Some Success Stories:

**Animal Husbandry:**
**Poultry Farming:**
A project on giriraja poultry farming was implemented at Central Agricultural University, Imphal, Manipur for socio-economic upliftment of scheduled caste community in Imphal-East District, Manipur. Training and demonstration on scientific Giriraja rearing, marketing, formation of SHG was conducted and Giriraja one week old chicks along with feeds and medicines were distributed to the farmers. More than 200 rural farmers/ youth were benefitted from 10 villages of Imphal-East District of Manipur. With the sponsorship of project poor and marginal farmers of rural societies of Andro especially, the women cluster of Andro project most of the dropped out students who discontinued their studies after matriculation have started going to colleges. Besides most the families covered under this project have given up local liquor (Kalei) production.

![Giriraja at the beneficiary farm](image)

Prof. M. S. Swaminathan visited the poultry farm at Central Agricultural University

Sustainable livelihood generation of rural women through improved backyard poultry farming was implemented at College of Veterinary Science and Animal Husbandry, Central Agricultural University, Mizoram. 541 parent Vanaraja chicks were purchased from Project Directorate of Poultry, Hyderabad. The birds were reared in deep litter system of management in the Instructional Poultry Farm Complex of the College. 10 women from ten selected villages were imparted training on scientific rearing of vanaraja poultry to enhance their skill to serve as local service providers in their respective villages and rural poultry resource centre were established.

![Management& Distribution of Chicks, Medicines and Feeds to the Beneficiaries](image)

**Emu and Turkey Rearing:**
Emu and Turkey farming for economic upliftment of scheduled tribe families in Senapati district, Manipur was implemented in KVK, Sylvan, Manipur. Farmers were provided training on scientific rearing of Emu and Turkey and 200 farmers were benefitted.

![Training on Emu Management](image)
Sheep Farming:
Sheep husbandry based integrated approach for empowerment of SC/ST rural women in tribal villages of Kolli Hills of Tamil Nadu was carried out at Veterinary College and Research Institute, Tamil Nadu. 60 beneficiaries were trained on various aspects of scientific sheep management through on-and off-campus training programmes. Implementation of this project helped the farmers for earning additional income through sheep farming.

Pig Farming:
Techno-economic empowerment of rural women through sustainable piglet production was implemented in College of Veterinary Science and Animal Husbandry, CAU Mizoram. 102 women farmers have been trained on various aspects of scientific management of pig. 137 weaned piglets produced in the college were distributed among the farmers for rearing as breeding animals to produce weaner pigs in the village level. More than 600 weaner pigs were produced by 102 women farmers. Adoption of piggery farming helped the beneficiaries in livelihood generation.

Zoonotic and Food Borne Infections:
Combating zoonotic and food borne infections through community participation was implemented at ICAR Research Complex for Goa, Goa. Mass awareness campaigns were conducted for production of hygienic milk, personal hygiene, and prevention of zoonotic and food borne infections. A clean milk production and food borne infection programmes were organized and more than 550 farmers were benefitted.

Fish Culture:
Carp seed production in Fibre-reinforced plastic (FRP) hatchery and development of integrated rearing system for livelihood generation of SC/ST communities in Khordha District of Odisha was implemented at ICAR-CIFA, Bhubaneswar. Beneficiaries were selected from Balipatana, Ballanta, Banapur & Begunia blocks and several training programmes on scientific aquaculture management have been conducted. Induced carp breeding operations were conducted in 3 hatchery units i.e., at Puranapadhan, Kantabada and Aranga. 421 farmers have been benefitted through adoption of fish farming for their livelihood generation.
Beekeeping:
Sustainable rural development through beekeeping was implemented by Dr. B. A. Marathwada University, Aurangabad. The project was implemented aimed to disseminate the technical know-how and impart the intensive training on bee-keeping technology. Several training programmes were conducted on different aspects on bee keeping and 1039 farmers were trained on scientific method of bee keeping and bee management. Adoption of bee keeping helped the farmers for earning additional income.

Bio-pesticides:
Bio-pesticides production for enhancement of rural economy of weaker sections of Amravati District of Maharashtra through popularization, training and field demonstration supported at KVK, Amravati. Programmes on awareness, training cum demonstration on mass multiplication, field trials of Trichoderma were conducted for different crops at farmers' field in two blocks of Amravati District. More than 500 farmers were trained on use of Trichoderma including it mass multiplication and application on fields. The technology was transferred to farmers & rural youth in the villages to have multiplier impact. Literatures in Marathi language on Trichoderma & its use and production of Trichoderma at village level was also prepared and distributed to the farmers.

Protected Cultivation:
Protected cultivation of flowers and vegetables to improve livelihood security of rural people was implemented by University of Agriculture Sciences (UAS), Dharwad Karnataka. The project was implementation in three villages of Dharwad district.
Several trainings were conducted on different aspects of production of capsicum and more than 200 farmers including women were benefited in the programme.

Anthurium and Gerbera Farming:

In-vitro propagation and bio-farming of Anthurium (*Anthurium andreanum*) and Gerbera (*Gerbera jamesonii*) was implemented by Uttar Banga Krishi Viswavidyalaya, Cooch Behar, West Bengal to benefit the farmers from Terai-Dooars region of West Bengal. In-vitro propagation protocols of Anthurium and gerbera have been developed for large scale production of quality planting materials and demonstration plots on bio-farming of Anthurium under agroshade net house and bio-farming of Gerbera under polyhouse have been constructed. Extensive training programmes have been conducted and more than 50 farmers were trained on bio-farming of Anthurium and gerbera. A remarkable impact has been observed among the farmers through the dissemination of technology in Terai-Dooars region of North Bengal on adaption of commercial cultivation of Anthurium and Gerbera under low cost greenhouse.

Tissue Culture:

Tissue culture plantlets of banana var. “grand naine” for the economic empowerment of the rural marginal SC/ST farmers and weaker sections was implemented in Udupi district, Karnataka by Nitte Mahalinga Adyanthaya Memorial, Karnataka. A hand on training on cultivation practices of tissue culture banana was provided to the selected farmers and women. 20,000 banana tissue culture plantlets were produced and distributed to all the selected farmers. The scientific innovation helps the farmers in acceptance of tissue culture protocol in banana cultivation.

Flax Seed Cultivation:

Upliftment of economic & health status of SC/ST people by cultivation, value addition & use of flax seed was implementation by Society for Environment & Development, Kota, Rajasthan. 6 villages were selected of Kota district of Rajasthan and information related to socio-economic condition, type & breeds of animals, their inputs & out-puts both in quantitative and monetary terms, types of vegetation available, crops grown, etc. were obtained. 240 farmers were trained on cultivation of flax seeds, value addition, products of seeds and stem, packaging, storage, transportation & marketing. Resource material was prepared in local languages and distributed to the beneficiaries. SHGs namely Samata Swayam Sahayata Samooh for Flax
Nemkeen, Ekata Swayam Sahayata Samooh for Flax Biscuits and Mamata Swayam Sahayata Samooh for flax seed making & selling have been formed. SHGs started earning good income by producing different value added products of flax seed.

**Making of Flax Biscuits and Packing Flax Namkeen by Beneficiaries**

**Vermicomposting:**

Vermicomposting technology for socio-economic development of rural SC/ST and weaker sections in Mysore district, Karnataka was implemented by **University of Mysore**, Karnataka. 15 villages have been identified for the construction, training and demonstration of vermicomposting. The demonstrations of vermicomposting process including collection of bio-waste such as paddy straw, corn waste, vegetable wastes, banana wastes, sugarcane trash, farm waste, grains husk, leaf litter, grasses, coconut, areca wastes, cotton wastes and aquatic weeds have been done. The preparation of vermicompost bed using partially decomposed wastes with cow dung, introduction of earthworms, maintenance of moisture and harvesting of vermicompost was also carried out in the pilot plants using audio visual aids and practical demonstration. A group of 8-10 people harvested 900-1000 kilograms per unit and fetching Rs.5000-6000/- within a period of 45 days.

**Demonstrations of Vermicomposting process and Packaging**

**Mushroom Cultivation:**

Establishment of Rural Bio-resource Complex was implemented at Uttar Banga Krishi Viswa Vidyalaya and North Bengal University, West Bengal. Two workshops on cultivation and post harvest processing of edible mushroom and exploitation of plant and microbial resources of North Bengal were organized. 1050 people from seven districts of North Bengal were given hands on training for button mushroom cultivation along with value added vermicompost preparation. A book on ‘Production and Processing of Edible Mushroom’ has been published for the better technical knowledge of the growers. 150 mushroom growers, 35 entrepreneurs and 10 active spawn producers are engaged in edible mushroom production.

**Mushroom Production Unit at University of North Bengal**

**Rehabilitation Programme:**

Rehabilitation of flash flood affected area of Uttarakhand through biotechnological interventions was implemented at **HESCO**, Dehradun. The aim of the project was to provide livelihood options to victims of the flash flood affected areas through biotechnological interventions. 30 villages in three districts Uttarkashi, Rudraprayag and Chamoli have been selected and
several training programmes have been conducted in various interventions in animal husbandry, agri-horticulture crops including value addition of agri-horticulture produce, nursery development, packaging and marketing. Six nurseries have been developed in the affected villages for planting material and this has provided a good source of livelihood support to the community. 2707 families from 3 disaster affected districts have been benefitted.

**Vegetable Seed Production:**

Quality seeds production of Tomatoes, Brinjal and Okra vegetable was implemented at KVK, Manipur for sustainable economic development. 3 sub-division of Bishnupur district namely, Moirang, Bishnupur and Nambol were selected and 10 self help groups have been constituted. Selected beneficiaries were trained on vegetable seed production. Adoption of this technology helped the farmers in livelihood generation.

**Cultivation of Pulses:**

Development of pulses based bio-village sustainable models through action research for livelihood security under different agro-ecosystems in Uttar Pradesh was implemented by Indian Institute of Pulses Research, Kanpur. Farmers were trained on scientific cultivation of pulses through training and demonstrations. Eight quintal quality seed of pulses as chickpea (Var. JG 14 and JG 16) and lentil (IPL 316) was distributed to 55 farmers in village Benipur, Nagla in Shahjhanpur and Kucharam in Chitrakoot, Uttar Pradesh and implementation of this project has created good impact for income generation.

**Health & Nutrition:**

A programme on **Newborn Screening (NBS)** has been implemented by Sanjay Gandhi Postgraduate Institute of Medical Sciences (SGPGIMS), Lucknow in collaboration with Chhatrapati Sahuji Maharaj Medical University (CSMMU), Lucknow. The facility has been successfully established for NBS for screening three diseases i.e. congenital hypothyroidism, galactosemia and biotinidase deficiency. The medical field workers were trained in counselling, educating the mothers and families of neonates, collecting samples by heel prtick and filling proforma. More than 13,500 neonates were tested for preventable causes. Awareness was generated through posters, exhibitions, meetings with doctors, NGOs participation and production of a video etc. The successful establishment of an outreach NBS programme helped to take preventive measures for neonates. The success of the program has been appreciated by Uttar Pradesh government.

Awareness generation and screening for **cervical cancer** in women above 30 years age was implemented by **Government Medical College, Srinagar, Jammu & Kashmir.** 2000 women were screened for cervical cancer through awareness generation cum screening camps. Around 8000 women have been provided free consultation for cervical cancer screening by a screening team of gynaecologists, biochemists, pathologists and health care workers through this programme. Women were made aware of benefits of screening for cervical cancer and motivated to come forward for screening for this deadly disease.
Breast cancer screening programme was supported in four states of North-East India namely Manipur, Meghalaya, Mizoram and Tripura through coordinating agency Cancer Foundation of India, Kolkata. The breast health education plan was focused on breast self-examination (BSE) to identify the early signs of breast changes and reach out to the designated Breast Clinic for clinical follow up. 18,270 women were sensitized on breast health in Tripura, Mizoram, Manipur and Meghalaya. Implementation of this project helped the women on breast health education for early diagnosis and treatment of breast cancer.