

VI. STRATEGIES AND RECOMMENDATIONS FOR THE FUTURE

Agro-climatic conditions in the hilly areas of Himachal Pradesh and in many other parts of the Hindu Kush-Himalayan Region are favourable for the production of off-season vegetables. Their returns on land, labour, and capital are substantially higher than for cereals and other field crops. As a result, off-season vegetables offer opportunities for a considerable increase in employment and income earning opportunities in hilly areas and enhancement of their population carrying capacity. However, in order to be successful and sustainable, appropriate strategies and approaches have to be observed. These include the following:

The Need for Planning and Research

Before embarking on a large-scale production programme, a detailed assessment should be undertaken of both production and demand aspects. After technical feasibility and demand prospects have been confirmed the next step should be establishment of vegetable research farms in the different ecological zones. These farms would undertake research and trials for vegetables suitable for the ecological zone concerned and would also arrange for demonstrations in farmers' fields. The farms in the different agro-climatic zones would also serve as centres for the production of foundation seeds.

Reliable Supply of Seeds and Other Essential Input

Pure and healthy seeds and seedlings are essential preconditions for successful vegetable growing. This requires arrangements for multiplication in farmers fields and supervision and certification. Other essential requirements include fertilizer and chemicals for pest and disease control. These should be of confirmed quality and should be available on time when needed. Lastly, farmers should have access to credit at affordable interest to enable them to buy the required goods and services as and when needed. Initially, provision of required inputs may have to be ensured by the Government, but ultimately the private sector and cooperatives should take over those functions.

Strengthening of Training and Extension Services

For disseminating the technical know how on delicate vegetable crops a strong link needs to be established between research and the farmers through an effective extension service. This requires strong organisational structures at State/region, district, and local levels. In case of Himachal Pradesh, it is suggested that at the State level the Additional Director of Agriculture (Vegetables) will act as a co-ordinator for the planning, production, procurement, and distribution of various types of vegetable seeds in the different districts. He will act as a monitoring agency for balancing the production and supply of vegetable seeds for domestic consumption and for export as well.

At the district level the Vegetable Development Officer will be mainly responsible for training and education of farmers through the staff posted in the blocks. Besides this, they will also look after the management of vegetables. There will be one Agricultural Inspector (Vegetable) with supporting staff of three Agricultural Sub-inspectors and four 'Beldars' posted in each block to conduct the training and education programme through the village farm volunteers posted in each *Panchayat*. The latter will establish village vegetable nurseries and operate custom service centres to enable them to become self-employed. Village Farm Volunteers or their equivalent with sufficient skill training and in adequate numbers are needed to pass on to farmers the basic knowledge of "What to grow", "When to grow" and "How to grow"?

Improved Marketing Arrangements

The present marketing structure and arrangements are not satisfactory to either producers and consumers since it is the middlemen who mostly benefit. It is suggested that a cooperative organisational system be established to perform the following functions:

- o to procure vegetable crops;
- o to grade, store, and market the produce on behalf of the members at local and distant markets;
- o to assist grower members financially to cultivate crops;
- o to assist retailer members by giving them produce on credit and meeting their other financial requirements for running their business;
- o to hold produce on behalf of their members by providing storage facilities to enable them to earn good returns;
- o to procure and supply at competitive prices the inputs required for cultivating the crops;
- o to provide its own independent outlets for marketing the crops; and
- o to establish, own, and operate processing units in case of specific crops, and market the finished product directly.