





Advisory Board

President Dr. N. C. Patel

Vice-Presidents Dr. A. M. Parakhia

Members

Dr. C. J. Dangaria Dr. P. G. Butani Dr. A. Y. Desai Dr. P. U. Gajbhiye Dr. D. B. Kuchhadia Prof. A. H. Memon

Chief Editor Dr. D. D. Sahu

Asst. Editor Prof. Seema Mandavia Dr. D. K. Varu

Editorial Co-ordinator Dr. Narendra Bharad Shri B. H. Tavethia

Photography Suresh Parmar

For office use only

Publisher

Director of Extension Education Junagadh Agricultural University Junagadh - 362 001.

Phone: (0285) 2672080-90 PBX: 311, 341, 375 Fax & Ph.: (0285) 2672653

It is not a calamity to die with dreams unfulfilled, but it is a calamity not to dreams.

- Benjabin E. Mays

From the Vice Chancellor's Desk



The three basic functions of this university - teaching, research and extension have been rapidly addressed, since the inception of Junagadh Agricultural University in 2004. The university campus has become a pilgrim place to the farmers of the region. During the last six years 21 new crop varieties of different crops have been released. The contribution of Main Oilseeds Research Station, Junagadh and the Pearl millet Research Station, Jamnagar has been

recognized at the national level which have been awarded as the best research centers by ICAR, New Delhi. Through vegetable research also new techniques have been introduced and recommended to the farmers. JAU has also evolved a hybrid variety of coconut namely TxD which proved to be suitable for coastal areas of our country. In the year 2007-2008, new variety of garlic namely GG-4 has been released. Many high yielding varieties of wheat, groundnut and castor have been offered to the nation by this university. Recently developed new wheat variety namely GW-366 has given 12 % more yield than LOK-1. The name and fame of this university have spread not only in our country but also abroad. Various delegations from different countries like Tanzania, Indonesia, South Africa and Israel have visited this university during last six months, have got impressed and appreciated the development of this University. They have expressed their interest and willingness for collaborative research and teaching with their universities.

At this moment, I compliment and congratulate the scientists and teachers of this university who by dint of their hard work and sincere efforts brought rapid progress in this university. I hope that they keep it up. Ofetel

N. C. Patel

Shri Narendra Modi Hon'ble Chief Minister lighting the lamp.

Swarnim Krushi Mahotsava 2010

On 27-28th May, 2010 at JAU, Junagadh Mega Agricultural Fair and a Seminar were organized. The fair was declared open by Hon'ble Chief Minister of Gujarat Shri Narendra Modi and the seminar on organic farming was inaugurated by the Hon'ble Agriculture Minister, Shri Dileep Sanghani. In the fair, there were about 100 stalls providing guidance to the farmers on seeds, pesticides, food processing, inaugurating the Swarnim Krushi Mahotsva by grading, packaging, value addition, green house

Swarnim Krushi Mahotsava 2010

technology, drip and sprinkler irrigation methods, solar energy utilization, etc. After inauguration of the fair, the Chief Minister delivered an inspiring speech in which he mentioned that the government is very much conscious about three things for the development of agriculture viz., land improvement, quality seed and irrigation water-which are most important for the agriculture.



Hon'ble Minister of Agriculture, Shri Dileep Sanghani and Hon'ble VC, Dr. N. C. Patel welcoming Chief Minister Shri Narendra Modi by garlanding

He also appealed the farmers to conserve and harvest rain water. He further highlighted other programmes of the government like *Kanya kelavani*, *Shala praveshotsava*, Vibrant Gujarat, etc. organized for one or two days but he mentioned that only *Krushi Mahotsava* is of 30 days duration programme during which agricultural scientists go to the farmers in all the villages of the state. Also, he highlighted the success of *Krushi Mahotsava* as the production of crop has increased, considerably.

On the same day of mahotsava seven progressive farmers were felicitated as Krushi na Rushi for their



Hon'ble Chief Minister Shri Narendra Modi releasing the publications of JAU Scientists

noteworthy achievements. Under the scheme of farmers accident insurance, the heirs of deceased farmers received cheques from Hon'ble Chief Minister. Some publications related to agriculture written by scientists were released. On the next day, a seminar on organic farming was organized which was attended by a large



Hon`ble Chief Minister Shri Narendra Modi addressing the mammoth gathering at Krushi Mahotsava

number of farmers in which the experts from different states and national levels provided guidance to them.



Hon'ble Minister of Agriculture, Shri Dileep Sanghani and Hon'ble VC, Dr. N. C. Patel presenting a memento to Hon'ble Chief Minister



Chief Minister Shri Narendra Modi greeting the gathering at Krushi Mahotsava

Swarnim Krushi Mahotsava 2010



Majestic gathering at the Swarnim Krushi Mahotsava celebration



Krushi na Rushi of Saurashtra region felicitated by Hon'ble Chief Minister Shri Narendra Modi

Scientific Advisory Committee (SAC) meeting of KVKs

Scientific advisory committee meetings were organized at all KVKs working under the jurisdiction of Junagadh

Scientific Advisory Committee Meeting Krushi Vigyan Kendra Junagadh Agricultural University - Amreli



Hon'ble Vice Chancellor Dr. N. C. Patel discussing with KVKs Scientists

Agricultural University. Hon'ble Vice Chancellor and the Chairman of SAC Dr. N. C. Patel remained present in all the meetings organized at Amreli, Khapat (Porbandar), Nana Khandhasar (Chotila), Jamnagar and Targhadia (Rajkot). In his address, he suggested to organize maximum training programmes at KVKs as well as at field levels. He added that FLDs are the best tool of transfer of technology. Along with supplying inputs to the farmers, demonstration at field level should be conducted so that the farmers will be convinced and inspired to adopt the scientific recommendations.

The programme coordinator of respective KVK presented the achievement and action plan of their KVK. The Director of Extension Education, officers of line departments, progressive farmers and farm women remained present in the meetings.

Award



Dr. N. K. Gontia, Professor and Head, Department of Soil and Water Engineering, CAET, Junagadh Agricultural University, Junagadh has been awarded the fellowship of Indian Water Resources Society on

April 6, 2010 for his professional contribution in the field of water resources.

Certificate of merit



Dr. Ram Autar Gupta, Professor, Dept. of Renewable Energy & Rural Engineering, College of Agricultural Engineering and Technology, JAU, Junagadh, has received certificate of merit from

Institution of Engineers (India) for his research article entitled "Study on pull force for cotton stalk and its relation with crop and soil parameters" published in Agricultural Engineering Journal of Institution during 2008-09.

Any thing can wait but not agriculture
- Pt. Jawaharlal Nehru

Research Activities

Sixth Combined Joint AGRESCO Meeting

The Sixth Combined Joint meeting of the Agricultural Research Council (AGRESCO) of SAUs of Gujarat was held at Junagadh Agricultural University,





Prof. M. C. Varshneya, Hon'ble Vice Chancellor of AAU inaugurating the 6th AGRESCO meet

Junagadh during April 20-22, 2010 under the Chairmanship of Dr. N. C. Patel, Hon'ble Vice Chancellor, JAU, Junagadh. Prof. M. C. Varshneya, Hon'ble Vice Chancellor, AAU, Anand; Dr. A. R. Pathak, Hon'ble Vice Chancellor, NAU, Navsari and Dr. J. B.



Dr. N. C. Patel, Hon'ble Vice Chancellor addressing the scientists in 6th AGRESCO meet of SAUs.

Misra, Director, Directorate of Groundnut Research, ICAR remained present. Welcome address was given by Dr. H. J. Vyas, Director of Research & Dean, P. G. Studies, JAU.

The Directors of Research & Dean P. G. Studies Dr. S. B. S. Tikka, Dr. H. C. Pathak and Dr. A. M. Shekh of SDAU, NAU, and AAU, respectively; Dr.R.L. Savalia, DEE, JAU, Dr. P. P. Patel, DEE, AAU, Prof. R. B. Maravia, Executive Director (Agril.), Sardar Sarovar Narmada Nigam Limited, Gandhinagar were present in the meeting.

Dr. A. R. Pathak, Hon'ble Vice Chancellor, NAU, in his opening remarks, praised the scientists of SAUs for collaborative research work in areas of breeding programmes. He also suggested research needs on biotechnology, nanotechnology, low cost technology and recycling of agricultural waste.

Dr. J. B. Mishra, Director, Directorate of Groundnut Research, ICAR, Junagadh expressed his views on research activity of SAUs. He opined that stem rot and aflatoxin in groundnut are the important issues for groundnut cultivation. He suggested research needs on disease control in groundnut through micronutrients.

Prof. M. C. Varshneya, Hon'ble Vice Chancellor, AAU expressed his experience and expertise. He gave his views on various areas of research on rainfed farming particularly in groundnut and cotton; increase in area of horticultural and spices crops; challenges to agricultural scientists for conversion of fallow or barren land into cultivated land; dry matter partitioning in respect to temperature regime; modified agricultural technologies i.e., cultural practices and mulches in respect to thermal and moisture regime; soil improvement through bioremediation; reduction in cost of cultivation through biotechnology, restoration of soil organic carbon for water conservation; research on bio-fortification of food through genetic enhancement of food crops; research on fodder quality; development of agronomical practices of different crops in poly houses; multistoried cropping for horticultural crops. He also emphasized that the agricultural education should be introduced right from primary and secondary schools.

Dr. N. C. Patel, Hon'ble Vice Chancellor, JAU, in his presidential address, stressed on the new challenges before us in agriculture. He stated that Gujarat state has large coastal area having saline and sodic soil. Approximately 22 percent soil of the state is having the said problem and needs immediate attention of the scientific community. Sound research programmes need to be initiated to bring these soils under cultivation through bioremediation and crop diversification. The 12th Five Year Plan is knocking at the door. The brain storming exercise should be done for the preparation of new project proposals to be included in next plan. He also proposed implementing group wise subcommittee meeting of Agricultural Universities from next year for better screening of the technology and advised the agricultural scientists to take advanced training under HRD programme. Further, he suggested that scientists should utilize maximum available resources in their research work. Dr. R. L. Savalia, DEE, JAU proposed the vote of thanks.

Recommendations for farmers were presented by concerned conveners of AGRESCO subcommittees and discussed thoroughly in the various technical sessions. Five new crop varieties have been released, 47 new technologies recommended for farming community, six scientific information and 134 new technical programmes were approved, for JAU, Junagadh.

Sr. No.	Sub- committees	Recommendations		New
		Farmers	Scientific	Technical Programmes
1	Crop Production	13	03	26
2	Crop Improvement	5*+1	-	01
3	Agril. Engineering	05	02	17
4	Plant Protection	16	-	27
5	Horticulture & Agro-forestry	08		13
6	Basic Science	-		13
7	Social Science	-	*	10
8	Animal Health & Production	02		06
9	Fisheries Science	02	01	21
	Total	5* +47	06	134

^{*} Varieties

New varieties released by JAU

1. Groundnut: GJG-9

Groundnut variety Gujarat Junagadh Groundnut-9 (GJG-9) recorded overall 30.0, 20.5 and 15.5 per cent pod yield superiority over the checks GG-2, GG-5 and GG-7, respectively in *kharif* season. It also displayed higher kernel and oil yield than the checks. It showed tolerant reaction to stem rot disease, jassid and thrips. Due to superior pod and kernel yield, bold kernels and comparable shelling out-turn, the variety GJG-9 is released for cultivation in the *kharif* in rainfed groundnut growing areas of the state. The average pod yield is 1632 kg/ha.





2. Groundnut: GJG-31

The summer bunch groundnut variety GJG-31 exhibited 36.9, 24.1, 17.5 and 20.6 per cent higher pod yield, respectively over the checks GG-2,

GG-4, GG-6 and TG-26 across the years. The variety also showed superiority in pod and kernel features over the check varieties. Due to less damage by jassid and heliothis and free from incidence of bud necrosis (PBND) the variety is released for cultivation in the summer groundnut growing areas of the state. The average pod yield is 3483 kg/ha.





3. Brinjal: GJB-2

The brinjal variety Gujarat Junagadh Brinjal -2 (GJB-2) recorded overall 20.9 per cent higher yield over check variety GOB-1. The fruits of this variety have attractive pink purple colour, medium in size, medium long shape and possessing white fruit pulp with less seeds. The variety showed tolerance against little leaf disease. It also showed superiority in quality parameters. The average fruit yield is 342.94 q/ha. The variety is recommended for cultivation during late kharif and rabi seasons across Gujarat State.





4. Okra: GJ-Okra-3

The variety Gujarat Junagadh Okra-3 (GJ-Okra-3) registered 20.6 and 25.7 per cent higher green fruit yield over checks GO-2 and Pusa Sawani, respectively.





Further, it also registered 38.4, 49.1 and 71.3 per cent higher yield as compared to Parbhani Kranti, Arka Anamika and Pusa Sawani, respectively. The variety possesses green, tender and attractive fruits. The variety is recommended for kharif cultivation in the Saurashtra and South Gujarat region. The average fruit yield is 150.52 q/ha.

5. Sesame: Gujarat Til-4

The variety Gujarat Til-4 (AT-159) registered 18.3 and 10.8 per cent yield increment over check varieties G-Til-2 and G-Til-3, respectively. It also showed oil production (kg/ha) superiority to the tune of 26.2 and 16.3 per cent over the check varieties G-Til-2 and G-Til-3, respectively. The variety possesses white seeds suitable for export. The variety showed parity with G-Til-2 and G-Til-3 for reaction to capsule borer, gallfly and mites. It has showed earliness to the tune of five to seven days than the check varieties. The variety is recommended for cultivation in the North Saurashtra Agroclimatic Zone. The average seed yield is 770 kg/ha.





AICRP Workshop on "Ground Water Utilization"

The Biennial Scientists' Meet of All India Coordinated Research Project (AICRP) on Ground Water Utilization was jointly organized by Department of Soil and Water Engineering, College of Agricultural Engineering and Technology, Junagadh Agricultural University, Junagadh and Directorate of Water Management (ICAR), Bhubaneswar during April 27-29, 2010, to discuss the important aspects of groundwater utilization such as assessment, conjunctive water use, rainwater harvesting, groundwater recharge, sea water intrusion in coastal belt as well as groundwater pollution due to domestic & industrial waste water and different management options. It was inaugurated by Dr. A. K. Singh, Deputy Director General (Natural Resource Management), ICAR, New Delhi; Dr. N. C. Patel, Hon'ble Vice Chancellor, Junagadh Agricultural

University, Junagadh presided over the function. Dr. Ashwanikumar, Director, Directorate of Water Management (AICRP) Bhubaneswar was the guest of honour.





Publications released by the dignitaries, The Biennial Scientists' Meet of AICRP-GWU-2010, April 27, 2010



Dr. N. C. Patel, Hon'ble Vice Chancellor, JAU, Junagadh addressing the scientists

Dr. A. K. Singh, DDG (NRM) has stressed on implementation of groundwater recharge programmes and efficient utilization of available water in agricultural sector. He emphasized to find out the impact of the work done in the field of water harvesting and also the groundwater pollution problems in agriculture. Dr. Ashwanikumar, Director, DWM (ICAR) has urged the need for groundwater recharge policies for different agroclimatic zone of the country.

Dr. N. C. Patel, Hon'ble Vice Chancellor, Junagadh Agricultural University, in his presidential address, gave brief details of water resources of Gujarat and particularly of Saurashtra region and appreciated role of Gujarat State Government, university, NGOs, people's participation in improving water availability in Gujarat

through watershed management, rainwater harvesting and groundwater recharge. He stressed the need for promoting micro-irrigation in big way in water deficit areas of Gujarat besides water activities. Hon'ble DDG (NRM) released the Annual Report of AICRP GWU for the year 2009-10. The publications by AICRP Centres and JAU, Junagadh were also released by other dignitaries. Dr. N. K. Gontia, organizing secretary & Professor and Head, Dept. of Soil and Water Engg., JAU, Junagadh proposed the vote of thanks.

'Vanche Gujarat'

In order to promote and propagate reading habits among people, the Government of Gujarat has launched a new drive namely, "Vanche Gujarat". The university feels



Shri Harshadbhai Shah, Associate Vice President, 'Vanche Gujarat' Compaign, inaugurating the function at JAU, Junagadh.



Dr. N. C. Patel, Hon'ble Vice Chancellor and President, 'Vanche Gujarat' for Junagadh Mahanagar Samitee addressing the meeting.

proud that Hon'ble Vice Chancellor, Dr. N.C. Patel has been nominated as the president of "Vanche Gujarat" for Junagadh Mahanagar Samitee. Under the drive, various programmes have been organized in the university and other educational institutions in Junagadh in order to create an awareness and awakening among the students and elders. A unique library namely "Tartu Pustak Kendra" has started functioning under his guidance in which many professors and enthusiastic staff members have donated useful books from their personal collection. All the citizens, intellectuals, morning joggers and visitors are invited to visit this library and get the books issued and cultivate the habit of reading.

Another function was also organized in the university on 23rd June. Shri Harshadbhai Shah, the Vice President of Gujarat state, Vanche Gujarat Compaign,



Dr. N. C. Patel, Hon'ble VC and President, 'Vanche Gujarat' for Junagadh Mahanagar Samitee inaugurating the 'TARTU PUSTAK KENDRA' at JAU, Junagadh.



Book exhibition at TARTU PUSTAK KENDRA, JAU, Junagadh.

delivered a lecture which was followed by a meeting of "Vanche Gujarat" Junagadh Mahanagar Samitee. The meeting was attended by the reputed persons of different professions in the city, who are the members of this compaign. Shri Harshadbhai gave a detailed outline of the programme and plan of work through out the year. An interaction session remained very interesting and informative for the participants.

THE NEW PROJECTS SANCTIONED DURING THE YEAR 2010-2011 Under RKVY Stream - I

Sr. No.	Title of project	Out lay (₹, lakh)	
1	Smart farming for increasing agricultural production in sodic soils of coastal area of Saurashtra	129.43	
2	Establishment of elite seed farm for coconut DxT (Mahuva) seed nut production	40.00	
3	Development of modules for precision dairy farming for Gir cattle and Jaffrabadi buffaloes	136.90	
4	On season crop field nutrient monitoring of ground nut and cotton in Saurashtra region	190.60	
5	Demonstration models of seed production technologies in the crops of Saurashra region	47.88	

Seminar cum exhibition at IARI New Delhi

Dr. A. K. Joshi, Dr. L. K. Dhaduk and Prof. B. M. Ram attended the national seminar on "Quality Seed for Food Security through Public-Private Partnership" held on April 13-14, 2010 at IARI, Pusa Complex, New Delhi. During the seminar, an exhibition was also organized in order to exhibit various cultivars owned by different public and private seed companies. The Exhibition Stall of JAU was visited by number of dignitaries and participants, and extremely admired with excellent remarks.



Dr. Maurya, ADG, IPR visiting the JAU stall during National Seminar on Quality Seed and Food Security at IARI, New Delhi Mr. Udai Singh, President, NSAI and Dr. Roongta, Chairman, NSC visited the JAU stall during national seminar on Quality Seed and Food Security at IARI, New Delhi

Students' activities

Placement of students

- 1. B.Tech (Agril. Engg.) and M. Tech.(Agril. Engg.) students got selected in different reputed companies, banks and NGOs across the country. Out of 45 outgoing students of B.Tech (Agril.Engg.), 17 students were recruited by Netafim Irrigation India Pvt. Ltd.- Vadodara, seven students by Jain Irrigation, six students by Kisan Irrigation Mumbai, four students by Tirth Agro Rajkot, two students by Deepak Foundation Vadodara, one each by Infrastructure services company Vadodara and TAFE -Chenai and remaining seven students opted for higher studies. Two M. Tech. (Agril. Engg.) students were selected by Deepak Foundation Vadodara, one each by Bank of Baroda and Union bank of India.
- 2. Six students of Agriculture faculty were selected in Reliance India Pvt. Ltd., Jamnagar and Pest Control India, Ahmedabad.

Lectures delivered

- 1. On the occasion of World Book Day celebration, Dr. B. M.Sheladiya, Ex. Professor of History, Patel Mahila Arts College, Joshipura, Junagadh delivered a lecture on importance of *books and reading* in life to the students and staff members of the University on 23th April, 2010.
- Shri Shrikantji Katdare, leader of Bhartiya Vichar Manch, Ahmedabad delivered a lecture on "Role of intellectuals in present situation" on 28th April, 2010 on the occasion of the celebration of Swarnim Gujarat at JAU, Junagadh.

KVK Activities



Demonstration cum training on Solar lantern and Solar cooker under KVK, Nana Kandhasar



Demonstration of cotton stalk puller at Doliya village under KVK, Nana Kandhasar



Animal Treatment camp at Doliya village under KVK, Nana Kandhasar

