

International Projects and Initiatives (IPI) – Collaborative Opportunities

The Rai Technology University (RTU) was established by an Act of Karnataka State Legislature in 2013 in India as a Private university and has been listed by the University Grants Commission under the same category. RTU's flagship program is the undergraduate program, Bachelor of Science in Agriculture [B.Sc.,(Ag)] with around 1700 students on campus . RTU has introduced several innovative activities in B.Sc., (Ag) program to ensure that the students passing out of RTU are the best in today's context and are way ahead of their peers in the field of agriculture. We are in the process of establishment of germplasm banks/blocks, nursery unit with polyhouses/nethouses, tissue culture facility for production of plants, mist house for propagation and livestock sheds for rearing animals.

The School of Agricultural Sciences and Forestry (SASF), has taken up three ambitious research projects with its own funds, for reducing the risk of biotic and abiotic stresses on locally important issues viz.

1. Studies on ground water depletion in Doddaballapur Taluk of Bangalore Rural District, Karnataka,
2. Investigations on bacterial wilt (*Ralstoniasolanacearum*) disease of Brinjal with special reference to spatial and temporal variability and
3. Promotion of Indian techniques in modern agriculture. India is the second largest producer of fruits and also the vegetables in the world. However, almost one third of the production is perished due to inadequate cold storage units and other resources. Further, the productivity of major crop categories (kg/ha) in 2014 is much lower when compared to the mean figures of World and China. The following table illustrates these facts.

Crop	India	World	China
Total Cereals	2981	3886	5888
Rice	3622	4539	6746
Wheat	3030	3289	5048
Fruits	11908	11346	11134
Vegetables	13991	19530	23885
Pulses	654	907	1550
Oilseeds	278	661	640

The University has taken initiatives to enlist the support of the local farmers in and around the Campus to serve as field laboratories for the students to learn. Further, we have also entered into a working relationship with the Department of Agriculture of the Government of Karnataka to help collect soil samples from the farmers' fields in Doddaballapura Taluk under the Soil Health Mission. The Department provided the University with GPS systems to take representative soil samples from the designated field points.

RTU believes in technology and education for all, particularly in rural areas. At the same time, it aims to preserve traditional and local varieties with modern technologies to flourish side by side. RTU is taking steps to identify custodian farmers who actively maintain, adapt and disseminate agricultural biodiversity and related knowledge, over time and space, at farm and community levels. It encourages seed sharing (between farmers) and seed/clone saving (storing for sowing in a later season) with all traditional seeds and clonally propagated varieties. The SASF also encourages adoption of crop rotation, multi-cropping and inter-cropping, vermi-composting at the farm level and maintenance of desi (local) livestock in the villages surrounding the University. Students are provided with opportunities to interact with such farmers on a regular basis particularly during the crop growing practical classes.

Faculty exchange program

Faculty exchange program has an enviable global network of faculty from across all continents. It leverages to create an environment that nurtures educators, enables them to focus on research and promotes out-of-the box delivery systems. The objective of the exchange program is to facilitate cooperation in research and higher education between the countries, which will facilitate and support a wide range of study and research activities. The duration of the exchange visit would be flexible depending on the outcome expected from the visit. Visits can range from one week to three months.

The purpose of the exchange visit could be:

1. Post doctoral research or fellowship
2. Development of research proposals
3. Developing joint research programs in India
4. Mentoring
5. Guest lectureships
6. Short courses development

Student Exchange Program

A **student exchange program** is a program in which students from a university study abroad at one of their institution's partner institutions. In this program, students are exposed to new procedures and ideas that will assist their work in the future. It includes theoretical studies, field trips and practical workshops. Our students would learn academic research with hands-on agricultural experience in the regions of our affiliates . It provides the students with academic knowledge by leading faculty, opportunities to gain practical skills and the chance to be a part of creating a sustainable future. A foreign exchange program provides students with an opportunity to study in a different country and environment experiencing the history and culture of another country. There is considerable interest among students of across Globein Indian studies. Most of Indian courses are focused on Ancient Indian Agriculture and Agricultural extension.

School on the Farm project of Austria allows young people to gain insight of the life on a farm. Such a program exists in India also. An exchange of students of both countries in such programs will be mutually beneficial.

Workshop and seminars

The workshops and seminars are used to exchange the practical ideas between both the countries It includes field trips to farms and other sites around India and our International Prtnersin addition to theoretical learning. The topics proposed for workshops/seminars that we could conceive in other Countries focusing on the Agriculture are :

1. Treatment of Industrial waste water
2. Food safety and security
3. Environmental policy and sustainable development
4. Pig, sheep and poultry development
5. Viticulture, wine, spirit and cellarage

Knowledge/Idea Centers

These comprise of bilateral sharing of knowledge and technologies and establishment of centers of excellence in various agriculture sectors across south India. This cooperation will be based on proper adaptation, implementation and assimilation of International agro-technologies and extension procedures of India. They will concentrate on biodiversity, sustainable development, conservation of natural resources and organic farming.