furrow (BBF). The core focus is reduction of water usage with water saving interventions.

KEY PROJECT APPROACHES

Potential of integrated efforts in soy: The ultimate yield potential of soybean is around 3 to 3.5 t/ha and the global average yield is 2 to 2.4 t/ha. The average yield in India is still lower, at 1.1 t/ha, indicating a yield gap of more than 2 to 2.4 t/ha from the ultimate yield potential. The high yield of the ultimate potential may be attributed to good agricultural practices, water soil-moisture conservation and management practices. Water scarcity, climate change and sustainable agriculture are global common issues hence integrated efforts are required to solve these issues.

The following interventions are planned in soy along with the existing sustainability interventions:

I. Technological interventions to improve water productivity and agricultural productivity

To increase water productivity by reducing non-productive evaporation and/or increasing productive transpiration, soil and water management techniques like straw mulching, vermicomposting, BBF/RBF sowing and farm bunding are applied. To ensure socio-economic and environmental benefits of these practices, a combined approach to water conservation with sustainable crop production practices at the farm level are encouraged. The present status of interventions are as follows:

S. No	Interventions	Achievements 2014-15
1	Compost Pits/Tanks	589
2	Farm Bunding/Promotion of RBF/BBF Methods of Soy Sowing/Mulching	554

II. Field Demonstrations

Field demonstrations are being widely used as an effective and efficient method of technology and knowledge transfer in the agriculture sector. At present there are 7 demo plots developed on vermicomposting, farm bunding and BBF/RBF sowing techniques in project locations in different agricultural economic zones of central India.

III. Capacity Building

Awareness regarding water saving practices like vermicomposting, BBF/RBF sowing technique, mulching and farm bunding is given by training of farmers and training of trainers which includes field staff and lead farmers and is done through regular farmer meetings. The most popular among all the practices is BBF/RBF sowing technique. Farmers are also showing interest in farm bunding which reduces soil erosion and runoff of water in the farm due to the fact that slope of land is higher as compared to other project locations. Regular trainings were conducted – around 14 training of trainers (ToT) and 257 training of farmers (ToF) – and a total of 19175 persons have been trained under various indicators till March.

IV. Measurements, Monitoring and Reporting

For successful implementation of water conservation, saving and crop productivity improvements, monitoring systems are developed that allow credible measurements and reporting of progress on a regular basis.

a. Soil Moisture Test of Demonstration Plots: For impact analysis of interventions in the soy fields moisture levels in soil were tested and the results showed a positive impact of increased level of soil moisture due to interventions like vermicomposting and farm bunding. It was observed that around 5.5% moisture increased due to use of vermicomposting by the farmer and 3% of moisture increased due to farm bunding.

b. Social Return on Investment (SROI): Through the Social Return on Investment (SROI) exercise with the farmers we measured various direct and indirect social benefits among the farmers and community and also carried out the impact evaluation of the programme. This process is going on in the field.

c. Focus Group Discussions: For the impact evaluation and feedback from the beneficiaries, sixteen focus group discussions were conducted with over 200 farmers. Questionnaires were prepared and used for interaction with

2. WATER EFFICIENCY & SUSTAINABILITY IN AGRI SUPPLY CHAINS

farmer groups. Some of the major observations and findings were: farmers have a positive impact towards water programmes and 90% of farmers believe that water saving interventions increase soil moisture levels and this will benefit the next crop after soy. Farmers are benefitting from the reduction in irrigation in soybean, and due to use of vermicomposting their cost of cultivation is also reduced and this increases soil health. BBF technology in soybean sowing also saved soy during dry spells at critical stages and also led to good germinations of seeds.

KEY PERFORMANCE INDICATORS

The project's emphasis on demand side reduction of water not only led to decrease in water consumption but also increase in productivity and food security through water availability for additional crops. The project is uniquely tying together businesses and farming on a common sustainability agenda of water which in turn significantly contributes to natural resource management and environmental sustainability of any region adopting similar approaches. Solidaridad is uniquely positioning water as a key agenda in the soy agri business through this project.

KPI –HUF Water Programme

Indicators	Unit	
Institutions	Nos	1361
Persons trained	Nos	19175
Persons engaged with government /supply chain for water related issues	Nos	18975
Areas treated	Ha	2064
Total water saved (supply and demand)	Billon Litres	14.69
Enhanced agri productivity compared to previous year	%	11.30
Agri production	Tonnes	45713
Number of household income increase due to project interventions	Nos	4592
Community benefitted (family)	Nos	6779
Behaviour change in water use efficiency	Nos	8678

PROJECT INTERVENTIONS

The project formally started in January 2014. The first two quarters of the project focused largely on baseline survey and developing district partnerships for soy. Actual implementation of activities like training of farmers, training of trainers on awareness towards soil and water conservation activities, vermicomposting and farm bunding took place from June 2014.

Number of persons trained under various indicators

Indicators	Unit
Number of 'Training of Trainers' programmes organized for progressive farmers	423
Number of 'Training of Trainer' programmes on good agricultural practices for sustainable soy	834
Number of extension services facilitated to soy farmers	10385
Number of sensitization meetings for selected farmers	19175
Number of farmers in training and capacity building for using improved practices for productivity enhancement and water savings	6792

Areas treated under different activities

Activities	Area /Ha.
Compost pits/Vermicomposting	952
Farm bunding	404
Promotion of RBF/BBF methods of soy sowing	450
Mulching	258
Total Area	**2064**

2. WATER EFFICIENCY & SUSTAINABILITY IN AGRI SUPPLY CHAINS

ACHIEVEMENTS 2014-15

As sustainable soy programmes promoted by Solidaridad is engaging stakeholders like farmers organizations, partner NGOs, agriculture research institutions and KVKs, and as the objectives of water efficiency project add value at every local stakeholder level, it creates possibilities for convergence with other schemes and encourages collective action. Solidaridad and Hindustan Unilever Foundation (HUF) jointly supported and facilitated the "National Conference on Sustainable Water Resources Management". The objective of the Conference was to bring together academicians, scientists, researchers, managers, administrators, engineers, NGOs, law experts and those interested in water resources management and to exchange and share experiences and research results about aspects of sustainable water resources management.

The field teams of partner organizations have provided trainings to lead farmers through ICS (Internal Control System) as they are disseminating best practices and experiences among fellow farmers through adoption of technologies in the demonstration plots. Lead farmers through the demonstration plots have shown better yields and reduced water use, resulting in reduced cost of diesel/electricity, labour etc. Currently 13 ICS teams have been established for capacity building of lead farmers and various trainings have been provided by the ICS team. They also engaged KVK scientists and visited agriculture research institutions. Apart from this, Solidaridad central India office organized various capacity building trainings for the project staff. Altogether 14 training of trainers (ToT) for lead farmers and ICS staff and 257 trainings for farmers and exposure to demonstration plots were organized during this period.

Farmers are keeping track of farm activities performed by them along with the costs incurred, legal record of land, electricity bills, record of labour, bills of agri-inputs, cost of water and diesel etc. by entering the details in farm diaries provided by the partners. This helps farmers to review themselves and this is also used for farmer level monitoring purposes.

An innovative ICT tool was also introduced -- a mobile app to capture the practices adopted by the farmers through which further yield estimation to analyze the results of practices is possible. We also incorporated the practices of water efficiency in this app, hence comparisons can be done with the farmers' yields – those who adopted water efficiency practices v/s non adopters.

The National Platform for Sustainable Soy has broadened the base for stakeholders and is emerging as a coordinator and facilitator and involving policy and advocacy issues through stakeholder consultations and contributions from stakeholders in terms of updates, news and advocacy issues for the newsletter, Sustainable Soy News. The Platform has also engaged industries in incentivizing farmers through market linkages, like for example, this year Vippy Industry supported market linkage and 3 procurement centres were established which were managed by farmer producer companies that provided a business case for industry and farmer organizations. The Platform is concentrating on the soy sustainability certification which is India's biggest sustainability certification programme. With the introduction of climate adaptation technologies and water efficiency, it is taking the shape of a knowledge resource centre for providing trainings, information, experiences sharing, cross learnings, innovative ideas etc.

2. WATER EFFICIENCY & SUSTAINABILITY IN AGRI SUPPLY CHAINS

CASE STUDIES FOR SOYBEAN WATER EFFICIENCY PROGRAMME

1. Enhanced water use efficiency and soil moisture by low cost vermicomposting producers

Low cost vermicomposting

Farm Bunding Pits

2. Impact of biodynamic compost using S-9 culture

It helps the farmer to reduce fertilizer costs and to decompose fertilizer use for spot application.

Biodynamic composting using S-9 culture

3. Impact of conservation agriculture in soy

By intercropping with maize, using castor as border crop, applying recommended seed rate by doing seed germination test and seed treatment, using cow urine and dung based products at home like Jeevamrit, earned a net additional income of 23,220 INR (300 EUR).

4. Impact of soil and water conservation practices

After use of vermicomposting and earth bund, less water was required for irrigation. The erosion of soil decreased and the water level also increased. Farm bunds helped in fields with slopes to save the fertile layer of soil.

Farm Bunding Pits with water

2. WATER EFFICIENCY & SUSTAINABILITY IN AGRI SUPPLY CHAINS

C. Cotton

In the present project cotton is the most widespread crop in terms of number of river basins and districts. The river basins covered under cotton are Narmada, Kaveri, Mahanadi, Krishna, Tungabhadra, Chambal, Sunar, Malaprabha, Nagabali, Ganagavalli, Dhadhar and Machhu.

Sustainable farming practices is the focus and objective of all cotton projects being implemented by Solidaridad, and to that end, the project objectives of 'efficient use of water for sustainable supply chains' fits very well with the organization's overall objectives.

Improving soil health to enhance humus retention capacities and to increase productivity of land, thereby contributing to improved livelihoods of small cotton farmers, complement the on-going cotton programmes being implemented and supported in India.

Presently, since the interventions are focused on individual farm holdings, the project contributes to betterment of farming practices and improved production and income. However, the project has resulted in a spin off where communities are taking up composting as a general practice by mobilizing government resources earmarked for such purposes under various schemes. The project has been used as an initiative to leverage government resources for soil conservation purposes and in Odisha the project is considering possibilities of multiplying project outputs through a process of convergence with existing government schemes.

Individual farmers are part of community institutions at the village level, and therefore, although an input such as compost may be used for an individual, the sharing of knowledge is between larger groups. For example, in a village where 4 or 5

2. WATER EFFICIENCY & SUSTAINABILITY IN AGRI SUPPLY CHAINS

compost pits/tanks are be provided, the entire village is assembled and trained while the compost pits/tanks are being constructed.

This has motivated the other farmers to either approach the government for assistance under the Vermi composting scheme or she/he starts digging a pit to start composting. In Odisha the project has started having a ripple effect where other (non-project) villages are also now beginning to adopt composting.

Women's self help groups in Odisha and Mysore are considering taking up collective vermin-composting as an 'income generating activity' for the group, considering the growing demand for vermin-compost as an alternative to FYM.

2. WATER EFFICIENCY & SUSTAINABILITY IN AGRI SUPPLY CHAINS

D. Tea

Tea growing is an increasingly competitive business all over the world. Thus, to sustain its production, innovative methods have to be adopted keeping in view the environmental and social implications. Erratic weather patterns affect growers, tea estate owners and investors. In addition, a wide spectrum of concerns need to be addressed, including:

- Global warming and growing threats of drought
- Decreasing yields from non-irrigated tea fields
- High drought sensitivity of new high yield clonal tea varieties
- Large fluctuations in annual tea production
- Inefficient and outdated irrigation systems

Water management has now become an absolute necessity which needs to get addressed in a more scientific manner. It is needless to highlight to a planter how good or bad, less or more water is to tea plants.

For example, during the lean season, especially in North India (mid-December to mid-March), when no tea plucking is done and the tea bushes undergo pruning and other maintenance activities, water is a critical component to maintain bush health. Therefore, water availability becomes a major concern.

2. WATER EFFICIENCY & SUSTAINABILITY IN AGRI SUPPLY CHAINS

The interventions undertaken in the water programme aim to integrate water saving initiatives in the tea supply chain, with effective collaboration between different stakeholders by developing and managing water consumption in tea cultivation practices. Through this programme, Solidaridad is also aiming to achieve an increase in productivity which in turn will help workers earn more incentives above their agreed wage rate, as the availability of green leaves would go up.

Solidaridad has engaged with UPASI and is in the process of engaging with the Tea Research Association (TRA) and the Indian Tea Association (ITA) through various training programmes, seminars and workshops to drive the water programme in their member gardens. Trial plots have also been set up in collaboration with them wherein the water efficient interventions are observed in a controlled environment and will generate scientific data confirming to water usage and saving. This data would further help in replicating the interventions in their member gardens and through these interventions would serve as a benchmark for water usage.

TRA and UPASI have been engaged to provide support in the form of steering the trial plots set up and to support the implementation and collection of scientific data from water interventions in North and South India respectively. Additionally, ITA has been roped in to evangelise the water programme among its member gardens.

Solidaridad has brought together these producer associations to enable smooth adoption of interventions by the industry.

Solidaridad is also currently associated with various gardens wherein some trial plots and supply side interventions have been set up in collaboration with UPASI, ITA and TRA, both in North and South India.

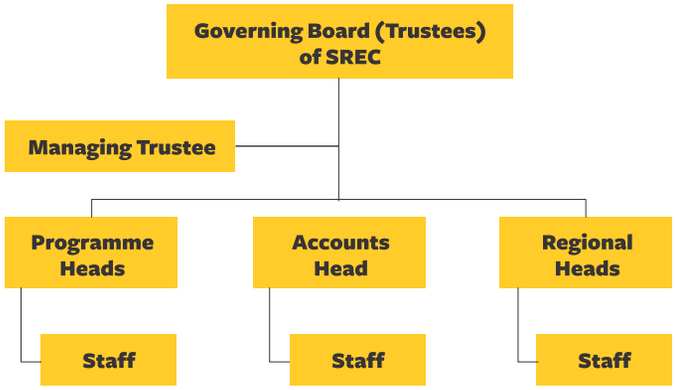
Setting up Scientific Trial for Measurement, Evaluation and Estimation of Water Usage

The project is setting up trial and demonstration plots with both the companies, TRA and UPASI. The purpose of these plots is to estimate actual water requirement for each irrigation system. Also, the cumulative effect of different agronomic measures on conserving water under different irrigation systems will give the actual water usage by the particular crop and the amount of water saved using the technologies.

ORGANIZATIONAL STRUCTURE AND GOVERNANCE

Solidaridad in India is called Solidaridad Regional Expertise Centre (SREC). SREC is a NGO registered under the Indian Registration Act, 1908. The Certificate has been issued by Sub Registrar of Janakpuri, New Delhi under Section 60 of the Act with the registration number 17474 in additional Book No.4 Volume No. 12384 on pages 113 to 126 on 18th December 2008.

SREC satisfies the conditions of u/s 80G of the Income Tax Act of 1961 and is also registered under Section 12 A of the Income Tax Act of 1961.



HUMAN RESOURCE STAFFING AND MANAGEMENT

SREC has a well-defined Human Resource (HR) policy which attempts to document prevalent organizational practices and norms in a standardized format for user-friendly reference. The HR policy contains the key policies, goals, benefits and expectations of SREC and other information an employee will need in the course of seeking employment to the organization.

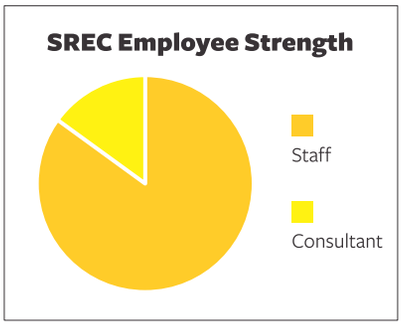
The emphasis is on:

- Devising a system that would result in an organizational climate conducive to developing the potential of human resources and providing opportunities for fulfilment
- Facilitating the implementation of human resource policies and practices in a clear and sensitive manner to enable the achievement of the mission of SREC
- Building an enduring foundation for professional relationships in the organization and ensuring continuity through the creation of a ready point of reference
- Ensuring that SREC continues to be an exciting, happy, secure and satisfying place for each and every one of us to work in and grow.

SREC believes the development of people is the prime responsibility of the organization and if an environment is created where individuals can develop their competencies, people can and will do their best.

SREC values the individual needs of staff and commits to providing an environment that facilitates a work and life balance. It would be our constant endeavour to explore alternatives in the ways of working – ones that embrace and harmonize all the important areas of our lives.

In order to be transparent and credible, SREC has in place a strong anti-corruption policy. SREC is guided by a well-articulated code of conduct book, which is handed over to each employee at the time of joining. Any corrupt practice by its staff is dealt with as per disciplinary measures provided in the HR policy and if it is by a partner, appropriate steps are taken – from bilateral discussions to legal remedies.

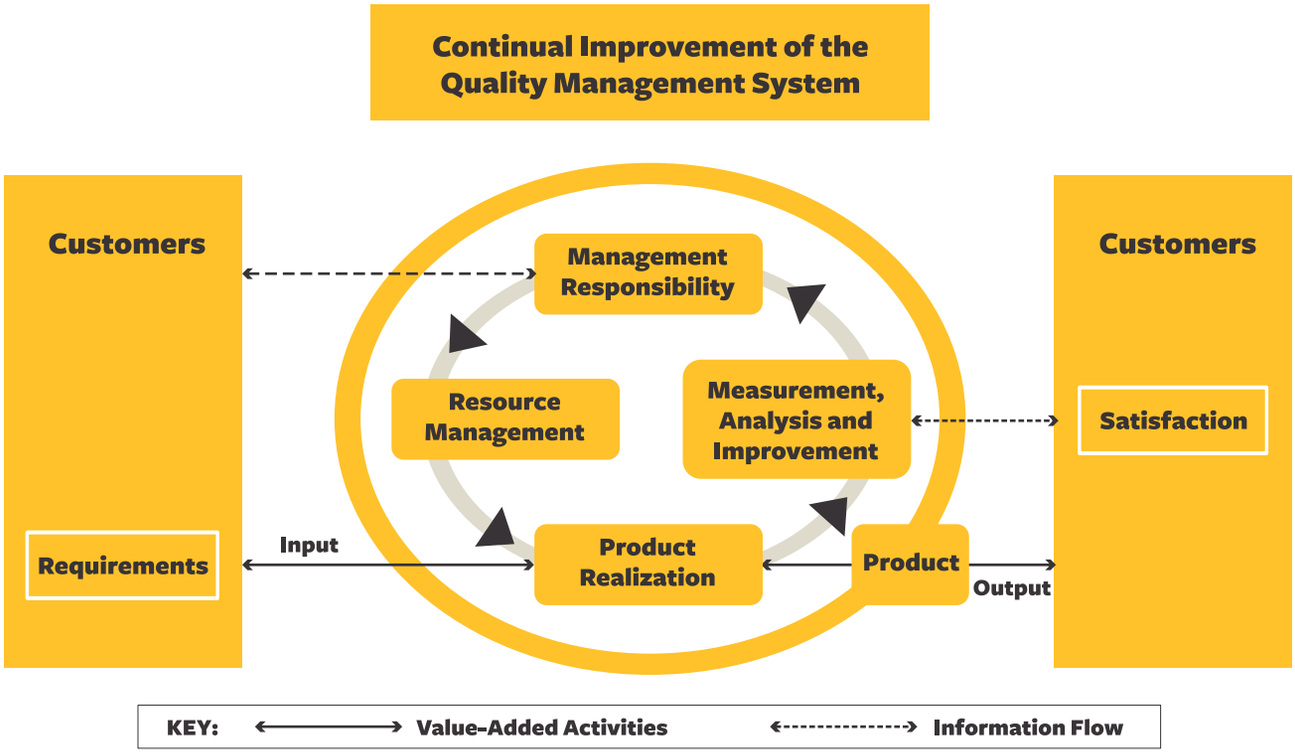


SREC IS ISO 9001-2008 CERTIFIED

SREC has been certified under ISO 9001-2008, since 9th September 2009. The purpose of the certification is to follow a globally accepted quality management of work, in order to:

- Demonstrate our ability to consistently provide services that meet the relevant statutory and regulatory requirements of donors and beneficiaries.
- Enhance donors' and beneficiaries' satisfaction through effective application of the system, including processes for continual improvement of the system with the assurance of conformity to donor and applicable statutory and regulatory requirements.

DECISION MAKING PROCESSES IN SREC



Programmes are developed in SREC as per the following:

1. The programme team under supervision of the Managing Trustee develops Multi-Annual Strategy Plans (MASPs) within India. These MASPs are in line with local priorities and in conformity with Government plans.

2. The MASP is then placed for consultation before the Board of Trustees and inputs are collected.

3. The MASP serves as the basis for the preparation of Annual Plans by the Managing Trustee, which are again deliberated and approved by the Board of Trustees.

4. The overall responsibility of managing and implementing the programmes and projects in line with MASP lies with the Managing Trustee. The Managing Trustee further delegates this function to programme coordinators.

5. Each commodity has a coordinator or manager assigned in SREC who is overall responsible for the project implementation.

6. Each of the projects is registered by the Programme Support Officer (PSO) in the SREC under the overall supervision of the Manager – Accounts and Administration, who, along with the PSO, registers the project in a project database where a unique number is given to the project. With this number, the PSO makes a digital file where all the important documents of the project are saved. Each digital project folder is required to have at least the following elements:

    - Partner Assessment Form
    - Project Description and Project Contract
    - Payment Requests and Payment Records
    - Progress Reports and Evaluations
    - Working Documents

7. Every month a monthly staff meeting is organized in SREC to evaluate and discuss the progress of various programmes, and if necessary, corrective measures are taken. The key outcomes of the monthly meetings are documented and preserved in hard and soft copies. An annual overall report along with audited financial statement is prepared as well.

SOLIDARIDAD FINANCIAL SUMMARY FOR 2014-2015

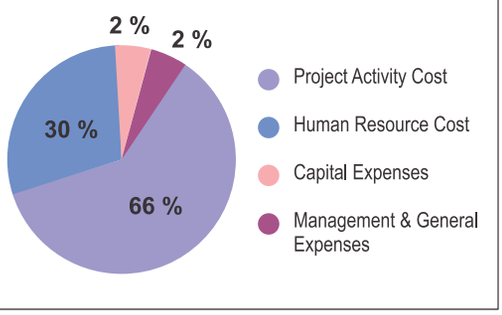
Statement of Financial Position

	As at 31st March 2015
Funds & Liabilities	**Rs.**
– Trust Fund	10,000
– Capital Fund (Represented by Fixed Assets)	48,73,639
– Restricted Fund	2,89,30,884
– General Fund	62,85,206
– Current Liabilities & Provisions	18,85,989
	4,19,85,718
Property & Assets	
– Fixed Assets	
Gross Block	69,15,940
Less: Accumulated Depreciation	20,42,301
Net Block	48,73,639
– Current Assets and Loans & Advances	
Cash & Bank Balances	3,34,60,990
Other Current Assets	2,13,590
Loans & Advances	34,37,499
	4,19,85,718

Donors	Purpose
Hindustan Unilever Foundation (HUF)	To implement the project on "Water Efficiency and Sustainability in Agri Supply Chains"
Hindustan Unilever Limited (HUL)	To implement the project on "India Domestic Sustainable Tea"
Prakruthi	To facilitate certification activities for capacity building and sustainable livelyhood for smallholder coffee growers and workers in India
Tata Global Beverages Limited	To implement the project on "India Domestic Sustainable Tea"
AZB & Partners	Research on Statutory Living and Working Conditions of Workers in Tea Estates

Supplementary schedule of expenses – classified by nature of expenses

	2012-13	2013-14	2014-15
Project Activity Cost	–	78,30,231	3,04,76,270
Human Resource Cost	–	54,31,047	1,39,84,665
Capital Expenses	–	32,14,265	9,44,080
Management & General Expenses	17,528	2,16,471	9,71,395
Total	**17,528**	**1,66,92,014**	**4,63,76,410**



SOLIDARIDAD FINANCIAL SUMMARY FOR 2014-2015

Statement of Activities

		Financial Year 2014-15
Revenues		**Rs.**
Restricted Income (Grants & Donations)		4,86,64,237
Unrestricted Income		
Overhead Support		19,78,910
Interest from Bank		7,88,759
Others		13,31,537
		5,27,63,443
Expenses		
Programme Related Expenses		4,54,05,015
Management & General Expenses		9,71,395
	Total Expenses	**4,63,76,410**
Surplus/(Deficit) for the Year		63,87,033
Earmarked Grants & Donations		(4,58,71,585)
Expenses out of Earmarked Grants		4,50,73,349
Changes in Net Assets		**55,88,797**

Extract of Independent auditors' report of the trustees of the Solidaridad Regional Expertise Centre

In our opinion and to the best of our information and according to the explanations given to us, the financial statements give the information so required and give a true and fair view in conformity with the accounting principles generally accepted in India:

a. In the case of the Balance sheet, of the state of affairs of the trust as at 31 March 2014, and

b. In the case of the Statement of Income and Expenditure, of the excess of expenditure over income for the period from 1 April, 2014 to 31 March, 2015.

For Dhingra & Juneja
Chartered Accountants
Firm Registration Number: **018799N**

Vikas Dhingra
(Partner)
Membership No: **099604**

Date: 12 SEPT 2015
Place: New Delhi

Asia's growing population (expected to reach 5.3 billion by 2050) is leading to shortages of land, water and energy. Solidaridad is taking an integrated approach, working with leading businesses to develop more efficient farming methods.

Solidaridad is dedicated to responsible food production to feed the growing world population and to providing the world with an alternative to fossil fuels like oil and gas.

Solidaridad is convinced that the agricultural sector can produce more efficiently so that it will be able to feed the world population in 2050, as well as supply energy to the industry; mining and industry need to switch to a responsible means of production; worker rights are respected and the environment is preserved for future generations, keeping intact its potential.

Solidaridad is involved in the Trustea programme which aims to establish sustainable production in the Indian tea market.

The Trustea programme seeks to facilitate a locally developed and owned Indian tea code that is meaningful, cost effective and practical to implement without compromising on globally accepted core sustainability principles. It seeks to sustainably transform around 500 million kg of tea, targeting 600+ factories, 500,000 tea plantation workers and 40,000 smallholders. Hindustan Unilever, Tata Global Beverages Limited and IDH – The Sustainable Trade Initiative, fund the programme and Solidaridad is the lead implementing agency along with Ethical Tea Partnership as the second implementing partner. The most prominent international tea standard, Rainforest Alliance, is involved as technical advisor.

The "Water Efficiency and Sustainability in Agri Supply Chain" programme is part of four agricultural supply chains of sugarcane, soy, cotton and tea spread across 38 districts in 10 states. The programme can save cumulatively 0.4 to 1 trillion litres of water in 3 years. The collaboration with HUF allowed to weave water as a common wave across the ongoing initiatives of Solidaridad and leverages on the existing networks and resources to enhance social return on investment for all the stakeholders.

The focus of the programme is on creating consciousness for the farmers; developing scientific methods like drip irrigation, capacity building of the farmers for good agricultural practices, and bringing in crop specific water use strategies.

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New Delhi – 110018, India

Solidaridad