NAVSARI AGRICULTURAL UNIVERSITY	
Dr. J.D.Thanki Convener NRM and Professor & Head	

## DEPARTMENT OF AGRONOMY N. M. COLLEGE OF AGRICULTURE NAVSARI AGRICULTURAL UNIVERSITY NAVSARI - 396 450

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> No. ACN/Agro/C/NRM/237/2014 Navsari. Dated 6-02-2014

To All the concerned members NRM Agresco Sub-committee Navsari Agricultural University

Sub. : Sending action taken report ...

- Ref. :1) This office letter No. ACN/AGRO/NRM/692-766/2013 dated 12-4-2013
  - Proceedings of 9th Combined Joint Agresco meeting dated 7-9-2013 circulated (web) by office of the Director of Research, NAU, Navsari

Sub. : Sending action taken report ...

Please find enclosed the item-wise suggestions made in last NRM Agresco Subcommittee and Combined Joint Agresco meetings pertaining to your Centre/ Department/ Scheme.

Please send action taken report on above within a week.

(J.D.Thanki)

Convener

Encl: A/a

## ACTION TAKEN REPORT ON PROCEEDINGS OF IX NATURAL RESOURCE MANAGEMENT SUB-COMMITTEE MEETING OF NAU AND COMBINED AGRESCO MEETING OF SAUS

SN	Title	Suggestions/Comm	Action taken	
		Sub-committee meeting of NAU	Combined Agresco meeting of SAUs	
	SWMRU, Navsari			
(1)	Effect of irrigation and sulphur levels on yield of cluster bean under south Gujarat condition	1	<ul> <li>Add observation on no. of pods /plant</li> </ul>	
(2)	Study on combine effect of irrigation, fertigation and mulching levels on fruit yield and quality of water melon	<ul> <li>Add observations : Plant population at harvest, pests &amp; diseases incidence, weed study, organic carbon content in soil</li> </ul>	-	
(3)	Comparative study of different sleeving materials in banana	<ul> <li>Delete treatment T<sub>6</sub></li> <li>Add two more replications</li> <li>Add observation of days to ripening</li> </ul>	• Take up expt. with RBD instead of FRBD in expt.	
(4)	Evaluating effect of enriched banana pseudostem sap (foliar spray) on <i>hirsutum</i> cotton		• RDN should be 120 kg/ha	
(5)	Effect of rate and frequency of micronutrient application on production of banana under drip irrigation	1	-	
(6)	Natural resources characterization in relation to banana growing areas of south Gujarat		- It	

	CSSRS, Danti/Umbharat					
(1)	Effect on variety and INM on yield of fodder sugar beet grown on coastal salt		Correct the experimental title as per suggested treatments	•	Delete the words "by two" from expt. title.	
	affected soils.	•	Take 4 replications		-	
		•	Treatment correction : $F_1$ : 100 % RDN, $F_2$ : 125% RDN, $F_3$ : 150% RDN (P and K common application)			
		•	Delete : I1 in irrigation and V3 in Variety			
		•	Add in Observations : Palatability, $IV$ digestibility, $NO_3^-$ content in fodder			
(2)	Response of cotton (Bt) hybrids to		Add common application of biofertilizer		-	
	integrated nutrient management under	•	Replace 10 t/ha FYM with 6 t/ha Biocompost			
	coastal salt affected soil condition	•	Add economic in observation part			
(3)	Salt built up and distribution in adjoining areas of aquaculture pond (Feeler trial)	•	Sampling should be done twice or thrice a year		-	
	NARP, Navsari					
(1)	Evaluation of rice based crop sequence under aerobic and transplanted method of cultivation in south Gujarat condition		Add Treatments : $C_1$ : Gram PKV-2 variety, $C_2$ : Green gram CO-4 variety, $C_3$ : Indian Bean (( <i>Kadva val</i> ) for vegetable purpose In V <sub>2</sub> : Only GNR-3, delete word "Rabi"		Take up expt. with SPD by allocating combinations of variety and method of planting in main plot	
	Soil Science, Navsari					
(1)	Effect of land leveling by laser leveler on	•	Take bed size as per suggestions		-	
	yield of wheat crop	•	Modify slope treatments			
		•	Design should be Large plot technique			

	Pulses and Castor Research Station, Navsari							
(1)	Spacing and fertilizer requirement of promising Indian bean genotype NPS-1	•	Design : SPD with Main plot : spacing and Subplot: fertilizer treatments Mention RDF (20:40:00 NPK kg/ha) Delete grain yield from the title Delete treatments Five and Six Modify the treatments in consultation with the committee (Dr. R.G.Patil, Dr. M.K.Arvadia and Dr. J.D.Thanki) with addition of with and without biofertilizer		_			
(2)	Date of sowing, spacing and nutrient management for pigeon pea cultivar GT- 102 during <i>rabi</i> season <b>Hill Millet Research Station, Waghai</b>	•	Modify the trial in consultation with Professor Agronomy and Ag. Chem & Soil Science, Navsari		In treatment O <sub>2</sub> mention FYM rate <i>i.e.</i> 5 t/ha			
	, c							
(1)	Response of different varieties of finger millet (Nagli) to nitrogen levels with and without bio-fertilizer under rain fed condition	•	Mention the collaboration of Ag. Chem & Soil Science, NMCA, Navsari Mention RDF: 40: 20: 00 NPK kg/ha Change in treatments : N <sub>1</sub> : RDF, N <sub>2</sub> : RDF + 5 t/ha VC, N <sub>3</sub> : RDF + 5 t/ha VC + 4 kg/ha Biofertilzer Variety : V <sub>1</sub> & V <sub>2</sub> Arrange demonstration after 1 <sup>st</sup> year results Delete "with and without" words from the title		<ul> <li>Revise N levels as under</li> <li>N1: RDF</li> <li>N2: 75 % RDF + VC 2t/ha</li> <li>N3: 75 % RDF + VC 1 t/ha + Biofertilizer</li> <li>N4: VC 2t/ha + Biofertilizer</li> </ul>			
(2)	Response of little millet (Vari) variety GV- 2 to nitrogen levels with and without bio- fertilizer under rain fed condition	• • • •	Modify the experimental title Treat: N levels: 0, 20, 40, 60 & 80 kg/ha P levels: 0, 20 & 40 kg/ha Common application of FYM and Biofertilzers for all treatments Analyze the experimental data in consultation with Statistics Department Mention the collaboration of Ag. Chem & Soil Science, NMCA, Navsari		-			

(3)	Studies on different package of practices in finger millet (ragi) under rain fed condition	0	•	Revise T <sub>2</sub> 30 kg N, 20 kg P <sub>2</sub> O <sub>5</sub> and Biocompost 2 t/ha.	
		<ul> <li>T<sub>3</sub>: Seed treatment with Pseudomonas @10 g/kg, Dipping of seedlings for 30 minutes, Replace 10 t /ha FYM with 5 t/ha Biocompost in all treatments, Apply 2 kg/ha Azotobacter + 2 kg/ha PSB</li> <li>Conduct multi location trial at Vyara and Dediapada</li> </ul>			
	Main Cotton Research Station, Surat				
(1)	Agronomic requirement of cotton varieties for high density planting systems under irrigated conditions	0	•	Take G. Cot. Hy 8 (BG II) out side the experiment with recommended practices.	
	Cotton Research Station, Bharuch				
(1)	Influence of high density plant population and nitrogen levels on seed cotton yield of <i>G. herbaceum</i> cotton var. GN Cot25		•	Conduct experiment in FRBD	
		Science, CoA, Bharuch			
	NARP, Bharuch				

(1)		I		T		
(1)	Study on spacing and nutrient management	•	Design: FRBD		-	
	with and without VAM in BP 06-633	•	Modify plot size in consultation with Dr.			
	(GNT-2) under rain fed condition in south		Usadadiya, Dr. Pandya and Dr. Desai			
	Gujarat	•	Delete $S_1$ treatment			
		•	$V_1$ : VAM + Rhizobium multiply in 5 t/ha FYM			
		•	Add in observations : Plant stand initial and at			
			harvest, Plant analysis for NPK, Replace 'Ento-			
			Patho' word with "pest and disease			
			observations"			
		•	Modify the Expt. Title, delete name of variety			
		•	Mention the collaboration of Research Scientist,			
			Soil Science department, NAU, Navsari			
	Agril. Research Station, Tanchha		L · · · ·			
(1)	Fertilizer management in rabi black moong	•	Modify the Expt. Title, delete name of variety		-	
	var. GBM-1 under conserved soil moisture	•	Modify treatments as $T_2$ : 5 t/ha FYM, $T_3$ : 2 t/ha			
	condition		VC, $T_4$ : 2.5 t/ha FYM and $T_6$ 1 t/ha VC			
		•	Correct the Sr. no. of Treatments			
		•	Add in observations : Plant analysis for NPK			
			uptake			
		•	Seed yield kg/ha only			
(2)	Effect of spacing and fertilizer	•	Modify the Expt. Title, delete name of variety	•	In treatment $T_2$ and $T_3$ use	
	management practices on rabi pigeon pea	•	Treatments : $T_1$ : RDF alone, $T_2$ : 75 % RDF +		Vermicompost @ 1 t/ha	
	var. GT-102 under conserved soil moisture		2t/ha VC, T <sub>3</sub> : 75 % RDF + 2t/ha VC +		instead of 2 t/ha	
	condition		Biofertilizer (Rhizobium + PSB)			
		•	Add NPK uptake observation			
	Agril. Research Station, Mangrol		1	1		

(1)	Response of <i>rabi</i> sorghum variety to nutrient management in rice fallow Intercropping suitability of sorghum and pigeon pea genotypes	<ul> <li>In treatments, delete V<sub>4</sub> &amp; R<sub>1</sub></li> <li>Add common dose of 10 t/ha FYM</li> <li>In biofertilizer, (Seed treat + Soil application@2 kg/ha)</li> <li>Add Plant stand initial and at harvest in observations</li> <li>Replace panicle word with "ear head"</li> <li>Use 'Varieties' instead of 'variety' in title</li> <li>Take 4 replications</li> <li>Modify treatments as follows: T<sub>1</sub>: GJ-38, T<sub>2</sub>: GJ-38 + Pigeon Pea (Vaishali), T<sub>3</sub>: GJ-38 + Pigeon pea (GT-101), T<sub>4</sub>: GJ-38 + Pigeon pea (GT-101), T<sub>4</sub>: GJ-38 + Pigeon pea (GNT-2), T<sub>5</sub> : GJ-38 sole, T<sub>6</sub>: Pigeon pea (Vaishali) sole, T<sub>7</sub> : Pigeon pea (GT-101) sole, T<sub>8</sub>: Pigeon pea (GNT-2) sole</li> <li>Add in observations : Weed study, Pests &amp; Diseases, Sorghum equivalent yield</li> </ul>	• Take variety AGT 2 instead of GNT 2
	Dept. of Agronomy, NMCA, Navsari	Fertilizer application on area base	
(1)	Identification and or diversification of present crop sequence	<ul> <li>Correct the fertilizer dose of castor GCH-7 as 120:30:00 NPK kg/ha instead of 75: 50:00 kg/ha NPK</li> </ul>	
(2)	Integrated weed management in <i>kharif</i> sorghum ( <i>Sorghum bicolor</i> ) and their residual effect on succeeding crop under south Gujarat conditions	• Delete the treatment $T_{11}$	-
(3)	Response of soybean ( <i>Glycine max</i> ) to weed management and different plant population levels during <i>kharif</i> season	• Fertilizer dose: 30:60:00 NPK kg/ha	• Use word spacing instead of plant population

(4)	Efficacy of herbicides and nitrogen use efficiency in aerobic rice	•	Select upland site for experiment Take this experiment on NAUR-1 variety	•	Recast title as "Weed and nitrogen management in aerobic rice" Delete NUE from the observation and add grain yield per kg applied nitrogen	
(5)	Effect of transplanting dates and nitrogen levels on growth, yield and quality of summer pearl millet under south Gujarat condition	•	Modify the experiment after first year results to include integrated nutrient management	•	$\begin{array}{llllllllllllllllllllllllllllllllllll$	
	Dept. of SSAC, NMCA, Navsari	1				
(1)	Evaluation of DRIS approach for assessing nutritional status of banana in South Gujarat		Before conducting the trial, collect the samples from banana growing area	•	Take as validation study if work is done elsewhere	
(2)	Comparison of different digestion methods for analysis of multi elements (P, K, Fe, Mn, Zn, Cu) from plant	•	Replace the word 'multi' with 'different' in title	•	Add wet digestion in different instruments to be used for digestion	
(3)	Comparison between kjeldhal auto digestion distillation and N analysis methods for determination of N from plant/manures/fertilizers		_		-	
(4)	Preparation of enriched biochar compost from farm waste (feeler trial)	•	Find C:N ratio Replace Subabul with Gliricidiya		-	
(5)	Effect of rates of N and P application on yield and quality of Broccoli	•	Add K in title instead of only N and P Record NO <sub>3</sub> <sup>-</sup> content	•	Revise $P_2O_5$ levels as 0, 40 and 60 kg/ha	
(6)	Survey of nitrate (NO <sub>3</sub> <sup>-</sup> ) levels in different vegetables available in Navsari market (feeler trial)	•	Record NO <sub>3</sub> <sup>-</sup> and heavy metal content	•	Approved as survey	
	Dept. of NRM, ACHF, Navsari					

(1)	Effect of different water salinity levels on young teak plants	•	Correct the title as : Effect of different salinity levels of irrigation water on young teak plants Take 4 replications Use 2-3 different clones	•	Write 'normal water' instead of 'best available water' in treatment S1.
(2)	Effect of different salinity levels on different clones of <i>Casurina equisetifolia</i>	•	Correct the title as : Effect of different salinity levels of irrigation water on different clones of <i>Casurina equisetifolia</i>	•	Write 'normal water' instead of 'best available water' in treatment $T_1$ .
(3)	Study the temporal and spatial changes in water quality of the NAU campus	•	Consult Professor (Statistics),NMCA for design, replication, statistical analysis, etc. In treatment $T_4$ , mention the name of Research Station as individual treatment and assign sequential treatment number to each <i>i.e.</i> $T_5$ , $T_6$ , $T_7$ etc.	•	Take GPS points
	Dept. of SSAC, ACHF, Navsari				
(1)	Evaluation of In situ crop residue management on quality and productivity of banana cultivated under organic farming		Correct the word in T <sub>3</sub> as "Panchgavya"	•	Revise title as "Effect of farm waste management on quality and productivity of banana cultivated under organic farming"
	Dept. of Agronomy, CoA, Bharuch				
(1)	Effect of pre and post emergence hebicides on weed infestation and productivity of pigeonpea under rainfed condition in south Gujarat	•	In T <sub>5</sub> : at 45 DAS in place of 40 DAS Delete the treatment $T_{11}$ Add observations : Bioassay study, NPK content in weeds and crop, Protein content in seeds, Weed flora & weed counts, Plant population initial and at harvest	•	Delete the treatments $T_2$ , $T_3$ , $T_8$ and $T_9$ .
(2)	Study on critical period of crop-weed competition in cotton var. G.Cot.Hy-8 (BGII) under rain fed condition of south Gujarat	•	Delete name of variety from the title Add observations : Oil content, Weed flora and weed counts, Plant population initial and at harvest	•	Take G Cot Hy. 8 (BG II) variety
	KVK, Dediapada	•			

(1)	Response of sorghum varieties to different tillage practices under conserved moisture after <i>kharif</i> paddy (drilled)	<ul> <li>Replication :</li> <li>Replace BP-</li> <li>Replace the observation</li> </ul>		•	Conduct the experiment using large plot technique	
	FQT Laboratory, Navsari					
(1)	Non-destructive analysis of protein, fiber and oil in rice, pigeon pea and soybean by NIR analyzer	• Accepted as	equipment calibration study	•	Accepted as equipment calibration study	
(2)	Evaluation of different extractants and methods for the determination of P and K from soil	• Accepted as	equipment calibration study	•	Accepted as equipment calibration study	