

Home Gardening

Majority of small and marginal farming households grow few varieties of vegetable crops for home consumption. At times they also buy from outside depending on affordability or their purchasing capacity. The program intends to organize these growers into collectives, sensitise, orient and train them on systematic vegetable growing to supplement the desired levels of nutritional intake for their family members and raise the vegetable production for additional income.

The change actions:

- Each program participating households will be mobilised and encouraged for raising a home vegetable garden at least in the available patch of homestead land under their disposal;
- Small and marginal farmers will be organised and trained for remunerative vegetable growing. They will be supported with organic vegetable growing inputs and be linked to village level collectives such as producers groups, farmers groups and self help groups for soliciting mainstream government support;
- Home gardening is considered as an additional source of income for women farmers;
- Women have different option to prepare nutritious food and feed their family members.

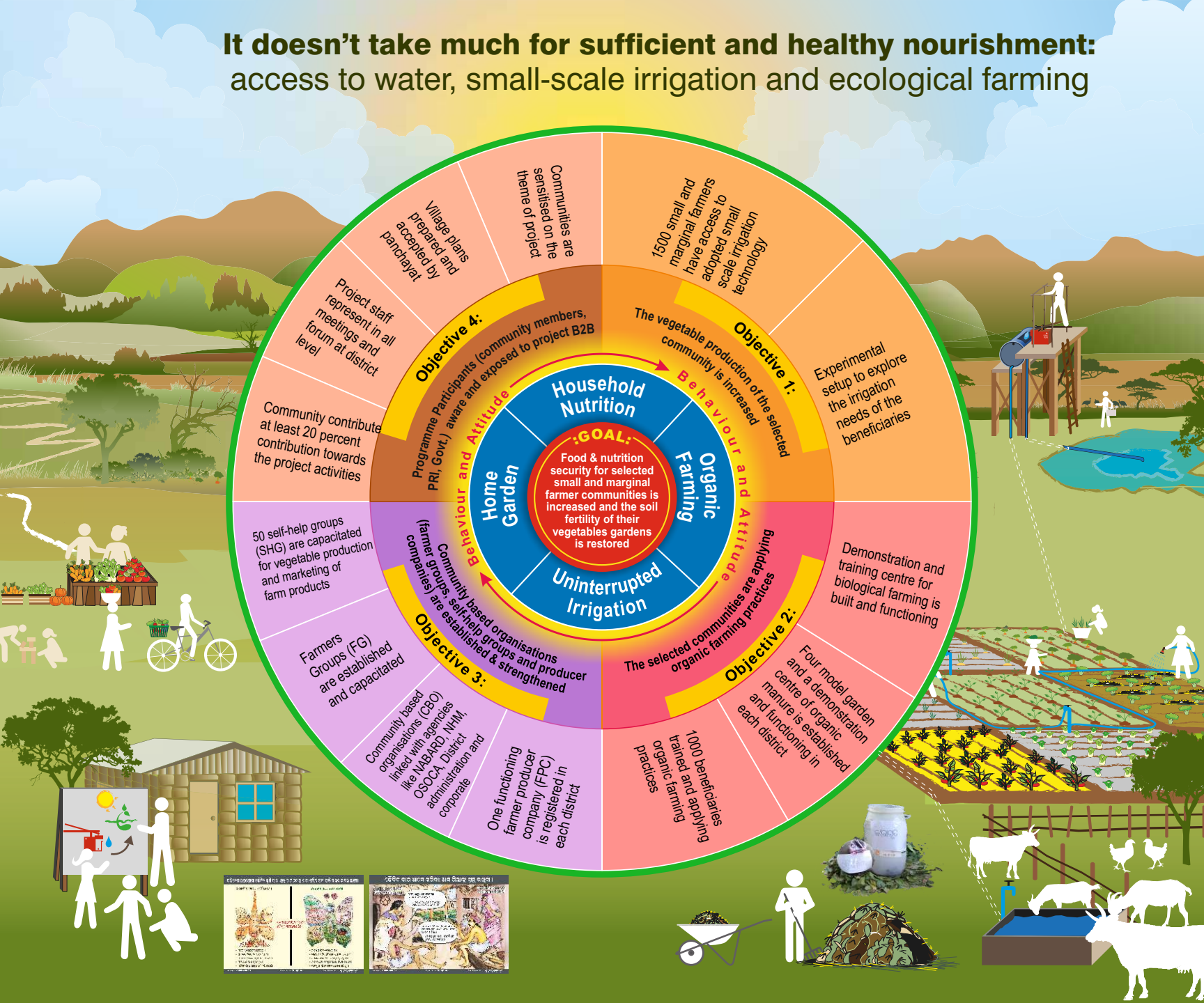
Un-interrupted Irrigation

Irrigation is central to crop productivity. However excess water flow causes stunting plant growth and water waste. Farmers using PEP can supply/irrigate the desired volume of water with less labour and reduced cost using an environmentally friendly irrigation option.

The change actions:

- The PEP suction pump draws water from up to 8 meters deep without producing carbon dioxide or over using this precious resource;
- It is a drudgery free water lifting device which regulates water flow management in the home gardens;
- Minimise water loss by applying advance alternative methods of storing and channelizing water flows;
- Dissemination of knowledge and information through training, exposures and workshops;
- A centralized PEP production unit will be established for quality assurance and undertake research and experimentation for the enhancement of PEP's efficiency;
- Farmer Group (FG) members will be trained on operations and maintenance of the device and they will act as self employed mechanics.

It doesn't take much for sufficient and healthy nourishment: access to water, small-scale irrigation and ecological farming



Organic Farming

The initiative will attempt for a reversal of chemical fertiliser and pesticides based farm practices, propagating alternative organic vegetable growing towards health and wellbeing of the communities.

The change actions:

- Promote organic farming practices;
- Intensive application of bio fertilizers and bio pesticides;
- Promoting field soil testing for farmers so as to enable them for deciding the cultivation of nutritious and profitable crop options;
- Apart from keeping vegetable cultivation as mainstay, orient and encourage farmers for crop diversification;
- At central level a training centre for organic farming will be established for knowledge and information dissemination. The training centre will have the facilities for conducting research and experiment on soil and plant protection and pest control measures;
- Transfer knowledge and skill to farmers on organic manure and pesticide preparation;
- Promote farmers groups and companies on organic manure and pesticide production;
- Individual farmers will can access their desired volume of manure and pesticides from the village organic enterprise;
- Integrate with government agriculture and horticulture promotional schemes and programs;
- Facilitate market access and marketing of products;
- Identify a progressive farmer in program villages and extend required support for strengthening their home garden initiative towards a model demonstration site for awareness generation and replication in the neighbourhood.

Family Nutrition

In order to strengthen household food security and nutrition, attention will be given to intensify local food production through home gardens that form an integral part of the local food consumption culture. These home gardens will have positive impact on addressing food insecurity and malnutrition and at the same time provide an additional income and livelihood opportunities to the resource poor farmers.

The change actions:

- Home gardens will assure a basket full of nutrition opportunity;
- The food basket or what to grow in the home gardens is equally essential, hence importance is being given to promote a mix of vegetables, fruits, plantation crops, spices and herbs as well as livestock that can serve as additional source of food nutrition and income;
- Livestock and poultry rearing will be taken up for supplementing the animal protein requirements as well as producing organic fertiliser requirements of the program households;



## Institution building towards sustaining the drive

Institutions namely Farmers group, Producers group and Self help group will be organised at village level and federated at Block and district level towards farmer's solidarity for better production, learning disseminations for quality improvement. A Producers' company will be set up at state level to sale the organic farm produces in wider markets.

### Farmers Group:

Farmers group will be organised in all the program villages with the membership of interested small and marginal farming households. The groups in their respective association will plan and cultivate organic vegetable crops.

### What Farmers Group (all small & marginal farmers) will do?

- Promote organic farming;
- Utilization of drudgery free PEP irrigation devices;
- Production of organic vegetables;
- Periodic maintenance of PEP;
- Educate and orient community members on harmful impacts of chemical inputs and resultant advantages of organic produces.

### Producers Group:

The Producers Group will focus on production and intra-trading of organic manure at village level. It will comprise of female members of the farming households.

### What Producers Group will do?

- Production of different varieties of organic manure and pesticides;
- Intra-trading of organic manure and pesticides;
- Mobilize community for adoption of organic manure usages;
- Act as Primary sellers of organic vegetable produced by the farmers.

### Self Help Groups (SHGs):

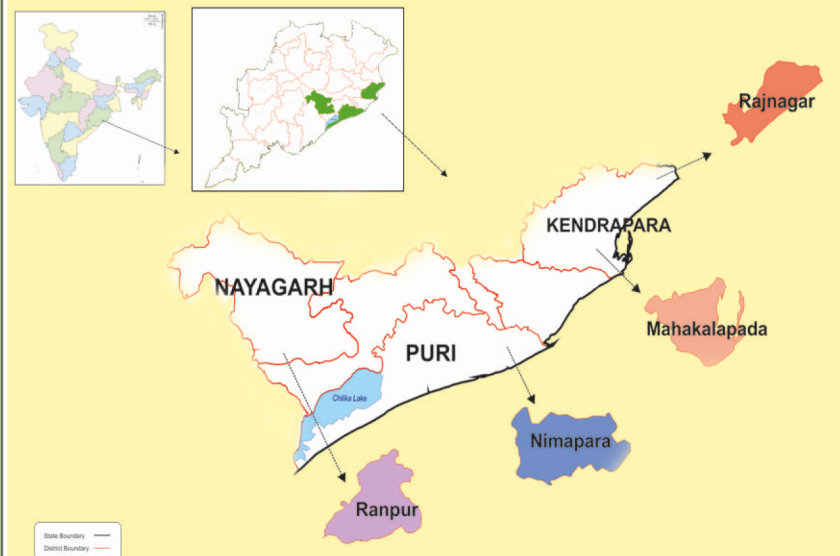
Active SHGs will be linked with market agencies for selling and promotion of organic products.

### What SHGs will do?

- Sale of organic vegetables;
- Network with small traders, organized vegetable outlets for promotion of organic vegetables;
- Propagate and disseminate resultant positive health outcomes with the consumption of organic food stuffs and change the attitude, behaviour from chemical to organic way.

## Operational Map

### Operational Area



Supported by :



Design & Developed by :



Back2Back

Brochure - No.1



Back2Back

FARMING • FARMER • INSTITUTIONS



## Addressing Food & Nutrition need through Organic Farming and Alternative Irrigation

### What is Back2Back?

Back2Back signifies three things: One, coming back to the conventional and rational means of irrigation and organic farming practices; two, providing continuous back up support to farmers towards improving the quality of life of families and communities; and lastly promoting community based organisations of farmers to sustain the process.

It is an initiative to improve food and nutrition security of small and marginal farmers along with restoration of soil fertility of their homestead gardens by adopting organic farming and drudgery free manual water lifting devices Pedal Pump (PEP). The methods and techniques will promote overall health and wellbeing of communities and regenerate sustainable and environmentally friendly farming practices in the target villages further sustained through farmer collectives.

The process has started in Puri, Nayagarh and Kendrapada districts of Odisha with the support of Aqua Alimenta. Around 5000 households will benefit from the project.

### Why Back2Back

In the past, families grew food and vegetables in their home gardens applying organic manures and maintained a healthy diet. Nowadays cereals, pulses and vegetables come (are bought) from the market and are mostly toxic due to excessive application of chemical fertilizers and pesticides. The application of chemical fertilizers in agriculture is growing with each passing day. There is a notion that, this has caused gastric problems, diabetes, blood pressure, cancer and many other diseases. Recurring use of chemical fertilizers and pesticide reduces the soil fertility. In the process all the farmer friendly micro organisms which were contributing to increase the soil fertility without any cost have perished and are no more in the soil to help the farmers. As a result farmers are forced to increase the quantum of fertilizers and pesticides every year. This has caused a threat to maintain a balance between the environment and human being. Hence there is a greater need to manage soil nutrition and produce organic vegetable to sustain the quality of life.

Agriculture also depends on assured water supply in the fields. Most of the irrigation technologies like deep tube wells or shallow tube wells are beyond the reach of the poor farmers. That is why they have to fall back on traditional devises like "Tenda" which are labour intensive. In this context, PEP has come to support of the farmers. It is easy to operate and maintain, reduces drudgery and is environmental friendly. Any member of the family can operate the device and the farmer can maintain it by themselves.