

**SANFEC Policy Brief  
No. 1**



**Poverty Programme have bypassed the  
“hardcore poor” ...**

## Preface

This is SANFEC Policy Brief # 1 prepared for sharing our findings on uncultivated food and its relation to biodiversity, livelihood, culture and food sovereignty. SANFEC members, along with the farmers have conducted research on this issue and have enough empirical information to substantiate statements made in this policy brief.

A SANFEC International workshop on Uncultivated Food and Plants was held during 2 – 4 October 1999, which helped enormously in developing the concept and methodology of information collection of this relatively 'un-noticed' but profoundly important issue for food sovereignty.

The first edition of this policy brief was circulated widely during the World Social Summit held in Johannesburg, South Africa during August 2002.

This is the second edition of the policy brief published in booklet form for wider distribution and sharing among different networks, individuals, researchers, policy makers and friends.

## Uncultivated Food: The Missing Link in Livelihood and Poverty Programs



(Bangladeshi children catching small fish from the water bodies, which is becoming more and more difficult due the poisoning of the water)

This brief identifies new policy directions for addressing poverty and

livelihood insecurity by bringing to light the role of uncultivated food in the food systems of South Asia. We hope that policy makers will come to see the connection between the conservation of the local diversity of food sources and broader social goals of poverty alleviation, livelihood enhancement and sustainable development.

The need is apparent. Recent research on poverty programs shows that by and large they are abject failures, especially in relation to the poorest of the poor. The failures are twofold. Economists have noted the "mismatch" between micro-level claims of poverty programs and national or macro-level performance, raising serious doubts about the result of large development investments and national strategies for poverty alleviation (Sen, 1998). There is also a serious problem of "social exclusion" in poverty programs. In Bangladesh, for example, the poorest of the poor (the so-called "hard core poor") cannot be reached by existing anti-poverty programs and micro-credit schemes (Novib 1996; Dewan 1997; ASA 1996; ASA 1997; BRAC 1996; Rahman 2000; Sen 1998).

## Poverty Programs have bypassed the "Hard Core Poor"

The Green Revolution strategy and trade in food, the two pillars of government food and agriculture policies over the last few decades, have also failed to address the problem of access to food by the poor. It is now apparent that food insecurity amongst the very poor is not due to inadequate food supply, but rather to the problem of what Sen has called "entitlements": bumper yields of grain in the Punjab remain out of reach of people with too little money to purchase food on the market and too few other entitlements to access food locally. Genetic engineering and biotechnology in the food system are equally irrelevant to the problem of poverty and food insecurity because they do not address access and entitlement to food, while at the same time raising many safety and ethical issues.

**The collection and gathering of uncultivated food has great scope in determining the well being and survival capacity of the poor.**



In our view, a lack of understanding in policy circles of the meaning of agriculture and its relationship to food, ecology and culture is a major hindrance when dealing not only with poverty but also with other policy matters such as sustainable development both at the conceptual and program design levels. Understanding agriculture simply as the production of food as a commodity, and poverty as an absence of income in a narrow sense, reduces the range of policy options to an equally narrow set of interventions that have already failed and can never be sustainable.

## Policies to Address Survival Issues Are Needed

Poverty and livelihood schemes are based on an understanding of economics that emphasize the income and employment dimensions in community life.



*Unnamed mango  
variety in Karnataka,  
India*

Pure income-generating schemes inevitably undermine the role of expenditure-saving activities and non

economic livelihood strategies such as food collection. But the fact is that the collection and gathering of uncultivated food has great scope in determining the well-being and survival capacity of the poor. Even in conventional economic analyses it has become evident that in a context such as Bangladesh "expenditure-saving activities contribute as much as a fifth to the annual household welfare of the rural poor" (Mujeri).

**In Bangladesh, uncultivated foods collected from agricultural fields, water bodies and forested areas constitute nearly 40 percent of the diet in communities where local biodiversity has been conserved.**

We try to deal with the gap in the understanding of food and to open up new horizons for policy makers in South Asia. We argue that poverty is a crisis in livelihoods, driven by the complex interactions between economic and non-economic activities, and the displacement of the people from the ecological basis of life. The new direction in rural South Asia, we believe, is to create an enabling policy environment for the conservation, promotion and enhancement of local biodiversity, including both cultivated and uncultivated foods used in the diverse food systems of the region. This direction involves defending the integrity and health of local ecosystems that generate cultivated and uncultivated biodiversity. It also involves recognizing and rebuilding the customary rights of the poor in communities and common property which



enable access to food and related sources of livelihood.

## **Agriculture is both Cultivated and Uncultivated Food**



We acknowledge that the critical relation between poverty and the customary rights of the poor to collect and gather food from their surroundings is not obvious. However, research results from Bangladesh and the Deccan Plateau of South India, two contrasting physical environments with a common heritage rich

in agricultural traditions and biological diversity, demonstrate the kinds of connections that exist.



In Bangladesh, we found that uncultivated foods such as leafy greens, tubers, small fish and small animals collected from agricultural fields, water bodies and forested areas constitute nearly 40 percent of the diet in communities where local biodiversity has been conserved (UBINIG, 2002). This is based on a conservative calculation of the pre-cooked weight of all

food consumed by families of all socio-economic classes in a dozen communities. Amongst the very poor, landless members of these communities (comprising some 15 percent of the rural population, many of whom are women-headed households) dependence on uncultivated sources of food and fodder is nearly 100 percent. Throughout the year, their daily survival and well-being is ensured through the collection of uncultivated foods directly, and through systems of exchange with rice farmers and the sale of goats and chickens in the local market to enable the purchase of oil and other food items they need but cannot collect directly.

Over 100 different leafy vegetables (commonly known as shak or saag in different South Asian languages) are used for food and fodder. They are plucked uncultivated plants, collected while weeding fields and gathered from plants cultivated for other purposes (for example, the tender leaves of jute). These leafy vegetables are part of the historical cuisine system of Bengal described in epic stories and poems, and remain important food sources

wherever they are available. As is widely recognized in Bangladesh, the most tasty and nutritious fish are not cultured but rather collected in the open water systems of the rivers, rice fields and mixed crop fields. This biologically rich open water fishery includes between 260 and 500 species of inland fish, more than in all of Europe. Some 75 of these species are consumed regularly by poor rural families (Minkin et al., 1993 & 1997; Thilsted 1993).

The high proportion of uncultivated food in the diets of people living in communities where local biodiversity has been conserved is significant, especially considering the nutritional contribution of micro-nutrients supplied by these food sources, in contrast to the carbohydrates provided by rice alone. Leafy greens, tubers and small fish are the main sources of nutrition that keep the rural population active, productive, and relatively disease free. The contribution of uncultivated food in this context is not merely a matter of satisfying hunger or overcoming stress conditions, it is an essential part of the diet that must be ensured, along with

community relations linking fishers, farmers and trades people in a web of economic and social transactions.

## **Agriculture is not only Crop Production**

Production of mono-cropped and pesticide-laden crops has destroyed uncultivated food sources in many areas of South Asia. When these losses are considered, increases in rice production reported as an increase in 'food' production are in fact directly responsible for severe declines in the abundance and availability of the overall food sources of the population.

**The relationship between a farming system that hosts uncultivated foods and the needs of the village cattle and other livestock is symbiotic**

The policy implication of this finding is profound. Simply halting the environmental destruction caused by pesticide use and enhancing the local biodiversity of cultivated and uncultivated plants would ensure some 40 percent of the food needs of the rural population. For the very poor,

the effect would be even greater. Alternative policies protecting and enhancing local biodiversity would act as a social safety net, providing local access to health-giving foods, medicine and numerous livelihood options, including opportunities for livestock management and local agro-industry based on handicrafts, non-timber forest products and the professions of midwives and informal home-based work.

**The crops of the Deccan plateau produce significant amounts of fodder. Two acres of sorghum, on an average, can support three head of cattle all year round**

The significance of the erosion of access to uncultivated foods is also apparent if we examine what happens to livestock when they are integrated into a farming system that is not supportive of uncultivated foods. Wherever pesticides are used, the seed and cropping system has to alter. The normal sorghum-pigeon pea-cowpea mixed cropping system on the Deccan Plateau in India cannot tolerate herbicide use: herbicides applied when one species needs

weeding negatively affect the growth of the other intercropped plants. Furthermore, farmers do not feel that use of herbicides in this kind of cropping system is economical. The use of herbicides automatically requires a shift to mono crops like cotton or potato.



This has two implications for fodder production. On the one hand, herbicide use makes it impossible to get any fodder from uncultivated plants. On the other hand, the crop itself, whether it is potato or cotton, does not produce residues which can be used as fodder. Therefore fodder availability from the main crop is reduced to zero.

Compare this with a field that supports uncultivated foods. The crops of the Deccan plateau produce significant amounts of fodder. Two acres of sorghum, on an average, can support three head of cattle all year round. Besides sorghum, the vines of dollichos lablab and cowpea make excellent fodder while the husk of pigeon pea, cowpea and dollichos lablab are much sought after for cattle feed. In sum, when the cropping system that supports uncultivated foods is altered, the fodder needs of one to two head of cattle per acre are also lost.

**Ensuring the maintenance of uncultivated food sources in and around the immediate environment is a critical missing link of poverty programmes**

The relationship between a farming system that hosts uncultivated foods and the needs of the village cattle and other livestock is symbiotic. Cattle supply all the nutrition that the system needs in the form of urine spilled on the soil and dung laid on the land by farmers before ploughing the



field. The cattle also supply all the draught power for transportation done from and to the field. Produce comes out of the field, manure goes into the field. This is a unique system of energy recycling which mechanized and chemical-based farming cannot reproduce.

In return, the farming system provides all that the cattle need: a continuous supply of green fodder during the cropping cycle, dry fodder from the crop residues (paddy straw, sorghum and pearl millet stalk, little millet straw, etc.) feed from the husk of the grains and pulses (paddy, pigeon pea, mung dal etc.), and a host of creepers which are central to the farming system (cowpea, dolichos lablab etc.).



## Women's Livelihoods are Linked to Common areas



The strategic role of uncultivated food and fodder in rural areas has important implications for land policies. The negative consequences of the privatization of common areas is particularly experienced by women who rely on their surroundings for food and access to life-enhancing spaces and

raw materials. Many of the productive activities of women in these communities are not mediated by the market or related directly to employment and income. Women are concerned about the privatization of common lands and transformation of public spaces such as roadsides and ponds as these have a direct impact on the livelihood options of people who depend on public spaces to graze animals or collect items for food or sale. Common areas and customary rights to these areas have been completely ignored in the policy context.



## **Destruction of Food Sources Dis-empowers Women**

Ensuring the maintenance of uncultivated food sources in and around the immediate environment as common resources accessible when necessary is not only a food security issue for the community. It is the missing link for poverty programs. The degree of control over local food sources, as opposed to uncertain access to uncertain markets, is the measure by which development programs can ensure the capacity of the poor communities to participate in the market. Rather than supplying food through state distribution systems and corporate subsidies, governments should protect and enhance local cultivated and uncultivated biodiversity, including the uncultivated food sources.

**Rural people collect medicinal plants in common and private spaces to address health problems.**

## Biodiversity is a Development Issue



Research on ecological agriculture now shows that mixed farms and community forests, grazing areas and water bodies provide individuals, households and communities with more equitable and sustainable livelihoods than production systems such as mono-cropping and tree plantations that reduce biodiversity or rely

on a small range of exotic biodiversity. This is because rural livelihoods involve not just the production of crops (which are sold or eaten) and the sale of family labor (on farms and in cities) but also a wide range of livelihood-enhancing activities that bring people into constant interaction with many inter-related natural and social resources. Rural people collect medicinal plants in



common and private spaces to address health problems, use crop residues to feed their animals,

exchange services with trades people and crafts people in the community, collect forage from uncultivated lands and forests, collect fish in open and closed access water bodies, collect food while weeding crops for neighbors, and so on. Livelihoods of this nature rely to a high degree on the biodiversity of local spaces: fields, field boundaries, seed stores, household patios and common areas. They also rely on the social and institutional relationships that

regulate access to biodiversity: gender relations, community membership, kinship, specific legal provisions, etc. The development of equitable and sustainable livelihoods in communities therefore needs to support and enhance both the biodiversity in the ecosystem and the social relationships that enable people to access and use the biodiversity in the ecosystem.

Thinking of policies in relation to uncultivated foods is a way to link between food, ecology and livelihood. An understanding of the role of uncultivated foods in the food systems of the poor reveals the multiplicity and richness of life-affirming agricultural practices and community relations which support livelihoods. Why should we accept the idea that the object of agricultural science is the production of a few selected crops in narrowly defined spaces? Why exclude the spaces around and between ploughed fields, the water bodies, the grazing areas, forested areas and the homesteads? Is "food production" synonymous with "cultivation"? Why has the concept of cultivation lost its

ecological and cultural connotations and fall into the maw of the factory model?

The idea that "food" must be supplied by "farms" operating as industrial factories and only available on the shelves of supermarkets is a strange phenomenon in human history, rejected by agricultural traditions grounded in the continuity of the knowledge created in relation to food sources. These knowledge systems developed over thousands of years and are being discarded almost overnight. Under the pressure of modernizing policies, food production and food consumption have drifted apart, leaving rural people with no sustaining link to their homes and their communities. This separation is inherently conflictual and destabilizing.





## Agriculture is a Way of Life

For food producing communities in South Asia, as in many other societies as well, food is not merely an object of consumption. Food is a joy of life. We eat not only to satisfy our hunger, but also to savour food, to share it with our family and friends, neighbours and kin. Human beings are not machines with big holes in their

stomachs. We are social beings, and food makes our social relations possible. Sharing food is deeply ethical and cultural. Food does not merely provide physiological and nutritional need. It is the premise upon which



ethical, cultural and social institutions are built. This is the reason why food must not be reduced to a mere commodity, a consumer item to buy and sell in the market. Once this notion is understood, the spiritual,

cultural and social role of uncultivated food also becomes strikingly visible. Erosion of food culture deepens the erosion of ethical, cultural or social institutions and human bonds. The political notion that "hunger" is only a biological phenomenon that can be resolved by relying mainly on world trade and the capacities of transnational corporations to produce food for the hungry ignores this reality altogether.



The survival and availability of local cultivated and uncultivated food is a political issue for security reasons as well. Food insecurity is a major cause of social and political instability in South Asia because it leaves people vulnerable to injustice and violence. Whether it drives people from rural to urban areas or demoralizes food-producing communities, the link to regional tensions is direct and immediate. Moving out from the community in the absence of the availability of food is the most obvious indication of the

breakdown of cohesion and social fabric within a community. Trafficking of women and children displaced from their homes has emerged as a major issue jeopardizing regional harmony. Migration within and between nations of the region has also become a significant source of conflict, leading to border clashes between India and Bangladesh and between India and Nepal. Never before in history has the significance of local food security been so paramount in redefining strategies for peace and poverty alleviation in the region.

**The survival and availability of local cultivated and uncultivated food is a political issue for security reasons as well**

## **Protection of Local Biodiversity is the Missing Link**

The underlying problem is that governments and donors have lost touch with the idea and meaning of agriculture and its capacity to feed people where they live and work. On the other hand, the vision

of agriculture is clear from the point of view of farmers and food-producing communities: the protection and enhancement of local biodiversity creates and sustains livelihoods for a wide range of people, not just farmers. Unless governments can guarantee significant new rural and urban livelihoods, there is no reason to sideline existing biodiversity-based livelihoods created by farming communities and promoted by many grassroots organizations. Essentially, the policy challenge is to defend the food sources of rural communities by defending the principle of local and ecological food production, and governance of the social relations of food by the food-producing communities themselves.

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