

I. Project Information

A. Development Challenge and Our Solution

Introduction of improved crop methodology, input intensification to enable smallholders escape poverty, poor crop productivity, fluctuating inflation affecting mostly smallholders, and poor marketing of agricultural surplus are some of the development challenges we need to address in the state of West Bengal (India). In West Bengal only 4 districts are productive enough and rest 14 falls under either low or medium productivity groups. Our target area viz; district Jalpaiguri where agriculture is the leading occupation falls under least productivity group (1372 kg/ha) after district Darjeeling (1353 kg/ha) in the state. Here average land holding size is 1-2 acres and majority of rural population falls under small and marginal farmers' category (Source: Directorate of Agriculture, GoWB).

The existence of market for smallholder farmers is such that most of them opt out of markets; poor price and less welfare-enhancing situations are responsible for these choices. GoWB has tried to regulate the market through its 38 Regulated Market Committee (RMCs) linking nearly 3000 rural hats/markets but this doesn't really suffice the needs of 50 million people who are fully dependent on agriculture (Source: West Bengal Marketing Board).

The action here proposes strengthening target farmers' economic situation and creating a strong network of producers' organizations simultaneously. The idea is to promote organic agriculture, and in turn letting them avail organic certification for their produce. Within a span of three years farmers would be able to obtain their C-I, C-II and C-III (Conversion Certificates) from a certification agency within India.

This idea of organic certification and market linkage (domestic/international) has already been successfully tested in Rajasthan with > 10000 farmers; a readymade market at the door step for organic products, a rather fair price and moreover on an average > 50% increase in the gross annual income were among several factors that led around 50% of these farmers join organic industry by themselves and that was only within 4 years of its inception in that target area.

This innovation has equally affected Rajasthan government; soon after the inception of organic industry, roughly 5000 farmers abandoned MGNREGS; a government scheme which provides 100 days' work annually. These farmers are not dependent on government schemes for livelihood anymore and rather have established their agriculture practices as a profitable venture.

B. Objectives and Anticipated Results

This programme is based on the idea of transforming low productive semi-subsistence agriculture to high productive commercialized agriculture. There are two key objectives that need to be addressed in order to achieve the target –

- A. Inclusive Agriculture Sector Growth
- B. Improved Nutritional Status

Among major issues is the increasing use of inorganic fertilizers (West Bengal comes 2nd after Punjab state); the use is highly concentrated towards nitrogenous fertilizers and a large imbalance has emerged between ratio of N, P and K as applied by farmers and the ratio that is considered optimum. Promotion of in-house organic fertilizers can cope well with this issue and would reduce agricultural operation cost simultaneously.

Promotion of Organic certification can be proved as an effective tool in the overall growth of agriculture sector; it's not a new idea in India but lack of awareness and government's poor willingness hasn't allowed it desired thrust yet. In order to do so, the broad objectives has been subdivided where DIV's support would play a significant role in addressing vital issues such as -

- a. Low productivity
- b. Higher farm input costs

- c. Low returns over agriculture investments
- d. Lack of awareness
- e. Market and Trade

This 'whole idea' of certification is based on establishment of two producers' organization in the target area which would lead two clusters of farmers (1000 in no.). Three years of rigorous work would make them avail all certifications needed (from Conversion - I to III level) in order to bring their agriculture practices at commercial scale. This is important as market availability would induce farmers to get involved in improved agriculture practices; whole year involvement would eradicate problems of food security and quality of food available would enhance their nutritional status at the same time.

We have 10 years of experience in Rajasthan state in this sector; increased awareness among certified smallholders farmers has shown its potential; they produced organic, they bargained and chose markets of their choice, and ultimately raised their economic status.

This situation is equally desirable to government as well who has to put billions of rupees in subsidizing inorganic fertilizers and later buying back agricultural produce at a minimum support price - in spite of all these efforts yet unable to uplift the living status of smallholders.

C. Potential Impact & Scale

The proposed program would be concentrated in two blocks of district Jalpaiguri viz; Mal and Nagrakatta and would work with 1000 smallholder farmers in initial phase. As per our experience, the program would have the potential to create an impact on 6000 persons directly and 10000 persons indirectly annually. Under direct beneficiaries we consider members of a family (including women and children who most of the times are devoid of good quality food and education respectively) and consumers (domestic/global) would fall under indirect beneficiaries.

Another important aspect of this program would be farmer to farmer transfer of technology which in most cases spreads in almost 1:1 ratio. E.g. in 10 years if 60000 people are benefitted by directly working with us then at least 50000 more would be benefitted just by learning it from other farmers. So in long term there is a great probability that a single program benefits nearly 200000 people.

The proposed program won't only create awareness regarding producing organic but would facilitate welfare enhancing situations for the smallholders. In 3 years we hope to create a positive impact on around 50000 people out of which (if farmers choose to export their produce then only) around 30000 people globally would be benefitted from great quality agricultural products. In long run this single program would have the potential to benefit roughly 200000 people (50% of which might be global population) which is actually 25% of the population in Jalpaiguri (800000) that needs to import rice from other districts just to meet the requirements.

The anticipated number of beneficiaries can be calculated by the following formula where it is experienced that a farmer keeps a 40% reserve of its produce for domestic needs while sells 60% produce in the market for cash income, so -

No of direct beneficiaries = (40% of total production from the clusters/consumption per capita)

No of indirect beneficiaries = (60% of total production from the clusters/consumption per capita)

The formula would work only in case of staple food crops and changes to 99% produce goes to sales in cash crops such as mustard, Jute and Potato.

As the program strongly emphasizes to work in close collaboration with local Panchayets so that it incorporates into local governments's annual action plan within one year of inception of the programme. This way an area can be saturated 100% in long run making the area sustainable from food security perspectives.

The most appropriate estimate of who the solution will directly and indirectly affect.

	<u>Direct</u>	<u>Indirect</u>
Now?	6000	0
In 3 years?	18000	30000
In 5 years?	30000	50000
In 10 years?	60000	100000

D. Competitive Landscape

There are certain schemes run by Government of India viz; National Food Security Mission, RKVY (Rastriya Krishi Vikas Yojana), Organic Mission and FCI (Food Corporation of India) working in line to manage the agriculture sector; these organizations supply inputs such as seeds and fertilizers to the farmers and government buys back the agricultural produce through FCI at a minimum support price (it put a burden of Rs 21.6 billions on government in year 2011).

Due to high prices government has to provide huge subsidy on seeds and fertilizers. Apart from this government provides various improved and organic technologies to the farmers. But the problem is that these things get remained at the policy level and implementation part limits itself to demonstration only. In other words, it is presumed that a few demonstration would be sufficient to spread the activity which seems bit difficult unless targeted farmers are educated to a certain level and well aware of the benefits of a particular programme but this is generally not the case in rural India. At the same time these programs put a huge financial burden on the the government; government buys agricultural produce back at a minimum support price through FCI inlets so that the rice/wheat can be redistributed at a cheaper prices to the poor farmers at local ration outlets. Hypothetically it is good idea but it seldom happens; in year 2011 government set the target to buy 2000000 tonnes of rice from the farmers but even after one year could complete the purchase of only 10% of it i.e. 200000 tonnes.

Compared to government's existing strategy, our strategy is much better as we provide handholding support to the farmers and our expertise in S.R.I. methodologies (System of Root Intensification; applicable in most crops), in organic technologies (vermi-compost, effective micro-organism etc.) and in linking farmers to the domestic/international market makes us unique in implementing any development programme.

Our programmes and approaches cost around Rs 26 - 30 (US \$ 0.5) per farmer per day and are highly cost effective compared to other development programme in India. This is also a reason why some state governments (Himanchal Pradesh, Rajasthan, Arunachal Pradesh) contacted us to promote organic farming in their areas; private stakeholders have already shown their interest in developing market for the smallholders (with lots of facilities to smallholders).

E. Measuring Success

The proposed program is for three years and each year has different objectives so measuring success would also be year based.

Year 1: Two clusters consisting of 1000 farmers would be formed in two halves of a year. We expect farmers to avail Conversion - I (C-I) certificate from a certification agency such as BioCert by the end of first year; C-I certification is possible only when all the farmers of a cluster learns all the progressive technologies and make their (declared) land 100% organic. So this would solve problems of food security and nutritional status right from the beginning. The

program would run in collaboration with local Panchayets; half yearly exposures/workshops/seminars would facilitate cross learnings so we expect concerned Panchayets to release funds for establishing at least one cluster consisting of 100 farmers in their locations by the end of the 1st year.

Year 2: Important components are getting Conversion -II certification, formal registration of producers' organization, value addition trading and direct domestic marketing through producers' organizations. We expect concerned Panchayets would be able to facilitate their district officials and promote programs on organic; facilities at Zilla Parishads (district level Panchayet admin) would release funds for at least 200 - 300 new farmers in their locations.

Year 3: Obtaining final i.e. Conversion - III certification which is extremely important for international marketing as per APEDA (Agricultural and Processed Food Products Export Development Authority) standards, linking producers' organizations directly with national/international marketing hub.

We expect that by the end of 3rd year, concerned Panchayets and district officials would be able to influence state government and might like to add this kind of programs in state annual plans for further scale up; this would be a great achievement as in long run only those programs can be successful which are either supported by state government (due to existing large infrastructure) or supported by private sector organizations ready to provide a readymade market to our smallholder farmers.

F. People

Three organizations would implement the whole program where one non-profit organization (PRASARI) is collaborating with two private sector organizations viz; Rapid Organic and Maple Orgtech. PRASARI and Rapid Organic would participate in the direct implementation while the latter one would provide its low cost organic technology to our target farmers' groups in the project location.

PRASARI Team -

Expert Organic Technology (1)
Consultant Organic Operations (1)
District Head (1)
Field Executive (2)
Village Resource Persons (11)
Head Administration and Accounts (1)
Accountant (1)

Team Rapid Organic -

Project Head (1)
Project officers (2)
Field operators (4)
Accountant (1)

Team Maple Orgtech -

Manager organic operations
MIS officer (Monitoring Information System)

PRASARI: is rather a new organization and has been working in West Bengal since 2007. Professionals dedicated to this proposed programs have 4 - 12 years of experience and expertise in Integrated Natural Resource Management based livelihoods activities, disaster management, watershed management, strategic planning, capacity building, and in dealing with local government.

Rapid Organic: has been working in western India since 2001 and has a base of 10000 organic farmers; they have expertise in developing Internal Control System and letting avail organic certification through various certification agencies. They have set a new trend in the organic industry and has been in the business of exporting organic products across globe since 2009.

Maple Orgtech (India) Limited: working in this (organic) sector for last 16 years, they might be the only organization in India working at such a large scale; through Effective Microorganism (EM) revolution, they have made thousands of farmers help reduce their cost of cultivation. EM technology is environment friendly and is being used successfully in more than 140 countries for the last 30 years and is perhaps the most powerful tool to fulfill our objective.