 NAVSARI AGRICULTURAL UNIVERSITY	Soil Science Department Navsari Agricultural University, Navsari	
Dr. Sonal Tripathi Convener, NRM Agresco & I/c. Research Scientist	e-mail :	convenernrm@nau.in
	Mo. No.	9724304673

CIRCULAR

- Read : 1. Director of Research & Dean, Faculty of PG Studies Circular No. NAU/DR/T5/7547/2022, Dated: 29/12/2022
2. Director of Research & Dean, Faculty of PG Studies Circular No. NAU/RES/T-5/Agresco/ 244-93/2022, Dated: 07/01/2022
3. સંશોધન નિયામકશ્રીના પરિપત્ર નં. નકૃયુ/સંનિ/ટી ૫/૧૮૪-૨૩૩/૨૦૨૨ તા. ૦૭/૦૧/૨૦૨૨

The XIX NRM Agresco sub-committee meeting of Navsari Agricultural University is scheduled during March 20-21, 2023. The members/reporting officers are requested to take note of the following points.

- (1) **"General guidelines for all AGRESKO groups of SAUs in Gujarat"** circulated by Director of Research & Dean, Faculty of PG Studies, NAU, Navsari No. NAU/DR/AGRESKO/1502/2021 Dated: 09/03/2021 (attached herewith) should be **strictly followed** for Report preparation, formulation of new technical programme/s and recommendation/s.
- (2) Prepare and submit the report of work done during the previous year along with the recommendations and new technical programme/s, if any in **prescribed format only** (attached herewith) before **20/02/2023** in 10 hard copies and soft copy (word) to the convener as well as in PDF format to all the members through email. **Report in other format will not be accepted.**
- (3) Do not submit hard copies of the report to the Director of the Research as the same will be submitted by the Convener (As per above, read 1).
- (4) The report should be prepared in word, A4 size paper/page set up and Arial font. The Gujarati version of the recommendation paragraph should be in Shruti font only.
- (5) All the presentations would be made exclusively in PowerPoint with greater font size. Please submit PPT files to the convener latest by 28/2/2023. Not more than 50 presentation slides, addressing only the most crucial components of the objectives, are preferred.
- (6) Members cannot remain absent in the NRM sub-committee meeting unless prior permission is obtained from the Director of Research & Dean, Faculty of P. G. Studies (As per above read 1).
- (7) Members proposing new technical programme/s should plan the same in advance by considering the need of the present and future agriculture and it will be discussed with the senior faculty members/related subject specialist and the statistician to avoid unnecessary discussions during the meeting. Also consider "General guidelines for all AGRESKO groups of SAUs in Gujarat".

- (8) All the members must upload NTPs and progress of their experiments on the new developed AEMS (Agricultural Experiment Monitoring System) software. A report generated by the software on uploading and final submission of information need to be attached with the report (As per above, read 1).
- (9) All new Technical Programmes must be uploaded in AEMS software immediately after approval in the Combined Joint AGRESCO (As per above, read 1).
- (10) It is mandatory for all members to submit their **Scopus H Index** which can be searched from <https://www.scopus.com>. (As per above, read 1). **Action Taken Report** should be prepared according to the new format only (attached herewith).



(Sonal Tripathi)
Convener

No. RS/SS/Agresco-NRM / 48 /2023

Date : 02 - 01 -2023

Copy f.w.rs./cs. To (Through email)

- (1) PS to Hon. Vice-Chancellor, NAU, Navsari
- (2) The Director of Research & Dean, Faculty of PG Studies, NAU, Navsari
- (3) The Director of Extension Education, NAU, Navsari
- (4) The Principal of colleges and Head of Research Stations of NAU
- (5) All Conveners, Agresco sub-committee, NAU
- (6) All Members of NRM subcommittee for information and necessary action

**REPORT FORMAT FOR THE AGRICULTURAL RESEARCH COUNCIL,
NRM SUB-COMMITTEE**

1. Cover Page (As per given format)
2. Content Page (Sr. No., title of experiment and page No.)
3. Seasonal features
4. Experiment-wise summary (Title and abstract including location, treatments, statistical details, seasonal features if any, result *etc.* (Research paper style, in one paragraph)
5. Form-A: Result of ongoing experiment
6. Form-B: Recommendation for farmers/information for scientific community
7. Form-C: New technical programme
8. Form-D: Other information

FOR OFFICE USE ONLY

**_____TH MEETING OF
AGRICULTURAL RESEARCH COUNCIL**

**DISCIPLINE
Natural Resource Management Sub-committee**

YEAR 20_____



ADDRESS OF THE REPORTING OFFICER

FORM-A: RESULT OF ONGOING EXPERIMENT

01. Experiment number and title :
(As per CJA)
02. Budget Head
03. Collaborative department, if any
04. Location and Agro-climatic sub region :
05. Investigators :
06. Year of commencement :
07. Season :
08. Crop and variety :
09. Experimental details :
(a) Treatments :
(b) Design :
(c) Replications :
(d) Plot size : Gross - ____ m x ____ m
Net - ____ m x ____ m
10. Cultural details
(a) Previous crops and fertilizers :
(b) Sowing date :
(c) Seed rate
(d) Spacing
(e) manures and fertilizers
(f) No. of irrigation with date
(g) Cultural operations with date
(h) Plant protection measures
(i) Harvesting date
11. Soil analysis
12. Input analysis
13. Results :
(Table/s with statistical analysis and Interpretation)
14. Remarks (for abnormal experimental results only) :
15. Reasons for abnormal conditions affecting experimental results and low yield if any be given in brief. e.g. uneven plant stand, pest and disease incidence, weather conditions, etc. :
16. Any other information : e.g. Modification in previous year experiment

Note:

1. For the experiments to be concluded, the previous year's results along with pooled analysis and interpretation should also be included in the same report.
2. For survey and lab experiment give scientific methodology in experimental details

FORM-B: RECOMMENDATION FOR FARMERS/INFORMATION FOR SCIENTIFIC COMMUNITY

01.	Experiment No. and Title (As per CJA)	:	
02.	Budget Head	:	
03.	Collaborative department, if any	:	
04.	Location and Agro-climatic sub-region	:	
05.	Background information	:	
06.	Objectives	:	
07.	Principal investigator and associates	:	
08.	Experimental period	:	From ____ to ____
09.	Season of experiment	:	
10.	Crop and Variety	:	
11.	Experimental details		
	(a) Treatments	:	
	(b) Experimental Design	:	
	(c) Replications	:	
	(d) Plot size (if applicable)	:	Gross - ____ m x ____ m Net - ____ m x ____ m
	(e) Spacing	:	
	(f) Seed rate (kg/ha)	:	
	(g) Manuring		
	(i) FYM (t/ha)	:	
	(ii) N, P and K (kg/ha)	:	
12.	Year-wise cultural details		
	(a) Date of		
	(i) Sowing	:	
	(ii) Harvesting	:	
	(b) Number of irrigations (Year-wise)	:	
	(c) Number of weedings	:	
	(d) Number of inter culturing	:	
	(e) Previous crop and fertilizer applied (year-wise)	:	
13.	Soil analysis (if applicable) Depth-wise Parameters	:	Initial : After
	(a) pH	:	
	(b) EC	:	
	(c) Organic carbon	:	
	(d) Available N	:	
	(e) Available P ₂ O ₅	:	
	(f) Available K ₂ O	:	
	(g) Any other	:	
14.	Input analysis		
15.	Year-wise general conditions		
	(a) Pest and diseases	:	
	(b) Plant stand	:	
	(c) Seasonal conditions	:	
	(d) Rainfall distribution	:	
16.	Results (Table/s with statistical analysis and Interpretation)	:	
17.	Economics	:	
18.	Conclusion	:	
19.	General recommendation for the farmers (English and Gujarati)/Information for scientific community (English)	:	

FORM-C: NEW TECHNICAL PROGRAMME

01. Experiment No. and Title :
02. Budget Head :
03. Collaborative department, if any :
04. Background information :
05. Objectives :
06. Principal investigator and associates :
07. Location and Agro-climatic sub-region :
08. Year and Season :
09. Crop and Variety :
10. Experimental details :
 - (a) Treatments : Factors, levels and other details
 - (b) Experimental Design :
 - (c) Replications :
 - (d) Plot size (if applicable) : Gross - ____ m x ____ m
Net - ____ m x ____ m
 - (e) Spacing :
 - (f) Seed rate (kg/ha) :
 - (g) Manures and fertilizer :
 - (h) Any other detail, if required :
11. Observations to be recorded :
12. Methodology (if necessary) :

FORM-E: OTHER INFORMATION

01. Publications :
02. Submitted thesis (Title of the Thesis, Name of the Student and Major guide) :
03. Advisory and extension services :
04. Event organized (Seminar, symposia, training *etc.*) :
05. Award and any other achievements :
06. Scheme/Project detail (Title and BH No.) :

ACTION TAKEN REPORT (18th AGRESCO meeting)

Name of AGRESCO Sub-committee: NATURAL RESOURCE MANAGEMENT

Name of Convener: Dr. Sonal Tripathi

Sr. No.	Title	Recommendations for farmers			Action taken by
Unit Name					
		18 th NRM (05-06/03/2022)	Item No.		
			Suggestions		
			Action taken		
		18 th Joint Agresco (21/03/2022)	Item No.		
			Suggestions		
			Action taken		
		18 th CJA (04-06/ & 10/05/2022)	Item No.		
			Suggestions		
			Action taken		
Information for scientific community					
Unit Name					
		18 th NRM (05-06/03/2022)	Item No.		
			Suggestions		
			Action taken		
		18 th Joint Agresco (21/03/2022)	Item No.		
			Suggestions		
			Action taken		
		18 th CJA (04-06/ & 10/05/2022)	Item No.		
			Suggestions		
			Action taken		

Sr. No.	Title	ACTION TAKEN REPORT						
		New Technical Programme			Action taken by			
Unit Name								
		18 th NRM (05-06/03/2022)	Item No.					
			Suggestions					
			Action taken					
		18 th Joint Agresco (21/03/2022)	Item No.					
			Suggestions					
			Action taken					
		18 th CJA (04-06/ & 10/05/2022)	Item No.					
			Suggestions					
			Action taken					
CONCLUDING/ONGOING EXPERIMENTS								
Unit Name								
		18 th NRM (05-06/03/2022)	Item No.					
			Suggestions					
			Action taken					
		18 th Joint Agresco (21/03/2022)	Item No.					
			Suggestions					
			Action taken					
		18 th CJA (04-06/ & 10/05/2022)	Item No.					
			Suggestions					
			Action taken					



DIRECTORATE OF RESEARCH
NAVSARI AGRICULTURAL UNIVERSITY
ERU CHAR RASTA, NAVSARI-396 450

NAVSARI AGRICULTURAL UNIVERSITY

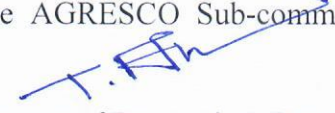
CIRCULAR

AGRESCO sub-committee meetings of different disciplines and Joint AGRESCO meeting of all the Sub-committees of Navsari Agricultural University, Navsari for the year 2023 are scheduled as under

Sr. No.	Name of AGRESCO Sub-committee	Date (s)	Name of the Conveners
1	Social Science	21 st Feb, 2023	Dr. Narendra Singh , Professor, Dept. of Economics, NMCA, NAU, Navsari
2	Basic Science	24 th Feb 2023	Dr. Rajkumar Katagi , Assistant Research Scientist, Main Cotton Research Station, NAU, Surat
3	Forestry	28 th Feb 2023	Dr. Sumankumar Jha , Associate Professor, Forest Biology & Tree Improvement, College of Forestry, NAU, Navsari
4	Agril. Engineering	3 rd March 2023	Dr. P. K. Shrivastava , Dean, College of Forestry, NAU, Navsari
5	Horticulture	9 th & 10 th March, 2023	Dr. Dev Raj , Professor, Post-Harvest Technology, ACHF, NAU, Navsari
6	Plant Protection	14 th & 15 th March, 2023	Dr. Hemant Sharma , Associate Professor, Dept. of Pathology, ACHF, NAU, Navsari.
7	Natural Resource Management	20 th & 21 th March, 2023	Dr. Sonal Tripathi , Associate Professor, Dept. of Soil science and Agricultural Chemistry, NMCA, NAU, Navsari
8	Crop Improvement	23 rd & 24 th March, 2023	Dr. Bharat K. Davda , Research Scientist, Main Sorghum Research Station, NAU, Surat
Joint Agresco		3 rd April, 2023	All the Sub-committees

All University Officers/ Unit/Sub-Unit Officers are requested to avoid arranging/organizing any meeting/programme during the above dates for smooth conduct of the AGRESCO Sub-committee meetings.

No. NAU/DR/T-5/AGRESCO/7686/2022
 Navsari Date : 21-12-2022

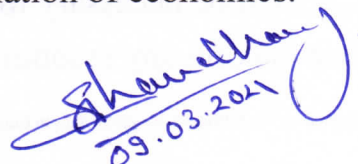

 Director of Research & Dean
 Faculty of P. G. Studies

C.F.W. to :

1. PS to Vice Chancellor, Navsari Agricultural University, Navsari
2. All University Officers, Navsari Agricultural University, Navsari
3. All Conveners of the above Sub-committee with a request to submit the list of members for approval
4. The Director of Research & Dean Faculty of P. G. Studies, AAU, Anand/JAU, Junagadh/SDAU, Dantiwada/KU, Gandhinagar
5. The Associate Professor, SAU's Council, podium level, Krishi Bhavan, Sector 10-A, Gandhinagar
6. The Director of Agriculture/ Horticulture/Animal Husbandry, Gujarat State, Gandhinagar
7. All Unit/Sub-Unit Officers of Navsari Agricultural University, Navsari for information and notice to the concerned

General Guidelines for all AGRESKO groups of SAUs in Gujarat

1. AGRESKO report should be prepared according to the prescribed format.
2. Proper footnote must be given in the table.
3. Methodology of experiment should be uniform.
4. Experiment must be properly framed and duplication (plagiarism) avoided at the university level.
5. The recommendation proposed should justify the title and objectives of the experiment.
6. NTP and recommendations must be sent to the relevant departments of respective SAU for comments and improvement before final presentation in CJA
7. In NTPs, the number of investigators should not exceed four including PI.
8. Name of JRF/SRF/Teaching Associate should figure as PI/Co-PI/Associate faculty in the AGRESKO experiments. However, Agricultural Officers, Horticulture Officers and Veterinary Officers can be included in the list of investigators.
9. Service oriented applications and software should not be presented in AGRESKO. However, research based applications and software's may be allowed.
10. It is mandatory to perform data analysis in consultation with Statistician.
11. The research papers of last five years from peer reviewed journals should be referred for preparing NTP.
12. Necessary set guidelines should be strictly followed for experiments based on Ph.D. student research work to be continued in sub-committee. The student's data should be considered as a Preliminary Trial. Based on that, treatments should be refined and placed again in the House before making any recommendation.
13. If $Y \times T$ is found non-significant and data are consistent for two years then recommendation can be approved.
14. Mention $SEm \pm$, CD at 5% and CV % in all the tables.
15. Good quality photographs should be compulsory for recommendation. Treatment effect should be visible in single photograph.
16. For Gujarati version of recommendation, "Shruti" font is compulsory.
17. The last season wholesale price earned by growers or the APMC price of the current season should be used for calculation of economics.


09.03.2021

18. Economics should not be mentioned in the text of objectives as well as in the list of observations, but by default it must be calculated at the time of recommendation.
19. There should be a common policy for testing product/inputs other than SAUs of Gujarat in coordinated trial (In many AICRP trials different types of products are being tested without knowing its composition and other details).
20. Testing of biorationals along with chemical pesticides should be avoided.
21. The inclusion of Trade Name for fertilizer / Chemical / Product material/drug/medicine etc should be avoided while proposing the new technical programme of the experiment.
22. In case of *rabi*/summer experiments, recommendation can be made with two years data based on the consistency of the treatment over the years, else three years.
23. For *kharif* experiment minimum three years data is required for recommendation considering the consistency of the treatment in all the years under experiments.
24. The new technical programme of AICRP trial should be presented in AGRESO sub-Committee meeting in respective SAU for inclusion of any treatment to meet the local demand / issue and approval. If the PI is unwilling to include any changes in the treatments suggested by the House, the experiment would be approved as AICRP trial only.
25. The common guidelines prepared by JAU for working out the economics while casting the recommendation is attached herewith and shall remain common across AGRESO groups (Annexure-I).
26. Code number of approved New Technical Programme should be given by Directorate of Research office of respective SAUs every year e.g. CP/Agronomy/2020/01.
27. Research Sub-committee must not approve more than one recommendation for the farming community from one approved NTP. In special cases, a scientific recommendation can be made in addition to the recommendation for the farming community from the same NTP provided two different sets of data have to be recommended. Alternatively, the recommendation can also be presented as “A” and “B” but the recommendation will be counted as one.
28. Scientist should conduct experiments of nutritional trial on experimental animals before making recommendation to farmers or scientific community. Similarly, it will be necessary to repeat the experiments in-vitro after in-vivo trials before making any recommendations for all Research Sub-committees.

29. Research sub-committee shall not be responsible for any legal cases or claim based on data provided in recommendation approved by the committee, further, in such cases the respective scientist/s shall be responsible.
30. Research sub-committee shall not be responsible for use of any banned chemicals/drugs/medicine/molecules/seeds/planting materials etc.
31. If suitable recommendation cannot be drawn from any NTP then NTP may be treated as concluded or extended for one or two years more by the respective Research Sub-committee. Further, "Concluded" or "Extended" should be in the knowledge of Research Sub-committee.

Specific Guidelines for AGRESKO of SAUs of Gujarat

Crop Production

1. Experiments proposed on nutrient management should be continued on the fixed plots at the same selected site till completion without changing the randomization of the treatments, if possible.
2. For many years, single crop based experiments have been conducted. Now we need to give priority to studies involving intercropping, crop sequence or crop rotation, unless justified as special cases. Thus, the new technical programme should consider inclusion of two to three crop sequences, if possible.
3. Experiments proposed for only one season (*rabi* or summer), should not include the treatment of organic matter, unless required for specific purpose.
4. Experiment proposed under organic farming should be conducted on certified/converted organic plot for at least 2 to 3 years under selected crop sequence, it should be continued for five years and first two years data will not be included in pooled analysis.
5. The chemical analysis of inputs, soil and produce should include as per following
 - Inputs:** Nutrients, heavy metals and C:N ratio (every use)
 - Soil:** Nutrients, heavy metals and microbial count (Initial & After harvest/ at end of use)
 - Produce:** Nutrients and heavy metals content as well as quality parameter wherever needed
6. For Control treatment: The existing recommendations should be followed: For pulses / oil seeds /low input crops e.g. 5t FYM and for cereals/high input requirement crops e.g. 10 t FYM/ha needs to be applied when the experiment is conducted for first time for new variety/crop.

7. In case of higher variation in seasonal data, the results (yield performance) need to be correlated with the weather data of respective seasons for proper interpretation.
8. When experiment is to be conducted in paired row or in broad bed and furrow, sketch / layout should be displayed during presentation for better understanding.
9. The new technical programme on product developed by the scientist for testing needs to be approved with disclosed content only. However, if PI desires to continue experiment, recommendation will be approved only after disclosure of the content in the house for which the PI must give his/her consent.
10. The laboratory / pot/ micro-plot study under controlled condition of maximum one year duration should be conducted depending upon the requirements of the research / product testing to bring out scientific information or as scientific recommendation to the laboratories/policy makers.
11. The details on composition of the product / fertilizer / chemical compound included in the treatment should be mentioned in the methodology / Treatments' details.
12. Package and practices related to fertilizers application (nutrient management), plant protection measures and irrigation (if any) should be included in the methodology.
13. Control plot (control treatment) must receive all standard recommended practices for the given crop in order to obtain optimum crop production.
14. In case of the planned comparison use LSD only for treatment mean comparison. In case of unstructured/unplanned comparison (wherever control treatments exist in the experiment) treatment mean should be compared using DNMRT especially, when number of treatments is more than seven.
15. The treatment involving comparison of different genotypes of a given crop; it should be ensured that 'Varieties' and 'Hybrids' are not included to avoid wrong interpretation unless hybrid is developed first time in that crop.
16. In case of nutrient sources, care should be taken to select the latest source which is listed under the FCO to ensure the quality of the product.

Crop Improvement

1. Release proposals should be in attached format (Annexure-II) as circulated by JAU, Junagadh.
2. Standard procedure should be followed for evaluation of the genotypes i.e., One year PET followed by one year SSVT and two years of LSVT with multi

locations for all agricultural and horticultural crops (Excluding plantation and forest crops).

3. In yield data table, year wise mean and per cent increase over should be mentioned.
4. Disease and pest data table should be given as per the format and the range of the same should be given along with mean.
5. Proposal should contain minimum one year AICRP testing data for crops covered under AICRIP testing, DNA fingerprinting and National Identity number, otherwise the proposal will not be considered for recommendation.
6. Include name of all sub-station scientists who have contributed in evaluation.
7. In table of ancillary observations, mean along with range should be mentioned.

Plant Protection

1. Same group of insecticides should not be kept for more than two subsequent sprays in a season.
2. The screening trials must have sufficient pests/disease pressure with susceptible check.
3. There is a need to mention emulsifier/sticker used in the experiment.
4. Market availability of the products should be checked before evaluation.
5. Analyze the data pooled over spray over period. Need to follow DNMRT when there are seven or more treatments.
6. Any CIB approved chemical cannot be restricted to evaluate as a seed dresser.
7. In case of biopesticide, minimum cfu/g must be as per CIB guidelines and should be followed commonly by all SAUs.
 - (a) For entomopathogenic fungi : 1×10^8 cfu/g
 - (b) For fungal and nematode bioagents for plant disease: 2×10^6 cfu/g
8. The concentration and dosage of all the bio-rational under testing should be uniform for all universities (Like the concentration of azadirachtin, cfu of entomopathogenic fungi, formulations related to cow urine etc.)

Basic Science

1. Data pertaining to *in vitro* compatibility study of microorganisms should be included, when multiple microbes in use.
2. New important microbial strain identified should be deposited in the concerned institute.
3. Furnish all details regarding identification of microorganism or plant using BLAST sequence result, percent homology and accession number.

4. Parameters as per FCO norms for microbes must be included in supporting the result findings.
5. The chemical analysis of inputs, soil and produce should include as per following
 - Inputs:** Nutrients, heavy metals and C:N ratio (every use)
 - Soil:** Nutrients, heavy metals and microbial count (Initial & After harvest/ at end of use)
 - Produce:** Nutrients and heavy metals content as well as quality parameter wherever needed
6. Prior approval from IBSC of respective SAU should be taken for experiment/s related to Genetically Modified Organism (GMO)/ Living Modified Organism (LMO) before presenting in Basic Science Sub Committee meeting.
7. Molecular marker studies like AFLP, SSR, ISSR etc. should include parameters like PIC, Shannon's diversity index, PCA etc., if required.
8. For testing microorganism showing nitrogen fixing ability, estimation of nitrogen content by kjeldahl method or any other known standard protocol should be carried out along with PCR based *nif* gene amplification.

Horticulture & Agroforestry

1. Mention Y x T value in each table.
2. Along with RDF, any common nutrient practice should also be mentioned.
3. In trials on nutrition management, the actual quantity given should be mentioned in the recommendation instead of percentage.
4. In case of flowering parameters, days (mid value) should be mentioned instead of dates. The days should be calculated keeping a common cutoff date for all.
5. It was also suggested to keep the name of the Horticulture and Agro-forestry Sub-Committee as Horticulture and Forestry Sub-Committee in future.
6. Varieties grown commercially by farmers should be taken as Check
7. While approving the new technical programmes for horticulture crops, the concerned sub-committee at the SAU level shall finalize the most relevant sub-committee considering the objectives and technical inputs, which will also finalize the Recommendation, if any. The decision taken by the respective SAU for deciding the sub-committee for such research programmes for horticultural crops shall be accepted during the Combined AGRESCO of all the SAUs.

Horticulture experts may be included in the other sub-committees at the SAU level, if needed.

Animal Health

1. While proposing NTP and recommendation, PI should ensure that experiment is approved by IAEC, whenever applicable.
2. The text of the recommendation should not be in bookish language.
3. A person working in the Unit / Sub-unit other than college should be treated as Faculty and faculty member working in the university can propose AGRESCO experiments as PI and he can be opted as Co-PI.

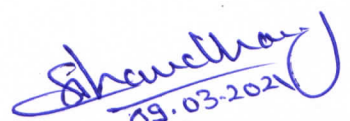
Animal Production & FS

1. Approvals of NTPs are subject to its approval by respective IAECs.
2. Investigators are advised to specify species/breed/No. of animals, period/interval of collection of blood/samples, observation to be recorded while planning the experiments.

Social Science

1. Scientist/sub committees meeting may take a decision regarding their recommendation with respect to its publication in AAU/NAU/SDAU/JAU jurisdiction and mention/guide under each recommendation. Accordingly, DEE shall incorporate respective recommendations of the other universities in their farmer's recommendation booklet every year.

No. NAU/DR/AGRESCO/ 1502. /2021
Date :09/03/2021


**Director of Research &
Dean P G Studies
NAU, Navsari**

**Guidelines for calculation of economics for casting the recommendation
in different AGRESCO sub committees**

The standard procedures are to be followed while calculating the cost of cultivation as recommended by CACP, New Delhi. The standard procedures for calculating cost of cultivation are as under.

Cost Concepts:

The cost concepts used in the experimental study and the items of costs included under each concept are given below:

Cost A: (I) + (II)

(I): Common cost (Excluding treatment cost)

- (i) Value of hired human labour
- (ii) Value of hired bullock labour
- (iii) Value of owned bullock labour
- (iv) Value of owned machinery labour
- (v) Hired machinery charges
- (vi) Value of seed (both farm produced and purchased)
- (vii) Value of insecticides and pesticides
- (viii) Value of manure (owned and purchased)
- (ix) Value of fertilizers
- (x) Depreciation cost on implements and farm buildings
- (xi) Irrigation charges
- (xii) Interest on working capital
- (xiii) Miscellaneous expenses

(II): Treatment cost: Expenditure incurred on applying the treatment
(Treatment wise)

Cost B: Cost A + interest on value of owned fixed capital assets and rental value of owned land

Cost C₁: Cost B + imputed value of family labour

Cost C₂: C₁ + 10 per cent of cost C₁ as a managerial charge

Computation Procedure:

Since some of the inputs used in the production process come from family sources, the procedures adopted for deriving imputed value of these inputs are as under.

- 1 The value of family labour is to be worked out at the wage rate prevailing for the different operations in the selected clusters/areas.
- 2 The cost of bullock labour utilize in cultivation of the crops is to be reckoned as per the prevailing market rate in the villages/areas.
- 3 The value of farm produced manure and seeds are to be evaluated at the rates prevailing in clusters/areas.

- 4 The cost of owned irrigation, tractor and machinery are to be considered at the market rate custom service.
- 5 Depreciation of owned farm buildings is to be calculated at the rate of 5 per cent for kuchcha and 2 per cent for pucca buildings per annum.
- 6 The kind payments are to be evaluated at prices prevalent in the village at the time of those operations.
- 7 Interest on working capital is to be charged at the rate of **12 per cent per annum and is to be adjusted according to duration of the crop.**
- 8 Interest on owned fixed capital is to be charged at the rate of **10 per cent per annum.**
- 9 Rent of owned land is to be evaluated on the basis of **rents prevailing in the village for identical type of land** or as **16 per cent of the gross income** obtained from the respective crop per unit of land. For calculation of gross income, consider the state average productivity of respective crops of last year published by Directorate of Agriculture, GoG, Gandhinagar for field crops and Directorate of Horticulture, GoG, Gandhinagar for horticultural crops and price of produce as utilized in calculation of gross realization of treatment.
- 10 The value of main product and by-product are to be imputed on the basis of actual price received or farm harvest prices prevailing in the selected villages/areas.
- 11 Depreciation on farm machinery, implements and tools are to be calculated by Straight Line method. Using this method, the yearly depreciation is to be computed by dividing the purchased value of an item (Original cost) with its expected life span. The formula for this method is:

$$\text{Annual depreciation} = \frac{\text{Purchased Value}}{\text{Life Span}}$$

e.g. Considered a piece of equipment that costs Rs. 25,000 and has an estimated useful life of 8 years and a Rs. 0 scrap value. To calculate the depreciation using Straight Line method:

Year	1	2	3	4	5	6	7	8
Opening Book Value	25000	21875	18750	15625	12500	9375	6250	3125
Depreciation	3125	3125	3125	3125	3125	3125	3125	3125
Ending Book Value	21875	18750	15625	12500	9375	6250	3125	0

- 12 The prices of inputs and output are to be taken as current market price for normal year, while during the abnormal year, when prices are more fluctuated then, the average of experimental years are to be taken for input and output prices e.g. Onion. When the crops in which MSP is available as declared by GoI, then instead of market price, consider the MSP for calculation of gross realization.

For recommendation purpose, while calculating the Cost of Cultivation, the common format for cost of cultivation table, follow the following format for recommendations (All Sub-committee groups except Plant Protection group).

Treatment	Yield (Kg/ha)		Gross Realization (₹/ha)	Total Cost of Cultivation (₹/ha)	Net Realization (₹/ha)
	Main Product	By- Product			
(1)	(2)	(3)	(4)	(5)	{6 = (4/5)}

The common format for cost of cultivation table, follow the following format for recommendations (Plant Protection group), where ICBR is considered.

Treatments	Yield increased over control (kg/ha)		Total additional income (₹/ha)	Quantity of inputs used (kg/lit/ha)	Total cost of treatment (₹/ha)	Net realization (₹/ha)	ICBR
	Main product	By product					
(1)	(2)	(3)	(4)	(5)	(6)	{7 = (4-6)}	{8 = (4/6)}

**PROPOSAL FOR RELEASE OF
----- VARIETY/HYBRID -----**

(Name of crop and variety/hybrid)

SUBMITTED TO

Photo of the candidate
Variety/Hybrid

**Submitted By
Name of the Research Station/Institute**

PROPOSAL FOR RELEASE OF VARIETY

Brief introduction

Present varietal scenario for the crop

.....

.....

.....

.....

.....

Brief information on how variety was developed.....

.....

When and where tested in state/AICRP trials.....

.....

Performance in brief as compared to the check varieties for yield, disease resistance,
pest resistance or any other specific characters.....

.....

Recommended region.....

Salient features/Merits of the proposed variety:

i)

ii)

iii)

iv)

**PROPOSAL FOR RELEASE OFVARIETY TO BE PRESENTED
INMEETING TO BE HELD AT DURING**

1	Name of the crop and species			
2	(a)	Name of the variety under which tested		
	(b)	Proposed name of the variety		
3	Sponsored by			
4	(a)	Institute or agency responsible for developing the variety (with address)		
	(b)	Name of the persons who helped in development of the variety	As per below	
I. Name of the persons who helped in the development of the variety				
	Sr. No.	Name	Designation	Period
				From To
(a) Present				
(b) Past				
II. Name of the persons of sub-centers who helped in the evaluation of the variety				
III. Name of the persons who helped in screening/quality analysis/biochemical analysis of the variety				
5	(a)	Parentage with details of its pedigree		
	(b)	Source of material in case of introduction		
	(c)	Breeding method		
	(d)	Breeding objectives		
6	State the variety, which most closely resemble the proposed variety in general characteristics.			
7	(a)	Whether recommended by seminar / conference / workshop / state variety release committee		
	(b)	If so, its recommendation with specific justifications for the release of proposed variety		
	(c)	Specific area of its adoption		
8	Recommended ecology			
9	Description of variety/hybrid			
	(a)	Plant growth habit/plant height, range		
	(b)	Important morphological features (4-5) of the proposed variety/hybrid which distinguish it from other important commercial varieties under field condition (Enclose more details in Annx.)		

	(c)	Maturity (range in number of days) seeding / Transplanting to flowering / fruiting)	
	(d)	Maturity group (early medium and late) wherever such classification exists	
	(e)	Reaction to major diseases in the field and also under control condition	
	(f)	Reaction to major pests in the field condition and control condition (including pest of storage)	
	(g)	Agronomical features (i) Season (ii) Condition of sowing (Rain-fed/irrigated) (iii) Spacing (iv) Seed rate (v) Fertilizers	
	(h)	Quality of produce grain, forage, fiber, including nutritive value where relevant	
	(i)	Reaction to Agro-climatic variables/stresses	
10		Description of parents (4-5), in case of hybrid (Enclose more details in Annx. as per DUS guidelines)	
11		Yield data of regional/inter-regional/coordinated trials:	
	(a)	Yield data of state varietal trials	
	(b)	Yield data of AICRP trials/National Demonstrations	
	(c)	Average yield under normal condition	
12	(a)	Agency responsible for maintaining breeder seed	
	(b)	Quantity of breeder seed in stock	
13		Information on the acceptability of the variety by farmers, consumers, industries	
14		Specific recommendation, if any, for seed production	
15		Any other pertinent information	
16		Vivid presentation with the help of good quality photographs	
17		Acknowledgement particulars about the submission of germplasm sample to NBPGR	

Place :

Breeder

Director of Research

Date :

Table-1: Yield performance ofentry in comparison with check varieties in the Gujarat State

Year/ Season	Name of Trial	Locations	Yield (kg/ha)			S. Em. ±	C. D. at 5%	CV%
			Proposed entry	(LC)	(NC)			
	PET							
		Mean				-	-	-
		% inc. over the checks					-	-
	SSVT							
		Mean				-	-	-
		% inc. over the checks					-	-
	LSVT							
		Mean				-	-	-
		% inc. over the checks					-	-
	LSVT							
		Mean				-	-	-
		% inc. over the checks					-	-
	LSVT							
		Mean				-	-	-
		% inc. over the checks					-	-
Overall Mean						-	-	-
Overall % increase over the checks			-			-	-	-
Frequency in top non-signi. groups						-	-	-

Table 2: Yield performance of entry in comparison with checks in the zone/region

Year/ Season	Name of Trial	Locations	Yield (kg/ha)			S. Em. ±	C. D. at 5%	CV%
			Proposed entry	(LC)	(NC)			
	PET							
		% inc. over the checks				-	-	-
	SSVT							
		Mean				-	-	-
		% inc. over the checks				-	-	-
	LSVT							
		Mean				-	-	-
		% inc. over the checks				-	-	-
	LSVT							
		Mean				-	-	-
		% inc. over the checks				-	-	-
	LSVT							
		Mean				-	-	-
		% inc. over the checks				-	-	-
Overall Mean						-	-	-
Overall % increase over the checks			-			-	-	-

Table 3: Yield performance of entry in the ...AICRP Trials

Year/ Season	Name of Trial	Locations	Yield (kg/ha)			S. Em. ±	C. D. at 5%	CV%
			Proposed entry	(LC)	(NC)			
	IVT							
						-	-	-
		% inc. over the checks						
	AVT							
		Mean				-	-	-
		% inc. over the checks				-	-	-

Table 4: Ancillary observations of economic attribute of proposed entry along with checks

Sr. No.	Character	Proposed entry	(LC)	(NC)

(Give Mean and Range for all the attributes)

Table 5: Morphological characters of proposed entry along with checks (As per DUS Guidelines)

Sr. No.	Character	Proposed entry	(LC)	(NC)

Table 6: Bio-chemical parameters of proposed entry along with checks

Sr. No.	Character	Proposed entry	(LC)	(NC)

Table 7: Rating of incidence of diseases at centre

Diseases	Year and season	Name of trial	Varieties		
			Proposed entry	(LC)	(NC)
		SSVT			
		LSVT			
		LSVT			
		Range			
		SSVT			
		LSVT			
		LSVT			
		Range			

Table 8: Rating of incidence of insect-pests at centre

Insect-Pests	Year and season	Name of trial	Varieties		
			Proposed entry	(LC)	(NC)
		SSVT			
		LSVT			
		LSVT			
		Range			
		SSVT			
		LSVT			
		LSVT			
		Range			

Table 9: Consumer preference of proposed entry along with checks

Sr. No.	Character	Proposed entry	(LC)	(NC)

Common points to be considered while preparation of varietal release proposal**(Suggestions from Combined Joint AGRESCO meetings of SAUs)**

1. The yield data of the candidate entry should not be considered in mean when they are below state/national average yield and/or very high CV%.
2. DNA profile data of proposed variety/ hybrid should be incorporated in the proposal
3. Nomenclature of the variety/hybrid should be as per the guidelines given in the Proceeding of 13th Combined Joint AGRESCO Meeting of SAUs 2016-17.
4. Do not write heading or sub-heading in introduction, but give only information as per the heading and sub-heading in two to three paragraphs.

MINUTES OF AGRESCO MEETING 2022-23 AT NAU

Date: 21.12.2022

Time: 3.30 PM

Venue: Office of DoR, NAU, Navsari

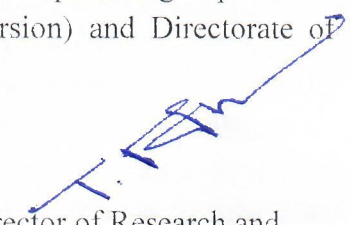
A meeting was convened by the Director of Research and Dean PG Studies, NAU, Navsari to discuss the upcoming AGRESCO 2022-23 on December 21, 2022 at 10.30 onwards in the office of Director of Research. The meeting was presided over by Dr. T. R. Ahlawat, Director of Research and Dean PG Studies, NAU, Navsari and following members remained present.

Sr. No.	Name	Designation
1	Dr. T. R. Ahlawat	Director of Research and Dean PG Studies, NAU, Navsari
2	Dr. P.K. Shrivastava	Principal & Dean, CoF, NAU, Navsari
3	Dr. Sonal Tripathi	Associate Professor, Dept. of SSAC, NMCA, NAU, Navsari
4	Dr. Bharat K. Davda	Research Scientist, MSRS, NAU, Surat
5	Dr. Dev Raj	Professor, Post-Harvest Technology, ACHF, NAU, Navsari
6	Dr. Sumankumar Jha	Associate Professor, Forest Bio. & Tree Imp., CoF, NAU, Navsari
7	Dr. Narendra Singh	Professor, Dept. of Economics, NMCA, NAU, Navsari
8	Dr. Hemant Sharma	Associate Professor, Dept. of Path., ACHF, NAU, Navsari.
9	Dr. Lalit Mahatma	Associate Director of Research, NAU, Navsari
10	Dr. B. M. Mote	Assistant Research Scientist, DoR office, NAU, Navsari

- Dr. Lalit Mahatma, Associate Director of Research, NAU, Navsari welcomed Dr. T. R. Ahlawat, Director of Research and Dean PG Studies, NAU, Navsari and all newly appointed Conveners of different AGRESCO Sub-committees of NAU, Navsari.
- Dr. T. R. Ahlawat, Director of Research and Dean PG Studies discussed with all the Conveners about dates and schedules of AGRESCO Sub-committees meetings. He also emphasized on the following points.
- It is mandatory for all members to submit their Scopus H index which can be searched from <https://www.scopus.com>.
- AGRESCO report and ATR should be prepared according to the new format only wherever it has been modified and circulated.
- It should be well informed to all the members to submit the printed and bound copies of AGRESCO report of their respective center to the Convener only. The Convener should properly arrange them as per the sequence of presentation and submit to different offices as per the provision.
- Only one copy of the ATR and AGRESCO report should be submitted to the Office of the Director of Research for documentation at least a week in advance of the scheduled date of AGRESCO meeting.
- Copies for Chairman, Co-Chairman and Rapporteurs at the time of presentation should be well labelled and kept of the venue of the meeting.
- All the members must upload NTPs and progress of their experiments on the new developed AEMS (Agricultural Experiment Monitoring System) software. A report generated by the software on uploading and final submission of information need to be attached with the report.

- All New Technical Programmes must be uploaded in AEMS software immediately after approval in the Combined Joint AGRESCO.
- The List of Members duly approved by the Director of Research and signed by both Convener and Director of Research should be circulated to all the members of that respective group.
- Attendance of all the members of AGRESCO sub-committee meeting is mandatory and a copy must be submitted to the Director of Research.
- Members should obtain prior permission of Director of Research through the respective Convener with suitable justification for the remaining absent from the AGRESCO sub-committee meeting. Application for the permission should be sent by email to amarmote4141@nau.in for further necessary action.
- Conveners will be responsible for the arrangement of venue and other facilities for the organization of AGRESCO sub-committee meeting as per their and other members' convenience.
- The schedule/ Minute to Minute programme of AGRESCO sub-committee meeting should be get approved by Director of Research and circulated well in advance of the meeting to all the members.
- Chairman and Co-Chairman of all the AGRESCO Sub-committee meetings should be Hon Vice Chancellor and Director of Research, respectively.
- Proceeding of AGRESCO sub-committee meeting should be submitted to the Director of Research for approval within a week of organization of the meeting and duly approved proceeding should be circulated to all members of respective committee.
- PPT comprising approved recommendation and NTP should also be submitted for the preparation of pre-proceeding of Joint AGRESCO, well in advance.
- The Conveners should not publish the Recommendations of their respective group as it is already being done by the Directorate of Research (English version) and Directorate of Extension Education (Gujarati version) at the university level.

No. NAU/DR/T5/⁷⁸⁴⁷/2022
Date: 29/12/2022


Director of Research and
Dean PG Studies, NAU, Navsari

ડૉ. ટી. આર. અહલાવત

ઇ.ચા/સંશોધન નિયામક અને
અનુસ્નાતક વિદ્યાશાખાધ્યક્ષ

સંશોધન નિયામકશ્રીની કચેરી

નવસારી કૃષિ યુનિવર્સિટી

એરુ ચાર રસ્તા, નવસારી

ફોન : ૦૨૬૩૭૨૮૩૧૬૦

ફેક્સ : ૦૨૬૩૭ -૨૮૩૪૫૨

E-mail : dr@nau.in

:: પરિપત્ર ::

આથી નવસારી કૃષિ યુનિવર્સિટી, નવસારીના તમામ અધિકારીશ્રીઓને જણાવવાનું કે, એગ્રેસ્કો મિટિંગએ યુનિવર્સિટીના સંશોધન કાર્યને મજબૂત બનાવવા માટે ખુબ જ મહત્વની છે. તો આગામી મળનાર યુનિવર્સિટીની ૧૮ મી એગ્રેસ્કો મિટિંગ સરળ અને અસરકારક રીતે યોજાય તે હેતુથી સર્વે વૈજ્ઞાનિક/અધિકારીશ્રીઓને નીચે મુજબની સૂચનાઓનું પાલન કરવા આથી જણાવવામાં આવે છે.

- એગ્રેસ્કો મિટિંગમાં દરેક સભ્યએ અચૂક હાજર રહેવું. અનિવાર્ય સંજોગોને કારણે જો કોઈ હાજર રહી શકે તેમ ન હોય તો તેમને નીચે સહી કરનારની પૂર્વ મંજૂરી અચૂક લેવી અને ગેરહાજર રહેવાની મંજૂરી માટે તેમની જગ્યાએ જે વૈજ્ઞાનિક રિપોર્ટ રજુ કરશે તેમની અને કન્વીનરની સહમતિ ઈ-મેઈલથી મેળવ્યા બાદ જ અત્રેની કચેરીમાં amarmote4141@nau.in પર મોકલવાની રહેશે. વધુમાં, કચેરી/કેન્દ્રના વડાની સહમતિ પુરવાર કરવા માટે મંજૂર થયેલ રજા અથવા અપુવડ દુર પ્રોગ્રામની નકલ સ્કેન કરી અરજી સાથે મોકલવાની રહેશે.
- દરેક વિભાગ વૈજ્ઞાનિકશ્રી/અધિકારીશ્રીઓના એગ્રેસ્કો રિપોર્ટની નકલ ફક્ત કન્વીનરને જમા કરવાની રહેશે અને કન્વીનર દ્વારા ફક્ત કમ્પાઇલ્ડ કરેલા એગ્રેસ્કો રીપોર્ટની એક નકલ અત્રેની કચેરીને મિટિંગની તારીખના ઓછામાં ઓછા ૦૫ દિવસ પહેલા મળી જાય તે રીતે આયોજન કરવાનું રહેશે.
- જે સંશોધન કેન્દ્ર દ્વારા પાકની નવી જાત રજુ કરવાની હોય તેમણે નવી જાતનો DNA ફીન્ગર પ્રીટીંગ રીપોર્ટ તથા NBPGR accession સર્ટીફિકેટ ફરજિયાત રજુ કરવા.
- નવા ટેકનિકલ પ્રોગ્રામ મુકતા દરેક વૈજ્ઞાનિકશ્રીઓએ તેમના અખતરા જે સ્કીમ અંતર્ગત લેતા હોય તેમનું નામ અને બજેટ હેડ અવશ્ય દર્શાવવું.

જા.નં. નક્યુ/સંનિ/ટી ૫/૧૪૪-૨૩૩/૨૦૨૨

તા. ૦૬/૦૧/૨૦૨૨

૦૭

સંશોધન નિયામક અને

અનુસ્નાતક વિદ્યાશાખાધ્યક્ષ

૧/૮