	Department of Agronomy College of Agriculture		
	Navsari Agricultural University		
DRaw with	Bharuch Campus, Bharuch-392012		
NAVSARI AGRICULTURAL UNIVVERSITY	Ph. No02642-246152		
Dr.J.G.Patel, Professor and	Email: jgpatel@nau.in	Mo.09725001518	
Head	Eman. jgpatel@nau.m	110.09723001310	
No.NAU/COAB/AGRESCO/	Date: 18/03/2016		

To All the Member NRM Agresco Subcommittee Navsari Agricultural University

Please find attached proceedings of 12<sup>th</sup> Natural Resource Management Agresco Sub-committee meeting held during 16<sup>th</sup>-17<sup>th</sup> March, 2016 at Navsari.

All the members are requested to go through suggestions made in the meeting and implement the same accordingly.

Members, whose recommendations and new technical programmes are accepted, are requested to incorporate all the suggestions of Sub-committee meeting and submit soft copy of corrected recommendations and new technical programmes and their power point presentation.

All the compilations and bound volume report of NRM Sub-committee of NAU is to be prepared by this office in time. Hence, it is requested to submit the recommendations and new technical programmes as mentioned above latest by 31/03/2016.

Thanking you,

Dealer

**(J. G. Patel)** Convener NRM Agresco Subcommittee

#### PROCEEDING

## 12th AGRESCO SUB-COMMITTEE on NRM Navsari Agricultural University, Navsri 396450 (16th and 17th March, 2016)

12<sup>th</sup> meet of AGRESCO SUB-COMMITTEE on NRM, Navsari Agricultural University was organized at Seminar Hall, N.M. College of Agriculture, Navsari and Training hall, Main Sugarcane Research Station, Navsari during 16<sup>th</sup> and 17<sup>th</sup> March, 2016. On this precious occasion, Hon. Vice-Chancellor, Dr. C.J. Dangaria, chaired the inaugural session. Dr. A.N. Sabalpara, Director of Research & Dean-PGS and Dr. M.K. Arvadia, Principal & Dean (Agriculture) also graced the sub-committee meet. Dr. R.R. Kaswala, Retd. Professor and Member, Board of Management also attended the meeting in technical programme session and inspired the members. Dr. C. L. Patel, Ex-Principal & Dean (Agriculture) was the special invitee to guide and encourage the young scientists of the university.

At the beginning, Convener Dr. J.G. Patel, welcomed Chairman of the inaugural function Dr. C.J. Dangaria Sir, Hon'ble Vice Chancellor, Navsari Agricultural University, Navsari. He extended warm welcomed to the Directors of Research, Deans of various faculties, Invitees, Associate Directors of Research, Senior Scientists/Professors and Young scientists. He briefly narrated the background, mandates and summary of the research activities of NRM Group and appreciate house for come with more recommendations and new technical programmes than last year. Also address the house regarding the role of NRM group in agriculture and deliberate the future thrust to sustain the productivity with changing demands of future generation. He also encouraged the newly appointed scientist and advised them to work with dedication.

While giving the opening remarks, Dr. M.K. Arvadia, Dean, Fuculty of Agriculture, NMCA, NAU, Navsari told about degradation of natural resources, how the pressure is mounting on it. He emphasized on natural recourse management, climate change and discussed about to fulfill the future needs of increasing population of country; it is necessary to increase quality produce by application of latest technologies.

Dr. A. N. Sabalpara, Director of Research in his address, stressed on gaps should be maintained between the productivity and production by the use of new agro technologies. Day by day cost of cultivation for the crop is increasing, it should be minimized through cost effective agricultural inputs. Maximum production with minimum use of inputs should be achieved by the precise application of inputs, integrated nutrient management and eco-friendly cost effective technologies. He also drawn attention to house to come with new technical programmes based on natural inputs, microbial inputs, SAP, bio compost, vermin compost, green manuring etc. Also focused on waste management, suggest to developed efficient waste recycling technologies. He motivated to centers for conducting new technical programmes. Dr. R.R. Kaswala, Retd. Professor of SSAC advised all for interaction during all the session very effectively which will give very fruit full research recommendation and new technical programmes. He also motivates the young scientist for innovative research.

In his inaugural address, Hon. Vice-Chancellor, Dr. C.J. Dangaria, focused on natural resource management as water and soil quality is deteriorating due to mismanagement of agricultural inputs. He stressed on to develop various technologies for increasing input use efficiency and soil health management. During his talk he emphasized to take interest each and every scientist in the recommendations and new technical programmes, so that they can effectively reply any quarry regarding. He suggested to the all scientists to work with dedication, excellently and creatively. Attention should be given on problems faced by farmers, work to solve them. Finally he appreciates all for past work done in favour of NRM and hopeful for better future of agriculture.

During inaugural session, Dr. C.L. Patel, Ex-principal & Dean (Agriculture) delivered a thought provoking lecture on "*Rhizosphere management for crop production*" to sensitize the members about this important issues. He intertwined the topic in his lecture and expressed his views and ideas duly supported by available data and evidences.

Dr. J. G. Patel, Convener presented the action taken report on proceedings of last year which was accepted by the house.

Dr. C. K. Patel, Associate Professor proposed vote of thanks at the end of the inaugural session.

#### Abstract of recommendations, ongoing and new technical programme

1.	Recommendations for farming community	-	15
2.	Information for scientific community	-	04
3.	Concluded experiments	-	04
4.	New technical programme	-	51
5.	Drop experiments	-	04
6.	Ongoing Experiments	-	146

#### Session I

## Action Taken report

Dr. J. G. Patel, Convener presented the action taken report on proceedings of last year which was accepted by the house.

## Session II

### Recommendation for scientific and farmers community

Chairman : Dr A. N. Sabalpara, Director of Research and Dean PGS
Co-Chairman : 1. Dr. C. L. Patel, Retd. Dean, Agriculture
2. Dr. R. R. Kaswala Retd. Prof. and Head (SSAC)
3. Dr. M. K. Arvadia, Principal and Dean, NMCA, Navsari
Rapporteurs : 1. Dr. L.K. Arvadiya, Associate Professor (Agron.)
2. Dr. A.R. Kaswala, Associate Professor (SSAC)

Date : 16-03-2016

### Common suggestion for all recommendation:

For all recommendations made there should be only one P I, 1 or 2 Co-PI and 1 or 2 associates

Write relevant zone and AES for all recommendations

SN	Experimental tile	Department	Suggestions	Remarks
		/Presented by		
SWMR	U, NAU, Navsari			
12.2.1	Effect of irrigation and	Dr V. P.	Approved with following suggestions	For farmers
	sulphur levels on yields of	Usadadia	1. Mention the depth of irrigation	Action taken by
	cluster bean under South		2. Recast the recommendation paragraph	Research scientist,
	Gujarat condition		3. Mention the initial soil status	SWMRU, NAU, Navsari
			4. Write "at" instead of "@ " in all tables	

12.2.2	Effect of irrigation and	Dr. S. L. Pawar	Approved with following suggestions	For farmers
	fertilizer levels on yield and		1. In recommendation paragraph quantify the quantity of	Action taken by
	quality of sugar beet		fertilizer and per cent value mention in brackets in	Research scientist,
	grown on clay soils of South		both Gujarati and English	SWMRU, NAU, Navsari
	Gujarat		2. Instead of "soil health" write "chemical properties" in	
			recommendation Paragraph	
12.2.3	Comparative performance	Prof. S. L. Pawar	Approved with following suggestions	For farmers
	of water soluble and		1. In recommendation paragraph quantify the quantity of	Action taken by
	routinely used fertilizer in		fertilizer and per cent value mention in brackets in	Research scientist,
	banana (cv. Grand Naine)		both Gujarati and English	SWMRU, NAU, Navsari
	under drip irrigation		2. In recommendation paragraph delete word higher net	
			income and recommend on the basis of higher yield	
			only.	
12.2.4	Natural resources	Prof. S.L. Pawar	Approved with following suggestions	For farmers
	characterization in relation		1. Modified the recommendation and made it for	Action taken by
	to banana growing areas of		farming community rather than scientific community	Research scientist,
	South Gujarat		2. Specify the taluka wise constraints	SWMRU, NAU, Navsari
CSSRS,	Danti/Ubharat			
12.2.5	Study on effect of land	Dr V. R. Naik	Approved with following suggestions	For farmers
	configuration and integrated		1. Refined economics	Action taken by
	nutrient management on		2. Check pH value in land configuration treatments	Research scientist,
	productivity of different		3. Recast recommendation paragraph	SWMRU, NAU, Navsari
	varieties of sorghum (rabi)			
	in coastal area of South			
1	in coastal area of South			
	Gujarat			

12.2.6	Effect of irrigation and date	Dr. V. R. Naik	Approved with following suggestions	For farmers
	of sowing on seed yield and		1. Delete economics and recast recommendation	Action taken by
	components of		paragraph on the basis of yield.	Research scientist,
	Salicornia (S. brachiata Roxb.)			SWMRU, NAU, Navsari
12.2.7	Effect of manuring in	Dr. V. R. Naik	Approved with following suggestions	For farmers
	organically grown garlic in		1. Mention the dose of bio fertilizer <i>Azotobactar</i> and <i>PSB</i>	Action taken by
	coastal area of South		in recommendation paragraph	Research scientist,
	Gujarat		2. Mention the pest and diseases status if any	SWMRU, NAU, Navsari
MSRS, 1	NAU, Navsari			
12.2.8.	Response of sugarcane to	Mr. M. P.	Approved with following suggestions	For scientific
	different plant nutrients in	Chaudhari	1. Check and clarify soil: water ratio for pH & EC in soil	community Action
	varied agro ecological		analysis table	taken by Research
	situations		2. Mention Y x T interaction	scientist, MSRS, NAU,
				Navsari
12.2.9	Priming of cane node for	Mr. M. P.	Approved with following suggestions	For scientific
	accelerating germination	Chaudhari	1. Present appropriate photograph of priming and best	community Action
			treatment	taken by Research
			2. Made arc sign transformation	scientist, MSRS, NAU,
			3. In recommendation paragraph replace the word	Navsari
			"node" by "setts"	
			4. Check the date of planting	
			5. Skip the yield parameters and recast the	
			recommendation on the basis of germination only	
Dept. of	f Soil Science, NAU, Navsar	i		
12.2.10	Effect of Land leveling by	Dr. A. Das	Approved with following suggestions	For farmers
	laser leveler on yield of		1. Remove percent value of yield and mention yield on	Action taken by

	Management in Castor		1. Add data on residual analysis	community Action
12.2.14	Integrated Weed	Dr. V. M. Patel	Approved with following suggestions	For scientific
				& Castor, NAU, Navsari
				Research scientist Pulse
	Mungbean in castor			Action taken by
12.2.13	Studies on intercropping of	Dr. V. M. Patel	Not Approved	Concluded
	<i>rabi</i> season		4. In treatments, mention "AM fungi" instead of "VAM"	, ,
	greengram <i>w</i> . Co-4 during		3. Use "at" instead of "@" in tables	& Castor, NAU, Navsari
	without VAM for		2. Mention selling price in economics	Research scientist Pulse
	management with and		1. Put relevant photographs	Action taken by
12.2.12	Spacing and nutrient		Approved with following suggestions	For farmers
Pulse ar	nd castor research station, N	AU. Navsari		
	condition in South Gujarat.			
	soil aggregates under rainfed		recommendation	Science, INTIO, INAVSAII
	application on the yield of pigeon-pen cv. Vaishali and		2. Thoroughly check all the data and totally recast the recommendation	Research scientist , Soil Science, NAU, Navsari
	of FYM and Bio-compost			Action taken by
12.2.11	Effect of Method and levels	Dr. A. Das	Approved with following suggestions 1. Put the contents of the manure	For farmers
10011	$\Gamma(C) \leftarrow CM(A + 1) + 1 + 1$		and yield	E C
			6. Made recommendation on the basis of water saving	
			5. Put fuel consumption data	
			4. Present the appropriate photograph of the treatments	
			3. Specify the unit of uptake value	
			paragraph	
			2. Remove higher net income from recommendation	Science, NAU, Navsari
	wheat crop		hectare basis in recommendation paragraph	Research scientist, Soil

			2. Recast the recommendation paragraph in Gujarat as	taken by Research
			well English.	scientist Pulse & Castor,
				NAU, Navsari
Dept. of	f Agronomy, NMCA, Navsar	i		
12.2.15	Effect of integrated nutrient	Dr. N. N.	Approved with following suggestions	For farmers
	management in	Gudadhe	1. Mention "or" instead of "followed by" in	Action taken by
	rice-green gram cropping		recommendation paragraph	Professor & Head,
	sequence unde <del>r</del>		2. Specify the method of BD	Dept. of Agronomy,
	south Gujarat condition			NAU, Navsari
12.2.16	Potash status in soil as	Dr. N. N.	Not Approved	Consider as ongoing
	affected by intensive	Gudadhe		experiment
	cropping (paddy-wheat-			Action taken by
	green gram) under			Professor & Head,
	medium and high fertility			Dept. of Agronomy,
	levels with and			NAU, Navsari
	without application of			
	potash			
12.2.17	Effect of cutting	Dr. R. M.	Approved with following suggestions	For farmers
	management and nitrogen	Pankhaniya	1. Mention time of fertilizer application	Action taken by
	levels on seed production		2. Give the dose of fertilizer in kg/ha	Professor & Head,
	and nutritional		3. Mention information on Y x T interaction	Dept. of Agronomy,
				NAU, Navsari
12.2.18	Permanent plot experiment	Dr. L. J. Desai	Approved with following suggestions	For farmers
	on integrated		1. Mention the quantity of FYM in recommendation	Action taken by
	nutrient supply system in a		para	Professor & Head,
	cereal based crop		2. Mention Y x T interaction	Dept. of Agronomy,

	sequence		3. First year value of soil analysis is consider as initial value for soil status	NAU, Navsari
12.2.19	Management of cropping	Dr. L. J. Desai	Approved with following suggestions	For farmers
	systems for resource	5	1. Specify the method of BD	Action taken by
	conservation and climate		2. Specify the minimum and conventional tillage	Professor & Head,
	change		practices in treatments	Dept. of Agronomy,
				NAU, Navsari
12.2.20	Development of organic	Dr LJ Desai	Approved with following suggestions	For farmers
	farming package for		1. Give the quantity of FYM and vermicompost in	Action taken by
	system based high value		recommendation paragraph	Professor & Head,
	crops		2. Mention the cost and dose of bio fertilizer with	Dept. of Agronomy,
			application charge	NAU, Navsari
Dept. of	f Ag. Stat, NMCA, NAU, Na	vsari		
12.2.21	Application of mixed	Dr. S. Ojha	Approved with following suggestions	For scientist
	statistical distributions in		1. Club the recommendation in one paragraph	community Action
	fitting rainfall data of south			taken by Professor &
	Gujarat			Head, Dept. of Ag.
				State, NAU, Navsari
Dept. of	f SSAC, ACHF, NAU, Navsa	ri		
12.2.22.	Effect of different organic	Not Presented	Not Approved	Concluded
	sources on yield and quality			Action taken by
	of rice grown on certified			Professor Dept. of
	organic farm			SSAC, ACHF, NAU,
College	of Agriculture, NAU, Bharu	ch		Navsari
12.2.23	Effect of integrated nutrient		Not Approved	Concluded
1 <u> </u>	I millingrand mullin		1 tot approved	Juliuuuu

	pigeonpea cv. Vaishali			Principal, College of
	under rainfed condition in			Agriculture, Bharuch
	South Gujarat.			
Dediapa	ada, NAU, KVK			
12.2.24	Effect of nipping and water	Dr. A. D. Raj	Not Approved	Concluded
	management on			Action taken by Project
	productivity of irrigated			co-ordinator, KVK,
	chickpea			Dediapada

# Summary :

In total **23** research recommendations were presented in 12th AGRESCO meeting of NRM.

Farming community: **15** 

Scientific community: 04

Concluded: 04

Ongoing experiments: 146

## Session III

## NEW TECHNICAL PROGRAMME

Chairman : Dr. R. R. Kasawala, Member (BoM) & Retd. Professor (SSAC)

Co-Chairman : 1. Dr. M. K. Arvadia, Dean, Agriculture 2. Dr. A. Das, Res. Scientist (Soil Science)

Rapporteurs: 1. Dr. R. L. Leva, Associate Professor (Agron.)

2. Dr. Sonal Tripathi, Associate Professor (SSAC)

## Date:17-03-2016

Sr.	Title	Presented by	Suggestions/comments	Remarks
No.				
Soil and	d Water Management Research Unit, NAU, Nav	sari		
12.3.1	Study on drip system layout for different row spacing of vegetable Indian bean (Var. GNIB-21)	Dr. V.P. Usadadia, Res.Sci.	<ol> <li>In Observation include crude fiber, moisture distribution pattern, pest and disease incidence</li> <li>Supporting data of pest &amp; Diseases observations</li> </ol>	Approved
12.3.2	Response of drip irrigated rabi sorghum to different levels of irrigation and fertigation	Dr. V.P. Usadadia, Res.Sci.	<ol> <li>Remove the part of observation i.e. No.5- No. of grains per earhead</li> <li>Include observation on nutrient mobility</li> </ol>	Approved
12.3.3	Effect of different levels of irrigation, nitrogen and foliar application of banana sap on drip irrigated sweet corn and their residual effect on succeeding summer green gram under South Gujarat conditions	Usadadia, Res.Sci.	1. Mention volume of spray under treatment S2 (3001/ha at 30 and 500 1/ha at 60 DAS )	Approved
12.3.4	Survey on impact of 'NAUROJI Novel Organic Liquid Fertilizer' indifferent crops of South		-	Approved

	Gujarat (B.H. 12026)	Res.Sci.		
MRRC,	NAU, Navsari			
12.3.5	Soil test based recommendation for targeted yield	Dr. Shailendra	-	Approved
	of rice	singh		
CSSRS,	Danti/Umbharat			
12.3.6	Influence of soil conditioner and integrated nutrient management on <i>kharif</i> rice and their residual effect on succeeding onion under		<ol> <li>Change treatment N1 as 100% RDF+10 t/ha FYM</li> <li>Merge factor A and B as Main factor</li> </ol>	Approved
	partially reclaimed coastal salt affected soil		<ul> <li>under FRBD in Rice Replication ; 4</li> <li>3. Plant height at 60 DAS of Onion</li> <li>4. Include observation on bolting %, pest and disease incidence , bulb</li> </ul>	
12.3.7	Effect of land configuration and soil conditioner, integrated nutrient management on growth and yield of radish	Dr. M.M. Patel Asso.Res.Sci.	<ul> <li>volume</li> <li>1. In treatment word RDF</li> <li>2. Sub plot INM treatment (i) add 5t/ha FYM</li> <li>3. Sub plot INM treatment (iii) biofertilizer @1.25 l/ha each</li> <li>4. Design : SPD instead of FRBD</li> </ul>	Approved
Main Su	ugarcane Research Station, NAU, Navsari			•
12.3.8	Scheduling irrigation with mulch under different sugarcane planting methods	Dr. S. C. Mali Res. Sci.	- (Project trial)	Approved
12.3.9	Carbon sequestration assessment in sugarcane based cropping system	Dr. S. C. Mali Res. Sci.	- (Project trial)	Approved
12.3.10	Agronomic performance of elite sugarcane genotypes	Dr. S. C. Mali Res. Sci.	- (Project trial)	Approved
12.3.11	Bio efficacy of some herbicides against weeds and its residual effect on sugarcane	Dr. S. C. Mali Res. Sci.	<ol> <li>Remove word 'some' from title</li> <li>Replace phytotoxicity with soil microbial analysis</li> <li>Treatment 6: replace glyphosate</li> </ol>	Approved

			<ul> <li>70% with 71%</li> <li>4. Treatment 7: replace 15-20DAS with 60 DAS</li> </ul>
	ence Department, NAU, Navsari	1	
12.3.12	Feasibility of raising cowpea genotypes (vigna unguiculata L. Walp) in salt affected coastal soil of South Gujarat	Dr. A. Das, Research Scientist	1. Conduct as feeler trial Not Approved
12.3.13	combination with FYM on yield of Tania (Xanthosomas agittifolium (L)) leaves	Dr. A. Das, Research Scientist	1. Come through Horticulture sub committee       Not         Approved
<b>Pulses</b> a	and Castor Research Station, Navsari		
12.3.14	Soil test based fertilizer recommendation for targeted yields of pigeon pea	Dr. V. M. Patel Asst.res.Sci.	1. Collaborate with Dept. of SoilApprovedChemistry, ASPEE College ofHorticulture and Forestry
12.3.15	Soil test based fertilizer recommendation for targeted yields of Indian bean	Dr. V. M. Patel Asst.res.Sci.	1. Collaborate with Dept. of SoilApprovedChemistry, ASPEE College ofHorticulture and Forestry
12.3.16	Nutrient management in Indian bean and its ratoon crop sequence	Dr. V. M. Patel Asst.res.Sci.	<ol> <li>Change RDF with fertilizer dose as per treatment</li> <li>Remove Yield observation No. 2,3, 4 and add pod yield and No. of grains per pod, crude fiber content</li> <li>Recast plot size</li> </ol>
12.3.17	Response of rabi castor to row spacings under different sowing window with or without intercrop of Indian bean var. GNIB-21		<ol> <li>Take A and B as main Plot treatment</li> <li>Change sowing window with last week of October and second week of November</li> <li>Note : if Variety is approved in last AGRESCO than experiment will be</li> </ol>

				conducted	
Hill Mi	llet Research Station Waghai,				
	Soil test based recommendation for targeted yield of Nagli (Finger millet)	Shri J. V. Patel, Asst. Res. Sci.,HMRS, Waghai	1.	Targeted yield range consider from 10 to 30 t/ha	Approved
Region	al Rice Research Station, Vyara	0			I
12.3.19		Dr. V.P. Patel Assoc.Res.Sci. RRRS	1.	Collaborate with KVK Vyara	Approved
Agricul	ture Research Station, Paria				•
12.3.20	Intercropping in newly established mango Orchard	Dr. Swapnil Deshmukh Asst.res.Sci.		Observation No. 2 replace yield with growth Delete observation No. 7	Approved
12.3.21	Effect of different sowing methods and nutrient management on Indian bean var., NPS-1 (GNIB- 21) sown after rice	Dr. Swapnil Deshmukh Asst.res.Sci.	2.	Under nutrient management treatment change RDF with 20:40:0 Replication: 4 Add quality parameter Protein and crude fiber content	Approved
12.3.22	Scheduling irrigation along with response of mulches in Brinjal	Dr. Swapnil Deshmukh Asst.res.Sci.	1.	M2; replace Sugarcane mulch @2t/ha with Sugarcane trace mulch @5 t/ha	Approved
12.3.23	Effect of tillage depth on flowering and fruiting of mango under rainfed agrosystem	Dr. Swapnil Deshmukh Asst.res.Sci.	2.	Treatment T3: Replace 30 cm with 22.5cm Treatment T4: Replace 45 cm with 40-45cm once in two years, cross section sub soiling Treatment T5: Replace three successive years with alternate years	Approved
12.3.24	Weed control in tomato (Lycopersicon esculentum	Dr. Swapnil	1.	Delete treatment No. 2	Approved

	Mill.) through mulching and herbicides under drip irrigation condition	Deshmukh	<ol> <li>Treatment T3: Replace 30 and 60 DAS with 45 DAS</li> <li>Observation (A) 1: remove at harvest</li> <li>Observation (B) 3:replace 50 with 40</li> <li>Add pest and disease incidence observation</li> </ol>
	otton Research Station, Surat		
12.3.25	Soil test based recommendation for targeted yield of cotton	Shri. K.B. Sankat Asst.Res.Sci. MCRS	1. Targeted yield range 20, 30, 40 and 50 q/ha instead of 20, 25, 30, and 35q/ha
Main Se	orghum Research Station, Surat		
12.3.26	Spacing requirement of sorghum variety GJ 42	Prof. Lalita H. Saini Asst.Res.Sci.	- Not approved
12.3.27	Soil test based fertilizer recommendation for targeted yields of sorghum	Prof. Lalita H. Saini Asst.Res.Sci.	<ol> <li>In level of N treatment, 120 kg/ha replace with 160 kg/ha</li> <li>Collaborate with Research Scientist (Cotton) Main Cotton Research Station, NAU, Surat</li> </ol>
12.3.28	Weed management in kharif sorghum	Prof. Lalita H. Saini Asst.Res.Sci.	<ol> <li>Observation No. 10 deleted</li> <li>Observation No. 7 change with dry weight of weed at 40 DAS and at harvest in gm/m<sup>2</sup></li> </ol>
Agricul	ture Research Station, Cotton Research Sub-Sta		
12.3.29	Studies on irrigation scheduling through drip, nitrogen management and mulch in turmeric	Dr. M.R. Thakur Asst.Res.Sci., NARP	<ol> <li>Treatment B and C merge and recast</li> <li>Replication: 4</li> <li>Observation No. 2 and 4 deleted</li> </ol>

			4.	Add observation of no. of mother	
				and finger rhizomes/plant	
Agricul	ture Research Station, Mangrol, Surat		-		
12.3.30	mulching along with no. of irrigations according	Prof. J.V. Vasave Asst. Res. Sci.,		Irrigation and Mulch treatment in main plot	Approved
	to critical stage approach under south Gujarat condition	Mangrol		And antitranspirant as sub plot Add weed count observation	
12.3.31	Effect of different organic manures and foliar application on chickpea under south Gujarat condition	Asst. Res. Sci., Mangrol		Recast experiment on INM with following committee Dr. V. P. Usadadia, Dr. G. G. Patel and Dr. V. J. Zinzala	Approved
12.3.32	in pigeonpea under south Gujarat condition	Prof. J.V. Vasave Asst. Res. Sci., Mangrol	1.	Add observation of Initiation of first branches from ground level	Approved
Departi	ment of Agronomy, N.M. College of Agriculture	, NAU, Navsari			
12.3.33	Effect of ZnO nanoparticles on growth, yield and quality of rice	Dr. N.N. Gudadhe Asst.Prof. NMCA	1.	Trial conducted as pot culture and it should be reported in next Agresco	Approved
12.3.34	Effect of levels and sources of sulphur application on growth, yield and quality of linseed under South Gujarat condition	Prof. Sejal K. Parmar, NMCA	2. 3.	Treatment A, Level S <sub>1</sub> deleted One absolute control treatment will be taken Add Ammonium sulphate in treatment Add EC. pH, OC in soil analysis	Approved
12.3.35	Integrated weed management in <i>rabi</i> maize and their residual effect on succeeding summer green gram under South Gujarat condition	Dr, V.J. Bavalgave Asst.Prof., NMCA	1. 2. 3.	Title recast Treatment $T_6$ to $T_{10}$ :30 DAS replace with 40 DAS Bioassay study deleted Residue analysis included	Approved

12.3.36	Integrated weed management in fodder oat and	Prof. Bhumi B.	1.	Title recast	Approved
	its residual effect on succeeding fodder sorghum	Tandel	2.	Bioassay study deleted	11
		Asst.Prof.,	3.	Residue analysis included	
		NMCA			
12.3.37	Production potential of fodder maize with	Prof. Bhumi B.	1.	Delete "South Gujarat condition"	Approved
	different fodder intercrop	Tandel		from objectives	
		Asst.Prof.,			
		NMCA			
12.3.38	Integrated farming system model for marginal	Dr. L. Desai	-		Approved
	farmers of Navsari (Gujarat)	Assoc.Prof.,			
		NMCA			
Departi	ment of Soil Science & Agril. Chemistry, N.M. C	College of Agricultu	re, NA	U, Navsari	
12.3.39	Preparation of P enriched Farm Yard Manure	Dr. Sonal	1.	Recast the title as "Evaluation of	Approved
	and its evaluation in rabi sorghum-green gram	Tripathi,		different phosphorus management	
	cropping sequence under South Gujarat	Assoc. Professor		practices in rabi sorghum-summer	
	condition	SSAC		greengram cropping sequence under	
				south Gujarat condition"	
			2.	Delete objective No.1	
Agricul	tural Meteorological Cell, Department of Agricu	ltural Engineering,	N.M.	College of Agriculture, NAU, Navsa	ari
12.3.40	Determination of rank correlation for various	Dr. Neeraj	-		Approved
	weather parameter over South Gujarat	Kumar,			
		Assist. Prof.			
		(Agril.			
		Meteorology),			
Departi	ment of NRM, ASPEE College of Horticulture a	and Forestry, NAU	, Navs	ari	
12.3.41	Calibration and validation of sugarcane crop	Prof. P.K. Parmar	1.	Recast the title	Approved
	using DSSAT model for South Gujarat region.	Asst.Prof. ACHF			
12.3.42	Seasonal and Diurnal variation of surface ozone	Dr. S.V. Vihole	-		Approved
	at NAU campus.	Asst.Res.Sci.			* *
	_	Envi.Sci.			

Departi Navsari	ment of Soil Science & Agril. Chemistry, Organi	c Farming Unit, AS	SPEE College of Horticulture & Forestry, N	NAU,
12.3.43	Effect of different organic source on yield and quality of sorghum varieties	Dr. P.K. Dubey Asst.Prof. SSAC ACHF	-	Approved
12.3.44	Effect of liquid manures on growth, yield and quality of green gram under organic farming	Dr. P.K. Dubey Asst.Prof. SSAC ACHF	1. Replace word vermiwash with vermibedwash under treatments	Approved
College	of Agriculture, Waghai			
12.3.45	Response of little millet (Vari) to organics (In collaboration with HMRS, NAU, Waghai)	Prof. S. S. Sonwane	1. Add observation on protein content	Approved
12.3.46	Assessment of quality of irrigation water of Dangs district	Prof. J. R. Jat	1. Add boron analysis	Approved
College	of Agriculture, Bharuch			
12.3.47	Response of cotton to green manuring and different fertility levels under rainfed condition.	Dr. D.D. Patel Assoc. Prof. COA, Bharuch	-	Approved
12.3.48	Response of sugarcane to tillage and different intercropping system under south Gujarat condition.	Dr. D. D. Patel Assoc.Prof. COA, Bharuch	<ol> <li>Changes design a Split Plot instead of Strip Plot with four replications.</li> <li>Change crop fenugreek (GF-1) instead of green gram in intercrops</li> </ol>	Approved
12.3.49	Nutrient management in Dill Seed under south Gujarat condition	Dr. Seema Sharma Assoc. Prof. COA, Bharuch	1. Remove sulphur levels	Approved
12.3.50	Evaluation of castor based relay cropping sequences under rainfed condition of South Gujarat.	Dr. Seema Sharma Assoc.Prof.	<ol> <li>Add Castor Equivalent Yield in observations</li> </ol>	Approved

		COA, Bharuch		
12.3.51	N & P management in kharif sorghum with and	Dr. Seema	-	Approved
	without bio organics under south Gujarat	Sharma		
	conditions	Assoc.Prof.		
		COA, Bharuch		
12.3.52	Agroclimatic Approach for Crop Planning	Dr. K.K.	-	Approved
		Dakhore		
		Asst.Prof.		
		COA, Bharuch		
Horticu	Ilture Polytechnic Aspee College Of Horticulture	e And Forestry		
12.3.53	Effect of tip pruning and foliar application of	Dr. H.M. Patel	-	Approved
	KNO3 on early flowering and yield of	Asst.Prof.		
	mango cv. Kesar			

## **TECHNICAL SESSION - IV :**

### **Review on Ongoing Research Programmes**

Chairman:	Dr. J. D. Thanki, Professor and Head (Agronomy)
Co-Chairman:	Dr. K. G. Patel
Rapporteurs :	Dr. R.B. Ardeshna and Dr. J.M. Patel

Chairman/Co-chairman reviewed the status of ongoing research programmes of NRM at each station. The members were also asked to present technical problems faced by them, if any, in conduct of experiments and need for any modification required in ongoing experiments. After thorough discussion on points/problems presented by few centres, the following decisions were taken.

Centre : Dept. of SSAC, NMCA, Navsari

12.4.1 Evaluation of DRIS approach for assessing nutritional status of banana in south Gujarat

Extensive survey and laboratory analysis based this study was proposed and approved in 9<sup>th</sup> NRM Agresco Sub-committee meeting. Due to transfer of PI of the study, department asked for permission to discontinue the study. Ex.PI of the study and Professor & Head were requested to discuss the matter with the Director of Research & Dean, Faculty of PG Studies.

Centre : Dept. of Agronomy, CoA, Bharuch

12.4.2 Effect of pre-and post-emergence herbicides on weed infestation and productivity of pigeonpea under rainfed condition of south Gujarat

PI of the experiment proposed to discontinue the experiment in view of repeated very poor germination in some weed control treatment/s. The house granted permission to discontinue the experiment.

Centre : KVK, Navsari

12.4.3 Effect of foliar spray of silicon on growth and yield of paddy

PI of the study put the matter of difficulty in silicon analysis. It was decided to collaborate the experiment with the Dept. of SSAC, NMCA, Navsari.

Centre : KVK, Dediapada

12.4.4 Response of sorghum varieties to different tillage practices under conserved moisture after *kharif* paddy (drilled)

In view of zero/low yield in zero tillage treatment resulting in erratic variation in CV%, investigator of the study asked for solution if any in statistical analysis. It was decided to consult Professor & Head, Dept. of Agril. Statistics, NMCA, Navsari for alternative/suitable method of statistical analysis.

The meeting ended with vote of thanks proposed by Prof. Jaymin Naik, Assistant Professor (SSAC), NMCA, NAU, Navsari.

Scaler Convener, NRM NAU, Navsari