

ENVIRONMENT

For sustainable farming

SUJATHA PADMANABHAN ASHISH KOTHARI

Print edition : May 12, 2001

T+ T-

Dalit women show the way to a sustainable future in agriculture in the Zaheerabad region of Andhra Pradesh.



It was the morning of Makar Sankranti, the harvest festival. In a Machnoor village in the Zaheerabad region of Medak district in Andhra Pradesh, on the grounds of the "Green School" run by the Deccan Development Society (DDS), a local grassroots organisation, preparations were on to flag off a jatra (journey) to mark the revival of organic agricultural practices in dozens of villages.

Ten decorated bullock carts stood ready to start a journey through 62 villages. Over the next 35 days they would, in two batches, spend a day at each village displaying the local seed diversity of kharif and rabi crops. Two of the carts would also display traditional foods that have begun to reappear in the people's daily diets.

In contrast to the splendour of the decorations on the carts (every side was painted with different motifs in rich earthy colours), the flagging-off was a simple ceremony. Sixtytwo Dalit women farmers arrived from the participating villages, each carrying a clay pot filled with seed from their areas. As they walked in single file to the "seed bank" (a programme initiated by the DDS) to make their offering and light a diya (lamp), the women broke into song extolling the virtues of traditional cropping methods.

What gave the DDS the impetus to organise the jatra was the National Biodiversity Strategy and Action Plan (NBSAP), a project initiated by the Union Ministry of Environment and Forests(MoEP). The NBSAP, whose technical execution is coordinated by Kalpavriksh, an environmental action group, aims to produce action plans for the whole country (Frontline, February 2, 2001). The plans will cover wildlife, crop and livestock diversity and micro-organisms, and will deal with conservation, sustainable use, and issues of social and economic equity in the use of natural resources. In contrast to earlier national plans, that were written by a handful of consultants, the NBSAP will have for its base plans that are written for smaller geographical units (States and Union Territories, local areas within States, and inter-State ecoregions) and themes that are closely linked with biodiversity (health, culture, policies and law, economic valuation, and so on).

At each of the 62 villages that the jatra visited, a meeting was held with the farmers, at which issues related to agricultural sustainability, biodiversity and cultural traditions were discussed. From these have emerged action plans for each village, which have been compiled to form a draft action plan for the Deccan area.

On February 17, Shamsuddinpur, a village in Medak district, established itself on the agricultural map of the country. The jatra ended at the village, with women from all the participating villages, and all the bullock carts, converging on it for a day-long ceremony, which included the release of the draft action plan.

The key participants reported that the response to the jatra had been enormous. In many villages, elders broke down when they saw seed varieties that they had lost long ago and recounted how their lives were so much better in those days. An old woman in Jeerlapalli village said she could now die in peace as what she had lost had come back to her. In some villages people went into a trance and became vehicles for the local devi to curse farmers who had switched to chemical-based farming, according to the participants of the jatra.

The discussions among the farmers covered many crucial benefits of mixed organic farming - an increase in the nutritive value of the food they consumed and the variety of fodder available to their cattle, an enhancement in soil fertility, decrease in soil erosion, an increase in immunity against

illnesses and disease and a decline in pest attacks. "We used to eat a kind of jowar and a millet called taidalu, which controlled our blood sugar levels, but now we eat mainly rice and some of us suffer from diabetes," said one of the older farmers.

Many challenges and constraints were also voiced, one of the biggest ones being the shortage of farmyard manure. Over the years it has increasingly been difficult for farmers to maintain their livestock. Grazing lands previously available to rural communities are often appropriated for various developmental purposes. What also came up repeatedly was the need for a change in government policies to give a boost to the marketing value of traditional varieties, by including them in the Public Distribution System (PDS) of the State. Also, there was a feeling that the younger generations seemed to value traditional foods less, and that concerted efforts need to be made to change those perceptions.

In a country where the Green Revolution homogenised agricultural fields by promoting a few laboratory generated varieties over vast areas, the DDS' efforts to revive organic and biologically diverse agriculture are significant. The Green Revolution snuffed out many traditional varieties of crops and traditional knowledge and skills, increased farmers' dependence on large corporations and the government for seeds, fertilizers and pesticides, and in other ways undermined the self-sufficiency of farming systems. While there is no figure for the overall loss of crop varieties in the country, only a handful of high-yielding varieties grow over 70 per cent of the paddy land and over 90 per cent of the wheat land, the new varieties having displaced possibly several thousand local varieties.

The implications of the erosion of agricultural biodiversity and the loss of soil nutrients are only now beginning to dawn on the decision-makers of the country. The widespread degradation of soil across the country (with over 65 per cent of land now suffering from serious loss of productivity) due to ecological mismanagement of this kind, is perhaps India's most pressing disaster in the making... other than the misuse of its water.

THERE are several critical measures that need to be adopted to make India's agricultural system biodiverse, self-reliant and productive. Since there is interdependence between agricultural and livestock needs, combinations of tree-crop, animal-crop and tree-animal systems would fulfil more needs for a rural household than systems of mono-cropping. The encouragement of a diversity of food crops in the PDS will help counter a bias towards wheat and rice, in both domestic consumption and production. Agricultural research and development in the country must be reoriented to look at rural systems in their totality. There also has to be a greater representation of women in decision-making, since it is they who conduct much of the harvesting, seed selection, sowing, and storage, that ensures crop diversity. For them, domestic consumption is more important than market profits. And the links between culture and agriculture are also much stronger where women have a central role.

The forces of globalisation pose a threat to small and marginal cultivators such as the DDS women. There is consternation amongst farmers across the country that post-April 2001, when a number of quantitative trade restrictions have been lifted to allow for imports from Western countries, the markets would be flooded with cheap grain, pulses, and even fruits and vegetables that are not home-grown. Signs of this are already visible. Urban markets are flooded with apples that carry a Tasmanian label.

Yet, quiet revolutions such as the one in the Zaheerabad region provide hope, despite the odds. The grit with which the women have taken on the challenge to reverse the dangerous trends of the Green Revolution, and resist the forces of globalisation, would stand them in good stead. It is as important a challenge for the urban consumers to reflect upon their market choices, to see what trends are being strengthened and what are not. Can we make ourselves more meaningful to the lives of hundreds of millions of farmers, fisherfolk, and pastoralists, whose lives and livelihoods depend on the continuation of the ecosystems that our decisions so profoundly affect? Can we build direct relations with farmers growing organic food, can we demand that small farming communities actually be given the decision-making powers that would enable them to control their lives, and can we contain our rampant consumerism that threatens to gobble up the earth? We may not adopt bullock carts, but can we learn from them?

Sujatha Padmanabhan and Ashish Kothari are with Kalpavriksh, an environmental action group, and

are involved with the coordination of India's National Biodiversity Strategy and Action Plan process.