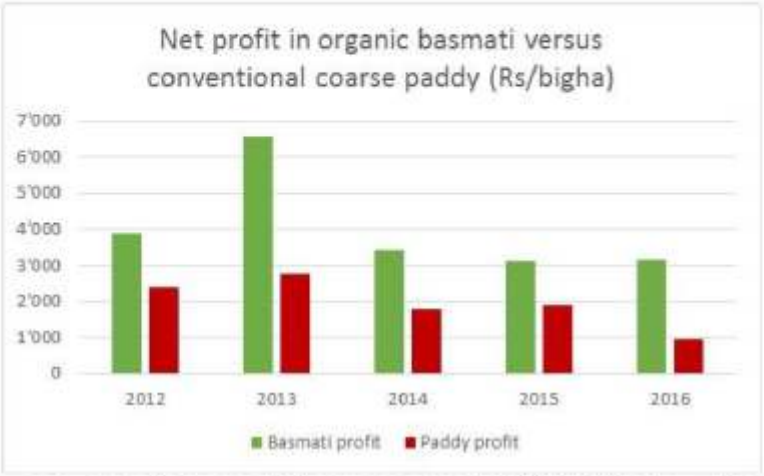
Organic farming and fair trade earn farmers a better income

Results of 5 years of field data collection in Nainital District, Uttarakhand, India

Being the partner of the project, Fair Farming Foundation is proud of the project achievement which helped farmers earn a better income. The organic and fairtrade basmati project has grown from less than 200 farmers in 2011 to over 4'000 farmers in 2016. During five years the project team collected detailed data from a sample of approx. 80 organic and 80 conventional farms in 18 villages. The results demonstrate that in each year organic basmati has been far more profitable than conventional paddy. In average over five years, organic basmati farmers earned 4'000 Rs/bigha, while conventional paddy farmers earned less than 2'000 Rs/bigha.



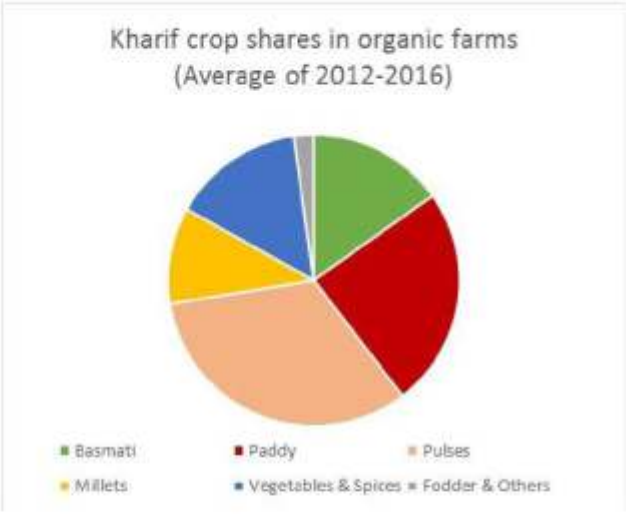
„It is for the first time that a company has helped us to get market access. The project has taught us how to do scientific organic farming. The premium received for Basmati is helping our community to develop." Renu Tiwari, Patkot village

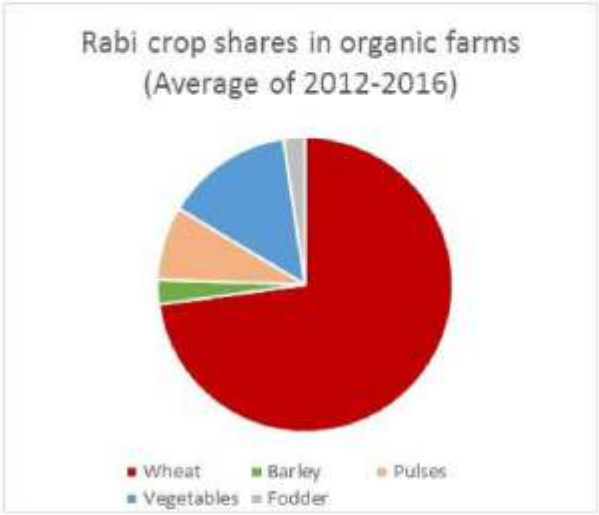
The best results were achieved by farmers applying the SRI system: Single seedlings are transplanted when they are 10-12 days old with a spacing of 25 x 25 cm. Less frequent irrigation allows for alternate wetting and drying of the soil.Instead of manual weeding aconoweeder is being used. This technique results in healthier plants, higher yields and a better paddy quality, which is rewarded by the buyer. Results in 2016 show that farmers can earn an extra 1'000 Rs per bigha by using this method (see table).

Basmati (2016)	Yield (kg/bigha)	Price (Rs/kg)	Cost (Rs/bigha)	Profit (Rs/bigha)
SRI	145	31	557	3'929
Non-SRI	115	30	506	2'956

If we compare average net profits of different Kharif crops over five years it is obvious that basmati is far more profitable than paddy or soybean. Organic farmers therefore are well advised to expand their area under basmati. However, it is important to follow a diverse crop rotation and also grow pulses, cereals and vegetables. This keeps soils healthy, provides diverse and healthy food for the family and reduces vulnerability to weather and price fluctuations.

Organic farms	Yield (kg/bigha)	Price (Rs/kg)	Cost (Rs/bigha)	Profit (Rs/bigha)
Basmati	136	33.1	548	4'018
Paddy	256	11.8	759	2'258
Soybean	67	31.8	575	1'534

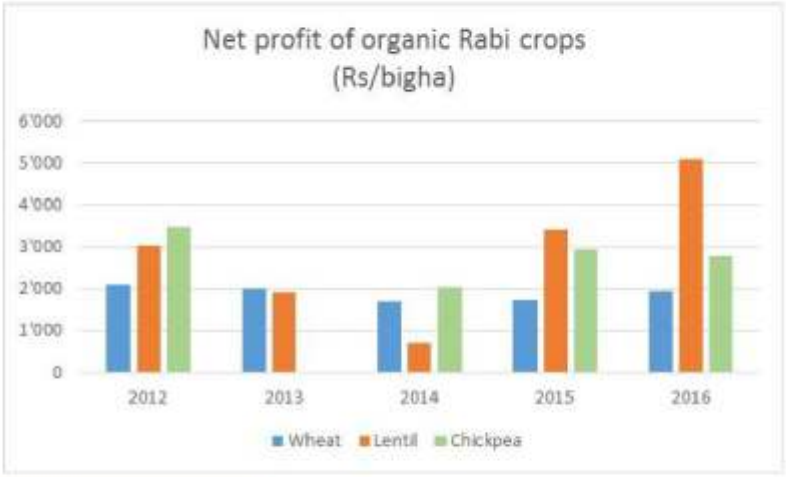




Crop diversity is also important in the Rabi season. Farmers still mainly grow wheat, although it is less profitable than pulses like lentils and chickpea. Organic pulses are in high demand and fetch good prices. In addition they enrich the diet and improve the fertility of the soil, which provides a better yield in the next season.

Organic farmers can further improve their yields and incomes by:

- Producing good quality compost
- Line seeding and mechanical weeding
- Careful irrigation (avoid stagnating water)
- Produce high-value crops like vegetables and spices



„Health is more important than money. Organic farming is not only good for the soil but also good for our children. SRI helps in getting more production and less disease and pest, while using less water." Nawin Tiwari, Patkot village

The project partners also help farmers in the following aspects:

Build biogas plants and buy fuel efficient stoves (to save time and money and improve health)

Improve composting and handling of biogas slurry (to improve soil fertility)
Improve and maintain water management infrastructure

Access to farm tools and machinery (to reduce labour input and improve yields)

Farm mechanization & Knowledge dissemination- We support a comprehensive approach to helping smallholder farmers prosper that includes access to more effective tools & farm management practices, locally relevant knowledge & emerging digital technologies

Under our Agriculture productivity enhancement project, We are engaged in uplifting the socio economic status of the marginal farmers through minimizing their agriculture expenditure and yielding more crops by end to end operation of agriculture technology.

We believe helping farming families to increase production in a sustainable way is the most effective way to reduce hunger & poverty over the long term . The objective is to increase household food security among the communities. FFF supports the development of appropriate agricultural technologies, farmer innovations, local knowledge systems and sustainable natural resources utilization. We have distributed 250 Doracycles, 2000 Drums for making bio-inputs, 134 Paddy winnower fans, 414 Knackshak spray pumps, 40 dolmakers, tractor, Trolley, cultivator, Harrow, threshor, Levlor, Pudler, Lift Lakor Patela, Palta Hal, Rice Planters to support the farmers. We have also started Voice & text SMS service for the farmers for the dissemination of appropriate information & knowledge.we believe genuine knowledge transfer must be tailored to local challenges and culture.

Our expert specialists & team trained the farmers on best package of practices. These trainings focus on the existing local problems of the farmers. Progressive farmers & other eminent think tanks are also invited for training programs & demonstrations to share their experience. FFF also motivates farmers by bringing them on study tours to showcase what other progressive farmers have achieved. This also includes visits to kisan mela, research stations,universities. Such exposure visits programs expose farmers to the possibilities of technological adoption & replication for their own farms.

In Pic: Supporting farmers with appropriate farming implements

Partners visited the Field to see the activities of Biodynamic project.

Biodynamic farming is a spiritual, ethical & ecological approach to agriculture. In an effort to create healthier plants and heal the earth by replenishing the soil and adding vitality to the plant, soil and/or livestock, Fair Farming Foundation suppoted the Biodynamic project in Bahraich . Initially we have engaged 550 farmers with the project.

In day-to-day practice the goal is to create a farm system that is minimally dependant on imported materials, and instead meets its needs from the living dynamics of the farm itself. It is the biodiversity of the farm, organized so that the waste of one part of the farm becomes the energy for another, that results in an increase in the farm's capacity for self-renewal and ultimately makes the farm sustainable.

Preparations" made from herbs, mineral substances and animal manures that are turned into field sprays and compost. One of the farming methods involves taking cow manure, packing into a cow horn and burying it underground over winter. It is then mixed with water and applied to the soil. It is very much helpful in stimulating root growth. Through Biodynamic project we are looking forward to transform the practice and culture of agriculture to renew the vitality of the earth, the integrity of our food, and the health and wholeness of our communities. The creation of lasting partnerships with our local support network has been essential to our small farm's continued success. The biodynamic work is continuing here and hopefully we will soon be able to report on further developments.

In Pic: Practical demonstration for preparation of Biodynamic compost

The Organic Agriculture Service centre was inaugurated amidst a large number of farmers, farmer representatives, villagers & staff members of Fair Farming Foundation

The machinery support will reduce the cost of cultivation and the other technical and input service through the Organic Agriculture service center will increase the production and productivity of the crops and improve the economic statues of the small land holding farmers in the kotabagh region said BS Bajwal, Farmer (Devirampur) Ramnagar

Most of the farmer in Kotabagh region of Uttrakhand are small & marginalized & having small land holding. They are not able to purchase costly farm implements & forced to hire them from market with a high price. With an aim to reduce time, drudgery & enhance production, Organic Agriculture service centre is established under our Fair Trade program.

Till date, we have opened, three agriculture centre. Farmers of the region are happy & exited to grab the services of the centre. It will not only provide them the required services with a minimum cost as compared with the market price but can be availed at their door step as & when demanded. The services of Tractor, Trailer, harrow, cultivator, Paddy thresher, levlor, pudler, lift lakor patella, Palta hal, Rice planters, organic inputs at the centre aimed at ensuring efficacy for agriculture extension activities & production methods.

The efficiency of mechanization can be judged from the fact efficient machinery helps in increasing productivity by about 30% besides, enabling the farmers to raise a second crop or multi crop thereby making Indian agriculture an attractive proposition.

Promoting "sustainable green revolution" across India- we are improving productivity of rice and other crops based on environment-friendly agricultural practices that preserve and improve the natural resource base and help to better withstand changing climate conditions

Till date, FFF could reach over 8075 farming families across 3 states of Indian sub-continent comprising and these families are the integral part of the Safe Environment Programme relentlessly making their efforts and contributing towards making the world a better and safer living place for all living beings.

Relentless efforts are being made by the Fair Farming Foundation to continuously support the organic agriculture production by the small and marginal farming families and shunning the usage of the highly poisonous agro-chemicals in the crop production creating a better environment for the future generation. Stopping usage of the conventional chemicals like fertilizers, pesticides, herbicides, growth regulators followed by the sound practices of the organic agriculture helping the farmers production fields regaining the natural vitality of soil.

In an era of increasingly scarce resources & growing impact of climate change, we encourage farmers to embrace & adopt sustainable practices & help them grow more with less land, costly inputs while preserving natural resources for future generations.

New technology also adopted to preserve the natural resources like water and soil by following SRI (System of Rice Intensification) to enhance the productivity of Basmati Crops with 3 times less usage of water as compared to the traditional flooding method. Farmers recorded highest yield of Traditional Basmati per hactre with more than 3.3MT in SRI production as compared to 2.5MT obtained through conventional method

In Pic: FFF Team encouraging & Providing trainings to farmers on SRI technology