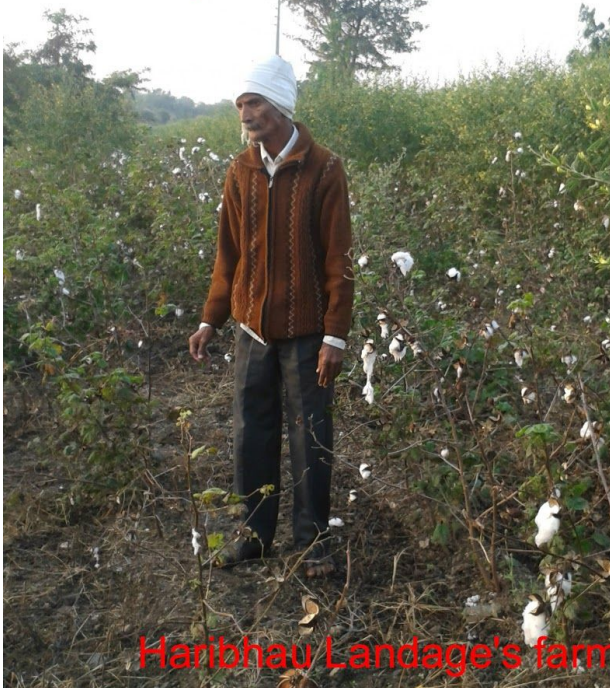


Traditional Farming

Chemicals Used
Costly investments
Lower yields



Modern Farming

Organic farming Techniques
Less investment intensive
1.5 times the yields



Haribhau Landage's farm comparison results 2015

Project Saangaati (The Guide)

April 2016

Save Indian Farmers

501 C (3) Non Profit Organization

137 Courts Lane

Little Rock, AR 72223

USA

Overview

Saangaati - The guide. Saint Tukaram was 17th century poet, who wrote जेथे जातो, तेथे तू माझा सांगाती - *wherever I go, you are my guide(navigator)*. Today in the state of Maharashtra, where this poet was born, the need for a guide, who helps distressed farmers, is crucial. Farmers have let go of the basics, that made agriculture the noble occupation of India. In India, 1 farmer commits suicide every 41 minutes. Majority of those suicides come from Maharashtra, India's leading industrial state. If this situation has to change, we need to make focused investments to rebuild future for India's farmers. Project Saangaati is about guiding farmers to use best agricultural practices, thus increasing their crop yields. We plan to deploy the team of local experts who have proven with their pilot phase that farmers who take strategic approach to farming, can benefit monetarily and grow eco friendly crops.

Goals and Objectives

Goal of Project Saangaati is to increase **organic crop yield** by 1.5 times their traditional output, thus providing way for farmer to make more money.

Problem Statement

India's farmers have relied primarily on rain fed cash crops and overuse of chemical fertilizers to increase their crop yields and sustain commodity prices. This has resulted in significant damage to local eco system, agricultural systems, rural economy and social fabric. Expert guidance and counselling at individual level will help rebuild agricultural sector of India that contributes to 51% of India's employment sector. Our multi-faceted approach will also help change lives of 1200 people towards better farming and healthier, educational and environment friendly practices.

At Glance

- Impact : 1200 people (600 farmers + spouse/sister/mother)
- SIF needs to raise : USD 67000
- Project Period : 1 Year (2 crop seasons)

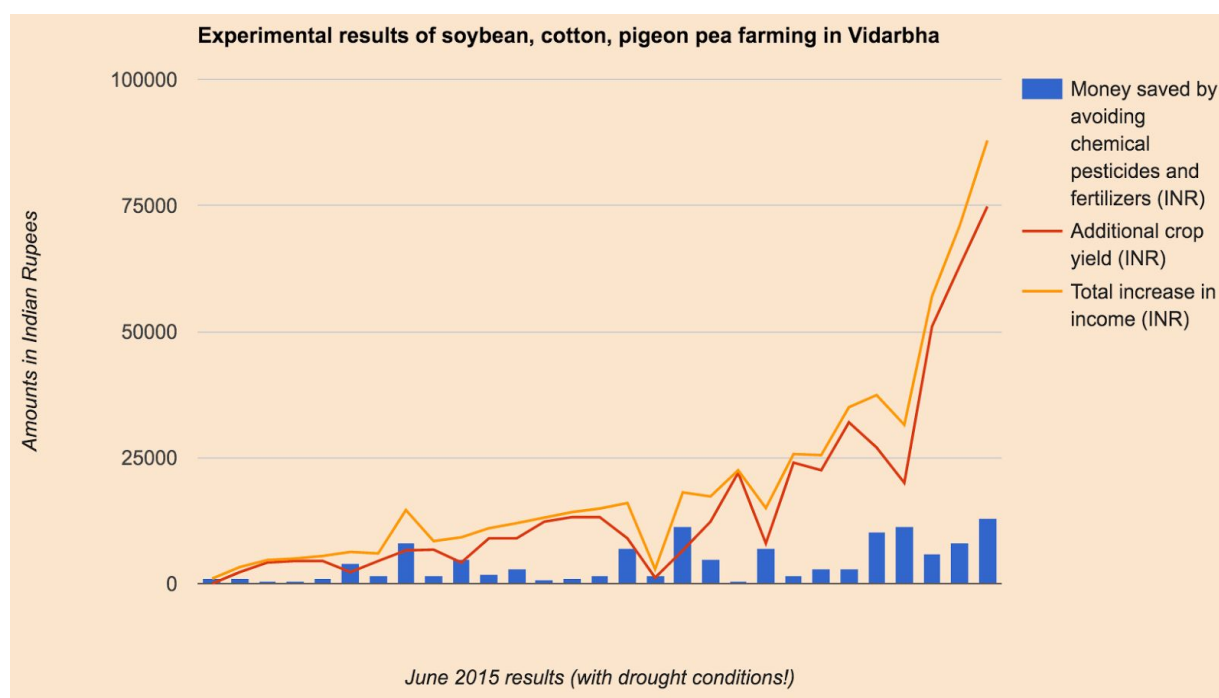
Why Organic Farming is profitable and sustainable?

In Summer 2015, Dindayal Bahuuddeshiya Prasarak Mandal worked with 40 farmers from four villages (Pathari, Borsinha, Shivani, and Malkhed) belonging to four different agro-climatic zones in Yavatmal to implement the practices on a part of their owned land (1-3 acres). Farmers could replace the use of extensive pesticides with herbal pest controllers such as neem extract and herbal extract, *dashaparni ark* (extract of 10 leaves). Farmers could use a very effective liquid organic fertilizer instead of chemical fertilizers. A few farmers developed cultivated manure fertilizers, *jeevamrut* (a liquid organic manure), *amrutpani* (a liquid herbal tonic and pest controller). A few farmers carried out seed processing for their second crop.

Overall, it was witnessed that farmers could increase their yield by around 1.2 to 1.6 times (forty farmers from the 4 different villages). Two farmers could double their yield of cotton compared to conventional methods. Farmers could save an investment of 4 to 9 thousand rupees that would be expended on chemical pesticides and fertilizers. Despite delayed start of the exercise in 2015 (two months after sowing) and scarcity of human resources, we could witness great results. This exercise gave us a confidence that we are on the right path to address the agrarian crisis. The key processes that helped to get the success are:

- A. Working with farmers in a participatory way,
- B. Developing the least dependent and ecologically healthy organic practices that consider the contexts of the farmers (assets, mind-sets, and capabilities), and,
- C. An iterative process of working on the constructive feedback from the farmers and building on it again and again. At the end of the exercise we have developed a manual for the farmers that provides a set of useful guidelines to implement the healthy, effective, low cost, and least dependent farming practices.

We would reach out to around 600 farmers and 1 additional member of their family, in the next phase. Chart below shows the results of the experiment in terms of crop yield and money saved.



People and Organizations involved

Table 1: Details of the people involved and their roles

| Sr. No. | Name of the person | Profile | Role in the project |
|---------|--------------------------|---|---|
| 1 | Mr. Vijay Kadre | Secretary, Deendayal Bahuddeshiya Prasarak Mandal, Yavatmal | Co-ordinator for village level activities |
| 2 | Mr. Gajanan Parsodkar | Coordinator, Deendayal Bahuddeshiya Prasarak Mandal, Yavatmal | Co-ordinator for village level activities |
| 3 | Dr. Vijay H. Honkalaskar | Development Practitioner, Lokchetana Sanghatan | Co-ordinator for village level activities and research investigations |
| 4 | Prof. Sheerish B Kedare | Professor, Department of Energy Systems and Engineering, IIT Bombay | Co-ordinator for research investigations |
| 5 | Prof. Upendra Bhandarkar | Associate Professor, Department of Mechanical Engineering, IIT Bombay | Co-ordinator for research investigations |
| 6 | Mr. Nikhilesh Bagde | Research scholar at CTARA, IIT Bombay | Co-ordinating and conducting research activities on field |
| 7 | Mr. Kedar Joshi | Research scholar at CTARA, IIT Bombay | Co-ordinating and conducting research activities on field |

This team of 7 will add 12 more field workers to interact with 600 farmers on one-on-one basis. They will be able to monitor progress, document efforts and also guide farmers through these steps. Our results of pilot study show average net profit of Rs 20782.76 (USD 319) over 2 crop seasons, last year. 2015 was considered drought year in terms of late monsoon and less than average rainfall. But our team has demonstrated that the science of utilizing organic fertilizers made in the field and stored carefully, preprocessing seeds before sowing are some of the most powerful contributors to higher yields (if done properly). We plan to roll out this project to 600 farmers thus projected profit of Rs 1 Crore 24 Lakhs 69 thousand (US \$186105¹) in a single year.

¹ Exchange rate assumed Rs 67 = 1 US Dollar

Evaluation Plan

Similar to pilot phase in 2015, where we measured amount of land under cultivation and net profit realized per crop season, we will be able to monitor crop yields and compare them to the yields in 2015.

In this phase 600 farmers will be enrolled. In addition to farmers, their spouse, sister, mother will be enrolled in the program. Farmers will benefit from the know-how of our agricultural experts and in return the points will be earned by women of the households. Those points will be redeemed towards Soil Testing, 200 Litre storage Tank, access to educational literature and training.

Key Performance Indicators (KPIs)

We would like to measure the increase in crop yield, year over year in terms of additional money earned by farmers. Other than economic indicator, 2 or more of the following KPIs will be recorded and monitored.

- Health Assessment Data such as weight, blood pressure, malnutrition levels
- Buying Cattle to support Organic farming practices for fertilizers and farm support income through milk
- Educational scores of children/attendance
- Savings accounts opened and maintained
- More performance indicators will be discussed in discussion with AI and Deendayal Trust

Budget

Save Indian Farmers will work with Deendayal Trust, local NGO to work with 1200 people (600 farmers and additional 600 women) to :

- Conduct activities and report progress on a monthly basis
- Record points earned on a monthly basis
- Measure KPIs mentioned above
- Form Self Help Groups
- Record photos/Videos of the knowledge transfer

Appendix

Dr. Honkalaskar meeting farmers of Pathari village



Making Organic Fertilizer on the farm itself



Making organic Pesticide (dashparni Ark - 10 leaf extract) in Borisinh Village



Training farmers and one-on-one discussions for customized solutions



Making cultivated fertilizer

