Understanding Tribal Agriculture

The predominant attitude of agriculture officials towards tribal communities is to try to convince them to give up their 'backward' agriculture and adopt more 'modern' and 'high productivity' agricultural practices. Often no attempt at all is made to try to understand the traditional agricultural systems and practices of tribal communities. It is taken for granted that this is bound to be 'backward' and hence in need of replacement by the readymade 'modern' solutions available with officials.

However this is not at all the reality that one sees in many tribal villages. Instead what we see in these villages is an agriculture system in harmony with nature as well as the food and nutrition needs of people. Further careful observation reveals this to be a risk minimising system which can provide at least some food even in adverse weather conditions. Hence the relevance of this eco-friendly, zero fossil fuel system has increased further in times of climate change and erratic weather.

In Dharaav village of Hoshangabad district (Madhya Pradesh) tribal farmers practice 'uter' system of cultivation. Under this mixed farming system seeds of several cereals, millets and legumes are sown together at the same time in or around June. 60 year old farmer Ganpat says that absolutely no cash expenditure is incurred in this farming. These farmers save seeds from the previous year’s crops. Farm animals fertilise the fields with manure while the crop residues of this organic mixed farming system, completely free from chemical poisons, provides nutritious food for bullocks, cows and other farm animals. Mixed farming of grains and legumes ensures that soil fertility is maintained. If one crop fails due to some reason, other crops of the mixed farming system enable farmers to survive despite some loss.

In Dindori district (Madhya Pradesh) Baiga tribals practice 'Benvar' agriculture system. Gothiya, a farmer of Kandabani village explains that during early summer small bushes and branches, fallen leaves are lit up in a fire. In this thin layer of ash mixed seeds are scattered. After about 3 years the site of farming changes. However after resting the land soil for some time, the tribal farmers again return to this land after 9 years.

About 16 crops are routinely grown in this mixed farming system. These further have about 56 varieties. Various crops support each other in this mixed system. The bigger plant growth of maize protects Kulthi from strong winds. Legume crops make up for the nitrogen taken up by cereals.

**Utera Kheti in Dhadha Padav, Bankhedhi, Hoshangabad**

This 'benvar' system does not require the land to be ploughed. This system is rooted in the belief that ploughing hurts mother earth. So not to mention a tractor, even ploughing by bullocks is avoided. This in turn helps women farmers to be very self-reliant in benvar system. Generally ploughing is one aspect of farming that has been monopolised by male farmers. But in benvar system which does not involve ploughing, women farmers do not have to depend on men. So single women households are also quite self-reliant in terms of taking up benvar farming.

Naresh Vishwas, who has written a book on benvar system, says, "This system helps Baiga tribal farmers to cope up with many adverse situations. There were some disruptions but then traditional seeds could be collected and this system could resume in many villages."

A researcher Vishwambhar Nath Tripathi has catalogued 26 types of cereals, 28 roots and tubers, 40 vegetables, 45 fruits and 21 mushrooms used in various tribal villages practising bio-diversity rich agriculture. Tribals also collect many kinds food from forests on the basis of their knowledge about the plant and tree diversity of forests.

A study titled “Forests as Food Producing Habitats” conducted in Rayagada and Sundargarh districts of Odisha by Debal Deb and others recently recorded 121 different kinds of uncultivated foods being harvested by villagers, mainly tribals. Ninety eight different kinds of uncultivated foods were used to prepare cooked foods. The study found that forests food could be playing a vital role in terms of micro-nutrients. Particularly in times of stress, uncultivated foods form a critical source of nutrition. If the forest is well maintained there is year-long supply of such foods. This food is completely free and hence accessible to the poorest.

Many problems among tribals arise not from any lack of traditional wisdom but due to many sided exploitation and disturbances (including displacement) they have to face due to outside forces. For example their entire system collapses when they are pushed out of sanctuary and park areas, or to make way for dams and industries.

Debjee Sarangi, a social activist who works with tribal farmers in Odisha says: “We found that several tribal farmers were routinely growing 55 to 60 crops on two acre farms, and the mixed farming system was rooted in sound agronomic and nutrition logic. However after resting the land soil for some time, the tribal farmers again return to this land after 9 years.

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Debjee Sarangi, a social activist who works with tribal farmers in Odisha says: “We found that several tribal farmers were routinely growing 55 to 60 crops on two acre farms, and the mixed farming system was rooted in sound agronomic and nutrition logic. In addition these tribals had excellent knowledge about very diverse uncultivated food they could obtain from forests. We contacted senior researchers who told us that as long as these traditional systems were well preserved tribal communities did not need outside help or employment works during bad drought years. Unfortunately the spread of monoculture crops and plantations under the garb of ‘development’ as well as other destructive projects implemented thoughtlessly without understanding the value of tribal farming harmed the self-reliance of tribal communities. While tribals looked upon their land as mother, outsiders looked only at the minerals they could extract as quickly as possible. There is a very basic difference in the two approaches."

Debjee adds, “Experiences of our organisation ‘Living Farms’ show that any food security system proposed by the government should take into consideration the ability of traditional farming tribal systems to provide a very diverse and balanced mix of nutrients in the form of several millets, legumes, cereals, fruits, vegetables and herbs. The food security proposed by the state should support this strength and self-reliance of traditional food systems instead of harming them.”

Therefore it is important for the government to have a better recognition of the inherent strength of tribal agriculture. The effort should be to build further on these strengths instead of thoughtlessly uprooting traditional wisdom.

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