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GOOD EARTH

Purulia's tryst with mixed cropping

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Mixed and bio diverse farming presents clear advantages, with crops millet and jute complementing the water-demanding paddy.

MEETING NEEDS: Increasing output.

D*aal Bhat, Machhar bhat* and *mishti doi*: typical Bengali dishes. But these dishes are conspicuously missing from the platter of a Santhal woman residing in the remotest corner of West Bengal. The food she gets to eat is barely representative of these Bengali delicacies. For a majority of farmers of the Santhal tribe of Purulia district, the daily diet has been reduced to rice and salt. That too only when there is rain.

This is what I expected during my visit to villages of Kashipur, Manbazar and Bada Bazar of Purulia. But there was a pleasant surprise in store for me. The sustained efforts of local NGOs and small farmer groups has led to a complete revival of ecological farming in the area. There has been a reversal from paddy mono-crops to the mixed-cropping of corn, millet, okra, brinjal, jute, groundnut and so on.

Mixed and bio diverse farming presents clear advantages. When the farmers grew only rice, the risks were very high, as Purulia is an upland region with marginal rainfall. But now the multiple cropping has ensured that they get something after the harvest even if it doesn't rain because crops like millet and jute require less water. This way these crops complement the water-demanding paddy.

Nutritional

Since nutritional food is ensured, there is no hunger. The multiple cropping is also being reflected in their daily diet, which now includes seasonal vegetables, legumes and other grains, in addition to *bhat* (rice). A healthy diet has regained an entry in the lives of the villagers of Purulia. They call such cropping also as nutritional cropping.

This agro-biodiverse cultivation has also reduced market dependence. The farmers grow almost everything that they require for their daily use, even the oil seeds (for oil, fodder and to make soap) and fibre (to make ropes) and consume those. Whatever is left afterwards goes to the market. This guarantees the two-way independence: market is less accessed for both sale and purchase. Self-sufficiency is another by-product of mixed cropping.

What is more important than increasing the output in agriculture today is the critical need for reducing external inputs, which is exactly what the initiative in Purulia aims to achieve. Farmers are substituting the chemical pesticides with herbs like basil, mint, marigold and lemongrass. Fencing is being done by babul. The pest and disease attacks have lowered, as unlike monocultures the mixed cropping does not provide enough number of single hosts for pests to thrive on. If some amount of external products is still required, farmers make them by using neem leaves, cow dung, etc.

There are more advantages. Agro biodiversity and chemical free farming invites more of honeybees, butterflies and other insects. Apart from aiding in bio- control of pests and pollination, their visits are further being harnessed by farmers by culturing them. Thus apiculture has opened another way of generating income for them.

These farms are alive; and so are the plates of the Santhal tribals residing in the area. The future of farming is in adopting these sustainable agriculture practices.

What can I do?

The crops in mixed cropping complement each other. Similarly we need to complement the farmers of Purulia.

So: ask your parents to buy organic food products; inform others about the benefits of agro biodiversity and reintroduce forgotten traditional food in our diets

In collaboration with Kalpavriksh Environment Action Group