

## EVALUATIVE REPORT OF THE DEPARTMENT OF FARM ENGINEERING

1. Name of the Department           **FARM ENGINEERING**
2. Year of establishment           **1981**
3. Is the Department part of a School/Faculty of the university?   **YES**
4. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters: Integrated Ph.D., etc.)
  1. UG
  2. P.G. [M.Tech. in Agricultural Engineering (SWCE)]
  3. Ph.D. in three disciplines (i). Ph.D. in Agricultural Statistics, (ii). Ph.D. in Agricultural Engineering (Soil and Water Conservation) & (iii). Ph.D. in Agricultural Engineering (Bio Process and Food Engineering)
5. Interdisciplinary courses and departments involved
  1. Agricultural Statistics – Eleven departments of the Institute
  2. Agricultural Engineering (SWCE) - Soil Sci & Agric. Chemistry & Agronomy
  3. Agricultural Engineering (BPFE) – Animal Husbandry and CFST
6. Courses in collaboration with other universities, industries, foreign institutions, etc. **NIL**
7. Details of programmes / courses discontinued, if any, with reasons           **NIL**
8. Annual/ Semester/Choice Based Credit System- **Semester with choice base credit system**
9. Participation of the department in the courses offered by other departments           **NIL**
10. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)

	Sanctioned	Filled
Professor	<b>03</b>	<b>00</b>
Associate Professors	<b>03</b>	<b>03</b>
Asst. Professors	<b>08</b>	<b>07</b>

11. Faculty profile with name, qualification, designation and specialisation (D.Sc./D.Litt./ Ph.D./M.Phil., etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided for the last 4 years
Dr. Subedar Singh	Ph.D.	Professor & Head	Statistical Genetics	37	
Dr. S.R. Singh	Ph.D.	Professor	Soil & Water Conservation Engg	38	
Dr. D.C. Agrawal	Ph.D.	Professor	Nuclear Physics	36	
Dr. G.C. Mishra	Ph.D.	Professor	Statistical Inferences & Agricultural Statistics	33	01
Dr. V.K. Chandola	Ph.D.	Professor	Soil & Water Conservation Engg	20	01
Dr. R.M. Singh	Ph.D.	Assoc. Prof.	Irrigation & Drainage Engg.	06	01
Dr. A.K. Nema	Ph.D.	Assoc. Prof.	Soil & Water Conservation Engg	06	
Dr. Abhishek Singh	Ph.D.	Asstt. Prof.	Sample Survey	06	
Shri Rajan Kumar	M.Sc.	Asstt. Prof.		02	
Dr. R.C. Pradhan	Ph.D.	Asstt. Prof.	Process and Food Engg.	02	

12. List of senior Visiting Fellows, faculty, adjunct faculty, emeritus professors **NIL**

13. Percentage of classes taken by temporary faculty – programme-wise information **NIL**

14. Programme-wise Student Teacher Ratio

**PG Agril. Engg 6:1; Agril. Stat.: 50:1**

**Ph.D. Agril Engg(SWCE) 3:1; Agril Engg (BPFE) 1:1 Agril Stat. 3:1**

15. Number of academic support staff (technical) and administrative staff: sanctioned and filled

**Administrative staff (Ministerial) Filled: 01**

**Support staff (technical) Filled: 05**

16. Research thrust areas recognized by funding agencies
17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies and grants received project-wise.
18. Inter-institutional collaborative projects and grants received
  - a) All India collaboration b) International
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, etc.: total grants received.
20. Research facility / centre with
  - state recognition
  - national recognition
  - international recognition
21. Special research laboratories sponsored by / created by industry or corporate bodies
22. Publications:
  - \* Number of papers published in peer reviewed journals (national / international)  
**National -39, International-27**
  - \* Monographs
  - \* Chapters in Books - 4
  - \* Edited Books
  - \* Books with ISBN with details of publishers **BOOKS - 06**
  - \* Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
  - \* Citation Index - range / average
  - \* SNIP
  - \* SJR
  - \* Impact Factor - range / average **(0.5 to 5.106)**
  - \* h-index
23. Details of patents and income generated **NIL**
24. Areas of consultancy and income generated **NIL**
25. Faculty selected nationally/ internationally to visit other laboratories in India and abroad
26. Faculty serving in
  - a) National committees b) International committees c) Editorial Boards d) any other

(please specify)

**Prof. S.R. Singh                      National Committee**

27. Faculty recharging strategies

28. Student projects                      **NIL**

- percentage of students who have done in-house projects including inter-departmental projects
- percentage of students doing projects in collaboration with other universities / industry / institute

29. Awards / recognitions received at the national and international level by                      **NIL**

- Faculty
- Doctoral / post doctoral fellows
- Students

30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

**National Seminar on “Sustainable Management of Water Resources” during January 14-15, 2011.**

31. Code of ethics for research followed by the departments

32. Student profile course-wise:

Name of the Course (refer to question no. 4)	Applications received	Selected		Pass percentage till 2011-12	
		Male	Female	Male	Female
<b>M.Tech. (SWCE)</b>	<b>220</b>	<b>36</b>	<b>08</b>	<b>47%</b>	<b>88%</b>
<b>Ph.D.</b>	<b>36</b>	<b>17</b>	<b>06</b>	<b>12%</b>	

33. Diversity of students

Name of the Course (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
<b>PG (M.Tech.)</b>		<b>75%</b>	<b>25%</b>	
<b>Ph.D.</b>	<b>67%</b>		<b>33%</b>	

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

State Agricultural Officer	<b>01</b>
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DST-Inspire Award	<b>03</b>
NET Qualified	<b>01</b>
Bank Services	<b>05</b>

35. Student progression

Student progression	Percentage against enrolled
UG to PG	
PG to M.Phil.	
PG to Ph.D.	<b>33%</b>
Ph.D. to Post-Doctoral	
Employed	
• Campus selection	<b>20%</b>
• Other than campus recruitment	<b>70%</b>
Entrepreneurs	

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	<b>33%</b>
from other universities within the State	<b>33%</b>
from universities from other States	<b>33%</b>
from universities outside the country	--

37. Number of faculty who were awarded Ph.D., D.Sc. and D.Lit. during the assessment period – **03 Faculty members**

38. Present details of infrastructural facilities with regard to

- a) Library : **Available**
- b) Internet facilities for staff and students : **Available**
- c) Total number of class rooms: **02**
- d) Class rooms with ICT facility : **01**
- e) Students' laboratories : **04**
- f) Research laboratories : **03**

39. List of doctoral, post-doctoral students and Research Associates

- a) from the host university
- b) from other universities

40. Number of post graduate students getting financial assistance from the university. **NIL**

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology. **NO**

42. Does the department obtain feedback from
- faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? **YES**
  - students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback? **NO**
  - alumni and employers on the programmes offered and how does the department utilize the feedback? **NO**
43. List the distinguished alumni of the department (maximum 10) **NIL**
44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.  
**A lecture by Prof S.D. Sharma V.C. Dev Sanskriti University, Haridwar was organized by the department.**
45. List the teaching methods adopted by the faculty for different programmes.  
**General lecture through ICT, seminars, group discussion, assignments, brain storming session, practical training.**
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?  
**Through regular monitoring of classes, timely examination and strict teaching schedule.**
47. Highlight the participation of students and faculty in extension activities.  
**Regular organization of Farmer's Training, participation in Farmer's Fair and other extension programme.**
48. Give details of "beyond syllabus scholarly activities" of the department.  
**Summer field training of students and visit to nearby watersheds. Special lectures on application of advanced softwares like SAS, GIS etc to students.**
49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
- **Development of Artificial Neural Networks for forecasting prices of edible oils**
  - **Development of rainfall-runoff-sediments yield models for some river basins of Jharkhand and M.P.**

- **Development of weather based statistical model for forecasting of wheat Varanasi and Chanduali.**
- **Thermodynamics of Solar Energy Channels over the globe.**
- **Planning and Management of Land and Water Resources through Watershed Interventions in Drought prone Bundelkhand Region**

51. Future plans of the department.

**To establish well furnished lab of Soil and Water Conservation Engineering, Post Harvest Engineering, Farm Machinery, Computer and Statistics.**

52. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

**Multidisciplinary department involved in interdisciplinary with faculties from four major subjects.**

#### **Post-accreditation Initiatives**

If the university has already undergone the accreditation process by NAAC, please highlight the significant quality sustenance and enhancement measures undertaken during the last four years. The narrative may not exceed ten pages.