The Mohinder Singh Randhawa Library: Library is housed in five storeyed building, centrally air-conditioned and surrounded by lush green lawns dotted with beautiful ornamental plants providing soothing environment. It has a collection of 4,19,179 documents that include books, theses, bound periodicals and digital documents. The building has four reading halls seating capacity of 760 readers. It opens from 9.00 am to 8.00 pm during the month of January-February and from 9.00 am to 9.00 pm for rest of the year on all working days. During Saturdays, Sundays, holidays and semester break library timings are from 9.00 am to 5.00 pm. In addition it has two Wi-Fi enabled 24X7 outer reading halls for the readers with seating capacity of 132 readers. These reading halls have direct accessibility even when library is closed. The services available and library rules and regulations are circulated from time to time. Library is open to teachers, students and non-teaching staff of PAU. They can enroll themselves as member by filling prescribed application form. Persons other than those listed above can be enrolled as members by filing application form subject to the approval of the competent authority/University Librarian on the payment of the following charges:

Sr. No.	Membership	Charges
1	Retired Personnel of PAU	Refundable security Rs 250/-
2	Corporate Membership	One time membership fee Rs.10,000/- Plus annual library service charges Rs. 1000/-
3	Special Members	Refundable security Rs. 5000/- plus annaul membership fee Rs. 2000/-
4	Casual Member	(i) Membership fee Rs. 700/- per month and Rs. 3500/- for six months (ii) Ward of PAU (Minimum age 16 yrs or matriculate whichever is earlier)-Rs. 500/- one Year

The following are the borrowing privileges:

Sr No.	Category	No. of books
1	Undergraduate student	3
2	Postgraduate student	4
3	Teaching Staff	8 (3 books
		for semester)
4	Non teaching staff	2
5	Special member	1
6	Contractual, JRF,SRF	2
7	Diploma students	2
8	GADVASU faculty	2
9	GADVASU student	1
10	Casual member	NIL

Period of loan:

Sr. No.	Type of Document	Issued for no. of Days
1	General books	14
2	Current periodicals,	Not to be issued
	Theses, Rare books	
3	Textbooks	only for overnight

Overdue charges: Rs 2/- per day for general books and Rs 1.50/- per hour for overnight issued material.

Loss of library materials: The loss of library material is recovered from the members as per details of recovery given in Chapter LVI of PAU Calendar.

The updated information related to the library is available on library web page of the University.

The Directorate of Extension Education in the University undertakes the dissemination of new knowledge and technologies through various extension hubs located at the headquarters as well as in different districts in the state. These include Agricultural Technology Information Centre (ATIC), 15 Farm Advisory Service Centres, 18 Krishi Vigyan Kendras (KVKs); Communication Centre, Skill Development Centre and many other extension projects at Dr Khem Singh Gill Farmers' Service Centre.

- **1. ATIC Centre:** This centre engages in quick delivery of technology to the farmers under single window system. Its activities include:
 - Diagnostic service in respect of crop disorders
 - Redressal of farm problems
 - On the spot diagnosis of complex problems of the farmers.
 - Help- line facility for the famers (0161-2401960 Ext. 417 and 0161-2410001)

For the specific problems, farmers can make a contact on telephone with the specialist / department concerned. The help-line telephone number of these departments are 0161-2401960 Ext. 446 (Farm Power and Machinery) Extn. 401 (Crop Production), Extn. 504 (Entomology), Ext. 419 (Seed Shop), Extn. 435 (Plant Breeding), Extn. 452 (Vegetable Cultivation), Extn. 303 (Fruit Cultivation), Extn. 305 (Food Processing & Technology), Extn. 461 (Economics), Ext. 505 (Plant Pathology), Extn. 506 (Soils), Extn. 284 (Soil & Water Engineering), Extn. 440 (Flower Cultivation), Extn. 382 (Rodent Control), Extn. 382 (Birds Management), Extn. 461 (Economics) and Extn. 373/215 (Publications).

- 2. Farm Advisory Service Centre: Farm Advisory Service Scheme/Centre (FASS/FASC) was started in 1962 primarily with the objective of quick transfer to technology

 to farmers of the state and getting first hand feed-back of their field problems at 15 district headquarters. FASCs of Punjab Agricultural University are an organic link between the University research system, filed functionaries and farmers. The staff of FASS is engaged in the following activities.
 - Advisory Service in respect of crop production and protection
 - Conduct of adaptive research trials
 - Providing training to farmers, demonstrations

- Field days, on-the-spot guidance of farmers, surveillance and monitoring of campaigns
- Feedback
- · Sale of farm literature
- **3.** *Krishi Vigyan Kendras* (KVKs): There are 18 *Krishi Vigyan Kendras* at district headquarters. The mandate of KVKs is to impart training to the farmers and unemployed rural youth with the following objectives.
 - Increasing agricultural productivity and encouraging youth to take up subsidiary occupations.
 - Supplementing family incomes.
 - Organizing front line demonstrations in various crops to generate production data receive feed-back information and to collaborate with scientists.

At present, KVKs impart practical / oriented training in diversified areas of agriculture, hybrid seed production, cultivation of aromatic and medicinal plants, dairy, bee-keeping, vermicompost, mushroom growing, integrated pest management, nursery training (horticultural, vegetables, flowering plants), repair and maintenance of farm machinery, self employment of rural youth etc. Besides, training rural women, income generating programmes like stitching, embroidery, knotting, soft toy, soap and detergent making, fruit and vegetable preservation, feed and nutrition also provided at these centres.

4. Communication Centre: The centre serves as an important link between the farmers and scientists through various forms of media for the dissemination of agricultural information and technologies developed by the university. Besides expanding sale and membership of the university's prized publications and periodicals, the Communication Centre has been a pioneer in launching the first of its kind digital weekly newspaper, 'Kheti Sandesh', updating lakhs of farmers about current farm operations and weather advisory. Through the weekly Facebook Live programme, the centre has further strengthened its connection with farmers in far flung villages by providing solutions to their queries in a face to face live online chat. Similarly, PAU updates are carried on the university's Twitter handle, while videos to popularize sustainable agriculture among

farmers are loaded from time to time on YouTube, serving as a ready reckoner for agricultural enthusiasts.

Acting as a liaison between the media, industry and the public, the centre has been entrusted with the big responsibility of coordinating the visits of national and international dignitaries, farmers, scientists, students and other visitors coming from various parts of the country as well as the world.

5. **Skill Development Centre:** Ministry of Skill Development and Entrepreneurship (MSDE) has been formed in 2015 to enhance employability of the youth of Nation through Skill Development. Punjab Agricultural University got the honor to establish Punjab's first Skill Development Centre in agriculture with an aim to capacity building in agriculture as well as allied sectors and bridge the gap between laboratories and farm. Skill Development Centre established at Punjab Agricultural University, under the National Skill Development Mission has been affiliated as a training provider and Training of Trainers (TOT) program by the Agriculture Skill Council of India (ASCI) and Food Industry Capacity and Skill Initiative (SICSI). The memorandum of understanding (MoU) has been signed with ASCI on September 10, 2015 and FICSI on October 6, 2015 under the Prime Minister Kaushal Vikas Yojana (PMKVY) for various job roles. The Skill Development Centre focused on the development of entrepreneurial skills to raise production and farm income as well as improving employment opportunities in agriculture and allied fields. The emphasis is given to equip the youth with knowledge, practical skills and its applications so that they can participate in nation's productivity. All the skill development programmes are planned, monitored, assessed, certified and followed up by National Skill Development Corporation. The Certificates of these courses are recognized throughout the country.

Apart from these, specialized training courses and integrated crop production courses for young farmers of three months duration have been organized for farmers/farm women and rural youth. Also, in-service training programmes is organized for the enhancement of knowledge and skills of in-service extension personnel. Monthly training camps is conducted for the members of the PAU Kisan Club (Ladies' Wing).

Objectives

- Determining skills/ competency standards, qualifications and development of National Occupational Standards (NOS)
- Preparation and maintenance of skills inventory to facilitate individual choices

- Development of sector specific skill development plans
- Establishment of a well-structured, sector specific Labor Market Information System (LMIS) to assist planning and delivery of training

Punjab Agri Business Incubator: Skill Development Centre, Directorate of Extension Education, Punjab Agricultural University, Ludhiana as been bestowed with an incubator namely PABI under this scheme in March, 2019 scheme Rashtriya Krishi Vikas Yojana – Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RKVY-RAFTAAR).

Opportunity to become an entrepreneur (Uddam): Uddam is Agripreneurship Orientation Programme aimed at providing an opportunity to Students, Youth and Smart Farmers, Women or anyone having an innovative idea. The programme offers Grant-in-aid opportunity for upto 5 Lakhs upon selection which will have to be used by entrepreneurs to transform their innovative ideas to a prototype in the form of products / services/ processes/ business platforms or models etc.

Opportunity to expand your business (Udaan): Udaan is an Incubation Programme aimed at providing support to the Start-ups having innovative minimum viable products / services / business processes or models that are ready for commercialization. The programme offers 2 month workshop, Mentorship, and Grant-in-aid opportunity for upto Rs. 25 Lakhs and facilitation support.

6. Institute of Agriculture: The institute of Agriculture came into being at Gurdaspur during 1993-94 under the aegis of College of Agriculture and offers a two-year Diploma Course

Agriculture where 30 rural students are admitted every year. Training is imparted in Agriculture and allied fields.

7. Farmers' Clubs/ Committees: For obtaining farmers' feedback on research systems include several committees / clubs like PAU Farmers' Committee: PAU Fruit and Vegetable Growers' Committee: Agricultural Equipment and Manufacturers Advisory Committee: Punjab Farmers' Club: Farm Youth Clubs; Punjab Dairy Farmers' Club; Punjab Young Farmers Association; Punjab State Bee-Keepers Association, Organic farmers Association; Diagnostic Survey Teams; Zonal Research Extension Advisory Committee; other Sources of Feed backs and Scientific Advisory Committee (SAC) etc.

- **8.** Human Resources Development Programmes: To update the knowledge of the staff and the farmers various training programmes are developed.
 - a) Staff development Progrmames:
 - Officers' workshops
 - National Workshop-cum-seminars
 - Advanced Centre of Training in wheat production technology
 - Centre for Training in integrated watershed development programmes (Hills)
 - Regional Biogas development and training centre
 - Regional Extension Service Centre for processing of food grains.
 - Training of soil testing officers; training in agricultural engineering.
 - Training of veterinary officers; Establishment of international training centre.
 - b. Farmers' related programmes:
 - Farmers Fairs (Kisan Melas)
 - Specialized training
 - Training in farm machinery
 - Soil & Water Engineering
 - Training programme for famers, rural artisans, small scale manufacturers.
 - Practical training course in agriculture for young farmers
 - Fruit and vegetable preservation training course
 - Gardener training course and farm women training
- **9. Utility Services for Farmers:** In order to get sustained productivity of both crops and animals, certain organized services are provided to the farmers. In turn, the University scientists get first-hand feedback on emerging problems in various fields of agriculture related with soils and water. The information about weather forecasting and monthly farm operations is shared with all stakeholders.

The above services are provided on all working days form 09.00 hours to 17.00 hours at headquarters and outstations with a lunch break from 13.30 hours to 14.00 hours.