

## College of Horticulture and Forestry



The College of Horticulture and Forestry (CHF) is located in main campus of A.N.D.U.A.T., Kumarganj, Ayodhya (U.P.) The geographical area under the jurisdiction of the college is spread over in three zones namely, North Eastern Plain Zone, Eastern Plain Zone and Vindhyan Zone comprising 27 districts of Uttar Pradesh to strengthen the teaching, research and extension programmes.

Initially the department of Horticulture was initiated in the year, 1977 and the work on Horticultural crops were started at the Crop Research Station, Masodha and shifted to the main campus of the University at Kumarganj. At the beginning all the branches viz., Fruit Science, Vegetable Science, Ornamental Horticulture and Post-Harvest Technology were included in the Department of Horticulture. Later on, in the year, 1980 a separate department of Vegetable Science was established. The post graduate programmes were started in the year 1981 in College of Agriculture in disciplines of Horticulture and Vegetable Science. The department of Forestry was established in the academic year 1987-88, which was divided into two departments namely:(i) Department of Agro forestry and (ii) Department of Forest Ecology and

Environment with the establishment of College. The College of Horticulture and Forestry was established in 2006 with seven departments: (i) Fruit science (ii) Floriculture and Landscaping (iii) Post-harvest Technology of Horticultural Crops (iv) Vegetable Science (v) Medicinal and Aromatic Plants (vi) Agroforestry (vii) Forest Ecology and Environment and B.Sc.(Horticulture) programme. The post graduate degree was started in the discipline of Agroforestry and Forest ecology and environment in the year 2009 and 2010 respectively. The new building of College of Horticulture and Forestry was constructed in the University Campus in 2009 which was inaugurated by Hon'ble Vice-Chancellor, Dr. Basant Ram on 11-12-2009. Presently following degree programmes are running in College of Horticulture and Forestry

S. No.	Name of Degree Programme	Discipline
1.	B.Sc.(Horticulture) Hons.	Horticulture
2.	M.Sc. (Horticulture) Fruit Science & Ph.D. Horticulture	Fruit Science
3.	M.Sc.& Ph.D. (Horticulture) Vegetable Science	Vegetable Science

## 1. Teaching:-

### I. Admission (2018-19):

Total 68 students were admitted during session 2018-19. The branch wise details are given below:

Degree Programme	No. of students admitted
B.Sc.(Horticulture) Hons.	39
M.Sc. (Horticulture) Fruit Science	11
M.Sc. (Horticulture) Vegetable Science	09
Ph. D. Horticulture	04
Ph. D. (Hort.) Vegetable Science	05
Total	68

II. Orientation of fresher: Newly admitted students of UG, PG degree programme were acquired well with rules and regulations of the college/University just after completion of their registration and their fresher's party was organized by seniors students.

III. Farewell: BID- ADIOS a farewell programme was organized by PG students for outgoing PG students on 10/05/2019.

IV. Courses offered: Total 163 courses were offered in different degree programmes in 1st and 2nd semester, Session 2018-19.

V. Appointment of guest faculties: Total 1 guest faculty was engaged in the Deptt. of Vegetable Science for teaching in 2nd Semester of academic session 2018-19 and 3 guest faculties have been appointed in 1st Semester of academic session 2019-20.

VI. In-Plant Training: Under Experiential Learning Programme, students selected two areas for specialized

training namely processing of fruits and vegetables for value addition and nursery production and management under ELP. Under processing of fruits and vegetables- student prepared 20-25 types of processed products for marketing purpose and 33 types of products for training and demonstration purposes.

- Students procured raw material from the market and university farms and they prepared all products in the post harvest lab of the College. They sold out their products in Kisan Mela and on demand in the university premises. Total profit of the products were distributed among the students.
- Under Rural Horticultural Work Experience programme 55 students have got eight weeks experiences on rural work in the village Sidhauna, Block-Milkipur, District-Ayodhya . In this programme, @ two students per farmer family were allotted in the selected village to perform intensive study under the guidance of coordinator and teachers. Students thoroughly studied about present status along with social, cultural and farming related activities of farmer as well as village. For these purposes a proforma had been provided to them. In the end of programme students organized a Kisan Gosthi in which they presented status of village along with causes of poor yield, income and their solutions and also discussed their social and cultural activities in the presence of

Dean, College of Horticulture and Forestry, course coordinator, teachers, farmers and Gram Pradhan. Students gifted clonal planting material to their adopted farmers at the end of the gosthi. In the end of seminar students gifted self developed seedlings of papaya Cv. Pusa Nahna to adopted farmers through Dean, Coordinator and teachers.

- VII. Memorandum of Understanding (MoU): For the up-gradation of teaching and advancement in research and student's thesis research work, MoU has been signed with two national and one state level organizations namely ICAR-Central Institute for Subtropical Horticulture, Rehmankhura, Lucknow, ICAR-National Research Institute on Litchi, Mushahari, Muzaffarpur, Bihar and Forest Department, Sultanpur.



Hon'ble Vice Chancellor Prof. P. V. Sandhu, and Dr. S. Rajan, Director ICAR-CISH, Lucknow with a copy of MoU

VIII. Development:

- a. One smart class room has been developed in the Deptt. of Fruit Science.
- b. One PG laboratory has been upgraded for PG Students practical and thesis

research work.

- c. Commercial Floriculture- New area has been developed for commercial production of cut/loose flowers at MES Horticulture.
- d. Introduction of improved cultivars- Improved cultivars of Ber, Guava, litchi and kinnow has been introduced at MES Horticulture for identification and evaluation under eastern U.P. Conditions. A New citrus block at MES, Horticulture has been developed in which Mercut, Kinnow, Kinnow Seedless PAU-1, Daisy, Nagpur Seedless Mandarin-4, Nagpur Lemon-7 and 8(Seedless) varieties were planted on 18<sup>th</sup> September which was inaugurated by Hon'ble Vice Chancellor by planting a kinnow plant.
- e. Plantation and Beautification -
  - Plantation:- Hon'ble Governor of U.P., Shri Ram Naik, Chief Minister of UP, Agriculture Minister of U.P. and various senior officials of Faizabad commissionery were planted different trees on several occasions.
  - Ashoka plantation was carried out from main gate of University to Narendra Udhyan, In the presence of Hon'ble Vice Chancellor, Commissioner Ayodhya Division, District Magistrate and Sr. Superintendent of Police, Ayodhya.
  - Huge Number of teak plants were planted on the occasion of Independence Day in university campus in which Sri Manoj Mishra, Commissioner, Ayodhya Division was chief guest. In the plantation

programme Hon'ble Vice Chancellor, Deans, Director, Faculty and Staff members, students has participated.

- Lawn:- Three new lawns have been developed in front of ABM building.
- Expansion of nursery area for landscape:- Nursery area has been extended for production and maintenance of more ornamental plants. These plants are being used for the beautification of the university campus.
- Mechanization of landscape division:- Latest power driven implements/ equipment has been introduced in landscape division for the maintenance of Lawn, hedge and greenery in the university campus.
- Strategy for more plantation:- University has make a new strategy for more plantation and to generate more income in coming years. In this regard it has been decided that each student/staff of the university will plant high valued plants @ 5 plants/year and Faculty members @ 10 plants/year per individual and the plants will be maintain by them up to four years. This should be mentioned in the record of individuals concerned.

IX. Participation in National Exams- The following students have qualified the National eligibility test in 2018 conducted by ASRB and ICAR-AIEEA (JRF), 2019.

Exams	Students Qualified (2018-19)
ICAR-ASRB NET	25
ICAR-AIEEA (JRF),	14*

\*Out of fourteen, three students have qualified

with full JRF fellowship in which two students got admission in IARI, New Delhi.



Felicitation of NET qualified Students by Hon'ble Vice Chancellor

#### X. Trainings:-

- Two Training programmes under MIDH Project was held on 28.01.2019 and 31.03.2019 in the gracious presence of Hon'ble V.C. Prof. J. S. Sandhu and Director NRC Litchi Mujaffarpur Dr. Vishal Nath Pandey. In each training programmes groups of 75 farmers were participated, seed packets of medicinal plant and literature were distributed among farmers during training programme.

#### XI. Projects Running in the College

- All India Coordinated Research Projects-06, Stat Non Plan-02 and MIDH-01
- Ongoing Adhoc Projects: 02
  1. Collection, Characterization, Evaluation, Maintenance and registration of minor seed spices grown in farmers field sanctioned for two years (2017-2019) by protection of Plant varieties and farmers Rights Authority, Ministry of Agriculture and Farmers Welfare, Govt. of India.
  2. Capacity building and technology

demonstration on processing of local fruits and vegetables for alternate livelihood of 'Tharu' tribe women Funded by DST Govt. of India.

- ADHOC Projects Proposal Submitted:

A total of fifteen adhoc projects have been submitted to different funding institutions viz., RKVY, MIDH, NOOP, UPICAR etc. which cost around 8.57 crores.

## XII. Co-curricular activities:-

- Apple Bazar day was organized on 18<sup>th</sup> September 2018 at MES, Horticulture, College of Horticulture and Forestry.
- Mango and Jamun exhibition was organized at Administrative block of the University on 02/07/2019 in which 148 farmers and Scientists of twenty six districts of Eastern U.P. were participated. Sixty outstanding germplasms of mango have been identified on the basis of biochemical and organoleptic test. These germplasms will be established in the Bio Diversity Park at Govind Nagar Farm, Horticulture for further evaluation.
- One day "International Potato Day" was organized on dated 16/01/2019 at MES Vegetable farm. This Programme was inaugurated by Hon'ble Vice-Chancellor. A number of Programme like Kishan Goshthi, Booklet distribution, field visit and exhibition etc. were organized. More than 200 Farmers, Researchers, Scientists, Students and Potato Growers were participated.

- Hon'ble State Agriculture Minister, U.P. Sri Surya Pratap Shahi has visited MES, Horticulture and Vegetable and Planted molshree plant in Narendra Udhyan on 09/07/2019.
- Hon'ble Chief Minister, U.P. Sri Yogi Aditya Nath has visited University on 08/07/2019 and planted molshree plant in Narendra Udhyan.
- Voter's awareness day was organized for students at University level in the College of Horticulture and Forestry on 25.01.2019.
- Participation of University in Aam Mahotsav at Indra Gandhi Pratishthan organized by Directorate of Horticulture, U.P. from 22-23 June, 2019.
- At MES Horticulture One hectare area has been developed for commercial production of cut/loose flowers.
- Improved cultivars of ber, guava litchi and kinnow has been introduced at MES Horticulture for identification and evaluation under eastern U.P. Conditions.
- Hon'ble Governor of U.P. Shri Ram Naik planted Sandal wood plant on 06/09/2018 at Narendra Udyan.
- Awareness programme for identification and management of banana wilt (TR-4) was organized in collaboration with ICAR-CISH, Lucknow and CSSRI, Lucknow on 24/01/2019 at NDUAT, Kumarganj, Ayodhya for Scientist and farmers Under MoU.
- A meeting has been organized between Acharya Balkrishna, CEO of Patanjali



group of Industries with University scientist Dr. Sanjay Pathak Professor and Head, PHT, regarding sell out of processing technology to patanjali group of Industries, Haridwar. Acharya ji showed his interest in osmo-dehydrated product of ber.

- Electrification of 46 ha land by investing Rs. Two lakhs at Govind Nagar farm of the College.
- Mechanization of Akma farm for reducing the labour cost.
- 04 FLD were conducted at four sites viz- Bharatpurva, Sidhouna, Jorium and Katghara village for demonstrating the superiority of four varieties cultivars K. Ashoka, K. Sadabahar, K. Sindoori and K. Pushker over local varieties.
- Radio talks: Fifty two in different horticultural aspects from the college.
- 460 students of different colleges has been visited different laboratories and experimental fields of college of Horticulture and Forestry.

## 2. Achievements and recommendations

### Vegetable Science

#### Potato

- Tuber treatment with *Trichoderma Viride* @ 8g/kg at planting is most effective measure to control of black scurf disease.
- The spraying of tubers with boric acid (3%) is an effective as boric acid dip treatment of tubers. Boric acid spray treatment of tubers after harvest and before cold storage is therefore, recommended for the control tuber

borne disease.

- Prophylactic spray (just at the time of canopy closer) with Mancozeb followed by dimethomorph + nabcizeb @ 0.25% was found effective to control late blight of potato.
- Three new varieties namely Kufri Ganga, Kufri Lima and Kufri Neelkanth were released at national level. Scientists of Faizabad centre has worked as an associate worker to release in the varieties.
- Whole tubers were found to be more productive than cut tubers to increase plant populations per unit area. Hence whole tubers (25-50 g) is recommended for planting of crop.
- Maximum tuber yield and highest net returns from potato was recorded with treatment having mulching and one extra irrigation at stolon formation, tuber initiation and tuber development stages.
- Metribuzin @ 0.75 kg/ha PE or POE at 10% germination is recommended for effective weed management.
- On the basis of two years results, it has been found that application of 100 kg  $P_2O_5$ /ha with recommended dose of N and K (150,120 kg/ha) produced higher yield and net returns of Potato in Eastern U. P.

### Spices

#### Ginger

- The lowest incidence of soft rot of ginger was found in soil solarization + plastic mulching + rhizome treatment with 2% neem oil (39.30) q/ha.

### Turmeric

- Out of 180 Germplasm evaluated and found that LTS-1, NDH-128 and NDH-11 were promising for high yield of rhizome under Central Varietal trial.

### Coriander

- 196 germplasm of coriander were evaluated in which NDCor-11, NDCor-12, NDCor-12, NDCor-111, NDCo110, NDCar-102 and NDCar-106 germplasms were found promising for high seed yield.

### Fenugreek

- 202 germplasm of fenugreek were evaluated in which NDM-47, NDM-119, NDM-49, NDM-120, NDM-80, NDM-120 and NDM-112 were found promising for high seed yield.

### Fennel

- Total 164 germplasm of Fennel were evaluated in which NDF-46, NDF-51, NDF -45, NDF -84, NDF-77, NDF-74 and NDF-68 were found promising for high seed yield.

### Black Cumin

- Total 36 germplasm of Black cumin were evaluated in which NDBC-20, NDBC-7, NDBC- 14, NDBC-20 and NDBC-7 were found promising for high seed yield.

### Azowain

- Total 36 germplasm of Azowain were evaluated in which NDAJ-10, NDAJ -30 and NDAJ-34 were found promising for high seed yield.

### Post-Harvest Technology

- Bagging of rainy season guava fruit

with violet color cellophane paper was found best for enhancement of quality, taste and storability of rainy season fruit. Bagged fruits were found excellent in appearance and taste. These fruits were found free from fruit fly and anthracnose problem.

- Guava RTS and squash dyed with annatto color obtained from 0.8 g and 2 g seed per liter respectively found best on the basis of biochemical and sensory evaluation. These products can be stored upto 6 and 12 month of storage respectively with outstanding stability of colour.

### Seed Produced

S. No.	Crop	Quantity
1	Vegetable Peas	385 Kg of three varieties
2	Bottle gourd	14Kg of three varieties
3	Pumpkin-	5kg
4	Okra	5.5 Kg
5	Sponge gourd	5.5 Kg
6	Spinach	6kg
7	Radish	0.5 Kg
8	Chilli	0.5 Kg
9	Tomato	2.06 Kg from eight varieties
10	Fenugreek	27 kg
11	Coriander	100 Kg
12	Bitter gourd	28 Kg
13	Elephant foot yam	176 Kg from two varieties.
14	Banda	20 Kg from two varieties.
15	Turmeric	5292
16	Potato	11847
17	Brinjal	0.3 from three varieties

## Fruit Science

### A) Promising genotypes in pipelines:

Aonla-NA-25,NA-26,NA-27,NA-29 and NA-32

Bael- ND/AH-8, ND/AH-9, ND/AH-10, ND/AH-11, ND/AH-12,ND/AH-16, ND/AH-17, ND/AH-21, ND/AH-22, ND/AH-25, ND/AH-26, ND/AH-27, NB-19,NB-21 and NB-22

Ber- Narendra Ber Selection-9, Narendra Ber Selection-10, Narendra Ber Selection-11, Narendra Ber Selection-12.

Jamun- CISHJ-37, CISHJ-42, NJ-6,NJ-7, NJ-8, NJ-9

### B) New germplasm collected

Aonla- NA-40, NA-41, NA-42, NA-43, NA-44

Bael- Narendra Bael-32, Narendra Bael-33, Narendra Bael-34, Narendra Bael-35, Narendra Bael-36.

Ber- Narendra Ber-24, Narendra Ber-25, Narendra Ber-26

Jamun- NJ-18, NJ-19, NJ-20, NJ-21, NJ-22, NJ-23, NJ-24, NJ-25, NJ-26, NJ-27, NJ-28, NJ-29.

### C) New promising germplasm identified

Aonla -maximum fruit yield 85 kg/plant in NA-26 followed by NA-25.

Bael- Maximum fruit yield 120 kg/plant was recorded in ND/AH-10 followed by ND/AH-8.

Ber- Maximum fruit yield 30 kg/tree in Narendra Ber -9 followed by Narendre Ber 10

Litchi:- First varietal Evaluation cum demonstration trial on litchi was conducted including four varieties Gandaki sampada, Gandaki Lali, Shahi and China.

### E) Planting density trail on bael cultivar NB-5 -The maximum yield was noted with combined effect of 8 x 8 m planting space with 25% pruning.

- Amritpani @ 20 % at weekly interval was found most effective for production of papaya nursery. These plants were found healthy and free from diseases.

### Pathological experiments-

#### BER:

- Out of forty nine germplasm of ber, Tikadi cv. was found resistant against black leaf spot under eastern U.P conditions.

#### Bael:

- Efficacy of different fungicides against foliage diseases in bael nursery caused by *Myrothecium roridum*, *Alternaria alternata* and *Fusarium p allidoroseum* was tested. On the basis of four years (2015-2018) observations Propiconazole 25 EC @ 0.1% was found best for the management of foliar diseases.

### 4. [Conference/Seminar/Workshop/ Training Organized](#)

A total of four trainings has been organized on different aspect of horticulture and forestry.

### 5. [Conference/Seminar/Workshop/ Training participated](#)

A total of twenty one national and



international conferences/seminars has been attended by different scientist of College at different places.

from different organization like ICAR, CSIR and SAUs have been visited to the university under different programmes.

## 7. Visits/Visitors

Total of 30 Scientist/Higher dignitaries



Dr Tej Veer Singh Dhillon, Director Seed and Farm, PAU, Ludhiyana



Shri Surya Pratap Shahi, Hon'ble Agriculture Minister, U.P.



Visit of Potato Experiments by Farmers at MES Vegetable Farm



Dr. Vishal Nath Pandey, Director, NRC, Litchi, Muzaffarpur



Inauguration of "Potato Day" by Hon' ble Vice- Chancellor at MES Vegetable Farm



Hon'ble Vice Chancellor Visited Spices Field at MES Kumarganj.



MLC U.P. and Board member Visited Spices Field



AICRP on Spices Monitoring team visited Spices crops.



Agro forestry System



Hon'ble Vice Chancellor and Mahant Hanuman Garhi in Kinnow Plantation



Molshree Plantation By Hon'ble Chief Minister



Hon'ble Principal Secretary Sri Anand Mohan Prashad and Hon'ble Vice Chancellor discussing with horticulture Scientist at Exhibition Stall



Director, CISH and Principal Scientist, CSSRI, Lucknow along with the Scientist of this University observing Jivamrit treated Papaya Plants





Awareness programme for identification and management of banana wilt (TR-4) in collaboration with ICAR-CISH, Lucknow and CSSRI, Lucknow at NDUAT, Kumarganj, Ayodhya



Students activities in ELP

A-Mango pulp extraction and storage, B- Air layering in lemon, C- Karonda pickle preparation

## 8. Placements

Nine Students got job in different State and Central govt. organizations.

## College of Fisheries



With the vision of creating new horizons in the field of fisheries, the College of Fisheries started in year 2006-07. At present the college offers Bachelor of Fisheries Science (B.F.Sc. Hons.) along with Master of Fisheries Science (M.F.Sc.), which has been started in the Department of Aquaculture and Fisheries Resource Management with 2 seats in each department. The students are admitted through the merit list of Combined Agriculture and Technology Entrance Test (CATET), being conducted every year. The qualification for admission in B.F.Sc. programme is Intermediate (10+2) in Science stream -Biology/Agriculture as basic subjects. For taking admission in M.F.Sc., the basic qualification is B.F.Sc. The recommendations of Fifth Dean's Committee of ICAR are being followed from session 2016-17.

Seven Departments have been functioning in the College of Fisheries:

S. No.	Department
1.	Aquaculture
2.	Fisheries Resource Management
3.	Aquatic Animal Health Management
4.	Aquatic Environment Management
5.	Fish Processing Technology
6.	Fisheries Engineering
7.	Fisheries Extension, Economics and Statistics

### Student Strength:

The student intake in B.F.Sc. is twenty six (26) and four (4) in M.F.Sc., 2 in each Department of Aquaculture and Fisheries Resource Management. The total number of students in the college in the present academic year is 86 including M.F.Sc. students. During last eight years, 237 students have been passed out in total.

### Programmes of teaching:

B.F.Sc. (Bachelor of Fisheries Science) is a 4 year degree programme. It is practical oriented professional course in which detailed theoretical instructions and intensive practical training are imparted in the field of fisheries sciences like production, post harvest technology, packaging, value addition, marine biology, economics and extension education. The programme is following the recommendations of Fifth Dean's Committee with a minimum total credit hours of 180. Under the two year M.F.Sc. degree programme, the students are offered a minimum total credits hours of 58.

### Infrastructure:

The College building has four undergraduate class rooms and seven post-

graduate class rooms along with two central laboratories, 6 research laboratories and 2 wet laboratories. Recently two laboratories have been upgraded and equipped with chemicals and new equipments. The college has a well managed library containing latest books, magazines and manuals published in fisheries and related fields.

The total area for the instructional fish farm is 4.0 ha. A circular carp hatchery and cemented nursery tanks were constructed under the 'Mega Seed Project' at the farm and are being currently used for practical and commercial seed production purposes. Successful carp breeding and seed production was performed in the hatchery during the breeding season in the current year. The students were practically acquainted with carp breeding techniques. Earthen ponds have also been constructed to store the waste water from the hostels and dairy farm. It is being reused for fish culture after proper biological treatment of the waste water. A trial on *Pangasius* culture is also undergoing in the farm besides carp polyculture. Four newly renovated ponds have also been stocked for practical fish culture operation. The fishes of the farm are used for different practical and breeding purposes for students. Rest of fish are sold time to time.



Instructional Fish Farm Visit by Hon'ble Agriculture Minister (U.P.) – Sri Surya Pratap Shahi Ji, D.G. UPCAR- Dr. Brijendra Singh and Dr. Ravindra Kaur, Principle Scientist, IARI, New Delhi



Hon'ble Vice-Chancellor (NDUAT) - Prof. J. S. Sandhu ji, Dean Prof. H.N Singh and faculty members interacting at the instructional fish farm

### Student Ready Programme:

The students were undergoing Hands on Training and Fisheries In-Plant Training till the last semester of the session 2018-19. From the academic session 2019-20, the students are undergoing Student READY Programme (SRP). In the SRP the students are attached to various aquaculture farms, seed production units, feed processing mills and fish processing industries at various states like Maharashtra, Gujarat, Harayana and Madhya Pradesh to learn the intricacies of industries. The students are exposed to various aspects of practical experience which makes them efficient in the concerned field of training.

After industry attachment programme under SRP students will be engaged in rural fisheries work experience programme for better extension exposure of fish culture. Further, the students will be taken to different institutes and industries in and out of the state. The students have to prepare a report of their work and visits and deliver a power point presentation. The teachers evaluate the performance with the Dean and Dean's nominee.





Students Working Under In- Plant Training and Practical Work at Fish Farm

### Student's Development:

The new students taking admission in the prestigious university were introduced to various rules, regulations and semester system through an orientation program. The students were also advised to participate in social, cultural, extra-curricular and sports activities during their degree. A brief of these activities are as follows:

#### a. Involvement in Social Activities

The students were actively involved in various social activities:

1. Exhibition to create the awareness about modern fishery technologies.
2. Group discussion on various social and current issues of national awareness.
3. General cleaning in and around college and public places under Swachh Bharat Abhiyan.

#### b. Involvement in Cultural and Literary Activities

The students participated in various literary activities such as essay competitions, debates and celebrate various occasions like World Environment Day, Hindi Diwas and Plantation program in the university campus. Cultural activities are also performed like dancing, singing and skits in Fresher's welcome and farewell parties. The winners are felicitated with prizes and certificates as a

token of appreciation.

### Sports and Extra Curricular Activities

The students actively participated in different indoor and outdoor games and also celebrated important national festivals- Republic Day, Mahatma Gandhi Jyanti, Narendra Deva Jayanti and Independence Day.



Student's Orientation Programme Welcome Programme

### Placement of Students:

In year 2018-19, a batch of 32 students passed out. Out of 32 students seven are pursuing M.F.Sc. and four are engaged in private industry. Others are preparing for competitive examinations. Executive personal of seed, feed and medicine are invited regularly to apprise our students about their organization and employment opportunity in fisheries sector.

### Extension Activities:

The College of Fisheries is also involved in extension programmes to enhance the fish production specifically at the village ponds. For extension activity "Fisheries Entrepreneurship Training Centre" at district Gonda (U.P.) have been established with the financial assistance of State Government to further increase the training and extension activities.



Scientists of the college participate actively in Kisan mela, Kisan gosthi, Farmer – Scientist interaction meets, Kisan call centers, Krishak help line services, TV & radio talks.



Hon'ble Vice-Chancellor in Kisan Mela Programme at FETC



Farmers in Training



Induced breeding and hatching of fish eggs being performed at instructional fish farm

## College of Home Science



Females constitute about half of the total population. They have multifarious roles to play. Besides managing their homes, farm and children, today more and more women are taking up jobs outsidess. Setting up and running a home is a serious job which requires the home maker to draw upon on her skills, knowledge, and experience to do the job well. The study of home science as a subject helps her to build the necessary scientific aptitude to achieve greater efficiency. The study of home science not only prepares her to do her job as a house maker efficiently but also helps her to prepare for various vocational areas like nutrition, textiles, dietician, interior decoration, child care and psychology etc.

The undergraduate programme leading to the degree of B.Sc. Home Science at N.D.U.A & T, Kumarganj, Ayodhya started in 1986 through the Department of Home Science as a constituent Department of College of Agriculture. Later in the year 1993, the department was upgraded to a fully fledged College of Home Science by the State Government. In the year 1999-2000, M.Sc. programme was started in the Department of Child Development with two seats. M.Sc. Programme in three more disciplines, namely, Food Science & Nutrition, Home Science Extension and Communication Management and Family Resource Management and Consumer Science was started

from academic session 2012-13 with intake of 5+1 seats each. Presently, college has five departments, namely-

1. Department of Food Science and Nutrition
2. Department of Textiles and Apparel Designing
3. Department of Family Resource Management and Consumer Science
4. Department of Human Development and Family Studies
5. Department of Home Science Extension and Communication Management

The Home Science College shifted to the present building on July 19, 2002. The additional wing of the college building was ready and handed over on 02.02.2015. The additional infrastructure has enabled the teaching in a more organized manner, though there are constraints of furniture like students' chair, podium etc in the classrooms and other store ware and curricular delivery aids.

### Degree Programmes:

The college of Home Science offers the following degree programmes for Undergraduate and Post Graduate Students.

**Programmes offered with duration:**

	Programmes	Duration
UG	B.Sc. Home Science/ B.Sc. (Hons.) Community Science	4 years
PG	M. Sc. (Home Science) Food Science and Nutrition,	2 years
	M. Sc. (Home Science) Human Development and Family Studies	2 years
	M. Sc. (Home Science) Family Resource Management and Consumer Science and Consumer Science	2 years
PhD	PhD (Home Science) Food Science and Nutrition	3 years
	PhD (Home Science) Human Development and Family Studies,	3 years
	PhD (Home Science) Family Resource Management and Consumer Science and Consumer Science	3 years

**Faculty**

There are total four regular faculties and seven guest faculties sharing the complete load of teaching. The supporting and some basic courses are taught by the faculty members from College of Agriculture and College of Veterinary Sciences and Animal Husbandry.

**Office and Supporting Staff**

The college has total eighteen office and

supporting staff.

**Student's Strength:**

At present there are total 103 students in the College of Home Science. This year total only 17 students have been admitted in BSc. Hons. Community Science and only one student has taken in admission in M.Sc. programme.

**Class wise distribution of students in session 2018-19**

Programme	I Year	II Year	III Year	IV Year	Total
B.Sc. (Hons.) Community Science	17	14	31	38	100
M.Sc. Food Science and Nutrition	Nil	02	-	-	02
M.Sc. Human Development and Family Studies	01	Nil	-	-	01
M.Sc. Family Resource Management and Consumer Science	Nil	Nil	-	-	Nil
Grand Total					103

### Passed out students and medal recipients:

Total 43 students were awarded B.Sc Home Science Degree in 20<sup>th</sup> convocation held on 6<sup>th</sup> September 2018. The following undergraduate students were honored in this convocation.



### In plant training

All the final year students were placed in Institute of Entrepreneurship Development Lucknow, U.P. and Government Food Preservation Centre, Ayodhya for in plant training in the last semester of their degree programme.

### Programmes Organized

National nutrition week was celebrated from 1-7 September 2018. Beside of that essay writing competition on 1<sup>st</sup> sept. 2018, Slogan writing competition on 4<sup>th</sup> sept. 2019, Poster Making Competition 5<sup>th</sup> sept. 2018 and Recipe Competition for old age on 7<sup>th</sup> sept. 2018 were also conducted.

JRF Classes : JRF classes were conducted in the college premises from 13.11.2018 to 11.12.2018 for the final year students of B.Sc. Home Science.

### Infrastructure and amenities :

Department of Food Science and Nutrition: There are six laboratories in this department. They are well equipped with modern analytical instruments.

1. P.G. Food Analysis Laboratory
2. Food Processing Laboratory
3. Dietary Counseling Laboratory
4. U.G. Food Analysis Laboratory cum Lecture Hall

### 5. Institutional Management Laboratory

### 6. Entrepreneurship Laboratory



A View of P.G. Food Analysis Laboratory



A View of Food Processing Laboratory



Students Baking Practicals in Food Processing Laboratory

Department of Human Development and Family Studies : There are five laboratories in this department:

1. Product development Laboratory
2. Laboratory Nursery School
3. Children activity cum Testing/



assessment laboratory

4. Parent education and guidance Laboratory
5. Computer Laboratory



Products/ Aids developed by students



Laboratory Nursery School

Department of Family Resource Management and Consumer Science having Computer-Aided Designing (CAD) Lab, Entrepreneurship Lab, Ergonomics Laboratory and Art and Craft Lab.



Articles prepared by students in Entrepreneurship Lab



Department of Textile and Apparel Designing having Textiles Laboratory, Designing Laboratory, Apparel Designing Laboratory and Printing and Laundry Laboratory.

Department of Extension and Communication Management having two labs like Multimedia Laboratory and Instructional cum Aids Development Laboratory.

#### College Library :

The college library contains textbooks, periodicals magazines, CDs, thesis and newspapers as per the requirements of U.G. and P.G Courses. Besides these, there are various reports, laboratory manuals of different departments and newsletters of different institutions and donated books for the use of faculty and students. Presently the College Library has 967 books of all subjects and 33 Thesis.

#### Extracurricular activities

The students of college actively participate in extracurricular activities and sports activities. The students actively participated in various competitions like patriotic song, group song (folk), mono acting, on the spot painting, poster making, clay modeling, quiz, elocution, debate, extempore, light vocal music, instrumental, collage, rangoli, skit, mime, group dance, cartooning from 25/01/2019 to 29/01/2019.

Participation in 19<sup>th</sup> AGRIUNIFEST 2019: University team including students from College of Home participated in 19<sup>th</sup> AGRIUNIFEST 2019 held at Sardar Krushinagar Agriculture University, Dantiwada, Gujrat from 3<sup>rd</sup> February 2019 to 7<sup>th</sup> February 2019.



Establishment of Nutrition Garden in the Department of Food Science and Nutrition: To cater the needs of fresh vegetables for conducting practical's of different courses of Food Science and Nutrition; an attempt has been made to establish small Organic Nutrition Garden in the college.



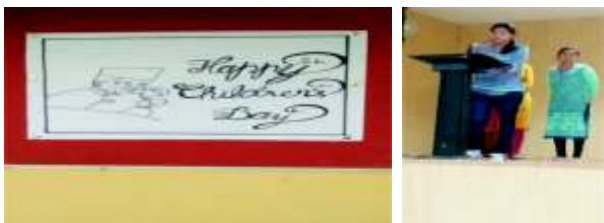
#### International women's day organized

To mark the International Women's Day, a seminar on the topic "Role of Farm Women In Doubling Income" organized by Department of Human Development and Family Studies on 08/03/2019. Hon'ble Vice Chancellor Prof. J.S. Sandhu inaugurated the programme.



#### Children's Day Organized:

The Children's Day was celebrated on Nov.14th 2018 by the Department Of Human Development and Family Studies.



#### Extension activities

##### Vriksharopan Abhiyan

All the faculty members, staff and students participated in Vriksharopan Abhiyan organized on the occasion of Independence Day around 50 trees were planted.



##### Kisan Mela

College of Home Science Faculty participated in Rashtriya Kisan Mela Evam Krishi Udyog Pradarshin dated 07/12/2018 to 08/12/2018 organized by Directorate of Extension, NDUA&T, Ayodhya. The college got II prize for "Demonstration of home waste management". Home science students earned through sale of eatables, preserved products and handicraft of Rs.9390/-.

Faculty publications: Faculty of Home science published total 21 research papers, 4 book chapters. 6 popular articles, scientists were participated in 10 seminars/ conferences /workshops.



## College of Veterinary Science and Animal Husbandry



The College of Veterinary Science and Animal Husbandry (C.V.Sc. and A.H), Kumarganj, Ayodhya is located in the main campus of Narendra Deva University of Agriculture and Technology, Kumarganj, Ayodhya with the mission to make provision for quality education for the students of Uttar Pradesh as a whole and eastern U.P. in particular and provide good facilities for research and extension to the scientists and workers in the area of Veterinary Science and Animal Husbandry.

**Goals:** To fulfill the above mission, the following goals are set.

1. To teach and trained the students in the field of Veterinary Science and Animal Husbandry in order to make them resourceful in the treatment of animals, management of livestock and poultry industry for better production.
2. To provide basic knowledge required for conducting the experiments to generate suitable technologies for the benefit of livestock and poultry based industries.
3. To trained them as competent extension personnel to disseminate various production technologies to the beneficiaries of Animal Husbandry Industry.

4. To provide facilities to faculty members for research and extension in the field of Veterinary Science and Animal Husbandry.

**Number of students admitted during current session:** In the College of Veterinary Science, following students were admitted and passed out in various programmes during the session 2018-19 and details are given below-

S. No.	Programmes	No. of Students admitted	No. of student pass out
1	B.V.Sc. and A.H.	50+4 (VCI)=54	15
2	M.V.Sc.	08	15
3	Ph.D.	08	Nil

### Strengthening of the college

#### Registration of Institutional Animal Ethics Committee:

As per the guidelines of CPCSEA and the provisions contained in the Rule 13 of "Breeding of and Experiments on Animals (Control & Supervision) Rules of 1998", an Institutional Animal Ethics Committee has been constituted and registered with CPCSEA Vide registration number 2060/GO/ReBi-S/Re-L/19/CPCSEA dated 19.03.2019



**Visit of the Animal House facility by the CPCSEA nominee**

### **Central Instrumentation Facility (CIF):**

The college has established a central

instrumentation laboratory as a common facility of instrumentation for the whole college. The various instruments present in the CIF include GCMS, Atomic Absorption Spectrophotometer, UV-VIS Spectrophotometer, Densitometer, Auto Analyzer, ELISA Reader, Electrophoresis facility etc. This facility is established with a mandate to provide most of the services to the whole college at a centralized place.

### **Animals Purchased**

1. Sahiwal cows: 32
2. Murrah Buffalo Bulls: 08

National and international conferences/trainings organized: Two national Seminars

S.N.	Theme of Seminar	Date
1	National seminar on New Horizons in Animal Health and production: Opportunities for Doubling Farmers Income Organized by College of Veterinary Science and Animal Husbandry, NDUAT, Kumarganj, Ayodhya.	Nov.28-29, 2018
2	National seminar on Recent Tools and techniques to enhance productivity for sustainable rural development Organized by College of Veterinary Science and Animal Husbandry, NDUAT, Kumarganj, Ayodhya.	Feb.19-20, 2019





Training Organized: One

S.N.	Theme of Training	Date
1.	Current approaches and Perspectives in diagnosis and control of Infectious Animal Diseases for the Field Veterinarians.	11 <sup>th</sup> Feb.2019- 13 <sup>th</sup> feb.2019



### Student Skill Development

The students are actively involved in various extra curricular programs to imbibe self confidence in them through following activities

1. Involvement in the treatment programmes as a part of their clinic.
2. Involvement in the infertility camps for animals.

3. Involvement in NSS programmes.

### World Veterinary Day Celebration:

World Veterinary Day was celebrated on 27<sup>th</sup> April, 2019 in the College of Veterinary Science & Animal Husbandry. Various Events (March past, Quiz competition, Debate competition and Rangoli competition and students corporate interaction) were organized on the occasion of World Veterinary Day.





### Student corporate faculty interactions

- Industry and corporate interaction programme with the help of
  - Sushima pharmaceuticals on 30.11.2018.
  - Triveni pharmaceuticals Pvt. Ltd. on 06.07.2019 Total 57 Students including the faculty were benefitted.
  - Zydus pharmaceuticals Pvt. Ltd. on 16.08.2019 -Total 56 Students along with faculty were benefitted.
  - Intas pharmaceuticals Pvt. Ltd was held on 19.08.-Total 62 Students along with faculty were benefitted.
- Visit to Amul plant, Lucknow III year B.V.Sc. & A.H. Year Students, on dated 22/01/2019. This visit provided the best exposure as well as scientific update and professional skill to become successful in the area of subject and gain Knowledge about milk packaging and processing and overall functioning of a milk plant.
- Participation in Annual All India Veterinary College, TT, Badminton and Professional Quiz competition for

Veterinary Students at College of Veterinary and Animal Sciences, GBPUA & T Pantnagar, Uttarakhand from 14/03/2019 to 16/03/2019 .This event was helpful for the personality development and inculcate professionalism amongst students. And also the visit of IVRI, Barailly.



Team of C.V.Sc. & A.H., N.D.U.A.T visited to G.B.P.U.A.T., Pantnagar

- Participation in Zonal level Quiz competition in subject of Veterinary Physiology two students secured second Runner-up position in the competition on 06 October, 2018.



Receiving second Runner-up position in the Quiz competition of Physiology

## Extension activities

### Animal Health Camp/ Awareness Programme

Department of Veterinary Medicine organized health camps on prevention and control of diseases of animals in Chaudhari Pur on 13.11.2018; village Pura (Sumerpur) on 11-10-2018; at village Akma on 16-10-2018; at village Mewapur on 24.10.2018.



Camp organized in Jorium Village on 09/08/2019

Participation in Krishi Kumbh organized by State Government, U.P. in Lucknow



Krishi Kumbh organized at University stall in Lucknow

Rabies awareness campaign were organized in about 10 schools in near by villages by the department of Veterinary Public Health namely ND DAV public School, Kumarganj, Blooming Buds Public School,



Devbaksh Degree College, Sarurpur

Akma, Dalim'ss Sunbeam Public School, Dobiya, S. S. Convent School, Haliyapur

Antibiotic Resistance Awareness campaign were organized in nearby Five colleges namely Devbaksh Degree College, Sarurpur, Ramnewaj Degree College, Kumarganj, Sant Tulsidas Inter College, Purabgaon, Dairy Workers, College of Fishries by the department of Veterinary Public Health



ND DAV Public School, Kumarganj



Sant Tulsidas Inter College, Purab gaon



Dairy workers, NDUAT





Ramnewaj Degree College, Kumarganj



S S Convent School, Haliyapur

### Activities in Clinics:

Total of 2222 animals comprising of, 233 Gynaecology, 1357 Medicine, 632 Surgery

Research projects in operation

animals were treated with total income of Rs. 60755.

S. No.	Title of Project	Year of sanction	Budget (In Lakhs)
	Conservation, propagation and genetic improvement of Sahiwal cattle in eastern UP	2013-14	77.87
	Strengthening of Veterinary Clinical Complex	2018-19	497.00
	Strengthening of Frozen Semen Bank for Indigenous Livestock	2018-19	181.00
	Establishment of feed analysis and quality control laboratory	2018-19	290.00

### Faculty Development

Distinguished visitors

Dr. Yashpal Singh Malik, National Fellow, and Dr. Rajat Garg, Principal Scientist,

Indian Veterinary Research Institute, Izatnagar, India visited Department of Veterinary Parasitology on the eve of Training Programme for Veterinary Officers.



Dr. Rajat Garg, Principal Scientist, IVRI, Izatnagar



Dr. Yashpal Singh Malik, National Fellow, IVRI, Izatnagar



- Dr. Sohan Vir Singh, Principal Scientist, National Dairy Research Institute, Karnal, Haryana visited our college.
- Sri Amit Mohan Prasad, Principal Secretary Agriculture, U.P. Government visited the Livestock Farm Complex on dated 25 February 2019. He was pleased to see the management of farm as well as newly introduced herd of Sahiwal cow.



- Hon'ble Sri Surya Pratap Shahi Ji, Minister of Agriculture, Ag. Education & Ag. Research visited college dairy farm on dated 28/11/2018
- Hon'ble Ranvendra Pratap Singh Ji, Minister of State, Agriculture, Ag. Education & Ag. Research



- Dr. D. C. Verma, President Uttar Pradesh Veterinary Council



- Hon'ble Amit Mohan Prasad Principal Secretary, Agriculture, Ag. Education & Research Govt. of Uttar Pradesh
- Dr. Putan Singh, Principal Scientist, Division of Animal Nutrition, ICAR-Indian Veterinary Research Institute, Izatnagar, Bareilly (U.P.) visited on 22/06/18 and 28/07/19.
- Dr. A. Vishwas Senior Scientist, ICAR-Central Avian Research Institute, Izatnagar (U.P.) visited on 22/06/18.
- Dr. Vinod Sidhu Head, Deptt. of Animal Nutrition, C.V.Sc. & A.H., DUVASU visited on 27/07/19
- Dr J. L Singh, Professor Veterinary Medicine GBPUAT visited the campus on 9/8/19
- Livestock position of Livestock Farm Complex: Total livestock population of college farm is 314 animals comprising of 54 Buffalo, 139 cattle, 62 sheep, 30 Goats and 26 Pigs.

## College of Agricultural Engineering



The Mahamaya College of Agricultural Engineering and Technology (MCAET), Ambedkar Nagar is located about 52 km away from Faizabad on Faizabad- Akbarpur (Ambedkar Nagar) National highway (NH 30) near "Shiv Baba" a religious place. The campus comprises the college buildings, boys hostels, girls hostel, guest house and residential buildings for faculty members and supporting staff. The teaching Programme is conducted in B.Tech. (Agricultural Engineering), B.Tech. (Mechanical Engineering) and B.Tech. (Computer Science & Engineering)

### Admission (2018-19):

Total 42 students were admitted during session 2018-19. The branch wise details are given as below:

Orientation of freshers: Newly admitted B.Tech. students were acquired well with rules and regulations of the college/University just after completion of their registration and their fresher's party was organized by seniors students.

Courses offered: Total 87 courses were offered in 1st Semester, Session 2018-19 and 97

Courses were offered in 2nd Semester, Session 2018-19. The classes were regularly conducted as per University norms. (Annexure-1 and 2)

Engagement of Guest Faculty: Total of 10 Guest Faculty comprising three in Mechanical Engineering, three in Computer Science & Engineering, one in Electrical and Electronics Engineering, one in Chemistry and one in Mathematics and one in Civil Engineering were engaged for teaching in 1st Semester as well as 10 Guest Faculty were engaged in 2nd Semester, Session 2018-19. Besides, some other courses likewise Soil Science, Agronomy were taught by the faculty available from Main Campus, Kumarganj.

Project Report: Total 10 Groups of the Students of final year B.Tech. (Agricultural Engineering/Mechanical Engineering/Computer Science & Engineering) have submitted the project reports on different assignment allotted to the each group of student. The each group of the student has submitted project report before the project evaluation committee.

In-plant Training: The students of final year B. Tech (Agri. Engg) were sent for four

months in-plant training at various reputed organizations like Tractor Company and Irrigation Equipment Manufacturing Company likewise Tractor and Form Equipment-Authorized dealer,Vishal Khand, Gomti Nagar, Lucknow, Hindustan Machine Tools Limited, Panchkula, Haryana, Department of Irrigation and Water Resoures, Ambedkar Nagar,UP, Agro Industries, Bareilly, Motilala Nehru Farmers Training Institute, Phulpur, Allahabad.

Anti Ragging: Anti Ragging squads were formulated and executed very sincerely and effectively at Campus.

Library services: Library is well equipped with 3424 books, 05 Almirah, 39 Book Shelf to contain books' Newspapers and

Manual: The following laboratory/ Teaching manual were prepared during 2018-19

S. N.	Particular	Prepared by
1.	Lab/ Teaching Manual on Soil & Water conservation Engineering	ER. M. Rai
2.	Lab/ Teaching Manual on Irrigation & Drainage Engineering	Dr. R. K. Mehta
3.	Lab manual on Surveying and Leveling	Er. Seema
4.	Lab manual on Engineering Mechanics	
5.	Lab manual on Fluid Machanics	
6.	Lab manual on Design of structure	
7.	Lab manual on Soil Mechanics	
8.	La Lab manual on b manual Data Structure	Er. Ritika Yaduvansi
9.	Lab manual on State of The Art computer	
10.	Lab manual on System programming	
11.	Lab manual on Refrigeration and Air conditioning	Dr. A. D. Gupta
12.	Lab manual on Power Plant Engineering	
13.	Lab manual on Automobile Engineering	
14.	Lab maual on Heat and Mass transfer	Er. Md. Aalam
15.	Programming Languages	Er. Md. Faiz
16.	Introduction to Computer and programming	
17.	Discrete Structures	

Magazines are also subscribed for the benefit of students.

Participation in National Exams: B. Tech final year students of all streams have participated in various National level examinations like JRF, GATE & CAT. Two student of B. Tech (Agriculture Engineering) Final year have participated in SKA Asia quiz competition on food safety.

#### Placement:

On campus

Twelve students have been placed in Action Construction Equipment Ltd. (ACE Ltd.), Palwal, Haryana as Graduate Engineering Trainees during academic year 2018-19.

18.	Data Base Management	Er. Shashi Prbha Aanan
19.	Fundamental of Computer Communication System	
20.	Formal Languages and Automata Theory	
21.	Management Information System	

Research Project Submitted: Total five research project were submitted to U. P. C. A. R. Lucknow

Extension: Scientists of MCAET

actively participated in Kishan Melas at Main Campus Kumarganj and also participated in Ghosthi organized at block levels of Distt. Ambedkar Nagar.



Irrigation and Drainage  
Engineering Lab



Agricultural Structure and  
Rural Engineering Lab



Agro Processing and Rural  
Industries Lab



Farm Machinery and Power Engineering Lab



Soil and Water Conservation Engineering Lab