

Towards another Big Push to Agriculture- Second Green Revolution

8.66 The urgent need for taking agriculture to a higher trajectory of 4 per cent annual growth can be met only with improvement in the scale as well as quality of agricultural reforms undertaken by the various States and agencies at the various levels. These reforms must aim at efficient use of resources and conservation of soil, water and ecology on a sustainable basis, and in a holistic framework. Such a holistic framework must incorporate financing of rural infrastructure such as water, roads and power.

8.67 The Approach Paper to the Eleventh Five Year Plan has aptly highlighted such a holistic framework and suggested the following strategy to raise agricultural output: (a) doubling the rate of growth of irrigated area; (b) improving water management, rain water harvesting and watershed development; (c) reclaiming degraded land and focusing on soil quality; (d) bridging the knowledge gap through effective extension; (e) diversifying into high value outputs, fruits, vegetables, flowers, herbs and spices, medicinal plants, bamboo, bio-diesel, but with adequate measures to ensure food security; (f) promoting animal husbandry and fishery; (g) providing easy access to credit at affordable rates; (g) improving the incentive structure and functioning of markets; and (h) refocusing on land reforms issues. National Commission on Farmers has already laid the foundation for such a framework.

8.68 Programme formulation as well as their implementation in the States must be

based on unique regional contexts incorporating agro-climatic conditions; and availability of appropriate research and development (R&D) backed by timely and adequate extension and finance.

8.69 Varietal break-through has been a major constraint in achieving higher level of productivity in pulses. These are genetically low yielding and less input responsive as compared to cereals and their cultivation has continued to be done on marginal and sub-marginal lands under rainfed conditions. With the limited availability of pulses overseas, development of hybrid varieties becomes a pre-requisite for increasing domestic production.

8.70 R&D expenditure on agriculture in India is low by international standards despite its high social return. Development of area specific seeds and their application, particularly in water abundant eastern belt can increase the yield levels in these areas. Increased R&D expenditure backed by modern technologies and compatible institutions must be focused in the coming years. R&D has to focus on areas such as rainfed, and drought-prone; crops such as drought-resistant and amenable to biotechnological applications; and biotechnology which has growth as well as export potential. With proper implementation, the National Agricultural Innovation Project initiated in July, 2006 for enhancing livelihood security in partnership mode with farmers' groups, panchayati raj institutions and private sector would go a long way in strengthening basic and strategic research in frontier agricultural sciences.