1 MAJOR THRUSTS IN AGRICULTURE

1.1. Four pillars on which Maharashtra's agriculture should rest for next 25 years should be productivity, quality, profitability and sustainability revolutions. To meet these objectives, a comprehensive land use plan should be a logical starting point. State Land Use Board exists but it is not equipped to provide proactive advice to farm families on land use planning. The reorganized State Land Use Board supported by a consortium of technical agencies could serve as a Virtual College in the state using a hub and spokes model. The hub would be the headquarters of the Board and the spokes should represent the agro-climatic and farming systems zones. The proposed land use board could also include community resource mapping of biotic and abiotic resources for a more comprehensive land use plan. The Virtual College for Land and Water Use Planning could be linked to a grid of community radios, cable TV and internet for an effective dissemination of its advice.

1.2. For achieving a productivity revolution, agri-clinics, agri-business centres and urban food parks linking the rural producers and urban consumers can make a major contribution by elevating and stabilising crop yields, provided the state enlarges the space for remunerative self-employment. For providing the technological umbilical cord, state needs to set up a state level Inter-Agency Action Council for Rural Technologies. Such an Inter-Agency Action Council’s principal mission should be to assist in bridging the ever widening gap between academic know how and field level do how. The field level units through which such a Council can promote the technological upgrading of farm operations will be Agri-clinics and agri-business centres operated by farm, veterinary, home Science, fishery, forestry and commerce graduates. These agriclinics and agri-business centres should act as vehicle for operationalisation of land use plan in rural areas and for value addition to primary products.

1.3. For achieving greater agricultural productivity, state needs to integrate commodity centered Technology Missions horizontally with the National Water Harvesting and Watershed Development Missions. Their working in isolation is both costly and unproductive. The integrated structure can be termed “Maharashtra Mission for Farmers' well being” to emphasise that farmers’ economic survival and well-being should be the bottom line of public policies in the field of agriculture. The proposed Integrated Mission for Farmers’ Well-being should be functionally linked to the restructured State Land Use Boards.

1.4. For quick dissemination of existing technologies, it is recommended that four Demonstration-cum-Training Centres in Precision Farming and High Technology Horticulture, organic farming and LEISA may be established at each of the Agriculture Universities. These training centres should act as trainers’ training centres for effective dissemination of appropriate technologies in every farm of the State. Reaching the unreached and including the excluded should be the goal of technology dissemination agencies.
1.5. For a quality revolution, sanitary and phytosanitary measures need considerable strengthening. There is need for more phytosanitary and aflatoxin testing laboratories for different agricultural products. Products conforming to ASTA standards are needed for US and EU markets. Testing centres for adopting codex alimentarius food standards should be created so that the state could enhance further its agricultural exports. A Quality Literacy Movement involving Panchayati Raj institutions is an urgent need.

1.6. To achieve quality standards, state should establish both in the private and public sectors, additional facilities for testing soils for micronutrients like zinc, boron etc. There is evidence that farmers are not getting full benefit from the application of nitrogen, phosphorous and potash due to the deficiency of micronutrients. This deficiency should be made good in a more expeditious manner by the state. The Maharashtra Grid of Agri-clinics operated by Farm and Home Science graduates can provide to each farming family in their respective areas a Soil Health Passbook, indicating the macro- and micro-nutrient status of their respective farm.

1.7. For making agriculture a profitable venture, more jobs/livelihood opportunities need to be created in the rural non-farm sector and in the rural-urban linkage sector. The non-farm employment should be based on the goods and services for which there is market demand. Both the Agri Business Centres and Food Park Programmes can play a critical role in this area. The Small Farmers Agri-business Consortium (SFAC) should also help in linking the primary producers with markets, and where ever appropriate, by making arrangements for contract cultivation. Setting
up soil testing laboratories, bio-agents production units, bio fertilizer supply centres, vermi-compost production, custom hiring of farm equipments, decentralised mini-pulse mills are few amongst long list of activities which could be taken up as livelihood opportunities in the rural non-farm sector. Apart from food processing, oils from trees such as karanj and jatropha, medicinal and aromatic products, chemically treated bamboos and fibres for the construction industry, tubers and other bioproducts for generating energy are some other examples for dispersed business opportunities.

1.8. For achieving higher incomes, there is great opportunity in coastal areas for promoting integrated agriculture cum aquaculture farms. Planting of mangroves, salicornia, casuarina, cashewnut and others suitable tree species together with intercropping with Arhar (pigeon pea) and prawn farming could help in improving both the ecological security of coastal areas and the livelihood security of coastal communities.

1.9. A decentralised system of procurement and storage is ideal for higher profitability by reducing transaction and transportation costs as well as for operating entitlements schemes relating to local level food security and preventing both distress sales and panic purchases (during drought and other natural calamites). Such Community Food Banks can be operated by local Self-Help Groups. These self help groups should promote consumption of local nutrient food grains and should be encouraged to run the local Public Distribution System (PDS) outlets. There is also need for Community Feed and Fodder Banks to enable landless labour families to take to animal husbandry by providing good quality but low cost fodder.
and feed. Such Feed Banks can use locally grown Quality Protein Maize (QPM), soyabean and millets.

1.10. For greater profitability, SFAC can help in organising Small Farmers’ Agri Export Estates for giving the power of scale to small scale producers at the production and post-harvest stages. Members of such Estates will have to be assisted in areas like mycotoxin testing and quality control, implements, pest management, etc. The basic idea behind Small Farmers Agri Export Estates is to provide expertise and essential centralised services (including e-commerce) to support decentralised production.

1.11. Lastly, a major initiative should be launched by the state for providing farm, home science, veterinary, fisheries, commerce and management graduates greater opportunities for remunerative self employment. For this purpose all avenues like the establishment of Agri-clinics and Agri-business Centres, Food Processing and Biotechnology Parks, Computer and Internet aided Rural Knowledge Centres and Agro-aqua Parks along the coast, should be provided to the educated youth. State should make a major effort to attract and retain educated youth in farming so that knowledge and skill intensive agriculture is promoted. A Venture Capital Fund should be established for this purpose. Along with venture capital fund, provision of insurance should also be made available to young entrepreneurs entering into the field of agri-business. For imparting the necessary self-confidence in taking to self-employment, an Agricultural Entrepreneurship Facilitation Service should be established under the proposal Virtual University for Agrarian Prosperity.