



Kurl Bader with the author on the farm

Small-scale organic farming

Mr. Kurt Bader, born in Switzerland is a passionate organic farmer settled in Bijaynagar village of Chitwan district, Nepal. With no formal education, he gained a lot of knowledge by practicing organic farming and sharing knowledge on sustainable agriculture across countries like Australia, India and Nepal.

In 2004, Kurt Bader presently aged 75 years, started agroforestry system in 0.3 ha of lands on organic basis with two assistants, Prakash and Durga. He grows vegetables like potato, chilly, onion, cabbage, cauliflower, radish, carrot, colocassia, leafy vegetables following organic principles. He has planted trees on bunds and farm boundaries and grown shrubs in between the vegetable crops. He has planted perennials trees like *Tectona grandis*, *Atrocarpus lokoocha*, *Leucaena leucocephala*, *Melia azadirach*, *Azadirachta indica*, *Ficus variegata*, *Ricinus communis*, bamboo, etc. on farm boundaries. Also he has raised diverse fruit trees like papaya, mango, jackfruit, passion fruit, drumstick, citrus, guava and banana.

Trees provide fodder to animals and fruits for household consumption. Multipurpose trees like Clover bush is a source of food for birds and animals. While the birds feed on the seeds, the animals feed on the leaf matter. The stem of Clover bush is a very good source of high quality firewood and charcoal. Trees are also being used for their medicinal properties. For instance, a mixture prepared from the leaves of *Casuarina equisetifolia* and *Cassia ellata* have shown good response to leaf blight in potato. Most of

the diseases are managed by using biological methods, and there is no incidence of any large scale pest/disease infestation.

The entire farm operates on recycling resources. The livestock component on his farm includes 4 goats, 20 poultry (both locals and hybrids), 8 rabbits and fishes which feed on most of the farm wastes. On the other hand the animal wastes like urine and dung and biomass generated on bunds and trees are recycled to form organic manure. Charcoal made from tree wood is applied to the soil along with silt, a source rich in minerals. Waste water from fish pond is utilized to irrigate the crops using underground pipelines. Thus, every farm component complements each other.

Water management is taken care of. Rain water is harvested in two concrete tanks with the capacity of 20,000 litres each, which is sufficient over the year. Sprinkler irrigation is provided over the year except rainy season assuring the proper utilization of rain water. It helps to maintain surface layer moist for growth and development of crops.

A lot of farmers from the neighbourhood visit Bader's farm and have been practicing tree integration in their farms. He is a role model in organic agriculture for many farmers in the region.

This is based on the interactions with the farmer by Dinesh Panday, Institute of Agriculture and Animal Science, TU, Nepal. E-mail: relorteddinesh@gmail.com