

From Chemical to Organic



- A climate proofing project in Kombaipatti watershed

Vadugan has a farm in the watershed area, Kombaipatti, where he grows organic crops. Tree years ago he switched from chemical farming to an organic alternative. The reason for the transition was that he didn't want to give produce containing traces of chemicals to his family so he turned to CIRHEP for help in changing to a more sustainable agriculture method. CIRHEP provided him with continuous training to make the farmer's wish to be fully organic a reality.



Pomegranate, red gram and country beans in a mixed field

Today he grows a variety of different crops such country beans, red pomegranate and brinjal. He has fields with mixed crops which is positive both for enhanced soil fertility, as well as food security for the farmer and his family. If one crop doesn't give a good yield one year chances are that another crop can make up for the loss. Most of the crops grown at the farm is used by the farmers close family, either as food or as animal feed, while pomegranate and brinjal is sold in the market. One problem the farmer is facing is that the organic produce does not sell for the higher price in the small neighboring towns.



The farmer Vadugan

During the years the farmer have received several different seedlings from CIRHEP, one of which is foxtail millet. Vadugan has a field of foxtail millet that doesn't require any additional irrigation, apart from rainfall, even on a dry summer like this year of 2018. The farmer also has a bore well which he uses the water from to irrigate other more water demanding crops like brinjal. The water level in the well has increased, partly thanks to the field bunds that were constructed by CIRHEP in 2005 and a well recharge pit connected to his open well. This have given the farmer a secured access to water even during the last couple of years of extremely low rainfall.



One out of two cows and two calfs the farmer own

The farmer produces his own organic pesticide and fertilizer. He has attended CIRHEP's training in making pesticides from five common leafs, that all can be found in his farm, and he has even continued to improve the recipe. He has added leafs from another five different species to make an even stronger organic pesticide which there fore can be used at lower concentration. Only last week he attended a training by CIRHEP in making another kind of insect repellent to target another kind of pest. He also creates his own fertilizer by using fish scraps, fruits and cow urine to use on his own fields.



Vadugan stirrig the organic pesticide

ACTIVITIES APPLIED

- Creating field bunds, well recharge pit and the usage of summer ploughing
- Providing climate resilient seeds such as;
 country beans, red gram, foxtail millet,
 little millet
- Workshops in organic fertilizer and pesticides

The farmer also cultivates a variety of jasmine flower. During the summer season the bushes provides him with a steady income. To extend the flowering period, CIRHEP has advised him to build a shed for his jasmine bushes. The shed, consisting of only a roof and some 1000 watt lightbulbs to provide extra heat, would protect the flowers from the mist and the cold temperatures that occurs in the winter on the west side of Kadavakaruchi. This can prolong flowering season and therefore increase his income.



Vadugan showing NABARD agent his file

Since the switch to organic farming the expenses for the farmer has decreased. The water use for farming is also less even though the framer now can use a larger area for cultivating crops than before. One of the most important changes for Vaduhgan is that he feels safe knowing that his produce wont contain any traces of poison.

RESULTS

- A more reliable water supply
- A more secure food supply with higher resistance to draught
- Less chemical pollution and more fertile soil
- A greater area can be used for farming activities

Table 1: Estimation of the farmers yearly income from fruits grown at the farm

Crop name	Income (Rupee/Year)	Expenses (Rupee/Year)	Net income (Rupee/Year)
Brinjal	72 000	15 000	57 000
Pomegranate	9000	0	9000
Pulses	Self use	2000	4000
Barnyard millet	5000	1000	4000