

SELF-STUDY REPORT
For
ICAR Accreditation of Programme
M.Sc. (Ag.) Agronomy



Submitted to
**NATIONAL AGRICULTURAL EDUCATION
ACCREDITATION BOARD-ICAR, NEW DELHI**

**SCHOOL OF AGRICULTURAL SCIENCES
G D GOENKA UNIVERSITY, SOHNA (GURUGRAM)**

122103

Self Study Report for the Accreditation of M. Sc. (Ag.) Agronomy

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6.4. Self-Study Report for the Programme M. Sc. (Ag.) Agronomy:

The G. D. Goenka University is a private university located in Sohna district Gurugram, Haryana, India. It was established in 2013 by GD Goenka Group through the Haryana Private Universities (Amendment) Act, 2013. The GD Goenka Group was founded by Shri A. K. Goenka. This University is approved by University Grants Commission (UGC). The University has outstanding infrastructures, faculties, visions, ideals and teaching methods. GD Goenka University is an internationally acclaimed and premier institution of higher education in India. Quality education aimed at directing the students towards research, innovation and extension is the defining element of the GD Goenka University. The University is recognized by UGC aspires to be a global leader in the 21st Century higher education ecosystem through enshrined core values of intellectual excellence, collegiality, diversity and integrity. GD Goenka University is also recognized as QS IQUAGE “Diamond” rated University. The GD Goenka Education City built-up with the world’s most advanced technology spread over 60 acres & is situated in the picturesque foothills of the Aravalli Range, Sohna Gurgaon Road, just 29 km away from Delhi, International Airport. It offers day boarding, full boarding and weekly boarding facility. The campus has more than 10 different schools.

This campus has state-of-the-art infrastructure, salubrious, air-conditioned well maintained Wi-Fi enabled campus, well-equipped libraries and hi-tech laboratories. The residential facilities are world class and students have access to a half Olympic size swimming pool, gym with latest equipment and squash courts in the ultra-modern fitness center. GD Goenka University offers more than 100 programmes with more than 10 different schools as the campus of the University in its 60+ acre lavish green campus. More than 200 handpicked faculties to instruct the students of more than 40 nationalities. The university has collaboration with more than 30 universities and professional institutions of the USA, Canada, Australia, UK and other countries of the world. GD Goenka University is a member of prestigious national and international associations like Association of Indian Universities (AIU), Association of Commonwealth Universities (ACU) and International Association of Universities (IAU).

6.4.1 Brief History of M.Sc. (Ag.) Agronomy programmes:

About the School of Agricultural Sciences (SoAS)

At present the B.Sc. (Hons.) Agriculture & M.Sc. (Ag.) Agronomy are running in the School of Agricultural Sciences since 2018 and one batch of each have been passed out.

With the above aim in focus and to make the SoAS as a centre of excellence for higher education and research, the School has been equipped with excellent physical and academic infrastructure, latest curriculum as per ICAR Fifth Deans' Committee recommendation and improved teaching methodology. The University has best quality faculty with industry interaction and hands on practical exposure enables it the quality learning process at the School of Agricultural sciences dynamic.

The School of Agricultural Sciences is well equipped with smart classes, modern laboratories, library, crop cafeteria etc. The campus is lush green and spread over 60 acres of land (12 acres used for building infrastructures, sports complex, hostels, parking etc. and 48 acres land allocated for various departments of School including 15 acres to Department of Agriculture).

The school has collaboration with Van Hall Larenstein, University of Applied Sciences, Netherlands for student exchange and summer school programmes. The School is in the advanced stage of collaboration with University Putra Malaysia (UPM). The School of Agricultural Sciences and College of Agriculture, Baramati, Maharashtra (MPKV) entered into agreement (MOU) on 18th August, 2018 for regular exchange of students UG and PG students including Semester exchange programme. The school also has signed MOU with ICAR-National Bureau of Plant Genetic Resources for students' research projects, research & trainings, educational tours and collaboration of PG students' research.

The programme offers courses with choice based credit system and has been designed to provide an excellent blend of contemporary theory and practical that align with the curricula of Fifth Deans' Committee Report of ICAR in which new initiatives has been strongly advocated.

Vision of the school

School of Agricultural Sciences at G D Goenka University aims to be an internationally leading agricultural school that redefines through interdisciplinary education, discovery, services, innovation and producing socially responsible self-motivated future leaders in their fields of endeavor with a broader understanding of the underlying global issues. The vision of School for master degree is to provide high quality education and research in crop production, enabling students to conduct professional activities in the field of Crop Production with advanced technological knowledge, understand and serve agriculture in an economically and environmentally sustainable manner, both in the public and private sector. Further, to foster hands-on, immersive, evidence-based research and fieldwork training opportunities to the students to prepare them for creating innovative solutions in the field of agriculture.

Objectives

1. To impart knowledge and skills of agriculture and allied sciences to prepare the students for a successful career in agriculture or agribusiness.
2. To enhance ability of students to articulate theory into practice to propose and defend realistic and novel solutions to emerging issues within the agricultural sector.
3. To develop vocational competencies and graduate attributes relevant to the agricultural sector which enhance students' employability prospects through exposure to best practice and diverse work placement opportunities.
4. To facilitate an ability to function effectively as an individual and as a member or leader in diverse teams or interdisciplinary environment.
5. To create individuals with an aptitude for continued self-directed learning in life to maintain their competence in changing world.
6. To introduce "Earning while learning system" for post graduate students through which they can earn money during their study.
7. To develop need based skills for PG students to enhance their attitude to become an entrepreneur for self-employment generation.

Programme Structure

The common academic regulations and syllabus as approved by the Fifth Deans' Committee report of ICAR is followed for Master Degree programme. The course structure and syllabus are thoroughly discussed and got approved by Board of Studies (BoS) and Academic Council of the University.

Post Graduate Programme for M.Sc. (Ag.) Agronomy

The programme had a total of 70 credits. The credit bifurcation is given below:

S. No.	Category	Total minimum number of credits to be earned
1	Compulsory courses	20
2	Seminar	1
3	Research	30
4	Minor	8
5	Supporting	6
6	Common courses	5
Total		70

Accomplishments

A. Total number of Alumni in PG

S. No.	Degree Programme	Number of students
1	M.Sc. (Ag) Agronomy	07

B. Alumni achievements

PG Programme:

S. No.	Designation/Programme	Name of the Institute/Industry & Office Address	No. of Students
1	Associate-Agronomist	Farmkart Online Services Private Limited	1
2	Agriculture Support Executive	Parvus Analytics Pvt. Ltd.	1
3	Sales Executive	Janani Foods (Pvt) Ltd.	1

4	Sales Trainee	IKYA Human Capital Solutions Ltd.	1
Total			4

Out of 07 students, 04 students placed in various industries and rest 03 students were engaged in start-up in seed production and dairy.

6.4.2. Faculty Strength

The faculty strength of the Degree programme (UG & PG) cadre wise, sanctioned and in-place are mentioned below:

Sl. No.	Sanctioned Faculty*	Appointment Type	Sanctioned	Filled	Vacant	Faculty recommended by the ICAR/UGC/VCI/ other regulatory bodies
1.	Professor	Permanent	3	2	1	ICAR
2.	Associate Professor	Permanent	8	8	0	ICAR
3.	Assistant Professor	Permanent	21	21		ICAR

* Engaged in UG and PG programmes

List of the faculty members engaged for M.Sc. (Ag.) Agronomy:

The list of faculty cadre wise from 2018-23 with name, specialization, date of appointment in the college, period of contract, salary account summary for last three years with the reference to Form 16 (Income Tax) is given below.

S. No.	Department	Name of the Faculty	Cadre	Specialization	Date of Appointment	Period of Contract	Form 16 (Income Tax)
1	Agronomy+ (Agro-forestry)	Prof. (Dr.) S S Tomar	Professor & Dean	Agronomy-Natural Resource Management	15.10.2022	Permanent	Newly Joined
2		Prof. (Dr.) Sahadeva Singh	Professor & Dean	Agronomy-Water Management/ Watershed Management	17.6.2019	Permanent	Submitted
3		Dr. Jagvir Singh Dhankar	Professor	Soil Fertility management	13.09.2018	Contractual	Submitted
4		Dr. R.P.Singh	Adjunct Professor	Agronomy-Fertility Management	1.09.2021	Contractual	Submitted
5		Dr A. N. Singh	Professor	Agronomy	01.09.2021	Permanent	Submitted

6		Dr Ravindra Nath	Associate Professor	Agronomy	10.05.2021	Permanent	Submitted
7		Dr. Ibrahim Kaleel	Assistant Professor	Water Management- Soil & Water Conservation	27.09.2019	Permanent	Submitted
8		Dr Praveen Kumar	Associate Professor	Environmental Science- Ecology & Crop Agro-climatology	26.08.2019	Permanent	Submitted
9		Dr Niraj Bishwakarma	Assistant Professor	Agronomy	25.07.2022	Permanent	Newly Joined
10		Dr Pradipta Ranjan Pradhan	Assistant Professor	Soil Science and Ag. Chemistry	15.03.2021	Permanent	Submitted
11		Dr Bulbul Ahmed	Assistant Professor	Bioinformatics/ Computer Sciences	15.02.2022	Permanent	Submitted
12		Dr. Rajbir Singh	Associate Professor	Statistics- experimental designs in research	02.09.2019	Permanent	Submitted
13		Dr. Jaswinder Kaur	Assistant Professor	Agricultural Entomology	01.10.2018	Permanent	Submitted
14		Dr. Hemant Thakur	Assistant Professor	Horticulture- Pomology	15.10.2018	Permanent	Submitted
15		Dr. Anurag Tripathi	Assistant Professor	Genetics & Plant Breeding	29.08.2019	Permanent	Submitted
16		Dr Deepika Garg	Assistant Professor	Mathematics	17.11.2015	Permanent	Submitted
17		Dr Deepak Kumar	Assistant Professor	Agronomy	03.04.2023	Permanent	Newly Joined
18		Ms. Raveena Negi	Assistant Professor	Forestry	21.01.2019	Permanent	Submitted
19		Mr. Nitesh Samadiya	Assistant Professor	Agronomy	15.10.2022	Permanent	Newly Joined
20		Mr. Kasirao	Teaching Assistant	Agronomy	01.12.2022	Permanent	Newly Joined
21		Ms. Perli Himavarsha	Teaching Assistant	Agronomy	01.12.2022	Permanent	Newly Joined

Present status of faculty engaged in M.Sc. (Ag.) Agronomy

S. No.	Department	Name of the Faculty	Cadre	Specialization	Date of Appointment	Period of Contract	Form 16 (Income Tax)
1	Agronomy+ (Agro-forestry)	Prof. (Dr.) S S Tomar	Professor & Dean	Agronomy-Natural Resource Management	15.10.2022	Permanent	Newly Joined
2		Dr A. N. Singh	Professor	Agronomy	01.09.2021	Permanent	Submitted
3		Dr Ravindra Nath	Associate Professor	Agronomy	10.05.2021	Permanent	Submitted

4		Dr Praveen Kumar	Associate Professor	Environmental Science- Ecology & Crop Agro-climatology	26.08.2019	Permanent	Submitted
5		Dr Niraj Bishwakarma	Assistant Professor	Agronomy	25.07.2022	Permanent	Newly Joined
6		Dr Pradipta Ranjan Pradhan	Assistant Professor	Soil Science and Ag. Chemistry	15.03.2021	Permanent	Submitted
7		Dr Bulbul Ahmed	Assistant Professor	Bioinformatics/ Computer Sciences	15.02.2022	Permanent	Submitted
8		Dr. Rajbir Singh	Associate Professor	Statistics-experimental designs in research	02.09.2019	Permanent	Submitted
9		Dr Deepika Garg	Assistant Professor	Mathematics	17.11.2015	Permanent	Submitted
10		Dr Deepak Kumar	Assistant Professor	Agronomy	03.04.2023	Permanent	Newly Joined
11		Ms. Raveena Negi	Assistant Professor	Forestry	21.01.2019	Permanent	Submitted
12		Mr. Nitesh Samadiya	Assistant Professor	Agronomy	15.10.2022	Permanent	Newly Joined
13		Mr. Kasirao	Teaching Assistant	Agronomy	01.12.2022	Permanent	Newly Joined
14		Ms. Perli Himavarsha	Teaching Assistant	Agronomy	01.12.2022	Permanent	Newly Joined

As per the norms of ICAR, the faculty strength is adequate. The teaching service faculties requirement are obtained by University before start of the next Academic Session and recruitment processes completed before start of the Session.

6.4.3. Technical and supporting staff

The following technical and supporting staff members of the both degree programme including farm and field workers are mentioned for both sanctioned and in place in the School to carry out administrative, teaching, academic, and research activities (as on December 2022).

Administrative, Technical and supporting staff strength

S. No.	Sanctioned designation	Sanctioned*	Filled	Vacant position
1	Deputy Registrar	01	01	-
2	UDC/Academic Coordinator	02	02	-
3	Assistant, Admission cell	03	03	
4	Assistant, Examination cell	02	02	

5	Assistant Training & Placement Cell	01	01	-
6	Deputy and Assistant officers (DFO, AFO)	03	03	-
7	Assistant Librarians	02	02	-
8	Assistant, IT Support	01	01	
9	College Coordinator	01	01	-
10	Farm Manager	01	01	-
11	Lab. Assistants	03	03	--
12	Agriculture Supervisor	01	01	-
13	Field Assistants	04	04	-
14	IV- class	02	02	-
Total		27	27	

List of administrative and supporting staff

S. No.	Name	Designation	Date of Appointment	Period of Contact	Salary account summary for last 4 years (2018-19, 2019-20 & 2020-21)*
1	Mr. Mohit Singhal	Deputy Finance Officer	05/08/2013	Permanent	Submitted
2.	Mr Anoop Prajapati	Assistant	01/02/2018	Permanent	Submitted
3.	Mr. Sujeet Kumar	Academic Coordinator	12/03/2018	Permanent	Submitted
4.	Ms. Kshriptra Chaturvedi	Academic Coordinator	18/11/2019	Permanent	Submitted
5.	Ms. Harmanpreet Kaur	Deputy Registrar	15/07/2021	Permanent	Submitted
6.	Mr.Vijay Sharma	Exam Coordinator	12/02/2018	Permanent	Submitted
7.	Mr. Divesh Sharma	Exam Senior Coordinator	06/09/2017	Permanent	Submitted
8.	Mr. Manoj Chauhan	IT Support	13/09/2017	Permanent	Submitted
9.	Mr. Mohit Man	ERP Manager	18/04/2018	Permanent	Submitted
10.	Mr. Ram Prasad Thakur	AO	01/08/2014	Permanent	Submitted
11.	Mr. Virendra Singh	Admn. Assistant	01/08/2016	Permanent	Submitted
12.	Dr. Swedesh Sharma	Deputy Librarian	15/01/2018	Permanent	Submitted

13.	Mr. Ajay Kumar Pandey	Assistant Librarian	24/05/2012	Permanent	Submitted
14.	Mr. Ankit	Admission Counsellor	28/07/2020	Permanent	Submitted
15.	Mr. Lovesh Sharma	Admission Counsellor	21/07/2020	Permanent	Submitted
16.	Ms. Sonia Shehrawat	Accounts	04/01/2014	Permanent	Submitted
17.	Ms. Pooja Yadav	Placement Coordinator	15/05/2019	Permanent	Submitted
18.	Mr. Baldev Singh	Hostel Warden	01/09/2016	Permanent	Submitted
19.	Mr. Laxman Singh	Hostel Warden	01/08/2016	Permanent	Submitted
20.	Ms. Meena Sen	Chief Hostel warden	01.03.2021	Permanent	Submitted
21.	Ms. Mukesh Kumari,	Asstt. Warden	01.12.2018	Permanent	Submitted

List of technical and supporting staff

S. No	Name of the staff	Designation	Date of appointment	Permanent/ Contractual (Period of contract)	ITR form/Salary Slip
1.	Mr. Sonu Kuntal	Farm Manager	13.11.2019	Permanent	Submitted
2.	Mr. Rohan Agnihotri	Farm Manager	12.12.20222	Permanent	Not Applicable
3.	Mr. S K Addy	Sr. Lab Technician (Soil Science)	01.12.2022	Permanent	Not Applicable
4.	Ms. Sapna Pandey	Lab Technician (Language Lab)	19.09.2016	Permanent	Submitted
5.	Mr. Sanjay Singh	Lab Technician (Soil Structure & Soil Survey)	21.07.2014	Permanent	Submitted
6.	Mr. Harbir Singh	Lab Technician (Environmental Lab)	10.08.2015	Permanent	Submitted
7.	Mr. Chand Ram,	Lab Technician (Mechanical & Farm Power and Machinery)	28.072014	Permanent	Submitted
8.	Mr. Ajay Kumar	Lab Instructor (Computer)	04.09.2017	Permanent	Submitted
9.	Ms. Arti	Lab Instructor (Agronomy & Agro-Forestry)	17/04/2019	Permanent	Submitted
10.	Mr. Bhaskar Suntha	Lab Technician (Agronomy, Agro-Forestry)	21.7.2014	Permanent	Submitted
11.	Mr. Uma Kant,	Entomology	25.10.2021	Permanent	Submitted
12.	Ms. Sabina Yasmin	Lab Technician (Plant Pathology)	07.09.2022	Permanent	Not Applicable
13.	Mr. Ankit Jindal	Lab Technician (Genetics & Plant Breeding)	18.08.2018	Permanent	Submitted
14.	Ms. Swati Suman	Lab Technician (Genetics & Plant Breeding)	19.09.2022	Permanent	Not Applicable

15.	Mr. Ram Avatar	Lab Technician (Horticulture)	18.08.2018	Permanent	Submitted
16.	Mr. Trilok Singh	Lab Technician (Microbiology)	26.8.2013	Permanent	Submitted
17..	Mr. Sumer Singh	Agriculture Supervisor	01.09.2013	Permanent	Submitted
18.	Ms. Mona	Lab Technician (Horticulture)	18.12.2022	Permanent	Not Applicable
19.	Mr. Manish	Field Supervisor	18.12.2022	Permanent	Not Applicable
20.	Mr. Narveer	Farm supporting staff	05.04.2021	Permanent	Submitted
21.	Mr. Naresh	Farm Supporting Staff	05.04.2021	Permanent	Submitted
22.	Mr. Haroon	Farm Supporting Staff	07.09.20222	Permanent	Not Applicable
23.	Mr. Arun	Farm Supporting Staff	07.09.20222	Permanent	Not Applicable
24.	Mr. Jagprasad	Field Supporting Staff	05.07.2022	Permanent	Not Applicable
25.	Mr. Kanhaiya	Field Supporting Staff	05.07.2022	Permanent	Not Applicable
26.	Mr. Shish Pal	Farm worker	01.09.2018	Casual (Master roll basis)	Not Applicable
27.	Mr. Desh Raj	Farm worker	01.09.2018	Casual (Master roll basis)	Not Applicable
28.	Mr. Murari Lal	Farm worker	01.09.2018	Casual (Master roll basis)	Not Applicable
29.	Mr. Babu	Farm worker	01.09.2018	Casual (Master roll basis)	Not Applicable
30	Ms. Kamla	Farm worker	01.09.2018	Casual (Master roll basis)	Not Applicable
31.	Ms. Kashmiri	Farm worker	01.09.2018	Casual (Master roll basis)	Not Applicable
32.	Ms. Meena Devi	Farm worker	01.09.2018	Casual (Master roll basis)	Not Applicable
33.	Mr. Jagbir	Farm worker	01.09.2018	Casual (Master roll basis)	Not Applicable
34.	Mr. Om Prakash	Farm worker	01.09.2018	Casual (Master roll basis)	Not Applicable

6.4.4. Classrooms and Laboratories

The school has well equipped high-tech classroom and laboratories with wide range of instruments and provide hassle free experience in learning and research. School has well equipped and digital class rooms with maximum sitting capacity of 62 students each. However, small class rooms with capacity of 20 students each class room is allocate for PG programme. The classrooms house latest ICT technologies (multimedia and LCD projectors along with white boards) for enabling interactive and participatory learning of the students for PG programme.

Average number of students in theory and practical batches for M.Sc. (Hons.) Agronomy programme is given below.

Academic Year	Number of Sections / Batches	Theory Batch		Practical Batch	
		Section Name	Number of Students Per section	Batch name	Number of Students per batch
M.Sc. (Agri.) Agronomy					
2018-19	1	Sec A	07	Batch 1	07
2019-20	0	0	0	0	0
2020-21	0	0	0	0	0
2021-22	1	Sec A	04	Batch 1	04
2022-23	1	Sec A	02	Batch 1	02

CLASSROOMS & LABORATORIES

S. No.	Room	Number	Area (sq ft)	Room no.
1	Classrooms (PG)	3	15*20	B403A, B406, B407
2	Laboratories (UG)	1- Plant Pathology & Entomology	38*26	B414
		1-Horticulture & Food Processing	38*26	B401
		1-Soil Science	38*26	B415
		1-Agronomy	38*26	B416
		1-Genetics & Plant Breeding	38*26	B417
		1-Agricultural Extension Studio	24*12	B203
		1- Communication Skills lab	47x35	B016
		1 - Computer cum language lab	47x35	B120
3	Laboratories (PG)	Agronomy research Lab	38*26	B402

UG Laboratories

List of lab/field equipment for each Division/Department/Section

1. Agronomy + (Agroforestry)

Sl. No.	Name of equipment	Units
1	Hot air oven	01
2	Moisture box	30
3	Moisture meter	02
4	Tube Auger	05
5	Bucket auger	05
6	Weighing Balance	01
7	Seed Germinator	01
8	Conductivity Meter	01
9	pH Meter	01
10	Water Bath	01
11	Shaker	01
12	Chlorophyll Meter	01
13	Drip and Sprinkler System	06
14	Sprayer	02
15	Spring Balance 50 Kg	01
16	Spring Balance 10 Kg	02
17	Top Pan Balance 1 kg capacity	01
18	Top Pan Balance 2 kg capacity	01
19	Meter Scale	05
20	Tape	05
21	Brix meter	01

2. Agricultural Economics + (Basic Economics, Maths & Computer Science and Statistics)

S. No.	Name of equipment	Units
1	Computers	20
2	Camera	01
3	Software	Available

3. Agriculture Extension & Communication + (Sociology and Psychology, English)

Audio-visual Lab

S. No.	Name of equipment	Units
1	LCD projector	1
2	Camera (SLR) with zoom, wide-angle, tele-photo lens	1
3	Video camera with tripod, lighting accessories and editing facility	1

4	Computers (workstation) with editing softwares	1
5	Digital voice recorders	3
6	Audio recording-mixing consoles	1
7	Computation softwares for statistics	1

4. Entomology

S. No.	Name of equipment	Units
1	Binocular Microscope	04
2	Insect Box	200
3	Insect Collection Nets	100
4	Collection Bottles	100
5	Insect Collection Big Boxes for Museum (1 for each order)	05
6	Insecticides for showing students/Representative for each group	As per demand
7	Electronic Balance	01
8	Soxhlet Extraction Apparatus	-
9	Bee keeping equipment	01
10	Oven	01
11	Patters Tower	01
12	Sprayers	01
13	Light traps	05
14	Fumigation Chamber	01
15	Sides/cover slips	30
16	Computer with printer	01

5. Genetics & Plant Breeding + (Seed Science & Technology)

Genetics Lab.

S. No.	Name of equipment	Units
1	Microscope	03
2	Binocular microscope	04
3	Electronic Moisture Meter	02
4	Electronic Balance	01
5	Seed Germinator	01
6	Automatic seed/grain counter	01

Biotechnology

S. No.	Name of equipment	Units
1	Hot Air Oven	01
2	BOD Incubator	01
3	Fluorescence microscope	01
4	Centrifuge	01

6. Horticulture + (Food Science & Technology)

a. Labs (Post Harvest)

S. No.	Name of equipment	Units
1	Hand Refractometer	05
2	Digital Refractometer	02
3	Oven	01
4	Refrigerator	01
5	Electronic Weighing Balance	01
6	Pan Balance (1 kg & 10 kg. capacity each)	02
7	pH Meter	01
8	Fruit crusher	01
9	Grinding and Mixing Machine	01
10	Distillation Assembly	01

b. Lab (UG Lab)

S. No.	Name of equipment	Units
1	Seed Germinator	01
2	Grafting and budding knife	30
3	Secateur	30
4	Saw	05
5	Loppers	05
6	Mist Chamber	01
7	Poly house with drip irrigation system	01
8	Microscope	02

c. Food Science & Technology

S. No.	Name of equipment	Units
1	Refrigerator	01
2	Muffle furnace	01
3	Weighing balance	01
4	Water bath	01
5	Hot air oven	01
6	Pulper	01
7	Juice extractor	01
8	Microwave oven	01
9	Baking oven	01
10	Sieve shaker	01
11	Poly pouch sealer	01
12	Crusher	01
13	Masala grinder	01
14	Dehydrator	01
15	Cold room	01
16	Vacuum pump	01

7. Soil Science and Agricultural Chemistry + (Microbiology, Agro-meteorology, Environmental Sciences)

S. No.	Name of equipment	Units
1	Electronic Top pan balance (0.1 g capacity)	01
2	Electronic Top pan balance (1 mg capacity)	01
3	Hot air oven	01
4	Ph Meter	01
5	EC Meter	01
6	Flame Photometer	01
7	Visible spectrophotometer	01
8	Hot Plate	02
9	Distilled water unit	01
10	Water Bath	01
11	Rotary Shaker	01
12	Binocular Microscope	01
13	BOD Incubator	01
14	Autoclave	01
15	Laminar Air Flow	01
16	Microwave oven	01
17	Digestion block	01
18	Hydrometer	01
19	Infiltrometer	01
20	Hydraulic conductivity meter	01
21	Atterberg's limitsmeter	01
22	Nitrogen Analyzer	01

8. Agrometeorology

S. No.	Name of equipment	Units
1	Thermometer Max	01

2	Thermometer Min	01
3	Digital Anemometer	01
4	Cup Anemometer	01
5	Pan Evaporimeter	01
6	Soil thermometer 05 cm.	-
	10 cm.	-
	15 cm.	01
7	Rain gauge	01
8	Sunshine Recorder	01
9	Stevenson's Screen	01
10	Thermograph	01
11	Hygrograph	01
12	Soil Heat Flux Plate	01
13	AWS (optional)	01
14	Lysimeter (optional)	01
15	Luxmeter	01
16	Solar Pyranometer	01
17	GPS Meter	02

9. Plant Pathology

S. No.	Name of equipment	Units
1	Microscope compound with photodisplay arrangement	01
2	Sterobinocular	12
3	Sample processing Board (Dry preservation of samples)	02
4	Wet preservation Jars	20
5	Autoclave	01
6	Oven	01
7	Deep Freeze	01
8	Centrifuge (3000 rpm)	01
9	Refrigerator	02
10	Water bath	01
11	Electronic balance	01

12	Weighing machine	01
13	Incubator	01
14	Occular meter	03
15	Stage Micrometer	01
16	Camera Lucida	01

10. Animal Sciences including Fisheries

S. No.	Name of equipment	Units
1	Hand and electric centrifuge	01
2	Hot air oven	01
3	Micro kjeldahl N digestion & distillation apparatus	01
4	Soxhlet unit for fat estimation	01
5	Hot plate, Fiber Tech.	01
6	Vacuum pump	01
7	Willy mill grinder	01
8	Platform balance (100 kg cap)	01
9	Milk analyzer (automatic)	01
10	Distilled water unit	01

11. Dairy & Poultry

S. No.	Name of equipment	Units
1	Milking machine	01
2	Milking bucket	01
3	Milking can	01
4	Animal and bird identification tools	01
5	Chaff cutter	01
6	Lactometer	01
7	Castrator	02
8	Electric dehorner	02
10	Cattle crate	01
20	Artificial Insemination Gun	02

12. Agriculture Engineering + (Farm Management)

S. No.	Name of equipment	Units
1	Working models of MB plough, Disk plough and indigenous plough cultivator	1 set each
2	Working model of different harrows	1
3	Seed drill	1
4	Working models of reaper and mowers	02
5	Different types of sprayers and dusters	2 Hand spray
6	Cut model of CI & SI engine	

7	Cut model of Tractor	
8	Tractor with trolley	1
9	Water tanker	1

13. Central Library and Information System

S. No.	Name of equipment	Units
1	Internet Server	3
2	Intranet Server	--
3	Computers for Reading Hall	102 (Room No.) 120-B (30 nos.); 121-B (24 nos.); 220 (28 nos.); 205 (20 nos.)
4	Heavy Duty Photocopiers	6
5	Computerized Issue and Catalogue Systems	3
6	Wi-Fi facility in college/library/hostels	Available in the entire university
7	CCTV monitoring system for library	7
8	RFID and Access Control System (Optional)	--
9	Broadband Internet Connectivity with minimum speed of 1Gbps	1

PG Laboratories (Research Lab):

PG lab is equipped with latest model of moisture meter, basic soil sampling kit, Chlorophyll meter, nitrogen analyser, refrigerator, microscope, herbarium Seed samples of different crops, oilseeds, pulses and horticultural crops are kept in lab for identification purpose. Other agronomical equipment are kept on research farm of school.

S. No.	Instrument/Equipment	Unit
1	Moisture box	30
2	Moisture meter	02
3	Tube Auger	05
4	Bucket auger	05
5	Seed Germinator	01
6	Shaker	01
7	Chlorophyll Meter	01
8	Spring Balance 10 Kg	01
9	Top Pan Balance 3 kg capacity	01
10	Tensiometer	01
11	Weather Station equipments	01
12	AAS(Atomic Absorption Spectrophotometer with accessories)	01

13	Lab Refrigerator -10*c with stabliser cap 165 Lt	01
14	Visible Spectrophotometer(with 340-1100nm)	01
15	Double distilled water Unit Cap - 5 Lt with auto cutoff	01
16	Microprocessor centrifuge 1000rpm with 15 ml&30ml test tube with angle head	01
17	Hot Air oven,18*18 dobule wall disital 12*12	01
18	pH meter digital with stand	01
19	EC Meter,digital with cell with stand	01
20	Nitrogen Analyser , Semi Auto for distilation with all accessory	01
21	Horizontal shaker 24 flask	01
22	Weighing Balance 10mg-300gm	01

Farm Land Utilization:

S. No.	Cultivated land	Area (Sq.m.)
1	Farm B (old farm):	
	a. Polyhouse	2000
	b. ELP+ Crop cafeteria	3502
	c. Herbarium medicinal area	1040
	d. Agronomy Research field (PG)	3508
	e. Farm Units	714
	Total	10764
2.	Farm between A & B Block	
	Farm A1 + Farm A2	3150+ 4510=7660
3.	Farm C (seed production farm)	6339
4.	Fruit farm (Orchard)	8000

Total Area = Farm B (old farm) + Farm A1 & A2+ Farm C (seed production farm) + Fruit orchard

= (10764+7660+6339+8000) sq.m.

= 32763 sq.m.

Area in acres : **8.09 acres**

Area sown (ha) : **3.27 ha**

6.4.5. Conduct of Practical and Hands-on-Training

The students of PG are provided with practical knowledge of agricultural practices both in laboratories and field. The students are exposed to hands on training in gaining practical experience in field operations, in documenting the biometrical traits of the crops, handling of various equipment in the laboratory and estimation of various parameters based on the course requirement. The students are sufficiently benefited with hands-on training during their practical classes and acquire skills on technology and process of crop production and protection technologies. The students perform all the lab and field activities on their own under the supervision of the course teacher and lab assistant. The course in-charge ensures that all the students participate in the practical. The practical modules are also developed as per the syllabus of each and every subject to enable students about practical knowledge.

The M.Sc. (Ag.) students were provided training under Pradhan Mantri Kaushal Vikas Yojana 2.0 on Soil & Water Testing Lab Analyst - AGR/Q8103 during the period April to October 2019.

6.4.6. Supervision of students in PG/PhD programme

Supervision of students for M. Sc. (Agri.) Agronomy programmes

Supervision of students in M. Sc. (Ag.) Agronomy programmes: Seven students are being supervised by faculties as per ICAR guidelines. Details are given below:

Name of Students	Advisory Name	Thesis Title
Suddakanti Saranya	Dr. Sahadeva Singh	Weed management in mustard (<i>Brassica juncea</i> L.)
P.V.L.V. Satya Sai	Dr. Sahadeva Singh	Effect of basal and foliar application of nitrogen on performance of mustard (<i>brassica juncea</i> L.)
Shaddarsanam Nikhitha	Dr. Sahadeva Singh	Growth and yield response of mustard (<i>Brassica juncea</i> L.) to soil and foliar nitrogen application
Dundigala Ravali	Dr. Sahadeva Singh	Response of barley (<i>Hordeum vulgare</i> L.) to varying levels of nitrogen
Avula Sai Sundeep Reddy	Dr. Sahadeva Singh	Response of late sown wheat (<i>Triticum aestivum</i> L.), to varying irrigation and nitrogen levels
Kunta Vamsi Krishna	Dr. Sahadeva Singh	Effects of Different Levels of Nitrogen on Growth and Yield Parameters of Oat (<i>Avena sativa</i> L.)

N. Shashi Priya	Dr. Sahadeva Singh	Studies on the Responses of Late Sown Rabi Wheat (<i>Triticum aestivum</i> L.) Following Application of Different Nitrogen Levels Under Irrigation in Haryana
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6.4.7. Feedback of stakeholders (students, parents, industries, employers, farmers etc.

GD Goenka University conducts survey and interactive sessions for the stakeholders of the institute to seek feedback on the programme structure of M.Sc. (Ag.) Agronomy. As a part of this, the feedback on various curriculum aspects and courses is collected from the students, faculty, parents, Industry experts, subject experts from ICAR and farmers. An effective Mentor – mentee system is functioning at the school level to get feedback from the students regarding curricula and extracurricular activities.

The feedback targets following different content for different stakeholders.

- For **students**, it addressed curriculum and its learning related issues in terms of quality, competence, skills and professionalism. This feedback also considers other issues like delivery of curriculum by teachers.
- For **teachers**, the feedback addressed issues like suitability the course and its need base outcomes of the curriculum, relationship with course content and corresponding reference material, availability of reference materials in terms with curriculum, evaluation methods and curriculum delivery etc.
- For **employers**, it addressed issues like general communication skills, developing solutions to real life problems, working in a team, creative challenges to challenges, organization skills, learning of new techniques, integration of technology for work as learnt through the curriculum.
- For **alumni**, it aimed for responses on adequateness of courses curriculum, sufficiency of syllabus content in context of current professional standards and curriculum design in context of development of self-directed learning and problem solving approach.
- Feedback obtained from the **parents** is considered as vital for the development of any educational institution and hence, the feedback is collected to improve the academic discipline in terms of timely conduct of lectures, practical and other activities.

School of Agricultural Sciences in G D Goenka University started academic year 2018-19, Feedback Committee has *Taken Action* on the *Feedback* received and reported few issues or queries related to curriculum and other facilities. The summary is as under:

2018-19 – Most of the students answered YES to all questions but still some students demanded of updating in the syllabus. New books to be added to the library subject wise.

Remedial Action: As per feedback received from the students, members of the committee revised syllabus and prepared the curricula for various programmes of SoAS at GDGU and recommend the same to the Academic Council for approval.

2019-20 – Mostly students answered YES to all questions and few of them mark No because students demanded some instrumentation facility at laboratories and Research Farm/ Field set up for smooth carry out his/her experimental work/project. On asking for any other suggestion most of the students complained about the network issues they are facing during online classes and availability of study material for them. Some students also asked about their internships and training.

Remedial Action: Feedback received from students at the end of the session and committee takes needful action and provide basic or sophisticated instruments and research Farm established in the university which is used for the research or practical work. Changes in the syllabus were made according to the ICAR Fifth Deans' Committee. Faculties and students were advised to procure good quality of internet broadband for smooth running of classes, evaluation and examinations, better wi-fi facility improved the connectivity. Internship and training carried out at ICAR, CoA, KVKs of various SAUs.

2020-21 – Almost all students answered YES to all questions. Except few student who were not agreed and reported extra load in week for them and few parents demanded value based courses and interdisciplinary project based learnings too for advanced learning and accordingly courses to be designed. Feedback collected at the end of the academic year 2019-20 during Covid-19 lockdown period. Majority of students (up to 80%) answered in YES and 20% answered NO to the questions asked to them through google form. So, it is evident that students were satisfied with the curriculum and syllabus. Some students reported overburdened load.

Remedial Action: Students were given relaxation in work load BSA slots were provided. Students were counseled for the relevance of the course content and its importance, IDP and VAD were introduced for advance learning. Students were satisfied with the curriculum and syllabus and also had opinion that curriculum is competent to fulfill the demand of the current industrial requirements.

2021-22- Feedback collected at the end of the academic year. For queries on study material all students were provided with the study material such as soft copy of books, question banks and presentations by the concerned subject faculties. Faculties took extra classes and rescheduled some classes in which students faced network issues. Students were informed that their internships will be arranged once the situation of COVID-19 is improved so, students were sent for internships and trainings later.

Remedial Action: Students were satisfied with the facilities provided by the university during pandemic period and fulfilled the demand of the internship/training and industrial requirements.

6.4.8. Student intake and attrition in the programme for the last five years:

The Programme was started in 2018-19 with a student intake of 07 for M. Sc. (Ag.) Agronomy programme followed by an intake in the academic year 2019-20, 2020-21 were zero respectively and 2021-22 & 2022-23 were 04 & 02 respectively. The details on the intake capacity, number of students admitted and the student attrition during the four-five years is given in the table below:

Student Intake & Attrition (PG)

Batch	No. of Students admitted	No. of Students dropped/withdrew	% Student Attrition
2018-19	7	0	0
2019-20	0	0	0
2020-21	0	0	0
2021-22	4	0	0
2022-23	2	0	0

Employment sector and percent employment of students of M. Sc. (Ag.) Agronomy passed out in June 2020

AY	No. of Students graduated	Employed in					Total	Percent Employment
		Central	State	Bank	Private	Entrepreneur		
2021-22	07	NIL	NIL	NIL	04	NIL	04	57.14

Out of 07 students, 04 students placed in various industries and rest 03 students were engaged in start-up in seed production and dairy.

6.4.9. ICT Application in Curricula Delivery

For M. Sc. (Ag.) Agronomy

Information and Communication Technology (ICT) is the integral part of teaching and learning programme when teachers are digitally literate and understand how to integrate in to curriculum. School uses a diverse set of ICT tools to communicate, create, disseminate, store and manage information. The School of agricultural sciences is imparting knowledge through Audio Visual Aids likes Collar mike and power point presentation. The students of our school are also well conversant with ICT and they are using the system at their seminars, assignments and research thesis presentation as well their training and entrepreneurship programmes. The available facilities are as under:

Internet Server: The School of Agricultural Sciences has well-equipped classrooms with the latest ICT technologies (multimedia and LCD projectors along with whiteboards) to make learning more interactive and effective. There is 24*7 internet and three Wi-Fi connection available to help the students and faculty participate in online programs.

A computer for Reading Hall: The reading room has thirty-eight desktops with full of internet connection that allows access to online resources available.

Heavy duties photocopiers: It has six heavy photocopier machines that allow photocopy, print, and flex printing. It also provides scanning, photo editing, and poster printing in all different sizes.

Computerized issue catalogue System: The library has three automated systems where all library related activities through Library Software that provides an effective and wide range of academic resources such as books, journals, online databases, DVDs and other valuable materials.

Technology-Enabled Classrooms: The faculty members use IT-enabled learning tools such as PPT, Video clippings, Audio systems, and online sources to expose the students with advanced knowledge and practical learning. The classrooms are well furnished with a Computer, LCD projector, audio system, and internet and Wi-Fi connection.

Digital Library: There are computers available for the student-teachers to access electronic resources, broadband, and Wi-Fi connection. Its prompt and effective services are synchronized with the changing needs of the academic community, which is moving towards electronic resources such as e-books, e-journals, and databases.

Computer and Language Lab: Well-furnished with a server and seventy-two systems with high configuration and LAN connection, headphones, interactive board with LCD projector and Internet and Wi-Fi Connected and Language Lab is well equipped.

Wi-fi enabled hostels: All the hostels are well equipped with a high-speed internet connection, wi-fi, air conditioning facilities for all rooms, and CCTV for monitoring the hostel.

CCTV monitoring system for the library: The library also has an internet connection and seven CCTV for monitoring resources such as books, journals, and magazines.

Broadband Internet Connectivity with a minimum speed of 1 Gbps: Broadband connections across the university's labs, offices, faculty lounge, and classrooms make it possible to access materials and carry out tasks smoothly and efficiently.

Summary of the ICT Application in Curricula Delivery

S. No.	Resources	ICAR requirement	Available
1.	Internet Server	01	03
2.	Intranet Server	01	--
3.	Computers for Reading Hall	20	38 (Room No. 120-B);

			Computers for practical: 72 (Room No. 121-B (24 nos.); 220 (28 nos.); 205 (20 nos.))
4.	Heavy Duty Photocopiers	02	06
5.	Computerized Issue and Catalogue Systems	02	03
6.	Wi-fi Facility in college/library/hostels	As per requirements	Available in the entire university
7.	CCTV monitoring system for library	01	7
8.	RFID and Access Control System (Optional)	01	--
9.	Broadband Internet Connectivity with minimum speed of 1 Gbps	01	01

6.4.10. The information pertaining to 6.4.1 to 6.4.9 is given for M.Sc. (Ag.) Agronomy.

6.4.11. Since the accreditation of Programmes is related to the All India Admission from ICAR and also having weightage for College accreditation, therefore the data presented in the section 6.4 is liable to the verification at any stage.

6.4.12. Certificate (Applicable when SSR is submitted for Programme)

I, the Dean Dr. S. S. Tomar hereby certify that the information contained in the Section 6.4.1 to 6.4.9 are furnished as per the records available in the college, and degree awarding university.



Signature of Dean with Date & Seal

Dated: 11.04.2023

