

**MINUTES OF THE MEETING ON BOARD OF STUDIES, FACULTY OF AGRICULTURAL ENGINEERING AND TECHNOLOGY. NAU, NAVSARI DATED: 23.05.2014 AT CONFERENCE HALL, DEPT. OF AGRICULTURE CHEMISTRY, NMCA, NAU BETWEEN 10:00 – 16:30.**

Second Meeting of the Board of Studies for Faculty of Agricultural Engineering and Technology. N.A.U., Navsari was held at the conference hall, Department of Agricultural Chemistry, NMCA, NAU on 05.01.2013 from 14:00 to 17:30 hrs. The following members remained present in the meeting.

<b>Name of Member</b>	<b>Designation and Address</b>	<b>Status at BoS*</b>
Er. S. P. Shukla	Principal, CAE, NAU, Dediapada	Chairman
Dr. H.C. Bhatt	Representative of DSW, NAU, Navsari	Member
DR. S. R Chaudhari	ADR (Animal Science) , NAU, Navsari	Member
Dr. G. G. Radadiya	Registrar, NAU, NAU, Navsari	Member Secretary
Dr. M. L. Gaur	Dean, AE, CAET, AAU, Godhara	Invitee Member
Dr. D. C. Joshi	Dean , FPT, CFPT&RE, AAU, Anand	Invitee Member
Dr. A. M. Bafana	Dean, ASPEE ABM, NAU, Navsari	Invitee Member
Dr. P. K. Shrivastava	Prof & Head, Dept. of NRM, NAU, Navsari	Member
Er. B. R. Patel	Asso Prof, Dept of SWE, CAE, NAU, Dediapada	Member
Dr. S. H. Sengar	Asso Prof, Dept of RERE, CAE, NAU, Dediapada	Member
Er. Deepak Singh	Ass. Prof, Dept SWE, CAE, NAU, Dediapada	Member
Er. Abhimanyu Kalne	Asst. Prof, Dept of FPE, CAE, NAU, Dediapada	Member
Er. Aashish Sonawane	Asst. Prof, Dept SWE, CAE, NAU, Dediapada	Member
Er. Tilak Chavda	Asst. Prof., Dept of RERE, CAE, NAU, Dediapada	Member
Er. Sandip Patel	Asst. Prof. (Comp Sc), Dept of FPE, CAE, NAU, Dediapada	Member
Dr. Meghana Varma	Asst. Prof. (Maths), Dept of FMP, CAE, NAU, Dediapada	Member
Er. Swagatika Jena	Asst. Prof., Dept of FMP, CAE, NAU, Dediapada	Member
Er. P. R. Pandey	Asso. Prof., PAE, NAU, Dediapada	Member
Er. A. P. Lakkad	Asst. Prof., PAE, NAU, Dediapada	Member
Er. H. Sanchavat	Asst. Prof., PAE, NAU, Dediapada	Member
Er. A. L. Chalodiya	Asso. Prof. & I/C Head, Dept. of AE, NMCA, NAU, Navsari	Member
Er. Manjushri Singh	Asst. Prof., Dept. Of AE, NMCA, NAU, Navsari	Member
Dr. Neeraj Kumar	Asst. Prof.(Met.), Dept. AE, NMCA, NAU, Navsari	Member
Er. Vipul T. Shinde	Asst. Prof., College of Agriculture, NAU, Waghai	Member
Er. N. M. Shah	Asso. Prof., ACOHF, NAU, Navsari	Member
Dr. Devraj Pandhir	Asso. Prof. & Head, Dept of PHT, ACHF, NAU, Navsari	Member
Er. A. K. Senapati	Asst. Prof., PGC on PHTPE, NAU, Navsari	Member
Er. F. M. Sahu	Asst. Prof., PGC on PHTPE, NAU, Navsari	Member
Dr. P. S. Suthar	Asst. Prof, PGC on PHTPE, NAU, Navsari	Member
Er. P. S. Pandit	Asst. Prof., PHTC,NAU, Navsari	Member
Er. N. G. Savani	Asst. Prof., SWMRU, NAU, Navsari	Member
Er. B. M. Soliya	Asst. Prof., SWMRU, NAU, Navsari	Member

The meeting was presided over by Er. S. P. Shukla, Chairman, Board of Studies, Faculty of Agricultural Engineering and Technology, Navsari Agricultural University, Navsari. At the onset, The Chairman welcomed invitee members, officers of University and all the members with flower and words.

The action taken report was read by the chairman and all the nine points from 1.1 to 1.9 was approved by house after in-depth discussion.

Eight proposed item notes were discussed in the house. Out of them, four were approved and rest four approved with modification in line with reference of Gujarat State Agricultural University Common Resolution Act as well as GSAU statute. The details of suggestion as well as modifications are given in details here under.

2.1 **Item Note 1:** To amend the name of the College of Agricultural Engineering, Dediapada.

Approved with the suggestions that the reference of act and statute, if any should be included in the write up of the item note while putting it in academic council. As per the provision in section No 30(3) and 20(1), (34) of Gujarat Agricultural Act-2004, the corrected resolution is as under;

**Resolved to amend the name of the college of agricultural Engineering, Dediapada from "COLLEGE OF AGRICULTURAL ENGINEEING" to "COLLEGE OF AGRICULTURAL ENGINEERING AND TECHNOLOGY" and recommend to put up the change in the Academic Council of NAU for approval.**

**Action Taken:** Principal, CAED, NAU, Dediapada

2.2 **Item Note 2:** To declare the Dean of the Faculty of Agricultural Engineering and Technology in NAU.

Approved with the suggestions that, the reference of act and statute if any should be included in the write up of the item note. As per the provision in section No 30(3) and 13(1)-13(2) of Gujarat Agricultural Act-2004 and statute No S. 44.1 of first common statute for State Agricultural Universities of Gujarat Rule-2011, the corrected resolution is as under;

**Resolved to declare Principal, College of Agricultural Engineering, Dediapada as the Dean of the Faculty of Agricultural Engineering & Technology, NAU and put up the same in the Academic Council of NAU for approval.**

**Action Taken:** Principal, CAED, NAU, Dediapada

2.3 **Item Note 3:** To put PG Center for M. Tech. in Post Harvest Technology and Process Engineering running at Navsari under the Dean, Faculty of Agricultural Engineering & Technology, NAU.

Approved with the suggestions that the students have to apply at Navsari under the Dean, Faculty of Agricultural Engineering & Technology, NAU, Navsari. The registration of student would be done at College of Agricultural Engineering, Dediapada. The course work and the project work will be done at Centre of Excellence for Post Harvest Technology, NAU, Navsari only. If there is need of extra staff to take the courses of the particular subject, the staff from different centers will be invited at Centre of Excellence for Post Harvest Technology, NAU, and Navsari till completion of the course as per time table. All the academic activities and calendar of M. Tech. (PHT&PE) program would be synchronized with the academic calendar of Faculty of Agricultural Engineering and Technology of SAUs. As per the provision in section No 30(3) and 20(1)(21),(29),(34) as well as 22(10),(11),(14) and (15) of Gujarat Agricultural Act-2004, the corrected resolution is as under;

**Resolved to put-up the PG centre on Post Harvest Technology and Process Engineering under the Dean, Faculty of Agricultural Engineering and Technology, NAU and recommend to put-up in Academic Council of NAU for approval.**

**Action Taken:** Chairman, BoS, Faculty of Agril. Engg. and Tech., NAU

2.4 **Item Note 4:** Allowing the academic staff of Dediapada for in service PG studies after completion of one year of service as a special case

The house has suggested that, after completion of the probation period, looking to the need of subject or faculty, department strength and performance of the particular academic staff, one may allow to go for higher studies as per rules and regulations of NAU with due approval of competent authority as either in-service scholar or on study leave.

In that Registrar, NAU has suggested for putting the item note with modification and inclusion that, instead of six months(1 semester) of study leave, the study leave should be of sufficient period (may be from 3 to 4 semesters) so one could complete the course work. He has also suggested for providing the list of leading institutes of India, where the higher studies may be allowed for the Faculty of Agricultural Engineering staff.

One can apply and registered at one of the listed institute, complete the course work at, within 3 – 4 semesters and just after completion of course work, he/she should rejoin the NAU with continuation of his PG research work at NAU. The candidate may under take research work under the supervision of Major Guide from the Institute, where he registered and Co-guide from NAU. As per the provision in section No 30(3) of Gujarat Agricultural Act-2004 and statute No S. 119 Rule No 134 of first common statute for State Agricultural Universities of Gujarat Rules–2011, the corrected resolution is as under;

**Resolved to allow the academic staff of Dediapada and Agricultural Engineering Subjects for Ph.D. higher studies after the completion of probation period as per need of discipline and the study leave for that should be of three years, and put up the same in the Academic Council of NAU for approval.**

**Action Taken:** Principal, CAED, NAU, Dediapada

2.5 **Item Note 5:** To amend the Post Graduate Degree title of M. Tech. in Post Harvest Technology & Process Engineering.

Approved with the suggestions that as this is going to be the fifth discipline of Agricultural engineering faculty, its course title and course code should not match with the course title and course code of M. Tech. Agricultural Engineering with specialization of Process and Food Engineering. If any similarities are there, it should be corrected with view to avoid the course contain should be changed and that should be matched with the earlier course contain i.e. M. Tech. in Post Harvest Technology & Process Engineering. The house has suggested to form a committee to decide the nomenclature of degree including all the principals of Agricultural engineering colleges of Gujarat and Dean, Faculty of Food Processing Technology as well as ADR (Animal Science) and Registrar, NAU for finalization of degree title.

2.6 **Item Note 6:** Approval for incorporation of three courses in M. Tech.(PHT&PE) from the allied field. House has suggested merging this item note with Item Note: 2.5. so dropped.

**Resolved to form a committee at the earliest to decide the nomenclature of degree including all the principles of Agricultural engineering colleges of Gujarat and Dean, Faculty of Food Processing Technology as well as ADR (Education) and Registrar, NAU for finalization of degree title and, put up the same in the Academic Council of NAU for approval.**

**Action Taken:** Chairman, BoS, Faculty of Agril. Engg. and Tech., NAU

2.7 **Item Note 7:** To amend the mode of evaluation in Polytechnic Agricultural Engineering.

Approved with the suggestions that the reference of act and statute, if any should be included in the write up of the item note. As per the provision in section No 30(3) of Gujarat Agricultural Act-2004, the corrected resolution is as under;

**Resolved to amend the system of evaluation in the polytechnic agricultural engineering as adopted in UG programs of SAU's and recommend to put up in the academic council of NAU for approval subject to the change in common regulation as well as adoption of this change by other polytechnics.**

**Action Taken:** Principal, PAED, NAU, Dediapada

2.8 **Item Note 8:** To amend the mode of evaluation in degree Agricultural Engineering College.

Approved with the suggestions that the reference of act and statute, if any should be included in the write up of the item note. As per the provision in section No 30(3) of Gujarat Agricultural Act-2004, the corrected resolution is as under;

**Resolved to amend the system of evaluation in the agricultural engineering as adopted in UG programs of SAU's and recommend to put up in the academic council of NAU for approval subject to adoption of this change by other Agricultural Engineering colleges.**

**Action Taken:** Principal, CAED, NAU, Dediapada

2.9 Student's presentation for their PG Research and thesis:

Four post graduate students have presented their PG research technical program. Out of four; one was for Ph. D. (Agricultural Engineering) with specialization in Soil Water Engineering and three were for M. Tech. (Post Harvest Technology and Process Engineering) with specialization in Post Harvest Technology and Process Engineering.

**All the four PG Research program were approved with suggestion as per detailed given bellow.**

**Action Taken:** Major Guide and concern student.

2.9.1 Name of Students: Er. Arun Lakkad (Ph.D.) Major Guide: Dr. P. K. Srivastava

Title: Estimation of Soil Loss and Prioritization of Watershed using RUSLE and MUSLE Models through Remote Sensing and Geographic Information System.

Objectives:

- 1) To estimate the different components of RUSLE and MUSLE models.
- 2) To estimate the Sediment Yield, Sediment Delivery Ratio and Sediment Yield Index of selected sub-watershed.
- 3) To prioritize the watershed for planning, execution and management.
- 4) To produce erosion susceptibility map.

Year of commencement: 2014-2015

Approved with following suggestions:

- 1) Consult statistician for strengthening of experiment for appropriate design of experiment.

2.9.2 Name of Students: Er. Praful Godhani (M.Tech.) Major Guide: Er. P. S. Pandit

Title: Design and Development of Banana Bunch Harvesting Tool.

Objectives:

- 1) To design and develop banana bunch harvesting tool which ease the cutting operation.

2) To evaluate the performance of banana harvesting tool and compare it with local sickle.

Year of commencement: 2014-15

Approved with following suggestions:

2) Include following parameters in design and observation.

- Diameter of grip, damage of fruits while harvesting, force required to cut the bunch in one stroke, cost calculation.

3) Include local sickle as another treatment for comparison.

4) Consult statistician for appropriate design of experiment and replications.

2.9.1 Name of Students: Ms. Priyanka Pandya (M.Tech.) Major Guide: Er. P. S. Pandit

Title: Design and Development of Banana Slicing Tool.

Objectives:

1) To design and develop banana slicing tool.

2) To evaluate the performance of developed tool and compare it with domestic slicer.

Year of commencement:2014-15

Approved with following suggestions:

1) Include following parameters in design and observation.

- Damage of slices, all observations for ripe and unripe banana. force required to slice the banana in one stroke, cost calculation.

2) Include domestic slicer as another treatment for comparison.

3) Consult statistician for appropriate design of experiment and replications.

2.9.1 Name of Students: Er. Parth Pandit (M.Tech.) Major Guide: Er. F. M. Sahu

Title: Effect of blanching and microwave power on drying characteristics of Elephant Foot Yam (*Amorphophallus Paeoniifolius*).

Objectives:

1) To optimize the study the effect of different blanching conditions and microwave power on drying kinetics of elephant foot yam.

2) To evaluate quality characteristics of dried products.

3) To select the model to describe the microwave drying behavior of elephant foot yam.

Year of commencement: 2014-15

Approved with following suggestions:

1) To change the title as: "Microwave assisted convective drying characteristics of Elephant Foot Yam (*Amorphophallus Paeoniifolius*)."

2) Optimize the blanching conditions like; water to product ratio, blanching time.

3) Keep the treatment factor as microwave power and exposure time and continue experiment with constant parameters of convective drying.

4) Include storage study of dried product at least for four months with a suitable packaging material.

5) Consult statistician for appropriate design of experiment and replications.

2.10 Presentation from centers for the departmental achievement, activities and work load:

Eight Centers have presented the teacher's workload and departmental activity in concern with agricultural engineering. Dr. Joshi, Dean, FFPT, AAU, Anand in his remark appreciated the agricultural works initiated at various centre of University. He also commended the Dr. A. R. Pathak, Hon. Vice Chancellor, NAU for recruiting excellent agricultural engineering staff at various centre of the university. Dr. M. L. Gaur, Dean, Agricultural Engineering, AAU appreciated the efforts made for the infrastructure, educational and research development by

NAU in the area of agricultural engineering. All the six presentation of workload and centre activities were approved with the suggestions made by house with particular presentation for improvement as bellow.

**Action Taken:** Head of Department, Scientist and Teacher.

2.10.1 Centre: PHTC, NAU, Navsari

Dr. Devraj has presented the workload, achievement and activity of centre. The house have noted the progress.

2.10.2 Centre: CAE and PAE, NAU, Dediapada

Er. Ashish Sonowne has presented the workload, achievement and activity of centre. The house have noted the progress.

2.10.3 Centre: NRM, ACHF, NAU, Navsari

Dr. P. K. Srivastava has presented the workload, achievement and activity of centre. The house have noted the progress.

2.10.4 Centre: DAE, NMCA, NAU, Navsari

Er. A. L. Chalodia has presented the workload, achievement and activity of centre. The house have noted the progress.

2.10.5 Centre: SWMRU: NAU, Navsari

Er. B. M. Soliya has presented the workload, achievement and activity of centre. The house have noted the progress.

2.10.6 Centre: DAE, CA, NAU, Waghai

Er. V. Sinde has presented the workload, achievement and activity of centre. The house have noted the progress.

2.11 Er. P. S. Pandit have discussed about patent for his PG student's research work name Mr. Bhani Ram M.Sc.(Horti) (PHT). The point was discussed thoroughly in the house and concluded to put up the matter in next meeting of NAU PG Board of Studies.

**Resolve to put up PG student's research work for patent in next Meeting of NAU PG Board of Studies.**

**Action Taken:** Major Guide

The meeting was ended with vote of thanks by Dr. P. K. Srivastava, Professor and Head, Dept. of NRM, ACOHF, NAU, Navsari

Chairman

Board of Studies for Agricultural Engineering and Technology  
College of Agricultural Engineering  
NAU, Dediapada

No. NAU/CAED/BoS/AE/765-99/2014

Navsari dated: 08-07-2014

**Copy f.w.es. to**

- PS to Hon. Vice-Chancellor, N.A.U., Navsari
- The Director of Research and Dean PG Studies, N.A.U., Navsari
- The Dean, Faculty of Agriculture, N.A.U., Navsari

**Copy to:**

- All the members of the Board of Studies as above.