

Directorate of Extension Education
Navsari Agricultural University
Navsari-396450

ANNUAL REPORT 2015-16

1. INTRODUCTION

Navsari Agricultural University is a pioneer institute in the South Gujarat region for transferring the agricultural technology to the farmers to increase their agricultural production. The Directorate of Extension Education is actively involved in transfer of latest technologies to the farmer's field and giving its feed back to the research workers. The Directorate of Extension Education has started functioning in 1972 during erstwhile Gujarat Agricultural University. Later on, as a consequence of the separation of Gujarat Agricultural University into four new universities in the State, Navsari Agricultural University (NAU) has come into existence on May 1, 2004. NAU encompasses seven districts, viz., Valsad, Navsari, Dangs, Surat, Tapi, Bharuch and Narmada of South Gujarat.

Geographically, the jurisdiction is stretched over 170 km. seashore on the western side and hilly terrain with dense forest on the eastern side enclosed with high fertile land and ample natural resources. Thus, presently the NAU serves to 4 districts of hills and 3 districts of plains in South Gujarat region. With varied geographical, biophysical and socio economic conditions of the region, the work of validation of newly developed technologies and transfer of technology has become very challenging. The Directorate undertakes extension activities through 5 KVKs (working at grass root level), Training Units (Sardar Smruti Kendra & Training and Visit System) at head quarter, ATIC, extension departments at different colleges along with the State Agricultural Management and Extension Training Institute (SAMETI), Gujarat assisting in extension reform programme.

2. VISION

To make the extension system '**Farmer-Driven**' and '**Market-led**' for augmenting production, productivity and income of the farming community.

3. MISSION

1. To bridge up the agricultural technology gap at grass root level.
2. To educate rural people to attain/participate in development.
3. To create awareness about health, hygiene, environment and bio-diversity conservation for sustainable development.
4. To link farmer with newly emerging globalized world by providing them information and guidance.
5. To develop a system of effective research and extension linkages.
6. To generate employment in the field of agriculture and allied disciplines.
7. To integrate IT in rural system for their development.

4. MANDATES

1. Facilitating planning, implementation, execution and monitoring of extension programmes carried out in South Gujarat region.
2. Emphasizing participatory technology generation, dissemination and utilization.
3. Offering training and field services to public, private, NGOs and corporate sectors.
4. Enhancing the agricultural vocations in the region.
5. Promoting the 'Market-led Extension'.
6. Organizing farm advisory services at the doorsteps of the farmers.
7. Encouraging women to work in groups at the grass root level.
8. Networking of extension and development systems through ICT-mode.

5. FUNCTIONS AND ACTIVITIES

1. Facilitating planning, coordinating, guiding, executing, implementing, monitoring, supervising, evaluating and reporting the various extension programmes carried out in South Gujarat region.
2. Liaison with State Government, Central Government, ICAR, District Development Departments, SAUs, Cooperatives, NGOs etc. for carrying out NAU Extension Programmes.
3. To assist and complement to state government department of agriculture, public sector and voluntary organizations in effective management of extension education systems.
4. To transfer the innovative technology through Krishi Vigyan Kendras.
5. To organize training programmes at headquarters.
6. To serve as single window system for providing all information regarding agriculture, providing inputs like seeds & planting material through Agricultural Technology Information Center (ATIC).
7. To act as mediator for researchers by updating them with field problems of farmers and to help them in developing "Demand Driven Technology."
8. To publish extension literature and its distribution among farmers & extension functionaries.
9. To handle various collaborative extension projects for transfer of technology.

6. TRANSFER OF TECHNOLOGY (ToT) CENTRES & EXTENSION SCHEMES

6.1 ToT Centres : NAU Transfers agricultural technology to the farmers through ToT Centres..

Type	Name of Centre	Location
▶ Training Centres for Farmers/Farm Women /Rural Youths	● Sardar Smruti Kendra	Navsari
	● Advance Training Centre for Soil and Water Management	Navsari
	● Demonstration-cum-Training Centre for Inland Fisheries	Navsari
	● Vegetable and Fruit Demonstration Scheme for Tribal Upliftment	Pariya
	● Tribal Women Training Centre	Dediyapada
	● Extension Wing	Navsari
▶ Training Centres for Extension Workers	● Training and Visit System Sardar Smruti Kendra	Navsari
▶ Advisory Services	● Farm Advisory Services	Navsari
	● Agricultural Technology Information Centre (ATIC)	Navsari
	● Centre of Agricultural Extension Information System	Navsari
	● Farm Publication	All Centres
▶ 1. On-farm testing 2. Frontline demonstrations 3. Training of farmers 4. Resource and knowledge centre of the district.	● Krushi Vigyan Kendra	Vyara, Waghai, Navsari, Surat, Dediyapada

6.2 School/Centres for Vocational Certificate Courses:

S.N.	Certificate Courses	S.N.	Certificate Courses
1.	School of Baking - Navsari	4.	Plant tissue culture training centre for women - Surat
2.	Landscaping and Gardening training centre - Navsari	5.	Turf grass management - Navsari
3.	Nature and Wild life photography - Navsari	6.	Agro ITI - Navsari

6.3 Short duration Agro ITI courses for Rural Youths:

1. Seed production
2. Organic farming
3. Kitchen gardening
4. Farm management
5. Dairy farming
6. Flower dehydration
7. Tissue culture
8. Poultry farming
9. Gender friendly equipments for farm women
10. Farm power machinery
11. Bio-fertilizers & Bio-pesticides
12. Soil-Water-Plant analysis
13. Productive & beneficial insects
14. Commercial Mushroom production technology
15. Artificial insemination
16. Micro irrigation system

6.4 Extension Schemes Run under NAU: *Extension activities through 31 Schemes*

S.N.	B. H.	Plan Schemes (7)
1	302/12240/00	Strengthening of Agro ITI Centre for Agriculture & Horticulture, Navsari
2	302/12304/00	Establishment of University Education Museum, Navsari
3	302/12305/00	Strengthening of Agricultural Technology Information Centre (ATIC), Navsari
4	302/12306/00	Strengthening of Testing of University's technologies on farmers' fields through adaptive trials Phase-II, DEE, Navsari
5	302/12505/00	Strengthening of the Directorate of Extension Education, Navsari
6	302/12507/00	Upgrading of the Existing Sardar Smruti Kendra, Navsari
7	302/12940/00	Establishment of Centre for Agricultural Extension Information System, Navsari
S.N.		Non Plan Schemes (6)
1	302/04505/00	Directorate of Extension Education
2	302/05116/00	Establishment of Sardar Smruti Kendra, Navsari
3	302/06221/00	Establishment of Farm Advisory Services, Navsari
4	302/07228/01	Establishment of School of Baking, Navsari
5	302/06228/01	Upgrading of School of Baking, Navsari
6	302/05710/00	Bal Mandir, Navsari
S.N.		Other Agency (05)
1	302/18246-3/00	Training & Visit System, Navsari (Non-Plan)
2	302/18246/00	Training & Visit System, Navsari (Plan)
3	302/18013/07	Diploma in Agriculture Extension Service for Input Dealers
4	302/18913/00	Krushu Mahotsav, Navsari
5	302/18999/0I	Green House/ Net House Farmers Training
S.N.		ICAR (01)
1	302/02033/00	Providing support to DEE for knowledge empowerment, technological backstopping, HRD and overseeing of KVKs, Navsari
S.N.		Revolving Fund (03)
1	302/A9510/08	Revolving Foundation Fund (Bakery), Navsari
2	302/B9510/45	Revolving Foundation Fund, T.& V., Navsari
3	302/C9510/57	Revolving Foundation Fund, T.& V., ATIC, Navsari

7. SALIENT EXTENSION ACTIVITIES & ACHIEVEMENTS

7.1 Important Extension Programmes carried out during 2015-16:

S.N.	Extension Programmes	Date/ Duration	Place	Participants		Organizer
				Nos.	Type	
1.	Orientation Programme on "Latest Agricultural Technologies" for NAU Scientists who were to serve in Krishi Mahotsav-2015.	17-04-2015	Navsari	203	NAU Scientists	DEE
2.	Krishi Mahotsav-2015 : Service of Scientists at Seminar and exhibition (two days) at each district panchayat seat.	22-04-2015 to 11-05-2015 (20 days)	All seven Districts of S.G.	196	Scientists	DEE
3.	Inaugural function of Mega Event of Krishi Mahotsav-2015 & Krushi Mela for South Gujarat in presence of Hon. Chief Minister	26-04-2015	Rajpipala	13500	Farmers	DEE & Narmada Admn.
4.	Farmers meet on "Paryavaranpriy Pak Sanrakshan" under the celebration of Gujarat Gaurav Din	01-05-2015	Vyara	3000	Farmers	KVK & Tapi Admn.
5.	Crop symposium on Mango with exhibition and mango fruit competition	03-06-2015	Navsari	273 109	Farmers NAU Scientists	HSG, ACH&F & Dept.of Horti.
6.	Capacity building training for farmers on "Climate Smart Agriculture"	05-06-2015	Navsari	200	Farmers	NAU, NCCSD & CRIDA
7.	Conferment of Diploma to the Input Dealers after completion of one year certificate course in "Agricultural Extension Services for Input Dealers".	25-06-2015	Navsari	40	Input Dealers	DEE & Dhanuka Agritech Ltd. New Delhi
8.	ATMA Convergence 9 & 10th Quarterly Meeting: An Interface between KVKs, PDs (ATMA), DAOs and NAU Scientists.	01-07-2015	Navsari	23	ATMA-KVK	DEE
9.	Training programme on "Protected cultivation: Green House/Net House"	06-07-2015 to 20-07-2015 (15 days)	Navsari	15	Farmers	DEE and GHM, G'nagar
10.	7 th Meeting of Extension Education Council	30-07-2015	Navsari	16	Members of EEC	DEE
11.	Women Empowerment Fortnight	01-08-2015 to 14-08-2015 (14 days)	Extension centers	3601	Farm women	DEE & Extension centers

12.	Meeting for implementation of "Mera Goan Mera Gaurav" programme of Govt. of India	20-08-2015	Navsari	30	Head of Unit/Sub-unit & Scientists	DEE
13.	Workshop on "Participatory Programme Planning, Monitoring and Evaluation"	25-08-2015 to 27-08-2015 (3 days)	Navsari	29	NAU Scientists of KVKs, IT & Colleges	DEE & EEI, Anand
14.	Farmers training programme on the occasion of "World Coconut Day"	02-09-2015	Navsari	140 60	Farmers NAU Scientists	ACHF
15.	"Gujarat ni Krushi Bharat ni Rushi" programme by Shri Ram Krushna Pvt. Ltd., Surat	16-09-2015	AAU, Anand	38 40	Farmers NAU Scientists and students	SRK, Surat
16.	Workshop on Bamboo cultivation and management under the World Bamboo Day celebration	18-09-2015	Navsari	87 34	Farmers NAU Scientists	ACHF
17.	National Consultation Meeting on Sapota	29-09-2015	Navsari	100	Delegates, students and progressive farmers	FRS, Gandevi
18.	23 rd Zonal Research and Extension Action Committee (ZREAC).	06-10-2015	Navsari	88	NAU Scientists & Line dept. staff	DEE
19.	ATMA Convergence 11th Quarterly Meeting: An Interface between KVKs, PDs (ATMA), DAOs and NAU Scientists.	06-10-2015	Navsari	21	ATMA-KVK	DEE
20.	State Level Training Programme on "Advance Maize Cultivation Technologies" for enhancing production in tribal area of South Gujarat.	08-10-2015 to 09-10-2015 (2 days)	Navsari	35	VLWs & Extn. Officers of Line Dept.	DMR, DEE & MMRS, Godhra
21.	PCRA Workshop / farmers training on "Fuel and Energy conservation"	28-10-2015	Navsari	40	Farm tractor drivers	DEE, KVK, Navsari and PCRA
22.	Inauguration of "Voice message and Dial out conference" with the farmers of Vasan village of Navsari.	04-11-2015	Navsari	26 9	Farmers connected by mobile Scientists	DEE, KVK, Navsari and Reliance Foundation
23.	MoU between GIPCL and NAU for providing experts services regarding agriculture crops in Solar Pilot Project at Village: Vastan, Taluka: Mangrol, Dist: Surat	06-11-2015	Nani Naroli, Taluka: Mangrol, Dist: Surat		Dr. C.J. Dangaria, Dr. G.R. Patel, GIPCL officers and NAU Scientists' team	GIPCL and NAU
24.	Celebration of World Soil Day by NAU centers and KVKs	05-12-2015	NAU centers	4669	Farmers	NAU
25.	Training programme for Horticulture officer/staff on Fruit and vegetable preservation	08-12-2015 to 10-12-2015	Navsari	18	Horticulture officer/staff	DEE, PHT & Dept. of Horti.

26.	Shiv yog Krushi shibir	09-12-2015 to 10-12-2015	Navsari	10157 79	Farmers NAU Scientists	KVK and DEE
27.	Breast cancer awareness programme	13-12-2015	Navsari	400	Farm women	KVK and DEE
28.	Capacity building training for farmers on "Climate Smart Agriculture"	14-12-2015	Navsari	197	Farmers	NAU & NCCSD
29.	Bakery training programme (20 week duration)	14-12-2015	Navsari	13	Rural youth	DEE
30.	Bakery training programme (one week duration)	7-12-2015 to 12-12-2015	Navsari	24	Farm women	DEE
31.	Bakery training programme (one week duration)	14-12-2015 to 19-12-2015	Navsari	19	Farm women	DEE
32.	Capacity building training for farmers on "Climate Smart Agriculture"	15-12-2015	Vyara	106	Farmers	NAU & NCCSD
33.	Training programme for Horticulture officer/staff on Fruit and vegetable preservation	17-12-2015 to 19-12-2015	Navsari	12	Staff (lab boys and assistants) of Dept. of Horti.	DEE, PHT & Dept. of Horti.
34.	Orientation programme for agri. scientist under Ravi Krushi Mahotsav-2015	29-12-2015	Navsari	84	NAU Scientists	DEE
35.	Ravi Krushi Mahotsav-2015 Service of Scientists allotted in 45 Taluka of South Gujarat.	31-12-2015 to 04-01-2016 (5 days)	45 Taluka of South Gujarat	72	NAU Scientists	DEE
36.	Seminar on "Scope and Potential of Plastic Mulch in Agriculture"	20-01-2016 to 21-01-2016 (2 days)	Navsari	90 50	Farmers NAU Scientists	SWMRU
37.	Farmers training programme on Scientific farming	22-01-2016	Navsari	79	Farmers	GNFC & DEE
38.	<i>Kaushalya Vardhan Talim</i> programme for Agro Input Dealers of South Gujarat	02-02-2016	Navsari	153	Agro Input Dealers of South Gujarat	DEE & GAI, G'nagar
39.	24 th Zonal Research and Extension Action Committee (ZREAC).	09-02-2016	Navsari	79	NAU Scientists & Line dept. staff	DEE
40.	Farmer-Scientist interaction	10-02-2016	Navsari	110	Farmers	DEE, ATMA & DDH, Navsari
41.	Youth farmer training programme	18-02-2016 to 20-02-2016 (3 days)	NAU, Navsari	19	Rural youth	NAU and GSFC, Baroda
42.	Farmer-Scientist interaction on Organic(<i>sajiv</i>) farming	19-02-2016	Navsari	200	Farmers and Scientists	KVK & ATMA Navsari
43.	Interactive seminar on "Good Agricultural Practices in Banana"	19-02-2016	Navsari	87	Farmers and Scientists	KVK & ATMA Navsari
44.	International Women day celebration	18-03-2016	KVK, Navsari	4749	Farm women	DEE and KVK, Navsari

7.2 Front-line Demonstrations :

The main objective of Front-Line Demonstrations is to demonstrate newly released crop production and protection technologies and its management practices in the farmers' field under different agro-climatic regions and farming situations. While demonstrating the technologies in the farmers' field, the scientist studies the factors contributing higher crop production; field constraints of production and thereby generates production data and feedback information. Total 3426 FLDs were conducted on farmers' fields under the close supervision of the NAU Scientists.

SN	Crop	No.of Demon.
1	Paddy	1317
2	Sugarcane	72
3	Pigeon pea	328
4	Gram	529
5	Green gram	138
6	Nagli	194
7	Sweet corn	206
8	Okra	237
9	Groundnut	100
10	Maize	113
11	Mango	51
12	Sapota	46
13	Cashew	58
14	Turmeric	37
Total		3426



Farmer in the paddy variety demonstration plot



Hon. Vice Chancellor Dr. C.J. Dangaria visiting demonstration field



Demonstration on pulse crop

7.3 Adaptive Trials on University Technologies:

Adaptive or minikit trial is a method of determining the suitability or otherwise a new practice in the farmers' situations. This may be regarded as the on-farm participatory technology development (PTD) process which requires the farmers' choice and opinion about the practice as important. The main purpose of these trials was to test the new and promising practice under the local resources, constraints and abilities of the farmers.

During the year, total 7442 adaptive trials were conducted on the farmers fields through five KVKs in South Gujarat on newly released varieties of paddy, cotton, gram, green gram, pigeon pea, sorghum, soybean, groundnut, wheat, mango and sapota. Moreover, the trials on fruit fly trap, yellow sticky trap, kitchen garden, fodder sorghum, mulching,

bio-fertilizer, novel organic liquid fertilizer, INM, IPM, SRI, mineral mixture for dairy animals, deworming, vermi-compost *etc.* were also conducted.



Adaptive trial on new variety of sorghum



Adaptive trial on fruit fly trap

7.4 ATMA Convergence Quarterly Meetings: *An interface between ATMA, KVKs & NAU Scientists*

The Directorate of Extension Education convened the "ATMA Convergence" quarterly meetings under the Chairmanship of Hon. Vice-Chancellor of NAU for facilitating an interface between KVKs, PDs (ATMA), DAOs and Scientists of NAU. The details of the meetings are given in the following Table.

S.N.	Quarter	Date of Meeting	No. of Officers Participated
1.	April-June 2015	01-07-2015	23
2.	July-September 2015	06-10-2015	21
3.	October-December 2015	11-01-2016	22
4.	January-March 2016	05-04-2016	21



Dr. C.J. Dangaria, Hon.VC, NAU, Dr. G.R. Patel, DEE, DAOs, PD ATMA and staff of KVKs of South Gujarat in the quarterly convergence meetings

7.5 Zonal Research and Extension Action Committee (ZREAC) Meetings:

Directorate of Extension Education organized two ZREAC Meetings during onset of *kharif* and *rabi* seasons to review the work done in last season and to make the planning for forthcoming season in convergence mode. District wise agriculture status and feedback pertaining to problems faced by the farmers in adoption of new technology at grass root level were presented by the concerned District Officer. During the year 2015-16, the 23rd and 24th ZREAC meetings were convened on 06-10-2015 and 09-02-2016, respectively.



Presidential speech by Dr. C.J. Dangaria,
Hon. Vice Chancellor



Officers of NAU, Line Department and scientists of NAU in
the meeting

7.6 Scientific Advisory Committee (SAC) Meetings of KVKs:

In order to review the activities carried out by KVKs and to make suggest for better planning and implementation of activities for next year, meetings of Scientific Advisory Committee of five KVKs run under NAU organized as under:

S.N.	Name of KVK	Date of SAC
1	KVK Navsari (Navsari)	22-02-2016
2	KVK Surat (Surat)	22-02-2016
3	KVK Vyara (Tapi)	23-02-2016
4	KVK Waghai (Dangs)	23-02-2016
5	KVK Dediypada (Narmada)	24-02-2016



7.7 Agricultural Educatorium (University Educational Museum)

Agricultural Educatorium situated at Navsari is a one of the best agricultural Museums in India providing basics of agriculture to all walks of people. During the period, total 17781 visitors (farmers, dignitaries, scientists, students *etc.*) had visited the museum and got basic knowledge and information related to agriculture and allied subjects through various display media viz., storytelling board, kiosks, press button board, diorama, murals, show case, models, specimens *etc.*



Outside look of Agricultural Educatorium



Shri. Jasabhai Barad, Hon'ble Minister, GoG visiting Agricultural Educatorium

7.8 Campus Visit and Comfortable Homely Stay of the Farmers

Large numbers of farmers from Gujarat, Maharashtra and Rajasthan States are visiting NAU Navsari campus round the year to see and learn about new technologies developed and demonstrated on NAU farms. During the last six months (July to December, 2015), total 47 farm visits were conducted and 2139 farmers had visited the NAU Campus. Total 1546 farmers and other visitors stayed at Kisanghar-farmers' hostel (1383 from Gujarat state and 163 from other states).



Farmers visit to different units at Navsari campus

7.9 Valedictory programme for the “Diploma in AESID”

Valedictory programme for the “Diploma in Agricultural Extension Services for Input Dealers” was organized on 25-6-2015 under the Chairmanship of Dr. G.R. Patel, Director of Extension Education, Navsari Agricultural University, Navsari. Total 40 input dealers from South Gujarat have received Diploma during the programme. The classes of dealers under the third programme started recently being conducted every Friday, at ATIC, NAU, Navsari.



Dr. G.R. Patel, Director of Extension Education addressing the participants during the inaugural function



Dignitaries and participants

7.10 Special training programme on “Protected cultivation: Green House/Net House”

Directorate of Extension Education, Navsari Agricultural University, Navsari has organized 15 days training programme on “Protected cultivation: Green House/Net House” in collaboration with Gujarat Horticulture Mission, Gandhinagar during 06 to 20th July, 2015 at ATIC, NAU, Navsari. The inaugural function of the third programme was held under the chairmanship of Dr. A.N. Sabalpara, Director of Research, NAU in the presence of Dr. G.R. Patel, Director of Extension Education. This is the third training programme up till now. In this training programme, 15 participants from South Gujarat have participated.



Dr. A.N. Sabalpara, Director of Research and Dr. G.R. Patel, Director of Extension Education in inaugural function.



Trainee discussing with scientist during their visit of green house

7.11 Extension Education Council meeting:

Seventh meeting of Extension Education Council was held on 30th July, 2015 at Navsari under the chairmanship of Dr. C.J. Dangaria, Hon'ble Vice Chancellor, NAU. Dr. G.R. Patel, Director of Extension Education presented the agenda items and discussion was held on the same. The suggestions made during the discussion will be incorporated in future activities for better implementation. In the meeting, 16 members of the council remained present.



Dr. C.J. Dangaria, Hon.VC, Dr. G.R. Patel, Director of Extension Education and other members in the meeting.

7.12 Implementation of "Mera Goan Mera Gaurav" programme :

"Mera Goan Mera Gaurav" programme launched by the Hon'ble Prime Minister on 25th July, 2015 at Patna, Bihar has been implemented by NAU. Total 41 teams of NAU Scientists were formed. Each team comprised of 4 Scientists for 5 villages. Total 164 Scientists were assigned the work in 205 villages selected under the programme. A meeting for planning and implementation of the programme was held on 20th August, 2015 at Navsari under the chairmanship of Dr. C.J. Dangaria, Hon'ble Vice Chancellor, NAU. Dr. G.R. Patel, Director of Extension Education gave the introductory remarks and presented the guideline and activity chart for better implementation of the programme. In the meeting Head of Units/Sub-units and Scientists of NAU remained present.



Dr. C.J. Dangaria, Hon.VC, NAU, Dr. A.N. Sabalpara, DR, Dr. G.R. Patel, DEE and University scientists in the meeting of "Mera Goan Mera Gaurav" programme

7.13 Workshop on "Participatory Programme Planning, Monitoring and Evaluation" for KVK and NAU Scientists:

Workshop on "Participatory Programme Planning, Monitoring and Evaluation" was jointly organized by Extension Education Institute, Anand and Directorate of Extension Education, NAU at Navsari during 25 to 27th August, 2015 (3 days). Dr. C.J. Dangaria, Hon'ble Vice Chancellor, NAU has inaugurated the workshop, Dr. G.R. Patel, Director of Extension Education, NAU delivered the welcome speech and Dr. C.P. Desai, Faculty from EEI, Anand gave the introductory remarks. Total, 29 scientists from 7 KVKs and different faculties of NAU had participated in the programme.



Dr. G.R. Patel, Director of Extension Education welcomes Dr. C.J. Dangaria, Hon.VC, NAU in the workshop.



NAU faculty members and scientists in the workshop

7.14 State Level Training Programme on Maize cultivation Technologies

To enhance the production of maize in tribal area of South Gujarat, a state level training programme on "Advance Maize Cultivation Technologies" was jointly organized by Directorate of Extension Education and Main Maize Research Station, AAU, Godhra during 8 to 10th October, 2015 (3 days) at NAU, Navsari. In the programme 35 Village Level Workers and Extension Officers of Line Department had participated.



Dr. A.N. Sabalpara, DR and Dr. G.R. Patel, DEE discussing with the participants



Participants of the training programme

7.15 Workshop on petroleum- energy conservation

Krishi Vigyan Kendra, NAU, Navsari, DEE and Petroleum conservation research association (PCRA) jointly organized one day workshop on conservation of energy on 28th Oct, 2015 at Navsari. Function was inaugurated by chief guest of the function Dr. G.R. Patel, Director of Extension Education, NAU, Navsari. PCRA Director and experts delivered lectures and provided the information on Fuel and Energy conservation. Total 40 farm tractor drivers of had participated in the one day training programme.



Lightening of lamp by Dr. G.R. Patel, Director of Extension Education and other dignitaries



Dr. G.R. Patel, Director of Extension Education addressing the participants

7.16 Inauguration of "Voice message and Dial out conference"

In order to provide latest information on agriculture at the doorstep of the farmers through mobile, NAU in collaboration with Reliance foundation started new initiative "Voice message and Dial out conference". The inauguration of the same was done by Dr. C.J. Dangaria, Hon'ble Vice-Chancellor, NAU in the presence of Director of Research and Programme Coordinator, KVK, Navsari on 4th November, 2015 at Navsari. During the programme, dignitaries and agriculture experts joined with programme through mobile phone and provided the information on organic farming to the 26 farmers of Vasan village of Navsari through Dial out conference.



Dr. C.J. Dangaria, Hon.VC, NAU inaugurating the "Dial out conference"



University officers and scientists discussing with the farmers of Vasan village through Dial out conference

7.17 Signing of MoU with GIPCL

An MoU was signed between NAU and Gujarat Industries Power Company Limited (GIPCL) on 6th November, 2015 at Nani Naroli, Taluka: Mangrol, Dist: Surat in the presence of Dr. C.J. Dangaria, Dr. G.R. Patel, GIPCL officers and NAU Scientists' team. The MoU meant for providing experts services regarding agriculture crops in setting up of 1 MW Grid Connected Distributed Solar PV Pilot Project of GIPCL at Village: Vastan, Taluka: Mangrol, Dist: Surat as GIPCL exploring the possibility of cultivation of agricultural crops in the land used for pilot project on huge source of renewable energy - solar power.



Signing of MoU by Dr. G.R. Patel, DEE, NAU and General Manager, GIPCL



Exchange of MoU between NAU and GIPCL officials

7.18 Training programme for Horticulture officer

To make aware the Horticulture officers and staff of State Department of Horticulture with latest development in the field of Horticulture and Post Harvest Technology, two training programmes on "Fruit and vegetable processing" were organized by Directorate of Extension Education, NAU in collaboration with PHT and Department of Horticulture at Navsari during 8 to 10th December, 2015 and 17 to 19th December, 2015. Dr. G.R. Patel, Director of Extension Education, NAU inaugurated the programmes on 8th and 17th December, 2015. In these two training programmes total 30 officers and staff members had participated.



Inaugural address by Dr. G.R. Patel, Director of Extension Education



Participants from Dept. of Horticulture in the training programme

7.19 Capacity building programme for farmers on "Climate smart agriculture"

Keeping the present situation of effect of climate change in agriculture, one-day Capacity building training for farmers on "Climate Smart Agriculture" was jointly organized by DEE, NAU and National Council for Climate Change Sustainable Development and Public Leadership (NCCSD) under the chairmanship of Dr. G.R. Patel, Director of Extension Education, NAU on 14th December, 2015 at Navsari. Dr. G.R. Patel, DEE, NAU, Dr. R.B. Patel, Retd. Prof. and Shri. N.M. Patel, NCCSD officer remained present in the programme and guided the farmers. Second programme was organized on 15th December, 2015 at KVK, NAU, Vyara, Dist: Tapi. During these two training programmes, different topic viz., impact of climate change, contingency plan and climate smart agriculture, value added agriculture and role of weather forecasting in agriculture. Video documentary on the topic was also shown to the farmers during the programme. Total 303 farmers participated in the programme.



Inaugural speech by Dr. G.R. Patel,
Director of Extension Education, NAU at Navsari



Participants in the programme at Navsari



Experts on the subject delivering the lecture during the programme at KVK, Vyara



7.20 Certificate courses on Bakery

Bakery Unit, DEE, NAU, Navsari organized 20-week duration one certificate course on bakery during July to December, 2015. Visit of different bakery units at Navari, Bardoli and Surat was organized as a part of the course. Total 13 students have participated in the training programme. Another two skill oriented training programme of one week duration on baking were organized during the month of December, 2015 (7 to 12th December, 2015 and 14 to 19th December, 2015). Total 43 Farm women had participated in the one week training programmes.



Practical training on baking during the training programmes

7.21 Orientation programme on *Rabi Krushi Mahotsav-2015*

To provide the latest technologies of *rabi* crops and other enterprises at the door step to the farmers, GoG going to organize Rabi Krushi Mahotsav-2015 during 31st December,

2015 to 4th January, 2016 (5 days). Orientation programme for the NAU Scientists from the agriculture, horticulture and animal husbandry disciplines were organized to equip with latest information under the Chairmanship of Dr. A.N. Sabalpara, Director of Research in the presence of Dr. G.R. Patel, Director of Extension Education, NAU, Navsari on 29th December, 2015 at Navsari in which 72 NAU Scientists had participated.



Dr. G.R. Patel, DEE addressing the scientists



Scientists in the programme

7.22 Pre-Kharif Kisan Sammelan Programme - 2015

‘Pre-Kharif Kisan Sammelan Programme-2015’ was organized by KVKs of NAU to create the awareness amongst the farmers about the latest agricultural technologies of *Kharif* crops and to increase the productivity of the *Kharif* crops. As a part of the programme, different extension activities were organized by KVKs viz., Farmers Scientists interaction, kisan gosthi, group meeting, exhibition cum Shibir, pashupalak sammelan etc. During the different programmes more than 1380 farmers and farm women actively participated.



Guidance by NAU scientists to the participants



Guidance by NAU scientists to the participants



7.23 Women empowerment fortnight

Women Empowerment Fortnight was celebrated by NAU during 01 to 14th August, 2015. Different extension programmes *viz.*, Women empowerment shibir, Mahila Krishi Divas, women training programme *etc.* were organized by Extension centres of NAU in the presence of dignitaries. Experts from various fields delivered lectures on different topics *viz.*, role of women in agriculture, farm mechanization, kitchen garden, terrace gardening, animal husbandry & clean milk practices, package of practices of main crops, use of bio-fertilizers, organic farming, drip irrigation, post harvest handling and value addition in fruits *etc.* During the fortnight total 3601 farm women participated and benefitted from the programmes.



Peoples' representatives, NAU officers, scientists and participants during the programmes at different places

7.24 "World Soil Day" Celebration

As a part of the celebration of the year 2015 as International Year of Soil, Government of India decided to celebrate the "World Soil Day" on 5th December, 2015 and given target to SAUs and KVKs to analyse the Soil samples and provide Soil Health Cards to the farmers. NAU centres and KVKs under the jurisdiction of NAU celebrated the "World Soil Day" on 5th December, 2015. NAU centres distributed 500 SHCs and KVKs distributed 1866 making total 2366 Soil Health Cards to the farmers. During the programmes, 4669 farmers participated at different places.

Overall :

S. N.	NAU Centres	Target	No. of Soil Health Cards distributed	No. of Participants attended the function
1	NAU Centres	500	500	4669
2	KVKs (7)	1750	1866	
Total		2250	2366	

Note : NAU Research Centres & KVKs (7) under NAU jurisdiction jointly organized the "World Soil Day".



Shri Prabhubhai Vasava, Hon. MP, Bardoli distributing Soil Health Cards to farmers at KVK, Vyara



Smt. Darshanaben Jardosh, Hon. MP, Surat and MLAs Distributing Soil Health Cards to the farmers.



Dr. C.J. Dangaria, Hon. Vice Chancellor, NAU distributing Soil Health Cards to farmers



Dr. G.R. Patel, DEE, NAU distributing Soil Health Cards at KVK, Waghai

7.25 Cosmic science event: Shivyog Holistic Farming

Krishi Vigyan Kendra, NAU, Navsari and Shivyog team with the blessings of Avdhoothbaba Shri. Shivanandji, organized two days' Shivyog Holistic Farming-cosmic science event for the farmers during 9 and 10th December, 2015 at Navsari. During this cosmic science shibir, University dignitaries Dr. A.N Sabalpara, Director of Research, Dr. G.R. Patel, Director of Extension Education, NAU, Navsari and other officers and scientists also remain present. Avdhoothbaba Shri. Shivanandji explained in detail about how to increasing farm yield manifold, nullifying crop stress, getting better returns on overall investment, cutting the expenditure incurred on pesticides and fertilizers and improving the health of the farmer and crop using the holistic healing processes. More than 10,000 farmers had eagerly participated in the shibir.



Avdhoothbaba Shri. Shivanandji giving blessings and guidance to the huge numbers of farmers, farm women and other participants

7.26 Kisan Gosthi on "Jai Kisan Jai Vigyan" diwas in Sansad Adarsh Gram

Govt. of India celebrating "Jai Kisan Jai Vigyan" week during 23rd to 29th December every year on the birth anniversary of Shri Atal Bihari Vajpayee and Late Shri Chaudhary Charan Singh, two former Prime Ministers of India keeping in view of their immense contribution for promoting use of science for the welfare of farmers. KVKs of NAU organized Kisan Gosthi on "Jai Kisan Jai Vigyan" diwas on 23rd December, 2015 in Sansad Adarsh Gram of respective districts. Total 930 farmers and farm women participated in the programmes at different places.



Presidential speech by Mr. P.N. Vasava,
Hon'ble MP, 23-Bardoli in Tapi district



Dr. C.J. Dangaria, Hon. Vice Chancellor, NAU addressing the farmers at Navsari

7.27 Mango seminar, exhibition and competition:

The mango seminar, exhibition and competition was organised by the Horticultural Society of Gujarat, Navsari Agricultural University and Department of Horticulture, GoG on June 3, 2015 at Navsari. The function was inaugurated by Dr. C.J. Dangaria, Hon'ble Vice Chancellor, NAU in the presence of Chief guest Dr. P.M. Vaghasia, Joint Director of Horticulture, Rajkot, leaders from different cooperatives viz., Deepakbhai Naik, Govindbhai Patel, Narendrabhai Naik and Satishbhai Naik. During the seminar, the experts discussed and guided the farmers through lectures on rejuvenation of old overcrowded orchards, bio-control of major pest and diseases, climate change and its effect on crops, protected cultivation, cold storage, ripening chamber and processing.

With the seminar, exhibition of different varieties of mango were also organized. Book on "Amba ni Vaignanik Kheti" was released on the occasion. In the programme 109 NAU Scientists and 273 farmers of South Gujarat participated and benefited from the technical sessions of seminar and exhibition.



7.28 Celebration of World Coconut Day

One day training programme on “Production Technology of Coconut” was organized by All India Co-ordinated Research Project (Palms) for Coconut Research, ASPEE College of Horticulture and Forestry, NAU, Navsari on the occasion of World Coconut Day (2nd Sept., 2015) at Navsari. The training programme was inaugurated by Dr. C.J. Dangaria, Hon'ble Vice-Chancellor in the presence of Directorate of Research, Dean, Horticulture and Forestry, Principal of Forestry. Lectures on different topics related to production technology of coconut, value addition in coconut *etc.* were delivered by different scientist. In this programme, 60 staff members of ASPEE College and 140 coconut grower farmers of South Gujarat had participated.



Welcome speech by Dr. B.N. Patel, Principal and Dean, ACHF



Participants of the programme

7.29 World Bamboo Day celebration

Workshop on "Bamboo cultivation and management" under World Bamboo Day celebration was organized by Forestry College, NAU, Navsari on 18th September, 2015 at Navsari in gracious presence of Dr. C.J. Dangaria, Hon'ble Vice-chancellor, NAU, Dr. T.C. Bhuyan, Research Scientist from Jorhat, Assam, Shri Punit Naiyar, DCF, Surat, Shri Kalpeshbhai Dholakia, Manager, CIBART, Shri. Anand Shah, CEPT, Ahmedabad, Shri J.R. Mori, Head, Baif, and other dignitaries. During the programme, lectures on different topics delivered by the experts, dignitaries and participants visited the exhibition of different products prepared from Bamboo. Two books (Gujarati) for the farmers were released by the dignitaries. In the programme 87 farmers and 34 NAU Scientists had participated.



Release of book by Dr. C.J. Dangaria, Hon.VC, NAU and other dignitaries



Participants in the programme

7.30 National Consultation Meeting on Sapota

The “National Consultation Meeting on Sapota” was jointly organized by ICAR-AICRP on Fruits and Fruit Research Station, NAU, Gandevi on 29th September, 2015 at Navsari. Dr. T. Janakiram, ADG (Hort. Sci. I), ICAR, New Delhi inaugurated the function and Dr. C.J. Dangaria, Vice-Chancellor was presided over the function in the presence of Dr. A.N. Sabalpara, Director of Research, NAU, Navsari, Dr. Prakash Patil, Project Coordinator (Fruits), IIHR, Bengaluru and Dr. B. N. Patel, Dean, ACHF, NAU, Navsari. Total 100 delegates from the SAUs and ICAR institute centres of AICRP, research scholars, progressive farmers, members of SHGs and presidents of the growers associations participated in the programme.



Presidential address by Dr. C. J. Dangaria,
Vice-Chancellor, NAU, Navsari



Inaugural speech by Dr. Janakiram,
ADG (Hort. Sci. I), ICAR, New Delhi

7.31 Seminar on “Scope and Potential of Plastic Mulch in Agriculture”

Seminar on “Scope and Potential of Plastic Mulch in Agriculture” was organized at PFDC, Navsari centre during 20- 21st Jan., 2016. The inaugural session was presided over by Dr. C. J. Dangaria, Hon'ble Vice Chancellor, NAU, Navsari with the gracious presence of Dr. G. R. Patel, Director of Extension Education, Dr. B. N. Patel, Dean and Principal, College of horticulture and forestry, and Dr. J. D. Thanki, Prof. and Head, Dept. of Agronomy, NMCA, NAU, Navsari.

During these two days the topics covered were importance of precision farming (PF), mulching technology, organic mulch in agriculture etc. delivered by scientists and experts. Farmers feedback and problems in mulching technology and general agricultural practices were also discussed. Visit to PFDC research farm, banana pseudo-stem processing unit, Educatorium and exposure visit at Bhairavi village was also arranged. In the programme total 90 farmers and 50 officers and scientists had participated.



8. MEGA EVENTS ORGANIZED DURING THE YEAR 2015-16

8.1. *Krush*i Mahotsav-2015 *Kharif* :

*Krush*i Mahotsav-2015 *Kharif* from 22-04-2015 to 11-05-2015 (20 days) was celebrated at each District panchayat seats, with two days programme (Seminar & Exhibition) at each seat in 39 Taluka of seven Districts of South Gujarat. In the programme schedule, Farmer's Seminar on first day and Agri. Exhibition during both the days organized with scientists remain present whole days. During the *Krush*i Mahotsav, team of three Scientists (Agronomy, Horticulture and Animal husbandry) at each District panchayat seats and making total of 196 NAU Scientists remain present during the programme with exhibition stall of University and provide guidance to the farmers.



8.2 *Krush*i Mahotsav-2015 (Mega *Krush*i Mela)

8.2.1 *Krush*i Mahotsav-2015 planning meeting:

Meeting for Mega event under *Krush*i Mahotsav-2015 was held on 14-04-2015, which was chaired by Shri. Mangubhai Patel, Hon'ble Minister, Forest and Environment, Tribal, GoG. to review and better planning to make the programme mega success. In the meeting MP, MLAs, Collectors, DDOs, Joint Directors, DAOs and other Line Dept. officers, Sugar Coop. representatives, APMC representatives were remain present.



8.2.2 Krushi Mahotsav-2015 Mega event:

Mega Agriculture and Animal Health Fair was organized by DEE & Narmada District Administration during 26-27/04/2015 and inaugurated by Hon. Chief Minister Smt. Anandiben Patel at Rajpipla on 26/04/2015 in the presence of Shri. Babubhai Bokhiria, Agri. Minister, GoG, Shri. Mansukhbhai Vasava, Minister (State), GoI, Shri. Mangubhai Patel, Minister (Forest & Environment) and Shri. Bharatsinh Parmar, Mahamantri, Pradesh BJP. In the Exhibition, 150 stall exhibited of Navsari Agricultural University, Line Departments and Input dealers – seed, fertilizer, farm implements and machinery with latest developed technology. Chief Minister also discussed with the farmers, about 13500 farmers visited and participated in the fair.





8.2.3 Pashumela

In the Animal Health fair, Doctors from NAU and Animal Husbandry department explained about complicated cases and diseases in detail, and operated the animal for different diseases. Total 10,852 animal treated during the fair.





8.3 *Khedut Sammelan* during celebration of Gujarat Gaurav Din-2015

Navsari Agricultural University, Navsari in collaboration with Tapi District Administration successfully organized “*Khedut Sammelan*” as a part of celebration of “**Gujarat Gaurav Din**” on the topic “*Paryavaranpriy Pak Sanrakshan*” during May 1, 2015 at Vyara. Hon’ble Chief Minister, Hon’ble Minister of Tribal Development, Hon’ble Guardian Minister (Tapi and Navsari), Hon’ble Joint Guardian Minister, Hon’ble Member of Parliament 23-Bardoli, Hon’ble MLAs, Hon’ble Collector, Hon’ble DDO, Tapi district; Hon’ble Vice Chancellor, Hon’ble Director of Research and Hon’ble Director of Extension Education, NAU, Navsari remain present and gave blessing and detail information regarding the importance of “*Paryavaranpriy Pak Sanrakshan*” for the benefit of farmers of south Gujarat. Hon’ble Chief Minister, Smt. Anandiben Patel also suggested to farmers for adoption of new technologies released by NAU Navsari. Moreover, four farmers represented by KVK, Vyara shared their success through adoption of the NAU technologies for eco-friendly pest and disease management.



8.4 *Ravi Krushi Mahotsav-2015:*

To provide the latest technologies of *rabi* crops and other enterprise at the door step of the farming community, GoG organized *Rabi Krushi Mahotsav* for the farmers. Service of 72 NAU Scientists were allotted in Krushi shibir and Agri. Exhibitions organized at 45 Taluka level programme in South Gujarat during 31-12-2015 to 04-01-2016 (5 days). NAU Scientists from the Agriculture, Horticulture and Animal Husbandry discipline provided the latest information on the development of technology in the respective field and discussed the problems of the participants.



Shri R.C. Patel, Dandakshri, Gujarat Assembly, Dr. C.J. Dangaria, Vice-Chancellor, NAU, Navsari and other dignitaries inaugurating the khedut shibit with lightning the lamp at Waghai



Shri Kunvarjibhai Halpati, Chairman, LLL&HHB, Gujarat and Shri Motibhai Vasava, MLA visiting the NAU stall exhibition

8.5 International Women's Day- 2016 celebration:

International Women's Day-2016 celebrated at KVK, NAU, Navsari on 18th March 2016 with the collaboration of "Late DiwalibenUkabhai Patel Sarvajanic Trust (Tarsadiya Foundation), Bardoli". Programme was inaugurated by Ms. Remya Mohan, IAS, District Collector & District Magistrate, Navsari and graced by Hon'ble Vice Chancellor, Dr. C. J. Dangaria, NAU, Navsari, Dr. G.R. Patel Director of Extension Education NAU, Navsari and other dignitaries of the university. Shri Lavjibhai Dungarbai Daliya (Badhsa), Surat; Shri Jayantibhai B. Patel, Chairman, Gandevi Sugar Factory; Shri Maheshbhai Savani, Savani group of companies; Shri Dahyabhai L. Patel, NRI were the chief guests of the function. About 5000 women farmers were participated from different talukas of Navsari district and benefitted through inspiring and spiritual lectures delivered by dignitaries. The cultural programmes like dance, bhajan also made the event an attractive and educative. Recipe competition was organized for the women to bring out their talent and provide platform to show their talent. Whole function was based on participatory approach. This function is telecasted in Doordarshan, GSTV and N7 TV channel on the evening of the same day.



9. PUBLICATION

9.1 Farm publications:

Directorate of Extension periodically publishes folders, leaflets and booklets on package of cultivation practices of main crops, diversified crops, newly released technology etc. of the area to make available to the farmers and extension workers as ready reference at very low cost or no cost.

Other publications–news letter/reports

- Research Accomplishments and Recommendations (Gujarati)
- Souvenirs
- Booklets on new emerging issues/technology

Farm VCD Publication

With a view to disseminate new agricultural technology through e-farm literature, theme based VCDs on 31 subjects mainly on package of practices of major crops of south Gujarat were published. Total 1315 VCDs were prepared and distributed to the farmers during Krushi Mahotsav-2015.



University publication:

- | | |
|------------------|------|
| 1. Book/booklets | : 22 |
| 2. Bulletin | : 1 |
| 3. Souvenir | : 1 |
| 4. Folders | : 68 |

10. SUMMARY OF ACTIVITIES CARRIED OUT BY KVKs RUN UNDER NAU

1) Front Line Demonstrations (FLDs) and On Farm Trials (OFTs) by KVKs

S. N.	KVK	FLDs		OFTs	
		Area ha.	No.of FLDs	No.of OFT	No.of bene.
1	Dangs	302.7	842	10	152
2	Tapi	161.8	565	4	326
3	Navsari	456.4	2902	6	78
4	Narmada	177.1	589	10	50
5	Surat	245	1204	10	68
6	Valsad	105.20	833	12	120
7	Bharuch	102	335	09	84
	Total	1550.2	7270	61	878

2) Training (vocational, sponsored and FLD training) by KVKs

KVK	Type	No. of Courses	Beneficiaries (Other)			Beneficiaries (SC/ST)			Total Beneficiaries		
			M	F	Total	M	F	Total	M	F	Total
Dangs	On campus	83	0	0	0	2383	1213	3596	2383	1213	3596
	Off campus	38	0	0	0	527	386	913	527	386	913
Tapi	On campus	61	78	182	260	754	1406	2160	832	1588	2420
	Off campus	42	0	0	0	271	620	891	271	620	891
Navsari	On campus	95	1258	946	2204	1496	808	2304	2754	1754	4508
	Off campus	52	431	358	789	691	159	850	1122	517	1639
Narmada	On campus	54	0	0	0	1363	691	2054	1363	691	2054
	Off campus	13	0	0	0	378	66	444	378	66	444
Surat	On campus	48	258	392	650	738	242	980	996	634	1630
	Off campus	55	156	191	347	971	308	1279	1127	499	1626
Valsad	On campus	57	7	5	12	1232	1267	2499	1239	1272	2511
	Off campus	54	0	0	0	890	825	1715	890	825	1715
Bharuch	On campus	33	156	26	182	476	162	638	632	188	820
	Off campus	81	530	202	732	689	496	1185	1219	698	1917
	Total	766	2874	2302	5176	12859	8649	21508	15733	10951	26684

3) Extension activities for Transfer of Technology :

S.N.	Extension Activities	No. of Activities	No. of Beneficiaries
1	Field Day	53	2347
2	Kisan Mela	22	19295
3	Kisan Ghosthi	93	8318
4	Exhibition	101	59570
5	Film Show	303	12699
6	Method Demo	98	3833
7	Farmers Seminar	18	2009
8	Workshop	13	2541
9	Group meetings	128	4353
10	Lectures delivered	531	79509
11	Newspaper coverage	82	0
12	Radio talks	20	0
13	TV talks	18	0
14	Popular articles	69	0
15	Extension Literature	46	1345
16	Advisory Services	7753	9612
17	Scientific visit to F.F	443	5790
18	Farmers visit to KVK	4370	8715
19	Diagnostic visits	319	1181
20	Exposure visits	42	1668
21	Ex-trainees Sammelan	2	22
22	Soil health Camp	16	2151
23	Animal Health Camp	20	1238
24	Agri mobile clinic	0	0
25	Soil test campaigns	2209	2638
26	FSC Conveners meet	10	116
27	SHG Conveners meet	11	243
28	Mahila M Conv meet	32	1736
29	Celebration of days	26	10174
	Total	16848	241103

4) Soil & Water sample analysis :

SN	KVK	Soil sample	Water sample	No. of farmers	Amount realized (Rs.)
1	Dangs	902	7	909	76175/-
2	Tapi	709	12	721	174380/-
3	Navsari	1271	682	1953	269650/-
4	Narmada	250	0	250	0/-
5	Surat	0	0	0	0/-
6	Valsad	657	241	884	35330/-
7	Bharuch	308	0	308	77000/-
	Total	4097	942	5025	632535/-

5) Text SMS on agro advisory sent to the farmers :

SN	KVK	No. of Messages	No. of Farmers
1	Dangs	5	4367
2	Tapi	10	15110
3	Navsari	68	575451
4	Narmada	78	9162
5	Surat	10	15340
6	Valsad	14	76738
7	Bharuch	26	8524
	Total	211	704692
