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*Rethinking Food Security Policies:
IDSAsr Declaration*



GAD Institute of Development Studies

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Rethinking Food Security Policies: IDSAsr Declaration

*{Declaration made at the end of two days national seminar on **Food security and Sustainability in India** held on November 7-8, 2009 organized by GAD Institute of Development Studies, PO Naushera, Amritsar 143008 and sponsored by Council for Scientific and Industrial Research (CSIR), Indian Council of Social Sciences Research (ICSSR), Indian Council of Agricultural Research (ICAR) and National Bank for Agricultural and Rural Development (NABARD)}*

*A National Seminar on **Food Security and Sustainability in India**, organized by GAD Institute of Development Studies, Amritsar- a NGO during 7-8 November brought together government officials, scientists, academicians and NGOs so as to generate discussions and debates surrounding climate change and global warming and their impact on agriculture. The seminar was sponsored by ICSSR, NABARD, CSIR and ICAR. Altogether 48 papers were submitted for presentation. The Copenhagen Summit on Climate Change is going to take place between 7 and 18 December, 2009 as a precursor to this international event of historical importance, social scientists, academicians, agro-scientists from government bodies and civil society organizations, world over, have started working together to analyze the problems related to ecological degradation, unsustainable industrial as well as agricultural practices and loss of biodiversity.*

Delivering the inaugural speech Dr. Sunitha Raju Chairperson, International Collaboration and Capacity Development of the Indian Institute of Foreign Trade, New Delhi said hunger has affected major chunk of the world population in the backdrop of the global financial meltdown. She said that the earlier definition of food security was enough food supply, which got replaced by the concept of access to food by the people during the 1980s. However, having access to food does not always ensure better nutritional outcomes and therefore, she said, it is essential to increase purchasing power by generating livelihood opportunities. She explained how value addition can take place in the agricultural sector. She said that trade policies can help in ensuring food security. She also talked about the role of institutions to provide easy credit and technology to farmers and the right kind of public-private partnership model for agricultural innovations. Dr Sunitha Raju pointed out that government policies should be aimed at ensuring food accessibility as per requirement in every household. She said the number of hungry people increases every day. She hoped that the consensus brought out at the end of the two-day seminar would be helpful for the policymakers of the country to tackle vital issues of food security and its accessibility.

Dr. Gursharan Singh Kainth, Director, GAD Institute of Development Studies spoke at length about the current economic, fuel and food crises that India and rest of the world underwent during 2008 and 2009. He discussed the results of the UN's Food and Agriculture Organization newly released report titled: The State of Food Insecurity in the World Report 2009: Economic Crises-Impacts and Lessons Learnt. He said that food and nutritional security were the foundations of a decent life, sound education and indeed the achievement of all the Millennium Development Goals. However, over past two years, volatile food prices and other resultant economic crisis have put a question mark on the food security and sustainability. Food and economic crises affected the employment prospects, he said. The number of hungry people in the world has crossed the 1.02 billion mark. Increasing use of food crops like maize and corn for biofuel production has led to food price inflation and adversely affected the poor consumers, he added.

Delivering the symposium lecture Dr. Golam Rasul of the International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, talked on food security and agricultural sustainability from a mountain perspective. He pointed out that food has become a political weapon in the densely populated South Asia. He said that the green revolution of 1960s and 1970s increased production and yield but has adversely affected land, water and environment and somehow agricultural dynamism was lost in South Asia. The situation, he said has worsened due to floods, cyclones and natural disasters and countries like Bangladesh, Bhutan and Nepal are still not food secured while food production is erratic in Pakistan. Special attention must be given to conserve Himalayan ecosystems in order to sustain flow of ecosystem services required for agriculture, food production, he added. While elaborating, Dr Rasul pointed out that long-term agricultural sustainability and food security of South Asia heavily depended on the water and other ecosystem services from the Himalayas. He said although the Himalayan ecosystem was the main source of water in South Asian countries including India, Pakistan, Nepal, Bangladesh and Bhutan, the linkage between food production and Himalayas was hardly given any consideration till now.

Dr. Rajinder Singh Bawa, Chairman, Advisory Council, GAD Institute of Development Studies said it is important that food reaches the poor. However, the government must be extremely cautious about increasing minimum support prices (MSP) as sometimes it is politically motivated. The public distribution system (PDS) is becoming like a debt trap and so it must be made a short-term measure. The long-term measure is to make the people empowered so that they start earning more. The PDS has become more of a political measure rather than an economic measure. There is also the need to bring in newer technologies for increasing oilseeds and cereals production, he stated.

The discussion during the two day deliberations brought out that though the gloomy forecasts of Malthus proved wrong, we need to learn a lot from the Malthusian wisdom. Population growth threatens global food security and the earth's finite natural resources. Increasing food prices, 'fatigue' in green revolution technologies and degradation of natural resources have brought food security once again to the centre stage of the policy arena and it is the duty of the international community to address the issue earnestly.

The economic liberalization launched in 1991 and the agricultural policy declared later laid down the objectives of the agricultural policy but did not spell out the way how these were going to be achieved. Tracing the course of history, the house note that any phase in the period is as transient as another. A policy inspired by the conditions prevalent in a certain period and designed to suit the contingencies of the time cannot be expected to suit another. Monsoon performances have varied and the economy needs to be prepared for the privilege of a long series of good monsoon as much as for a spell of monsoon failures. The nine years starting with 1999-00 saw only two years when the rainfall at least equalled the long period normal and as many as three years when the deviation exceeded 10 per cent. The policies related to procurement and distribution are likely to have medium to long run effects on stocks, fiscal situations and prices that the government needs to take into account. A sustainable food policy can only be flexible and adjustable with suitable triggers for contingencies.

Any policy induced movement away from food grains could reflect on public stocks that has serious implications on distribution in possible shortage years. Imports may not be an answer if global performance also fails simultaneously. With the growing concern about food security especially at the household level for the vulnerable, India needs to manage the food economy and negotiate at international forums with caution. The movement towards the free market has been largely elusive if not a myth. Although the economy is now more open, external factors are still of less significance than domestic ones. Between the two dominant staples, rice has grown in importance both in domestic public operations and in India's trade with the global market. Wheat continues to be influenced more strongly by public activities.

Sustainable agriculture integrates three main goals- environmental health, economic profitability, and social and economic equity. A variety of philosophies, policies and practices from farmers to consumers have contributed to these goals. Sustainability rests on the principle that we must meet the needs of the present without compromising the ability of future generations to meet their own needs. Therefore, stewardship of both natural and human resources is of prime importance. Stewardship of human resources includes consideration of social responsibilities such as working and living conditions of labourers, the needs of rural communities, and consumer health and safety both in the present and the future. Stewardship of land and natural resources involves maintaining or enhancing this vital resource base for the long term.

A systems perspective is essential for understanding sustainability. The system is envisioned in its broadest sense, from the individual farm, to the local ecosystem, and to communities affected by this farming system both locally and globally. An emphasis on the system allows a larger and more thorough view of the consequences of farming practices on both human communities and the environment. A systems approach gives us the tools to explore the interconnections between farming and other aspects of our environment.

A systems approach also implies interdisciplinary efforts in research and education. This requires not only the input of researchers from various disciplines, but also farmers, farm workers, consumers, policymakers and others.

Important recommendations that emerged in specific areas of sustainability and food security include:

- ***Farming and Natural Resources***

Water: *Regarding water supply and use, steps should be taken to develop drought-resistant farming systems even in "normal" years. The most important issues related to water quality involve salinization and contamination of ground and surface waters by pesticides, nitrates and selenium. Temporary solutions include the use of salt-tolerant crops, low-volume irrigation, and various management techniques to minimize the effects of salts on crops. In the long-term, some farmland may need to be removed from production or converted to other uses. Other uses include conversion of row crop land to production of drought-tolerant forages, the restoration of wildlife habitat or the use of agro forestry to minimize the impacts of salinity and high water tables. Pesticide and nitrate contamination of water can be reduced using many of the other innovative plant production practices.*

Wildlife: *The plant diversity in and around both riparian and agricultural areas should be maintained in order to support a diversity of wildlife. This diversity will enhance natural ecosystems and could aid in agricultural pest management.*

Energy: *In sustainable agricultural systems, there is reduced reliance on non-renewable energy sources and a substitution of renewable sources or labour to the extent that is economically feasible.*

Air: *Measures to improve air quality include incorporating crop residues into the soil, using appropriate levels of tillage, and planting wind breaks, cover crops or strips of native perennial grasses to reduce dust.*

Soil: *Numerous practices have been developed to keep soil in place, which include reducing or eliminating tillage, managing irrigation to reduce runoff, and keeping the soil covered with plants or mulch. Enhancement of soil quality is also essential.*

- ***Plant Production Practices***

Sustainable production practices involve a variety of approaches. Specific strategies must take into account topography, soil characteristics, climate, pests, local availability of inputs and the individual grower's goals. Despite the site-specific and individual nature of sustainable agriculture, several general principles may be applied to help growers select appropriate management practices:

- ***Selection of species and varieties that are well suited to the site and to conditions on the farm;***

- *Diversification of crops (including livestock) and cultural practices to enhance the biological and economic stability of the farm;*
- *Management of the soil to enhance and protect soil quality;*
- *Efficient and humane use of inputs; and*
- *Consideration of farmers' goals and lifestyle choices.*

- ***Need for Policy and Institutional Changes in Agricultural Biodiversity Management***

Although many institutions are already actively involved, more coordination work is needed at all levels to ensure effective reforms and agricultural biodiversity conservation policies that benefit the public, especially the poor. Policy changes that attack the roots of problems and ensure peoples' rights are needed. Aspects needing further attention include:

- *Ensuring public participation in the development of agricultural and resource use policies;*
- *Eliminating subsidies and credit policies for high yielding varieties (HYVs), fertilizers, and pesticides to encourage the use of more diverse seed types and farming methods;*
- *Policy support and incentives for effective agro ecological methods that make sustainable intensification possible;*
- *Reform of tenure and property rights that affect the use of biological resources to ensure that local people have rights and access to necessary resources;*
- *Regulations and incentives to make seed and agrochemical industries socially responsible;*
- *Development of markets and business opportunities for diverse organic agricultural products; and*
- *Changing consumer demand to favour diverse varieties instead of uniform products.*

- ***The Economic, Social and Political Context***

In addition to strategies for preserving natural resources and changing production practices, sustainable agriculture requires a commitment to changing public policies, economic institutions, and social values. Strategies for change must take into account the complex, reciprocal and ever-changing relationship between agricultural production and the broader society.

The "food system" extends far beyond the farm and involves the interaction of individuals and institutions with sometimes contrasting and competing goals including farmers, researchers, input suppliers, farm workers, unions, farm advisors, processors, retailers, consumers, and policymakers. Relationships among these actors shift over time as new technologies spawn economic, social and political changes.

A wide diversity of strategies and approaches are necessary to create a more sustainable food system. These will range from specific and concentrated efforts to alter specific

policies or practices, to the longer-term tasks of reforming key institutions, rethinking economic priorities, and challenging widely-held social values. Areas of concern where change is most needed include: food and agricultural policy, land use, labour, rural community development, consumers and the food system, etc.

A comprehensive area planning is required to develop agriculture on farming system perspective with vertical and horizontal links of concentric zones. Farmers' needs are now much more diversified and hence, integration of research and extension for farming system research and development is essential. The infusion of Agri-biotech (agricultural bio-technology) and Info-Tech (information technology) in farming system is needed to catalyze progressive changes in more sustainable ways and help to attack the problem of rural livelihoods. The priority area is extensive and intensive increase in strengthening research and extension systems which requires adequate funding support. Urgent need is to revive national extension system - Community Development (CD) system under ATMA - adequately equipped and revamped in respect of additional human power, physical facility including transport, ICT-computer, Internet facilities etc. to cater the multiple needs of farming community and agri-preneurs. The public-private-client partnership should be selectively built and strengthened according to location specific needs and aspirations.

*Our Country needs active participation of farmers' even of those having small holdings. Support to only well-off farmers, by the politicians, concerned state departments and also by the state Agricultural Universities and Institutes and **Krishi Vigyan Kendras** would not help in tackling the sensitive issue i.e. food security for all. We have to change the indifferent attitude of 'owner cultivators' (having small holding involve in farming) 'land owners' (giving their land to agriculture labourers for share cropping) and 'share croppers' towards farming community, as well as increase the purchasing power of small and poor farmers by making provisions for trading of intangible services rendered by farm forestry and agro forestry ecosystems to generate sustained income of peasants and to conserve the environment of biosphere in general and to ensure sustainable food security for all in reality.*

VALUE ADDITION CONCERNS:

Adequate nourishment in terms of quantity and quality is necessary for sustainable life. Value addition is becoming popular and coming up as an emerging category. It will be essential requirements for future development for sustainability. Changing life style, habits and spread of western culture made changes in food habits and now people lookout for fast-ready-to-eat foods. The house laid stress to address the need of the children, women, senior citizens, athletes and soldiers through the development of nutritional products which contain high food value in lesser quantity in various products either based on lesser known or well known grains, pseudo cereals, pulses, fruits and vegetables, milk, etc. Exploration, cultivation and production of new resources may also be taken in to consideration to lessen the burden on existing ones. Further the following measures are required in the context of food security.

1. Documentation of new and lesser known edible grains, pulses, fruits, and vegetables for further studies.
2. Evaluation and documentation of nutritional profile of edible sources so as to establish potential food resources.
3. Development of new, applied and cheaper techniques for processing and preservation of value added products based on milk, grains, pulses, vegetables, fruits and wild resources etc. for practical application.
4. Toxicity evaluation and standardization of commonly used preservatives need to be carried out.
5. Manufacturing of healthy and safe feed and fodder for milk, poultry, fish and meat providing animals are essential to meet safety standards and to maintain food chain, food security and solve food scarcity.
6. Good Manufacturing Practices (GMP) be adopted by manufacturers of value added products.
7. The owners of small hotels, restaurants, canteen managers and students hostel contractors and care takers should be inducted in the stream of research and developing projects for their feedback, initiatives, innovations and suggestions.

BIO DIVERSITY CONCERNS:

Agri-food production relies on biodiversity. yet intensive and profit oriented farming can weaken it. Many components of agro biodiversity would not survive without human interference; local knowledge and culture are integral parts of agro biodiversity management. Moreover, diversity within species is as important as diversity between species. Locally diverse food production systems are under threat and, with them, the accompanying local knowledge, culture and skills of the food producers. The loss of forest cover, coastal wetlands, 'wild' uncultivated areas and the destruction of the aquatic environment exacerbate the genetic erosion of agro biodiversity. The main cause of genetic erosion in crops is the replacement of local varieties by improved or exotic varieties and species. There are now just 12 crops and 14 animal species that provide most of the world's food; the need of the hour is to protect genetic diversity of crops at a time of soaring food prices. The international community has to intensify its commitment and action towards integrating food security and biodiversity concerns. Fewer genetic diversity means fewer opportunities for the growth and innovation needed to boost agriculture at a time of soaring food prices. The erosion of biodiversity for food and agriculture severely compromises global food security. We need to strengthen our efforts to protect and wisely manage biodiversity for food security. Its sustainable use is central to achieve a secure and sustainable food supply system. Acknowledging the importance of biodiversity to food security, the UN body made an alarming note stating that estimated three-quarters of the varietals genetic diversity of farm crops have been lost over the last century and that hundreds of the 7,000 animal breeds registered in its database are threatened by extinction. Furthermore, it cautioned that as biodiversity used in food and agriculture declines, the food supply becomes more vulnerable and unsustainable, rendering agriculture less adaptable to environmental challenges, such as climate change or water scarcity. The underlying challenge is how to improve and maintain agricultural sustainability.

In brief, the uncultivated land needs to be ecologically regenerated and ameliorated. Dense forests should be given sustenance and protective care in space-time continuum. The biotic material from the forest must flow to croplands continuously. Forests would contain the negative effects triggered by the inherent fragility of the Himalayan mountains, enhance resilience, conserve native biodiversity, contribute to regulate water cycle, enhance carbon sequestration and contribute to mitigate global warming to be followed by restoration of climate orders. The largest geographical area under the uncultivated lands with ecological amelioration and sound management would also help maintain plentiful supplies of a variety of foods and lasting solution to food and environmental crises of our contemporary times.