

**3.3.1 Institution has created an ecosystem for innovations, Indian Knowledge System (IKS) including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of technology/knowledge and the outcomes of the same are evident**

**Response:**

The university has developed an ecosystem for the promotion of innovations and the Indian Knowledge System. It provides a conducive environment to address IPR by providing financial and logistical support for the patent filing and the commercialization of developed technologies. Further, the university has signed 54 MOUs with national and international institutes for collaborative research work, sharing of research facilities, academia-industry interaction and student exchange for PG and doctoral research.

The university has established several State of the art laboratories, like the Advanced Biotechnology Laboratory, Bio Control Laboratory, Critical Care Unit for farm and companion animals, Micro-Nutrient Laboratory, Referral Analytical Laboratory for Microbial Toxins and Environmental Pollutants/ Toxicants, and Veterinary Diseases Diagnostic Laboratory. Using these facilities, the university has developed 23 varieties of crops, technologies along with more than 100 area specific recommendations for agricultural and allied practices. **These technologies/recommendations are transferred to stakeholders following guidelines for technology transfer and commercialization and farmers through university KVKs.**

Further, the university has developed modern facilities for pilot plants and incubation units like the Bio Control Centre, Agro-processing Centre, Mushroom Research and Training Centre, Poultry Research and Training Centre, Fisheries Research and Training Centre, Vermi Compost Unit, Centre (s) of Excellence on Biotechnology; Organic Basmati Rice Production; Sugarcane; Maize Training for Empowerment; Mushroom and Mango Processing; Poultry Production and Processing, and Instructional Livestock Farm Complex-II (with goat and pig units) for the training and entrepreneurship development of students and rural youths to enable them to self employment. The students of the university are also undergoing business incubation in the area of bio-control agent production.

The university also focuses on the Indian Knowledge System (IKS) by incorporating various related topics in the course curriculum and research and development of products and processes based on the Indian Knowledge System like, the development of bio control agents, Moringa Rich cookies, osmotic dehydration of cucumber, isolation of functional cassava starch, standardization of herbal clarifying agents for jaggery, traditional storage of food grains, Aonla processing, solar drying of fruit and vegetables and bio-fertilizers.

The university has developed an IPR cell to protect the Intellectual Property Rights of the developed products and technologies. The guidelines for technology transfer and commercialization include providing professional input and a set of skills required for the commercialization of the technologies and IPR issues and providing greater impetus for research and innovation through incentives and benefit sharing.

The ecosystem and other initiatives are reflected in the form of outcomes like commercialization of two herbal based alternative medicine technologies, Bruckeck and Anacheck, through Agrinovate, the filing of 09 patent applications and the establishment of 21 business units by rural youths and farmers trained in 67 training and entrepreneurship programmes organized by the university in the areas of mushroom cultivation, bio-control agent production, poultry production, goat production, pig production, dairy product development and food processing. The various lectures by experts and alumni have sensitized the university students on IPR and entrepreneurship development. The lab to field transformation of technologies has significantly impacted the quality and quantity of agriculture produced by the beneficiary farmers.

Collaborations	<a href="#">View Document</a>
IKW and Student READY programme in Food Technology Curriculum	<a href="#">View Document</a>
IKW and Student READY programme in B. Sc. Agriculture Curriculum	<a href="#">View Document</a>
Internship Programme in BVSc and AH programme	<a href="#">View Document</a>
IPR Cell	<a href="#">View Document</a>
IPR Policy	<a href="#">View Document</a>
Patents	<a href="#">View Document</a>
Guidelines for Technology Transfer /Commercialization- 2023	<a href="#">View Document</a>
Photographs of Activities	<a href="#">View Document</a>
Entrepreneurship development Programmes	<a href="#">View Document</a>