

**Inaugural Address By Smt . D. Purandeswari MoS-HRD (HE) At
The International Conference On Sustainable Agriculture At
Kotyam, Kerala On 6th Feb, 2008 Organized By The CMS College
Kotyam, Kerala.**

Mr. Principal of the college and other distinguished guests and friends. It is my proud privilege to deliver the inaugural address at this prestigious international conference organized by the CMS college, Kotyam, on a subject of outstanding and universal importance through out the world more particularly in the developing world.

The World Development Report 2008 — “Agriculture for Development”, released by the World Bank, addresses a challenging development issue: does agriculture have a key role in unleashing prosperity in rural areas and in poverty alleviation? Even though the share of agriculture in national income has declined, a powerful case is made for the centrality of agriculture towards achieving the Millennium Development Goal of halving poverty and hunger by 2015. While agriculture alone will not accomplish this goal, it is emphasized that its importance in growth acceleration and expansion of employment opportunities in rural areas remains undisputed. Attention is drawn to the pervasiveness of rural poverty and dependence on agriculture as a source of livelihood. “Three out of four poor people in developing countries live in rural areas — 2.1 billion living on less than \$2 a day and 880 million on less than \$1 a day — and most depend on agriculture for their livelihoods”, it says. A typology of agriculture’s role is proposed. Developing countries are grouped into agriculture-based, transforming and urbanised. Most of Sub-Saharan Africa, for example, belongs to the first group, South

and East Asia to the second, and Latin America and the Caribbean to the third. The shares of agriculture in these groups are 29 per cent, 13 per cent and 6 per cent, respectively. The range of rural poverty rates is also large — 51 per cent in the first, 28 per cent in the second and 13 per cent in the third.

Although, there is considerable heterogeneity within each group, it is argued that the strategies and policy instruments vary with the group. Briefly, in Sub-Saharan Africa, the focus has to be on raising productivity of small farmers; in South Asia, greater attention must be paid to promotion of high value agriculture and non-farm activities, and to enable people to move out of agriculture; and, in Latin America and the Caribbean, the emphasis must shift to reduction of remaining rural poverty through conversion of small farmers into suppliers to rapidly growing food markets. I would like to restrict my observations to the second group of transforming countries to which India belongs.

In the emerging scenario, agriculture is a complex subject of study and presents several intricate problems of strategic concern. These include, one, promotion of high-value activities to diversify smallholder farming away from land-intensive staples to cater to rising urban incomes and dietary changes; two, extension and adaptation of technologies to enhance land productivity in less-favoured areas with a large concentration of extreme poor; three, provision of infrastructural support to facilitate diversification of agriculture and of rural economies; four, expansion of rural non-farm

activities to absorb a rapidly growing labour force, and finally a massive increase in investment in education and vocational skills to make it easier for people to migrate to areas/sectors with greater potential for labour absorption.

In elaborating these concerns, WDR 2008 makes observations that are pertinent and insightful. Briefly, the high-value revolution is led by the private sector, with the state facilitating it. Scale economies in processing and marketing are achievable with fragmenting and shrinking farm size. Contract farming has considerable potential in reducing transaction costs and risks of smallholders. However, the distribution of gains along the value chain depends on the bargaining power of various players. So producer groups could help smallholders achieve scale in marketing and negotiate better prices. Also, it is imperative to maintain productivity growth in food staples. Both the high-value revolution and the extension of new technologies to less favoured areas require better water management in order to check mounting scarcity and deteriorating quality. A case is also made for promoting non-farm employment in secondary towns and to strengthen rural-urban linkages. Regional and territorial agricultural clusters — with processing and packaging of high-value commodities — deserve serious attention. Investment in infrastructure and skill development would facilitate this transition. In particular, better quality of school education would prepare the next generation to shift out of agriculture.

While much of what WDR 2008 recommends for transforming economies such as India's is persuasive, two caveats are necessary. One is that if the recent spikes in foodgrain prices — especially of wheat, rice and maize — persist, the declining share of agriculture may slow down or halt. The presumption here is that rapidly rising demand for biofuels will continue to exert upward pressure on foodgrain prices in the absence of substantially higher yields. The second and perhaps equally important caveat is that the WDR 2008 is rather sanguine about the transformation taking place. Specifically, transition to high-value agriculture, promotion of non-farm employment and shift of rural population out of agriculture risk protests, violence and rupture of social fabric. A case in point is recent violent clashes and simmering discontent in Nandigram and elsewhere. Domestic institutions of conflict management – including but going beyond social safety nets may help in achieving a smoother transformation to a rapidly evolving economic environment.

Today, Global Agriculture is witnessing two opposite trends. In many South Asian countries farm holdings are becoming smaller and smaller and farmers are suffering handicaps with reference to cost-risk return structure of agriculture. The average size of farms in most developed countries, in contrast, is over several hundred hectares and is supported by heavy inputs of technology, capital and subsidy. In India nearly 600 million individuals are engaged in farming and over 80% of them belong to the small and marginal category. Due to imperfect adaptation to local environments, insufficient provision of nutrients and water and incomplete control of pests, diseases and

weeds, the present average yield of major farming systems in India is just 40% of what can be achieved even with technologies currently on the shelf. There is considerable scope for further investment in land improvement through drainage, terracing and control of acidification in areas where they have not been already introduced. An integrated approach is necessary to remove the technological, infrastructural, social and policy constraints that are responsible for the gap between actual and potential yields. Improving income through efficient production and post harvest technologies will help improve opportunities for both skilled employment and farm income. Public policies should not only concentrate on agrarian reform, and input output pricing but also on reaching the unreached through training, techno infrastructure and trade. Rural knowledge connectivity is as important, if not more important than physical connectivity through roads. Future agricultural production programmes will have to be based on a 3 pronged strategy, which can help improve productivity without causing ecological and social harm. These are defending the gains already achieved, extending the gains to rain fed areas, and making new gains through farming system diversification and value addition. For defending the gains already made, it is required to develop and adopt technologies that will lead to economic gain without ecological loss. Crop management technologies based solely on the use of chemical fertilizers will lose the production potential in the long run, unless farmers take steps to restore soil organic matter and rectify micro-nutrients deficiencies. This hidden deficiency in soil in micro nutrients can lead to deficiency of minerals in human diet

too. This problem can be overcome only if an integrated attention is given to physics, chemistry and micro-biology of the soils.

There is also a need to develop and disseminate eco-technologies for rain fed and semi arid; hill and island areas that had not benefited from modern yield enhancement technologies. Regional imbalance in agricultural development are growing, based largely, on the availability of assured irrigation on the one hand and assured and remunerative marketing opportunities on the other.

Noted agriculture scientist M S Swaminathan has suggested setting up of a national research network to give a boost to the concept of sustainable agriculture that aims at enhancing food production while maintaining ecological balance. Speaking at a plenary session on "Evergreen revolution" or sustainable agriculture, Sri Swaminathan proposed formation of the national network of research institutions, farmers and other concerned which would provide scientific basis to sustainable agriculture methods, delivering several advantages.

The new network should involve farmers. It should be joint research with farmers. Participatory knowledge management and participatory research are the two important features which should be built into the network if approved by the government. Evergreen revolution is the need of the hour because the demand for food grains and water resources has increased manifold while the resources have shrunk. As Sri Swaminathan observes: I quote

"Today, in our country, land has become the most hot political topic. We have seen the SEZ issues in Goa and Nandigram. This is only the tip of the iceberg. Water conflicts would also grow," Un quote

Therefore, the challenge is to produce more food from less land and water. It has to be done in a way that does not damage the future prospects. To quote Sri Swaminathan again:

"That means the short term and long term goals must be in harmony. That's what we call sustainable agriculture or evergreen revolution. Productivity in perpetuity without ecological harm and probably the country which needs it most in the world today is India,"

Farmers and the rural population in developing countries also face serious social problems. First among these is insecurity of land tenure, and lack of access to land. Many farmers are tenants, beholden to landlords, to whom they pay rent that can significantly reduce the family income. In many countries, unequal land distribution, and the exploitation of landless peasants, is the major cause of rural poverty and insecurity. Sustainable agriculture and rural development requires a new commitment by governments and international agencies to improve the land access and land rights situation of farmers and indigenous communities. These communities are also affected by development projects, such as dam, forestry and mining projects, which displace them.

Thus the issue of the human rights of these disadvantaged groups is also crucial in the striving for sustainable agriculture. The agricultural sector has multiple roles in developing countries: to help ensure food security, anchor rural development, provide resources for the livelihood and adequate incomes of a majority of people, all without destroying the environmental base. There are thus two inextricably linked components, the social and environmental, to agricultural sustainability.

It is thus imperative that a change of mindset should take place, to build a new paradigm of policies that can promote sustainable agriculture. Whether such a paradigm shift actually takes place in agriculture is the acid test of the success or failure of sustainable development in the years ahead.

With these words, I convey my best wishes to the C.M.S. College for a very successful and meaningful deliberation on the subject in this International Conference organized by them. I hope that some of these deliberations would provide appropriate inputs for policy framework.

Thank you,

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