

**PROCEEDING OF THE 12<sup>th</sup> MEETING OF AGRICULTURAL  
ECONOMICS, AGRICULTURAL STATISTICS AND EXTENSION  
EDUCATION SUB-COMMITTEE OF SOCIAL SCIENCE GROUP HELD  
ON FEBRUARY 17<sup>th</sup>, 2016 AT NAU, NAVSARI**

**INAUGURATION SESSION**

At the outset, Dr. Narendra Singh, Convener, AGRESCO Sub-Committee of Social Science Group, ASPEE College of Horticulture and Forestry, NAU, Navsari welcomed the dignitaries and members of the Sub-Committee. It was followed by floral welcome and lightening of Lamp.

Dr. C. J. Dangaria, Hon'ble Vice-Chancellor of Navsari Agricultural University, Navsari and President of inaugural session congratulated the scientists of this group including Krishi Vigyan Kendra for their contribution towards farming community. He appreciated the convergence with line departments but he felt that, there is need to improve it. He also narrated the importance of documentation and urged scientists to go for bottom up approach for formulation of new experiments. He also emphasized that, researcher should initiate research work on feedbacks received from Krishi Vigyan Kendra.

Dr. G. R. Patel, Director of Extension Education, NAU, Navsari elaborated activities carried out by Directorate of Extension Education. He mentioned about implementation of skill development programmes, Mera Gaon Mera Gaurav, organic farming, climate change, capacity building for climate resilient agriculture/ climate smart agriculture, Krishi Mahotsav and Mega Event Celebration of Krishi Mahotsav, women empowerment, energy conservation, MOU with GIPLC for providing technical support for research in between solar panels, establishment of Krishi Library in all seven districts, Celebration of Jai Javan Jai Kishan week *etc.* He also suggested number of researchable issues for this group, some of these includes enhancing input use efficiency, effect of IT based system, employment of rural youth and women empowerment, women friendly drudgery reduction including small scale farm mechanization, stimulation of adoption behavior, assessment of ITKs through on farm experiments, rural lively hood security, perceptions related to climate change *etc.*

Dr. B. N. Patel, Principal and Dean, ASPEE College of Horticulture and Forestry, NAU, Navsari appreciated the efforts made by this group for the betterment of farming community. He said that, production of fruits and vegetables in the region were increased significantly. He also mentioned that, there were high post harvest losses observed in mango, sapota, tomato and okra. The overall losses in these crops are more than 30 per cent. He also suggested the new area of research *viz.*, impact of climate change and ways to mitigate them, ways to overcome labour problem, reducing input cost, market price, management of natural resource, export oriented horticulture *etc.*

H. R. Pandya, Principal and Dean, ASPEE Institute of Agri Business Management, NAU, Navsari suggested that, plan the new experiment in such way that some recommendations or suggestions emerged out of it, which will be useful to design future extension strategies. One publication "Strengthening of Extension Wing" prepared by Dr. P.B. Khodifad, Assistant Professor and Dr. R.D. Pandya, Professor and Head, Department of Extension Education, N. M. College of Agriculture, NAU, Navsari was released by Hon'ble Vice Chancellor Dr. C. J. Dangaria and other dignitaries.

The inaugural session was ended with vote of thanks by Dr. Ruchira Shukla, Associate Professor, ASPEE Institute of Agribusiness Management, NAU, Navsari.

### TECHNICAL SESSION – I

<b>Chairman</b>	:	Dr. C.J. Dangaria, Hon. Vice Chancellor, NAU, Navsari
<b>Co-Chairman</b>	:	Dr. G.R. Patel, Director of Extension Education, NAU, Navsari
<b>Rapporteur :</b>	:	Dr. J.J. Pastagia , PC, KVK, Surat Dr. C.K. Timbaria, PC, KVK, Navsari
12.1.1	:	<b>Approval of minutes of the 11<sup>th</sup> AGRESCO-SS (Feb., 18, 2015)</b> The house has approved the minutes.
12.1.2	:	<b>Review and follow up action for strengthening the body</b> The action taken by the concerned members were discussed. The chairman suggested following points for further consideration.
		(i)The Soil and Water Management Unit has to present progress report and new experiments of PFDC (Precision Farming Development Center) in social science group. <b>(Action:</b> Research Scientist, Soil and Water Management Unit, Navsari)
		(ii) The presentation of report of the experiment should be presented by concerned department on transfer or retirement of scientists. <b>Action Taken:</b> All Heads of department /Unit/ Center
		(iii) In the most of action taken reply, it has been written as suggestions accepted only, but the progress of experiment also has to be mentioned. <b>Action Taken:</b> All Heads of department /Unit/ Center
		(iii) Both the suggestion from AGRESCO and Joint/combined AGRESCO should be incorporated in report <b>Action Taken:</b> All Heads of department /Unit/ Center
		For Action taken report, the convener has to circulate the letter well in advance with mentioning last date of submission. The report received after last date should not included in action taken report or with mentioning as received late. <b>Action Taken:</b> Convener, AGRESCO-SS

## TECHNICAL SESSION II: EXTENSION EDUCATION

<b>Chairman</b>	:	Dr. G. R. Patel, DEE, NAU, Navsari
<b>Co-Chairman</b>	:	Dr. R.D. Pandya, Professor & Head, Department of Extension Education, NMCA, NAU, Navsari
<b>Rapporteurs</b>	:	Dr. O. P. Sharma, Assoc. Professor, (Ext. Edu.) NMCA, NAU, Navsari
		Dr. H. U. Vyas, Assoc. Professor (Ext. Edu.) ATIC, NAU, Navsari
12.2.1	:	<p><b>KVK, Vyara</b>            Dr. C. D. Pandya, PC presented the results of research study entitled “Impact of KVK activities in adopted villages of Tapi District” and “Impact of Self Help Groups on Socio-Economic Status of tribal women in adopted villages of KVK, Tapi”. House accepted the same.            Moreover he has also proposed a new technical programme entitled, “Constraints in adoption of <i>khariif</i> groundnut production technology in Tapi district”. House approved.</p> <p style="text-align: right;"><b>(Action taken: PC, KVK, Vyara)</b></p>
12.2.2	:	<p><b>KVK, Waghai</b>            Prof. J. B. Dobariya, SMS (Extension) presented the results of research study entitled, “Change in cropping pattern in tribal area of Dang district”. House accepted the same.            He also proposed two new technical programmes entitled; “Training needs of farmers in vegetables cultivation in tribal areas” and “Impact of KVK activities in adopted villages of KVK-Dangs”. House approved both of them.</p> <p style="text-align: right;"><b>(Action taken: PC, KVK, Waghai)</b></p>
12.2.3	:	<p><b>KVK, Surat</b>            Dr. P. D. Verma, SMS (Extension) presented the results of research study entitled “Study on knowledge of owners of milch animals about animal breeding”. House accepted the results.            He also presented the status report of ongoing programme entitled; “Study on cropping pattern adopted by the farmers in coastal region of South Gujarat”. House accepted the status report.</p> <p style="text-align: right;"><b>(Action taken: PC, KVK, Surat)</b></p>
12.2.4	:	<p><b>KVK, Navsari</b>            As per the instruction made through circular by Director of Research, NAU, house suggested to PC, KVK, Navsari to submit a new technical programme to the Convener before Joint AGRESCO of NAU so, it can be put up in time.</p> <p style="text-align: right;"><b>(Action taken: PC, KVK, Navsari)</b></p>
12.1.5	:	<p><b>KVK, Dediypada</b>            Prof. S. R. Kumbhani presented the results of two research studies entitled, “Adoption of improved Indian bean production technology” and “Impact assessment of FLDs technology on Pigeon pea”. House accepted the results. He also presented the progress of ongoing programme entitled; “Impact of FLDs on improved Paddy production technology”. House convinced with the status report and accepted it.            Dr. Meenaxi Tiwari, SMS (Home Science) proposed a new technical programme entitled “Maternal Nutritional Knowledge and its Association with</p>

		Nutritional Status of School Going Children”. House approved the same. (Action taken: PC, KVK, Dedyapada)
12.2.6	:	<b>TWTC, Dedyapada</b> Dr. V. K. Poshiya, Asstt. Prof.( Extension) presented the results of Project entitled; “Knowledge and Status of Tribal Farm Women about Human Nutrition”. House accepted the same. He also proposed a new technical programme entitled “Impact of low drip kitchen garden demonstration organized by Tribal Women Training Centre, Dedyapada. House approved the same. (Action taken: PC, KVK, Dedyapada)
12.2.7	:	<b>AES Paria</b> Absentia House suggested to the Convener that this matter should be put-up to the Director of Research, NAU, Navsari for further necessary action. (Action taken: Res. Sci., AES, Paria)
12.2.8	:	<b>Deptt. of Ext. Edu., NMCA</b> Dr. R. D. Pandya, Prof. & Head, presented a detailed 1 <sup>st</sup> Project report of Strengthening of Extension Wing (B.H.12145). House appreciated and accepted the same. Further, house suggested that according to the objectives of plan scheme the research should be conducted by selecting another area of South Gujarat. Dr. P. B. Khodifad, Asst. Professor (Extension) presented the results of technical programme entitled; “Assessment of livelihood pattern of tribal farm women in Narmada district”. House accepted. While, proposing a new technical programme by Dr. Khodifad the Professor & Head has requested to the house that considering the involvement in plan scheme, he may exempt from the new technical programme and house approved the request. On behalf of Dr. R. M. Naik, Asso. Professor (Extension), the Professor & Head has proposed a new technical programme entitled; “Knowledge of farmers about training programme organized by Mega Seed Project of NAU, Navsari on seed production technology of Paddy in Navsari district”. House accepted the same. Dr. O. P. Sharma, Asso. Professor (Extension), submitted a status report to the house about ongoing technical programme entitled; Perception of farmers towards activities of <i>Krishi Mahotsav</i> in South Gujarat. Dr. Sharma informed that in context to objectives and methodology, the interview schedule/questionnaire was prepared. The results of same will be presented in 13 <sup>th</sup> AGRESKO-SS. (Action taken: Prof. & Head, Deptt. of Ext. Edu., NMCA)
12.2.9	:	<b>Deptt. of Ext. Edu., ACHF</b> Dr. O. D. Vanparia, Asso. Professor (Extension), presented the results of research study entitled; “Awareness about AICT among the students of ASPEE College of Horticulture and Forestry”. House accepted the same. (Action taken: Assoc. Prof., Deptt. of Ext. Edu., ACHF)

12.2.10	<p><b>: Deptt. of Vet. &amp; AH Ext. VCVSAH</b>  Dr. M. R. Bhatt, Asso. Professor (Veterinary Extension), presented the results of technical programmes entitled; “Analysis the behaviour of fruit growers of Navsari district towards the use of pesticides”. House accepted the same.  He has also proposed a new technical programme entitled’ “Perception and attitude of young farm women towards animal husbandry as occupation”. House approved the same and suggested that this study should be conducted for 3 consecutive years by selecting 120 farmers from one selected taluka.  Moreover, in the inaugural session, the Hon’ble Vice Chancellor, NAU, clarified that in case of transfer or retirement of faculty, the ongoing research, its conduction, conclusion or reporting in the AGRESCO should be done from the available faculties, where it was proposed as departmental research.</p> <p>Hence, in this context the house suggested that Dr. D. Rani V. will work as PI for the technical programme entitled; “ICT penetration level of dairy cooperative farmers in South Gujarat region” and for second Dr. R. S. Ghasura will work as PI for the technical programme entitled; “Bio security management levels of commercial poultry farmers in south Gujarat region”. Their results will be presented in next AGRESCO.  In addition to ongoing technical programme entitled; Perception of farmers towards activities of <i>Krishi Mahotsav</i> in South Gujarat, the Professor &amp; Head has requested to the house that Dr O. P. Sharma is transferred and working at Dept. Extension Education, NMCA and has done one year exercise on it so, it should be continued with him only. House has considered it exceptionally and granted.</p> <p style="text-align: right;"><b>(Action taken: Prof. &amp; Head, Deptt. of Vet. &amp; AH Ext., VCVSAH)</b></p>
12.2.11	<p><b>: SWMRU, NAU</b>  Absentia  House suggested to the Convener that this matter should be put-up to the Director of Research, NAU, Navsari for further necessary action.</p> <p style="text-align: right;"><b>(Action taken: Res. Sci., SWMRU, NAU)</b></p>
12.2.12	<p><b>: ATIC &amp; Educatorium, DEE, NAU</b>  Dr. G. B. Kalaria Asso. Professor (PP), presented the status report of technical programme entitled “Usefulness of ATIC as perceived by the farmers”. The results will be presented in next AGRESCO.  Dr. H. U. Vyas, Asso. Professor (Extension), presented the results of the technical programme entitled, “Training needs of agricultural input dealers in transfer of agriculture technology”. House approved.  He also proposed a new technical programme entitled; “Constraints faced by farmers regarding protected cultivation in South Gujarat” along with Dr. O. D. Vanparia, Asso. Professor (Extension), ACHF as Co-PI. House accepted the same.</p> <p style="text-align: right;"><b>(Action taken: DEE, NAU)</b></p>
12.2.13	<p><b>: Agril. College Bharuch</b>  On behalf of Dr. Netravathi. G, Asst. Professor (Extension), Dr. A. Srivastava , Asso. Professor (Statistics) presented the results of technical programme</p>

		<p>entitled; “Knowledge and adoption of pigeon pea growers about recommended production technologies in Bharuch district of South Gujarat”. House approved the same.</p> <p>Further, Dr. Srivastava, has proposed a new technical programme entitled; “Knowledge and adoption of cotton growers about recommended production technologies in Bharuch district of South Gujarat”. House approved the same.</p> <p style="text-align: right;"><b>(Action taken: Asstt. Prof. (Ext.) CoA, Bharuch)</b></p>
12.2.14	:	<p><b>Agril. College Waghai</b></p> <p>Dr. M. Choudhary, Asso. Professor (Extension), presented the results of the project entitled; “Study on expectations and motivational sources of enrolled students of College of Agriculture, Waghai”. House accepted the results.</p> <p>He also proposed a new technical programme entitled; “Aspiration level of farmers lived in tribe situation of Dangs”. House accepted the same.</p> <p style="text-align: right;"><b>(Action taken: Assoc. Prof. (Ext.) CoA, Waghai)</b></p>
12.2.15	:	<p><b>SSK, Navsari</b></p> <p>Prof. V. P. Vejapara, PO, presented the results of technical programme “Comparative study of successful and unsuccessful Self Help Groups of Navsari district”. House accepted the same.</p> <p>Further, he informed that his engagement in to different activities related to farmers visiting to the campus throughout the year so, relaxation may given to him from conduction of research. House granted.</p> <p style="text-align: right;"><b>(Action taken: Programme Organizer, SSK)</b></p>
12.2.16	:	<p><b>Poly-technique Waghai</b></p> <p>Absentia</p> <p>House suggested to the Convener that, this matter should be put-up to the Director of Research, NAU, Navsari for further necessary action.</p> <p style="text-align: right;"><b>(Action taken: Principal, Poly-technique, Waghai)</b></p>
12.2.17	:	<p><b>Poly-technique Vyara</b></p> <p>Dr. N. M. Chauhan, Principal, presented two new technical programmes entitled, “Constraints faced by tribal farmers in adoption of export oriented okra production technology in Tapi district of South Gujarat” and “A Study on adoption of recommended production technology of brinjal by brinjal growers in Tapi district of Gujarat State”. House accepted the both.</p> <p style="text-align: right;"><b>(Action taken: Principal, Poly-technique, Vyara)</b></p>
12.2.18	:	<p><b>DEE, NAU, Navsari</b></p> <p>Prof. S. D. Kavadi, Assistant Extension Educationist proposed a new technical programme entitled; “Group Dynamics of FIGs / CIGs working under ATMA in South Gujarat”. House accepted the same.</p> <p style="text-align: right;"><b>(Action taken: DEE, NAU, Navsari)</b></p>
12.2.19	:	<p>Considering the mode of work done by the faculties of Polytechnic AH, NAU, Navsari, and for that the AGRESCO of Social Science group is the only body of university hence, the Hon’ble Vice Chancellor, NAU, suggested that the information about outcome is to be given to said house. By following the instruction Dr. Y. D. Padheria provided the information to the members of the house about ‘Evaluation of buffalo management practices in peri-urban dairy farms of Surat city’.</p>

	<p>Dr. N. S. Dangar Asstt. Professor (AGB), presented two new technical programmes entitled; Study on managerial practices adopted by commercial broiler farmers in Navsari district and Study on managerial practices adopted by commercial layer farmers in Navsari district. House approved both of them. Further, looking to the sample size of new technical programme, the house suggested that all the commercial broiler and commercial layer farmers of study area should be considered respectively.</p> <p style="text-align: center;"><b>(Action taken: Principal, Polytechnic AH, NAU, Navsari)</b></p>
--	--

### TECHNICAL SESSION III: AGRICULTURAL ECONOMICS AND ABM

<b>Chairman</b>	:	Dr. H.R.Pandya, Dean, ASPEE Agribusiness Management Institute, NAU, Navsari
<b>Co-Chairman</b>	:	Dr. Narendra Singh, Associate Professor, ACHF, NAU, Navsari
<b>Rapporteurs</b>	:	Dr.J.J. Makadia, I/c Professor and Head, Department of Agricultural Economics, NMCA, NAU, Navsari
	:	Dr. Ruchira Shukla , Assoc. Professor, AABMI , NAU, Navsari
	:	Prof. Gautam Parmar, Asst.Professor, AABMI, , NAU, Navsari
12.3.1	:	<p><b>Department of Agricultural Economics, NMCA, NAU, Navsari</b></p> <p>Prof.N.J.Ahir, Assistant Professor (Agricultural Economics), N. M. College of Agriculture presented the report for Department of Agricultural Economics. He presented the results of two research studies:</p> <p>i. “Comparative Economics of the drip and flood irrigation method in banana crop in South Gujarat”.</p> <p>ii. “Economic assessment of post-harvest losses in kesar mango in South Gujarat”. The house accepted the results of both the studies.</p> <p>Dr.J.J. Makadia, I/c Professor and Head,(Agricultural Economics), N. M. College of Agriculture presented the New Technical Programme entitled " Economic viability of layer poultry farms in Navsari district of Gujarat." The house approved it after the discussion.</p> <p style="text-align: center;"><b>(Action taken : Professor, Agril.Economics,NMCA, NAU, Navsari)</b></p>
12.3.2	:	<p><b>Department of Agricultural Economics, ACHF, NAU, Navsari</b></p> <p>Dr.D.J.Chaudhari, Asst. Professor (Agril. Economics), ACHF, presented the details of activities carried out in his department. He presented the progress of</p>

	<p>two ongoing programmes</p> <p>i) “The Economic impact of climate change on agriculture and implications for food security in South Gujarat”. Study will be continued.</p> <p>ii)“Climate change Impacts on livestock and adaptation strategies for sustainable production”. Study will be continued.</p> <p>He presented two new technical programmes :</p> <p>i) “Economic analysis of palmyra palm(<i>Borassus flabellifer L.</i>) in South Gujarat” After discussion, house approved the same.</p> <p>ii)“Economic analysis of sugarcane cultivation under straw burning practices ” After discussion, house approved the same.</p> <p><b>(Action taken:</b> Associate Professor, Agril. Economics, ACHF, NAU, Navsari)</p>
12.3.3	<p><b>: Department of Agricultural Economics, College of Agriculture, NAU, Bharuch</b></p> <p>Dr.P.M.Thanki, Associate Professor and Head, Department of Agricultural Economics, College of Agriculture, NAU, Bharuch presented the results of study entitled “Economics of production and marketing of major rabi and summer vegetables in Bharuch district of South Gujarat”. The house accepted the results.</p> <p>He presented the progress of ongoing study entitled “Economics and marketing of major flower crops in Bharuch district of South Gujarat” The results will be presented in 13<sup>th</sup> AGRESCO-SS.</p> <p>Furthermore he presented a new technical program entitled “The studies on economics of production and marketing of papaya (<i>Carica papaya L</i>) of Bharuch districts of South Gujarat”. The house suggested to change the title as “Economics of production and marketing of papaya (<i>Carica papaya L</i>) in Bharuch district of South Gujarat”. The house also suggested to merge 2<sup>nd</sup> and 3<sup>rd</sup> objectives as “To study the price spread in different marketing channels of papaya”.</p> <p>The house also suggested to increase the sample size to 50 papaya growers.</p> <p><b>(Action taken:</b> Assoc. Professor and Head, (Agril Eco.),CoA, NAU, Bharuch)</p>
12.3.4	<p><b>: Planning cell, Director of Research and Dean, PG Studies</b></p> <p>Dr. V.M. Thumar, Planning Officer and Associate Professor (Agril. Econ.) presented results of study titled “Analysis of fund allocation and expenditure</p>



		<p>under plan scheme of NAU". The house approved the results.</p> <p>Furthermore he also presented the new technical programme entitled "Study of outlay of different sources of funds before and after formation of Navsari Agricultural University". The house suggested to add "Before and After formation of Navsari Agricultural University" in all the three objectives. The house also suggested to replace the word "Estimate" in third objective by "Study".</p> <p style="text-align: center;"><b>(Action taken:</b> Planning officer and Assoc. Professor ( Agril. Eco.) , Directorate of Research , NAU, Navsari)</p>
12.3.5	:	<p><b>Department of Agricultural Economics ,College of Agriculture, NAU, Waghai</b></p> <p>Prof. Vishal Thorat, Assistant Professor, Department of Agricultural Economics, College of Agriculture, Waghai, presented the progress of the study entitled "Transition of food consumption pattern in Deccan Gujarat". Furthermore , he presented two new technical programmes:</p> <p>i) "Situation assessment of indebtness of agricultural households in South Gujarat.". House suggested to change the title as "An assessment of indebtness of agricultural households in different regions of Gujarat". The house also suggested to replace the word "Situation" by word "Status" and "South Gujarat" to be replaced by "Gujarat" in both the objectives.</p> <p>ii) "Assessment of vulnerability to expected poverty among scheduled tribe farmers in South Gujarat". The House approved the same.</p> <p style="text-align: center;"><b>(Action taken:</b> Assistant Professor, (Agril.Econ.),CoA,Waghai)</p>
12.3.6	:	<p><b>Department of Agricultural Economics, Polytechnic in Agriculture, NAU, Vyara.</b></p> <p>Dr.Gaurav Sharma, Assistant Professor(Agril.Econ) presented new technical programme entitled "A study on primary processing and marketing of vegetables in Tapi district of South Gujarat". The house suggested to change title as "A study on processing and marketing of vegetables in Tapi district of South Gujarat". The house also suggested to reframe the first objective as "To examine pattern of processing by vegetable growers of the region".</p> <p style="text-align: center;"><b>(Action taken:</b> Assistant Professor, (Agril.Econ.), Polytechnic, Vyara)</p>

12.3.7	:	<p><b>ASPEE Agribusiness Management Institute, NAU, Navsari</b></p> <p>Prof. Gautam Parmar, Asst. Professor, AABMI, presented the results of the study titled "Market acceptability and preference for Ready to Cook foods in Navsari district." The study was concluded and house accepted the results.</p> <p>Dr.Ruchira Shukla, Associate Professor presented the progress of three ongoing programmes</p> <p>i) "An Appraisal of Rice flakes (Poha) processing units in Navsari district of South Gujarat".  ii) "Technical efficiency of sugarcane production in South Gujarat".  iii)"A comparison of consumer perception towards organized and unorganized retailing in South Gujarat".</p> <p>New technical Programmes: Five new technical programmes were presented.</p> <p>Prof. Gautam Parmar, Asst. Professor, AABMI, presented two new technical programmes</p> <p>i) "A study of consumption pattern and factors affecting on edible oil usage in Navsari". The house suggested to reframe the title as "A study of consumer behavior and factors affecting edible oil usage in Navsari". The objective 1 to be reframed as "To study consumer behavior of edible oil in Navsari."  ii) "A Study on fish marketing channels and constraints faced by intermediaries". The house suggested to reframe the title as "Identification of marketing channels and constraints in fish marketing". The house also suggested to increase consumer sample size to 50 (Fifty).</p> <p>Dr.M.G.Thakkar,Assoc. Professor, AABMI, presented two new technical programmes</p> <p>iii)"Study of Entrepreneurial intentions among the PG students of NAU, Navsari". The house approved the same after discussion.  iv)"Career Management concerns of UG &amp; PG Students of NAU Campus Navsari". The house approved the same after discussion.</p> <p>Dr. R. Shukla, Assoc. Professor, AABMI, presented new technical programme</p> <p>i) "Assessment of private plant nursery enterprise in Navsari and Surat districts." The house approved the same after discussion.</p> <p style="text-align: right;"><b>(Action taken: Dean, AABMI)</b></p>
12.3.8	:	<p><b>Krishi Vigyan Kendra, NAU, Surat</b></p> <p>Dr. P.D.Verma, Asst. Res. Sci, KVK, Surat presented the results of the study titled "Sustenance cropping system in tribal area of Surat district" in the technical session of Agricultural Economics and ABM as the study was related to economics. He also proposed 5 (Five) recommendations based on</p>

the results of the study.

### **Farming community**

#### **A. Rain-fed Cropping System**

1. Tribal Farmers of Surat district are advised to adopt pigeon pea as intercrop in prevailing system as Sorghum- Pigeon pea, Pigeon pea – Soybean, Cotton -soybean-Pigeon pea, Sorghum-pigeon pea- Soybean, in rain fed conditions, where the BC ratio was 2.32, 2.29, 2.22, 2.14 higher than other system respectively.

સુરત જીલ્લાના આદિવાસી ખેડૂતોને સલાહ આપવામાં આવે છે કે, સૂકી ખેતીના વિસ્તારમાં આંતરપાક તરીકે તુવેર પાકને પ્રાધ્યાના આપવાથી આર્થિક નફો મળે છે. દા.ત. જુવાર-તુવેર-તુવેર-સોયાબીન, કપાસ-સોયાબીનમાં એક રૂપીયો ખર્ચ કરતાં રૂા. ૨,૩૨, રૂા. ૨.૨૯, રૂા. ૨.૨૨ અને રૂા. ૨.૧૪ આર્થિક નફો મળે છે.

#### **B. Semi-Irrigated System**

2. Tribal farmers of Surat district are advised to adopt Indian bean based cropping system if they have the irrigation facility to fetch the better return. The BC ratio was 2.91, 2.63, 2.61 of various cropping systems namely, Paddy TP-Pigeon pea- Indian bean and Paddy TP-Indian bean, Pigeon pea-Indian bean respectively.

ઓછી પિયતની સગવડતા ધરાવતા આદિવાસી ખેડૂતોને સલાહ આપવામાં આવે છે કે, તેઓ પાપડી આધારીત પાક પ્રણાલી અપનાવવી જોઈએ. કારણ કે આમ કરવાથી, એક રૂા. ખર્ચ કરતાં રૂા. ૨.૯૧, રૂા. ૨.૬૩ અને રૂા. ૨.૬૧ આર્થિક નફો જુદી-જુદી પાક પ્રણાલી જેવી કે ડાંગર ખરીફ તુવેર-પાપડી, ડાંગર ખરીફ-પાપડી અને પાપડી-તુવેરમાં મળે છે.

#### **C. Well irrigated conditions**

3. In the well irrigated condition tribal farmers of Surat district are advised to adopt Paddy TP (Kharif) – Pointed Guard - Maize (Rabi) cropping system to fetch better returns ie. BC ratio was 2.43 over the other system prevailing in the area.

પિયત સગવડતા ધરાવતા આદિવાસી ખેડૂતોને સલાહ આપવામાં આવે છે કે, ખરીફ ડાંગર-પરવળ-મકાઈ (રવી- ઉનાળુ) પાક પ્રણાલી અપનાવવાથી ૧ રૂપીયો ખર્ચ કરતા રૂા. ૨.૪૩ વધારે આર્થિક નફો મળે છે.

### **Scientific community**

4. Extension functionaries are advised to suggest pigeon pea and Indian bean as a base crop in rainfed as well as in semi irrigated areas of tribal farmers of Surat district. Besides, the farmers may be educated about the disadvantages of mono-cropping *i.e.* paddy *Kharif*-paddy summer as well as to promote *Rabi* maize and pointed guard instead of upland summer paddy in tribal areas.
5. Policy makers are advised to initiate the separate organic farming policy for tribal areas as they are very close to natural organic farming to strengthen these cropping systems as sustenance farming. Because

		<p>in rained areas, the average consumption of chemical fertilizers is very less as 41.38 kg N /ha and 12.88 kg/ha P in Paddy drilled, 4.44 kg/ha N and 11.84 kg/ha P and 5.92 kg/ha K in soybean, 3.30 kg/ha N, 0.88 Kg/ha P in Sorghum and 0.54 kg/ha N, 1.38 Kg/ha P in Pigeon pea and 14.4 kg/ha N, 36 kg/ha P in Summer groundnut.</p> <p style="text-align: right;"><b>(Action taken:</b> Programme Coordinator, KVK, Surat)</p>
--	--	--

#### TECHNICAL SESSION IV: AGRICULTURAL STATISTICS

<b>Chairman</b>	:	Dr. H R Pandya, Professor & Head, Department of Ag. Stat, NMCA, NAU, Navsari
<b>Rapporteurs</b>	:	Dr B. K. Bhatt, Associate Professor (Ag Stat), ACHF, NAU, Navsari
		Prof J. R. Naik, Associate Professor (Ag Stat), NMCA, NAU, Navsari
		Dr. Sanklpa Ojha, Assistant Professor, NMCA, NAU, Navsari
12.4.1	:	<p><b>Dept. of Agril. Statistics, NMCA, NAU, Navsari</b></p> <p>Prof Sankalp Ojha, Assistant Professor, NMCA, NAU, Navsari presented the research report of Department of Agril. Statistics. He presented the results of research study on :</p> <p><b>i)</b> “Growth and instability of major field crops of South Gujarat” and the same is accepted by the house and</p> <p><b>ii)</b> “A study on some useful correlation techniques in social sciences” the same is accepted by the house.</p> <p>Furthermore he presented following new technical programme and after discussion house approved the same :</p> <p>“Comparison of different intrinsically nonlinear models for the prediction of milk yield of Surati Buffalo”.</p> <p style="text-align: right;"><b>(Action taken:</b> Professor &amp; Head, Ag. Stat., NMCA, NAU, Navsari)</p>
12.4.2	:	<p><b>Dept. of Agril. Statistics, ACHF, NAU, Navsari</b></p> <p>Dr. B. K. Bhatt, Assoc. Prof. ACHF, NAU, Navsari presented the research report for Department of Agril. Statistics. He presented the results of research study on : “Effect of intercropping in banana under organic farming”. House accepted the results.</p> <p>Furthermore he presented following new technical programme and after discussion house approved the same :</p> <p>:Uniformity trial in brinjal (seed purpose)</p> <p style="text-align: right;"><b>(Action taken:</b> Associate Professor (Ag. Stat.), ACHF, NAU, Navsari)</p>

12.4.3	:	<b>Dept. of Agril. Statistics, CoA, NAU, Bharuch</b>  Dr Alok Shrivastava, Associate Professor, CoA, NAU, Bharuch presented the new technical program on : “Dynamics of growth rate & instability of major crops in Bharuch districts” for Department of Agril Statistics. House suggested to take new technical program on uniformity trial on cotton instead of growth rate as plenty of work has been done in the past. The detailed new technical programme should be submitted to the convener before Joint AGRESCO.  <b>(Action taken:</b> Associate Professor (Ag. Stat.), CoA, NAU, Bharuch)
12.4.4	:	<b>Dept. of Agril. Statistics, CoA, NAU, Waghai</b>  Dr Yogesh A. Garde, Assistant Professor, CoA, NAU, Waghai presented progress report of ongoing research entitled “Pre harvest forecasting of Ragi (Hill Millet) in Dang district“ . Furthermore he presented following new technical program on : “Forecasting of rice ( <i>Oriza sativa</i> ) yield using ordinal logistic regression “ and after discussion house approved the same. <b>(Action taken:</b> Assistant Professor(Ag. Stat.), CoA, NAU, Waghai)

#### TECHNICAL SESSION V: PLENARY SESSION

<b>Chairman</b>	:	Dr. G.R. Patel, DEE, NAU, Navsari
<b>Rapporteurs</b>	:	Dr. V.M. Thumar and Dr. A.K. Leua
	:	The reports of all the technical sessions were presented by the chairman of respective session and were approved by the house . The convener has nominated Dr. A.K. Leua, Associate Professor, AABMI, NAU, Navsari for special talk in 13 <sup>th</sup> AGRESCO. Vote of thanks was extended by Dr. Mahul G. Thakkar. <b>(Action taken: Convener of AGRESCO)</b>

No.ACHF/NAU/Agresco/ 6601-10 /2016

Date: 17<sup>th</sup> March,2016



(Narendra Singh)

Convener & Asso. Prof.

Dept. of Agril. Economics

ASPEE College of Horticulture & Forestry

Navsari Agricultural University, Navsari

\*\*\*\*\*