

Improve Competitiveness by Value Addition

Crop and Livestock Sectors

Linking small farmers with efficient market system and value addition

- Development of starter culture, stabilizers, etc from local sources
- Development of Standards for safe processing of milk, meat (especially for Buffalo and Cattle), and fruits and vegetable products
- Development of processing and preservation techniques for various livestock, cereals, and horticultural products for long life/storage and improved quality.
- Development of new products and by-products from various livestock, cereals, and horticultural commodities
- Documenting contaminants (pesticides, veterinary drugs, toxins, heavy metals, etc) in livestock and horticultural products and develop technologies to reduce the contaminants.
- Analysis of value chain of major fruits (citrus, mango.), vegetables (tomato, onion, garlic, chillies) and livestock products (milk, meat, yogurt, leather) and develop technologies/data to overcome constraints at different food chain level.
- Assess contractual arrangements in different food production and marketing (sugarcane, mango, citrus, certain vegetables, livestock and fisheries products, etc.) and suggest ways to improve these arrangements for the fair share of all parties.
- Development of cheap, good quality packaging material for livestock and horticulture products for increasing their shelf life
- Evaluation of nutraceutical value and development of socially acceptable foods from indigenous vegetables and milk.

Reducing postharvest losses and value-addition

- Develop technologies for enhancing shelf life of fruits (especially in mango, citrus and guava), vegetables (especially in tomatoes, green chillies, okra, cucurbits and spinach), and livestock products (milk, meat).
- Development and evaluation of batch and continuous dryers for sunflower, seed cotton, groundnut, corn, paddy, canola etc.
- Develop technologies for harvesting, pre-cooling, handling, storage and transportation of perishables (including livestock products) and grains to reduce postharvest losses
- Develop technologies for home-based and commercial drying (such as solar-cum gas fired dryer), processing and preservation of fruits and vegetables, and livestock products
- Assessment of post-harvest losses in major fruits (especially in guava, mango, citrus, datepalm, melons), major vegetables (especially tomatoes, potatoes, okra, chillies, cucurbits) and livestock products (milk, yougart, meat, etc.) at various market levels, and identify the strategies to control these losses where these as they occur.

Taping new emerging markets

- Develop technologies for economically viable sprout production from different crops like sesame, mungbean etc. for local and export market.
- Study domestic and international markets demand for fruits, vegetables, essential oils, livestock and fisheries products, and develop technologies to meet these demands
- Analysis of value chain of niche products and suggest technological and policy measures to overcome the major constraints for entering into the niche market
- Develop techniques to control sanitary pests in crops and animals
- Develop alternative sustainable and environmentally friendly production and marketing technologies to make organic farming an economically viable option.
- Develop technologies for production of economical bio-fuels