# Profile

# Department of Vegetable Science





# **College of Horticulture and Forestry**

Acharya Narendra Deva University of Agriculture and Technology, Kumarganj, Ayodhya-224 229 (U.P.)

#### History

The department of vegetable science was established in the University in the year 1980, and earlier the department provided degrees of M.Sc. (Ag.) Vegetable Science and Ph.D. (Vegetable Science). Later the department was shifted to College of Horticulture and Forestry in year 2009. The M.Sc. (Hort.) Vegetable Science and Ph.D. (Hort.) Vegetable Science degree programs commenced with the session 2018–19. The department offers PG and Ph.D. courses in the College of Horticulture and Forestry. The Department has been continuously striving to develop superior high yielding varieties / hybrids in vegetable and spice crops through crop improvement programmes and also to bring out appropriate production technologies which will minimize the cost and maximize production and profitability.

#### Vision

We envision vegetable cultivation and consumption serve as a cornerstone for sustainable agriculture, human nutrition, entrepreneurship and societal well-being.

#### Mission

- Providing education and training that equip students, farmers, extension workers, and other stakeholders with the knowledge, skills, and resources needed to excel vegetable production, management and marketing.
- Conducting strategic research on the improvement of vegetable and spice crops with heftier impact potentials.
- ❖ Disseminating nutritionally rich vegetable seed kits for urban growers and consumers to contribute to nutritional outcomes.

### **Objective**

- ❖ To empower students with technical knowledge, entrepreneurial skill, and agrotechniques of vegetable production
- ❖ To collect, evaluate, utilize genetic resources and elite breeding lines for larger impact potentials
- ❖ To produce quality seed and seedling for strengthening marginal households
- ❖ To conduct trait-specific research with increased uptake potentials for scalability of vegetable production in less-privileged regions

#### **Faculty Profile**

The department includes, one Professor, one Associate Professor, seven Assistant Professors and five Technical staff.

Sr. No	Name	
1.	Name  Dr. C.N. Ram	Designation: Professor & Head Highest qualification: Ph.D. Total Experience: 20 Years Publications • Research Paper: 69 • Books: 06 • Book Chapters: 01 • Extension Folder: 21 • Popular Article: 47 Area of specialization: GPB Technology developed: 03 Variety developed: 02 Member of Scientific Society: 05 Projects: PI-01 Awards: 05 Mob.: 9451205686 Email: cnram2006@gmail.com

2. **Designation:** Associate Professor Highest qualification: Ph.D. **Total Experience: Publications** • Research Paper: 33 • **Books:** 02 • Book Chapters: 10 • Extension Folder: 07 Dr. Pradeep Kumar • Popular Article: 65 **Area of specialization:** Plant Pathology **Technology developed: 06** Variety developed: 01 **Member of Scientific Society:** 02 Projects: 01 Awards: 07 Mob.: 9415475037 Email: pradipnduat07@gmail.com **Designation:** Assistant Professor 3. Highest qualification: Ph.D., NET **Total Experience:** 08 Years **Publications** • Research Paper: 52 • **Books:** 05 • Book Chapters: 10 Dr. Aastik Jha • Extension Folder: 22 • Popular Article: 15 Area of specialization: Vegetable Breeding **Technology developed:** 09 **Member of Scientific Society:** 08 **Projects:** 06 (PI-03, Co-PI-03) Awards: 07 **Mob.:** 9453909227 Email: aastikiivr@gmail.com **Designation:** Assistant Professor 4. Highest qualification: Ph.D. **Total Experience:** 6.5 Years **Publications** • Research Paper: 24 • **Books:** 04 • Book Chapters: 08 • Extension Folder: 16 Dr. Anil Kumar • Popular Article: 10 Area of specialization: Vegetable Breeding **Member of Scientific Society:** 05 **Projects:** 05 (PI-02, Co-PI-03)

Awards: 02

**Mob.:** 9415474728

Email: akkakori@gmail.com

5.



Dr. Ashish Kr. Singh

**Designation:** Assistant Professor

Highest qualification: Ph.D., NET

**Total Experience:** 03 Years

**Publications** 

• Research Paper: 13

• Books: 03

Book Chapters: 05Extension Folder: 14Popular Article: 07

Area of specialization: Vegetable Breeding

Member of Scientific Society: 05 Projects: 02 (PI-01, Co-PI-01)

**Awards:** 02 **Mob.:** 9415577639

Email: aksingh7639@gmail.com

6.



Dr. D. K. Upadhyay

**Designation:** Assistant Breeder / Assistant Professor **Highest qualification:** Ph.D., NET, PG Diploma in IPR

**Total Experience: 12** 

**Publications** 

• Research Paper: 24

• **Books:** 02

Practical Manual: 02
Souvenir Article: 03
Book Chapters: 05
Extension Folder: 05
Popular Article: 15

**Area of specialization:** GPB (Vegetable Breeding)

Member of Scientific Society: 04

**Awards:** 04 **Mob.:** 9532962378

**Email:** dhananjay.gpb2011@gmail.com

7.



Dr. Sanjeev Singh

**Designation:** Assistant Agronomist / Assistant Professor

Highest qualification: Ph.D., NET

**Total Experience:**02

**Publications** 

• Research Paper: 08

• **Books:** 02

Book Chapters: 04Popular Article: 33

**Area of specialization:** Agronomy **Member of Scientific Society:** 05

Awards: 02

**Mob.:** 9452375581

Email: sanjeevsingh0590@gmail.com,

dr.sanjeevagron@ndauat.org

8.



Dr. Pradeep Kumar Dalal

**Designation:** Assistant Entomologist / Assistant Professor

**Highest qualification:** Ph.D., NET **Total Experience:** 06 Months

**Publications** 

Research Paper: 14Book Chapters: 07Popular Article: 04

**Area of specialization:** Vegetable Entomology/Apiculture

Awards: 02

**Mob.:** 7015622349

Email: drpradeep.entovs@nduat.org, pradeepdalalag@gmail.com

9.



Dr. Manoj Kr Maurya

**Designation:** Assistant Pathologist / Assistant Professor

**Highest qualification:** Ph.D., NET **Total Experience:** 06 Months

**Publications** 

• Research Paper: 15

• Books: 01

Book Chapters: 01Popular Article: 03

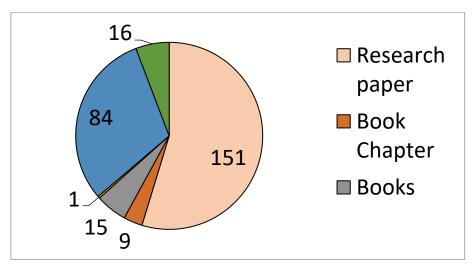
Area of specialization: Plant Pathology

Awards: 01

**Mob.:** 9532013964

Email: drmanoj.pathovs@nduat.org, manoj.maurya0805@gmail.com

## **Total number of publications = 276 (last five years)**



#### Degree Program

The department is imparting teaching and research education for undergraduate and postgraduate students in the field of Vegetable Science and department offer program in M.Sc. (Horticulture) in Vegetable Science and Ph.D. (Horticulture) Vegetable Science. The Department offers various courses for cultivation of tropical, subtropical, temperate and underground crops and courses related to breeding and seed production of vegetables, spices and tuber crops as well as protected cultivation of vegetable crops for undergraduate, postgraduate and Ph.D. students. The annual seats offered under post-graduate and Ph.D. are 22 and 8, respectively.

## Courses

The department offers nine UG courses, two experiential learning course, 14 PG courses and eight Ph.D. courses provides strong academic guidance to the students.

A. Courses for UG Programme

	Agriculture			
S.No.	Name of course	Course code	Credit hours	Semester
1.	Production Technology of Vegetable and Spices	HORT-211	2(1+1)	III
		Sub total	2(1+1)	
	Horticul	lture		
2.	Principles of Genetics and Cytogenetics	GPB-111(H)	3(2+1)	I
3.	Principles of Plant Breeding	GPB-121(H)	3(2+1)	II
4.	Temperate Vegetables	VS-211(H)	3(2+1)	III
5.	Spices and Condiments	VS-221(H)	3(2+1)	IV
6.	Precision Farming and Protected Cultivation	VS-222(H)	3(2+1)	IV
7.	Breeding of Vegetable, Tuber and Spice Crops	VS-311 (H)	3(2+1)	V
8.	Potato and tuber crops	VS-312 (H)	3(2+1)	V
9.	Seed Production of Vegetable, Tuber and Spice Crops	VS-321 (H)	3(2+1)	VI
10.	Commercial Horticulture	ELP-411(H)	10(0+10)	VII
11.	Processing of Fruits and Vegetables for Value Addition	ELP-412(H)	10(0+10)	VII
		Sub total	44(16+28)	
		Total (A)	46(17+29)	

**B.** Course for PG Programme

	M.Sc.				
S.No.	Name of course	Course code	Credit hours	Semester	
1.	Production of Warm Season Vegetable Crops	VSC-511 (N)*	3(2+1)	I	
2.	Principles of Vegetable Breeding	VSC 512 (N)*	3(2+1)	I	
3.	Systematics of Vegetable Crops	VSC 513(N)	2(1+1)	I	
4.	Processing of Vegetable	VSC 514(N)	2(1+1)	I	
5.	Production of Cool Season Vegetable Crops	VSC-521 (N)*	3(2+1)	II	
6.	Growth and Development of Vegetable Crops	VSC-522 (N)*	3(2+1)	II	
7.	Seed Production of Vegetable Crops	VSC-523 (N)	3(2+1)	II	
8.	Production of Underutilized Vegetable Crops	VSC-524 (N)	3(2+1)	II	
9.	Breeding of cross-pollinated vegetable crops	VSC-525 (N)	3(2+1)	II	
10.	Production of Spices crops	VSC-526 (N)	3(2+1)	II	

11.	Post Harvest Management of vegetable crops	VSC-527 (N)	3(2+1)	II
12.	Organic Vegetable Production	VSC 515(N)	2(1+1)	III
13.	Breeding of Self Pollinated Vegetable Crops	VSC 516(N)	3(2+1)	III
14.	Protected Cultivation of Vegetable Crops	VSC 517(N)	2(1+1)	III
15.	Master's Seminar	VSC 591(N)	1(0+1)	IV
		Sub total	39(25+14)	
	Ph.D	).		
1.	Recent Trends in Vegetable Production	VSC-611 (N)*	3 (3+0)	I
2.	Advances in Breeding of Vegetable Crops	VSC-612 (N)*	3 (3+0)*	I
3.	Seed Certification, Processing and Storage of Vegetable Crops	VSC-613 (N)	3 (2+1)	I
4.	Biodiversity and Conservation of Vegetable Crops	VSC-614 (N)	3 (2+1)	I
5.	Breeding for special traits in Vegetable Crops	VSC-621 (N)	2 (2+0)	II
6.	Biotechnological approaches in Vegetable Crops	VSC-622 (N)	3 (2+1)	II
7.	Abiotic Stress Management in Vegetable crops	VSC-623 (N)	3 (2+1)	II
8.	Advanced laboratory techniques for vegetable crops	VSC-624 (N)	3 (1+2)	II
9.	Doctoral Seminar-I	VSC-691 (N)	1 (0+1)	II
10.	Doctoral Seminar-II	VSC-692 (N)	1 (0+1)	II
		Sub total	25 (17+8)	
		Total (B)	64 (42+22)	
		Grand Total (A+B)	110 (59+51)	

<sup>\*</sup>Compulsory among major courses

#### Germplasm

The department is enriched with active germplasm collection of major vegetable and spice crops like tomato, brinjal, chilli, okra, bottle gourd, bitter gourd, cucumber, pointed gourd, pumpkin, sponge gourd, ridge gourd, snake gourd, watermelon, muskmelon, cowpea, vegetable pea, tuber crops, turmeric, fenugreek, funnel, coriander *etc*. This germplasm collection serves as a valuable resource for breeding programs and genetic conservation efforts. Department has conserved a total of 678 vegetable and 724 spices germplasms. The germplasms details are given below-

S. no.	Crops	Number of germplasms
	Vegetables	
1.	Bottle gourd	40

2.	Bitter gourd	34
3.	Pumpkin	48
4.	Sponge gourd	50
5.	Ridge gourd	20
6.	Ash gourd	25
7.	Cucumber	32
8.	Pointed gourd	09
9.	Long melon	18
10	Round melon	15
11	Muskmelon	22
12	Watermelon	15
13	Tomato	45
14	Cherry tomato	32
15	Brinjal	80
16	Okra	34
17	Chili	23
18	Green Mustard	24
19	Summer Squash	27
20	Garden Pea	35
21	Moringa	15
22	Carrot	10
23	Radish	15
24	Cowpea	10
	Total	678
	Spices	
26	Ginger	66
27	Turmeric	186
28	Coriander	141
29	Fenugreek	148
30	Fennel	100
31	Black cumin	37
32	Ajwain	46

Total	724
Grand Total	1402

#### **Varieties**

The department, the backbone of developing, evaluating, releasing and commercializing crop varieties, has significantly helped farming communities. Department has released 52 varieties of vegetables and 11 varieties of spices. Many of these are in the seed production chain and grown in U.P., Bihar, Jharkhand, Punjab, Uttarakhand and Chhattisgarh. The departmental legacy of breeding bottle gourd and Haldi is nationally recognized.

Our higher-degree students are already conducting part of their research at ICAR institutes like ICAR-IIVR, Varanasi, and ICAR-IARI, New Delhi. These are excellent synergistic platforms to build research capacity and improve scientific outcomes. The varieties details are given below-

S. no.	Crops	Number of varieties/Hybrid
	Vegetables	
1.	Bottle gourd	12
2.	Tomato	08
3.	Garden Pea	06
4.	Pumpkin	04
5.	Brinjal	04
6.	Pointed gourd	03
7.	Colocasia (Arvi)	03
8.	Elephant Foot Yam	02
9.	Banda (Alocasia Sps.)	02
10.	Cowpea	02
11.	Muskmelon	02
12.	Sweet Potato	02
13.	Bitter gourd	01
14.	Okra	01
	Total	52
	Spices	
15.	Turmeric	05
16.	Fenugreek	03
17.	Coriander	02
	Fennel	01
	Total	11
	Grand Total	63

### Varieties-wise details

	eties-wise details  VEGETABLES
1	Bottle gourd (Lagenaria siceraria)
1	1.1 Narendra Shishir (NDBG-202)
	1.1 Narendra Rashmi (NDBG-202)  1.2 Narendra Rashmi (NDBG-1)
	1.3 Narendra Hybrid-4
	1.4 Narendra Dharidar (NDBG-802-1)
	1.4 Nateridia Dilandar (NDBG-802-1)  1.5 NDBG-132
	1.5 NDBG-132  1.6 Narendra Jyoti (NDBG-104)
	1.7 Narendra Madhuri (NDBG-505)
	1.7 Narendra Madnuri (NDBG-303)  1.8 Narendra Shivani (NDBG-403)
	1.8 Narendra Silivani (NDBG-403)  1.9 NDBG-132
	1.10 Narendra Pooja (NDBG-10)
	1.11 Narendra Kamna (NDBG-16)
2	1.12 Narendra Sita (NDBG-14-10)
2	Pumpkin (Cucurbita pepo)
	2.1 Narendra Agrim (NDPK-24)
	2.2 Narendra Amrit (NDPK-130)
	2.3 Narendra Abhooshan (NDPKH-1)
	2.4 Narendra Upcar
3	Pointed Gourd (Trichosanthes dioica Roxb.)
	3.1 Narendra Parwal-260
	3.2 Narendra Parwal-307
4	3.3 Narendra Parwal-604
4	Bitter Gourd (Momordica charantia L.)
	4.1 Narendra Karela Baramasi-1
5	Muskmelon (Cucumis melo)
	5.1 Narendra Muskmelon-1 (NDM-2)
	5.2 Narendra Muskmelon-2 (NDM-15)
6	Brinjal (Solanum melongena)
	6.1 Narendra Brinjal-1 (NDB-25)
	6.2 Narendra Hybrid Brinjal-3 (NDBH-8)
	6.3 Narendra Brinjal-2
	6.4 Narendra Suyog (Narendra White Brinjal-1)
7	Tomato (Solanum lycopersicum L.)
	7.1 Narendra Tomato-1
	7.2 Narendra Tomato-2 (NDT-120)
	7.3 Narendra Tomato-5 (NDT-96)
	7.4 Narendra Tomato-6 (NDT-4)
	7.5 Narendra Tomato-3 (NDT-3)
	7.6 Narendra Tomato-4 (NDT-9)
	7.7 Narendra Tomato-7 (NDTS2001-3)
_	7.8 Narendra Tomato-8 (NDTVR-60)
8	Cowpea (Vigna unguiculata L.)
	8.1 Narendra Lobia-1 (NDCP-13)
	8.2 Narendra Lobia-2 (Sel-2-1)
9	Vegetable Pea (Pisum sativum var. hortanse)
	9.1 Narendra Sabji Matar-1

	9.2 Narendra Sabji Matar-2 (NDVP-8)
	9.3 Narendra Sabji Matar-3 (NDVP-10)
	9.4 Narendra Sabji Matar-4 (NDVP-9)
	9.5 Narendra Sabji Matar-5 (NDVP-250)
	9.6 Narendra Sabji Matar-6 (NDVP-12)
10	Okra (Abelmoschus esculentus )
	10.1 Narendra Bhindi-1 (NDO-10)
11	Colocasia-Colocasia esculenta (L.) (Arvi)
	11.1 Narendra Arvi-1
	11.2 Narendra Arvi-2
	11.3 PKS-1
12	Banda (Alocasia Sps.)
	12.1 Narendra Banda-1
	12.2 Narendra Banda-2
13	Sweet Potato- (Ipomoea batatas L. Lam.)
	13.1 Narendra Shakarkand-1
	13.2 Narendra Shakarkand-10 (NDSP-10)
14	Elephant Foot Yam (Amorphophallus paeoniifolius)
	14.1 Narendra Zimikand-5 (NDA-5)
	14.2 Narendra Zimikand-9 (NDA-9)
	SPICES
15	Turmeric (Curcuma longa)
	15.1 Narendra Haldi-1
	15.2 Narendra Haldi-2
	15.3 Narendra Haldi-98 (NDH-98)
	15.4 Narendra Saryu (NDH-8)
16	Coriander (Coriandrum sativum)
	16.1 Narendra Dhania-1 (ND Cor-2)
	16.2 Narendra Dhania-2
17	Fenugreek (Trigonella foenum-graecum)
	17.1 Narendra Methi-1 (NDM-19)
	17.2 Narendra Methi-2 (NDM-69)
	17.3 Narendra Richa (NDM-79)
16	Fennel (Foeniculum vulgare Mill.)
	18.1 Narendra Sauf-1

# Some promising varieties photographs



(Bottle gourd)	(Bottle gourd)	(Bottle gourd)	(White Brinjal)
		NDH-2	्नेख़ ह्यो-2
Narendra Suran-5	Narendra Parwal-	Naren	dra Haldi-2
	307	(Tu	ırmeric)

# **Technologies**

Due emphasis has also been accorded to standardize the production and protection technologies in different vegetables and spices. Around fifteen agro-techniques have been standardized for vegetable cultivation including agro-techniques for improved cultivation practices, plant protection technology and seed production. The technologies developed by the department are being popularized among farmers through training & demonstrations. These technologies have been mentioned as below (last 10 years).

S.No.	Name of Technology	Year	Detail of technology Attributes
1	Response of sulphur and molybdenum for cowpea production	2013	Application of molybdenum (3spray at 45, 55 and 65 DAS) @ 25ppm+sulphur @15 kg/ha along with NPK (60:60:40 kg/ha) resulted maximum pod yield (108.92 q/ha) with B:C ratio of 2.03 in cowpea cv. Kashi Kanchan with spacing of 50cm x 30 cm.
2	Organic production of amaranth	2013	Application of recommended dose of NPK (100:50:50 kg/ha) resulted maximum biomass yield (208.14q/ha) with B:C ratio of 5.87 in Amaranth cv. Arka Saguna with spacing of 15cm x 5 cm against organic production using different organic manures alone and in combination with bio-fertilizers
3	Low tunnel production technology for early harvest of cucurbits (Bitter gourd)	2014	Bitter gourd cv. Jaunpuri Karela with spacing of 2m x0.5cm and NPK @ 150:60:60 Kg/ha revealed that the sowing under different conditions had significant effect on early harvest of fruit yield of bitter gourd. The maximum marketable fruit yield (87.92q/ha) with B:C ratio of 1.74 was recorded when crop was sown on 15 <sup>th</sup> December under low tunnel condition which was followed by 15 <sup>th</sup> February transplanting in open field (79.95q/ha) with B:C ratio of 1.45. Hence,15 <sup>th</sup> December sowing under the low tunnel with the spacing of 2.0mx 0.50 m along with nutrient dose of N:P:K @ 150:60:60 is recommended as low tunnel production technology for early harvest of cucurbits (Bitter gourd)

_	1	1	
4	Standardization of water requirement for turmeric through drip irrigation	2015	- Drip once in two days at 80% pan evaporation with 4 l/h resulted in increase in yield by 10-15 % in turmeric.
5	Bio-fertilizers for yield enhancement of coriander	2017	Soil application of Phosphate Solubilizing Bacteria (PSB) @15 kg ha-1 or Azospirillum @15 kg ha-1 along with NPK @ 60:40:30 kg/ha is recommended for improving the productivity of coriander.
6	Potato - Production Technology	2018	Application of 100 kg P <sub>2</sub> O <sub>5</sub> /ha with recommended dose of 150 kg N/ha & K <sub>2</sub> O/ha
7	Potato - Cropping sequence Technology	2019	Planting of potato at optimum date from 25 <sup>th</sup> October to 5 <sup>th</sup> November, harvesting at 90 days and transplanting onion thereafter.
8	Management of turmeric foliar diseases- leaf spot (Colletotrichum capsici) and leaf blotch (Taphrina maculans):	2021	Rhizome treatment with propiconazole (0.1%) and foliar spray of propiconazole (0.1%) was recommended for the management of turmeric foliar diseases - leaf spot (Colletotrichum capsici) and leaf blotch (Taphrina maculans).
9	Management of coriander powdery mildew (Erysiphe polygoni)	2021	Spraying propiconazole (0.1 %) at the initiation of the disease followed by second spray 15 days after first spray was ecommended for the management of coriander powdery mildew ( <i>Erysiphe polygoni</i> )
10	Management of stem gall disease of coriander	2021	A ready mixture of fungicidal formulation containing Azoxystrobin 11% + tebuconazole 18.3% SC has been recommended for management of stem gall disease of coriander.
11	Potato - Integrated Nutrient Management Technology		Application of 2/3 <sup>rd</sup> nitrogen (100 kg/ha) through inorganic fertilizer and remaining 1/3 <sup>rd</sup> nitrogen through FYM is recommended.
12	Seed spices: Intercropping of seed spices with vegetables for higher yield and income	2023	Intercropping of coriander with garlic is an excellent way to increase productivity (44.2 over 14.8 q/ha) and profitability, with the highest benefit-to-cost (B:C) ratio (2.86 over 1.8) from the coriander sole cropped area
13	Fennel: Foliar application of iron and zinc on growth, yield and quality of fennel:		Foliar spray of zinc sulphate and iron sulphate, each @ 4g/l with RDF at 60, 75 and 90 days after sowing in fennel is recommended for higher yield of 14.7% over untreated and net returns with high BC ratio of 20.8% over untreated plot
14	Coriander: Integrated pest and disease management in coriander	2023	Three sprays of Hexaconazole 5 EC@ 0.005% + First foliar spray of Emamectin benzoate-5%SG@ 4.0g/10 lit and second spray of Azadiractin 3000 ppm @ 3 ml/lit is

	effective for the management of stem gall,
	PM and aphid

#### **AICRPs**

Three All India Coordinated Research Project are also running in the department namely AICRP on vegetable crops, AICRP on Potato and AICRP on spices. University recognized as sub centre under AICRP (Vegetable crops) during 1980 has initiated work on crop improvement, production including seed production and crop protection technologies. The important crops covered are brinjal, chilli, tomato, cauliflower, French bean, peas, okra, cucumber, bottle gourd and some other cucurbits. Till today 52 high yielding varieties of different vegetable crops have been developed and released for general cultivation by State/Central Variety Release Committee. Besides this, more than 10 different recommendations have been made on improved vegetable production and plant protection technologies for the benefit of farmers of the State. AICRP on Potato started in year 1985 for improvement, production and protection technologies. AICRP on spices started in year 1996 for improvement, production and protection technologies which covers ginger, turmeric, coriander, cumin, fennel, fenugreek and ajwain. To popularize the cultivation of seed spices in the state as well as to achieve the aim of self-reliance in spices production at national level, quality seed production of high yielding varieties and the development programmes like technology transfer through FLDs, seminar/ workshops and farmers training are also being done.

#### **Departmental Facilities**

- 1. Main department building within College of horticulture and Forestry having two PG smart class rooms, UG laboratory, PG laboratory, Library, Seminar room, staff rooms, office room, farm office and store rooms.
- 2. Research cum Seed Production farm having a total land area of 40 Acres.
- 3. Well organized vegetable seed and pro-tray seedling production of deferent vegetables and spices
- 4. Developed infrastructure for seed production and processing unit under hall of 1000 sq.ft. built-up area.
- 5. In 2023-24, a total of 50q of vegetable seeds produced and supplied to farmers.
- 6. Average annual revenue from the sale of vegetables seeds and pro-tray seedlings of vegetables Rs. 10 lakhs
- 7. Prepared Narendra Sabji Beej for kitchen garden.
- 8. Farm rooms and shades: 06 Nos.
- 9. Protected cultivation structures: 5 Nos.
- 10. Vegetable Technology Park



**Smart Classroom** 



PG Laboratory



Departmental library



Vegetable seed sell counter, farm office and farm store rooms



Pro-tray turmeric seeding production



Vegetable Technology Park



Glasshouse and Net house (Protected cultivation structure)



Kitchen garden Kit "Narendra Sabji Beej"

Hon'able Chief Minister of Uttar Pradesh launching the kitchen garden kit "Narendra Sabji Beej"



Women farmers interacting with scientist about nursery management



Padam bhushan Dr. R.S. Paroda , Ex DG ICAR, interacting with scientists at MES Vegetable on 21 Jan 2024



Dr. Sanjay Singh DG, UPCAR, Lucknow visited at MES



Hon'ble Governor of Uttar Pradesh visited at department of vegetable stall



Dr. Devesh Chaturvedi ACS (Agri.) UP Govt. inaugurating Vegetable Technology Park on 11 Oct 2023



Sh. Surya Pratap Shahi, Hon'able Agriculture Minister Uttar Pradesh Govt. at Vegetable Technology Park 09 Nov 2023