

DEPARTMENT OF AGRONOMY AT A GLANCE

Established :1978

Head of the Department : Dr. Ghanshyam Singh

Teaching Programme:

S.N.	Programme	Intake capacity	Students admitted		
			2015	2016	2017
1.	M.Sc.(Ag.)	20	20	19	20
2.	Ph.D. (Agronomy)	05	05	05	05

Faculty Position

S.N.	Faculty	Professor	Assoc. Professor	Asstt. Professor
1.	Core	01	Nil	02
2.	AICRP's	01	03*	03

* Faculty other than Agronomy

Research Projects

S.N.	Name of the Project	Remarks
1.	AICRP on Integrated Farming System	Continued
2.	AICRP on Irrigation Water Management	Continued
3.	AICRP for Dryland Agriculture	Continued
4.	AICRP on Weed Management	Closed w.e.f. 1-4-2018



Name of Scientist : **Dr. R.S. Singh**

Designation : **Asstt. Professor (Agronomy)**

Research work (2015-16 to 2017-18)

Name of Project with Funding Agency	:	▪AICRP on Weed Management ICAR (75%) and State Govt. (25%) (Project Closed w.e.f. 1-4-2018) ▪Effect of Haloxyfop against grassy weeds in mentha DAS India Pvt. Ltd (100%)
Project Submitted	:	Nil
Publication	:	07 (NASS Rating: 3.74 to 5.17)
Recommendation/ Product Developed		
✚ Intercrops rice with dhaincha and apply pendimethalin 1.0kg/h pre-emergence followed by 2, 4-D, 0.5 kg/ha post emergence at 40 DAS in direct seeded rice.		
✚ Grow sugarcane at 90cm apart and intercrop 2 rows of potato at 45cm between sugarcane. For weed management pendimethalin @ 1.0kg/ha as pre-emergence or undertake manual weeding.		
✚ Apply glyphosate 5-10 ml/l of water on fresh foliage to obtain complete control of water hyacinth.		

Teaching Work (2015-16 to 2017-18)

I Semester			II Semester		
Course No.	Credits	Self Credit Load	Course No.	Credits	Self Credit Load
AGRON 112 (N)	1(1+0)	0.5	AGRON 322 (N)	2(1+1)	1.0
AGRON 111 (N)	2(1+1)	1.0	AGRON 321(N)	3(2+1)	1.5
AGRON 111 (V)	4(3+1)	2.0	AGRON 223(V)	3(2+1)	1.5
AGRON 311 N (H)	3(2+1)	1.5	AGRON 522	3(2+1)	1.5
AGRON 511	3(3+0)	1.5	CEL 421(N)1-6	3(2+1)	1.5
AGRON 512	3(2+1)	1.5			
AGRON 212(N)	3(2+1)	1.5			
AGRON 211 (N)	2(1+1)	1.0			
Total	21.0	10.5	Total	14.0	7.0

No. of Students Guided	M.Sc.(Ag.) : 09	Ph.D. : 02
No. of Students Guiding	M.Sc.(Ag.) : 06	Ph.D. : 02

Work Plan for 2018-19 :

- ❖ Actively participate in teaching programme of above mentioned courses as per direction of Head of Department and Dean, College of Agriculture.
- ❖ Project proposal will be submitted
- ❖ Quality research work of post graduate students.



Name of Scientist : **Dr. Ram Pratap Singh**

Designation : **Asstt. Professor (Agronomy)**

Research work (2015-16 to 2017-18)

Name of project and Funding Agency	: Nil
Project submitted	: Nil
Publication	: 06 (NASS Rating: 3.84 - 4.95)
Recommendation/ Product Developed	: Released rice varieties: : (Agronomist- As team member) <ul style="list-style-type: none">▪ IR 64-Sub 1▪ NDR 993011 (Narendra Shishir)▪ NDR 8015 (Narendra Neha)

Teaching Work (2015-16 to 2017-18)

I Semester			II Semester		
Course No.	Credits	Self Credit Load	Course No.	Credits	Self Credit Load
AGRON-311(N)	2(1+1)	1.0	AGRON-528	3(2+1)	1.0
AGRON-311(H) N	3(2+1)	1.5	AGRON- 523	3(3+0)	1.0
AGRON-312 (N)	3(2+1)	1.0	AGRON-321 (N)	3(2+1)	1.0
AGRON-518	2(1+1)	1.0	AGRON- 322 (N)	2(1+1)	1.0
AGRON-591	1(0+1)	0.5	AGRON-591	1(0+1)	0.5
AGRON-613	2(1+1)	1.0	AGRON-691	2(0+2)	1.0
AGRON-691	2(0+2)	1.0	CEL-421 (N) I-3	3(2+1)	1.5
AGRON- 111 (V)	4(3+1)	1.3	AGRON- 222 (V)	1(1+0)	0.5
			AGRON- 223 (V)	3(2+1)	1.0
Total	19.0	8.3	Total	21	8.5

No. of students guided: M.Sc. - 2

Ph.D. - Nil

No. of students guiding: M.Sc. - 4

Ph.D. - 2

Work Plan for 2018-19:

- Teaching of UG/PG students as per programme of HOD/ Dean College of Agriculture
- Project proposal will be submitted.



Name of Scientist : **Dr. N. B. Singh**

Designation : **Professor (Agronomy)**

Research work (2015-16 to 2017-18)

Name of project and Funding Agency	:	AICRP – Integrated Farming System ICAR (75%)and State Government (25%)
Project submitted	:	NIL
Publication	:	Five (NASS rating 2.80-5.46) + two (Chapter in book)
Recommendation/ Product Developed		
<ul style="list-style-type: none">+ From Farming System Module of one hectare area consisting of crop + dairy + vermicompost + fisheries and horticulture enterprises, net return of Rs.2.5 to 2.75 lacs can be obtained.+ Inclusion of vegetable in cropping system proved to be more remunerative and energy efficient as compared to pulse, oilseed and cereal based crop component in rice-wheat cropping system.+ Inclusion of leguminous crop in rice-wheat cropping system improved the soil health in terms of increasing the organic carbon, available nitrogen, phosphorus and potassium as well.+ There was appreciably improvement in organic carbon and reduction in pH and EC by applying various organic manures as compared to application of inorganic fertilizers alone.+ Continuous application of organic manures increased the availability of nutrients gradually and reached to that level at which plants requirement is fulfilled in a balanced way, which increases the productivity of soil and is helpful in sustaining the productivity as well.		

Teaching work (2015-16 to 2017-18)

I Semester			II Semester		
Course No.	Credits	Self Credit Load	Course No.	Credits	Self Credit Load
AGRON 513	3(3+0)	1.0	AGRON 523	3(3+0)	1.0
AGRON 611	3(2+1)	1.0	AGRON 522	3(2+1)	1.0
AGRON 591	1(0+1)	0.5	AGRON 591	1(0+1)	0.5
AGRON 691	2(0+2)	1.0	AGRON 691	2(0+2)	1.0
Total	9.0	3.5	Total	9.0	3.5

No. of Students Guided	M.Sc.(Ag.) : 07	Ph.D. : Nil
No. of Students Guiding	M.Sc.(Ag.) : 03	Ph.D. : 03

Work plan for 2018-19:

- As per mandate, we have to conduct the experiments as approved by IIFSR- Modipuram.
- Teaching work as per allotment by HOD, Agronomy.
- Supervision of work of M.Sc.(Ag) and Ph.D. students allotted to me.



Name of Scientist : **Er. R.C. Tiwari**

Designation : **Associate Professor**
(Agril. Engg)

Research work (2015-16 to 2017-18)

Name of Project with Funding Agency	:	AICRP - Irrigation Water Management ICAR (75%) and State Govt. (25%)
Project Submitted	:	Nil
Publication	:	02 (NASS rating 4.39)
Recommendation/ Product Developed		
<ul style="list-style-type: none">+ Raised bed technology for pigeonpea and urd under poor availability of canal water.+ Alternate wetting and drying technique for rice under canal command with 7cm irrigation at 1-3 DADPW in check basin (10x10m)+ Fertigation @ 60% of PE every 3rd day with 75% dose of Nitrogen through drip irrigation in Tomato.+ Fertigation @ 80% of PE every 3rd day with 75% dose of Nitrogen in Zaid Okra through drip irrigation.+ Irrigation schedule 7cm water in each irrigation at 4-DADPW for drum seeded rice in puddled soil.		

Teaching Work (2015-16 to 2017-18)

I Semester			II Semester		
Course No.	Credits	Self Credit Load	Course No.	Credits	Self Credit Load
AENG 111(N)	3(2+1)	1.5	AGRON-121(N)	3(2+1)	1.5
AENG 211(N)	2(1+1)	1.0	AGRON-121(H)	2(1+1)	1.0
AENG 211(H)	2(1+1)	1.0	AENG-221(N)	2(1+1)	1.0
			AENG-321(N)	2(1+1)	1.0
			FAC-221(N)	2(1+1)	1.0
			CEL421(N)II-7	3(1+2)	1.5
			AGRON-521	3(2+1)	1.0
Total	7.0	3.5	Total	17.0	8.0

No. of Students Guided	M.Sc.Ag. : Nil	Ph.D. : Nil
No. of Students Guiding	M.Sc.Ag. : Nil	Ph.D. : Nil
No PG and Ph.D. Programme in Agricultural Engineering		

Work Plan for 2018-19:

- Development of suitable irrigation practices for direct seeded rice and brinjal under different land configuration and integrated nutrient system.
- Studies on multiple use of water through integrated cropping system with pisi culture and duckery in Avampur Distributory of Sharda Sahayak Canal Command.



Name of Scientist : **Dr. B.N. Singh**

Designation : **Asstt. Professor (Agronomy)**

Research work (2015-16 to 2017-18)

Name of Project with Funding Agency	:	All India Coordinated Research Project on Irrigation Water Management ICAR (75%) and State Govt. (25%)
Project Submitted	:	Nil
Publication	:	04 (NASS rating 4.39 – 4.90)
Recommendation/ Product Developed	:	<ul style="list-style-type: none">❖ Multiple use of water through integrated cropping system with pisci culture and duckery at head section of Chandpur Distributory of Sharda Sahayak Command.❖ Raised and sunken bed technology for pigeonpea and rice (DSR) under poor availability of irrigation water❖ Raised bed planting of mentha in paired row (45x20cm) with 1.0 IW/CPE (8-10 days interval) irrigation schedule for higher production of mint oil.

Teaching Work (2015-16 to 2017-18)

I Semester			II Semester		
Course No.	Credits	Self Credit Load	Course No.	Credits	Self Credit Load
AGRON 112(V)	1(1+0)	0.5	AGRON 121(N)	3(2+1)	1.5
BEAS 212 (AE)	3(2+1)	1.5	AGRON 121(H)	2(1+1)	1.0
AGRON 312 (H)	2(1+1)	1.0	AGRON 222(V)	1(1+0)	0.5
AGRON 516	3(2+1)	1.5	AGRON 528	3(2+1)	1.0
			AGRON 521	3(2+1)	1.0
Total	9.0	4.5	Total	12.0	5.0

No. of Students Guided	M.Sc.(Ag.) : 04	Ph.D. : Nil
No. of Students Guiding	M.Sc.(Ag.) : 03	Ph.D. : 03

Work Plan for 2018-19 :

- **Development of suitable irrigation practices for summer maize and cabbage under different land configuration and integrated nutrient management.**
- **Studies on improved irrigation practices in rice based cropping system in Avanpur Distributory of Sharda Sahayak Canal Command**



Name of Scientist : **Dr. H.C. Singh**

Designation : **Assoc. Professor (SWC)**

Research work (2015-16 to 2017-18)

Name of Project with Funding Agency	:	AICRP for Dryland Agriculture ICAR (75%) and State Govt. (25%)
Project Submitted	:	Nil
Publication	:	Book Chapter : Improved Agronomic Practices for Rainfed Crops in India, Published by : CRIDA Hyderabad ISBN: 978-93-80883-38-0 April 2016.
Recommendation/ Product Developed	:	✚ 15 cm. of bund height and sowing of rice in first week of July save 10 to 15% water and give optimum yield of rice under Dryland condition. ✚ Sub soiling at 30 cm depth with cross pass at 2 m. interval + 2 harrowing provide the maximum grain yield of paddy with maximum output energy and rainwater use efficiency.

Teaching Work (2015-16 to 2017-18)

I Semester			II Semester		
Course No.	Credits	Self Credit Load	Course No.	Credits	Self Credit Load
AENG 111(N)	3(2+1)	1.5	AGRON-121(N)	3(2+1)	1.5
AENG 211(N)	2(1+1)	1.0	AGRON-121(H)	2(1+1)	1.0
AENG 211(H)	2(1+1)	1.0	AENG-221(N)	2(1+1)	1.0
			AENG-321(N)	2(1+1)	1.0
			FAC-221(N)	2(1+1)	1.0
			CEL421(N)II-7	3(1+2)	1.5
			AGRON-622	2(2+0)	1.0
Total	7.0	3.5	Total	16.0	8.0

No. of Students Guided	M.Sc.Ag. : Nil	Ph.D. : Nil
No. of Students Guiding	M.Sc.Ag. : Nil	Ph.D. : Nil
No PG and Ph.D. Programme in Agricultural Engineering		

Work Plan for 2018-19 :

- Development of Farm pond and evaluation of catchment command relationship for various crops.
- Survey and identification of Integrated Farming System for rainfed condition and establishment of practical IFS under rainfed condition in NICRA village.[]



Name of Scientist : Dr. Neeraj Kumar

Designation : Asstt. Professor (Soil Science)

Research work (2015-16 to 2017-18)

Name of project with funding agency	:	*All India Coordinated Research Project on Dry land Agriculture (75% ICAR, 25% State Govt.), * NICRA (100% ICAR)
Project submitted	:	*04 Ad-hoc Research Project handled as P.I.: *PI of AICRP Dryland Agriculture, NICRA

Publication :

***Research Paper published : 18 (NAAS rating 4.39- 5.46)**

*** Book : Fundamental of Soil Science 2018 (ISBN 9789386283696) Page 324**

***Book Chapter : Improved Agronomic Practices for Rainfed Crops in India, Published by : CRIDA Hyderabad**

ISBN: 978-93-80883-38-0 April 2016.

Recommendation/ Product Development :

- **PSB and *Rhizobium* inoculated Pigeonpea & blackgram intercropping system is more suitable along with RDF + FYM @ t/ha**
- **Basal application of DAP 50 Kg + Zinc Sulphate 25 Kg + Sulphur 30 Kg ha⁻¹ along with 2 foliar spray of 2.5 % DAP at 45 & 60 DAS is suitable for Chick Pea in rainfed condition.**
- **Application of FYM @ 6 t ha⁻¹ + ZnSO₄ @ 25 kg ha⁻¹ + FeSO₄ @ 10 kg ha⁻¹ along with 75% RDN is most suitable for rainfed Maize.**
- **Soil Test based Recommendation (STR), gave maximum yield of rice (48.80 q/ha) and wheat (45.78 q/ha) with reducing the extra cost spent due to imbalanced use of fertilizers and thus minimize the indiscriminate use of chemical fertilizers, maintain the fertility status of soil through balanced application of macro and micro nutrients and enhanced productivity of rice and wheat as well as farmers' income.**

Teaching work (2015-16 to 2017-18)

Semester	Name of course	Credit hours	Self Credit Load
I Semester	SS-515	3(2+1)	1.0
	SS-613	3(2+1)	1.0
	SS-516	3(2+1)	1.0
	SS-611	3(2+1)	1.0
	SS-615	3(2+1)	1.0
	Total		12.0
II Semester	SS 622	3(2+1)	1.0
	SS-621	3(2+1)	1.0
	SS 522	3(2+1)	1.0
	AGRON-524	3(2+1)	1.5
	AGRON 622	2(2+0)	1.0
	AGRON-624	3(2+1)	1.0
Total		17.0	6.5

No of Students Guided	M.Sc.(Ag) : 07	Ph.D. : 02
No of Students Guiding	M.Sc.(Ag) : 03	Ph.D. : 02

Work Plan 2018-19:

- Research work will be done as per technical programme assigned by CRIDA Hyderabad of AICRPDA and NICRA project.
- Teaching work of U.G, P.G and Ph.D. courses as per allotment by Head, Agronomy/Soil Science
- Supervision of work of M.Sc.(Ag.) & Ph.D. students allotted to me.



Name of Scientist : Dr. Rajesh Kumar

Designation : Jr. Agronomist/

Asstt. Professor (Agronomy)

Research work (2015-16 to 2017-18)

Name of project with funding agency	:	All India Coordinated Research Project on Dry land Agriculture ICAR (75%) and State Govt. (25%)
Project submitted	:	Nil
Publication	:	09 (NAAS rating 3.0- 5.38)
Recommendation/ Product Development	:	Nil

Note : Study leave 15 January 2013 to 14 January 2016

Teaching work (2015-16 to 2017-18)

Semester	Name of course	Credit hours	Self Credit Load
I Semester	AGRON-321 (H) N	2(1+1)	1.0
	AGRON-511	3(3+0)	1.0
	AGRON-519	2(1+1)	1.0
	AGRON-612	1(1+0)	0.5
	Total	8.0	3.5
II Semester	AGRON-321 (N)	3(2+1)	1.5
	AGRON-624	2(1+1)	1.0
	Total	5.0	2.5
No of Students Guided	M.Sc.(Ag) : Nil	Ph.D. : Nil	
No of Students Guiding	M.Sc.(Ag) : 05	Ph.D. : 03	

Work Plan 2018-19:

- Research work will be done as per technical programme of AICRPDA and NICRA project.
- Teaching work of U.G, P.G and Ph.D. Courses as per allotment by HOD, Agronomy
- Supervision of work of M.Sc.(Ag.) and Ph.D. students allotted to me.