SRI KONDA LAXMAN TELANGANA STATE HORTICULTURAL UNIVERISTY
Administrative Office :: Mulugu (C&M) :: Siddipet District.

BRIEF NOTE ON THE BOOK ON PERSPECTIVE PLAN FOR HORTICULTURE IN TELANGANA 2035

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- ✔ Telangana has diverse agro-climatic conditions suitable for cultivation of different horticultural crops and climate is particularly suitable for quality horticultural produce.
- ✔ In 2023-24, the area under horticulture crops in the state was 11.91 lakh acres, producing 42.58 lakh metric tonnes. Mango, sweet orange, acid lime, guava, pomegranate, tomato, brinjal, oil palm, chilli, and turmeric are the major horticultural crops cultivated in the state.
- ✔ Horticulture crops occupy 6% of the total gross cropped area in the state contributing 30 per cent to the state's Agricultural Gross Value Output (GVO) in 2022-23 and has been identified as one of the growth engines for the development of Telangana State.
- ✔ However, the growth rate in fruit crops is only 1.6 per cent with the coefficient of variation at 6.77 per cent indicating that though the growth is low it is stable.
- ✔ Among the fruit crops mango, sweet orange, acid lime, guava and pomegranate are the major crops occupying 73.73, 13.95, 3.37, 3.43 and 0.52 per cent of the area under fruit crops respectively. Mango and Sweet orange covers 87 per cent of fruit area.
- ✔ Area under vegetable crops is decreasing after reaching the peak in 2018-19. The growth rate is negative at (-) 8.4 per cent during the last decade with a very high Coefficient variation of about 31 per cent which must be addressed immediately.

- ✔ Among the vegetables, tomato, brinjal, onion, okra, green chilli and gourds occupy 26.55, 4.79, 9.39, 4.88, 8.50 and 9.18 per cent of vegetable area respectively during 2023-24.
- ✔ Area under plantation crops is increasing, but with a big jump from 2022-23. Oil palm is the major crop under plantation crops in Telangana. Telangana state is in fore front in promoting oil palm cultivation which pushed the area from 2022-23.
- ✔ The percent of area under horticultural crops in cultivable land is low at 7 per cent in Telangana compared to other southern states viz.,18.96 in Tamil Nadu, 18.60 in Andhra Pradesh, 20.36 in Karnataka and 71.06 percent in Kerala indicating huge scope for increase in area under horticultural crops in the state.
- ✔ Though, Telangana ranks number one in productivity of turmeric, ginger, chrysanthemum, two in red chilli and okra in 2023-24, the productivity is low in mango, guava, onion and tomato which needs to be increased.
- ✔ Demand for fruits for the years 2025, 2030 and 2035 is assessed as 23.18, 23.56 and 23.74 lakh metric tonnes with a deficit of 4.53, 4.91 and 5.09 lakh metric tonnes, based on the present production and considering population projections, ICMR recommendation of 100 g per day, allowance of 30 per cent towards exports, 5 per cent for processing and 30 per cent towards post-harvest losses.
- ✔ Demand for total vegetables, leafy vegetables, tuber crops and other vegetables for the years 2025, 2030 and 2035 is assessed as 81.49, 20.37, 20.37 and 40.75 lakh metric tonnes; 82.83, 20.71, 20.71 and 41.41 lakh metric tonnes; 83.47, 20.87, 20.87 and 41.73 lakh metric tonnes respectively, considering population projections, ICMR recommendation of 400 g per day, allowance of 5 per cent towards exports, 10 per cent for processing and 30 per cent towards post-harvest losses.

The following constraints were identified in the horticultural crop production in the state.

1. **Production constraints:** Non profitable due to high cost of production, non-availability of quality seedlings in time, biotic and abiotic stresses, scarcity of labour during critical stages, non-availability of skilled labour, high wage rates, lack of proper machinery, crop insurance, late disbursement of loans, unsustainable income, non-integration with agriculture and livestock.
2. **Marketing constraints:** Lack of marketing facilities at local place, high transportation costs, price fluctuations, involvement of middlemen, market intelligence, grading, cold storage and processing facilities.
3. **Low returns per unit area**
4. **Management and sustaining natural resources** like land, soil, water and biodiversity in the context of changing climate.

✔ Based on the demand projections and constraints, strategies were formulated for different crops. Additional area is required to meet the deficit in estimated demand in fruit and vegetable crops as per the priority in the state.

✔ Besides area expansion, productivity enhancement through adoption of improved varieties and management practices will help in increasing the production and reducing the cost of production in the existing areas.

✔ Crop diversification, integration of horticulture with agriculture and livestock through suitable cropping systems and farming systems as per the resource availability will help in attaining high returns per unit area.

✔ Research on development of improved varieties, location specific technologies, climate resilient technologies and post-harvest management and value addition has to be intensified. The following strategies are to be followed for the crops surplus/deficit in the production

Crops Surplus in production

- ✔ Increase in export
- ✔ Post harvest management and processing
- ✔ Strengthening of marketing and infrastructure
- ✔ Quality improvement

Crops deficit in production

- ✔ Increase in area in cluster mode.
- ✔ Increase in productivity using improved production technologies.
- ✔ Optimum resource use for increasing resource productivity.
- ✔ Reduce post-harvest losses.
- ✔ Farm mechanisation to reduce the cost of production.
- ✔ Processing and value addition to improve the farmers income.
- ✔ Strengthening marketing and infrastructure.
- ✔ Quality improvement.
- ✔ Strengthening research on crop improvement and production technologies.

Area Expansion

- ✔ Potential districts for area expansion under different fruits and vegetables were identified taking into consideration of climate and soils.

- ✔ An area of **1.32 lakh acres** has to be expanded under fruit crops like guava, papaya, banana, sapota, pomegranate, dragon fruit, grapes date palm, fig, jamun, amla, custard apple in the identified potential districts in the **next five years.**
- ✔ The farmers should be **discouraged for area expansion under mango and sweet orange** as our state is in excess production.
- ✔ An area of **2.45 acres** has to be expanded under vegetables like tomato, brinjal, carrot, cabbage, cucumber, cauliflower, radish, onion, potato, leafy vegetables, ridge gourd, green chilli, okra, bottle gourd, bitter gourd and beans in the potential districts in cluster mode in **the next five years.**
- ✔ Action plan for cultivation of **off season/lean period vegetable** is to be implemented.
- ✔ For year-round production of vegetables, **staggered planting, cultivation under shade nets, protected cultivation in lean season** are to be followed.

Increasing the productivity

- ✔ SKLTGHU technologies in fruits, vegetables, spices need to be implemented to harness maximum attainable yield.
- ✔ Weather based ago advisories are to be issued and followed on real time basis to minimize the losses. Custom Hiring Centers (CHCs) need to be established at least one in each mandal to help the small and marginal farmers.
- ✔ Capacity building programmes are to be conducted to horticulture officials, extension specialists, researchers and farmers to upgrade the professional skills.

Increasing the production potential

- ✔ University has to develop climate resilient varieties, improved varieties and hybrids with high yield potential and tolerance to biotic and abiotic stresses and associated production and protection technologies for optimum and efficient utilization of resources.

Post harvest management

- ✔ For minimising the post-harvest losses, there is a need to develop infrastructural facilities like cold storage units, ripening chambers, vegetable market yards with storage facility, refrigerated transportation.
- ✔ More Low-cost ventilated onion storage structures need to be established in onion growing areas. Awareness is to be created on proper harvesting and handling to reduce post-harvest losses.
- ✔ Export Oriented Integrated Pack Houses with suitable Infrastructure has to be created near airport for promotion of exports. Research on quality promotion, shelf life, storage and post-harvest handling, pesticide residue free produce and identification of Maximum Residual Levels (MRLs) of new molecules and development of weather-based pest and disease forecasting modules need to be intensified.

Marketing

- ✔ A Market Intelligence Unit may be setup in SKLTGHU in collaboration with department of agricultural marketing for price forecasting of horticultural crops and need to be disseminated to farmers through research stations,

KVKs, Department of Horticulture through different media to reach unreached.

- ✔ By implementing the above action plan, the state will increase the production of horticultural crops in next five years.
- ✔ Area expansion of fruits **(1.32 lakhs acres)** and vegetables **(2.45 lakhs acres)** will increase the anticipated returns on investment in the ratio of **1:4** with an estimated investment of **Rs 920.90 crores** towards inputs (Rs 253.4 crores per annum) and **943.50 cores** towards drip irrigation in a period of five years.
- ✔ Further, this investment of **Rs 253.4 crores per annum** can be aligned with **Central and State Government subsidy schemes.**
- ✔ Adoption of SKLTGHU technologies in the existing fruit crop area of Telangana will add an anticipated returns of **1341 crores per annum to GSV**.
- ✔ The action plan can be implemented involving Department of Horticulture, SKLTGHU, NABARD, FPOs and other groups.
- ✔ Investment of **Rs 75.00 crores** by the Government of Telangana in addition to tapping of funds from Ministry of food processing and other schemes of GoI will give anticipated returns on investment in the ratio of **1:3** with the involvement of Department of Horticulture, Department of Agricultural Marketing, APEDA, Ministry of food processing, FPOs, startups and other groups.

Advantage Telangana in Horticulture

- ✔ Diverse agro climatic conditions.
- ✔ Good source of irrigation.
- ✔ Pro active government policies.

- ✔ Good road, rail and air connectivity.
- ✔ HUB of Agricultural and allied Research Institutes and International Institute like ICRISAT.
- ✔ SKLTGHU with native of experience and young scientists.