

Anand Agricultural University



ANNUAL REPORT
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Gujarat Agricultural University Act., 2004

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Our Symbol



This is our Emblem;

One Square, One Leaf
with "AAU" firmly embedded

The Square with lighter and darker shades of green
Stands for Lusciousness, Fertility and Abundance of this land.
This is our Mother Land
With all the three elements abounding

Among the entire world, there is only one thing
That Could photo synthesize solar rays
into biomass i.e., the LEAF.
Hence, the LEAF stands as our symbol
Which could transform sun rays i.e. energy into matter

Thus leaf as a symbol of our commitment;
Our Dream
to make our Country
abundant in agriculture

Leaf is our tribute to
Our Mother Land
Our pledge to make Country prosperous

Our Motto is :

कृणवन्तो राष्ट्रं कृषिसंपन्नम्

Means

We, the Scientists, Students and
all the employees of AAU unitedly
stand to make the solemn pledge
that we enrich and glorify
the grandeur of our Country
and make it agriculturally prosperous



“The first duty of a University is to teach wisdom, not trade; character, not technicality.”

- Winston Churchill



Foreword

Education is the chief defense of the nation and plays a pivotal role in developing and sustaining prosperous civilization. Agricultural education is of particular significance to a country like India, where the majority of its population survives through agriculture. This being a driving force of its existence and continued progress, Anand Agricultural University (AAU), carved out of the erstwhile Gujarat Agricultural University (GAU), the dream institution of Sardar Vallabhbhai Patel and Dr. K. M. Munshi, was set up to provide support to the farming community in three facets namely education, research and extension activities in Agriculture, Dairy Science, Veterinary Science & Animal Husbandry, Horticulture, Biotechnology, Product Processing and Home Science. At present, there are 9 Colleges, 2 P.G. Institutes, 23 research centers, 5 polytechnics and 3 KVK – 1 each for Pashu Vigyan Kendra, Dairy Vigyan Kendra and Sardar Smruti Kendra, Tribal Women Centre and Vocational Courses in Landscape Gardening, Farm Machinery and Watershed Management working in 6 districts of Gujarat namely Ahmedabad, Anand, Dahod, Kheda, Panchmahal, Vadodara covering about 16% of geographic area and 22% of cultivable area.

AAU's activities have expanded to span newer commodity and other sectors such as soil health card, bio-diesel, medicinal plants, liquid biofertilizer, location specific micronutrient status, pesticide residue, probiotic food, interface between industry and scientists, distance education etc., apart from the mandatory ones like rice, maize, tobacco, vegetable crops, fruit crops, forage crops, animal breeding, nutrition and dairy products etc. The core of AAU's operating philosophy however, continues to create the partnership between the rural people and committed academia as the basis for sustainable rural development. In pursuing its various programmes, AAU's overall mission is to promote continuous process of development of sustainable growth and economic independence in rural society. AAU aims to do this through education, research and extension education. Thus, AAU works towards the empowerment of the farmers.

AAU has taken a lead in agricultural education, research and extension in the Country. We are committed to frontier areas of research and formulate our programmes as per the need of the farmers. So far, 521 technologies have been recommended for farmers/scientists/ entrepreneurs and 43 crop varieties released. About 209 research projects are underway in different areas of agriculture, veterinary, dairy, food processing technology, agricultural engineering and horticulture. We have shown our strength in the areas of Liquid biofertilizer, Pesticide residue analysis, Soil health card, Astrometeorology calendar, Micro-propagation, Bio-diesel, Animal genomics, Rumen metagenomics, Modern surgical tools, Probiotic and Prebiotic fermented food products etc.

AAU's Annual report for the year 2012-13 demonstrates our continued commitment to be a pioneering University taking lead in modern agricultural education and research. I profoundly thank the State Government, ICAR and other funding agencies for their valued support and/or administrative inputs in supporting our endeavor.

A. M. Shekh

Vice Chancellor

Anand Agricultural University



Our Song

हो संस्कृति कृषि वत्सलम्, कल्याण कीर्ति मंगलम्
कृष्यावन्तो राष्ट्रं कृषिसंपन्नम् कृष्यावन्तो राष्ट्रं कृषिसंपन्नम्
कृष्यावन्तो राष्ट्रं कृषिसंपन्नम्

सरदार गाथा गुर्जरी, याद अमूल यरोतरी,
क्षीर संस्कृति महीसागरी, आतिथ्य आदर से लरी,
कृष्यावन्तो राष्ट्रं कृषिसंपन्नम्

डाकोर श्रीठाकोर डा, कायावरोहण कलिका,
वडताल लाल गुलाल, सून करताल धून नारायणी,
कृष्यावन्तो राष्ट्रं कृषिसंपन्नम्

संतराम ओडाणा श्रीमद्, हरि मारगी जेधन लगत,
दिल के दिये जलते किये, गुंज गीरा रविशंकरि,
कृष्यावन्तो राष्ट्रं कृषिसंपन्नम्

सरदार रास अडासमें, आपु चले थे साथ में,
विधानगर आशंठ में, विज्ञान ज्ञान गंगोतरी,
कृष्यावन्तो राष्ट्रं कृषिसंपन्नम्

- डॉ. आलकृष्ण जेधी

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OUR PLEDGE

We, the scientist, students
and the employees of
Anand Agriculture University
Unitedly stand to make
the solemn pledge
That
we enrich the glorify,
The grandeur of our country
And
make it agriculturally prosperous;
And
will devote ourselves
with heart and soul to Realize
the objectives
of our institution

Chapter 1

Vision & Mission

Anand Agricultural University has metamorphosed from *Krishi-Go-Vidya* Bhavan established way back, in the forties, by the Iron Man of India, Shri Sardar Vallabhbhai Patel not as merely an educational institution, but as a mission; a cause, primarily conceived to revitalize agriculture, following Mahatma Gandhiji's call for village regeneration.

Anand Agricultural University (AAU) was carved out from the erstwhile Gujarat Agricultural University to establish and incorporate teaching and imparting education in Agriculture and Allied Sciences in the State of Gujarat by the Government of Gujarat, through enactment of Gujarat Act No. 5 of 2004. The Act was passed by the Gujarat Legislative Assembly and was assented by H.E. the Governor of Gujarat on 4th March, 2004. Farming community is being provided support in all the three facets viz. education, research and extension activities in agriculture and its allied fields through AAU.

The Vision and Mission of Anand Agricultural University (AAU) are as under:

Vision

Agriculturally Prosperous Gujarat and India

Mission

The mission of the Anand Agricultural

University is to provide teaching, research and extension education services related to Agriculture, Dairy, Veterinary and Allied Sciences including newer sciences like Agricultural Information Technology, Agricultural Engineering Technology, Food Processing Technology, Agricultural Business Management, etc.; and thereby develop excellent human resource and innovative technologies to serve the farming community with the motto of making Gujarat and India agriculturally prosperous.

Goals and Objectives

- Make provision to impart education and thereby develop quality human resource.
- Furthering the advancement of learning through research.
- Passing the knowledge gained through research to the stake holders – the farmers, through extension education.
- Promoting partnership and linkages with national and international institutions.
- Budding cutting edge technologies for national and international arena/markets.

Teaching

- ♦ To impart education in agriculture and

allied sciences at undergraduate and post graduate level leading to Bachelor's, Master's and Doctorate degree in various colleges of Agriculture, Dairy, Veterinary, Agril. Engineering, Agril. Information Technology, Food Processing Technology & Bio-Energy, International Agri Business Management and leading to diploma in various Polytechnics in Agriculture, Horticulture, Home Science and Agril. Engineering.

- ♦ To provide integrated agricultural education at different levels to increase efficiency and effectiveness of skill of students;
- ♦ To upgrade the technical competence of teachers by redesigning course curriculum as suggested by ICAR/ Dean's Committee and coordinating the teaching with research in the field of agriculture;
- ♦ To organize vocational courses to educate rural youth in various disciplines of agriculture and allied sciences with intension to develop self-employment;
- ♦ To provide consultancy and advisory services to the industry, government and non-government sectors;
- ♦ To architect agribusiness professionals for Agricultural, Agri. food firms, rural and allied sectors;
- ♦ To encourage entrepreneurial spirit and develop qualified entrepreneurs for rural development;
- ♦ To cater the needs of enterprises and cooperatives in agribusiness at national and international level

Research

- ♦ Aimed at evolving new varieties and breeds and developing technologies for increasing agricultural and animal productivity with a view to improve socio-economic status of farmers of Gujarat and India;
- ♦ Develop package of practices for cultivation of various crops and cropping systems of middle Gujarat;
- ♦ Develop integrated farming system, Integrated Pests and Disease Management Systems, Organic farming and Biological control;
- ♦ Develop cutting edge technologies in the filed of Nanotechnology pertaining to agriculture, Animal husbandry and Food sciences;
- ♦ Develop technologies in the field of Milk production, Food processing and Bio-energy;
- ♦ Develop specific indigenous and cross breeds suitable to ago-climate of Middle Gujarat

Extension

- ♦ Impart training to the officers and extension workers of line department of Government of Gujarat and India, field functionaries, staff of the University, NGOs, farmers, entrepreneurs etc;
- ♦ Conduct short and long duration vocational training for farmers, farm women, farm youth, entrepreneurs and tribals;
- ♦ Assess, refine and demonstrate latest

agricultural technologies of University through front line demonstrations for their wider adoption;

- ♦ Transmit agricultural technologies to the farmers and rural masses of Gujarat through mass media, information technologies and video conferencing.

History

Anand Agricultural University (AAU) has entered into Ninth year of its being established by the Gujarat Act No. 5 of 2004, passed by the Gujarat Legislature and was assented by Her Excellency, Governor of Gujarat on 4th, March 2004, AAU has been incorporated as a teaching and affiliating University for imparting education in agriculture and allied sciences. AAU has a long cherished history. Sardar Vallabhbhai Patel, an Iron man of India and Dr. K. M. Munshi, who played a significant role in affable and unobtrusive manner both as member of the Drafting Committee and as an active member of the Constituent Assembly of Indian Constitution established *Krush-Go-Vidhya Bhavan*, Institute of Agriculture and Animal Genetics, Anand in 1938 to revitalize agriculture, train the farmers and their sons and daughters in modern practices of agriculture and animal husbandry so that they can raise their head and live in prosperity.

Institute of Agriculture was popularly known as '*Khetiwadi*' which later in June, 1972 became a part of the Gujarat Agricultural University. Institute of Agriculture, Anand had two Colleges viz., B. A. College of Agriculture established in 1947 and Sheth M. C. College of Dairy Science established in 1960, which

were then affiliated to Sardar Patel University, Vallabh Vidhyanagar. Later, in 1972 they became integral part of Gujarat Agricultural University along with the Government College of Veterinary Science and Animal Husbandry which was established in 1964 at Anand.

The activities of Anand zone of erstwhile Gujarat Agricultural University have now been transferred to newly established Anand Agricultural University with effect from May 1, 2004 with three Colleges viz., B. A. College of Agriculture, Sheth M. C. College of Dairy Science and College of Veterinary Science & Animal Husbandry, 27 Research Stations, one Extension Education Institute, 16 Extension Education Centres like Krushi Vigyan Kendra, Sardar Smruti Kendra, Tribal Training Centre, Tribal Research-cum-Training Centre, Poultry Training Centre, Bakery Training Centre, Livestock Training Centre, Home Science School, Mali Training Centre.

Today, all existing diploma schools are transformed into polytechnics with new syllabus and rules. Passed out students get employment as middle level technician on farm, industry and agriculture related enterprises and admission to a degree college. More colleges are established i.e. International Agri. Business Management Institute, Agril. Information Technology, Agril. Engineering Technology and Food Processing Technology & Bio-Energy, etc.

Power and Functions of the University

Under Section 6 of the GAU Act, 2004, the University is empowered to exercise the following powers.



B.A. College of Agriculture, AAU, Anand



Sheth M.C. College of Dairy Science, AAU, Anand



College of Veterinary Science & Animal Husbandry, AAU, Anand

- (1) Provide education and instruction in agriculture and allied sciences and in such other branches of learning as the University may deem fit;
- (2) Make provision for research in agriculture and allied branches of learning;
- (3) Make provision for dissemination of the findings of research and technical information through extension education programmes;
- (4) Make such provision which would enable affiliated colleges and recognised institutions to undertake specialisation in different fields of studies;
- (5) Institute degrees, diploma and other academic distinctions;
- (6) Lay down courses of study and instruction for various examinations;
- (7) Hold examinations and confer degrees, diploma and other academic distinctions and confer certificates to persons who -
 - (a) have pursued approved courses of study at the University or at a college unless exempted there from, in the manner prescribed and have passed the examinations prescribed by the University or
 - (b) have carried on research under conditions prescribed;
- (8) Withdraw or cancel any degree, diploma or certificate conferred or granted by the University in such manner as may be prescribed;
- (9) Confer Honorary degree and other distinctions in the manner prescribed;
- (10) Provide lectures, instructions and training to persons who are not enrolled students of the University and grant such certificates to them as may be prescribed;
- (11) Co-operate with any other University or authority in such manner and for such purpose as the University may determine;
- (12) Establish and maintain colleges for imparting education in agriculture and allied sciences;
- (13) Establish and maintain classrooms laboratories, libraries, English language laboratory, research stations, institutions and museums with latest technology for teaching, research and extension education;
- (14) Create such teaching, administrative and other posts as the University may deem necessary from time to time and make appointments thereto;
- (15) Institute and award fellowships, scholarships and prizes in accordance with the Statutes;
- (16) Associate or admit educational institutions imparting education in agriculture and allied sciences with, or to the privilege of the University by way of affiliation or recognition;
- (17) Withdraw or modify, either in whole or part, affiliation or recognition of educational institutions;

- (18) Inspect colleges and recognised institutions and take necessary measures to ensure that proper standards of instruction, teaching and training are maintained in them and that adequate library and laboratory provisions are made therein;
- (19) Lay down and regulate the salary scales, allowances and other service conditions of the members of teaching, other academic and non-teaching staff of the University;
- (20) Lay down and regulate the salary scales, allowances and other conditions of service of the members of the teaching, other academic and non-teaching staff in the affiliated colleges and recognised institutions;
- (21) To
 - a) Control and co-ordinate the activities of, and to give financial aid to, affiliated colleges and recognised institutions; and
 - b) Regulate fees to be paid by the students in affiliated colleges and recognised institutions;
- (22) Institute and maintain residential accommodation for students and staff of the University;
- (23) Fix demand and receive or recover such fees and other charges as may be prescribed;
- (24) Supervise, regulate and control the residence, conduct and discipline of the students of the University, make arrangements for promoting their health and general welfare;
- (25) Conduct, co-ordinate, supervise, regulate and control post-graduate teaching and research work at the University departments and affiliated colleges and recognised institutions;
- (26) Co-ordinate, supervise, regulate and control conduct of undergraduate teaching and instruction in the affiliated colleges and undertake the same in University colleges;
- (27) Make special provision for agricultural education, research and extension in relation to arid areas and areas prone to scarcity in the University area;
- (28) Perform all such other acts and things whether incidental to the powers aforesaid or not, as may be requisite in order to further the objectives of the University.

Chapter 2

Functioning of Authorities

Decision Making is a Science

Implementation is an Art

Authorization

Authority to govern the affairs of Anand Agricultural University flows from the GAU Act, 2004.

AAU is a corporate body established under GAU Act, 2004 (Gujarat Act No. 5 of 2004) and comprises of Chancellor, Vice-Chancellor, Board of Management, Academic Council and Officers of the University. It has a territorial jurisdiction of six districts of Gujarat namely; Ahmedabad, Anand, Dahod, Kheda, Panchmahal and Vadodara.

Functioning of the Authority

During the year under report following authorities, as provided in Section 17 of the Act, were functional.

- Board of Management
- Academic Council
- Faculties
- Board of Studies of different groups of subjects from different faculties.

The Organizational Chart and decision making channel are given in Chart- 1 and 2 respectively.

Board of Management

The Board of Management considers and decides matters of general policies relating to progress and development of the University. The list of the Hon'ble members of the Board of Management is given at *Appendix -1*.

During the year under report, one regular meetings and three special meetings were held under the Chairmanship of Dr. A. M. Shekh, Vice Chancellor, AAU Dr. P.R.Vaishnav, I/c Registrar acted as the Member Secretary of the Board. Following decisions were taken at the said meetings.

28th Meeting of the Board of Management held on 07-06-2012

- 28.1 Confirmation of the Minutes of 27th Meeting of Board of Management held on 13-02-2012.
- 28.2 Report of the Action Taken on the Minutes of 27th Meeting of the Board of Management held on 13-02-2012.
- 28.3 સને ૨૦૧૨-૧૩થી અંદાજપત્રીય જોગવાઈ (આયોજન બહાર) મુખ્ય સદર ૨૪૧૫-કૃષિ વિષયક સંશોધન અને શિક્ષણ.
- 28.4 વાર્ષિક વિકાસ કાર્યક્રમ: ૨૦૧૨-૨૦૧૩
- 28.5 વાર્ષિક વિકાસ કાર્યક્રમ ૨૦૧૨-૧૩ માં મંજૂર થયેલ કૃષિ શિક્ષણ (નોર્મલ અને ટ્રાયબલ)ની નવી યોજનાઓના અમલ કરવા બાબત.
- 28.6 વર્ષ ૨૦૧૨-૧૩ની પ્લાન યોજના હેઠળનાં બાંધકામોની વહીવટી મંજૂરી આપવા બાબત.

Chart-1
ORGANIZATIONAL SET-UP

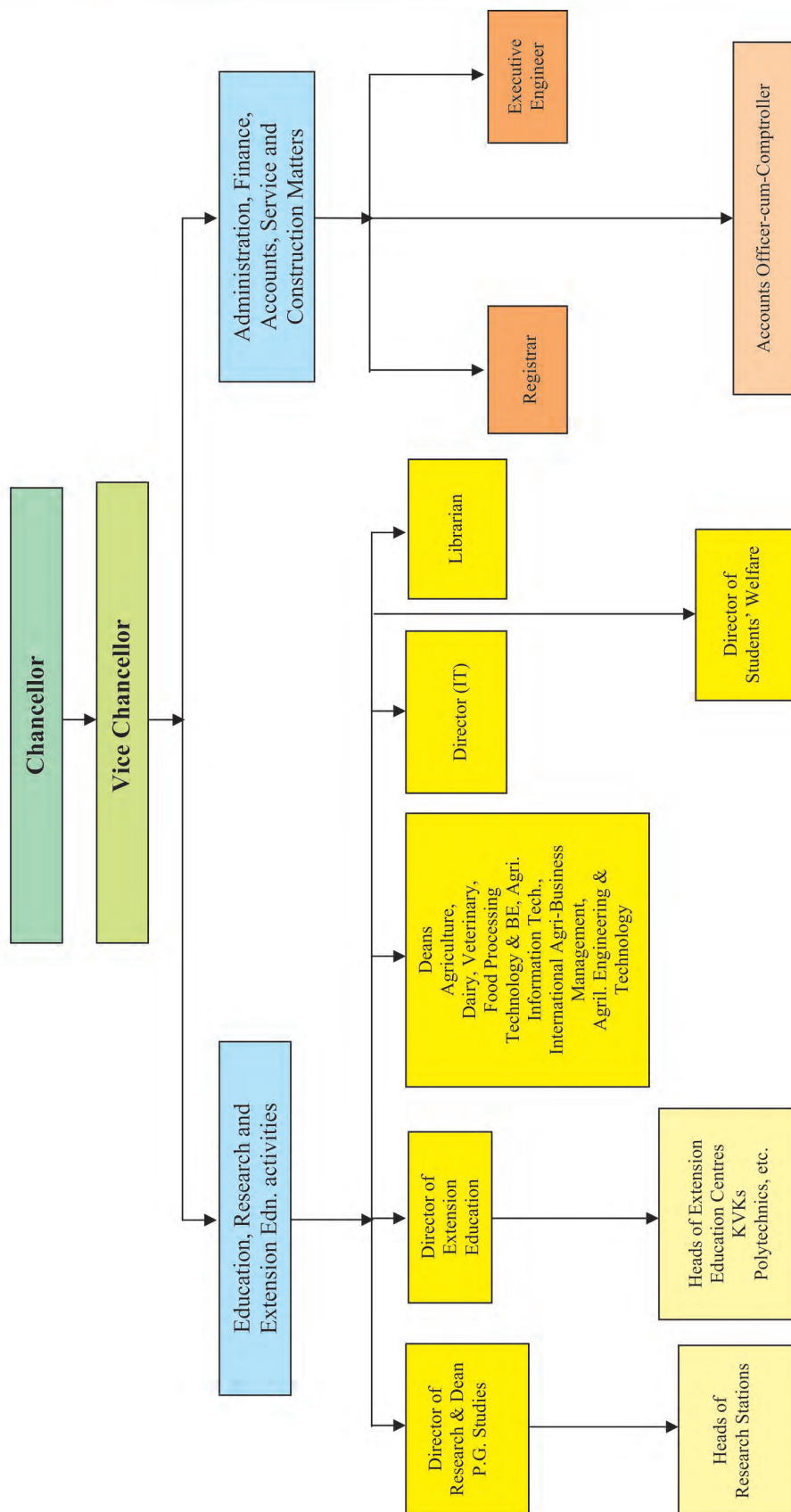
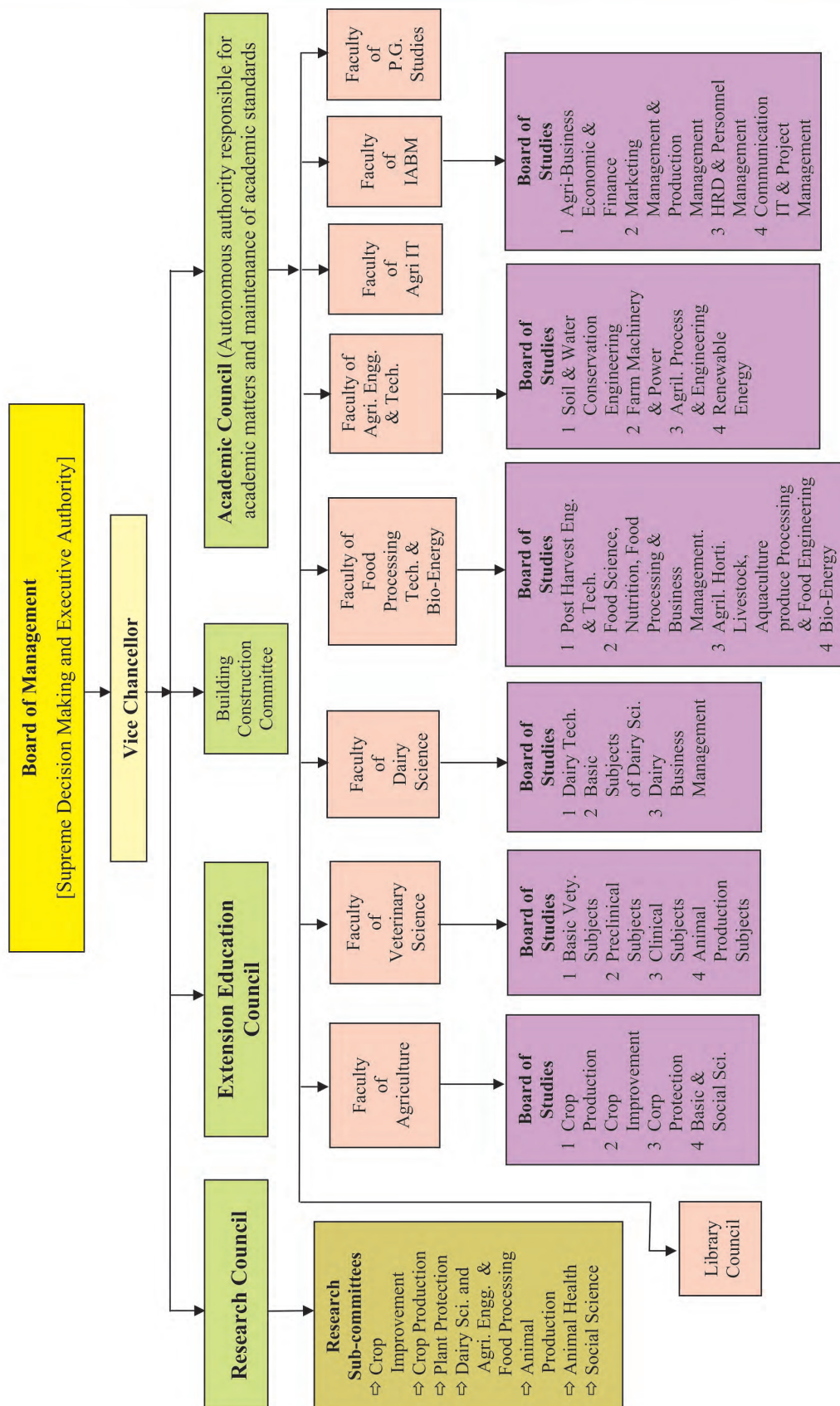


Chart-2

Organizational Chart & Decision channels



- 28.7 કન્સ્ટ્રક્શન ઓફ ન્યુ બોયઝ હોસ્ટેલ અન્ડર આઈસીએઆર એટ એ.એ.યુ., આણંદના કામની વહીવટી મંજૂરી આપવા બાબત.
- 28.8 “SHRI KAMENDU C. VASAVADA MEMORIAL MEDALના નામનો MEDAL અનુસ્નાતક કક્ષાએ ડેરી વિદ્યાશાખાના “M.Tech. / M.Sc. in Dairy Microbiology વિષયના અભ્યાસક્રમમાં સૌથી વધુ ગુણ (O.G.P.A.) મેળવતા વિદ્યાર્થીને એનાયત કરવા અને તેના વિનિયમો મંજૂર કરવા બાબત..
- 28.9 વાર્ષિક વિકાસ કાર્યક્રમ: ૨૦૧૧-૨૦૧૨માં મંજૂર થયેલ કૃષિ વિસ્તરણ શિક્ષણને લગતી છ નવી યોજનાઓને અમલ કરવાની મંજૂરી આપવા બાબત.
- 28.10 “SHRI KAMENDU C. VASAVADA MEMORIAL MEDAL ના નામનો MEDAL અનુસ્નાતક કક્ષાએ ડેરી વિદ્યાશાખાના “M.Tech. in Dairy Engineering વિષયના અભ્યાસક્રમમાં સૌથી વધુ ગુણ (O.G.P.A.) મેળવતા વિદ્યાર્થીને એનાયત કરવા અને તેના વિનિયમો મંજૂર કરવા બાબત.
- 28.11 “SHRI KAMENDU C. VASAVADA MEMORIAL MEDAL ના નામનો MEDAL અનુસ્નાતક કક્ષાએ ડેરી વિદ્યાશાખાના “M.Tech. in Dairy Technology વિષયના અભ્યાસક્રમમાં સૌથી વધુ ગુણ (O.G.P.A.) મેળવતા વિદ્યાર્થીને એનાયત કરવા અને તેના વિનિયમો મંજૂર કરવા બાબત.
- 28.12 “SHRI SHAILESHBHAI RAMESHBHAI PATEL, SHAKTI GROUP, SARSA GOLD MEDAL” ના નામનો સુવર્ણચંદ્રક સ્નાતક કક્ષાએ વેટરનરી વિદ્યાશાખાના “વેટરનરી પેથોલોજી” વિષયના અભ્યાસક્રમમાં છઠ્ઠા સેમેસ્ટરના અંતે સૌથી વધુ ગુણ (C.G.P.A.) મેળવતા વિદ્યાર્થીને એનાયત કરવા અને તેના વિનિયમો મંજૂર કરવા બાબત.
- 28.13 “DR. R. S. SHARMA GOLD MEDALના નામનો GOLD MEDAL અનુસ્નાતક કક્ષાએ ડેરી વિદ્યાશાખાના “M.Tech. / M.Sc. in Dairy Chemistry વિષયના અભ્યાસક્રમમાં સૌથી વધુ ગુણ (O.G.P.A.) મેળવતા વિદ્યાર્થીને એનાયત કરવા અને તેના વિનિયમો મંજૂર કરવા બાબત.
- 28.14 Revision of remuneration rates for Thesis evaluation/Viva-voce.
- 28.15 Increase in the amount of Surety Bond for in-service students.
- 28.16 “DR. A.D. DAVE MEDAL ના નામનો GOLD PLATED SILVER MEDAL સ્નાતક કક્ષાએ વેટરનરી વિદ્યાશાખાના “LIVESTOCK PRODUCTION AND MANAGEMENT વિષયના અભ્યાસક્રમમાં ચોથા સેમેસ્ટરના અંતે સૌથી વધુ ગુણ (C.G.P.A.) મેળવતા વિદ્યાર્થીને એનાયત કરવા અને તેના વિનિયમો મંજૂર કરવા બાબત.
- 28.17 Agenda with the permission of the Chairman.
- 28.17 (1) Implementation of Research Schemes/Projects sanctioned under RKVY.
- 28.17 (2) Implementation of Research Schemes/Projects sanctioned under NHM.
- 28.17 (3) Implementation of Research Schemes/Projects financed by GOG/GOI/ ICAR and Other Agencies.
- 28.17 (4) Approval for the implementation of projects funded by ICAR and under NAIP.
- 28.17 (5) વાર્ષિક વિકાસ કાર્યક્રમ ૨૦૧૨-૧૩ માં મંજૂર થયેલ કૃષિ વિસ્તરણ શિક્ષણ (નોર્મલ અને ટ્રાયબલ) ની નવી પાંચ યોજનાઓને અમલ કરવાની મંજૂરી આપવા બાબત.
- 28.17 (6) “એસ્ટાબ્લીશમેન્ટ ઓફ ડેમોસ્ટ્રેશન કમ ટ્રેનિંગ સેન્ટર ફોર ઈનલેન્ડ ફીશ કલ્ચર” યોજનાને દેવાતેજ કેન્દ્ર ખાતેથી પશુ સંશોધન કેન્દ્ર હસ્તકના નાવલી ફાર્મ ખાતે તબદીલ કરવાની મંજૂરી આપવા બાબત.
- 28.17 (7) નિયામક મંડળની ૧૨ અને ૧૩ મી સરકયુલેશન બેઠકની કાર્યનોંધ પર લીધેલ પગલાંને બહાલી આપવા બાબત.
- 28.17 (8) “એસ્ટાબ્લીશમેન્ટ ઓફ ઈન્સ્ટિટ્યુટ ઓફ ડિસ્ટન્સ એજ્યુકેશન યોજનાનું કાર્યમથક અમદાવાદથી બદલીને આણંદ તબદીલ કરવા માટે કાર્યોત્તર મંજૂરી આપવા બાબત.

28.17(9) Implementation of Research Schemes/Projects sanctioned under State Plan during year 2012-13.

6th Special meeting of the Board of Management held on 12-10-2012

- 6.1 Confirmation of the Minutes of 28th Meeting of Board of Management held on 07-06-2012.
- 6.2 Report of the Action Taken on the Minutes of 28th Meeting of the Board of Management held on 07-06-2012.
- 6.3 આયોજીત યોજનાઓ વાર્ષિક અંદાજો વર્ષ : ૨૦૧૩-૨૦૧૪.
- 6.4 બીન આયોજીત યોજનાઓ વાર્ષિક અંદાજો વર્ષ : ૨૦૧૩-૨૦૧૪.
- 6.5 આણંદ કૃષિ યુનિવર્સિટીના સને ૨૦૦૮-૨૦૧૦ ના વાર્ષિક હિસાબો મંજૂર કરવા અંગે. (તા.૧.૪.૨૦૦૮ થી તા.૩૧.૩.૨૦૧૦).
- 6.6 Discontinuation of plan scheme "Post Graduate Diploma in Dairy & Food Quality Assurance" (B.H. 10951-03)
- 6.7 નવરાત્રી ગરબા મહોત્સવ-૨૦૧૨ માટે વડોદરા મોડેલ ફાર્મના મેદાનનો ઉપયોગ કરવા બાબત
- 6.8 Agenda with the permission of the Chairman
- 6.8 (1) કેન્દ્રીય મીઠાજળ જીવપાલન (મત્સ્ય) અનુસંધાન સંસ્થા ભૂવનેશ્વર ધ્વારા યુનિવર્સિટી સાથે સ્થપાયેલ "ક્ષેત્રીય સંશોધન કેન્દ્ર" ની પ્રવૃત્તિઓના વિસ્તાર માટે યુનિવર્સિટી કેન્દ્ર, આણંદ ખાતે જમીન ફાળવવા બાબત.
- 6.8 (2) Implementation of Research Scheme / Projects sanctioned under RKVY.
- 6.8 (3) કન્સ્ટ્રક્શન ઓફ ટીસ્યુક્લ્ચર લેબોરેટરી અન્ડર એનએચએમ એટ એ.એ.યુ., આણંદ
- 6.8 (4) રાષ્ટ્રીય કૃષિ વિકાસ યોજના અંતર્ગત નવા ઈન્ફ્રાસ્ટ્રક્ચરના બાંધકામની વહીવટી મંજૂરી આપવા બાબત.

- 6.8 (5) આણંદ કૃષિ યુનિવર્સિટીના સને ૨૦૧૧-૧૨ના વાર્ષિક હિસાબો મંજૂર કરવા અંગે.
- 6.8 (6) શ્રી વી.એસ.કુંપાવત, જુનિયર ટેકનીકલ આસીસ્ટન્ટ (એગ્રી. સુપરવાઈઝર) ની અસાધારણ રજાઓ મંજૂર કરવા બાબત.
- 6.8 (7) આણંદ કૃષિ યુનિવર્સિટીમાં ગૃહપતિ (Rector) /મદદનીશ ગૃહપતિ (Assistant Rector)ના માનદ્ વેતનમાં વધારો કરવા બાબત.

6 (A) Special meeting of the Board of Management held on 24-01-2013

- 1 Confirmation of the Minutes of the 6th Special meeting of Board of Management held on 12-10-2012.
- 2 Report of the action taken on the minutes of 6th Special meeting of the Board of Management held on 12-10-2012.
- 3 Confirmation of the Minutes of the 15th Circulation meeting of Board of Management held on 03-01-2013.
- 4 Report of the action taken on the minutes of 15th Circulation meeting of the Board of Management held on 03-01-2013.
- 5 ભરતી પ્રક્રિયાની સમીક્ષા.
- 6 જે ભરતી સંદર્ભે બોર્ડ ઓફ મેનેજમેન્ટની મંજૂરીની જરૂરી હોય તેવા વ્યક્તિગત કેસો.
- 7 આયોજીત યોજનાઓના સુધારેલ અંદાજો વર્ષ: ૨૦૧૨-૨૦૧૩.
- 8 આયોજીત યોજનાઓના અંદાજપત્ર વર્ષ: ૨૦૧૩-૨૦૧૪માં નવા કાર્યક્રમો સરકારશ્રીને દરખાસ્ત કરવા બાબત.
- 9 સીડ વિલેજ યોજનાની વર્ષ ૨૦૧૩-૧૪ની દરખાસ્ત બાબત.
- 10 મદદનીશ પ્રાધ્યાપક અને તેની સમકક્ષ જગ્યાના ભરતી નિયમો અંગે.
- 11 Agenda with the permission of the Chairman.

7th Special meeting of the Board of Management held on 16-02-2013

- 7.1 Confirmation of the Minutes of the Special meeting of Board of Management held on 24-01-2013.
- 7.2 Report of the action taken on the minutes of Special meeting of the Board of Management held on 24-01-2013.
- 7.3 Approval of list of eligible candidates for award of degrees at the Ninth Annual Convocation.
- 7.4 આણંદ કૃષિ યુનિવર્સિટીના સ્નાતક કક્ષાના વિદ્યાર્થીઓને સને ૨૦૧૧-૨૦૧૨ના વર્ષ માટે "કુલપતિ સુવર્ણચંદ્રક" મંજૂર કરવા બાબત.
- 7.5 આણંદ કૃષિ યુનિવર્સિટીના અનુસ્નાતક કક્ષાના વિદ્યાર્થીઓને સને ૨૦૧૧-૨૦૧૨ના વર્ષ માટે "કુલાધિપતિ સુવર્ણચંદ્રક" મંજૂર કરવા બાબત.
- 7.6 દાતાઓશ્રીઓના દાનના વ્યાજમાંથી સુવર્ણચંદ્રકો, ચંદ્રકો અને રોકડ ઈનામો મંજૂર કરવા બાબત.
- 7.7 Approval of GoG project on "Setting up Incubation Centre-cum-Center of Excellence in Food Processing at AAU, Anand."
- 7.8 Annual Report of Anand Agricultural University for the year 2010-2011.
- 7.9 મદદનીશ પ્રાધ્યાપક અને તેની સમકક્ષ જગ્યાના ભરતી નિયમો અંગે.
- 7.10 ડૉ. પી.સી.પટેલ, માજી પ્રોગ્રામ કોઓર્ડીનેટરની સામેની ખાતાકીય તપાસ અંતે બરતરફની શિક્ષા કરવા બાબતે
- 7.11 શ્રી એ.કે.વાટલીયા, માજી જૂનિયર કલાર્કની સામેની ખાતાકીય તપાસ અંતે બરતરફની શિક્ષા કરવા બાબતે
- 7.12 બી.એ.સી.એ. એલ્યુમની એસોશીએશન ધ્વારા સંસ્થાના આદરણીયકોની પ્રતિમાઓ મૂકવા માટે યુનિવર્સિટી ભવન પાસેની જગ્યા ફાળવવા બાબત.
- 7.13 Agenda with the permission of the Chairman.
- 7.13(1) To revise remuneration charges for U.G. Examinations of Veterinary Science & Animal Husbandry / Dairy Science Faculties.

7.13(2) આણંદ કૃષિ યુનિવર્સિટી, ઈન્ટરનેશનલ હોસ્ટેલ ફીનું ધોરણ નક્કી કરવા બાબત.

7.13(3) કૃષિ વિદ્યાશાખામાં સ્નાતક કક્ષાએ દાતાશ્રીના જુદા જુદા વિષયોમાં સુવર્ણચંદ્રકો/ચંદ્રકો/રોકડ ઈનામ એનાયત કરવાના વિનિયમોમાં સુધારા વધારા/ફેરફાર કરવા બાબત.

Academic Council

Academic Council has been established under Section 21 of GAU Act. Academic Council is responsible for maintenance of standard of teaching and examinations in the University by controlling and regulating the quality of teaching, education and examinations in the university.

During the year under report, Dr. A. M. Shekh, Vice Chancellor was the Chairman while Dr. P.R.Vaishnav, Registrar acted as Member Secretary of the Academic Council. The list of members of the Academic Council is given in *Appendix -2*.

During the year under report, three meetings of Academic Council were held to consider various issues pertaining to improvement of education, course curricula, course credits and recruitment rules for teachers and such other items. Besides making recommendations to the Board of Management as mentioned above, the Academic Council also took following important decisions.

30th Meeting of Academic Council held on 28-05-2012

- 30.1 Confirmation of the Minutes of 29th Meeting of Academic Council held on 03-02-2012.
- 30.2 Report of the Action Taken on the Minutes of 29th Meeting of the Academic Council held on 03-02-2012.

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| <p>30.3 Approval of a Format for Transcript as per old VCI B.V.Sc. & A.H. regulations.</p> <p>30.4 To draw Question Paper and evaluate Answer Books of Under Graduate Semester End Examinations by Internal Examiners, instead of External Examiners.</p> <p>30.5 To shift courses "Dairy Plant Operations and Management-I (DP-3101: Experiential Learning)" and "Dairy Plant Operations and Management-II (DP-3202: Experiential Learning)" of B.Tech. (D.T.) from Third Year (i.e. Fifth and Sixth semesters) to Fourth Year (Seventh and Eighth semesters).</p> <p>30.6 Approval of course curriculum (Fourth Year) and syllabus (Fourth Year) for B.Tech. (AIT) programme under the Faculty of Agricultural Information Technology.</p> <p>30.7 તમામ વિદ્યાશાખાઓમાં આગામી સત્રાંત પરીક્ષાથી Make-up પરીક્ષા રદ કરવા બાબત.</p> <p>30.8 બી.એસસી. (ઓનર્સ) કૃષિના સાતમા સેમેસ્ટરના Experiential Learning કોર્સને પ્રશ્નાદવર્તી મંજૂર કરવા અંગે.</p> <p>30.9 "SHRI SHAILESHBHAI RAMESHBHAI PATEL, SHAKTI GROUP, SARSA GOLD MEDAL" ના નામનો સુવર્ણચંદ્રક સ્નાતક કક્ષાએ વેટરનરી વિદ્યાશાખાના "પેથોલોજી" વિષયના અભ્યાસક્રમમાં છઠ્ઠા સેમેસ્ટરના અંતે સૌથી વધુ ગુણ (C.G.P.A.) મેળવતા વિદ્યાર્થીને એનાયત કરવા અને તેના વિનિયમો મંજૂર કરવા બાબત.</p> <p>30.10 ડિપ્લોમામાંથી ડીગ્રી અભ્યાસક્રમોના વિદ્યાર્થીઓની માર્કશીટ તૈયાર કરવા બાબત.</p> <p>30.11 B.V.Sc. & A.H. વિદ્યાશાખામાં VCIના નવા નિયમોના નિયમ:૧૩(૫) મુજબ પરીક્ષામાં નાપાસ થનાર વિદ્યાર્થીઓને બધા વિષયોને બદલે VCIના જૂના નિયમો મુજબ નાપાસ થયેલ વિષયની જ પરીક્ષા આપવા અંગે.</p> | <p>30.12 વાર્ષિક વિકાસ કાર્યક્રમ ૨૦૧૨-૧૩ માં મંજૂર થયેલ કૃષિ શિક્ષણ (નોર્મલ અને ટ્રાયબલ)ની નવી યોજનાઓના અમલ કરવા બાબત.</p> <p>30.13 Revision of remuneration rates for Thesis evaluation/ Viva-voce.</p> <p>30.14 Disparity in credit load for certain subjects.</p> <p>30.15 In-service PG admission.</p> <p>30.16 Ph. D. study in the subjects not offered by the University.</p> <p>30.17 Consideration of non-teaching employees for in-service study.</p> <p>30.18 Increase in the amount of Surety Bond for in-service students.</p> <p>30.19 Agenda with the permission of the Chairman.</p> <p>30.19(1) Rules & Credit load for Educational Tour for B.Tech. (FPT).</p> <p>30.19(2) Approval of Semester-wise redistribution of the courses for B.Tech. (FPT).</p> <p>30.19(3) Course Curriculum & Syllabus for U. G. programme in Horticulture.</p> <p>30.19(4) Reduction in period of study tour for students of B.Tech. (Agril. Engg.).</p> <p>30.19(5) Approval of Course Syllabus for PG program in the Faculty of Agricultural Engineering & Technology.</p> <p>30.19(6) વોકેશનલ કોર્સેસ ઓન કૃષિ ઈજનેરી અને ટેકનોલોજી અભ્યાસક્રમ અને નિયમો મંજૂર કરવા બાબત.</p> |
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- 31st Meeting of Academic Council held on 08-10-2012
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| <p>31.1</p> | <p>Confirmation of the Minutes of 30th Meeting of Academic Council held on 28-05-2012.</p> |
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31.2	Report of the Action Taken on the Minutes of 30 th Meeting of the Academic Council held on 28-05-2012.	32.3	Approval of list of eligible candidates for award of degrees at the Ninth Annual Convocation.
31.3	Raising remuneration charges for UG Examinations of Veterinary Faculty.	32.4	આણંદ કૃષિ યુનિવર્સિટીના સ્નાતક કક્ષાના વિદ્યાર્થીઓને સને ૨૦૧૧-૨૦૧૨ના વર્ષ માટે "કુલપતિ સુવર્ણચંદ્રક" મંજૂર કરવા બાબત.
31.4	Establishment of Department of Poultry Science.	32.5	આણંદ કૃષિ યુનિવર્સિટીના અનુસ્નાતક કક્ષાના વિદ્યાર્થીઓને સને ૨૦૧૧-૨૦૧૨ના વર્ષ માટે "કુલાધિપતિ સુવર્ણચંદ્રક" મંજૂર કરવા બાબત.
31.5	મરઘાં ઉછેર તાલીમના સૂચિપત્ર, અરજીપત્રક તથા તેને લગતાં અન્ય સંલગ્ન સુધારા મંજૂર કરવા બાબત.	32.6	દાતાઓશ્રીઓના દાનના વ્યાજમાંથી સુવર્ણચંદ્રકો, ચંદ્રકો અને રોકડ ઈનામો મંજૂર કરવા બાબત.
31.6	બી.એસસી. (ઓનર્સ) એગ્રી.માં અભ્યાસ કરતી વિદ્યાર્થીની કુ. નિરજા શશીધરન (૨જી નં. ૧-૪૫૯-૨૦૦૯) ને સાતમા સેમેસ્ટરમાં રજીસ્ટ્રેશન કરવાની મંજૂરી બાબત.	32.7	આણંદ કૃષિ યુનિવર્સિટી, ઈન્ટરનેશનલ હોસ્ટેલ ફીનું ધોરણ નક્કી કરવા બાબત.
31.7	To include English language course in 1 st Semester B.Tech. (D.T.) class.	32.8	To include Mathematics subject in 1 st Semester B.Tech. (D.T.) class.
31.8	ગુજરાતની કૃષિ યુનિવર્સિટીઓમાં અભ્યાસક્રમોનો પોલીટેકનીક / સ્નાતક / અનુસ્નાતક કક્ષાનાં વર્ષ ૨૦૧૨-૧૩ની કેન્દ્રિય પ્રવેશની કામગીરી આણંદ કૃષિ યુનિવર્સિટીનો અહેવાલ.	32.9	Redistribution of the B.Tech. (D.T.) courses.
31.9	Agenda with the permission of the Chairman.	32.10	Revised Academic Regulations for the students registered in the Academic Year 2012-13 and onward.
31.9 (1)	બી.એસસી. (ઓનર્સ) એગ્રી.ના અભ્યાસક્રમમાં એક્સપેરીએન્સીયલ લર્નિંગ વિષયવાર કોર્સીસના નં બર બાબત.	32.11	Introduction of elective (3 rd Semester) course of "Strategic Management-ABM 538 (2+0)".
31.9 (2)	આણંદ કૃષિ યુનિવર્સિટીમાં ગૃહપતિ (Rector) / મદદનીશ ગૃહપતિ (Assistant Rector)ના માનદ વેતનમાં વધારો કરવા બાબત.	32.12	Changes in Syllabus of Business Laws and Ethics (ABM 506).
		32.13	Relaxation for in-service Ph.D. admission.
		32.14	AAU Fellowship for PG Programme.
		32.15	Eligibility for award of medals/ prizes to PG students.
		32.16	P.G. student intake capacity for 2013-14.
		32.17	Approval of Post Graduate Programme M.Tech. (AIT) under the Faculty of Agricultural Information Technology.
		32.18	Approval of B.Tech. (AIT) Course Curriculum and Syllabus.
		32.19	Admission of B.Tech. (AIT) students in various M.Sc. programme.

32nd Meeting of Academic Council held on 14-02-2013

32.1	Confirmation of the Minutes of 31 st Meeting of Academic Council held on 08-10-2012.
32.2	Report of the Action Taken on the Minutes of 31 st Meeting of the Academic Council held on 08-10-2012.

- 32.20 Agenda with the permission of the Chairman
- 32.20 (1) કૃષિ વિદ્યાશાખામાં સ્નાતક કક્ષાએ દાતાશ્રીના જુદા જુદા વિષયોમાં સુવર્ણચંદ્રકો/ચંદ્રકો/રોકડ ઈનામ એનાયત કરવાના વિનયમોમાં સુધારા વધારા/ફેરફાર કરવા બાબત.
- 32.20 (2) પોલીટેકનીક ઈન હોર્ટીકલ્ચર, વરોદરા ખાતે અભ્યાસક્રમમાં બે વિષયોનો પશ્ચાતવર્તી અસરથી અમલ કરવા બાબત.

During the year under report two meetings of Post Graduate Board of Studies were also held under the Chairmanship of Dr. A.M. Shekh, Vice Chancellor.

10th Meeting of the Board of Studies of Post-graduate Studies held on 17-05-2012

- 10.1 Confirmation of the minutes of 9th Meeting of the Board of Studies of Post-graduate Studies held on 13-06-2011.
- 10.2 Action taken on the minutes of 9th Meeting of the Board of Studies of Post-graduate Studies held on 13-06-2011.
- 10.3 Disparity in credit load for certain subjects.
- 10.4 Submission of Campus forms.
- 10.5 Allowing in-service Ph.D. employees to teach Master degree courses.
- 10.6 In-service Ph.D. admission.
- 10.7 Regarding PG Research work and its consideration in AGRESCO.
- 10.8 Revision of remuneration rates for Thesis evaluation/Viva-voce.
- 10.9 Approval of Academic Regulations and Course Syllabus for P. G. programme in the Faculty of Agricultural Engineering.

- 10.10 Agenda with the permission of the chairman:
- 10.10 (1) In-service PG admission
- 10.10 (2) Ph. D. study in the subjects not offered by the University
- 10.10 (3) Consideration of non-teaching employees for in-service study
- 10.10 (4) Increase in the amount of Surety Bond for in-service students

11th Meeting of the Board of Studies of Post-graduate Studies held on 24-12-2012

- 11.1 Confirmation of the minutes of 10th Meeting of the Board of Studies of Post-graduate Studies held on 17-05-2012.
- 11.2 Action taken on the minutes of 10th Meeting of the Board of Studies of Post-graduate Studies held on 17-05-2012.
- 11.3 Introduction of elective (3rd Semester) course of "Strategic Management-ABM 538 (2+0)"
- 11.4 Dropping of non-credit course from MBA-IAB Course Curriculum.
- 11.5 Changes in Syllabus of Business Laws and Ethics (ABM 506)
- 11.6 P.G. student intake capacity for 2013-14
- 11.7 Initiation of AAU Fellowship for PG Programme
- 11.8 Increasing minimum OGPA requirement for Ph.D. admission
- 11.9 Relaxation of probation clearance for in-service Ph.D. admission
- 11.10 Eligibility for award of medals/prizes to PG students
- 11.11 Admission for M.Tech./M.Sc. in different disciplines of Dairy Science Faculty.

- 11.12 Initiation of PG programme in the discipline of Agricultural Process Engineering under the Faculty of Agricultural Engineering & Technology.
- 11.13 Agenda with the permission of the chairman
- 11.13(1) Introduction of new course in P.G. programme under Faculty of Agriculture.
- 11.13(2) Inclusion of a course on Pesticide Residue in P.G. Syllabus.
- 11.13(3) Approval of Post Graduate Programme under the Faculty of Agricultural Information Technology.
- 11.13(4) Admission of B.Tech. (AIT) graduates in various M.Sc. (Agriculture) Programmes.

Faculties

Faculties provided in the Section 23 of the Act are the authorities within the University. The following faculties in the University are constituted:

- Faculty of Post Graduate Studies
- Faculty of Agriculture
- Faculty of Dairy Science
- Faculty of Veterinary Science & Animal Husbandry
- Faculty of Food Processing Technology & Bio-Energy
- Faculty of Agricultural Engineering
- Faculty of Agricultural Information Technology

Officers of the University and the

constitution of faculty is given in *Appendix-3 & 4*, respectively.

Faculties consider all administrative and academic matters pertaining to their respective pervIEWS and make recommendations to the Academic Council. The faculty either initiates the matters on its own or receives recommendations from the Board of Studies of group of subjects of the respective faculty.

Board of Studies

As provided in Section 24 of the GAU Act 2004, Anand Agricultural University has constituted the Board of Studies for different groups of subjects.

Sr. No.	Name of Board of Studies
Faculty of Agriculture	
1	Board of Studies of the subject of Crop Production
2	Board of Studies of the subject of Plant Science
3	Board of Studies of the subject of Plant Protection
4	Board of Studies of the Basic and Social Science subjects
Faculty of Dairy	
1	Board of Studies of the subject of Dairy Technology
2	Board of Studies of Basic subjects of Dairy Science Faculty
3	Board of Studies of Dairy Business Management
Faculty of Veterinary	
1	Board of Studies of the Basic Subjects of Veterinary Faculty
2	Board of Studies of the Pre-clinical subjects of Veterinary Faculty
3	Board of Studies of the Clinical subjects of Veterinary Faculty.
4	Board of Studies of the subjects of Animal Production

Food of Processing Technology and Bio-Energy	
1	Board of Studies of subjects of Post Harvest Engineering and Technology.
2	Board of Studies of subjects of Food Science, Nutrition, Food Processing and Business Management.
3	Board of Studies of subjects of Agricultural, Horticultural, Livestock and Aqua-cultural Produce Processing and Food Engineering, Agricultural Engineering & Technology.
4	Board of Studies of subjects of Bio-Energy.
Agricultural Information Technology	
1	Board of Studies of subjects of Agricultural Information Technology.
Faculty of International Agri-Business Management	
1	Board of Studies of subject of Agri-Business Economic & Finance.
2	Board of Studies of subject of Marketing Management & Production Management.
3	Board of Studies of subject of HRD & Personnel Management.
4	Board of Studies of subject of Communication IT & Project Management.

Faculty of Agril. Engineering and Technology	
1	Board of Studies of subject of Soil & Water Conservation Engineering
2	Board of Studies of subject of Farm Machinery & Power
3	Board of Studies of subject of Agril. Process & Engineering
4	Board of Studies of subject of Renewable Energy
Faculty of Post-Graduate Studies	
1	Board of Studies of Faculty of Post Graduate Studies.

The Board of Studies of all faculties specially considered the following five items:

- 1 Scrutiny of application for recognition of teachers as Ph.D. guides.
- 2 List of experts in the subjects dealt with by that Board of Studies.
- 3 List of examiners from the field of subjects of that Board of Studies.
- 4 Research Problems to be given to the students for M.Sc. /Ph.D. theses.
- 5 Evaluation of examination results of all semesters and their analysis.

The Constitution of Board of studies is given in *Appendix-5*.



College of Agricultural Engineering & Technology, AAU, Godhra



College of Food Processing Technology & Bio-Energy
AAU, Anand



International Agri-Business Management Institute
AAU, Anand



College of Agricultural Information Technology
AAU, Anand

Chapter 3

The Vice Chancellor *Ripples in the Ocean*

The Vice Chancellor is the principal executive and academic officer of the University. He is ex-officio Chairman of the Board of Management and Academic Council. The Vice Chancellor visualizes the direction of growth and development, exercises general control over the affairs of the University and is responsible for the maintenance of the discipline in the university. He gives effect to the order from the Board of Management regarding appointment, dismissal, suspension of the officers, teachers and employees of the University.

Dr. A.M. Shekh, a renowned Agro-Meteorologist took over as the second Vice Chancellor on 15-04-2011 and continued to be Vice Chancellor of the University during the year under report. Dr. A.M. Shekh has taken the University to new heights.

As the second Vice Chancellor of the Anand Agricultural University, Dr. A.M. Shekh executed the authorities like Academic Council, Faculties, Board of Studies of different groups of subjects, Research Council, Extension Council, ZREAC, Agresco Sub-Committees, SAC of KVKS and made them effectively functional.

The Government of Gujarat has assigned him a special responsibilities as Nodal Officer of all the four agricultural Universities of Gujarat for administrative and academic matters.

The Major contributions of Dr. A.M. Shekh as Vice Chancellor are as follows:

- Organized 8th Krushi Mahotsav of one month duration in all six districts of Middle Gujarat and more than 1,25,000 farmers were guided through programme. Mega event of Hon. Chief Minister was organized at Petlad during 12-14, May 2012 in which more than 70, 000 farmers were benefited through exhibition of different agricultural technology.
- Establishment of Pashu Vigyan Kendra and Dairy Vigyan Kendra, first of its kind in Gujarat and India.
- MoU between AAU and CIFA for establishment of regional research centre for aqua-cultural activities.
- Signed five MoUs for collaborative research with foreign Universities

MoUs signed through BPD Unit in FY 2012-13

Sr. No.	Signed with	Purpose of MoU	Date
1	Panchamrut Dairy, Godhara	Consultancy for standardizing the mechanical method of production of different varieties of Khoa with traditional kadai taste.	30.08.12
2	Orchem Industries (Secundrabad, Hyderabad)	Licensing of Date Palm tissue culture technology .	09.01.13
3	Centre for Innovation, Incubation and Entrepreneurship (CIIE)-IIM, Ahmedabad	To promote business incubation in their respective areas through mutual collaboration	09.01.13
4	Entrepreneurship Development Institute (EDI), Gandhinagar	To promote Entrepreneurship through mutual collaboration	09.01.13
5	Dr Baboo's Food Science and Biotechnology Pvt. Ltd., (Thiruvananthapuram, Kerala)	Licensing of Probiotic Lactic Culture technology	27.02.13

- Establishment of educational museum.
- C-DAP of middle Gujarat were prepared.
- Seed village production programme conducted.
- Decision Support System Software on Soil Health Card Project covering 10 lakh farmers of 18,000 villages of Gujarat through internet.
- Provided dynamic leadership to AAU Scientific Community having 7 colleges with different faculties, 5 polytechnics, 24 research stations, 16 extension centres including three KVKs under University and three KVKs with NGO's.

The leadership role played by Dr. A.M. Shekh has made excellent impact. The efforts have resulted in following ways :

- Gujarat Farmers are now aware that the health of their soil and resultant effect depend upon balanced use of inputs.
- Teaching and Agricultural Education has been given impetus in the State as evident

from large numbers of applications received for admission in all faculties and higher percentage of cut off marks.

- Streamlined the Research and Extension activities.
- Streamlined admission and examination, reducing delay and made parity with national academic schedule.

National and State level Representations by the Vice Chancellor

Dr. A.M. Shekh has been nominated / appointed on various State Level and National Level Committees by the competent authorities viz.

- Gujarat State Biotechnology Mission (GSBTM)
- Invitee Member – Gujarat Agro Industries Corporation, Ahmedabad
- Member General Council of MANAGE, Hyderabad
- Member - University Granth Nirman Board, Ahmedabad

- Member- Consortium of Planning & Monitoring Board, Sardar Patel University, VV Nagar
- Board Member – Gir Foundation, Gandhinagar
- Member Advisory Board of Advances in Life Science Journal
- Members in Research Council of Maharana Pratap University of Agriculture & Technology, Udaipur
- Member – Technical Committee, National Innovation Foundation, IIM, Ahmedabad

Activities as Nodal Officer

Administrative Matters

As a Nodal Officer of the four agricultural

Universities of Gujarat, Dr. A.M. Shekh has vigorously pursued various pending problems of the staff and solved problems related to pay commission, transfer, promotion etc.

Academic and Examination Matters

As Nodal Officer for Academic and Examination matters, Dr.A.M. Shekh successfully executed tedious and tiresome exercise of central admission at Polytechnic, UG and PG levels for four SAUs of Gujarat. He convened meetings of Registrars and Deans of the four SAUs and conducted examinations and paper evaluation exercise for centralized admissions. The details of the students admitted during 2012-13 are given below:

UNDER GRADUATE LEVEL

Degree	Number of Application received for admission	Actual admission given in SAU's			
		ANAND	JUNAGADH	NAVSARI	SARDAR KRUSHINAGAR
B.Sc. (Agri.)	8780	185	119	75	158
B.V.Sc. & A.H,		82	34	60	64
B.Tech. (DT)		61	-	-	-
B.Tech. (Agri. Engg)		41	91	-	-
B.Tec. (AIT)		30	-	-	-
B.Tech. (FPT)		33	-	-	-
B.Sc. (Hons.) Horti.		42	50	54	33
B.Tech. (Dairy & Food Tech.)		-	-	-	51
B.Tech. (RE & EE)		-	-	-	35
B.Sc. (Hons) Home Sci. & Nutrition		-	-	-	46
B.Sc. (Agril Biotech.)		-	-	49	-
B.Sc. (Biotech.)		-	-	-	26
B.Sc. (Microbiology)		-	-	-	25
B.Sc. (Biochemistry)		-	-	-	21
B.Sc. (Food Quality Assurance)		-	-	-	24
B.Sc. (Hons.) Forestry		-	-	39	-
B.F. Sc.		-	51	-	-

POST GRADUATE LEVEL

Degree	Number of Application received for admission	Actual admission given in SAU's			
		ANAND	JUNAGADH	NAVSARI	SARDAR KRUSHINAGAR
M.V.Sc.	792	23	03	16	24
Ph.D.(Vet.)		07	00	01	03
M.Sc.(Agri)		73	46	52	31
Ph.D.(Agri)		28	21	34	17
M.Sc.(DT)/M.Tech (DT)		17	-	-	-
Ph.D.(DT)		03	-	-	-
M.Tech(FPT)		13	-	-	-
IABM		10	04	-	-
M.Sc.(Horti)		13	09	31	15
Ph.D.(Horti)		02	-	10	02
M.Sc.(Forestry)		-	-	05	-
Ph.D.(Forestry)		-	-	-	-
M.Tech (Agri.Engg)		06	15	-	-
M.F.Sc.		-	-	-	-
Ph.D.		-	-	-	-

University Administration

Dr. A.M.Shekh has provided direction and pace to the university through participative management and committee approaches. During the year under report, nine meetings of different authorities (Academic Council-3, Board of Management-4, Board of Post-Graduate Studies-2), have been organized under his Chairmanship, wherein he actively participated/ guided and motivated the personnel of the university and setup new standards in all spheres of activities and programmes. Due to his efforts the academic sessions are regularized. Ninth annual convocation was organized.

Under the dynamic leadership of Dr. A.M. Shekh as Vice Chancellor, 44 new research projects sponsored by ICAR/GOG/NHM/SSNNL/GOI and 6 projects under RKVY with total financial outlay of Rs.2812.50 lakh were

sanctioned during the year.

Seminars and Meetings

During the year under report, Dr. A.M. Shekh attended various seminars and meetings and presented papers. The details are as under:

- Saket Project Food Security Seminar at Ahmedabad on 13.04.2012.
- National level Convention on Agri. Business Technology Steering Committee at Index B on 18.04.2012.
- Programme organised by Varsha Vigyan Kendra at Junagadh Agricultural University, Junagadh on 07.06.2012.
- Management Committee Meeting of EEL, Anand at Bhopal on 21.06.2012.
- State Holders Consultation Meeting for Formulation of Science & Technology

- and Innovation Policy at New Delhi on 09.07.2012.
- General Annual Meeting of University Granth Nirman Board at Gandhinagar on 16.07.2012.
 - Meeting on Seed Productin in Agriculture Crop at New Delhi on 24-25 July, 2012.
 - Knowledge Meet Meeting at New Delhi on 21.08.2012.
 - NAIP -III Advisory Meeting at SDAU, SK Nagar on 17.07.2012.
 - National Convention Agri. Business Meeting at Gandhinagar on 03-04 September, 2012.
 - Meteorological Workshop at ISRO, Ahmedbad on 09-10-2012.
 - Second Consultation Meeting of NAARM, QRT at Mumbai on 18.10.2012.
 - National Level Workshop on Taluka Level (Microlevel) Action Plan for Climate Resilent & Sustainable Agriculture at New Delhi on 01-11-2012.
 - Technical Advisory Meeting of GSBTM at Gandhinagar on 06-11-2012.
 - Third People's Education Congress Meeting at Gujarat Vidyapith, Ahmedabad on 19.11.2012.
 - International Round Table for Academic Institute at Mahatma Mandir, Gandhinagar on 9-10 January, 2013.
 - National Seminar on Tropical & Sub Tropical Fruits at Navsari Agricultural University, Navsari on 11th January, 2013.
 - Vibrant Gujarat Summit organised by Government of Gujarat, Gandhinagar during 12-13 January, 2013.
 - National Seminar on prospects of Live Stock & Dairying in India under changing global Economic Era. organised by BACA Economics Department, AAU, Anand on 17-18 January, 2013.
 - Farmers'Day on 19-01-2013.
 - Conerence & Symposium Crop Diseases Management at Navsari Agriculural University, Navsari on 21st January, 2013.
 - National Conference Integration of Medicinal & Airomatic Plants for Rural Development prosperity organised by M&AP, Boriavi on 22-23 January, 2013.
 - Times Social Impact Awards at New Delhi on 28-01-2013.
 - XI Agri. Science Congress Agril. Education Shaping India Future at Orissa University of Agri. & Tech. Bhubaneshwar.during 7-9 February, 2013
 - VC Conference at New Delhi organised by ICAR & Mahendra Samrudhi Award at New Delhi during 19-21 February 2013
 - National Seminar on Dairy Industry on Dairy Science College, AAU, Anand on 1-2 March, 2013
 - National Seminar on Advances in Animal Health & Application of Biotechnology at Veterinary Science College, AAU, Anand on 09-03-2013.



Institute of Distance Education, AAU, Anand



Agriculture Polytechnic, AAU, Vaso



Agriculture Engineering Polytechnic, AAU, Dahod

Chapter 4

Human Resource (HR) Activities

Human Resource Development at Anand Agricultural University (AAU) has a top priority. The changing global scenario demands traditional research be sharpened based on market driven economy. Therefore, AAU scientists and teachers are encouraged to update their knowledge and improve their skills. Need of the day is the search for newer technologies with cutting edge research so that new generation young farmers and women are benefitted.

Agricultural Universities are mainly functioning on three aspects i.e. teaching, research and extension. Teaching imparts knowledge, research provides newer avenues and wisdom, which ultimately leads to strengthening of extension activities in agriculture sector. Manpower at University is broadly divided into two parts i.e. technical and non-technical. Technical manpower includes staff involved in teaching, research and extension activities. They are positioned as Professor, Associate Professor, Assistant Professor, Research Scientist, Associate Research Scientist, Assistant Research Scientist, Extension Educationist, Associate Extension Educationist, Assistant Extension Educationist and so on. Non-Technical personnel are concerned with administrative and allied activities.

Anand Agricultural University was formed from erstwhile Gujarat Agricultural University during May 2004 with three colleges for Under Graduate & Post Graduate programme and four Diploma schools for imparting agricultural and allied science education. Technical personnel included the staff at the main campus as well as 16 research stations, who carried different activities like crop improvement, crop protection, crop production, live stock management & improvement practices etc. at their domain of work. Our research has revealed excellence not only in agriculture but also in other allied sectors like dairy science, veterinary science and animal husbandry, agricultural engineering, food processing technology etc.

Presently, Anand Agricultural University has total 2079 sanctioned posts, out of which 1362 are filled and remaining 717 posts are vacant.

AAU organizes various programmes and activities to expand frontiers of knowledge of its scientists and the staff.

During the year under report following programmes; conference / trainings / workshops / seminars / winter schools / group meetings were organized by the University scientists.

Chapter-4 : Human Resource (HR) Activities

Conferences/Seminars

- Department of Vet. Medicine has organized Zookeepers National Seminar on 14th December, 2012 sponsored by CZA ,New Delhi.
- Two days National Seminar on “Prospects of Livestock and Dairy in India under changing Global Economic Era” was organized by the WTO Cell, Department of Agricultural Economics and Department of Animal Science, BACA, AAU, Anand on 17th and 18th January, 2013.
- Seminar on “Innovative Approaches in Dairy Industry” was organized by Faculty of Dairy Science on 1st, March 2013.
- 10th Alumni Convention was organized by Faculty of Dairy Science on 2nd March 2013.
- Department of Animal Biotechnology organized National Seminar on “Bioinformatic Challenges in Cutting Edge Metagenomic Research” on 7th March, 2013.
- Department of Vet. Medicine organized 1st Annual Convention & National Seminar (ASCAD) on “Advances in Animal Health & Applications of Biotechnology” on 9th March, 2013.
- Department of Veterinary Gynaecology & Obstetrics organized a National Seminar on “Advances in Animal Health and Application of Biotechnology and 1st Annual Convention of the Society for Veterinary Sciences & Biotechnology” on 9th March, 2013.

Trainings/Winter/Summer Schools

- Department of Soil and Water Engineering, CAET, AAU, Godhra organized three days field training program on Auto Level, Total Station and DGPS during 30th July to 1st August 2012. Faculties/SRAs of the institute attended the training program.
- Department of Soil and Water Engineering, CAET, AAU, Godhra organized six days field-cum-lab training program during 27th August to 1st September 2012 on various GIS softwares such as Erdas Imagine, Leica Photogrammetry, GeoMedia etc.
- Two training programmes on ‘Leadership Development’ were organized during 29-31st August and 5-7th September 2012 at CAET, AAU, Godhra.
- STTP on Food Processing Entrepreneurship was held on 13-14 September, 2012 at College of FPT & BE, AAU, Anand.
- Three days training program on Pro-E Software Design was organized during 24th to 26th September, 2012 in CAD- CAM Lab CAET, AAU, Godhra.
- One day training programme on Quality Seed Production in Paddy was organized by RRS, AAU, Anand on 27th September 2012. Total 95 progressive farmers participated in the training programme.
- Department of Animal Biotechnology organized short course on “Metagenomics: Role of Next Generation sequencing and Bioinformatics” during 16-24 October, 2012.



Chapter-4 : Human Resource (HR) Activities

- Poultry complex of AAU, Anand organized Refresher Training Course on “Recent Advances in Poultry Breeding, Health, Farm and Hatchery Management” under ASCAD for Gujarat State Veterinarians during 3rd December, 2012 to 5th January 2013.
 - Two months training programmes on “Seed Production Technology for different crops” were organized by Department of Ag. Botany, BACA, AAU Anand for farmers from different districts of Gujarat from December 2012 to January 2013.
 - Two ASCAD training programmes on “Gynaecological Aspects including Sonography & AI Techniques” were conducted for State Veterinarians during January and February 2013.
 - Department of Entomology, BACA, AAU. Anand organized field level officers training during 15-17 February 2013 for Coromandel Int. Ltd.
 - Eight days training on “Fungi and insect pest damaging seeds/food grains during storage and their management” for tribal farmers of Panchmahal and Dahod districts was organized by Krushi Vigyan Kendra, Devgadhabaria during the month of March, 2013.
 - Department of Ag. Economics, BACA, AAU. Anand organized two one-day training programmes for farmers in order to create awareness of agricultural export and WTO.
 - Department of Livestock Production and Management organized training for State Veterinary officers on “Recent Advances in Livestock Production” during 7 – 13 January, 2013.
 - Department of Veterinary Microbiology conducted ASCAD Training Programme on “Advances in Diagnostic Microbiology” from 28th January 2013 to 2nd February 2013.
 - Department of Veterinary Microbiology conducted combined ASCAD Training Programme on “Laboratory Techniques in Disease Diagnosis” during 18-23 February, 2013.
- ### Group Meetings
- XXVII Annual Group Meeting, AICRP – National Seed Project (Crops) 2012, was organized by AAU during 14-16 April, 2012.
 - Department of Meteorology organized National Level Workshop On “Micro Level Action Plan at District Level for Climate Resilient Agriculture” during 29-30 June, 2012 at Anand in association with NCCSD, Ahmedabad.
 - Pre-conference Workshop on “Hands on Corneal Suturing and B-scan ocular ultrasonography” was organized by Department of Surgery and Radiology, Veterinary College, Anand on 31st October, 2012.
 - XXXIV Annual Congress of ISVS & International Symposium on “Ruminant Surgery in Polyclinics Co-operative Dairies and Shelters: Perspective 2020” organized by Department of Surgery and Radiology during 1-3 November, 2012.
 - Department of Meteorology organized Zonal FASAL review meeting during 18-19 December, 2012.

Chapter-4 : Human Resource (HR) Activities

- Department of Meteorology organized “Farmers Awareness Programme on Climate Change” in collaboration with ATMA (Kheda) and KVK Dethali during 1-4 January, 2013.
- Department of Vet. Medicine organized Workshop on ‘Trends in Wild life Crime & Investigation’ during 21-22 January, 2013.

Managerial Training during the period 01/04/2012 to 31/03/2013

Sr. No.	Name of Training	Place	Duration period	Total participants
2	Departmental Examination	Anand	02/01/2013 to 05/01/2013	79
1	Right to Information Act-2005	Gandhinagar	12/02/2013	03

Human Resource

The staff position as on 31-03-2013 in the Anand Agricultural University was as under:

Sr. No.	Cadres	Sanctioned post	Filled up Posts	Vacant posts
1	University Officers			
	Vice-Chancellor	1	1	0
	Director of Research	1	1	0
	Registrar	1	0	1
	Director of Extension Education	1	1	0
	Account Officer-cum-Comptroller	1	0	1
	Director (I.T.)	1	0	1
	Total	6	3	3
2	Teaching / Research / Extension:			
	Principal	4	4	0
	Associate Director of Research	2	2	0
	Associate Director of Extension Education	1	1	0
	Professor & its equivalent	73	51	22
	Associate Professor & its equivalent	198	137	61
	Assistant Professor & its equivalent	381	262	119
	Total	659	456	202
3	Administration - Class-I			
	Assistant Registrar	2	1	1
	Administrative-cum-Accounts Officer	1	0	1
	Total	3	1	2
4	Non Technical Class-I			
	Executive Engineer	1	1	0
	Deputy Engineer	1	1	0
	Total	2	2	0

Chapter-4 : Human Resource (HR) Activities

Sr. No.	Cadres	Sanctioned post	Filled up Posts	Vacant posts
5	Administration - Class-II			
	Accounts Officer (Cash)	1	1	0
	Accounts Officer (PF/Cash)	1	0	1
	Assistant Adm. Officer	6	3	3
	Audit Officer	1	0	1
	Dy. Comptroller (Redeployed from SRA)	1	1	0
	Total	10	5	5
6	Adm- Class -III			
	A Office Superintendent	15	10	5
	B Head Clerk	17	13	4
	C Senior Clerk	85	77	8
	D Junior Clerk	145	119	26
	Total	262	219	43
7	Technical Class -III			
	Agril. Officer/S.R.A.(Agri) & its equivalent	89	22	67
	Programme Assistant	9	1	8
	Veterinary Officer & its equivalent	11	1	10
	S.R.A. (Agri. Engg)	12	7	5
	S.R.A. (Dairy)/Dairy Supervisor	16	1	15
	Agril Supervisor & its equivalent	19	6	13
	Agril Asstt. & its equivalent	180	153	27
	Total	336	191	145
8	Non Technical – Class- III			
	Steno Grade – I	3	2	1
	Steno Grade – II	12	7	5
	Steno Grade –III	6	1	5
	Lab Technician & equivalent	49	47	2
	Driver	45	35	10
	Tractor Driver	14	10	4
	Stockman / Live Stock Assistant	5	3	2
	Total	134	105	29
9	Isolated Cadres (Details given below)	69	51	18
10	Class – IV Cadres (Regular)	336	144	192
11	Posts Created as per Supreme Court directives.			
	Class-III (Jr.Clerk/Agril Asstt./Driver/Tractor Driver)	15	12	3
	B Class - IV	247	172	75
	Total	262	184	78
	Grand Total	2079	1362	717

Chapter-4 : Human Resource (HR) Activities

Details of Isolated Cadres (as mentioned at Sr.No.9 above):				
1	Junior Engineer (Civil/Electric)	3	2	1
2	Programmer	3	3	0
3	Library Assistant	1	1	0
4	Senior Technician	2	1	1
5	Instructor (Baking /Science)	3	0	3
6	Junior Instructor	2	0	2
7	Junior Instructress	1	1	0
8	Assistant Instructor	1	1	0
9	Computer Operator	1	1	0
10	Artist/ Photographer	1	1	0
11	Mechanic-cum-Draftsman	1	1	0
12	Junior Research Assistant (Dairy)	1	1	0
13	Senior Wireman	1	0	1
14	Compounder	2	1	1
15	Project Operator	1	0	1
16	X- ray Technician	1	1	0
17	Data Entry cum Disk Librarian	1	1	0
18	Hatchery Supervisor /Chick Sexer	1	0	1
19	Fitter	1	1	0
20	Boiler Attendant	2	1	1
21	Compressor Attendant	2	2	0
22	Junior Mechanic-cum-wiremen	1	1	0
23	Balwadi Teacher	1	1	0
24	Sewing Teacher	1	1	0
25	Teaching Assistant	2	0	2
26	Craft Teacher	1	1	0
27	Bakery Operator	1	1	0
28	Craftsman(Welder,Fitter,Turner,Electrician)	4	4	0
29	Carpenter	2	1	1
30	Blacksmith	2	2	0
31	Junior Wireman	3	1	2
32	Mechanic/Sr. Mechanic/Jr. Mechanic	4	4	0
33	Tracer/Draftsman Tracer	2	2	0
34	Hostel Warden	8	7	1
35	Plumber	1	1	0
36	Foreman Instructor	2	2	0
37	Supervisor Instructor	2	2	0
Total		69	51	18

New Appointments

During the year under report, following posts were filled up by direct recruitment/ promotion under various cadres.

Chapter-4 : Human Resource (HR) Activities

Appointments during the period 01.04.2012 to 31.03.2013

Sr. No.	Cadre	Direct Recruitment/ Promotion	Total
1	Professor	Direct Recruitment	3
2	Associate Professor	Direct Recruitment	28
3	Assistant Professor	Direct Recruitment	53
4	Assistant Registrar Class-I	Promotion	01
5	Administrative Officer Class-II	Promotion	01
6	Agricultural Officer	Direct Recruitment	02
7	Office Superintendent	Promotion	02
8	Head Clerk	Promotion	08
9	Senior Clerk	Promotion	12
10	Junior Clerk (Class-IV)	Promotion	17
11	Agricultural Assistant	Direct Recruitment	01
12	Supervisor Instructor Grade-3	Direct Recruitment	02
13	Foreman Instructor Grade-3	Direct Recruitment	02
14	Boiler Attendant	Direct Recruitment	01
15	Hostel Assistant Warden	Direct Recruitment	07
Total			140

Retirement

During the year under report, Number of persons retired by Superannuation/ Voluntarily/Resignation/ Death/ Appointed in other University is given below :

Sr. No.	Cadre	Number of person retired on					Total
		Retired	Volun- tarily	Resig- nation	Death	Appointed in other University	
1	Professor	07	00	00	00	00	07
2	Asso. Professor	01	00	00	01	02	04
3	Asstt. Professor	05	01	08	00	05	19
4	Asstt.Adm.Officer/ A/c Officer (Cash)	01	00	00	00	00	01
5	Agri. Officer	03	00	02	00	00	05
6	SRA (Dairy)/Dairy Supervisor	00	00	01	00	00	01
7	Agri. Supervisor	01	00	00	00	00	01
8	Agri. Assistant	16	04	00	00	00	20
9	Office Supdt.	02	01	00	00	00	03
10	Head Clerk	05	00	00	00	00	05
11	Senior Clerk	07	01	01	00	00	09
12	Junior Clerk	04	00	02	01	00	07
13	Driver	00	01	00	00	00	01
14	Steno Grade-I	01	00	00	00	00	01
15	Project Operator	01	00	00	00	00	01
16	Teaching Asstt.	00	01	00	00	00	01
17	Boiler Attendant	01	00	00	00	00	01
18	Lab.Technicain/Lab. Assistant	01	01	00	00	00	02
19	Class-4	26	01	00	04	00	31
TOTAL		82	11	14	6	7	120

Chapter 5

Education

Admission Procedure (Graduation and Diploma course)

AAU is a residential University and follows Semester system. Courses of B.Sc. (Hons.) Agriculture, B. Tech. (Dairy Technology), B. Tech. (Agricultural Engineering), B. Tech. (Food Processing Technology), B.Tech. (Agricultural Information Technology), B. Sc. (Hons.) Horticulture study are of four years duration divided into eight semesters, while B.V.Sc. & A.H. course is of five years duration, divided into ten semesters. The medium of instruction

is English. The University imparts resident instruction for the graduate programmes at their constituent colleges with the eligibility and admission requirements as given in Table 5.1. Under the Semester system of education, all students are compulsorily required to stay in a University hostel, except otherwise permitted. Through online receipt of applications, a common merit list is prepared on the basis of academic regulations. Girl students (except NRI girls/payment seats) are exempted from tuition and hostel fees.

Table 5.1 Eligibility criteria for admission in various degree programmes

Name of the graduate programme	Category wise minimum % requirement of marks in theory subjects in Physics, Chemistry and Mathematics / Biology of HSSCE examination			
	Category			
	General	SC	ST	SEBC
B.Sc. (Hons.) Agriculture	40	35	35	40
B.Sc.(Hons.) Horticulture	40	35	35	40
B.V.Sc. & A.H.	Marks of theory subjects in Physics, Chemistry and Biology of HSSCE examination			
	50	40	40	40
	A candidate under General Category must have passed in each of the subjects (Physics, Chemistry and Biology & English), obtaining 50 % aggregate marks in these subjects at the qualifying examination. The students are admitted only on the basis of merit in GUJCET marks in Physics, Chemistry & Biology in the ratio of 30:30:40. No other weightage is considered for the admission.			
	Marks of theory subjects in Physics, Chemistry and Mathematics of HSSCE examination			

Chapter-5 : Education

B.Tech. (Agricultural Engineering)	40	35	35	40
B.Tech. (Agricultural Information Technology)	40	35	35	40
B.Tech. (Food Processing Technology)	40	35	35	40
B.Tech. (Dairy Technology)	40	35	35	40
Admission is considered on the merit basis of 60% of PCM/PCB theory and 40 % PCM/PCB GUJCET marks.				

Students who have passed Secondary School Certificate Examination with English as compulsory subject are eligible for admission to three year (six semesters) Diploma programme in various subjects run at the Polytechnics of the University. The Medium of Instruction is English. 20% seats of degree programme are kept reserved in Agriculture, Horticulture, Agricultural

Engineering & Food Processing Technology for Diploma to Degree programme. Based on the common entrance test, the qualifying students are admitted directly in the third semester of the concerned degree programme.

The college wise details i.e., number of seats and actual admitted students are given in Table 5.2.

Table 5.2 Students intake and admitted in different graduation programmes for the academic year 2012-2013

Degree	Name of the College	Admission Capacity			No. of students
		Gen/SC/ST/OBC	NRI/Payment	ICAR/VCI	Admitted
B.Sc. Hons. (Agri.)	B. A. College of Agriculture, Anand	103	20	12	120
	College of Agriculture, Vaso	50	-	-	48
B.V.Sc.& A.H.	College of Veterinary Sci. & A. H., Anand	61	15	10	82
B.Tech. (Dairy Tech.)	Sheth M. C. College of Dairy Science, Anand	45	15	06	61
B.Tech. (AET)	College of Agril. Engineering & Technology, Godhra	36	-	05	41
B.Tech. (AIT)	College of Agricultural Information Technology, Anand	36	-	05	30
B.Tech. (FPT)	Food Processing Technology & Bio-Energy, Anand	36	-	05	33
B.Sc. Hons. (Horti.)	College of Horticulture, Anand	50	-	-	42

The details of number of seats and actual admitted & passed out students from different polytechnics are given in Table 5.3.

Table 5.3 Students intake, admitted and passed out in different diploma programme for academic year 2012-2013

Name of the Diploma Programme	Name of the polytechnic College	Admission capacity	No. of students	
		Gen/SC/ST/BC	Admitted	Passed
Agriculture	Sheth M.C. Polytechnic College of Agriculture, Anand	35	35	29
	Polytechnic College of Agriculture, Vaso	35	35	27
Agricultural Engineering	Polytechnic College of Agricultural Engineering, Dahod	35	33	26
Nutrition & Dietetics	Polytechnic College of Food Science & Home Economics, Anand	35	22	22
Horticulture.	Polytechnic College of Horticulture, Vadodara	35	33	28

Admission Procedure (Post Graduate course) interview.

A candidate aspiring to take admission in P G studies should have a graduate degree of the related field with an OGPA of not less than 6.00/10.00. A basic science graduate should have 60 % in aggregate as well as in the field in which he/she seeks admission.

Entrance test and personal interview are conducted and admission is given on the basis of merit and as per the intake capacity.

For admission in International Agri. Business Management Institute, graduates of agriculture and its allied science are eligible. Selection is made on the basis of merit in entrance test, group discussion and personal

Two academic years (four semesters) are required for the course work, research & thesis preparation and examination leading to the Master's Degree for the student from Agricultural University while for Basic Science students, it requires 6 semesters. A minimum period of three academic years (six semesters) is required for the Ph.D. degree.

Intake Capacity

Intake capacity for Post Graduate programmes in a particular discipline is fixed on the basis of the concerned department's infrastructure and the experts / recognized teachers available. On the basis of the decision

Chapter-5 : Education

taken by the Academic Council, the intake capacity has been fixed as shown in Table 5.4.

Table 5.4 Intake capacity in different faculty for the year 2012-2013

Agriculture Faculty

Sr. No.	Subject	M. Sc. (Agri.)		Doctorate	Total
		Regular + Payment	ICAR	Regular + Payment	
1	Agronomy	11+3	5	4+1	24
2	Ag. Chem. & Soil Sci.	14+1	4	2+0	21
3	Biochemistry	3+0	1	1+0	5
4	Pl. Breeding & Genetics	8+2	3	4+1	18
5	Agril. Entomology	8+2	4	4+1	19
6	Ag. Statistics	5+0	2	1+0	8
7	Plant Pathology	6+1	2	3+0	12
8	Agril. Economics	3+1	1	1+0	6
9	Extension Education	10+2	5	2+0	19
10	Crop/Plant Physiology	1+0	1	--	2
11	Agril. Meteorology	2+0	1	1+0	4
12	Nematology	2+0	1	--	3
13	Agril. Microbiology	1+0	1	--	2
14	Plant Molecular Biology & Biotech.	1+1	1	3+1	7
15	Seed Technology	3+0	--	1+0	4
TOTAL		78+13	32	27+4	154

Horticulture Faculty

Sr. No.	Subject	M. Sc. (Horti.)		Ph. D.	Total
		Regular + Payment	ICAR	Regular + Payment	
1	Fruit Science	11+2	2	2+0	17

Veterinary Science Faculty

Sr. No.	Subject	M. V. Sc.		Doctorate	Total
		Regular + Payment	VCI	Regular + Payment	
1	Anatomy	2+1	2	1+0	6
2	Veterinary Pathology	2+1	1	1+0	5
3	Parasitology	3+0	1	1+0	5
4	Veterinary Microbiology	2+0	1	1+0	4
5	Animal Veterinary Physiology	1+0	--	1+0	2
6	Livestock Production & Management	2+0	1	1+0	4
7	Animal Genetics and Breeding	2+0	1	1+0	4
8	Veterinary Surgery & Radiology	2+1	1	1+0	5
9	Veterinary Pharmacology	1+0	--	1+0	2
10	Veterinary Obstetrics and Gynaecology	2+1	1	1+0	5
11	Veterinary Clinical Medicine, Ethics and Jurisprudence	2+1	1	1+0	5
12	Animal Nutrition	2+0	1	1+0	4
13	Veterinary Public Health	2+0	1	1+0	4
14	Poultry Science	2+0	--	1+0	3
15	Animal Biotechnology	3+1	1	1+0	6
16	Veterinary & Animal Husbandry Extension	--	--	--	--
17	Veterinary Epidemiology & Preventive Medicine	2+0	--	--	2
18	Veterinary Biochemistry	1+0	--	1+0	2
TOTAL		33+6	13	16+0	68

Dairy Science Faculty

Sr. No.	Subject	M. Sc. / M.Tech.		Doctorate	Total
		Regular + Payment	ICAR	Regular + Payment	
1	Dairy Technology	5+2	3	2+1	13
2	Dairy Engineering	2+0	1	--	3
3	Dairy Microbiology	1+0	1	1+0	3
4	Dairy Chemistry	2+0	--	1+0	3
TOTAL		10+2	5	4+1	22

Food Processing Technology Faculty

Sr. No.	Subject	M. Tech.(FPT)		Doctorate	Total
		Regular + Payment	ICAR	Regular + Payment	
1	Food Processing Technology	11+2	4	3+1	21

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Agribusiness Management Faculty

Sr. No.	Subject	MBA			Total
		Regular + Payment	ICAR	Regular + Payment	
1	International Agribusiness	20+10	4	--	34

The students of MBA (International Agri Business) may be deputed abroad for project work: however, travel cost will be borne by the candidates.

Agricultural Engineering & Technology Faculty

Sr. No.	Subject	M.Tech.(FPT)		Doctorate	Total
		Regular + Payment	ICAR	Regular + Payment	
1	Farm Machinery & Power Engg.	3+0	1	--	4
2	Soil & Water Engineering	3+0	1	--	4
TOTAL		6+0	2	--	8

Sr. No	Subject	Master
Distance learning		
1	Agriculture Journalism	05
2	Agriculture Marketing	03

Sr. No	Subject	Seats
PG Diploma		
1.	Agricultural Information Technology (Part Time)	15+0

Note: 15 % seats are reserved for ICAR/GOI candidates

Passed Out (Graduates and Post Graduates) of AAU

Details of students passed in different faculties at Graduate, Masters and Doctorate levels is given in Table 5.5.

Table 5.5 The number of students came through with different levels of success during the academic year 2012-2013

Degree	First class with Distinction	First class	Second Class	Pass Class	Total
Graduate					
B.Sc.(Agri.)	12	29	38	-	79
B.V.Sc. & A.H.	06	33	18	-	57
B.Tech.(DT)	08	24	21	-	53
B. Tech. (Ag. Engg.)	04	19	04	-	27
Post Graduate					
M.Sc.(Agri.)	10	61	19	-	90
M.Sc.	01	08	15	-	24
M.Sc.(Horti.)	-	07	04	-	11
M.V.Sc.	13	44	03	-	60
M.Sc.(Dairying)	02	-	01	-	03
M.Tech.	03	07	04	-	14
M.Tech. (FBT)	-	-	01	-	01
M.Tech. (FPT)	-	05	02	-	07
Ph.D. Dairy	-	-	-		02
Agriculture	-	-	-		10
Veterinary	-	-	-		14
MBA (IAB)	02	06	08	-	16

(1) Nodal Officer

As the Nodal Officer for Academic and Examination, Dr. A. M. Shekh successfully organized tedious and tiresome exercise of central admissions

at UG, Diploma and PG level for four SAUs of Gujarat. As Nodal Officer, he convened meeting of Registrars and Deans of four SAUs and arranged for smooth conduct of examinations and paper evaluation.

Chapter-5 : Education

(2) Centralized Admission Process

Under Section 25 (7) (g) of the GAU Act, 2004, the Council of State Agricultural Universities is assigned the function to supervise and coordinate the central admission to various degree courses at the University. However, since the Council does not have adequate staff, function of the central admission for all SAUs of Gujarat are performed by the Nodal Officer & Vice Chancellor, Anand Agricultural University.

Admission and Output

The advertisement was published in leading daily news papers for the admission. The applications were processed and entrance test were conducted through computer OMR system and merit list was prepared and declared on website to call candidates for personnel interview/counselling.

During the year under report, details of students admitted in various degree programme in all the four SAUs are given in Table 5.6.

Table 5.6 Student Admitted in Four SAUs (2012-13)

Degree	Actual admission given Anand/ Junagadh/ Navsari/ Sardar Krushinagar
Under Graduate	
B.Sc. (Hons) Agri.	639
B.V.Sc. & A.H.	240
B.Tech (DT)	61
B.Tech (AET)	132
B.Tech (AIT)	30
B.Tech.(FPT)	33
B.Tech (Dairy and Food Tech)	51
B. Sc. (Hons) Forestry	39
B.Sc. (Hons) Hort.	179
B. Tech. (RE &EE)	35
B.Sc. (Hons) Home Sci. & Nutrition	46
B. F. Sc.	51
B.Sc. (Agri. Biotech)	49
B.Sc. (Biotech)	26
B.Sc. (Micro)	25
B.Sc. (Bio Chem)	21
B.Sc. (FQA)	24

Degree	Actual admission given Anand/ Junagadh/ Navsari/ Sardar Krushinagar
Post Graduate	
M.V.Sc.	65
Ph.D (Veterinary)	11
M. Sc.(Agri.)/M.Sc.	202
Ph. D (Agri.)	100
M. Sc.(D.T.)/M.Tech(Dairy)	17
Ph. D. (Dairy)	03
Post Graduate	
M. Tech (FPT)	13
MBA (IAB)	14
M.Sc.(Horti)	68
Ph. D.(Horti)	14
Agri. Engg. (M.Tech)	21
M.Sc. (Horti/Forestry)	05
PHT (Master)	02

Annual Convocation:

February 26, 2013 was the historic day for Anand Agricultural University as the Ninth Annual Convocation was held in the presence of Hon'ble Governor of Gujarat and the Chancellor of the University, Dr. Shrimati Kamla.

Ku. Patel Amiben R., a student of Faculty of Dairy Science and Ku. Niranjana M., a student of Faculty of Agriculture Science were awarded Chancellor's Gold Medal for Ph. D and Master's degree respectively. Shri. Abhijit Singh, from the Faculty of Agriculture, Shri. Sushant Labh, from the Faculty of Veterinary

Science, Ku. Paul Preeti Ashok, from the Faculty of Dairy Science and Ku. Swati Ray, from the Faculty of Agricultural Engineering & Technology were awarded Vice Chancellor's Gold Medal. The list of Gold Medal with the name of the Faculty and students is shown in *Appendix-6* in detail.

Hon'ble Governor of Gujarat and Chancellor of AAU, Anand Dr. Shrimati Kamla conferred the Degrees to the graduates and Post-graduates in person and in absentia. Total **251** graduate and **245** Post-graduate candidates received the degrees at the Convocation.





Chapter 6

Research



One of the prime objectives of the University is to enhance production and productivity of agricultural commodities through high standard research in the discipline of Agriculture and related sciences to uplift the socio-economic standards of farming communities.

Indian Agriculture must continuously evolve to remain ever responsive to manage the change and to meet the growing and diversified needs of different stakeholders in the entire production to consumption chain. Accordingly, the researchable issues as per the requirement of farming community, agriculture based industries and stakeholders of Gujarat state with multi dimensional approach are identified.

Anand Agricultural University is involved in multi dimensional research activities which include research on natural resources management, pest and disease management, water management, high quality

seed production, post-harvest technology, value addition, plant and animal biotechnology, dairy science etc.

Scientific community of Anand Agricultural University put their sincere efforts and inputs to achieve results of high standards as per the objectives and goals of the university to make Agriculture locally, regionally and globally competitive. Research achievements in terms of crop variety release, technologies developed, machinery developed, recommendations evolved, genome sequencing etc. are the results of hard & sincere work of scientific community of Anand Agricultural University during the year and is briefly presented here.

Research Stations

Agroclimatic zone-wise research stations working in the university jurisdiction along with their activities are presented in Table 6.1.

Chapter-6 : Reserach

Table- 6.1: Agro-climatic zone-wise Research Stations of AAU with available land and activities

MIDDLE GUJARAT AGRO-CLIMATIC ZONE-III				
Name of Centre		Total area (ha.)	Cultivable area (ha.)	Research activities
1	Zonal Research Station, Anand			
i	Bidi Tobacco Research Station	25.47	23.39	Crop improvement work on Tobacco as well as development of package of practices of tobacco and seed production
ii	Main Forage Research Station	18.44	16.65	Crop improvement work on Forage crops as well as development of package of practices of forage crops and seed production
iii	Regional Research Station (RRS)	43.51	41.49	Crop improvement work on Bajra, Cotton, Wheat, Pulses and Oil seed crops as well as agronomical research and water requirement, research work on important crops of the region
iv	Main Vegetable Research Station	23.99	22.96	Crop improvement work on Vegetable Crops as well as development of package of practices of Vegetable Crops and seed production
v	Centre of Excellence on Medicinal & Aromatic Plants	7.55	7.30	Crop Improvement work as well as production technology of Medicinal & Aromatic Plants
vi	Centre of Excellence on Biotechnology	2.55	-	Agril. Sciences, Animal Science and Food Biotechnology
vii	Centre of Organic Farming	-	RRS and Agronomy Farm	Organic farming of different crops including use of vermicompost, FYM cakes, Biocontrol agents etc.
viii	Biofertilizer Project	-	RRS and Agronomy Farm	Isolation of beneficial microorganism for biofertilizers.
ix	Micronutrient Project	-	-	Micro and secondary plant nutrients, heavy metal detection in industrial and sewage effluent
x	Pesticide Residue Project	-	-	Monitoring of milk and milk products, vegetables, edible oils, seed spices, feed and fodder for presence of pesticide residues and its amelioration technology
xi	FPT & BE	-	-	Post harvest technology / Bio- diesel / Biogas
xii	Bio-control Project	-	College farm	Research work on Biological control of pests, mass production of promising biocontrol agents.

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Name of Centre		Total area (ha.)	Cultivable area (ha.)	Research activities
xiii	Agronomy Farm/ AICRP on Weed Control Project	47.95	45.83	Agronomical and weed control experiments, PG research
xiv	Horticulture Farm	34.70	32.00	Horticultural Crops, PG research
xv	Nematology	2.30	2.30	Identification of resistant genotypes of important crops against nematodes & its control.
xvi	Centre of Excellence on Animal Nutrition	6.17	-	Animal Nutrition
xvii	Reproductive Biology Research Unit	5.40	5.40	Reproductive biology of buffalo and goat
xviii	Poultry Complex	-	-	Genetic improvement of poultry breeds for higher production.
xix	Veterinary College (Dept. of Gynaecology)	13.5	9.80	Livestock improvement work
xx	Instructional Farm, (Veterinary College)	16.30	13.54	Educational purpose
xxi	LiveStock Research Station	36.40	29.20	Livestock management and maintenance of kankrej and cross breed cattle
xxii.	Research in Dairy Science	-	-	Technology up-gradation for dairy products

2	Research sub- stations			
Anand district				
i	Tobacco Research Station, Dharmaj	11.92	9.30	Research work on chewing tobacco
ii	KVK, Devataj	18.92	15.52	KVK activities and research in inland fisheries
iii	Horticulture Research Farm, Khambholaj	31.64	31.64	Research on Horticultural crop (Papaya and potato)
Dahod district				
iv	Hill Millet Research Station, Dahod	46.70	32.09	Minor millet , Drilled paddy, Maize and Pulses
v	Tribal Research Cum Training Centre, Devgadbaria	7.98	7.98	Soybean and Maize

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Kheda district				
vi	Main Rice Research Station, Nawagam	25.92	20.06	Crop improvement work as well as development of package of practices of paddy and seed production
vii	Research Station for Irrigated Crops, Thasra	15.71	14.62	Water Management in different crops, Research in rice, wheat, gram and vegetable crops.
viii	Meenawada	43.22	-	Cattle breeding farm
ix	Ramna Muvada	20.00	-	Goat project, Silvipasture Research Project
x	Nenpur	40.00	-	Jatropha and seed production of different crops of the region.
xi	Sansoli	20.00	-	Castor Research, Seed production and evaluation of hybrid maize
xii	Vaso	20.00	-	Degree Agriculture College and Diploma Agriculture Polytechnic.
Panchmahal district				
xiii	Main Maize Research Station, Godhra	20.55	18.72	Crop improvement work in maize as well as development of package of practices of maize and seed production
xiv	Agril. Res. Station, Kakanpur	20.47	20.47	Arid fruits research, Maize seed production and workshop for Agri. Engg. College
xv	Agricultural Research Station, Derol	38.42	35.99	Research work on Drilled Paddy, Pulses and Oil seeds and seed production
Vadodara district				
xvi	Pulses Research Station, Vadodara	33.08	22.47	Crop improvement work in pigeonpea and other Pulse Crops
xvii	Rice Research Station, Dabhoi	29.13	25.64	Research work on Paddy and Water Management
xviii	Narmada Irrigation Research Station, Khandha	24.62	17.55	Water Management on field and hort. crops
xix	Jabugam	21.52		Seed production of different crops and Degree Agriculture College.
NORTH GUJARAT AGRO-CLIMATIC ZONE -IV				
Ahmedabad district				
xx	Castor and Seed Spices Research Station, Sanand	6.44	5.60	Castor and seed spices

NORTH GUJARAT AGRO-CLIMATIC ZONE -V				
Ahmedabad district				
xxi	Regional Cotton Research Station, Viramgam	24.43	21.30	Deshi Cotton and Dual Sorghum
BHAL AND COASTAL AGRO-CLIMATIC ZONE-VIII				
Ahmedabad district				
xxii	Agri. Research Station, Bhal & Coastal Zone, Arnej	60.84	48.41	Evaluation of un-irrigated Wheat & Gram, Salinity amendments in different crops
xxiii	Agricultural Research Station, Dhandhuka	44.32	39.19	Un-irrigated Wheat, Gram, Cotton and Water Management
	Total Area of AAU (ha)	909.61	805.30	

Seasonal Features and Crop Condition

The onset of SW monsoon in Anand was late by two weeks to its normal time and began during the 27th MSW with 76.8 mm rainfall causing late sowing of all the rainfed crops in kharif 2012 (Table 6.2). Thereafter up to 37th MSW, all the weeks received variable amount of rainfall. During this period there was no severe dry spell. The weekly weather parameters are presented in Table 6.3. Late onset of monsoon severely affected sowing of major rainfed cereals in the state. Month-wise percentage sown area covered under different crops over normal in Gujarat state indicated in Table 6.4. Only 8 % of normal sown area was covered by various crops in June months. Net sown area progressively increased due to good rainfall during July and August month. There was only 6.7 mm rainfall during June as against its normal 108.4 mm. July received 257.3 mm rainfall in 8 rainy days as against the normal of 319.3 mm. August month received the rainfall of 360.4 mm in 13 rainy days as compared to 252.3 mm of normal rainfall. September received 258.3 mm rainfall in 13 rainy days as compared to 114.8 mm of

normal rainfall. Seasonal total rainfall was 882.7 mm which was higher than normal (862.00 mm) with 36 rainy days.

The weekly maximum temperature was found to be higher than the normal during 12 to 15, 24 to 30 and 50 to 52 MSW. Similarly, weekly minimum temperature was lower during 1 to 13 and 41 to 48 MSW. The lower maximum temperature during 1 to 7 and lower minimum temperature during 41 to 48 and 1 to 13 MSW helped in boosting wheat and potato production in the state.

District wise rainfall distribution in Middle Gujarat

The district-wise seasonal rainfall of all the 6 districts of middle Gujarat and its percentage departure from normal is presented in Table 6.4. The State as a whole received 575 mm rainfall, which was about 72 per cent of its normal value. In East-Central Gujarat region, Ahmedabad district received lowest (66%) rainfall, whereas Dahod district received highest (98%) rainfall.

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Table: 6.2 Daily rainfall (mm) received during June to September 2012 at Anand

Date	June	July	August	September
1	0.0	0.0	0.0	14.0
2	0.0	0.0	4.2	1.0
3	0.0	0.0	0.4	0.0
4	0.0	69.6	0.0	25.2
5	0.0	0.0	0.0	84.1
6	0.0	0.0	0.0	9.4
7	0.0	7.2	0.0	15.8
8	0.0	1.6	6.9	24.7
9	0.0	0.0	1.0	6.4
10	0.0	45.0	7.2	7.5
11	0.0	29.0	0.0	21.0
12	1.4	22.0	69.8	1.6
13	0.0	2.6	107.8	2.8
14	2.7	31.2	75.0	2.0
15	0.0	0.0	0.0	13.0
16	0.0	0.0	0.0	0.0
17	0.0	46.3	0.0	0.0
18	0.0	0.0	2.6	0.0
19	0.0	0.0	6.0	0.0
20	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0
23	0.0	0.0	10.0	24.8
24	0.0	1.4	14.6	0.0
25	0.0	0.0	3.0	5.0
26	0.0	0.0	0.0	0.0
27	2.6	0.0	0.0	0.0
28	0.0	0.8	47.7	0.0
29	0.0	0.0	0.0	0.0
30	0.0	0.0	1.8	0.0
31	-	0.6	2.4	-
Total	6.7	257.3	360.4	258.3
Rainy days	2	8	13	13

Table: 6.3 Weekly weather parameters recorded during the year 2012

Week	EP	BSS	RF	WS	MAXT	MINT	MEANT	RH1	RH2
1	2.7	7.5	0.0	3.0	26.3	11.1	18.7	91.6	47.0
2	3.0	9.5	0.0	2.7	25.3	8.6	17.0	80.7	33.3
3	3.2	9.3	0.0	2.5	26.7	9.4	18.0	86.6	32.1
4	3.6	9.5	0.0	2.8	27.8	10.7	19.3	80.7	35.3
5	4.2	9.7	0.0	3.7	27.8	10.7	19.3	71.4	38.1
6	4.8	9.9	0.0	4.6	26.2	9.9	18.0	64.9	30.7
7	4.2	9.8	0.0	3.0	29.4	12.2	20.8	78.7	32.4
8	5.3	9.9	0.0	2.7	32.4	12.2	22.3	84.9	26.4
9	5.7	9.6	0.0	3.5	32.1	13.4	22.8	73.4	28.7
10	5.8	8.9	0.0	3.2	32.0	12.9	22.5	76.9	21.9
11	6.9	9.4	0.0	3.5	33.9	14.4	24.1	59.9	19.1
12	7.4	8.0	0.0	3.2	36.9	15.6	26.2	65.7	17.6
13	8.1	9.3	0.0	3.3	39.8	18.8	29.3	67.3	21.0
14	8.4	9.5	0.0	3.8	40.1	21.0	30.5	78.3	23.1
15	8.3	9.5	0.0	4.5	39.4	21.8	30.6	87.1	25.9
16	8.8	8.1	0.0	5.6	35.7	25.6	30.6	62.4	33.4
17	9.9	10.8	0.0	5.8	38.2	24.6	31.4	62.9	29.7
18	9.2	10.6	0.0	6.1	39.6	23.3	31.5	81.4	30.1
19	9.4	10.5	0.0	6.0	38.9	25.9	32.4	76.1	38.7
20	9.4	10.5	0.0	6.1	39.0	25.3	32.2	74.4	37.7
21	9.7	10.8	0.0	6.6	39.9	25.7	32.8	77.1	37.3
22	9.8	10.3	0.0	7.8	39.6	26.3	32.9	76.0	36.6
23	9.5	7.7	0.0	8.6	37.7	27.8	32.8	80.4	42.9
24	8.0	7.9	4.1	6.8	37.5	27.6	32.6	84.1	55.6
25	9.3	8.6	0.0	10.1	37.9	27.8	32.9	83.9	44.1
26	8.7	9.2	2.6	9.3	37.5	27.6	32.6	83.1	44.9
27	5.4	2.9	76.8	8.6	34.6	27.0	30.8	88.9	66.7
28	4.5	5.3	131.4	6.5	32.8	25.8	29.3	93.9	75.0
29	4.5	4.9	46.3	6.6	33.5	27.1	30.3	94.9	66.4
30	4.9	1.4	2.2	7.4	32.0	26.7	29.3	90.6	70.7
31	4.0	1.1	5.2	7.2	31.6	26.3	29.0	88.7	73.9
32	3.9	1.8	15.1	7.2	31.7	25.9	28.8	92.4	74.0
33	2.2	1.9	255.2	6.7	29.9	24.7	27.3	95.4	85.6
34	3.7	3.6	30.6	5.3	31.8	24.8	28.3	96.1	70.6

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Week	EP	BSS	RF	WS	MAXT	MINT	MEANT	RH1	RH2
35	3.9	3.0	68.9	3.7	32.6	25.9	29.3	96.7	79.4
36	3.3	2.3	160.2	4.8	31.9	25.4	28.6	98.7	83.7
37	2.6	1.9	54.3	6.1	29.8	25.1	27.4	99.1	85.0
38	3.7	5.3	0.0	4.3	32.3	24.6	28.4	95.4	70.1
39	3.5	6.5	29.8	3.4	32.3	24.0	28.2	93.9	64.3
40	4.5	8.5	0.0	2.8	36.3	24.7	30.5	90.1	55.0
41	4.6	8.5	0.0	2.3	35.8	21.5	28.6	93.1	43.3
42	4.7	9.6	0.0	1.7	36.1	19.6	27.9	90.3	39.9
43	4.4	9.7	0.0	1.5	35.6	19.1	27.3	89.6	32.6
44	4.7	8.8	0.0	2.6	33.5	16.2	24.9	73.7	30.4
45	3.9	9.6	0.0	2.0	32.6	13.9	23.2	86.6	29.1
46	3.3	9.5	0.0	1.5	33.2	15.5	24.4	92.0	31.4
47	3.4	9.5	0.0	1.7	31.4	12.4	21.9	88.4	30.6
48	3.3	9.6	0.0	2.0	31.1	13.3	22.2	93.0	38.0
49	3.1	8.8	0.0	2.1	30.5	16.0	23.3	83.7	42.9
50	2.9	8.9	0.0	1.6	31.0	13.8	22.4	98.3	39.9
51	3.3	8.6	0.0	2.7	29.7	14.2	21.9	89.1	45.4
52	3.7	9.3	0.0	2.3	28.6	10.3	19.4	86.5	37.5

Table: 6.4 District wise total rainfall and its percentage departure from normal

No.	District Name	Total rainfall (mm)	Normal rainfall (1982-2011)	% against normal
East-Central Gujarat				
1	Ahmedabad	458	695	66
2	Kheda	649	806	81
3	Anand	625	761	82
4	Vadodara	711	928	77
5	Panchmahals	793	823	96
6	Dahod	732	745	98
State average		575	798	72

Extreme weather events:

- ❖ The SW monsoon was delayed by two weeks and adversely affected normal sowing of all the rainfed crops in the state.
- ❖ The dry spell occurred during 18/07/2012 to 07/08/2012 and severely affected grand
- growth period of all the rainfed crops.
- ❖ The seasonal rainfall scenario shows that Kheda, Panchmahals and Dahod districts fall under normal rainfall under delayed onset of monsoon condition and rest of the districts fall under deficient rainfall

situation. Thus, rainfall distribution was not favouring good crop growth and development.

Research Council

The Research Council has been constituted as per the provision of Gujarat Agricultural Universities Act – 5 of 2004.

Constitution of Research Council

Sr. No.	Name, Designation & Address	
A.	Dr. A.M. Shekh, Vice Chancellor	Chairman
B.	Dr. K.B. Kathiria, Director of Research & Dean, PG Studies	Secretary
C.	1. Dr.D.M.Korat, Associate Director of Research, (Agriculture)	Member
	2. Dr. M.M. Pathak, Associate Director of Research (Animal Science)	Member
D.	Faculty Deans	
	1. Dr. K. P. Patel, Dean, Faculty of Agriculture	Member
	2. Dr. B. P. Shah, Dean, Faculty of Dairy Science	Member
	3. Dr. A. M. Thakar, Dean, Faculty of Vety. Science	Member
	4. Dr. D.C. Joshi, Dean, Faculty of Food Processing Tech. & Bio-energy	Member
	5. Dr. Y. R. Ghodasara, I/c. Dean, Faculty of Agricultural Information Technology,	Member
E.	Dr. P.P. Patel, Director of Extension Education, AAU,Anand	Member
F.	Conveners of the AGRESCO Sub-committee	
	1. Dr. A. M. Mehta, Convener of Crop Improvement Sub-Committee & Research Scientist (Rice), MRRS, AAU, Nawagam	Member
	2. Dr. Vyas Pandey, Convener of Crop Production Sub-Committee & Prof. & Head, Dept. of Agril. Meteorology, BACA, AAU, Anand	Member
	3. Dr. B. A. Patel, Convener of Plant Protection Sub-Committee & Professor & Head, Dept. of Namotology, BACA, AAU, Anand	Member
	4. Dr. J. B. Prajapati, Convener of Dairy Science Sub-Committee & Prof. & Head, Dept. of Dairy Microbiology, SMC College of Dairy Science, AAU, Anand	Member

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	5.	Dr. J. J. Hasnani, Convener of Animal Health Sub-Committee & Prof. & Head, Dept. of Parasitology, College of Vety. Science, AAU, Anand	Member
	6.	Dr. D. N. Rank, Convener, Animal Production Sub-Committee & Prof. & Head, Dept. of AGB, College of Vety. Sci. & A.H., AAU, Anand.	Member
	7.	Dr. C. P. Desai, Convener of Social Science & Ext. Educationalist, EEI, AAU, Anand	Member
	8.	Dr. R. F. Sutar, Convener of Food Processing Sub-Committee & Professor, FPT & BE, AAU, Anand	Member
	9.	Dr. M. L. Gaur, Convener of Agril. Engineering Sub-Committee I/c. Dean, College of Agril. Engg., AAU, Godhra	Member
G.	Two Eminent Scientists from ICAR Institutes nominated by the Vice-Chancellor		
	1.	Dr. R. S. Kurothe, Principal Scientist (Engg.), Head, Central Soil & Water Conservation Research & Training Institute, Vasad, Gujarat	Member
	2.	Dr. P. Manivel, Principal Scientist (Plant Breeding), Derectorate of Medicinal & Aromatic Plants Research (ICAR), Boriavi, Anand, Gujarat	Member
H.	Two Progressive Farmers nominated by the Vice-Chancellor		
	1.	Shri. Kanubhai Ravjibhai Patel (Mukhi), Vaso, Ta. Nadiad, Dist. Kheda	Member
	2.	Shri. Narsinhbhai Patel, Nayaka, Umiya Farm, Taluka.: Matar, Dist.: Kheda	Member
I.	Scientists from AAU		
	1.	Dr. J. A. Patel, Research Scientist, Regional Research Station, AAU, Anand	Member
	2.	Dr. Y. C. Zala, Professor & Head, Dept. of Ag. Economics, BACA, AAU, Anand	Member
	3.	Dr. M. K. Jhala, Professor & Head, Dept. of Microbiology, Veterinary College, AAU, Anand	Member
	4.	Dr. R. V. Prasad, Professor & Head (FQA), FPT & BE, AAU, Anand	Member
	5.	Dr. J. B. Prajapati, Professor & Head, Dept. of Dairy Microbiology, College of Dairy Science, AAU, Anand	Member

Research Sub-Committies

To evaluate the research work and to finalize the technical programme for research in particular direction, the research areas of different subjects have been sub-grouped in nine research sub-committees under different faculties are as under.

Faculty of Agriculture

- **Crop Improvement** : Plant Breeding Genetics, Plant Biotechnology, Nanotechnology, Plant Physiology and Biochemistry
- **Crop Production** : Agronomy, Soil Science, Horticulture, Meteorology and Bio-fertilizer
- **Plant Protection** : Entomology, Plant Pathology and Nematology
- **Social Science:** Agril. Statistics, Agril. Economics, Extension Education, Agril. Information Technology and International Agril. Business Management

Faculty of Veterinary Science

- **Animal Production** : Animal Biotechnology, Animal Breeding and Genetics, Animal Physiology & Bio-chemistry, Livestock Production and Management, Animal Nutrition, Reproductive Biology and Poultry Sciences

- **Animal Health:** Vet. Medicine, Vet. Microbiology, Vet. Pharmacology, Vet. Parasitology, Vet. Surgery, Vet. Pathology, Gynaecology & obstetrics Veterinary Public Health, Vet. Clinics and Anatomy

Faculty of Dairy Science

- **Dairy Science** : Dairy Microbiology, Dairy Engineering, Dairy Technology, Dairy Economics, Food Bio-technology, Dairy Chemistry

Faculty of Food Processing Technolgy & Bioenergy

- **Food Processing Technolgy & BioEnergy** : Post Harvest Technology, Food Processing and Packaging Technology and Bio-Energy
- **Faculty of Agrilcultural Engineering**
- **Agril. Engineering:** Soil and Water Conservation, Farm Power Machinery, Agril. Product Processing and Renewable Energy

Research Accomplishments

Research Sub-Committees met and finalized different research programmes considering the feedback received from farmers through extension machinery and educational needs as per current global requirement in agricultural sciences. The research accomplishments made as a result of sincere efforts of the scientists are given below.

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Name of the sub-committee	Date of Meeting	No. of recommendations finalized	
		For farmers	For scientific community and entrepreneurs
Crop Improvement	9-10 April, 2012	05 + 02*	-
• Variety Release		04 + 02*	-
• Plant Physiology		01	-
Crop Production	7-8 April, 2012	08	01
• Cultural Practices		01	-
• Nutrient Management		04	-
• Water Management		02	-
• Horticulture		01	-
• Weed Management		-	01
Plant Protection	22-23 March, 2012	12	02
• Insect Pest Management		10	01
• Disease Management		02	01
Dairy Science	14 March, 2012	-	03
Food Processing	15 March, 2012	-	02
Animal Production	16-17 March, 2012	04	15
Animal Health	16-17 March, 2012	-	05
Social Science	19-20 March, 2012	01	01
Agril. Engineering	5 April, 2012	-	-
Joint AGRESCO, AAU, Anand	12 April, 2012	30+02*	29
Combined AGRESCO of SAU's at NAU, Navsari	19-21 April, 2012	30+02*	29

* Pre released

The details of recommendations approved in the combined AGRESCO meeting

of SAUs of Gujarat held at NAU, Navsari are given here:

Recommendations for farming community

I CROP IMPROVEMENT

[A] PLANT BREEDING

1. Maize: Gujarat Anand White Maize Hybrid - 2 (GAWMH-2)



The single cross hybrid is derived from a cross of CML-251 X GWL-10. It recorded 3.9 t/ha grain yield and revealed 25.9, 24.0 and 13.8 % yield superiority over Narmada Moti GM-6 (composite varieties) and HQPM-1(single cross hybrid), respectively under kharif - rainfed conditions. It showed moderate tolerance to stem borer and resistance against Maydis Leaf Blight (MLB) disease.

2 Tobacco: Gujarat Anand Bidi Tobacco - 11 (GABT-11)

This variety is derived from a cross of ABD-65 x ABD-10 possesses shy suckering habit, short internodes and more number of leaves (33). The plant stature is medium with round, stout and thick stem. This variety gave 4175 kg cured leaf yield which is 87 and 11 % higher over existing check varieties A

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119 and MR GTH 1 under irrigated condition at Anand, respectively. It showed profuse spangling and desirable leaf thickness with better smoke taste than both the checks.



3 Forage Sorghum: Gujarat Anand Forage Sorghum-11 (GAFS-11)



This culture showed tall stature with non lodging thin stem. It showed higher green forage yield to the tune of 32.9, 11.1 and 23.5 % and higher dry matter yield to the tune of 25.5, 24.0 and 23.1 % over checks S-1049, GFS-5 and C-10-2, respectively. The crude protein yield and keeping quality were found better than the checks. For plant height,

tillers, number of leaves, leaf length and leaf width, the variety was found better than checks. This genotype was found comparable for anthracnose, zonate leaf spot and leaf blight diseases with checks. This variety is recommended for cultivation in the Middle Gujarat, Bhal and North-West zone under rainfed conditions.

4 **Tomato: Gujarat Anand Tomato-4 (GAT-4)**



The variety exhibited 269 q/ha fruit yield which was 16.4 and 30.9% higher over the checks GT-2 and AT-3, respectively. The genotype has determinate type plant growth habit with dark green foliage and dark green shoulder on fruits at breaker stage. The fruits are

red in colour, big in size and circular in shape. The fruits possess higher Vitamin C, acidity and pulp/juice ratio as compared to both the checks. The variety GAT-4 showed low incidence of whitefly and fruit borer damages as well as TLCV as compared to GT 2 and AT 3.

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Pre-release:

1 Maize: Gujarat Anand Yellow Maize Hybrid-1 (GAYMH-1)

The single cross hybrid derived from a cross CML 307 x GYL-11 is an early maturing and yellow grain hybrid suitable for North Gujarat Agro Climatic Zone-IV under rainfed conditions. It revealed 3.6 t/ha grain yield which was 23.9 and 20.6 % higher over checks HQPM-1 (single cross hybrid) and GM-2 (variety) under kharif- rainfed conditions, respectively. It showed moderate tolerance to stem borer and is resistant against Maydis Leaf Blight (MLB) disease when compared to check GM-2 under natural field conditions.

2 Dill Seed: Gujarat Anand Vegetable Dill Seed-1 (GAVDS-1)

Dill Seed culture is a selection from local germplasms. It showed vigorous vegetative growth with more number of branches as compared to other cultures. The dark green colour foliage revealed 180-190 q green biomass/ha which was 8.4, 21.2 and 8.2 % higher than check varieties GD-1, GD-2 and GD-3, respectively. Due to its late flowering habit, it can be utilized for leafy vegetable purpose for a longer period. It possesses good aroma and volatile oil content.

[B] PLANT PHYSIOLOGY

1 Effect of ethereal and gibbrellic acid on fruit ripening in chilli cv.GVC-111

Farmers of Middle Gujarat, Agro

climatic Zone-III planting chilli variety GVC-111 for seed production purpose are advised to spray GA3 @ 50 mg/l at 45 days after transplanting for getting higher seed yield and quality seed.

II CROP PRODUCTION

[A] CULTURAL PRACTICES

1 Effect of sowing dates on yield and quality of forage sorghum

The farmers of middle Gujarat agro climatic zone-III are advised to sow fodder sorghum var. GFS-5 upto 30th June to get higher yield and net profit.

[B] NUTRIENT MANAGEMENT

1 Response of irrigated Bt cotton to N, P and micronutrients

The farmers of middle Gujarat agro climatic zone-III (AES-2) growing irrigated Bt cotton are advised to apply 10 t FYM/ha and 240 kg N/ha, i.e., 60 kg N/ha as a basal and remaining 180 kg N/ha in three equal splits at one month interval after sowing for securing higher yield.

2 Response of chickpea (GG-1) to nitrogen, phosphorus and sulphur with and without biofertilizers under supplementary irrigation in Bhal region

Farmers of Bhal area growing chickpea under limited irrigation facility are advised to apply *Rhizobium* as a seed treatment (30 g/kg seed) and 20 kg N

+ 20 kg S/ha as a basal and remaining 20 kg N/ha at the time of first irrigation to obtain higher seed yield and net return.

3 Influence of integrated nutrient management on yield of soybean

The farmers of middle Gujarat agro climatic zone-III (AES-II) growing soybean (*kharif*) are advised to apply 50% of RDF i.e. 15 kg N and 30 kg P₂O₅/ha along with seed treatment with PSB + *Rhizobium* (each of @ 5 ml/kg) to get higher yield and net return.

4 Effect of organic manures, sulphur and phosphorus on growth and yield of black gram

The farmers of middle Gujarat agro climatic zone- III (AES-2) growing black gram (var. Guj. Urid 1) during *kharif* season are advised to apply vermicompost @ 2 t/ha or FYM @ 5 t/ha and 20:40:40 NPS kg/ha as a basal dose to get higher yield and net realization.

[C] WATER MANAGEMENT

1 Effect of spacing, drip irrigation and nitrogen on late *Kharif* castor

The farmers of middle Gujarat agro climatic zone-III (AES-II) are recommended to sow castor seed in

paired row (60x60x180 cm) and irrigate as well as fertigate through drip at 0.8 PEF. The 30% of RDN (22.5 kg/ha) and full dose of P (50 kg/ha) should be applied as basal and remaining N in three equal splits at an interval of one month through drip.

System details

Lateral spacing	: 2.4 m
Dripper spacing	: 0.6 m
Dripper discharge	: 4 lph
Operating pressure	: 1.2 kg/cm ²
Operation frequency	: Alternate day
Operating time	: 100-150 min

2 Comparative evaluation of SRI with different methods of rice cultivation

The farmers of middle Gujarat agro climatic zone III (AES-II) having assured irrigation and drainage facility are advised to grow rice var. GR 12 in *kharif* season by adopting SRI/Modified SRI technique for obtaining higher yield and saving of 50% chemical fertilizer over conventional practices. The farmers should adopt either one of the following two modified SRI techniques.

Chapter-6 : Reserach

Sr. No.	Practices to be followed	Modified SRI	Modified SRI (Under paucity of labours)
1	Seeding	Seeding of near sprouted seeds on well drained leveled soil after puddling	
2	Seed rate (kg/ha)	5	20
3	Spacing (cm)	25 cm x 25 cm	25 cm between two rows
4	Nutrient management	(1) FYM@ 5 t/ha as basal (2) <i>Azotobacter chroococcum</i> ABA 1 +PSB <i>Bacillus coagulans</i> PBA 16 (10^8 cfu/ml) each @ 1 litre/ha at the time of seeding along with well sieved FYM (50 kg/ha) (3) Fertilizers 40-12.5-0 NPK kg/ha (a) Basal: 40% N & 100% P_2O_5 (16-12.5-0 NPK kg/ha) (b) At the tillering stage: 40% N (16 kg N/ha at 30 DAS) (c) At Panicle initiation (PI) stage: 20% N (8 kg N/ha one week before PI stage)	
5	Water management	No flooding of water upto PI stage, maintain the soil moist condition and 5 cm submergence of water from Panicle initiation (PI) to dough stage.	
6	Weed management	Use rotary / cono weeder for weeding / interculturing 4 times at 10 days interval starting from 25 days after seeding.	

* $ZnSO_4$ @ 25 kg/ha should be given as basal dose.

[D] HORTICULTURE

1 Effect of biofertilizers and chemical fertilizers on growth and flower yield of Deshi Red Rose

The farmers of middle Gujarat Agro Climatic Zone-III (AES-II) growing Deshi Red Rose are advised to apply 40 g nitrogen (87 g urea), 40 g phosphorus (250 g single super phosphate) and 25 g potash (42 g murate of potash) per plant in three equal splits from third year onward in June, October and January and after two days of fertilizers application 1 ml/plant each in 3 equal

splits of *Azospirillum* and PSB (*Bacillus coagulans*) should be applied as soil treatment mixing in 200 ml of water for getting higher flower yield, maximum shelf life of flowers as well as higher net realization.

III PLANT PROTECTION

[A] AGRICULTURAL ENTOMOLOGY

1 Evaluation of IPM module for the management of sucking pests in *Bt* cotton

Following IPM module found cost effective and safer against the

natural enemies is recommended for the management of aphid, jassid, whitefly and thrips in *Bt* cotton (BG II) cultivated in middle Gujarat.

- (1) One need based (5 aphids or leafhoppers or whiteflies/leaf) application of *Beauveria bassiana* (2×10^8 cfu/g) @ 40 g/10 l water followed by need based application of thiamethoxam 25 WG 0.01% (4 g/10 l water) (50 g a.i./ha).
- (2) Need based (5 thrips/ leaf) application of acephate 75 SP 0.075% (1 g/l water) (375 g a.i./ha).
- (3) The waiting period of thiamethoxam 25 WG 0.01% (50 g a.i./ha) and acephate 75 SP 0.075% (375 g a.i./ha) should be maintained 21 and 15 days after application, respectively.

2 Evaluation-cum-demonstration of management strategies for the control of fruit flies (*Bactrocera cucurbitae* and *Dacus ciliatus*) in bitter gourd orchard

Bitter gourd growers of middle Gujarat are advised to install pheromone traps with Cue-lure impregnated wood blocks @ 16/ha at the initiation of the flowering followed by spot application of poisoned bait made by mixing of 400 g Jaggery + 8 ml of dichlorvos 76 EC in 10 litre of water at fortnightly (15 days)

interval. The spots should be spaced at 7×7 m distance. The bait should also be applied on border/field boundaries.

3 Evaluation of different insecticides as seed treatments against leaf miner in cucurbitaceous vegetable crops

For effective management of leaf miner in early stage of the crops viz., cucumber, bottle gourd, ridge gourd and smooth gourd, the farmers of middle Gujarat are advised to treat the seeds before sowing with imidacloprid 70 WS @ 7.5 g/kg seeds or thiamethoxam 70 WS @ 4 g/kg seed.

4 Evaluation of some microbial insecticides against leaf defoliators and plant hoppers infesting paddy

Paddy growers of middle Gujarat are advised to give application of *Bacillus thuringiensis* (5×10^7 spores/mg) @ 1.0 kg/ha (20 g/ 10 l water) or *Beauveria bassiana* (2×10^6 cfu/g) @ 1.0 kg/ha (20 g/ 10 l water) or *Verticillium lecanii* (2×10^6 cfu/g) @ 1.0 kg/ha (20 g/ 10 l water) at initiation of leaf folder damage.

5 Evaluation and demonstration of IPM module against pest complex of paddy

Paddy growers of middle Gujarat are advised to use resistant paddy cultivar (Gurjari), transplanting of paddy seedlings during the first fortnight of July and application of NSKE @ 5% (500 g/ 10 l water) to suppress the incidence of leaf folder and maintain the population of predatory spiders.

Chapter-6 : Reserach

6 Impact evaluation of cow-urine and vermiwash on insect pests, their natural enemies and yield of brinjal

Farmers growing brinjal crop organically are advised to apply two sprays (60 and 75 days after transplanting) of cow-urine @ 20% mixed with leaf extract of neem or custard apple or jatropha or lantana @ 10% for suppression of sucking pests (aphid, leafhopper and whitefly) as well as shoot and fruit borer.

7 Evaluation of microbial insecticides formulations against fruit borer of tomato

Tomato growers are advised to spray HearNPV (1.0×10^9 POB/ml) @ 250 ml/ha (5 ml/ 10 l water) or *Beauveria bassiana* (1×10^8 cfu/g) @ 1.0 kg/ha (20 g/10 l water) or *Metarhizium anisopliae* (1×10^8 cfu/g) @ 1.0 kg/ha (20 g/10 l water) 85 days after transplanting for suppression of fruit borer, *Helicoverpa armigera* (Hubner).

8 Bio-efficacy of some microbial insecticides against pests of cabbage

Cabbage growers are advised two sprays of *Beauveria bassiana* (2×10^6 cfu/g) or *Verticillium lecanii* (2×10^6 cfu/g) @ 1.5 kg/ha at 40 and 60 days after transplanting for suppression of aphid and head borer (*Helicoverpa armigera*).

9 Standardization of number of pheromone traps for mass trapping of stem borer in paddy

The farmers of middle Gujarat

growing paddy are advised to install pheromone traps with *Scirpophaga incertulas* lures equidistantly in the field one month after transplanting of the crop @ 30 traps/ha for effective and economical management of stem borer (*Scirpophaga incertulas*). Lure should be changed at 3 weeks interval. The installation of pheromone traps helps the farmers to gain economic benefit.

10 Evaluation of various physical barriers to prevent damage of rose-ringed parakeet to wheat panicles

To prevent parakeet damage to the wheat panicles, farmers growing wheat under irrigated condition are advised to tie two parallel jute strings vertically, 20 cm apart by fixing it with the help of wooden stakes on the outer edge of the row; the strings to be fixed just 6 inches away from the panicles.

[B] PLANT PATHOLOGY

1. Integrated management of phytonematodes, *Meloidogyne* spp. in mung by adding organic compounds

The farmers of middle Gujarat growing *kharif* mung are advised to apply neem cake @ 1000 kg/ha + *Trichoderma viride* (2×10^8 spores/g) @ 2.5 kg/ha, 10 days before sowing for effective and economical management of root knot nematodes (*Meloidogyne* spp.).

2. Management of wilt of pigeonpea through bio-agents and fungicides

Farmers of middle Gujarat growing pigeonpea are advised to treat the seeds

first with carboxin (37.5%) + thiram (37.5%) @ 3 g/kg seeds followed by *Trichoderma viride* (2×10^8 cfu/g) @ 10 g/kg seeds for effective and economical management of wilt disease of pigeon pea.

IV ANIMAL PRODUCTION

1 Development of coloured meat purpose crossbred birds

For development of coloured meat purpose chicken crosses suitable for rural farming, new Hampshire can be used as male line and Australorp as female line as new Hampshire crosses gained significantly higher weight (1253 g) at 8 weeks age whereas, Australorp has produced significantly higher egg numbers (80) upto 40 weeks with 55 g egg weight at 40 weeks age.

2 The feed cost of raising weaner kids and lambs fed jowar hay (30%) and groundnut *gotar* (30%) based Total Mixed Ration

The feed cost of raising weaner kids and lambs fed with *jowar* hay (30%) and groundnut *gotar* (30%) based Total Mixed Ration can be reduced by 25 to 30% as compared to TMR based on *jowar* hay (60%) alone.

3 Supplementation of concentrate mixture to buffaloes of Ahmedabad district

In Ahmedabad district buffaloes yielding 5-7, 7.5-9.5 and 10-12 kg milk/day, on an average received daily 3.0, 4.0 and 5.0 kg concentrate mixture, respectively. In order to fulfill their

nutrient requirement, the farmers are advised to feed daily additional 1.0 kg compound concentrate mixture in summer to buffaloes yielding 5-7 kg milk and 0.5 kg compound concentrate mixture round the year to buffaloes yielding daily 7.5-12 kg milk.

4 Effect of inclusion probiotics in broiler ration

The cost of feeding (₹/kg gain) in coloured broilers was reduced by 14.5% when probiotics were supplemented @ 100 g and 50 g/tonne of feed during starter and finisher phase, respectively.

V SOCIAL SCIENCE

1 Economic analysis of tissue cultured and sucker propagated banana in middle Gujarat

In Middle Gujarat Agro-climatic Zone-III, tissue-cultured banana was found to be more profitable than sucker-propagated banana and the risk was also lower in tissue-cultured banana. Therefore, the farmers are recommended to grow banana by tissue-cultured plantlets.

Recommendations for scientific community and entrepreneurs

I CROP PRODUCTION

WEED MANAGEMENT

1 Study on nitrogen stress detection in wheat crop using Spectroradiometer

It is advisable to use the NDRE (Normalized Difference Red Edge)

vegetative index computed from narrow band spectral reflectance measured using spectroradiometer to detect the nitrogen stress in wheat during early growth stage (30 to 45 DAS) as NDRE is found the most sensitive index. Nitrogen deficiency can be computed using stepwise regression equation.

$$\text{Nitrogen deficiency (kg/ha)} = 468.1 - 923.4 \times \text{NDRE} (R^2:0.78^{**})$$

II PLANT PROTECTION

AGRICULTURAL ENTOMOLOGY

1 Impact evaluation of cow-urine and vermiwash on insect pests, their natural enemies and yield of Brinjal

Cow-urine alone sprayed at higher concentrations (40 & 50%) on 60 and 75 days after transplanting of brinjal crop positively affects certain growth and yield attributing characters (plant height, fruit length and fruit diameter).

PLANT PATHOLOGY

2 Assessment of loss due to early blight disease in potato crop

Loss due to early blight disease in yield of potato tuber is estimated to the tune of 33% in middle Gujarat.

III DAIRY SCIENCE

1 Process standardization for the manufacture of *Thabdi*

A scientific method to manufacture *Thabdi* is developed from milk

standardized to 0.66 fat : SNF ratio and added with 8% (w/v) sugar at the time of first boiling. The boiling is to be continued till pat formation. The final heat treatment is imparted for 40 min in two parts; 20 min after pat formation to have graininess development accompanied by addition of ghee @1.2 per cent and continuing the heat desiccation for further 20 min to get desired moisture, colour and grainy texture. The yield of the *Thabdi* is 27 kg/100 kg milk which can be stored at $30 \pm 2^\circ\text{C}$ temperature for 9 days.

2. Process standardization for the manufacture of *Halvasan*

Good quality *Halvasan* can be prepared using standardized milk having 0.66 fat: SNF ratio, 5% *fada* (sprouted dry *Bhalia* wheat, Durum), 17% sugar and heating at 90°C temperature for 2 h. The final desiccation is to be carried out for 30-40 min to have desired colour, moisture and proper grain size. The yield of *Halvasan* is 45 kg/100 kg milk which can be stored at $30 \pm 2^\circ\text{C}$ temperature for 9 days.

3 Development of self carbonated probiotic whey beverage

Self carbonated probiotic whey beverage could be prepared by fermentation of pasteurized paneer whey using yeast *Kluyveromyces marxianus* NCIM 3566, probiotic culture *Lactobacillus helveticus* MTCC 5463 and 7% sugar. The product could provide

optimum dose of probiotic lactobacilli of 2.13×10^8 cfu/ml having organoleptically acceptable quality till 21 days of storage at 5 ± 2 °C temperature.

IV FOOD PROCESSING TECHNOLOGY

1 Utilization of pumpkin powder for preparation of various food products

The pumpkin powder rich in carotene (Precursor of vitamin-A) can be used for manufacturing of various food items.

(A) A carotene biofortified biscuits can be prepared by replacing refined wheat flour (maida) with pumpkin powder at the rate of 2.5% (w/w). This biscuit will be of a good dietary supplement of vitamin-A.

(B) A carotene biofortified deep fried *bhajjiya* can be prepared by replacing gram flour (besan) at the rate of 10% (w/w) with pumpkin powder. The *bhajjiya* will be a good dietary supplement of vitamin-A.

(C) A carotene biofortified ice-cream can be prepared with pumpkin powder incorporated at the rate of 1.5% (w/v). The ice-cream will be a good dietary supplement of vitamin-A.

2 Puffing of grains (Parboiled Milled Rice) using microwave energy from Gurjari/Jaya rice

The entrepreneurs and food processors interested in production of instant puffed rice using microwave

energy are advised to use Gurjari or Jaya variety following the protocol developed by AAU. The technology enables production of puffed rice in domestic convective- cum-microwave oven.

V ANIMAL PRODUCTION

1. The effect of estrus synchronization protocols on estrus response and fertility in Gir cows

Estrus Synchronization protocols viz. I: CIDR protocol (CIDR+EV-Day 90-92; PGF2 α - Day 7, AI - day 9th (48 hr after PGF2 α injection), II: Ovsynch Protocol (GnRH -Day 0; PGF2 α - Day 7; GnRH- Day 9; AI - Day 22-24 hr after 2nd injection) or III: Cowsynch Protocol (GnRH - Day 0; PGF2 α - Day 7; GnRH - Day 9 + AI - 12 & 18 hr) results in successful ovulatory estrus and conception within two cycles in postpartum infertile Gir cows.

2 Effect of IGF-II genotypes on feed consumption and egg production in Bantamized White Leg Horn

At IGF-II locus, AA genotype (*NlaIII* RFLP) has lower body weight and better feed conversion efficiency than AB and BB genotypes with egg number, egg weight and AFE at par in Bantamized White Leg horn birds suggesting A allele having favourable effect on feed conversion efficiency.

3 Effect of O CX-32 genotypes on egg production in Bantamized White Leg Horn

At OCX-32 ex2 and ex4 loci, AB and BB genotypes (*HpyCH4IV* and *NcoI*

RFLP) has significant and favourable association with egg production without affecting egg weight as compared to AA genotype in Bantamized White Leghorn birds suggesting B alleles at both loci which has favourable effect on egg production.

4 **Developing egg purpose crosses for backyard poultry farming**

For development of crossbred chicken suitable for rural poultry farming using Australorp, Naked neck and Rhode Island Red as male and White Leghorn as female parents, Naked neck and Rhode Island Red crossbred have shown significantly better egg number, egg mass, feed efficiency in terms of feed consumption per egg, per kg eggs and per dozen eggs and return over feed cost up to 40 weeks of age as compared to Australorp crossbred.

5 **Composition of Kachchhi camel milk**

Kachchhi camel milk contains comparatively higher unsaturated fatty acids (Palmitoleic Acid 7.31%, Linoleic Acid- 0.78% and Linolenic Acid 0.57%), Minerals (Iron +0.30 ppm and Zinc +2.64 ppm) and Vitamin C (+5.88 mg/100 ml) than goat milk.

6 **Technology for manufacturing camel milk medium fat ice cream**

Pineapple flavoured medium fat ice cream (6% milk fat, 11% MSNF, 15% sugar, 1.5% whey protein concentrate, 0.2% sodium alginate and 0.15%

glycero monostearate) can be prepared from camel milk which has comparable acceptability to regular ice-cream (10% fat).

7. **Genetic variability in Kachchhi camel**

Kachchhi camel has low genetic variability as revealed by low observed and effective mean number of alleles (MNA=3.18 and 2.06 respectively), low observed and expected heterozygosity ($H_o=0.364$ and $H_e=0.421$) and low inbreeding coefficient ($F_{IS} = 0.1027$) based on camel specific set of 16 microsatellite markers.

8. **Growth performance of kids and lambs fed jowar hay and groundnut haulms based total mixed ration (TMR)**

The weaner lambs fed with *jowar* hay (30%) and groundnut *gotar* (30%) based Total Mixed Ration (TMR-T₂) resulted in significantly higher amount of total and protein nitrogen (95.56 & 66.16 mg/dl, respectively) compared to lambs fed with TMR based on *jowar* hay (60%) alone (68.49 and 39.02 mg/dl, respectively). The higher availability of increased protein-N resulted in significantly higher growth rate in weaner lambs.

9. **Compensatory growth in crossbred calves fed crop residue based TMR**

Restricted feeding of 8-12 months old growing crossbred calves at the rate of 75% of the requirement as per NRC (1989) standards for 3 months followed

by re-alimentation for 2 months at the rate of 125% of requirement is a feasible option since it resulted in 29% higher body weight gain without increase in feed cost per kg gain.

10 Area specific mineral mixture for Dahod district

Following area specific mineral mixture is recommended for Dahod district to makeup the deficiency when fed @ 30g/head/day to dairy animals in addition to the current feeding practices.

Sr. No.	Mineral elements	Requirement (%)	Mineral salt	Quantity (g)
1	Calcium	20.000	Dicalcium phosphate Calcite powder	12.177
2	Phosphorus	12.000	DCP	66.667
3	Magnesium	5.000	Magnesium oxide	9.259
4	Sulphur	2.700	Sodium thiosulphate	6.923
5	Copper	0.100	Copper sulphate	0.400
6	Zinc	0.900	Zinc sulphate	2.727
7	Manganese	0.130	Manganese sulphate	0.419
8	Iron	0.400	Ferrous sulphate	1.333
9	Cobalt	0.012	Cobalt sulphate	0.060
10	Iodine	0.026	Potassium iodide	0.034
Total				100.000

11 Nutritional evaluation of detoxified *Jatropha curcas* meal on milk production in buffaloes

The replacement of soyabean meal protein with detoxified *Jatropha curcas* meal at 50% level in the concentrate mixture for buffaloes had no adverse effect on total milk yield, gross milk composition, nutrient utilization, feed conversion efficiency and blood biochemical profile viz glucose, total protein, albumin, globulin and activities of alanine-aminotransferase and aspartate aminotransferase.

12 Effect of GHR gene SNPs on production in Jaffarabadi and Mehsana buffaloes

Two SNPs in Exon 8 of GHR gene (G1961T and T1972C) have significant and favourable association with milk fat% in Jaffarabadi and Mehsana buffaloes, where allele T and allele C respectively have favourable effects.

13 Novel SNPs in Leptin gene in Jaffarabadi and Mehsana buffaloes

Three novel SNPs one each in Promoter (C287A), Intron-1 (A321G) and Exon-3 (A498T) in Leptin gene have been discovered in Jaffarabadi and

Chapter-6 : Reserach

Mehsana buffaloes.

14 Effect of Leptin gene SNPs on production in Jaffarabadi and Mehsana buffalo

An SNP (C310T) in intron 1 of Leptin gene has significant association with milk fat% in Jaffarabadi buffalo. Allele C was found to have favourable effect.

15 Effect of Pit gene SNPs on production in buffaloes

Seven new SNPs discovered in Pit 1 gene of buffalo, one in Exon 1 (T264A), three in Intron-1 (C461T, G472A and C603G), one in Exon 2 (C720T) and two in Intron 2 (T771C and G772A) have no association with the milk yield and milk fat %.

VI ANIMAL HEALTH

1 Evaluation of immunomodulatory activity of a topical herbal drug in the treatment of bovine subclinical mastitis

Topical application of 5 g of a gel based herbal drug {containing *Curcuma longa* (0.04 g), *Paedaria foetida* (0.04 g), *Glycyrrhiza glabra* (0.1 g), *Eucalyptus globulus* (0.2 g), *Cedrus deodara* (1.0 g) and *Shudh gandhaka* (1.0 g) in each 10 g} on sub-clinically infected udder quarters twice daily after milking for 5 consecutive days results in significant reduction in bacterial load and immunomodulation till day 21 post-treatment, hence

suggested as an effective herbal therapy against bovine sub-clinical mastitis.

2. Anticancerous efficacy of *Semecarpus anacardium* on N-Nitrosodiethylamine induced Hepatocellular Carcinoma in Wistar Rats

The Nut milk extract of *Semecarpus anacardium* (Bhilamo) at the rate of 2.5 g/kg body weight orally once a day for seven weeks has anticancerous effect on N- nitroso diethylamine induced hepatocellular carcinoma in wistar rats.

3. Influence of different categories of follicles on quantity and quality of oocytes with respect to their in vitro maturation in Surti buffaloes

- (i) For better maturation rate of oocytes in Surti buffaloes, oocytes with more number of cumulus layers should be selected.
- (ii) In Surti buffaloes, better quality and quantity of oocytes are retrieved in absence of corpus luteum.

4. Rabbit model based on histomorphometry and monopolar electrocoagulation

In the rabbit model, based on histomorphometry, monopolar electrocoagulation (24 W and 3 sec) caused greater thermal damage than bipolar (56 W and one sec), advocating low power output and less duration of application.

VII SOCIAL SCIENCE

1. Economic analysis of tissue cultured and sucker propagated banana in middle Gujarat

The total cost of cultivation was found to be higher in tissue-cultured banana (TCB) by Rs. 36,649/- per hectare than sucker-propagated banana (SPB), in which higher cost of tissue-cultured plantlets alone contributed to about 70 per cent. In adoption of TCB, high cost of tissue-cultured plantlets was the main constraint expressed by about 73 per cent of SPB farmers. Therefore, to popularize TCB, the trustworthy tissue-cultured plantlets should be made available to the farmers at reasonable price.

II Achievements in Seed Production

Ensuring quality seeds to farmers, Anand

Agricultural University has registered its trademark and logo of “ANUBHAV SEED” with the Trademark Registration Authority of India. All the seed producing centres/units of Anand Agricultural University, Anand are well equipped with seed production machinaries required for all operations starting from land preparation to harvesting. The total seed production of the year 2012-13 reached all time high 6940.50 quintals showing more than three times increase over the year 2004-05 (2247.83 quintal). The newly created seed processes and seed testing facilities also boosted the efforts of seed quality assurance. Moreover, the University has started seed production through **Participatory Seed Production** in farmers’ field and produced 117.60 quintal certified and 1648 quintal truthfully labeled seeds.

Table- 6.5 Seed and Seedling production during the year 2012-13

(In quintal)

Sr. No.	Crop	Breeder	Other stage	Total
Cereals				
1	Paddy	127.45	2335.43	2462.88
2	Maize	375.57	355.09	730.66
3	Wheat	630.00	1507	2137.00
Pulses				
4	Green gram	6.00	116.55	122.55
5	Gram	37.00	278	315.00
6	Pigeonpea	16.50	35.2	51.70
Oilseeds				
7	Castor (Hyb.)	4.60	164	168.60
8	Groundnut	77.80	-	77.80
9	Soybean	-	193.5	193.50

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Sr. No.	Crop	Breeder	Other stage	Total
Cash/ Other crops				
10	Cotton (Deshi)	37.00	27	64.00
11	Tobacco	-	70.8	70.80
12	Clusterbean (seed)	9.75	216.04	225.79
13	Sunhemp	-	7.5	7.50
Forage crops				
14	Lucerne	16.50	16.7	33.20
15	Oat	130.00	3	133.00
16	Rajka-Bajra	-	0.4	0.40
17	Sorghum	-	119.4	119.40
Vegetables				
18	Clusterbean (Veg.)	-	0.25	0.25
19	Pigeonpea(Veg.)	-	0.7	0.70
20	Chilli (Veg.)	0.45	0.31	0.76
21	Brinjal	-	0.6	0.60
22	Cucumber	-	0.27	0.27
23	Okra	-	4.75	4.75
24	Tomato	-	0.006	0.006
25	Bottle gourd	-	0.8	0.80
26	Cowpea (Veg.)	0.50	1.6	2.10
27	Indian bean Papdi	-	4	4.00
Spices (Seed)				
28	Cumin	3.00	6.5	9.50
29	M & A plants seed	-	2.97	2.97
Total		1472.12	5468.38	6940.50
Seedlings and Planting materials (Lakhs)				
1	Tobacco	-	-	52.00
2	Napier Hybrid	-	-	2.49
Total		-	-	54.49
Tissue cultured plants (Nos.)				
1	Date palm	-	-	1500
2	Parval	-	-	2000
3	Stevia	-	-	2000
Total		-	-	5500

Research Projects

In addition to regular state plan, non-plan and ICAR Co-ordinated projects, following **61** new schemes were sanctioned during the year, 2012-13.

Project sanctioned by	No.
ICAR	03
GoI	05
State Plan	12
GoG	06
RKVY	06
NHM	01
Other Agency	24
SSNL	04
TOTAL	61

LIST OF OTHER AGENCY SCHEMES IMPLEMENTED (2012-13)

Sr. No.	Name of Project	Principal Investigator	Financing Authority	Grant Allotted (Rs. In lakhs)
A. GOVERNMENT OF GUJARAT				
1	Workshop on Medicinal Plants	Research Scientist, Medicinal & Aromatic Plants, ICAR Unit-9, AAU, Anand	Gujarat Medicinal Plants Board, Gandhinagar	2.00
2	Bioinformatic Challenges in cutting edge Matagenomic Research	Professor & Head, Dept. of Animal Biotechnology, Vety. College, AAU, Anand	Mission Director, GSBTM, Gandhinagar	0.65
3	Development of EST-SSR markers for fibre quality in diploid cotton (<i>Gossypium herbaceum</i>)	Dr. R.S.Fougat, Unit Officer, Dept. of Agri. Biotechnology, AAU, Anand	Mission Director, GSBTM, Gandhinagar	19.93
4	Incubation Centre-cum-Centre of Excellence in Food Processing Sector at AAU, Anand Campus	Dr. D.C.Joshi, Dean, Faculty of FPT &BE, AAU, Anand	Jt.Commissioner of Industries (Inc), Gandhinagar	917.00
5	Biochemical and molecular characterization of <i>T. durum</i> cultivars for its end product processing quality.	Dr. J. G. Talati Prof. & Head, Dept. of Biochemistry, BACA, AAU, Anand	Mission Director, GSBTM, Gandhinagar	19.72
6	Purchase of GPS enabled Tablet PC	Director of Information Technology, AAU, Anand	Director of Agriculture, Gujarat State, Gandhinagar	46.58
Total				1005.88

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Sr. No.	Name of Project	Principal Investigator	Financing Authority	Grant Allotted (Rs. In lakhs)
B. NATIONAL HORTICULTURE MISSION				
7	Crop Protection in Horticultural Crops	ADR, AAU, Anand	Director of Horticulture, Gujarat State, Gandhinagar	3.00
Total				3.00
C. PRIVATE ORGANIZATIONS				
8	Diatomaceous earth as a silicon source in different crops of India	Dr. K. C. Patel, Asso. Professor, Dept. of Agril. Chemistry & Soil Science, BACA, AAU, Anand	University of Agricultural Sciences, GKVK, Bangalore	11.34
9	Bio-efficacy of <i>Metarrhizium anisopliae</i> based Bio-insecticide, Met52 EC for the control of sucking pest complex in Brinjal	Dr. J. J. Jani, Asso. Research Scientist (Microbiology), Biological Control Research Laboratory, ICAR Unit-9, AAU, Anand	Novozymes South Asia Pvt. Ltd., B-1104, Anusha Residency, Sutarwadi, Pashan-Sus Road, Pune	4.50
10	Bio-efficacy of <i>Metarrhizium anisopliae</i> based Bio-insecticide, Met52 EC for the control of sucking pest complex in chilli.	Dr. J. J. Jani, Asso. Research Scientist (Microbiology), Biological Control Research Laboratory, ICAR Unit-9, AAU, Anand	Novozymes South Asia Pvt. Ltd., B-1104, Anusha Residency, Sutarwadi, Pashan-Sus Road, Pune	4.50
11	Evaluation of performance of paddy hybrids / varieties	Shri. R.L.Chotaliya, Assistant Research Scientist, Paddy Research Station, AAU, Dabhoi	Pravardhan Seeds Pvt. Ltd., 8-2-277/45, UBI Colony, Road No.3, Banjara Hills, Hyderabad	6.60

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Sr. No.	Name of Project	Principal Investigator	Financing Authority	Grant Allotted (Rs. In lakhs)
12	Evaluation of performance of paddy hybrids / varieties	Research Scientist (Rice), MRRS, AAU, Nawagam	Nuziveedu Seeds Pvt. Ltd., Hyderabad	21.10
13	Evaluation of performance of pearl millet hybrids	Dr. B.C.Patel, Assistant Res. Scientist, Regional Research Station, AAU, Anand	Devgen Seeds and Crop Technology Pvt. Ltd., 70, Surya Towers, 105, SP Road, Secunderabad	1.50
14	Evaluation of performance of maize hybrids	Dr. B. N. Patel, Associate Research Scientist, ARS, AAU, Nenpur / Sansoli	Nuziveedu Seeds Pvt. Ltd., 8-2-277/45, UBI Colony, Road No.3, Banjara Hills, Hyderabad	24.90
15	Evaluation of performance of maize hybrids	Dr. B. N. Patel, Associate Research Scientist, ARS, AAU, Nenpur / Sansoli	Bayer BioScience Pvt. Ltd., 4 th floor, B. D. Patel House, Near Sardar Patel Colony, Naran Pura, Ahmedabad	1.50
16	(1) Testing the bio-efficacy of JumpStart in Soybean (2) Testing the bio-efficacy Optimize 400 in Soybean and (3) Testing the bio-efficacy of Taegro in Soybean	Dr. J. J. Jani, Asso. Research Scientist (Microbiology), Biological Control Research Laboratory, ICAR Unit-9, AAU, Anand	Novozymes South Asia Pvt. Ltd., B-1104, Anusha Residency, Sutarwadi, Pashan-Sus Road, Pune	13.15

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Sr. No.	Name of Project	Principal Investigator	Financing Authority	Grant Allotted (Rs. In lakhs)
17	Evaluation of Sulphur and Zinc containing Complex Fertilizer Efficiency in Groundnut - Wheat and Maize - Mustard cropping System	Dr. V.P.Ramani, Associate Research Scientist, Micronutrient Project (ICAR), ICAR Unit-9, AAU, Anand	Mosaic India Private Limited, 11 th floor, Building 8C, DLF cyber City, Phase-II, Gurgaon	13.64
18	Study the performance of Bio Gold and Power Gold as a manure and soil conditioner in improving the cotton (Bt) yield and fertilizer use efficiency	Dr. K. C. Patel, Asso. Professor (Ag. Chem.), Dept. of Ag. Chemistry & Soil Science, BACA, AAU, Anand	Narmada Bio-chem Pvt. Ltd., 1008-1009, 10th floor, Akik Comlex, Opp. Rajpath Club, S. G. Road, Bodakdev, Ahmedabad	12.00
19	Evaluation of Bio-efficacy & Phytotoxicity of Antracol 70WP (Propineb 70% WP) against Leaf spot disease of cotton	Dr. R. N. Pandey, Professor & Head, Dept. of Plant Pathology, BACA, AAU, Anand	Bayer CropScience Ltd., Ahmedabad	3.63
20	Evaluation of performance of maize hybrids	Dr. B. N. Patel, Associate Research Scientist, ARS, AAU, Nenpur / Sansoli	Bioseed Research India Pvt. Ltd, Hyderabad	1.50
21	Evaluation of performance of maize hybrids	Dr. B. N. Patel, Associate Research Scientist, ARS, AAU, Nenpur / Sansoli	Monsanto India Ltd., #10, Devashish Bunglows, Kubereswar marg, Waghodia Road, Vadodara	2.10

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Sr. No.	Name of Project	Principal Investigator	Financing Authority	Grant Allotted (Rs. In lakhs)
22	Testing the bio-efficacy and Phytotoxicity of chlorantriliprole 35% WG against lepidopteran pests of Okra and Tomato	Dr. N. B. Patel, Assistant Research Scientist (Entomology), MVRs, AAU, Anand	E.I. Dupont India Private Limited, 7th floor, Tower C, DLF Cyber Greens, Sector -25 A, DLF City, Phase - III, Gurgaon	10.35
23	Effect of application of different sources of Phosphorus on growth and yield of crops under maize-mustard cropping sequence	Dr. M. V. Patel, Professor & Head, Dept. of Agronomy, BACA, AAU, Anand	Rashtriya Chemicals & Fertilizers Ltd., Mahul Road, Chembur, Mumbai	5.40
24	Isolation of Native Isolates useful in Agriculture for Control of Plant Pathogens and their PGPR Activity	Associate Research Scientist(Microbiology), Biological Control Research Laboratory, ICAR Scheme, Unit-9, AAU, Anand	Ambic Organic, Bardoli	0.28
25	Testing of Agro Charger & Agro Clean in Chilli	Dr. D.P.Gohil, Associate Research Scientist (Pl. Br.), Main Vegetable Research Station, AAU, Anand	Shukla Ashar Impex Pvt. Ltd., 205-206, Orbit Plaza, Dr. Yagnik Road, Rajkot - 360 001	1.18
26	Testing of Agro Charger & Agro Clean in Tomato	Dr. R.R.Acharya, Associate Research Scientist (Pl.Br.), Main Vegetable Research Station, AAU, Anand	Shukla Ashar Impex Pvt. Ltd., 205-206, Orbit Plaza, Dr. Yagnik Road, Rajkot - 360 001	2.72

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Sr. No.	Name of Project	Principal Investigator	Financing Authority	Grant Allotted (Rs. In lakhs)
27	Monitoring of Surface and Ground water for Pesticide residues in the SSP command-Phase-II area for the year 2012-2015	Dr. P. G. Shah, Residue Analyst, Pesticide Residue Scheme, ICAR Unit-9, AAU, Anand	Soil Survey Officer, Narmada Yojna, Ahmedabad	4.40
28	Supervised field trial on residue and persistence study Ipoconazole + Metalaxyl (Rencona dimension) on maize	Dr. P. G. Shah, Residue Analyst, Pesticide Residue Scheme, ICAR Unit-9, AAU, Anand	Network Coordinator, AINP on Pesticide Residues, New Delhi	2.00
29	Testing of Zineb 68% + Hexaconazole 4% WP (AVTAR) against diseases of Cotton and Maize	Dr. R.K.Patil, Professor for Maize crop and Dr. N. M. Gohel, Asstt.Professor, Dept. of Plant Pathology, BACA, AAU, Anand	Indofil Industries Ltd., Mumbai	4.20
30	Evaluation of Carbendazim 25% + Mancozeb 50% WS (SPRINT) against diseases of Maize and Onion bulb	Dr. R. N. Pandey, Professor & Head, Dept. of Plant Pathology, BACA, AAU, Anand	Indofil Industries Ltd., Mumbai	2.09
31	Evaluation of <i>Bt</i> Cotton Hybrids	Dr.M.B.Parmar Asstt. Res. Sci., RRS, AAU, Anand	12 trials of 9 private companies	32.40
Total				186.98
D. RASHTRIYA KRUSHI VIKAS YOJNA [RKVY]				
32	Establishment of Education & Extension facilities for farmers and students	Executive Engg., AAU, Anand	Director of Agriculture, Gujarat State, Gandhinagar	582.40

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Sr. No.	Name of Project	Principal Investigator	Financing Authority	Grant Allotted (Rs. In lakhs)
33	Large Scale Multiplication of Indigenous Date Palm Trees Through Tissue Culture	Dr. N. Subhash, Professor, Tissue Culture Lab, AAU, Anand	Director of Agriculture, Gujarat State, Gandhinagar	47.00
34	Establishment of Liquid Biofertilizer mass production unit (Biofertilizer Plant)	Dr. R. V. Vyas, Research Scientist, Dept. of Microbiology, BACA, AAU, Anand	Director of Agriculture, Gujarat State, Gandhinagar	88.38
35	Establishment of Central Laboratory of Excellence for mapping and atlas preparation of agriculturally beneficial bacteria in Gujarat state	Dr. R. V. Vyas, Research Scientist, Dept. of Microbiology, BACA, AAU, Anand	Director of Agriculture, Gujarat State, Gandhinagar	66.42
36	Development of Irrigation resources	Dirctor of Research, AAU,Anand	Director of Agriculture, Gujarat State, Gandhinagar	29.80
37	Creation of facilities for farmers/ farm women / rural youth at AAU, Anand	Dr. P.P.Patel, Dirctor of Ext. Edu., AAU,Anand	Director of Agriculture, Gujarat State, Gandhinagar	38.807
Total				852.23
E. Plan				
38	Production Potential and Value Addition of Banana Grown in Tribal Area of Chhotaudaipur Region of Middle Gujarat Through Multiple Approach, Jabugam	Assistant Research Scientist, Agricultural Research Station, AAU, Jabugam	Government of Gujarat, Gandhinagar	13.32

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Sr. No.	Name of Project	Principal Investigator	Financing Authority	Grant Allotted (Rs. In lakhs)
39	Augmenting Reproductive Efficiency in Dairy Animals of Tribal Areas using Controlled Breeding Technologies and Ultrasonography, Anand	Professor & Head, Dept. of Gynaecology, College of Veterinary Sciences, AAU, Anand	Government of Gujarat, Gandhinagar	11.00
40	Establishment of Advanced Centre of Integrated Research and Trainers Trainings on Management of Natural Resources (Land, Water and Energy) and Farm Mechanization in tribal region of Middle Gujarat, Godhra	Dean / Principal, College of Agril. Engineering, AAU, Godhra	Government of Gujarat, Gandhinagar	41.37
41	Developing a Small Agro-Tourism Conclave to Promote Experimental Learning on Watershed Based Interventions, Kankanpur	Dean / Principal, College of Agril. Engineering, AAU, Godhra	Government of Gujarat, Gandhinagar	32.18
42	Developing Model Mechanized Farming Villages for Productivity, Enhancement and Entrepreneurship Development in the Tribal Region of Middle Gujarat, Kankanpur	Dean / Principal, College of Agril. Engineering, AAU, Godhra	Government of Gujarat, Gandhinagar	31.50
43	Tailoring Maize for Specific uses thereby nutritional enrichment and security – A better alternatives for Rainfed Farming. Particularly tribal area of Gujarat state, Godhra	Research Scientist (Maize), Main Maize Research Station, AAU, Godhra	Government of Gujarat, Gandhinagar	6.68
44	Study on Pesticide Residue Analysis from Food, Feed, Water and Soil for Food safety in Gujarat	Residue Analyst, Pesticide Residue, ICAR Unit - 9, AAU, Anand	Government of Gujarat, Gandhinagar	101.00

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Sr. No.	Name of Project	Principal Investigator	Financing Authority	Grant Allotted (Rs. In lakhs)
45	Development of hybrid varieties in cucurbit crops, Anand	Research Scientist (Vegetable) Main Vegetable Research Station, AAU, Anand	Government of Gujarat, Gandhinagar	8.00
46	Effect of phytochemicals on nutrient utilization, health attributes and production of ruminants, Anand	Research Scientist, Animal Nutrition Research Station, College of Veterinary Sciences, AAU, Anand	Government of Gujarat, Gandhinagar	9.00
47	Research Center for Distant Hybridization in field and fruit crops, Anand	Unit officer, Dept. of Agril. Biotechnology, AAU, Anand	Government of Gujarat, Gandhinagar	70.90
48	Development of early maturing high yielding castor hybrids / varieties suitable to cropping system in irrigated area of Middle Gujarat, Sansoli	Associate Research Scientist, Agricultural Research Station, AAU, Sansoli	Government of Gujarat, Gandhinagar	17.08
49	Evolving Suitable Rice Genotypes for Rabi & Summer Cultivation for Enhancing the Production and Productivity in Middle Gujarat of Agro-climatic Zone – III, Thasra and Nawagam	Research Scientist (Rice), Main Rice Research Station, AAU, Nawagam	Government of Gujarat, Gandhinagar	8.67
Total				350.70
F.SSNNL				
50	Establishment of Agricultural Research Station in Sardar Sarovar Command, Thasra	Asso. Res. Scientist, ARS, Thasra	SSNNL, Gandhinagar	19.05
51	Establishment of Agricultural Research Station in Sardar Sarovar Command, Dabhoi	Asstt. Res. Scientist, Paddy Res. Station, Dabhoi	SSNNL, Gandhinagar	28.29

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Sr. No.	Name of Project	Principal Investigator	Financing Authority	Grant Allotted (Rs. In lakhs)
52	Establishment of Agricultural Research Station in Sardar Sarovar Command, Dhandhuka	Asstt. Res. Scientist, ARS, Dhandhuka	SSNNL, Gandhinagar	16.48
53	Narmada Irrigation Research Project, Khandha	Unit officer, NIRP, Khandha	SSNNL, Gandhinagar	65.20
Total				129.02
G. GOI				
54	Response of Greengram (Kharif) and Maize (Rabi) to the foliar application of Kappaphycus Cell Sap (Sea Weed) organic fertilizer	Dr. R. A. Patel, Assistant Professor, Dept. of Agronomy, BACA, AAU, Anand	The Director, Central Salt & Marine Chemicals Research Institute, G. B. Marg, Bhavnagar	5.73
55	Metabolic and molecular profiling of aromatic rice germplasm of India for gaining insights about aroma	Dr. Atul M. Mehta, Research Scientist (Rice), MRRS, AAU, Nawagam	Scientist 'C', DBT, New Delhi	9.60
56	Costs and Returns in Milk production: Developing Standardized Methodology and Estimates for Various Production Systems	Dr. Sanjiv Kumar, Asstt. Professor, IABMI, AAU, Anand	Director, NDRI, Karnal	3.60
57	Sustainability of Sarus crane of western India: evaluation with habitat-based meta-population model	Dr. C. K. Borad, Asso. Res. Sci., AINP on Agricultural Ornithology, AAU, Anand	The Scientist 'D', SERB, (DST, GOI), New Delhi	16.91
58	Up-gradation/Setting up of Food Testing Laboratory at AAU, Anand.	Project Incharge Principal, College of FPT & BE, AAU, Anand.	Assistant Director, Ministry of Food Processing Industries, GOI, New Delhi	249.15
Total				284.99

H. ICAR				
59	Determining population structure and identification of SNPs associated with Milk traits in Kachchhi and Marwari Camel (Emeritus scientist scheme)	Dr.J.V.Solanki Emeritus Scientist, Animal Biotechnology Dept. Vet. College, AAU, Anand	ADG(HRD) ICAR, New Delhi	5.88 1 st yr
60	Production and demonstration of tissue culture raised plants under three locations and collection and maintenance of elite germplasms of date Palm	Implementing officer Dr. Subhash. N., Professor and Head, Plant Tissue Culture Lab. AAU, Anand	Director (Horticulture), ICAR, New Delhi	40.00
61	Tribal Sub Plan(TSP): Encouraging Tribal Youths/ Women for Adopting Proven Agri. Engg. Tehnology on Mechanization, Value Addition & Resource Conservation in Middle Gujarat	Dr. M. L. Gaur Principal, CAET, AAU, Godhra.	ADG(EP&D), ICAR, New Delhi	95.00
Total				140.88
Grand Total				3109.93

IV RESEARCH PUBLICATIONS

a. Research Papers Published (*Annexure-7*)

Sr No.	NAME OF FACULTY	No.
1	Faculty of Agriculture	90
2	Faculty of Dairy Science	06
3	Faculty of Veterinary Science	93
4	Faculty of Food Processing Technology & Bio-Energy	04
5	Faculty of Agricultural Information Technology	07
6	Faculty of Agricultural Engineering	07
7	Faculty of Agricultural Business Management	06
	TOTAL	213

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b. Research Papers Presented

Sr No.	NAME OF FACULTY	No.
1	Faculty of Agriculture	95
2	Faculty of Dairy Science	55
3	Faculty of Veterinary Science	172
4	Faculty of Food Processing Technology & Bio-Energy	25
5	Faculty of Agricultural Information Techology	06
6	Faculty of Agricultural Business Management	06
	TOTAL	359

Participation of Scientists in Conference / Seminar / Symposium / Workshop / Training etc.

a NATIONAL LEVEL (Appendix - 8) : 388

Distinguished Awards / Honours / Recognition

- Dr. K. P. Patel, Dean & Principal, B. A. College of Agriculture and Dr. V. P. Ramani, Officer-In-charge, Micronutrient Project (ICAR), AAU, Anand have been awarded "THIRD PRIZE" in the discipline of Agricultural Sciences for their article entitled "Specialty Fertilisers in Indian Agriculture" published in April 2012 issue of Indian Journal of Fertilisers.



- Dr. Jayesh B. Patel, Ph.D. Scholar of Department of Veterinary Pharmacology & Toxicology has been selected for award of INSPIRE fellowship for doctoral studies by Department of Science and Technology, Government of India, New Delhi from August, 2012.
- Young Scientist award was given to Ms Suja Senan for her paper entitled "Safety Investigation of probiotic strain *L. helveticus* MTCC 5463 using complete genome sequence annotation studies" at 1st Annual conference of Probiotic Association of India New Delhi during 27-28 Aug, 2012.
- Dr. R. V. Vyas and Mrs. H. N.Shelat received Federation of Gujarat Industries (FGI) Award from Hon. Chief Minister of Gujarat, Shri Narendra Modi at FGI campus on 10th September, 2012 for Liquid Biofertilizer Technology TOT & PPP.



- First Prize was awarded to Dr. Sunil Patel by Dr S. H. Srivastava, Hon. Vice-Chancellor of Sardar Patel University, Vallabh Vidyanagar (Gujarat) for oral presentation of research paper on 'Innovative Equipment Design and Standardization of Process for Mechanized Production of 'Halwasan – A Value Added Functional Food' at National seminar on "Functional Foods: Managing Health in the Modern Age" held at Post Graduate Department of Home Science, Sardar Patel University, Vallabh Vidyanagar, Gujarat during October 7-8-2012.
- Anand centre of AICRP on Agrometeorology was awarded as the Best centre for the year 2011-12 by Project Coordinator (AICRPAM) CRIDA, Hyderabad during XII Biennial Workshop of AICRP held at Maharana Pratap University of Agriculture & Technology, Udaipur during October 9-12-2012. The award was presented by Dr. S. R. Maloo, Dean, RAU, Udaipur. The award is given based on overall performance of the center on fifteen parameters evaluation rating.



- Oral presentation of joint research paper entitled, "Isolation of endophytic bacteria and their PGPR potential for increased production of maize (Zea mays L.)" by Jhala Y.K., Gupta D. G., Patel H. K., Shelat H. N. and Vyas R. V. won 3rd prize in 2nd India group meeting of Asian PGPR society for sustainable agriculture at Maharaja Sayajirao University, Vadodara during 22-23 October, 2012.
- Dr. A M Shekh, Vice Chancellor, AAU, and Chairman, BPDU, Dr. R. V. Vyas and Mrs. Harsha N Shelat received CERTIFICATE OF APPRECIATION from Director General, ICAR, Dr. S. Ayappan on 16th November, 2012 at CAZRI, Jodhpur.



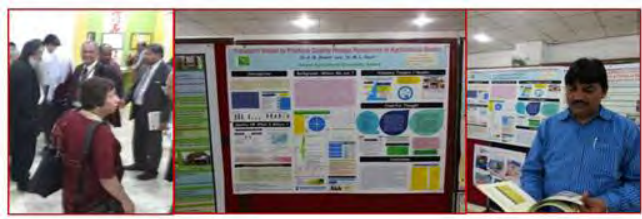
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- Third Prize was awarded to Dr. Dharmendrakumar, Dr. Subhash Parnerkar, Dr. M. A. Shekh and Mr. G. R. Patel for their best paper presentation entitled “Effect of feeding graded levels of detoxified neem cake on carcass traits in growing Marwari kids” in National seminar on “Future challenges and opportunities to improve health and production of small ruminants” organized by the Indian Society of Sheep and Goat production and utilization at Central Institute for Research on Goats, Mathura during 22-23 December, 2012.
- In the 31st Annual Convention of (ISVM) 2013 & National Symposium on “Advancing Veterinary Medicine and its Specialities for Augmented Productivity and Health: Issues and Strategies in Farm and Companion Animals” held during January 9-11, 2013 at the College of Veterinary Science and Animal Husbandry, Mhow (M.P.) following scientists have received different distinctions:
 - 1 Sharma Pradeep, D.S. Nauriyal, Shah Kunal and Valand Piyush: 1st Prize in Poster Presentation.
 - 2 Dr. R. G. Jani: Dr. G N Dutta Memorial Gold Medal.
 - 3 Dr. S M Parmar and Dr. R G Jani: Best Paper Presentation Award.
- Main Vegetable Research Station, AAU, Anand was awarded first prize for the best exhibition stall in Krishi Mela (2013) organized by Agriculture Technology Management Agency (ATMA) and Women Agricultural Skill Development Training Program at Tarapur, Anand on 22nd January, 2013.
- Pratik Jaisani, R. N. Pandey and D.L. Yadav received 3rd Prize of “Prof. Krishna Sahai Bilgrami best paper presentation award” for paper entitled “*RAPD and Internal Transcribed Spacer (ITS) Region based Characterization of Trichoderma spp. from Rhizospheric soils of different Crops*” presented at the “34th Annual conference and National symposium of ISMPP, Udaipur on “Crop Disease Management: Advances and Challenges” held at N. M. College of Agriculture, Navsari Agricultural University, Navsari during 21-23 January, 2013.
- Dr. A M Shekh, Vice Chancellor, AAU and Chairman, BPDU with his team comprising Director of Research, Dr. K. B. Kathiria, CPI and Head BPDU & Res Sc. Micro, Dr. R. V. Vyas & Associate Research Scientist (Microbiology) & CCPI BPD Unit Mrs. H. N. Shelat received Times of India (TOI) JP Morgan Social Impact Award (2012) from beneficiary, Mr. Devesh Patel (farmer of Boriavi) at a function in New Delhi on 28th January, 2013.



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- Dr K N Wadhwani received National Fellow award from Indian Society of Animal Production & Management, NDRI, Karnal on 28th January, 2013.
- Dr Y D Padheriya, Dr K N Wadhwani, Dr C G Joshi and Manisha Patel received IInd Prize in Poster Presentation at NDRI, Karnal on 28th January, 2013.
- Paper from Dr A M Shekh & Dr M L Gaur of AAU bagged 1st Prize during Congress organized by National Academy of Agricultural Sciences (NAAS), New Delhi, ICAR and OUAT Bhubaneswar during 7-8 February, 2013.



- Mahindra Samriddhi India Agri Award under category Krushi Siksha Samman 2013 for LBF consortium an Innovative farming technology was received by BPD team on 21st Feb 2013 at New Delhi.



- Young Scientist Award was given to Dr. Subrota Hati in the field of Dairy

Microbiology for paper entitled "Antioxidative and Antimicrobial Activity of Fermented Soy Milk supplemented with WPC 70" at "15th Indian Agricultural Scientists and Farmers Congress" during Feb. 22-24 Feb 2013 at Vigyan Parishad Hall, University of Allahabad, Allahabad.

- Dr. B.P. Shah, Principal & Dean has received "Dr. J.R. Patel Memorial Trust award for the year 2011-13" for his remarkable contribution in dairy education on 2nd, March 2013 at AAU, Anand.



- Best presentation award was given to Ms Suja Senan for her paper entitled "Comparative Genomic Ananlysis of the stress response in Probiotic *L. helveticus* MTCC5463 and dairy starter culture *L. helveticus* DPC 4571 strains" at national seminar on innovative approaches in dairy industry held at AAU, Anand during 1-2, March 2013.



- Smitha B., A.K. Jain, S.C. Parmar and K.D. Aparnathi won first prize in poster presentation entitled “Development of ready-to-serve soup powder from blends of groundnut flour, tofu and whey powder” at National Seminar on “Innovative approaches in dairy industry” held at AAU, Anand during 1-2, March 2013.
- Smitha B won second prize on the oral presentation entitled “Studies on physico-chemical and sensory characteristics of nutrient rich biscuits prepared from blends of peanut, co-precipitates and millet” at National Seminar on “Innovative approaches in dairy industry” held at AAU, Anand during 1-2, March 2013.
- Bhimani, M. P., Bhanderi, B. B. and Roy, A. were awarded first runner-up position for poster presentation of a research paper entitled “LAMP based detection of *Pasteurella multocida* in outbreak of fowl cholera in Emu” in the seminar on Advances in Animal Health and Application of Biotechnology for Animal Biotechnology” organized by College of Veterinary Science & AH, AAU, Anand on 9th March, 2013.
- Vyavahare, S. S., Veerasami M., Das D., Rana S. K., Srinivasan V.A. and Jhala M. K. were awarded first position for poster presentation of a research paper entitled “ Use of IFN-Gamma Release Assay in combination with tuberculin skin test for screening of bovine tuberculosis in Indian cattle” in the seminar on Advances in Animal Health and Application of Biotechnology for Animal Biotechnology” organized by Department of Gynaecology & Obstetrics, College of Veterinary Science & AH, AAU, Anand on 9th March, 2013.
- Dr K.A. Sadariya, Assistant Professor of Veterinary Pharmacology & Toxicology has been awarded for best poster presentation on National Seminar (ASCAD) on “Advances in Animal Health & Application of Biotechnology” and 1st Annual Convention of Society for Veterinary Sciences and Biotechnology (SVSBT) on 9th March 2013 at AAU, Anand.
- Jigar Patel & D.S.Nauriyal: Runners-up Best Poster Presentation in 1st Annual Convention of Society for Veterinary Sciences & Biotechnology (SVSBT) and National Seminar (ASCAD) on “Advances in Animal Health & Applications of Biotechnology” held at College of Veterinary Science & Animal Husbandry, Anand Agricultural University, Anand on 9th March, 2013.
- Drs. Hadiya K. K., Patel J. A., Shah R. G., Panchal T. and Dhami A. J. were awarded for best poster presentation for their paper entitled “Monthly Pattern of Inseminations and Reproductive Health Disorders in Dairy Bovines of Middle Gujarat” during National Seminar on Advances in Animal Health & Application of Biotechnology (ASCAD & VSBT) held at AAU, Anand on 9th March 2013.
- Best Research Paper Award: A research paper entitled “Influence of Different Cryoprotectants and Packaging Materials on the Viability and Acidifying Activity of Freeze-dried *Streptococcus thermophilus*

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Cultures” authored by Palak Jani, Sreeja V. and Prajapati JB, published in Indian Journal of Dairy Science, 2011, 64(2):112-120 was adjudged as the best research paper – 2011 by Indian Dairy Association. Dr JB Prajapati received this honour with cash prize of Rs 5000/- and certificates for authors during 41st Dairy Industry conference in Mumbai on 16th March, 2013.



- ‘Distinguished Service Certificate’ is awarded to Dr. Navneet Kumar, Associate Professor, Department of Agricultural Process Engineering, CAET, Godhra by Indian Society for Agricultural Engineers (ISAE), NASC Complex, New Delhi for his significant contribution in the profession.
- Dr.S.M.Khanorkar, Assoc. Research Scientist (Plant Breeding & Genetics) was elected as editor member by Society of Electronic Journal of Plant Breeding, Tamil Nadu Agricultural University, Coimbatore for the year 2012.
- Dr. R. N. Pandey, Professor & Head, Department of Plant Pathology was nominated as member of Editorial Board of *Journal of Mycology and Plant Pathology* as well as Chief Editor for “ISMPP Newsletter”

of “*Indian Society of Mycology and Plant Pathology*”, (ISMPP) Udaipur.

- The research paper entitled “Effects of weather parameters on pest-disease complex of okra grown during summer season in middle Gujarat authored by Sevak Das, Vyas Pandey, H.R. Patel and K.I. Patel published in the *Journal of Agrometeorology* 13(1): 36-41 2011 is adjudged as the best paper for Dr. S. Venkatraman Best paper Award contributing to mitigation of abiotic and biotic stresses on crop production.
- Dr. D. A. Patel, Associate Professor (Pl. Breeding) received first prize in poster presentation in “National seminar on tropical and subtropical fruit crops” held at NAU, Navsari.



- Dr. Sudeshna Chakraborty, Research Associate received second prize in oral presentation in National seminar on “New Perspective in Natural Sciences”, held at Vallabh Vidyanagar.
- Dr. M. K. Jhala has been nominated as member of Research Advisory Committee of NDDB, Anand.

- Dr. Ashish Roy has been nominated as an External Expert in Management Committee of *Brucella* control project of KNNa & NDDb.
- Suja Senan is certified as a Lead auditor/ Auditor for “Food safety management system auditor/lead auditor program as per ISO 22000:2005” by DNV Business Assurance (Course number A17376 certified by IRCA).
- The 10th Alumni Convention was organized by Faculty of Dairy Science on 2nd, March 2013.
- Department of Animal Biotechnology has organized National Seminar on Bioinformatic Challenges in Cutting Edge Metagenomic Research on 7th March, 2013.
- Department of Vet. Medicine has organized 1st Annual Convention & National Seminar (ASCAD) on ‘Advances in Animal Health & Applications of Biotechnology’ on 9th March, 2013.

IMPORTANT EVENTS

Conferences/Seminars/Symposia/Conventions

- Department of Vet. Medicine has organized Zookeepers National Seminar on 14th December, 2012 sponsored by CZA ,New Delhi.
- Two days National Seminar on “Prospects of Livestock and Dairy in India under changing Global Economic Era” was organized by the WTO Cell, Department of Agricultural Economics and Department of Animal Science, BACA, AAU, Anand on 17th and 18th January, 2013.
- A Seminar on “Innovative Approaches in Dairy Industry” was organized by Faculty of Dairy Science on 1st, March 2013.
- Department of Veterinary Gynaecology & Obstetrics has organized a National Seminar on “Advances in Animal Health and Application of Biotechnology and 1st Annual Convention of the Society for Veterinary Sciences & Biotechnology” on 9th March, 2013.

Training/Winter/Summer School

- Department of Soil and Water Engineering, CAET, AAU, Godhra organized three days field training program on Auto Level, Total Station and DGPS during 30th July to 1st August 2012. Faculties/SRAs of the institute attended the training program.



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- Department of Soil and Water Engineering, CAET, AAU, Godhra organized six days field-cum-lab training program during 27th August to 1st September 2012 on various GIS softwares such as Erdas Imagine, Leica Photogrammetry, GeoMedia etc.
- Two training programmes on 'Leadership development' were organized during 29-31st August and 5-7th September 2012 at CAET, AAU, Godhra.
- STTP on Food Processing Entrepreneurship was held on 13-14 September, 2012 at College of FPT & BE, AAU, Anand.



- Three days training program on **Pro-E Software Design** was organized during 24th to 26th September, 2012 in CAD- CAM

Lab CAET, AAU, Godhra.

- One day training programme on Quality Seed Production in Paddy was organized by RRS, AAU, Anand on 27th, September 2012. Total 95 progressive farmers participated in the training programme.
- Department of Animal Biotechnology has organized short course on "Metagenomics: Role of Next Generation sequencing and Bioinformatics" during 16-24 October, 2012.
- Poultry complex of AAU, Anand has organized Refresher Training Course on "Recent Advances in Poultry Breeding, Health, Farm and Hatchery Management" under ASCAD for Gujarat State Veterinarians during 3rd December, 2012 to 5th January 2013.
- Two months training programmes on "**Seed Production Technology for different crops**" were organized by Department of Ag. Botany, BACA, AAU Anand for farmers of different districts of Gujarat from December 2012 to January 2013.



- Two ASCAD training programmes on

“Gynaecological Aspects including Sonography & AI Techniques” were conducted for State Veterinarians in January 2013 and February 2013.



- Department of Entomology, BACA, AAU. Anand has organized field level officers training during 15/02/2013 to 17/02/2013 for Coromandel Int. Ltd.
- Organized eight days training on “Fungi and insect pest damaging seeds/food grains during storage and their management” for tribal farmers of Panchmahal and Dahod districts during the month of March, 2013 at Devgadbaria.
- Department of Ag. Economics, BACA, AAU. Anand has organized two one-day training programmes for farmers in order to create awareness of agricultural export and WTO.



- Department of Livestock Production and Management organized training for State Veterinary officers on “Recent Advances in Livestock Production” during 7 – 13th January, 2013.
- Department of Veterinary Microbiology has conducted ASCAD Training Programme on “Advances in Diagnostic Microbiology” from 28th January 2013 to 2nd February 2013.
- Department of Veterinary Microbiology has conducted combined ASCAD Training Programme on “Laboratory Techniques in Disease Diagnosis” during 18-23 February 2013 (Combined preclinical subjects).

Group Meetings/Workshops

- XXVII Annual Group Meeting, AICRP – National Seed Project (Crops) 2012, was organized by AAU from 14-16 April, 2012. Dr. R. N. Pandey worked as Organizing Secretary of the group meeting.



- Department of Meteorology has organized National Level Workshop on “Micro Level Action Plan at District Level for Climate Resilient Agriculture” during 29-30 June,

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2012 at Anand in association with NCCSD, Ahmedabad.

- Pre conference Workshop on “Hands on Corneal Suturing and B-scan ocular ultrasonography” was organized by Department of Surgery and Radiology, Veterinary College, Anand on 31st October, 2012.
- XXXIV Annual Congress of ISVS & International Symposium on “Ruminant Surgery in Polyclinics Co-operative Dairies and Shelters: Perspective 2020” Department of Surgery and Radiology during 1-3 November, 2012.
- Department of Meteorology has organized Zonal FASAL review meeting during 18-19 December, 2012.
- Department of Meteorology has organized “Farmers Awareness Programme on Climate Change” in collaboration with ATMA (Kheda) and KVK Dethali during 1-4 January, 2013.
- Department of Vet. Medicine has organized Workshop on ‘Trends in Wild life Crime & Investigation’ during January 21-22, 2013.
- has organized Guest Lecture delivered by Dr. F. Mukherjee on “Bovine Tuberculosis: Challenges & opportunities” for all College faculty and PG students on 16th January, 2013.
- Department of Vet. Medicine has organized Pashupalan Shibir cum Exhibition on 20th February, 2013.
- Department of Veterinary Microbiology has organized day long visit and Invited lecture on “Challenges to veterinary profession- Role of Commonwealth Veterinary Association (CVA)” presented by Dr. S. Abdul Rahman (President, CVA) on 18th March, 2013.
- Under National Information System for Pest Management (*Bt* cotton) [NISPM for *Bt* cotton], Department of Entomology, BACA, AAU, Anand has organized 10 Khedut-Shibirs, 26 Field Visits, one Farmers Day and 4 Field Scout Trainings as well as one Farmers Day and 7 Farmers Trainings were also organized under the project “Integrated Pest Management and Bio-control”
- Department of Veterinary Gynaecology & Obstetrics has diagnosed and treated 942 cases of infertility at 19 different clinical camps organized by different agencies.
- Laboratory Support Services by Department of Veterinary Gynaecology & Obstetrics: 560 plasma samples were analysed using RIA and other kits of Progesterone, protein, cholesterol and macro-micro minerals. 37 mares were diagnosed pregnant by Cuboni’s test and 392 semen ejaculates

Others

- National Dairy Products Judging Contest was organized by Faculty of Dairy Science on 13th September, 2012.
- National Dairy & Food Quiz contest was organized by Faculty of Dairy Science on 14th September, 2012.
- Department of Veterinary Microbiology

were collected and processed.

- The following events were organized by BPD unit :

Event and Venue	Date	No. of Participants
SAU-ICAR-CII Industry Meet	16/04/2012	272
AAU NGOs Partnership Meet	29/06/2012	45
MSME Meeting	26/07/2012	18
Aonla Seminar	24/01/2013	50
Scientists Sensitization Program, JAU, Junagadh	01/02/2013	200
Scientists Sensitization Program NAU, Navsari	12/02/2013	100
Alberta University Delegation's Interaction with AAU UG students	05/03/2013	150

Distinguished Visitors

Name	Designation/Address	Date
Rajendra Prasad	Project Director, DSR, Mau	17/04/2012
Dr. K. Vishunavat	PI Seed Pathology, GBPUAT, Pantnagar	17/04/2012
Dr. S. Natrajan	Senior Scientist, DSR, Mau	17/04/2012
Mr. N. Bala	Scientist-E, Agriculture Forest Research Institute, New Pali Road, Jodhpur	08/05/2012
Dr. K.D. Kokate	DDG (Agri. Extension) ICAR, New Delhi.	20/05/2012
Dr. Y.V. Singh	Zonal Project Director, Zone-VI, Jodhpur.	20/05/2012
Dr. V. J. Shivankar	Director, NRC (Citrus), Nagpur	07/06/2012
Varun Sheth	Successor of Bansilal Amritilal Sheth	05/07/2012
Dr. Sangyam Chaudhary	Executive Director, NDDB	06/07/2012
Sadanand Ambadkar Ishan	Pratap Industry, Baroda	30/07/2012
Mr. I. C. Chauhan	Soil conservation officer, GUUE, Gandhinagar	31/07/2012
Mr. G Narayana	Chairman, Emeritus Excel Industries, S. V. Road, Jogeshwari, Mumbai	29/08/2012
Mr. Vijay Bansal	Senior General Manager, RIL	01/09/2012
Prof. C. Manoha-rachari	Professor, Dept of Botany, Usmaniya University of Hyderabad	04/09/2012
Dr. Amrita Patel	Chairman, NDDB	12/09/2012
Officers delegation-15	Govt. A.H. Officers from Maharashtra	13/09/2012
Dr. D.P.Shah	G.M., Sumul Dairy, Surat	14/09/2012
Dr. G. L. Jain	MD, Venkateshwara Research and Breeding Farm, Pune	15/10/2012

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Dr. M.K.Padhi	Principal Scientist & I/c. A.I.C.R.P. Cell, Project Directorate on Poultry, Hyderabad	15/10/2012
Dr. D.N.Kamra	Director, CAFT in Nutrition, IVRI, Bareilly	18/10/2012
Dr. Mohd. Aslam	Advisor, DBT, New Delhi	24/10/2012
Mr.Adrianus Franciscus and Mr.Antonie Leenderd	Central Vety. Insitute of Wagthegen, Netherland	08/11/2012
Dr. Malali Gowda	Director, NGGF, c-CAMP, NCBS, Bangalore	27/11/2012
Mr. Thomas	Germany	05/12/2012
Mr. Kiyoaki Iboshi	Japan	12/12/2012
Dr. Harisinh Chauhan	East Valley Pet Hospital, Redlands, CA. USA-92374.	15/12/2012
Dr. K. S. Varaprasad	Director, DOR, Hyderabad	19/12/2012
Dr. Manish Nivsarkar	Director, B. V. Patel PERD Centre, Ahmedabad	30/12/2012
Dr. R. C. Purohit	Professor and Former Dean, SWE department, CTAE, MPUAT, Udaipur	02/01/2013
Dr. Abhijit Sen	Member, Planning Commission, GoI	17/01/2013
Dr. Vijay Paul Sharma	Professor , Centre for Management in Agriculture (CMA) IIM, Ahmedabad	17/01/2013
Dr. S. S. Shah	Vasant Vihar, Thane	23/01/2013
Dr. N P Singh, Project Coordinator (Chickpea)	AICRP on Chickpea, IIPR, Kanpur, U.P.	14/02/2013
Dr. S. D. Dhimon, and Man Mohan Singh	Kohinoor, Serepat, Haryana	20/02/2013
Dr. Satyabrata Maity	Director, DMAPR (ICAR), Boriavi,	27/02/2013
Shri Babubhai Bokhiriya	Hon. Minister of Agriculture and Co-operation, Gujarat state	16/03/2013
Dr. C. L. Dadhich	Honorary Secretary and Treasurer, Indian Society of Agricultural Economics, Mumbai	17/03/2013
Shri R. S. Sodhi	Managing Director, Gujarat Cooperative Milk Marketing Federation Ltd. Anand	17/03/2013
Dr. A. K. Srivastava	Director, National Dairy Research Institute, Karnal	17/03/2013
Dr. S. Abdul Rahman	Ex-Dean, Veterinary College, and President of the Commonwealth Veterinary Association (CVA),Bangalore	18/03/2013

Chapter 7

Extension Education Extensive Education and Technology Transfer

The Directorate of Extension Education has to plan, coordinate, organize and guide the extension education programs in the University and to ensure efficient working of the extension education activities in close coordination with the development departments, voluntary and private organizations. Moreover, this Directorate encourages, guides and supports the extension education centres of the University to organize different extension education activities for the benefit of farming community.

Extension Education Council

The Extension Education Council has been constituted to consider and recommend the extension education programmes/activities of the University. The sixth meeting of Extension Education council was held on 03/07/2012 at V. C. Conference Hall, AAU, Anand under the chairmanship of Dr. A.M. Shekh, Hon'ble Vice Chancellor, AAU, Anand. The Extension Education Council has following members:

1	The Vice Chancellor	Chairman
2	The Director of Research	Member
3	The Deans of the Faculties	Members
4	Director of Agriculture or concerned Joint Director	Member
5	Director of Animal Husbandry or concerned Joint Director	Member
6	Director of Horticulture or concerned Joint Director	Member
7	Ten Extension Education Specialists to be nominated by the Vice Chancellor in consultation with Director of Extension Education from amongst the following ;	Members
	(i) Professor of Extension Education	
	(ii) Head of Polytechnics	
	(iii) Director, Extension Education Institute	
	(iv) Programme co-ordinator, Krushi Vigyan Kendra	
	(v) Extension Specialists	
	(vi) Other Extension Specialists/Farm Manager	
8	Three eminent concerned with farmers Training Extension Education Specialists from outside the University to be co-opted by the Council.	Members
9	The Director of Extension Education	Member Secretary

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Zonal Research and Extension Advisory Committee (ZREAC)

The Committee consisted of representatives of development departments, Centres of extension education, Director of Research, Deans of the faculties, Crop and Subject Matter Specialists, co-operative sector, industries and progressive farmers.

Meetings were held regularly twice in the year (*kharif* and *rabi* season). The committee discussed in depth the adoption and its feed backs on research recommendations and existing transfer of technology programs. The approved recommendations are then passed to the concerned. The ZREAC *rabi* was held on 29/09/2012 & *Kharif* on 08/03/2013.



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Centers of Extension Education

Under the aegis of Directorate of Extension Education, following centres/ activities are functioning:

Sr. No.	Type	Name of Centre	Location
1	Certificate Course	Bakery School	Anand
		Poultry Training Centre	
		Gardeners Training Centre	
		Training Program on Food Processing Technology	
		Training Program on Organic Farming	
		Training Program on Weed Management	
		Training Program on Integrated Pest Management	
		Training Program on Medicinal and Aromatic Plants	
		Training Program on Seed Production	
2	Training Centres for Extension Workers	Extension Education Institute (EEI)	Anand
		Training and Visit Training Centre	
3	Training Centres for Farmers/ Farm Women/ Rural Youth	Sardar Smruti Kendra (SSK)	Anand
		Krushi Vigyan Kendra (KVK)	Arnej, Dahod, Devataj
		Tribal Training Centre (TTC)	Dahod
		Tribal Research cum Training Centre (TRTC)	Devgadhbaria
		Tribal Women Training Centre (TWTC)	
		Dairy Vigyan Kendra (DVK)	Vejalpur
		Pashu Vigyan Kendra (PVK)	Limkheda
		Transfer of Technology Centre (TOTC)	Godhra
		Farm Technology Training Centre (FTTC)	Sansoli
		Tribal Training Center (TTC)	Jabugam
		Demonstration cum Training for Inland Fishculture (DTIF)	Navli
4	Advisory Services	Farm Advisory Services (FAS)	Anand
		Agricultural Technology & Information Centre (ATIC)	
		Transfer of Technology Centre (TOT)	Anand, Arnej
		Centre for Communication Network (CCN)	Anand
		Agri Polyclinic Centre (APC)	Dahod
		Publication Unit	Anand
5	Other	NARP Project at Main Maize Research Station	Godhra
		Seed Village Programme	Anand

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Extension Education Schemes

Under the Directorate of Extension Education, 24 plan schemes and seven non plan schemes, four ICAR schemes and seven other schemes were operated during the year as under:

Sr. No.	Scheme	Center
Plan Schemes		
1	Training Programme on Food Processing Technology	Anand
2	Training Programme on Organic Farming	
3	Training Programme on Weed Management	
4	Training Programme on Integrated Pest Management	
5	Training Programme on Seed Production	
6	Training Programme on Medicinal and Aromatic Plants	
7	Establishment of Gardeners Training Centre	
8	Upgrading of Poultry Training Centre	
9	Centre for Communication Network	
10	Strengthening of Directorate of Extension Education	
11	Establishment of Centre to Agricultural Extension Information System	
12	Establishment of Transfer of Technology Centre	
13	Agricultural Technology Information Centre	
14	Upgrading of Existing Sardar Smruti Kendra	
15	Establishment of Transfer of Technology Centre	Arnej
16	Establishment of Agri Poly Clinic for Tribal Farmers	Dahod
17	Establishment of Demonstration cum Training Centre for Fish Culture	Devataj
18	Establishment of Women Training Centre	Devgadbaria
19	Transfer of Technology Centre	Godhra
20	Tribal Training Centre	Jabugam
21	Pashu Vigyan Kendra	Limkheda
22	Demonstration cum Training for Inland Fishculture	Navli
23	Farm Technology Training Centre	Sansoli
24	Dairy Vigyan Kendra	Vejalpur

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Non Plan Schemes		
1	Director of Extension Education	Anand
2	Publication Scheme	
3	Establishment of Sardar Smruti Kendra Museum	
4	Farm Advisory Scheme	
5	Training and Visit Scheme	
6	Tribal Training Centre	Dahod
7	Tribal Training and Research Centre	Devgadbaria
ICAR Schemes		
1	Strengthening of Director of Extension Education	Anand
2	Krushi Vigyan Kendra	Arnej
3	Krushi Vigyan Kendra	Dahod
4	Krushi Vigyan Kendra	Devataj
Other Schemes		
1	Krushi Mahotsav	Anand
2	Training and Visit Scheme (Plan)	
3	Kisan Call Centre	
4	Seed Village Scheme	
5	NARP Extension Scheme	Arnej
6	NARP Extension Scheme	Godhra
7	C-DAP	Anand

New Schemes Sanctioned

Five new schemes were sanctioned under 12th FYP (2013-17). The main objectives of these schemes are as under:

(1) Establishment of Pashu Vigyan Kendra (PVK) At Limkheda in Dahod District Objectives

- (i) To establish a model centre for preparing package of Dairy and animal husbandry practices on scientific recommendations suitable to different categories of live stock farmers of the area.
- (ii) To organize specialized training programs, demonstrations and to provide training facilities, multifaceted information and communication for popularizing latest technologies to live-stock farmers.
- (iii) To organize extension activities like farmer's day, animal health camp, milk yield, clean milk competitions and scientist live-stock farmer interactions and group discussions etc.
- (iv) To impart knowledge and skill in animal husbandry, dairying, health and nutrition etc. to the live stock farmers for enhancing milk productivity and milk quality.
- (v) To establish the live stock farmers society (LFS) in the villages and to train the members of LFS in leadership communication & co-operative for TOT.

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- (vi) To know/collate constraints faced by the live stock farmers/feed back in adopting the scientific recommendations/modern animal husbandry practices and to suggest remedial/alternatives measures to solve them.
- (vii) To conserve the bio-diversity through conservation & improvement of the indigenous livestock.
- (viii) To augment feed & fodder resources and capacity for manufacturing of balanced cattle feed, bypass protein feed and area specific mineral mixture.
- (ix) To publish animal husbandry and dairy related literature for dissemination of recommended technologies.

(2) Establishment of Tribal Training Center (TTC) at Jabugam in Baroda District Objectives

- (i) To impart knowledge and production skills in crop production, horticulture, farm forestry, animal husbandry, poultry keeping, apiculture, health and nutrition etc. to the tribal farm men and women.
- (ii) To provide vocational training in agro-based cottage industries to tribal farm men and women families so as to improve their income and make them lead better quality of life.
- (iii) To educate the tribal farm men and women families to use appropriate low cost and low risk technologies in the farm and homes.
- (iv) To diversify the use of labour in lean period through subsidiary enterprises like, livestock farming, poultry keeping, apiculture, mushroom cultivation, rabbit rearing, collection of minor forest products etc.
- (v) To conduct need based training program for tribal farm men and women, including young tribal daughters and tribal landless women labourers.
- (vi) To understand tribal social culture and try to eliminate rigid traditions that are working as an hindrance in adopting new and developed technologies.

(3) Establishment of Farm Technology Training Centre (FTTC) at Sansoli in Kheda district Objectives

- (i) To impart knowledge and production skills in crop production, horticulture, farm forestry, animal husbandry, poultry keeping, health and nutrition etc to the farmers.
- (ii) To conduct need based training programme for farmers, farm women and farm youth.
- (iii) To conduct demonstrations on improved farm technologies.

(4) Establishment of Transfer of Technology Centre (TTC) for Tribal at Godhara in Pnchmahal

District

- (i) To establish a model centre for preparing package of practices of scientific recommendation suitable to tribal/non-tribal farmers of the agro-climatic conditions of the zone.
- (ii) To organize demonstrations for popularizing latest technologies of agriculture in Panchmahals district.
- (iii) To organize specialized training courses.
- (iv) To increase the use of information technology for transfer of farm technologies.
- (v) To organize extension activities like farmers' day, field day, farmer- scientist interactions and group discussions etc.
- (vi) To collect the constraints faced by the tribal/non-tribal farmers in adopting the scientific recommendations/modern farming practices and to suggest alternatives to solve their problems.

(5) Establishment of Pashu-Dairy Vigyan Kendra (PVK) at Vejalpur in Panchmahal District Objectives

- (i) To establish a model centre for preparing package of Dairy and animal husbandry practices on scientific recommendations suitable to different categories of live stock farmers of the area.
- (ii) To organize specialized training programs, demonstrations and to provide training facilities, multifaceted information and communication for popularizing latest technologies to livestock farmers.
- (iii) To organize extension activities like farmer's day, animal, milk yield, clean milk completions and scientist live-stock farmer interactions and group discussion etc.
- (iv) To impart knowledge and skill in animal husbandry, dairying, health and nutrition etc. to the live stock farmers for enhancing milk productivity and milk quality.
- (v) To establish the Live stock Farmers Society (LFS) in the villages and to train the members of LFS in leadership communication & co-operative for TOT.
- (vi) To know/collate constrains faced by the live stock farmers/feed back in adopting the scientific recommendations/modern animal husbandry practices and to suggest remedial/alternatives measures to solve them.
- (vii) To conserve the bio-diversity through conservation & improvement of the indigenous Livestock.
- (viii) To augment feed & fodder resources and capacity for manufacturing of balanced cattle feed, bye-pass protein feed and area specific mineral mixture.
- (ix) To publish animal husbandry and dairy related literature for dissemination of recommended technologies

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Extension Education and Training Programs

1 Certificate Courses for Farm Youths

Anand Agricultural University conducted various certificate courses as per the details given below during the year 2012-13.

Sr. No.	Name of Certificate Course	Centre	Duration	No. of Training (batch per year)	No. of Students Completed the Course
1	Baking Technology	Anand	20 Weeks	02	17
2	Poultry Training		10 Weeks	03	35
3	Gardeners Training*		6 Months	01	13

**Organized under National Horticulture Mission of India(NHMI)*

2 Special Training Programmes for Farmers

Special training programmes on various subjects for farmers were carried out by AAU as under:

Sr. No.	Subject of Training Programmes	Centre/Place	No. of Training	No. of Beneficiaries
1	Organic Farming	Prof. & Head, Agronomy Dept. BACA, AAU, Anand	03	103
2	Weed Management	Research Scientist, Weed control Scheme, BACA, AAU, Anand	03	115
3	Seed Production	Prof.&Head, Botany Dept., BACA, AAU, Anand	01	14
4	Food Processing Technology	Principal, College of FPT&BE, AAU, Anand	02	34
5	Integrated Pest Management	Prof. & Head, Entomology Dept., BACA, AAU, Anand	07	255

3 Training Programs for Extension Workers

(a) Extension Education Institute

The Extension Education Institute, Anand caters extension training needs of middle level functionaries of various development departments of Western Zone States viz; Gujarat, Rajasthan, Madhya Pradesh, Chhatisgarh, Maharashtra, Goa

and UTs of Diu, Daman and Dadara Nagar Haveli. The aim is to improve upon their job performance wherever they are working in different capacities. The Management Committee of EEI approves action plan and reviews the progress of EEI activities. The details of the training courses conducted by the EEI, Anand during the year are as follows:

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(b) Training & Visit Centre Programs

The Anand Agricultural University has taken up the task of training for the extension personnel of the Department of Agriculture through the Training and Visit Centre Programs at Anand. The main objectives of the scheme are:

- (i) To coordinate research, training and extension activities effectively
- (ii) To conduct research more effective by catering to the local needs and situation
- (iii) To evolve an intensive training program on a systematic basis for extension workers and farmers and to ensure effective supervision and technical support to VEWs/ADOs.

The details about bi-monthly workshops, pre-seasonal training workshops and special training programs organized for the extension personnel of the Department of Agriculture and the number of SMSs/AEOs attended the programs during 2012-13 are as under:

Sr. No.	Type of Training Course	No. of course	No. of participants
1	Scheduled training courses		
	1 On campus	22	381
	2 Off campus	17	511
2	Collaborative courses	07	164
3	Consultancy courses	13	403

In addition to these courses, eight follow-up and research studies were undertaken during the year.

Sr. No.	Type of program	No.	No. of Participant
1	Bi-monthly Workshop	03	108
2	Pre-seasonal Training	02	87
3	Training on ISOPOM Oilseeds	04	117
4	Training on Organic Farming	01	17
5	Training on Cotton Production Technology	01	21

4 Training/Extension Education Programs for Farmers/Farm Women/Farm Rural Youth and Extension Workers

(a) Training Programs

Training is essential to increase the efficiency of the farmers, farm women and farm youth. On-campus as well as off-campus training programs are organized based on the needs and interests of the stakeholders. Through the Front Line Transfer of Technology (TOT) Centres, on-campus and off-campus training programs were organized. The details of the programme is as under.

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Table 7.1 Training Programs Organized by the Transfer of Technology Centres Farmers/ Farm Women/Farm Rural Youth and Extension Workers

Sr. No.	TOT Centre	No. of trg. progs.	Farmers	Farm women	Farm Youths	Extension workers/ other	Total
1	KVK, Devataj	61 A	1443	14	-	25	1482
		51 B	630	332	154	-	1116
2	KVK, Dahod	105 A	1817	575	127	45	2564
		03 B	35	19	-	-	54
3	KVK, Arnej	39 A	775	357	-	-	1132
		81 B	1467	450	-	-	1917
4	SSK, Anand	170A	2557	3508	227	183	6475
5	ATIC, Anand	12A	293	351	-	-	644
		11B	359	-	-	-	359
6	TRTC, Devgadhbaria	04A	174	-	-	-	174
		01B	43	-	-	-	43
7	TFWTC Devgadhbaria	19A	76	611	-	-	687
8	APC, Dahod	04A	89	-	-	-	89
9	DVK, Vejalpur	05A	212				212
10	TTC, Jabugam	01A	71	-	-	-	71
11	DTIF, Navli	04A	62	-	-	-	62
Total (i to xi)		424A	7569	5416	354	253	13592
		147B	2534	801	154	-	3489
Grand Total (A+B)		571	10103	6217	508	253	17081

A = On-campus B = Off-campus

(b) Extension Education Activities

The TOT centres have also planned and organized extension activities. The details of the extension activities organized and number of beneficiaries are given in the following tables.

Table 7.2 Extension Education Activities carried out by TOT Centres

Sr. No.	Name of Activity	Name of TOT centre					
		KVK			SSK	TRTC	TWTC
		Devataj	Dahod	Arnej	Anand	D'baria	D'baria
1	Farmers /field days/meetings	03 (75)	02 (139)	18 (522)	05 (1236)	-	-
2	Agri. fairs / Exhibitions	02 (Mass)	02 (3772)	02 (1029)	05 (2100)	-	1 (500)

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3	Seminars/Work shops/ Kisangosthis	12 (607)	79 (8869)	12 (257)	06 (150)	04 (65)	03 (250)
4	Films/Video shows/ TV programmes	27 (587)	21 (443)	02 (259)	215 (12000)	05 (80)	15 (400)
5	Radio/TV talks	-	13 (Mass)	-	04 (Mass)	-	03 (Mass)
6	Celebration of important days	07 (Mass)	03 (502)	02 (60)	-	-	-
7	Guidance through letters/ personal contact/ telephone	358	177	1046	698	12	10
8	Farm literature	05	04	12	18	-	-
9	Press note/news paper coverage	08	01	01	22	-	-
10	Crop diagnostic services	83 (297)	36 (195)	16 (984)	59 (544)	-	03 (50)
11	Farmer scientists interactions	02 (Mass)	01 (59)		06 (160)	03 (250)	04 (65)
12	Distribution of farm literature	08 (7387)	04 (1168)	-	18 (1630)	-	-
13	Group discussions	-	79 (8869)	-	70 (2533)	07 (150)	10 (300)
14	Field visit of scientists	210 (667)	46 (409)	38 (672)	66 (2100)	03 (50)	02 (250)
15	Farmers visit to TOT centres	689	329	(324)	24974	250	150
16	Exposure visits	03 (75)	-	01 (14)	-	-	-
17	Cattle camps (No. of animal)	01 (201)*	01 (277)*	01 (123)*	-	-	31 (1550) and 9330*
18	Interactive/Method demonstrations	08 (106)	02 (63)	05 (100)	-	101 (101)	-
19	Lectures delivered	14 (800)	47 (4722)	79 (4064)	156 (6780)	5 (150)	10 (300)
20	Voice sms Service	08 (350)	-	-	-	-	-

Note: Figures in bracket indicate numbers of participants/beneficiaries:

*no. of animals treated

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Table 7.3 Extension Education Activities Carried Out by Different Centres of Certificate Courses

Sr. No	Name of Activity	Name of the centre	
		School of Baking Anand	Poultry Anand
1	Field visit	02 (33)	-
2	Guidance through letters/ telephone	(30)	(80)
3	Escorting the visitors	09 (240)	37 (656)
4	Demonstrations	19 (530)	-
5	Internship	01(15)	16 (120)
6	Educational tours	02 (49)	-
7	Stall exhibitions	01 (1000)	02 (6000)
8	Trainings	01 (20)	-
9	Training programmes	02 (42)	-
10	Farmers Shibirs	-	3 (150)

Note: Figures in the parenthesis indicate the no. of beneficiaries.

(c) Agriculture Fairs

To communicate the agricultural technologies to many farmers at a time, AAU has organized/ participated in different agricultural fairs and exhibitions. The profile of AAU and the

latest technologies developed by the University were displayed. Interactions between scientists and the farmers were also organized. Literature on the latest technologies were distributed during such fairs and exhibitions.

Table 7.4 Agriculture Fair/ Exhibition held during the year 2012-13

Sr. No.	Agriculture Fair/ Exhibition	Place	Date	No. of Beneficiaries (Approx.)
1	Agril. Fair & Agril. Exhibition(<i>Krusha mahotsav -2012</i>)	Petlad	12-14 May 2012	80,000
2	Agril. Exhibition	Anand	14-15 June 2012	1000
3	FGI Expo 2013 & Agril. Exhibition	Vadodara	3-5 Jan. 2013	Mass
4	Vibrant Gujarat Global Trade Show-2013	Gandhinagar	8-13 Jan. 2013	Mass
5	Agril. Fair	Tarapur	22 Jan. 2013	Mass
6	Agril. Fair & Agril. Exhibition	Vejalpur	16 Feb. 2013	12,000
7	Agril. Fair	Vejalpur	19-20 Feb. 2013	10,000
8	Trutiya Mahi Mahotsav (By FES)	Thasra (Galteswar Mahadev)	21-22 Feb. 2013	Mass
9	Agril. fair cum Agril. Exhibition	Sanand	20 Mar. 2013	Mass

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(d) Frontline Demonstrations (FLD)

The FLDs aim to demonstrate the production potentialities of newly released and pre-released production technologies on farmers' fields. The KVKs and other TOT centres have

organized 1499 FLDs on various crops during kharif, rabi and summer seasons as well as on farm implants, livestock and fishery. The number of FLDs conducted during the year 2012-13 is given in the following Table 7.5.

Table 7.5 Frontline Demonstrations Conducted

Sr. No.	FLD organised by	Area (ha)	No. of FLDs
1	KVK, Anand (Devataj)	58.90	121
2	KVK, Ahmedabad (Arnej)	194.50	229
3	KVK, Dahod	82.50	371
4	Regional Research Station, Anand	5.20	15
5	Main Forage Research centre, Anand	51.20	128
6	BTRS, Anand	19.00	19
7	Bio-fertilizers Dept., Anand	15.00	60
8	Micronutrient project, Anand	3.70	28
9	Main Maize Research Station, Godhra	80.00	20
10	Main Rice Research Station, Navagam	59.25	238
11	Pulse Research Station, Vadodara	4.00	12
12	Narmada Irrigation Research Station, Khandha	25.60	63
13	Paddy Research Center, Dabhoi	24.20	143
14	Tribal Research cum Training Center, Devgadhbhar	13.00	52

5 Advisory Services

(a) Farm Advisory Services (FAS), Anand

The Farm Advisory Service Centre, Anand provides guidance and information to farmers on scientific farming. The farmers are advised on their farm problems through correspondence and field visit. This centre acts as a link among research scientists, extension workers and farmers.

(b) Agricultural Technology Information Centre (ATIC), Anand

The Agricultural Technology Information Centre, a single window support system, which was established since August, 2005 linking the various units of a research institutes with intermediary users and end users (farmers) in decision making and problem solving exercise. The objectives of the centre are:

- (1) To provide a single window delivery system for the products and species available from an institution to the farmers and

other interested groups as a process of innovativeness in technology dissemination at the institute level.

- (2) To facilitate farmers to access the institutional resources available in terms of technology, advice, technology products etc. for reducing technology dissemination losses.
- (3) To provide mechanism for feedback from the users to the institute. In addition to supporting individual farmers groups, public and private agencies in supplying quality materials technology, technologies knowledge; etc.

Thus, major objective of this system is to supply all the information on technologies, techniques and knowledge and necessary inputs and materials including planting materials, seeds advisory services, diagnostic services from the one place. The following extension activities were carried out by the centre.

Table 7.6 : Extension Activities Carried Out by ATIC

Sr. No.	Extension Activities	No. of Activity	No. of Participants
1	Khedut shibir	01	50
2	Mobile helpline service	2050	2050
3	Agricultural literature distribution	01	2000
4	Exhibition/Krishi Mahotsav	02	Mass
5	Field visit/ diagnostic service	58	58
6	Exposure visit	06	06
7	Guidance to visitors	709	709

Other Objectives

- (i) Farmers were given technical advice to solve their problems on various crops.

- (ii) Various types of literature/folders related to Agricultural fields are published by the Directorate of Extension Education and distributed among needy farmers.

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- (iii) A mobile number of ATIC in-charge is provided, so that many farmers contact to know information in person or through others on agricultural and allied fields.
- (iv) The farmers visiting ATIC are kept content by providing detailed information/diagnosis about their problems either at ATIC or by getting contacted with related departments of the University.
- (v) Reply to the farmers through email, letters and mobile regarding plant protection

problems for different crops.

(c) Transfer of Technology Centre, Anand and Arnej

The Transfer of Technology Centres at Anand and Arnej (Ahmedabad district) were sanctioned in the year 2004-05 by the Govt. of Gujarat, where demonstrations, field days, trainings, advisory activities are undertaken by the University. The following extension activities carried out by the centres are given in following Table.

Table 7.7 Extension Activities Carried Out by TOT Centres

Sr. No.	Activity	Centres	
		Anand	Arnej
1	Training Programs	03(105)	05(312)
2	Farmer Shibirs	03(1733)	03(134)
3	Crop Demonstrations(FLD)	50(50)	20(20)
4	Guidance through letters /telephone	16	20
5	Crop diagnostic services	-	06(45)
6	Field Visits	02(8)	-
7	Group Discussions	-	04(125)
8	Agri. Exhibitions	-	01(7325)
9	Publications (Folder)	07(14000)	-
10	Advisory to Visitors	10	162
11	Crop seminars	-	5(850)
12	Lectures on new technology	5(200)	-
13	Farmer scientists interactions	-	6(77)

Note : The figures in parenthesis indicate numbers of beneficiaries

(d) Centre for Communication Network (CCN), Anand

The Govt. of Gujarat has accorded sanction for the scheme "Centre for

communication Network" from the year 2005-2006. The details of extension education activities were carried out by the scheme are as under.

Table 7.8 Extension Education Activities Carried Out by CCN

Sr. No.	Activity	No of Activity	No. of Beneficiaries
1	Farm literature/distribution (Free of cost)	3	3000
2	Trainings	08	350
3	Agril. fairs	02	3000
4	Escorting the visitors	70	70
5	Group discussions	20	600
6	Guidance through telephones / letters/mobile	800	800
7	Lectures for transfer of technology	03	45
8	Press notes / success stories published	01	Mass
9	<i>Krishigoshthis/ Khedut shibir</i>	01	250
10	Crop diagnostic services	05	75
11	Farmer – scientist interaction	02	400
12	Establishment of <i>Gram Kisan Samitis (GKSs)</i>	20	300

(e) Agri-Polyclinic (APC), Dahod

Agri Polyclinic for Tribal Farmers was started in 2008 at Muvaliya Farm, Dahod. In Dahod area, there is a facility to impart training to the tribal farmers, farm women and rural youth through various extension functionaries. But there is lack of pests/ diseases/ disorders diagnostic services in Dahod area. Due to intensive and monoculture cultivation of various crops and introduction of new varieties/ crops from other places without testing for its susceptibilities to pests and diseases

under Dahod situation, the problems of pests and diseases and unseen disorders are increasing day by day. The problem of various unseen pests/ diseases/ disorders increased due to malnutrition & monoculture cultivation of crops and introduction of new crops like soybean in Dahod district. Under changing scenario of pests/ diseases/ disorders problems, there is a need to diagnose the same by the experts in well equipped laboratory. The extension education activities carried out by APC are as under :

Table 7.9 Extension Education Activities Carried Out by APC

Sr. No.	Extension Activity	No. of Activities	No. of Participants
1	Trainings	07	176
2	Escorting the visitors	41	41
3	Telephonic guidance	12	12

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Various Extension Education Activities at a Glance



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Various Extension Education Activities at a Glance



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Various Extension Education Activities at a Glance



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(f) Publications

(i) Farm Magazine

The publication unit publishes the monthly farm magazine “*Krushigovidya*” regularly since May-1948. There were

21,900 subscribers registered for this magazine during the year under report 2012-13. Moreover, *Krushigovidya* publication unit has provided guidance to farming community (about 2000 beneficiaries) through telephone / letters.



(ii) AAU Newsletter

The Directorate of Extension Education publishes a quarterly “Anand Agricultural University Newsletter” regularly. The AAU newsletter gives research highlights, technical events / news, extension activities, noteworthy work done by agricultural scientists.

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(iii) Agricultural Literature

The leaflets/ folders / books/ booklets/ reports; etc. on various subjects were published by different extension

education centres of AAU during the year under report. In all, 57 publications published are given in *Appendix-9*.

Publications at a Glance



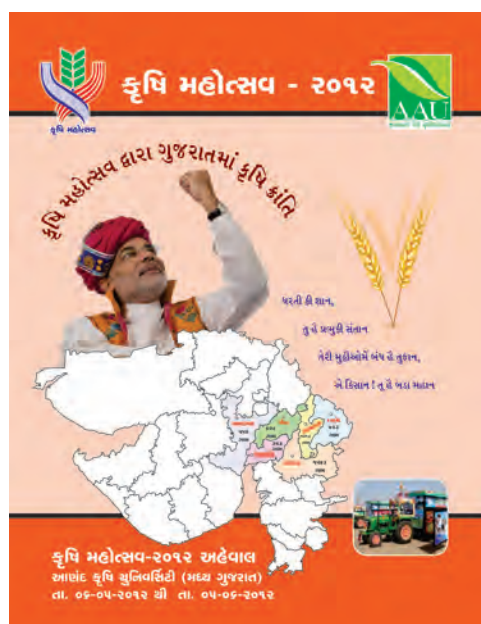
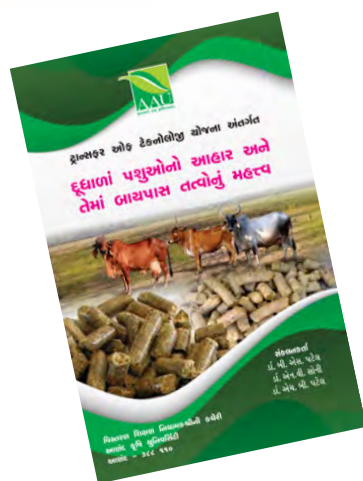
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Publications at a Glance



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Publications at a Glance



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(iv) Video Films (DVD)

Seven e-technology packages (video films) were prepared and distributed to all Village Panchayats of middle Gujarat. More over, one DVD on activities of AAU

named “AAU at a glance” and four DVD on success stories of progressive framers under RKVY scheme were prepared for farming community. The details of video films (DVD) are given in Appendix-10.



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(g) Mass Media

(i) Radio Talks

The scientists of the University delivered Radio talks on agriculture and allied fields from All India Radio, Vadodara. During the year, 13 scientists have delivered talks on different topics related to agriculture, horticulture, agricultural engineering, animal husbandry etc. The details of radio talks are given in Appendix-11

(ii) TV Talks

In all, 34 Doordarshan programs on different aspects covering agriculture, animal science, agricultural engineering, horticulture, home science; etc. were *telecasted* through Doordarshan Kendra, Ahmedabad in “Gram Jagat” program for the benefit of the farming community. The details are given in Appendix-7.4

(h) Coordination with Development Departments

- The AAU has planned and organized various extension education programs/ activities in close coordination with line departments of the State. The structural linkages exist under Training and Visit system by way of constituting technical committees at district, zonal and state levels.

- The functional linkages also exist under T&V Scheme through bi-monthly workshops, pre-seasonal trainings, diagnostic team, and state level crop seminars/ workshops etc. The coordination exists in follow-up programs as well as planning of farm trials. In AGRESCO, the officers of the line departments are the members and they generously contribute to the formulation of technical programs as well as in finalizing recommendations for the farmers.

- Interface of AAU scientists with functionaries of the departments of the State, NGOs and other agencies organized at state as well as at campus level.

- The agricultural programs of All India Radio as well as Doordarshan were finalized by such coordinated efforts.

- For transfer of technologies to the farmers at large, farmers’ day, *krushi mela*, farmer-scientist interactions, group discussions etc. were organized through collaborative efforts.

(i) Others

(A) NARP Project at MMRS, Godhra

During the year under report, various extension activities carried out under the scheme are as follow.

Table 7.10 Extension Activities Carried Out by NARP, MMRS, Godhra

Sr. No.	Activity	No. of Activity	No. of farmers
1	Field days	04	212
2	Field visits	04	115
3	Guidance through telephone/mail/on spot	712	712
4	Agri. exhibitions	04	102300
5	Lectures delivered	46	1690
6	Visitors	1246	1246
7	Articles published	02	Mass
8	Literature published (leaflet/ folder)	05	5000
9	Meetings/ Seminars/ Workshops attended	08	-

(B) Seed Village Programme

Under Seed Village Programme, the seeds of five crops were produced in 187 Villages by 3311 farmers during 2012-13. The details are as under:

Sr. No.	Name of Crop	Name of Variety	Area(ha)	No. of Village	No. of Farmers
1	Wheat	GW 496, GW-366	684.40	93	1671
2	Gram	GG-1, GG-2	145.20	21	358
3	Maize	GM-3	35.20	06	88
4	Cumin	GC-4	223.40	29	559
5	Green gram	Meha	234.20	38	635
Total			1322.40	187	3311

(C) Krushi Mahotsav – 2012

As a measure towards empowerment of farming community “*Krushi Mahotsav-2012*” a doorstep extension *modus operandi* of the State Government Visionary programme was launched from 6th May to 5th June 2012 through out the Gujarat State.

‘*krishi mahotsav-2012*’ was launched at Petlad on 12 May 2012 by Shri Narendrabhai Modi Hon. Chief Minister of Gujarat State. The three-day festivities included *krishi mela*, *krushi* Exhibition and other related events jointly organized

by the state government, district administration and AAU at Educational Trust college Ground, Dantali Road, Petlad.

Role of AAU

The Anand Agricultural University has territory in six districts viz.; Ahmedabad, Anand, Dahod, Kheda, Panchmahal and Vadodara having 58 *talukas*. The 360 Nodal Scientists at District and *Taluka* levels and other scientists and 232 Post Graduate Students in total 592 were assigned the duties to move with 63 *Kisan Rath* in 4989 villages. Two groups of scientists were formed to escort the *Kisan Rath* for 15 days each. The AAU organized orientation

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cum workshop during 03-05-2012 to 04-05-2012 for AOs, AEOs, Scientists, STL Officers of Deptt. of Agriculture and P.G. Students on *Krushī Mahotsava-2012* programme.

During the visits in the villages, the scientists have delivered talks and interacted with farmers. They have guided them to prepare a crop production plan at village as well as individual levels, plant protection measures, farm implements, water conservation, irrigation methods, bio-fertilizers, bio-pesticides, bio-control of insects/pests, animal husbandry, cultivation practices of major field crops, fruit crops, vegetable crops and medicinal plants of the area. The farmers were also benefited though *krushi rath* library having 15 books on agricultural literature.

The scientists of AAU also participated in the 42 *Khedut Shibirs* organized at *Taluka* levels by the Agricultural Produce Market Committees (APMCs) of respective *talukas*. The core team of seven scientists for each district also participated and given guidance to farmers in these shibirs.

For dissemination of recommended agricultural technology, seven e- technology packages (video films) on “(1) *Dangarni kheti padhdhati*, (2) *Makaini kheti padhdhati*, (3) *Khetpedashoma mulayvardhan*, (4) *Falpakoni kheti padhdhati- kel, aambo, papaiya*, (5) *Vermicompost ane biofertilizers* (6) *Aadrsh pshupalan*, (7) *Shakbhajina pakoni kheti padhdhati- marachi, tameta*” were prepared and distributed to all Village Panchayats of middle Gujarat through DAOs.

Intensive research for two decades by Dept. of Microbiology & Biofertilizer project resulted in development of “**Anubhav liquid Biofertilizer**”- *Azotobacter*, *Azospirillum* and Phosphate culture which were mass multiplied and one lakh-bottles were supplied for inclusion in the *krushi kit* to be distributed to the farmers of Gujarat during *krushi mahotsav-2012*.

The important activities carried out the by scientists of AAU during the *Krushī Mahotsav 2012* in middle Gujarat are highlighted in the following table.

Table 7.11 Extension Education Activities Under *Krushī Mahotsav* Program

No.	Districts	Krushī Shibir		Village Meeting	
		No.	Beneficiaries	No.	Beneficiaries
1	Ahmedabad	10	8914	541	146815
2	Anand	05	3800	353	93972
3	Dahod	07	3141	713	95571
4	Kheda	04	788	608	142201
5	Panchmahal	05	6500	1216	128230
6	Vadodara	11	5635	1548	116287
Total		42	28778	4989	723076

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➤ Feedback of the Programme

- 1 The farmers got chance to make face to face interactions with the scientists of AAU and with the personnel of various line departments.
- 2 They have been well acquainted with the technical know-how of the latest scientific agricultural technologies and various development programs/schemes run by the State Government for betterment of the rural masses.
- 3 The scientists of AAU also have got the unique experience to exchange their ideas and knowledge with the farmers. They have also learnt many things from the farmers, which may be useful in future for planning research programs.

Krushvi Mahotsav -2012 at a glance



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Krushi Mahotsav -2012 at a glance



Chapter 8

Students' Welfare Beyond the Curriculum Confines Year : 2012-13

The office of Director of Students' Welfare, Anand Agricultural University, was established with effect from 01/05/2004 after creation of Anand Agricultural University. This office is looking after various students' activities/facilities including sports, culture, fellowships, recreation, health, adventure, counseling, placement etc. More over, dignitaries of different fields are invited to share their thoughts, experiences and views among staff and students.

Students' Representative Council

All the constituent colleges of the University have the Students Representative Council (SRC) formed as per University rules. The Council is formed with a view that the students can represent their problems through their representatives. The SRCs organize and monitor various extracurricular activities of students. The Students' Representative Councils of all the colleges organized various extracurricular activities like planning forum, sports, debate and elocution, college magazine, cultural programmes, NSS, NCC, etc.

In addition/besides, Alumni Associations in three colleges were active under which, one day seminars were organized for strengthening the professional brotherhood and to create the atmosphere of oneness.

Students' Amenities

(I) Hostel

Hostel environment plays an important role in the development of personality and character of the students. As a residential University, good hostel facilities are provided to all the under-graduate and most of the post-graduate students of the University. In some of the hostels self-managed messes are governed by the students while some are managed by contract system under the supervision of Rector / Asst. Rector. Library facility is also available for the use of students. The other facilities for day to day requirements like laundry, tailor, cycle store, provisional store, telephone, post office, bank etc. are also available in the University Premises. The Rector and Asst. Rectors & Hostel Worden are appointed in each college for maintenance of student facilities and solving the residential problems of the students.

(II) Health Facilities

Anand Agricultural University has made MOU with Charutar Arogya Mandal, Karamsad, for Providing better health facility for students & staff.

There is a special facility of Physician for Dental Surgeon, Skin Specialist, Mental Surgeon, Gynaecologist also.

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The number of cases registered under various systems of Medicine in this University during the year is as under:

Sr. No	Test/ Treatment	No. of cases/ patients Turned up
1	Allopathic	10499
2	Homeopathic	1921
3	Blood Sugar BS/FBS/ PP2bBS,test ,Lipid Profile,Creatinine,Jaundice/ S.G.P.T/SGOT/Albumin,Uric Acid,Blood group & Laboratory test in Health Center.	2484
4	Students Health Check-up	1274

Physical Education Programme

The Physical Education and Sports play vital role for development and maintenance of personality, physical fitness, health and body development of the students. Alongwith the development of academic career of the students, this university also thrives hard to bring out the hidden personality talent of the students by involving them in physical education, sports, cultural and adventurous activities at college level under the direct guidance of Director of Students Welfare.

Summer Adventure Camps

With the aim of developing adventurous virtues among students and to prepare them to face adverse conditions as per convenience of students from their academic calendar, colleges of the university participated in Summer

Adventure Camp at WHMI-Manali (Solang) from 19th June-28th June-2012, under Rajiv Gandhi Adventure Scheme for NSS volunteers. Nine volunteers participated from Anand Agricultural University.

Youth WES Leadership – CES-IIT Madras

Mr. Nayankumar Harishanker Joshi, a student of 6th Sem.Veterinary Sci. College took part in International Colloquium on Youth WES Leadership conducted by Centre of Excellence for Change (CES) and IIT Madras on the 10th & 11th of March 2013 at IIT Madras,Chennai.

Zonal Elocution Competition

Mr.Rodrigues Rodney, student of 3rd Semester, College of Food Processing Technology & Bio-energy took part in the Zonal **Elocution** Competition on the eve of 11th Agricultural Science Congress,2013 held at Mahatma Phule Krishi Vidyapeeth, Rahuri Dist. Ahmednagar, Maharashtra-State on 20th November, 2012.

Sports Activities

The students of the university are also trained for the development of skills and excellence in various sports activities. For this reason, Inter-Collegiate competitions for various games like Chess, Table-tennis, Badminton, Kabbadi, Volley ball, Basket ball, Kho-kho, Cricket, Cultural activities, Essay competition, Debate, Elocution, etc. are routinely arranged at various colleges.

The selected students from Inter-Colleges competitions are nominated for Inter-University participation. During the year under the report, the following inter-collegiate competitions were held;

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Sr. No.	Game	Organizing College	Date	Champion/Runnerup
1	Chess	F.P.T & B.E College, Anand	03/10/2012	C.A.E.T. Godhra Dairy. Sci. College, Anand
2	Table-Tennis (man)	F.P.T.& B.E.College Anand	03/10/2012	Dairy.Sci.College, Anand Vet.Sci. College, Anand
3	Table-Tennis (women)	F.P.T.& B.E.College Anand	03/10/2012	B.A.C.A., Anand F.P.T.&B.E., Anand
4	Basket-ball	AIT College, Anand	5-6/10/2012	Dairy.Sci.College / B.A.C.A., Anand
5	Volley-ball	AIT College, Anand	8-9/10/2012	Dairy.Sci. College, Anand C.A.E.T., Godhra
6	Badminton (M) Badminton (W)	B.A.C.A., Anand	12-13 /10/ 2012	Vet.Sci.College, Anand B.A.C.A., Anand Agri. I.T. College, Anand
7	Essay, Debate, Elucation.	C.A.E.T., Godhra	25/10/2012	C.A.E.T., Godhra Vet.Sci.College, Anand B.A.C.A., Anand Vet.Sci. College, Anand I.A.B.M.I., Anand
8	Cultural Programme, Group Song, Folk Dance, Mono Acting, Drama.	I.A.B.M.I., Anand	29/10/2012	Dairy.Sci.College, Anand F.P.T.& BE, Anand Vaso. Agri., Anand I.A.B.M.I., College, Anand.
9	Folk Dance Mono- Acting Drama	I.A.B.M.I., Anand I.A.B.M.I., Anand I.A.B.M.I., Anand	29/10/2012 29/10/2012 29/10/2012	Dairy.Sci.College, F.P.T.& B.E. Vet.Sci. College, Vaso.Agri. Vaso.Agri., F.P.T.&B.E., Anand
10	Kabbadi	I.A.B.M.I., Anand	05/02/2013	B.A.C.A., Dairy . Sci. College, Anand
11	Kho-Kho	Vet.Sci.College, Anand	08/02/2013	B.A.C.A., Anand Vet.Sci. College, Anand
12	Cricket	Dairy.Sci.College, Anand	10-12/02/2013	Dairy.Sci. College, Anand Vet.Sci. College, Anand
13	Foot-ball	B.A.C.A., Anand	16-17/02/2013	Vet.Sci.Coll., B.A.C.A.Anand.

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Chapter-8 : Students' Welfare



Chapter-8 : Students' Welfare

Inter Agricultural University Sports Games held during the year

Sr. No.	Game	Organizing College/University	Date
1	Volley-ball & Basket-ball	Anand Agricultural University, Anand	16-17/10/2012
2	Badminton, Cultural & Literary	Junagadh Agricultural University, Junagadh	6-7/11/2012
3	Cricket & Table Tennis	Sardarkrushinagar Dantiwada Agricultural University, Sardarkrushinagar	14-15/02/2013
4	Kho-Kho, Kabbadi & Chess	Navsari Agricultural University, Navsari	20-21/02/2013

Volley-ball & Basket-ball Tournament at Anand Agricultural University, Anand

Gujarat Inter Agricultural University Volley-ball & Basket-ball Tournaments was organized by Anand Agricultural University, at Gymkhana Ground, Anand during October 16-17- 2012. All the four Agricultural Universities of Gujarat participated in it. The tournament was inaugurated and declared open by Dr.A.M.Shekh, Hon.

Vice Chancellor in the presence of Dr.P.R.Vaishnav, Registrar, Anand Agricultural University Anand and Dr.A.J.Pandya, Director of Students' Welfare A.A.U.Anand. All the Chairmen, Director of Students Welfare, participants from Anand Agricultural University, Sardarkrushinagar Dantiwada Agricultural University, Junagadh Agricultural University & Navsari Agricultural University were present in the opening ceremony. Results of Volley-ball & Basket-ball tournaments were as under :

Sr. No.	Name of Game	Winner Team	Runner-up Team
1	Basket-ball	Anand Agril.University	SDAU
2	Volley-ball	Junagadh Agril.University.	SDAU



13th All India Inter Agricultural University "Youth Festival" 2012-13

Team of Anand Agricultural University participated in the 13th All India Inter Agricultural University's Youth Festival organized by Jawaharlal Nehru Krishi Vishwa Vidyalaya Jabalpur (M.P.) during 24-28 February 2013. 23 students participated in various competitions like Patriotic Songs (Indian), Group Dance (Folk), Education, Debate, Mono Acting, One Act Play (Drama).

14th All India Inter Agricultural University Sports & Games Meet 2012-13

Anand Agricultural University participated in XIV All India Inter Agricultural University Sports & Games Meet 2012-13 at Bidar-Karnataka on 6-10 March 2013. 43 students from AAU participated in various games like Volley-ball, Table-Tennis (Men & Women), Badminton (Men & Women), Kabbadi, Kho-kho, Basket-ball, Athletics, Games etc.

National Service Scheme (NSS)

The Department of Youth Affairs and Sports, Ministry of Human Resources Development, New Delhi, have started the National Service Scheme in 1969-70. The basic purpose of this scheme is to develop responsibility through social services and realization of work and discipline. National Service Scheme was functioning in all the colleges & Polytechnics of Anand Agricultural University. During the year under report, volunteers registered for regular activity and for special camp are as under.

Sr. No.	Activity	No. of registered volunteers
1	Regular activities	600
2	Special camp activities	300

During spare time from the academic programme, the students are directly involved with the activities related to the problems and requirements of the society and its development through various fields of N.S.S. activities. They are also inspired to work with Environment, Health, Family welfare, Hospitals and other organizations during natural calamities for the benefit of society and work with people in the village and slums.

The social activities carried out by N.S.S. are divided into two groups.

Regular activities

The regular activities carried out by this university during the year include

- Celebration of Independence day
- One day camp of tree plantation, Poster competition
- Blood donation camp, Pulse Polio Immunization Programme
- Celebration of World AIDS Day against HIV in collaboration with Red Cross Society on 1st December 2012 at Anand campus. Animal camp, Essay competition, Sadbhavna parve.
- Celebration of Gandhi Jayanti on October 2, 2012

Chapter-8 : Students' Welfare

- Celebration of Sardar Patel Jayanti on 31 October, 2012.
- A tree plantation programme organized in the hostel premises, Polytechnic in Food Sci & Home Economic.
- Awareness of AIDS through Video, CD and Quiz programme.
- World Food Day Celebration on 16 October 2012.
- Celebration of the Teachers Day on 5 Sept 2012.
- Celebration of 'RATRI BEFORE NAVRATRI' programme .
- Participation of the Students of Dairy Sci. College in "Amul Volcano" organized by Rotary Club, Anand.





Chapter-8 : Students' Welfare

Communication Skills and Parsonality Development Programme

Programme on Communication Skills and Personality development for students

of different faculties of Anand Agricultural University was held during 23-26 March 2013. Total 310 students (including 43 SC/ST students) participated in this training programme.

Special Camp activities

Sr. No.	College	Date	Place	No. of Participants
1	Polytechnic in Agricultural Engineering, Dahod	16-03-2013 to 22-03-2013	At.Moti Sarsi (Tal. Dahod)	20
2	Food Processing Technology & Bio-Energy College, Anand	17-03-2013 to 23-03-2013	At.Sarsa (Tal & Dist.Anand)	25
3	College of Agicultural Information Technology, Anand	17-03-2013 to 23-03-2013	At.Sarsa (Tal & Dist.Anand)	25
4	College of Agricultural Engineering & Technology, Godhra	18-03-2013 to 24-03-2013	At.Padhiyar (Ta.Godhra, Dist. Panchmahal)	30



Several special activities were carried out in these campuses viz.,

- Different kinds of *shram-yagnas*.
- Surveillance of villagers to know their social, educational, economical and health status along with the epidemiological surveillance of important diseases in animals.
- *Pashu nidan sarvar* camp.
- Writing of slogans on walls.
- Global Warming Awareness Programme.
- A Health checking camp for villagers & Students & Senior Citizens
- Creative painting by NSS Volunteers.
- Volunteers participating in indoor and outdoor games.
- *Prabhatpheri* in the morning at 6.00 hrs.
- Collect Plastic & Gutka pouches for plastic free village.
- Drama on *Andhashradha & Nashabandhi* (Addiction).
- Gardening & Cleaning in Kakanpur Farm.
- *Bhajan Sandhaya* in village.
- Village Cleaning Programme.
- *Rangoli*, Poster making, Musical chair, Quiz, Cartooning, etc.
- Seminar & Lectures on various topics and Visits were organized viz.
- Lecture on Importance of Blood Donation.
- Lecture on First Aid.
- Lecture on Thalessemia.
- Lecture on '*Krishi Mahotshava-2013*' by the Assistant Director (Agriculture) Dist.Anand.
- Lecture on "Future and Scope of Food Processing in Gujarat".
- Lecutre on "Agricultural Development of Gujarat".
- Lecture on "Life Style & Thoughts of Swami Vivekanand".
- Visit to Poultry Feed Processing Plant at Sarsa village.
- Visit to green house established in Padhiyar village.
- Demonstration of preparing of Bakery products like biscuits and other products.
- Conservation of cultural/historical heritage etc.,
- Organic farming etc.

The villagers also actively participated and benefited from these programmes. All the students participated and whole heartily gained knowledge on various aspects like health, development of spiritual and cordial relationship, preservation of natural resources and conservation of cultural /historical heritage, animal health, dairy products, etc and strengthened their creativity.

Blood Donation Camp

A Blood donation camp was organized in collaboration with Red Cross Society, Anand.

Chapter-8 : Students' Welfare

Details of participated colleges are as under :

(1) College of Food Processing Technology & Bio-Energy on 30-08-2012. 63 Units of blood were collected and donated by students.

(2) Sheth M.C.College of Dairy Science on 04-12-2012. 61 Units of blood were collected and donated by the students.

(3)

College of Veterinary Science & Animal Husbandry 62 Units of blood were collected and donated by the students.

(4)

College of Agricultural Engineering & Technology,Godhra on 31-01-2013. 32 Units of blood were collected and donated by the students.



Chapter-8 : Students' Welfare

National Cadet Corps (NCC)

The motto of the NCC is Unity and Discipline, Different training programmes are routinely organized by the units of NCC in various colleges of this university for the development of quality leadership, patriotism, brotherhood, sportsmanship and adventurous attitude and unity among the students.

The NCC Unit of B.A. College of Agriculture consists of 80 cadets. This year

four Gujarat Battalion (boys) organized combined annual training camps at Kapadvanj. 20 cadets of B.A.C.A. participated in the camps and participated in many events and 40 cadets attended CATC and ATC camp during the year 2012-13.

32 cadets passed B Certificate examination and 10 cadets got A Grade in the examination. 30 cadets passed C certificate examination and 18 cadets got B Grade.



Chapter-8 : Students' Welfare

Student Magazine

The student magazine is published by colleges of this University to bring out the hidden qualities of writing and expression of the students. The teachers, staff members and post-graduate students of the college provide the crucial link for the overall development of the students through various articles, poems, drama, interesting agricultural information useful to farmers and scientific community etc. The Director of Students' Welfare provides the Financial Assistance. The detailed report of sports and adventure activities in addition to educational activities is also included in the Magazine.

Educational Tour

Educational tour is considered as a part of academic syllabus of the degree courses of this University. The duration of educational tour is of 2-3 weeks, which comprises visits to reputed Institutes of Gujarat and out side Gujarat.

The basic purpose of this tour is to gain knowledge and information by the students regarding their study by personal visit to the related Institutes and research centers. From the educational tour, the students of this university have gained important and interesting information regarding developments in agriculture, veterinary and industrial growth

by visiting the research centers of Agricultural Universities and other places.

Financial Assistance to the Students

University provides scholarship and financial assistance to the students on merit basis. Moreover, scholarship, Government Scholarship Loan and Freeships etc. are also provided to the students of all the faculties on merit basis as under.

- 1 U. G. Fresh Fellowship ₹ 6000 /- per year to eligible students in all faculties.
- 2 For under graduate students National Talent Scholarship (ICAR) ₹ 12000/- per year to students of Agriculture, Dairy, Veterinary, Agricultural Engineering and Technology, F.P.T. and Agri I.T. faculties.
- 3 I.C.A .R. Merit cum Means Scholarship to 7.5 % of intake capacity ₹ 6000/- per year for all faculties.
- 4 AAU Merit fellowship for the first rank holder from each of the faculties of Agri., Vet., Dairy and FPT and IABMI for Masters; ₹ 18, 000/- per year.
- 5 AAU Merit fellowship for the first rank holder from each of the faculties of Agri., Vet., Dairy and FPT and IABMI for Ph.D studies; ₹ 24, 000/- per year.

Chapter-8 : Students' Welfare

The details & Nos of National Talent Search (NTS), Merit cum Means (MCM) Scholarship, UG, PG Fellowship are as under :

Year : 2012-13				
College Name	NTS Scholarship	UG Fellowship	PG Fellowship	MCM Scholarship
Agricultural Faculty	05	53	06	-
Veterinary Science Faculty	11	68	08	09
Dairy Science Faculty	0	25	05	-
Food Processing Technology & Bio-Energy Faculty	09	12	06	-
Agricultural Information Technology Faculty	0	09	-	-
College of Agricultural Engineering & Technology, Godhra	0	07	02	09
Agriculture College-Vaso	-	05	-	-
Horticulture College-Anand	-	05	-	-
Inter national Agri-Business Management Institute	-	-	06	-
Total	25	184	33	18

Student Discipline

The quality of discipline is being developed in students through sports, N.C.C. and N.S.S. etc, and due to this, co-operative atmosphere is being maintained between students, teachers and staff members of this university and no serious noteworthy cases of misbehavior by the students occurred during the year of report.

Other Activities

Pushpanjali on birth ceremony of Mahatma Gandhi and Shashtriji

A "Sarva Dharma Prarthna" programme was organized on the day of "Gandhi Jayanti". A floral tribute was paid to Poojya Gandhi Bapu and to former Prime Minister of India, Lal Bahadur Shastri by officers of this University. On this occasion, Sarva Dharma Prarthna, famous

Chapter-8 : Students' Welfare

bhajan of bapu 'Vaishnavjan to tene re kahiye' was recited by students. Students enlightened the audience by delivering Gandhian thoughts/ Principles of Gandhiji regarding Truth, Non Violence, Non Co-operation and simplicity. One of the students narrated the biography and simplicity of Shashtriji.

Placement Cell

Anand Agricultural University has an excellent placement record with top-notch organizations in Banks, Agriculture companies and various Dairy and Food Industries, Pharmaceuticals with a strong and supportive

alumni network holding prime position in reputed companies. The institution not only ensures a job for the deserving students but also instills a lifetime of confidence and growth. AAU is dedicated placement cell is constantly in touch with the industries. The Student Counseling & Placement Cell looks after students' well-being, placement and Campus Interview. During the year of report, there was a heavy demand from different companies like GCMME, NGO, GOT. of GUJ. (Animal Husbandry), Dena Bank, Balaji Wafers, NDDDB, Dhanuka Agritech., Pest Control of India Pvt. Ltd., Bank of Baroda, Mother Dairy, Amul Dairy, Foreign study etc.



Chapter 9

Finance & Account : Navigating through Fiscal Flow

The Accounts Officer-cum-Comptroller

Considering the responsibility and answerability that lie with the Accounts Officer-cum-Comptroller under Item-14 of Chapter-III of the first Statutes of Anand Agricultural University the present detail is devoted to the office and duties of the Comptroller, as reiterated in the Gujarat Agricultural University Act, 2004 No.5, which ordains the Officer-in- Charge of this office to follow the directives mentioned there under.

Annual Statement

Income/Expenditure

Grant

Anand Agricultural University has received State Plan & Non-Plan grants from Government of Gujarat. The research, extension & development grants were received from I.C.A.R., New Delhi. Further, Plan and Non-Plan grants for Extension Education Institutes were received from the Government of India. The University also received grants from other related departments of State & Central Government including private industries, private agencies and NGOs.



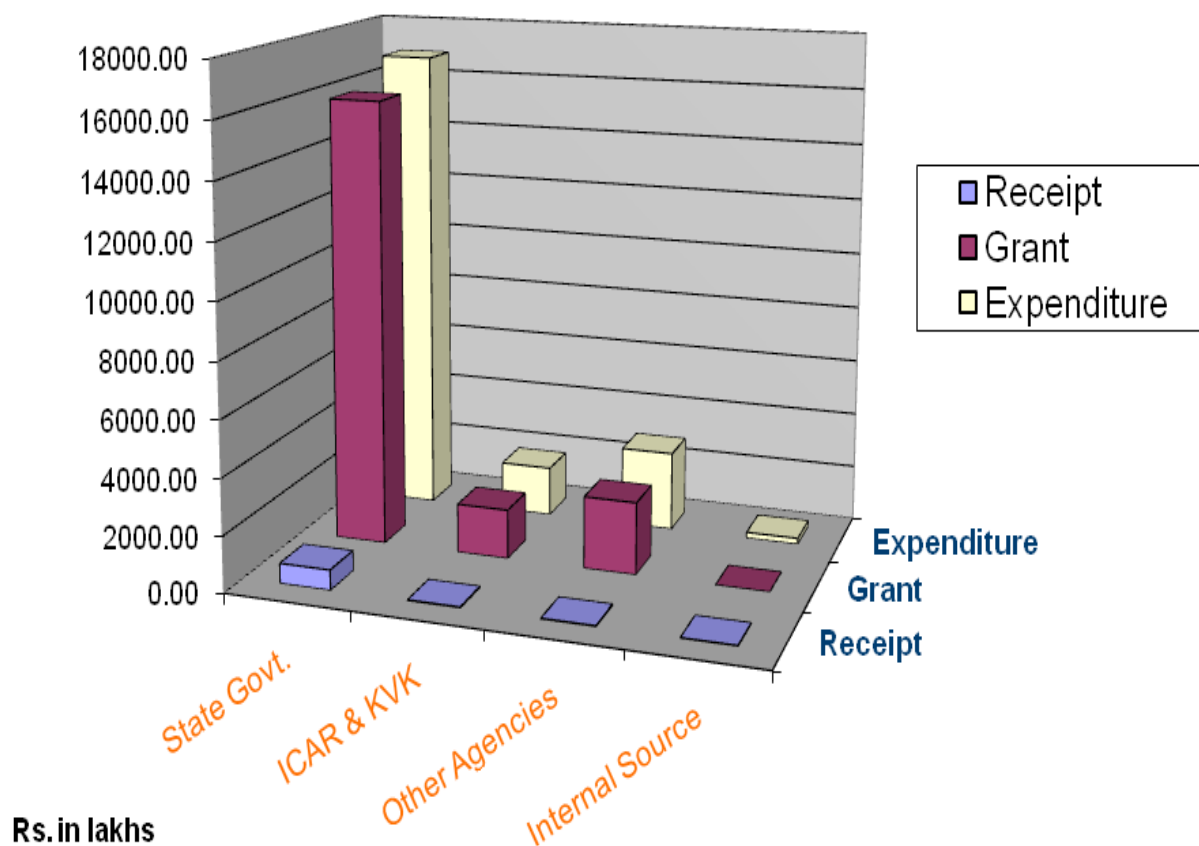
Chapter-8 : Finance & Account

Grant Received/Expenditure Incurred/Income Generated (2012-13)

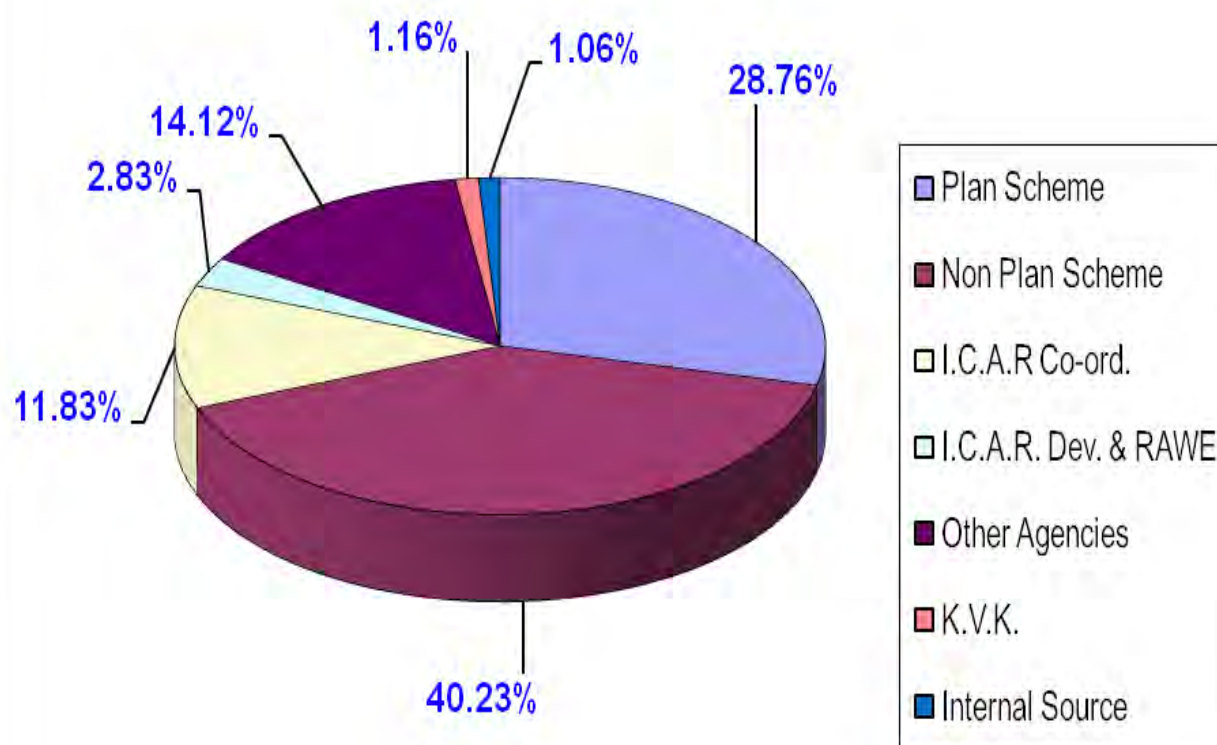
(₹ in lakhs)

Sr. No.	Particulars	Income generated	Grant received	Expenditure incurred
(A)	State Govt. Grant			
1	Plan Scheme	202.03	7087.05	7616.40
2	Non Plan Scheme	510.32	8833.60	9253.77
	TOTAL	712.35	15920.65	16870.17
(B)	Other Sources			
1	ICAR Co-ordinated Projects	36.76	1095.74	1111.88
2	ICAR Adhoc Development & RAWE	0.00	498.26	506.91
3	Other Agencies Scheme	35.50	2571.89	2842.75
4	K.V.K. Centre in AAU	0.00	164.40	164.40
	TOTAL	72.26	4330.29	4625.94
(C)	Internal Source			
1	University Development Grant (9599)	29.48	0.00	211.50
	TOTAL	29.48	0.00	211.50
	TOTAL : (A+B+C)	814.09	20250.94	21707.61

Receipt, Grant & Expenditure for the year 2012-13



Funding Agency wise Grants for the year 2012-13



Audit

(I) Internal Audit

The Internal Audit has been conducted during year 2012-13 on the basis of quarterly based audit by the Chartered Accountant. The quarterly audit report was received from Chartered Accountant. To settle the compliance of the audit report, a meeting was arranged on 07/06/2013 with all DDOs. The Internal Audit from the period from 01/01/2013 to 31/03/2013 was also made.

(II) Examiner Local Fund Audit

During the year under report,

Audit for the year 2009-10 was conducted by the Local Fund for the period from 28/04/2011 to 27/06/2012 and the final report was received in December, 2012. The Action Taken Report has been prepared by this office and submitted to the Board of Management.

(III) A.G. Audit

The Accountant General (Civil Audit), Rajkot team conducted the Audit for the year 2010-11 during 21/02/2012 to 03/03/12. The audit paras have been replied and the further remarks are being complied. Further the audit replies to the

Chapter-8 : Finance & Account

previous year's paras have been made and are under finalization with the A.G., Rajkot.

Store Verification

During the year physical store verification has been conducted by the University.

Resources of Income and Financial Estimates

The Revenue generated by the University during

the year is mainly through sale of farm produces, milk & milk products, poultry products i.e. egg, bakery products & guest house services, examination fee, tuition fee, hostel revenue, tender fee, house rent deductions, library fee, etc.

Financial Estimates

Following are the Plan and Non-Plan Budget Estimates for the year as approved by the State Government.

Sr. No.	Details of Head	Estimates for 2012-2013 (Rs.in lakhs)	
		Original	Revised
(A)	Plan		
	Education	3694.30	3676.94
	Extension Education	628.50	524.52
	Research	2853.20	2885.59
	Total	7176.00	7087.05
(B)	Non Plan		
	Non-Plan (Normal)	6772.15	8712.78
	Non-Plan (Tribal)	119.43	120.82
	Total	6891.58	8833.60

Pension

Sr. No.	Details of Pension cases during the year	No. of cases finalized
1	Final pension cases	100
2	Revised pension cases	137
3	Restoration pension cases	30

Provident Fund (PF)

Sr. No.	Details of P.F. cases disposed during the year	No. of cases finalized
1	No. of Final withdrawal cases	85
2	No. of Part-final withdrawal cases	273

In addition, the monthly PF accounts subscription, withdrawals & balancing for university employees in the form of broad sheet & ledger were maintained. Initial P.L. accounts

with Anand Treasury is opened & maintained. The PF account slips were issued to staff in the month of April-2013.

Chapter 10

Estate Management

Building dream mounments

All the works related to construction and maintenance of Anand Agricultural University campus falls into the purview of Executive Engineer, who supervises the work with the assistance of the Deputy Engineer and Junior Engineers.

In addition, the office of the Executive Engineer also looks after transport facilities of University office, tele-communication and security services, the University Guest Houses and housing facilities. Presently, Er. B.N. Bhalia

is acting as the Executive Engineer of the University.

Construction Committee

The Construction Committee is constituted to frame regulations, planning and approval of major works, tender approvals and excess/extra items as per power delegated under Statute-28.

The Construction committee consisted of following members:

Sr. No.	Name of member	Designation	
1	Dr. A.M. Shekh	Vice Chancellor	Chairman
2	Dr. K. B. Kathiria	Director of Research	Member
3	Dr. P. P. Patel	Director of Extension Education	Member
4	Dr. B. P. Shah	Principal, Dairy Sci. College & Board member.	Member
5	Dr. D. C. Joshi	Dean, FPT & BE	Member
6	Dr. P. R. Vaishnav	Registrar	Member
7	Shri K.P. Mahant	Account officer-cum- comptroller	Member
8	Dr. A. D. Patel	Research Scientist, BTRS from	Member
9	Shri P. S. Vyas	Financial Advisor	Invited Member
10	Shri N. G. Vakharia	Technical Expert (from Dt. 15-06-2012)	Invited Member
11	Er. B.N. Bhalia	Executive Engineer	Member Secretary

Chapter-10 : Estate Management

Meetings of The Committee

Sr. No.	Meeting	Date
1	21 st	27-06-2012
2	22 nd	25-03-2013

The 21st & 22nd University Construction Committee was held on June 27, 2012 & March 25, 2013. Total 46 items were presented for approval in meetings. All the items were approved after detail discussion.

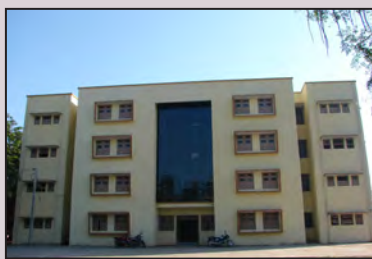
As per the provision of the grant, 89 Administrative approvals and 182 technical/part technical sanctions were accorded.



Works completed during the period under report



Construction of FPT & BE college with Auditorium at AAU, Anand



Construction of hostel for Veterinary Sci. college at AAU, Anand



Construction of hostel for Agriculture and AIT, college at AAU, Anand.



Renovation/strengthening of toilet block of Veterinary 'C' block for Farmer/ students at AAU, Anand.



Construction of office cum laboratory building at AAU, Viramgam



Construction of Office cum laboratory building at AAU, Jabugam



Chapter-10 : Estate Management

<div>Construction of Quarters at AAU, Anand</div> <div>Construction of Training Hall under ICAR at AAU, Anand</div> <div>Construction of toilet block for gents & ladies at BACA AAU, Anand</div>		
No	Name of work	
1	Construction of FPT & BE college with Auditorium at AAU, Anand	
2	Construction of hostel for Veterinary Sci. college at AAU, Anand	
3	Construction of hostel for Agriculture and AIT, college at AAU, Anand.	
4	Renovation/strengthening of toilet block of Veterinary 'C' block for Farmer/ students at AAU, Anand.	
5	Construction of office cum laboratory building at AAU, Viramgam	
6	Construction of Office cum laboratory building at AAU, Jabugam	
7	Construction of Quarters at AAU, Anand	
8	Construction of Training Hall under ICAR at AAU, Anand	
9	Construction of toilet block for gents & ladies at BACA AAU, Anand	
10	Construction of Fodder, Animal, Milking, bull, chaff cutter shed, Calf room at AAU, Minavada	
11	Construction of Fodder, Animal, Milking, bull, chaff cutter shed, Calf room at AAU, Ramnamuvada	
12	Construction of Approach road to new farm at AAU, Godhra	
13	Construction of approach road to CEAT at AAU, Godhra	
14	Construction of Implement shed for Horticulture Polytechnic at AAU, Vadodara.	
15	Construction of River side compound wall at AAU, Minavada.	
16	Construction of Fodder & Bullock shed at AAU, Jabugam.	
17	Construction of Farm store at AAU, Jabugam.	
18	Renovation of T & V hostel for women farmers at AAU, Vadodara.	
19	Construction of Rat proof godown at AAU, Vaso.	
20	Construction of Godown, Fodder shed & Bullock shed at AAU, Arnej.	
21	Construction of Bullock shed at Horticulture farm at AAU, Anand.	
22	Construction of Pump/operator room with water tank at AAU, Vaso.	
23	Construction of Godown & working shed with toilet at RRS Navli farm, AAU, Anand.	
24	Construction of Asphalt road from village to office at AAU, Devataj.	
25	Construction of Box culvert at AAU, Vaso	

Chapter-10 : Estate Management

26	Construction of protection wall to road side at AAU, Khambholaj.
27	Construction of farm road of Nandesari farm for RRS at AAU, Anand.
28	Construction of remaining farm wall at AAU, Dahod
29	Extension of centre of excellence in Medicinal & Aromatic plants at AAU, Anand.
30	Providing land scaping Agri. Engineering college at AAU, Godhra.
31	Construction of Pump/Operator room for RRS at AAU, Anand.
32	Construction of Seed storage Godown at AAU, Anand.
33	Construction of sun drying yard for FPT&BE college at AAU, Anand.
34	Providing CC block around PG girls hostel at AAU, Anand
35	Construction of Parking shed for hostel 'A' of Veterinary Science at AAU, Anand.
36	Construction of Parking shed for Veterinary 'B' hostel at AAU, Anand.
37	Construction of farm road from Navli road Gate to LRS godown at AAU, Anand.
38	Plinth protection to new P.G. hostel at AAU, Anand.
39	Providing under ground rain harvesting system at AAU, Sansoli.
40	Construction of compound wall, gate & watchman cabin to FPT&BE college at AAU, Anand.
41	Addition, Alteration & renovation work of kitchen/ Dining hall for PG hostel at AAU, Anand(veterinary Campus)
42	Providing Plinth protection to Office cum laboratory building at AAU, Jabugam.
43	Construction of remaining farm road at AAU, Vaso.
44	Construction of CC approach road to RRS Seed godown at AAU, Anand.
45	AA & renovation work of existing Meteorology building at AAU, Anand.
46	Providing CC block in parking of International hostel at AAU, Anand.
47	Renovation work of Anubhav dairy at AAU, Anand.
48	Construction of culvert wall & rubble pitching at AAU, Nenpur.
49	Construction of farm wall at Canal side of Navli cattel fodder farm at AAU, Anand.
50	Construction of Pump room for BTRS at AAU, Anand.
51	Providing aluminium doors in University Bhavan at AAU, Anand.
52	Construction of farm protection wall at AAU, Godhra
53	Construction of RCC Overhead water tank at AAU, Godhra
54	Construction of front side compound wall at AAU, Godhra
55	Providing Mosquito jali in Principal quarter at AAU, Godhra.

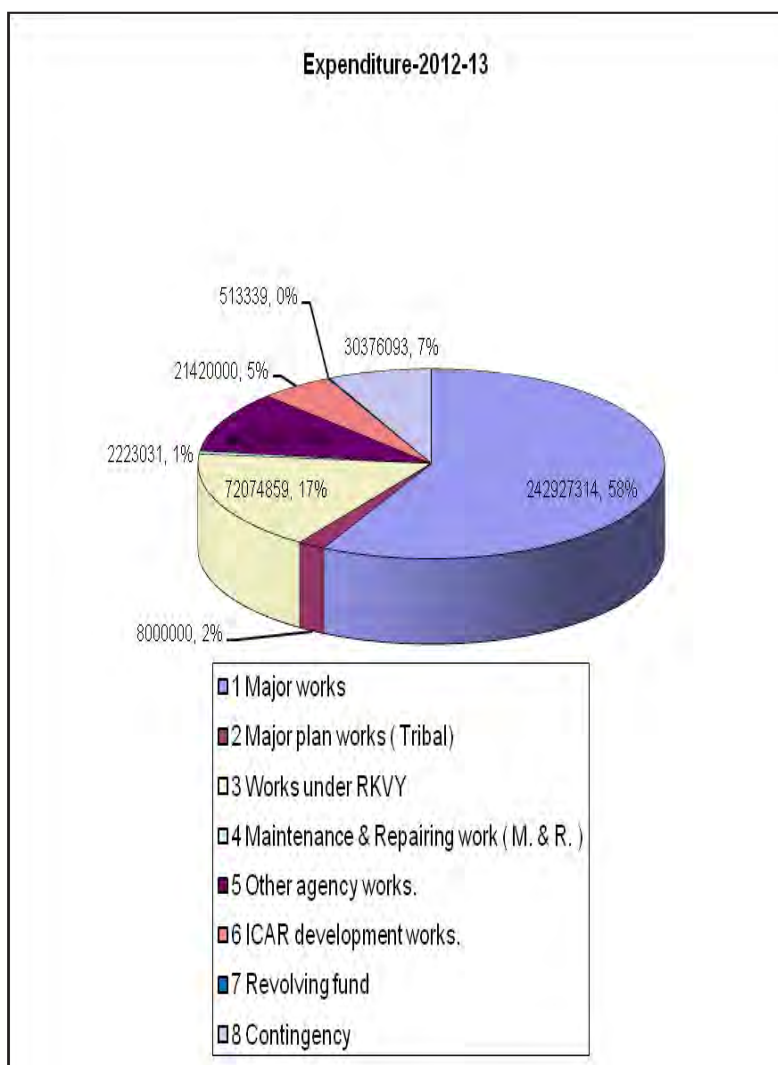
Chapter-10 : Estate Management

56	Providing Mosquito jali in D1 quarter at AAU, Thasra.
57	Renovation of Canteen building for University Bhavan at AAU, Anand.
58	Construction of Net house at AAU, Sansoli.
59	Construction of Compound wall near Talao at AAU, Sansoli.
60	Providing collapsible Gate to Auditorium of FPT&BE college at AAU, Anand.
61	Construction of curbing under RKVY at AAU, Sansoli.
62	Addition & alteration & renovation work of toilet block of Munshi hostel at AAU, Anand.
63	Construction of CC approach to Veterinary Boys hostel at AAU, Anand.
64	Construction of approach to PG dining hall & OTS Veterinary 'c' hostel at AAU, Anand.
65	Construction of shed near threshing yard under RKVY at AAU, Sansoli.
66	Construction of parking shed for AIT hostel at AAU, Anand.
67	Strengthening drainage system of Sardar hostel of Veterinary at AAU, Anand.
68	Construction of sump at AAU, Vaso.
69	Addition, alteration and renovation of Kitchen/ Dining hall of Shastri hostel at AAU, Anand
70	Construction of Entrance compound wall at AAU, Nenpur.
71	Providing glass cladding to entrance of Exam hall at AAU, Anand
72	Construction of wall for protection to animal shed at AAU, Ramnamuvada
73	Construction for Isolated threshing yard for RRS farm at AAU, Anand.
74	Providing water supply facility to office & quarters at AAU, Sansoli
75	Providing M.S. grill in parking for laboratory for CAET AAU, Godhra.
76	Construction of Sun drying yard at AAU, Thasra
77	Construction of farm protection wall b/h animal shed at AAU, Minavada.
78	Construction of Pump/Operator room at AAU, Minavada
79	Construction of basket ball ground at AAU, Vaso.
80	Upgrading exhibition board of colleges & sections for students at University Bhavan at AAU, Anand.
81	Providing partition for visiting students, in V.C. office at AAU, Anand.
82	Providing false ceiling in FF class room of AIT college at AAU, Anand.
83	Construction for parking in Polytechnic at AAU, Vaso .
84	Construction for Garden in Polytechnic at AAU, Vaso.
85	Construction approach to department block of Polytechnic at AAU, Vaso.

Chapter-10 : Estate Management

Statement showing expenditure

Sr. No.	Plan/Scheme	Expenditure in ₹
1	Major works	24,29,27,314.00
2	Major plan works (Tribal)	80,00,000.00
3	Works under RKVY	7,20,74,859.00
4	Maintenance & Repairing (M. & R.)	22,23,031.00
5	Other agency works	4,42,30,881.00
6	ICAR development works	2,14,20,000.00
7	Revolving fund	5,13,339.00
8	Contingency	3,03,76,093.00
TOTAL		42,17,65,517.00



Chapter-10 : Estate Management

Major Events

Sr. No.	Detail of event	Date
1	Inauguration of Tribal Farmer Women training centre at AAU, Devgadhbariya	30-04-2012
2	Inauguration of Agriculture Engineering Polytechnic & Polyclinic laboratory at AAU, Dahod.	01-05-2012
3	Bhoomi Pujan of ICAR Boys hostel at AAU, Anand.	29-05-2012
4	Inauguration of U.G. hostel for Veterinary Science college at AAU, Anand.	16-03-2013
5	Inauguration of U.G. hostel for Agriculture & AIT college at AAU, Anand.	16-03-2013



**Inauguration of Tribal Farmer Women training centre at AAU,
Devgadhbariya on Dt. 30-04-2012**

The Inauguration of **Tribal Farmer Women training** centre building was done by **Smt. Anandiben Patel**, Hon. Minister, Revenue, Road & Building in august presence of Hon. Vice Chancellor Dr. A.M. Shekh and Smt. Urvashidevi Maharaolji, donner of land on 30-04-2012.

Chapter-10 : Estate Management

Inauguration of Agricultural Engineering Polytechnic & Polyclinic laboratory at AAU, Dahod on 01-05-2012



Inauguration of **AGRICULTURAL ENGINEERING POLYTECHNIC and POLYCLINIC LABORATORY** was done by **Shri Narendra Modi** Hon. Chief Minister, Government of Gujarat in august presence of Shri Mangubhai Patel, Hon. State Minister, Adivasi Vikas, Panchayat & Gram Gruh Nirman and Hon. Vice Chancellor Dr. A.M. Shekh, on 01-05-2012.

Bhoomi Pujan of ICAR Boys hostel at AAU, Anand on 29-05-2012



Bhoomi Pujan of **ICAR BOYS HOSTEL** was performed by Dr. S. Ayyappan Director General (ICAR) in august presence of Hon. Vice Chancellor Dr. A.M. Shekh, Dr. K.B. Kathiria, Director of Research, Dr. K.P. Patel, Principal, BACA, Dr. S. Maiti, Director, M&AP, Dr. P.K. Borad, Rector, Dr. P.P. Patel, Director of Extension Education, Shri S.P. Chayya on 29-05-2012.



Inauguration of U.G. hostel for Veterinary Science college at AAU, Anand on 16-03-2013

Inauguration of **VETERINARY BOYS HOSTEL** was performed by **Shri Babubhai B. Bokhiriya**, Hon. Agriculture Minister in august presence of Hon. Vice Chancellor Dr. A.M. Shekh, Dr. A.M. Thakar Principal, Veterinary College, Er. B.N. Bhalia, Executive Engineer on 16-03-2013.



Chapter-10 : Estate Management

Inauguration of U.G. hostel for Agriculture & AIT college at AAU, Anand on 16-03-2013

Inauguration of **AIT BOYS HOSTEL** was performed by **Shri Babubhai B. Bokhiriya** Hon. Agriculture Minister in august presence of Hon. Vice Chancellor Dr. A.M. Shekh, Dr.N.C. Patel, Hon. Vice Chancellor, Junagadh, Dr. A.R. Pathak, Hon. Vice Chancellor, Navsari, Dr. K.B. Kathiria, Director of Research, Er. B.N. Bhalia, Executive Engineer and Shri S.P.Chhaya on 16-03-2013.

Housing Accommodation Committee

Housing Accommodation committee is constituted for allotment of housing quarters to University employee staff as per rules under statute 42.A (G.A.U.).

The Housing Accommodation committee is a statutory body formulated under statute 42.A Schedule XXVI para 4.1 as below :

Sr. No.	Name of Member	Designation	
1	Dr. K. B. Kathiria	Director of Research	Chairman
2	Dr. P.P. Patel	Director of Extension Education	Member
3	Dr. K.P. Patel	Principal, B.A.C.A.	Member
4	Dr. A.M. Thakar	Principal, Vet. Sci. College	Invited member
5	Dr. B.P. Shah	Principal, Dairy Sci. College	Invited member
6	Dr. R.H. Patel.	Asso. Director of Research	Member
7	Dr. A.A. Patel	Principal, EEI	Invited member
8	Dr. A.D. Patel	Research Scientist (Tobacco)	Invited member
9	Er. B.N. Bhalia	Executive Engineer	Member secretary

Meetings of Committee

Sr. No.	Meeting	Date
1	18 th	29-08-2012

Total 12 items were presented for approval in the meeting; all the items were approved after long discussion.

Chapter 11

Information Technology

Importance of Research Center/ Department along with activities carried out during the Year

The Information Technology Center at Anand Agricultural University caters to the demand for the use of Information Technology in the field of agriculture to the State Agricultural Universities of Gujarat. On inclusion in various committees of the university, the Director, IT took measures to carry forward the IT activities at various levels. During the year, substantive work was done not only in the technical or administrative matters of ITC, but also pertaining to Network problems at all the four SAUs of Gujarat. Most importantly the Director, IT was given state level responsibilities regarding IT work of Soil Health Card by Agriculture and Co-operation Department, Government of Gujarat. The required activities were carried out effectively.

Output During the year – Quantum of Work Done at Information Technology Center

- I Objective/MCQ entrance examination for the IDEA PG students has been implemented successfully for Anand Agricultural University.
- II Online Job Application System for teaching & non-teaching post of Anand

Agricultural University has been implemented successfully.

- III For one first time in the history of AAU as well as of Gujarat, “*Krusha Mahotsav 2012*” was webcasted Live on the Website of the University by Information Technology Center, AAU Anand.
- IV For one first time in the history of AAU as well as among all SAU’s of Gujarat, the 9th Annual Convocation function was webcasted Live on the Website of the University.
- V Improved and technically efficient online data entry programme for the Soil Health Card System has been introduced by Information Technology Center, AAU Anand.
- VI Soil Health Card (SHC) portal was shifted from GSWAN and was hosted on our Data Center at AAU, Anand.

Salient Achievements during the year with photographs and information

➤ AAU Web Application

- i Anand Agricultural University, Anand has developed new dynamic website. Website has 2-tier authentication. The website has dynamic uploading for all the colleges,

Chapter-11 : Information Technology

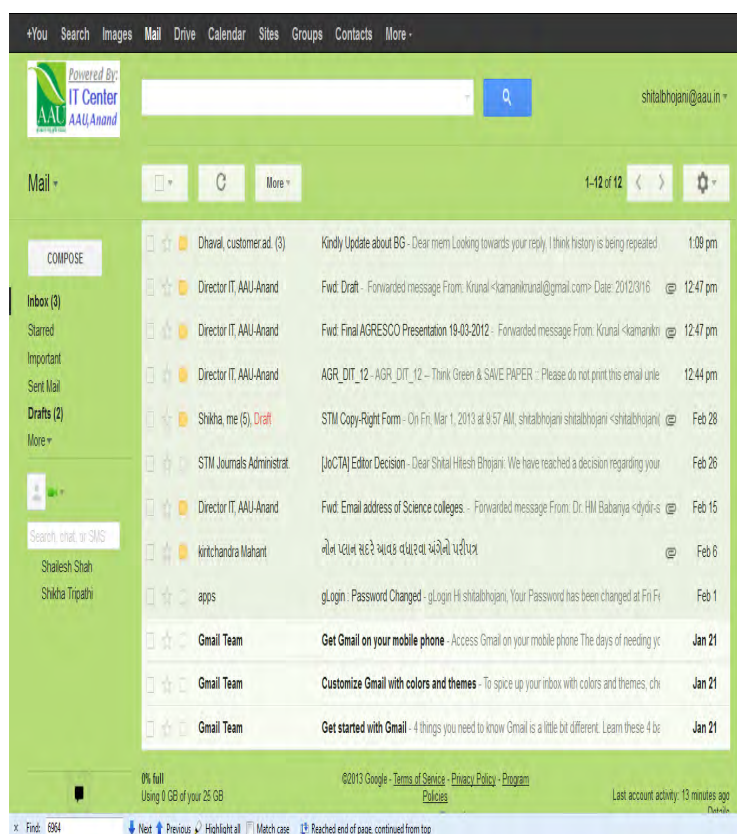
- extension centers, research centers, etc.
 - ii The dynamic updation of the site from the concerned end user is under admin approval process. Furthermore this website has some pages in regional language (i.e Gujarati) so that farmers of Gujarat can get benefit from that.
- **AAU Web Mail**
- i A web mail service has been incorporated in the Web Site enabling the users to read and reply their e-mail from any computer of LAN or using wireless network.
 - ii Anand Agricultural University has changed email setup from Windows live of Microsoft Corporation to Gmail accounts of google provider. Windows Live Mail was providing 10GB storage space for the individual while gmail is providing up to 25 GB of storage without any cost.
 - iii There are more than 5500 e-mail users. The web site has been maintained and updated regularly.



AAU Web Application AAU Web Mail

Chapter-11 : Information Technology

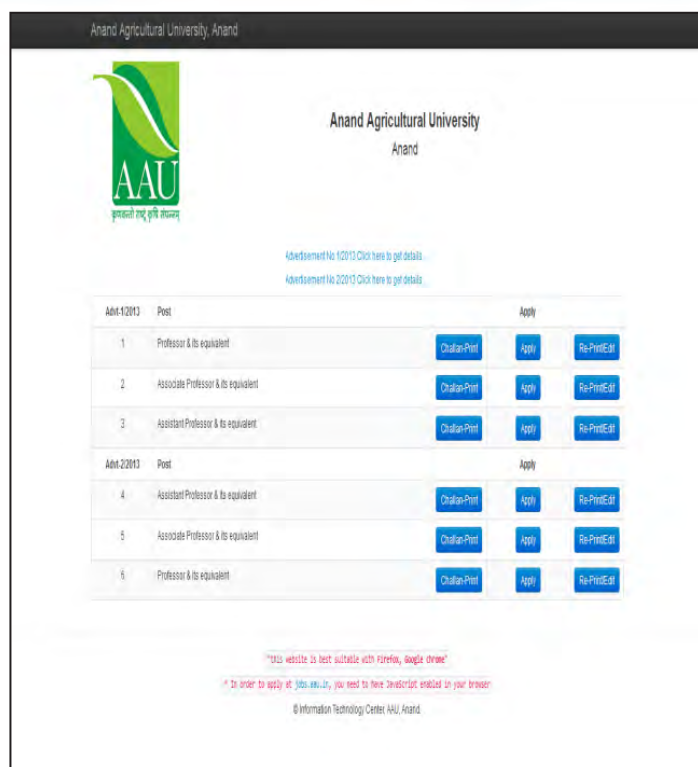
- **Online Job Application System for AAU**
- Anand Agricultural University has successfully implemented the online recruitment process for class – III cadre, it is a first of its kind move in state agricultural university.
- i Online recruitment is cost effective
 - ii Online recruitment is quick
 - iii Online recruitment gives you a better chance of success
 - iv Online recruitment gives you a bigger audience



Online Job Application System

- **Online Admission project for PG programme (www.gsauca.in)**
- Anand Agricultural University (AAU) has initiated common admission for Post Graduate programmes to colleges of all agricultural universities in Gujarat. Students aspiring to shape their career in agriculture sector will be able to apply for admissions in courses of their choice online at colleges managed by Junagadh Agricultural University, Navsari Agricultural University, Sardarkrushinagar Dantiwada Agricultural University apart from AAU.

Chapter-11 : Information Technology



Online Admission project for PG/UG/Polytechnic programme (www.gsauca.in)

➤ Online Admission project for UG programme (www.gsauca.aau.in)

For the second consecutive year, for UG programme, Anand Agricultural University (AAU), Anand has given common admission to colleges of all agricultural universities in Gujarat. Students desiring to shape their career in agriculture sector will be able to apply for admissions in courses of their choice online at colleges managed by Junagadh Agricultural University, Navsari Agricultural University, Sardarkrushinagar Dantiwada Agricultural University, Kamdhenu University – Amreli apart from AAU.

➤ AAU Online 9th Annual Convocation Programme (www.gsauca.in)

First time in the history of AAU as well as among all SAU's of Gujarat, the 9th Convocation Function was webcasted Live on the Website of the University. It is first of its kind move in the state agricultural universities.

- i Application hosted on the web - Available 24x7; able to handle peak loads.
- ii Drastically reduces the time required by any University, for processing and issuing the Convocation Certificates.
- iii Certificate Verification process by Recruiters is instantaneous and available online.
- iv Also manage live web telecast of 9th Convocation function at our university website.

Chapter-11 : Information Technology

- **Establishment of new server room / data center at University Bhavan**

from GSWAN and was hosted on our Data Center at AAU, Anand.

Soil health card portal was shifted



Improved Soil Health Card Web Portal (e-krishi kiran)

- **Wifi Internet Connection**
 - Information Technology Center, Anand Agricultural University started wifi internet connection covering hostels of campus region.

Projects details

- **Web Based Application for Soil Health Card Programme**

The Soil Health Card System contains agricultural information of all districts of Gujarat which is used for the benefit of farmers, agricultural scientists and decision makers. It is an only one of its

kind information project prepared and initiated by the Government of Gujarat for the benefit of farmers at the grass-root level. The soil health card program is able to provide specific type of output to the farmer, thereby, promoting scientific agricultural technologies by enabling the farmers to get required specific information through use of Information Technology. This program is projected to link the distance between Scientist – Extensionist – Farmers and Input-Output Dealers effectively. The farmers can get information easily and precisely when needed.

Chapter-11 : Information Technology

➤ **Web User Interface Assisted Live Stock Research Station Management Information System (Status – in Progress. Tentative date of completion 2014)**

- Livestock Research Station, Anand is entrusted the responsibility of establishing a crossbred dairy herd which can thrive and produce good amount of milk in middle Gujarat Agro-Climatic zone. Research has also been taken-up to study various aspects of management, production, reproduction, nutrition, adaptation and economics of milk and animal production since 1979. This system will store the details of Gir, Kankrej and Crossbreed cows and also assess the production performance of these different breeds. It will also be helpful to find out the parental information of any cow, to identify the livestock problems of the area and plan the research strategy as a corrective measures for particular problem.

➤ **Web based Inward Outward Management System (Status – In Progress. Tentative date of completion End of 2013)**

Nowadays in the world of digital environment we have also to move forward by adopting

new technologies. Anand Agricultural university has many departments, managing inward and outward registers at their respective offices manually. This system brings the new concept of computerization of our manual registers. Inward Outward software is designed for public relation management. Concentrating on the Inward – Outward processing of any organization, the Inward-Outward software will help you in managing documents, track application and file management. By the help of this software, activity of Inward – Outward will be less bothersome.

Awards /Honours

- The e-Krishi Kiran Programme (Soil Health Card) of Information Technology Center, AAU has won the Special Mention Award for “Best Government to Citizens (G2C) Initiative of the Year” in the eMaharashtra Awards-2013, Mumbai.

Important Events

- Objective/MCQ entrance examination for the IDEA PG students has been implemented successfully for Anand Agricultural University.



Chapter 12

Dr. M.D. Patel Regional e-Library

Dr. M. D. Patel Regional e-Library is functioning independently as a separate unit with great pride as "University Library". Presently the library is in possession of 25 Foreign & 76 Indian Journals, 70883 Barcoded Books, 10440 Reports, 13500 Back Volumes, 4061 M.Sc. and Ph.D. theses, 132 digitized rare books, and several e-resources for the utility of the users of the Institution. Moreover, e-transaction and e-circulation of books by using Web Opac and PVC Library Smart card has fortified the

Library system. Dr.M.D.Patel Regional e-Library is enriched with online access, e-journals and CD ROM database along with standard stored Premium database on AAU server. Information Technology in collaboration is maintaining and rendering services of 20 mbps connectivity as well as storage of database. This year, the infrastructure of the Library has been greatly improved with the voluminous grant given by the state government and the ICAR.



Chapter-12 : Dr. M.D. Patel Regional e-Library

Resources procured during the year under Report

Journals subscribed	Books purchased	Online Resources procured
1 Foreign Journals : 25 2 Indian Journals : 76	2045	1 Commodities (CMIE) 2 Indiastat.om 3 J-Gate 4 Cab International Online Resources available (Courtesy ICAR): 1 Consortium of e-Resources in Agriculture (aau.in) 2 Krishiprabhae-Theses database (hau.ernet.in)

Grant allotted and expended during the year of Report

Sl. No.	Type of Grant	Allotment ₹	Expenditure ₹
1	State Government	44,82,000	43,42,591
2	ICAR Development	1,09,06,000	1,06,51,000

CeRA online

Consortium of e-Resources in Agriculture is a boon bestowed by the ICAR to the SAUs of the country. This archival repository of e-resources in electronic form is hugely improving the quality of scientific publications as well as teaching and research guidance. The DDS service being provided on time by Dr M. D. Patel Regional e-Library is widely appreciated by the ICAR. This year, the CeRA user statistics indicate 6073 CeRA users and 624 Library Loan clearances, showing vast increase from last year's statistics.

Krishiprabha e-Theses database

Krishiprabha is a full-text electronic database of Indian Agricultural Doctoral Dissertations submitted by research scholars to the 45 State/Deemed Agricultural Universities. This is a sustainable database, listing about 7500 Doctoral Dissertations with a full text of about 6000 Dissertations, created by Nehru Library, CCS Haryana Agricultural University, Hisar with financial support from Indian Council of Agricultural Research, New Delhi under National Agricultural Innovation Project. Anand Agricultural University has become an

integral part of Krishiprabha project, and so far, 159 Doctoral Dissertations from Anand campus were digitized and submitted to the Lead Centre, which are available in full text on **hau.ernet.in** to the users on Krishiprabha e-theses portal. Twenty more theses dissertations from the year 2009 are under the process of being submitted in standard format to Database.

Conference Attended

Faculty has attended Association of Agricultural Librarians & Documentists of India (AALDI) Conference on “Innovative Practices in Management of Agricultural Libraries in the ICT Environment” at OUAT, Bhubaneswar during 5-7 December, 2012, and presented two papers, i.e., “**Consortium of e-Resources in Agriculture and its use in Agriculture Libraries**”, and “**User Needs in Agricultural Libraries**.”

Book Exhibitions

A total of Six Book exhibitions were conducted by Dr M. D. Patel Regional e-Library during the months of August, September and October, 2012 by United Book Traders-Jodhpur, Prashant Book Agency-New Delhi, Techno Books & Periodicals-New Delhi, International Book Service, New Delhi, Ambica Book Agency, Jaipur and Atlas Book Centre-New Delhi, whereby several recommendations were received from different faculties.

Renovation

The flooring of Stack Room-1 was renovated as the flooring got spoiled in places and was inconvenient for the purposes of using as well as cleaning.

Amenities

Two Kamsweep machines were procured keeping pace with the ultra tech age for cleaning of the Library building and premises. RO system was installed to provide hygienic water conditions to users and staff. AMCs were accorded to Libsys, CCTV and Xerox for smooth and uninterrupted functioning of the Library system.

Library Council Meeting

A joint Sixth Library Council & Fifth Library Purchase Committee meeting was held on 14-8-2012 at Dr.M. D.Patel Regional e-Library, AAU, Anand and various library related issues were discussed at length.

User Statistics

During the year of report, there were 11,272 Library transactions, and the number of users utilizing the library facilities was approximately 90 per day.

Cyberary continues to be the hub of e-content search with an average of 130-150 users per day.

Chapter-12 : Dr. M.D. Patel Regional e-Library



Appendices

Appendix-1

Members of the Board of Management

Vice Chancellor

Dr. A. M. Shekh

Secretary

Agriculture & Cooperation Department

Shri R. K. Tripathy

Secretary

Finance Department

Shri L. Chauaungo

Secretary

Education Department

Dr. Hasmukhbhai Adhiya

Director of Agriculture

Dr. B. R. Shah

Director of Animal Husbandry

Dr. A. J. Kachhiapatel

Director of Horticulture

Dr. B. S. Patel

Dean

Dr. B.P. Shah

Nominated by Vice-Chancellor

Director

Central Institute for Cotton Research Nagpur (Maharashtra)

Dr. K.R Kranthi

Nominated by ICAR

Member Secretary

Dr. P.R.Vaishnav, I/c Registrar

Appendix-2

Members of Academic Council

Vice Chancellor Dr. A. M. Shekh	Prof & Head, Agronomy Dr. M. V. Patel (Nominated)
Director of Research & Dean PG Studies Dr. K. B. Kathiria	Professor & Head Food Processing Technology Dr. R. V. Prasad (Nominated)
Director of Extension Education Dr. P. P. Patel	Head, Integrated Business United Phosphorus Ltd., Mumbai Mr. Bhupen Dubey (Co-opt)
Dean, Agriculture Dr. K. P. Patel	Retd. Director of Research Dr. P. H. Bhatt (Co-opt)
Dean, Veterinary Science Dr. A. M. Thaker	Librarian I/c. Dr. Y. R. Ghodasara (Co-opt)
Dean, Dairy Science Dr. B. P. Shah	Director of Student Welfare Dr. A. J. Pandya (Co-opt)
Dean, Food Processing Technology & Bio-Energy Dr. D. C. Joshi	Managing Director, Vidya Dairy Dr H.K. Desai (Co-opt)
Dean, Agricultural Information Technology I/c. Dr. Y. R. Ghodasara	Retd. Professor Dairy Business Management Dr. P. N. Thaker (Co-opt)
Dean, Agril. Engineering & Technology, Godhra I/c. Dr. M. L. Gaur	Principal International Agri-business Management Institute Dr. G. B. Valand (Co-opt)
Professor & Head, Agril. Statistics Dr. J. S. Patel (Nominated)	Retd. Dean Dr. N. M. Patel (Co-opt)
Professor & Head Teaching Veterinary Clinic Service Complex Dr. D. M. Patel (Nominated)	Assistant Director General (EQR) ICAR, New Delhi Dr. C. Devkumar (Co-opt)
Professor & Head (Microbiology), Vety. Science & Animal Husbandry Dr. M. K. Jhala (Nominated)	Director Directorate of Medicinal and Aromatic Plants Research, Boriyavi Dr. S. Maiti (Co-opt)
Research Scientist (Rice) Dr. A. M. Mehta	Member Secretary Dr. P. R. Vaishnav, I/c Registrar

Appendix-3

Officers of the University

Hon'ble Governor Dr. Smt. Kamla Beniwal	Dean Food Processing Technology & Bio-Energy Dr. D. C. Joshi
Vice Chancellor Dr. A. M. Shekh	Dean Agril. Information Technology Dr. Dhaval Kathiria
Registrar I/c. Dr. P.R.Vaishnav	Dean Agril. Engineering & Technology I/c. Dr. M. L. Gaur
Director of Research & Dean, PG Studies Dr. K. B. Kathiriya	Comptroller-cum-Accounts Officer I/c. Shri K. P. Mahant
Director of Extension Education Dr. P. P. Patel	Librarian I/c. Dr. Y. R. Ghodasara
Dean, Agriculture Dr. K. P. Patel	Director of Students' Welfare I/c. Dr. A. J. Pandya
Dean, Dairy Science Dr. B. P. Shah	Director, Information Technology I/c. Dr. D. R. Kathiria
Dean, Veterinary Science Dr. A. M. Thaker	Executive Engineer Shri B. N. Bhalia

Appendix-4

Heads of the Departments

FACULTY OF AGRICULTURE

Principal & Dean : Dr. K. P. Patel

Sr. No.	Name & Designation	HOD declared for the Department
1	Dr. R. N. Pandey Professor & Head	Plant Pathology
2	Dr. D. B. Patel Professor & Head	Botany / Plant Breeding & Genetics
3	Dr. J. G. Talati Professor & Head,	Biochemistry
4	Dr. H. C. Patel Professor & Head	Horticulture
5	Dr. M. V. Patel Professor & Head	Agronomy
6	Dr. P. K. Borad Professor & Head	Agricultural Entomology
7	Dr. J. S. Patel Professor & Head	Agricultural Statistics
8	Dr. Vyas Pandey Professor & Head	Agricultural Meteorology & Agricultural Engineering
9	Dr. N. B. Chauhan Professor & Head	Extension Education
10	Dr. B. A. Patel Professor & Head	Nematology
11	Dr. Y. C. Zala Professor & Head	Agricultural Economics
12	Dr. V. R. Bhatt Professor & Head	Agricultural Chemistry & Soil Science
13	Dr. R. V. Vyas Professor & Head	Agricultural Microbiology
14	Dr. R. S. Fogut Professor & Head	Biotechnology
15	Dr. D. H. Patel Asst. Professor	Language
16	Dr. B. D. Patel Agronomist	AICRP on Weed Control

FACULTY OF VETERINARY SCIENCE & ANIMAL HUSBANDRY

Principal & Dean: Dr. A. M. Thaker

Sr. No.	Name & Designation	HOD declared for the Department
1	Dr. Y. L. Vyas Professor & Head	Veterinary Anatomy
2	Dr. J.S. Arya Professor Head	Veterinary Physiology
3	Dr. A. M. Pande Professor & Head	Veterinary Biochemistry
4	Dr. A. M. Thaker (In charge) Professor & Head	Veterinary Pharmacology & Toxicology
5	Dr. K.S. Prajapati Professor & Head	Veterinary Pathology
6	Dr. J.J. Hasnani Professor & Head	Veterinary Parasitology
7	Dr. M.K. Jhala Professor & Head	Veterinary Microbiology
8	Dr. D. S. Nauriyal Professor & Head	Veterinary Medicine
9	Dr. D.B. Patil Professor & Head	Veterinary Surgery & Radiology
10	Dr. A.J. Dhami Professor & Head	Veterinary Gynaecology & obstetrics
11	Dr. K.N. Wadhwani Professor & Head	Livestock Production Management
12	Dr. D. N. Rank Professor & Head	Animal Genetic & Breeding
13	Dr. C.G. Joshi Professor & Head	Animal Biotechnology
14	DR. M.N. Brahmbhatt Professor & Head	Livestock Product Technology and Veterinary Public Health

Appendices

15	Dr. D.M. Patel Professor & Head	Teaching in Veterinary Clinical Complex (TVCC), Zaveri Hospital
16	Dr. Subhash Parnekar Research Science & Head	Animal Nutrition
17	Dr.(Mrs.) Ankita Killedar Research Scientist & Head	Veterinary Reproductive Biology Research Unit
18	Dr. S.V. Shah Asso. Research Scientist & Head	Livestock Research Station
19	Dr. F.P. Savaliya Principal Scientist & Head	Poultry Complex
20	Dr. V. P. Belsare Research Scientist & Head,	Kapila Go Sanshodhan Kendra, Minawada / Ramna Muvada

FACULTY OF DAIRY SCIENCE

Principal & Dean : Dr. B. P. Shah

Sr. No.	Name & Designation	HOD declared for the Department
1	Dr. P. S. Prajapati Professor & Head	Dairy Technology
2	Dr. K. D. Aparnathi Professor & Head	Dairy Chemistry
3	Dr. A. G. Bhadania Professor & Head	Dairy Engineering
4	Dr. J. B. Prajapati Professor & Head	Dairy Microbiology
5	Dr. A. J. Pandya Professor & Head	Dairy Processing & Operations
6	Dr. A. K. Makwana Associate Professor	Dairy Business Management (In-charge)

FACULTY OF FOOD PROCESSING TECHNOLOGY & BIO-ENERGY

Principal & Dean : Dr. D. C. Joshi

Sr. No.	Name & Designation	HOD declared for the Department
1	Dr. R. F. Sutar Professor and Head	Post-Harvest Engineering & Technology
2	Dr. S. S. Kapdi Professor and Head	Bio-Energy
3	Dr. R. V. Prasad Professor and Head	Food Quality Assurance
4	Dr. H. Pandey Associate Professor & I/c Head	Food Processing Technology
5	Dr. A. K. Sharma Associate Professor & I/c Head	Food Engineering
6	Dr. H. G. Bhatt Associate Professor & I/c Head	Food Business Management

FACULTY OF AGRICULTURAL ENGINEERING & TECHNOLOGY

I/c. Principal & Dean : Dr. M.L. Gaur

Sr. No.	Name & Designation	HOD declared for the Department
1	Dr. M. L. Gaur Professor	Soil and Water Conservation Engineering (SWE) CAET, Godhra
2	Dr. R. N. Swarnkar Professor	Farm Machinery and Power (FMP) CAET, Godhra
3	Dr. Pankaj Gupta Associate Professor	Renewable Energy (RE) CAET, Godhra
4	Dr. Navneet Kumar Associate Professor	Agricultural Processing Engineering (APE) CAET, Godhra

FACULTY OF AGRICULTURAL INFORMATION TECHNOLOGY:

I/c. Principal & Dean : Dr. D. R. Kathiriya

Sr. No.	Name & Designation	HOD declared for the Department
1	Dr. D. R. Kathiriya Professor & I/c. Principal/Dean	Agricultural Information Technology

INTERNATIONAL AGRICULTURAL BUSINESS MANAGEMENT INSTITUTE

Principal : Dr. G. B. Valand

Sr. No.	Name & Designation	HOD Declared for the Department
1	Dr. R. S. Pundir Associate Professor	Agribusiness Economics and Policies
2	Mr. T. S. Shibin Assistant Professor	Marketing Management
3	Mr. Y. A. Lad Assistant Professor	HRD and Personal Management
4	Dr. Sanjiv Kumar Assistant Professor	Production Management
5	Dr. M. R. Prajapati Assistant Professor	Financial Management
6	Mr. Dilip R. Vahoniya Assistant Professor	Project Management

POLYTECHNICS

Sr. No.	Name & Designation	HOD Declared for the Polytechnic
1	Dr. V. J. Patel Associate Professor	Sheth M. C. Polytechnic in Agriculture, Anand
2	Dr. K. D. Mevada Associate Professor	Polytechnic in Agriculture Vaso
3	Dr. K. B. Kamaliya Associate Professor	Polytechnic in Food Science and Home Economics, Anand
4	Dr. K. S. Patel Associate Professor	D. M. Polytechnic in Horticulture Vadodara
5	Dr. M.M.Trivedi Associate Professor	Polytechnic in Agricultural Engineering Dahod

Appendix-5**Constitution of Board of Studies other than Board of the Post Graduate Studies**

The Board of Studies of each faculty except the faculty of Post Graduate Studies shall comprise of the following members :

- (a) The Dean of the Faculty - Chairman
- (b) The Head of the Department and Professors teaching subjects assigned to that faculty
- (c) The Director of Extension Education or his representative
- (d) The Director of Research and Dean Post-Graduate studies or his representative
- (e) Five Co-opted members
- (f) The Assistant Registrar (Academic) as Secretary

Appendix-6

9th Annual Convocation 26-02-2013

List of Gold Medals/Gold Plated Silver Medals Awards/Cash Prizes

Sr. No.	Name of Gold Medal / Cash Prize	Particulars	Recipient of the medal	Name of College
1	Chancellor's Gold Medal	For best Ph.D thesis from amongst all faculties is awarded to the student for the year 2011-12	Patel Amiben R.	SMC College of Dairy Science, Anand.
2	Chancellor's Gold Medal	For best student from amongst all faculties in Master's Degree is awarded to the student for being adjudged the best P.G. Student for the year 2011-12	Niranjana M.	B.A. College of Agriculture, Anand
3	Dr. D. J. Patel Medal	For securing highest OGPA in the subject of Plant Pathology in M.Sc.(Agri) degree course for the year 2011-12	Sanghavi Sumit Kishor	B.A. College of Agriculture, Anand
	Late Shri S.V.Desai Medal	For securing highest OGPA in the subject of Plant Pathology in M.Sc.(Agri) degree course for the year 2011-12		
4	Dr. C. B. Shah Medal	For the students of B.A. College of Agriculture, Anand for getting the highest OGPA including excellence in thesis in the subject of Agronomy in M.Sc. (Agri) examination for the year 2011-12	Avinash Gupta	B.A. College of Agriculture, Anand
5	Late Dr. Diwaker R. Patel Medal	For best PG Research work in the subject of Plant Biotechnology in the faculty of Agriculture for the year 2011-12	Poonam	B.A. College of Agriculture, Anand

Sr. No.	Name of Gold Medal / Cash Prize	Particulars	Recipient of the medal	Name of College
6	Late Shri K.K.Shukla Medal	For best PG Research work in the faculty of Veterinary Science & A.H. for the year 2011-12	Hemant Gupta	College of Vet. Sci & A.H., Anand
7	Late Smt. V.S.Siripurapu Memorial Gold Medal	For the student of PG Institute of FPT & Bio Energy for securing First Class with Distinction and Maximum OGPA in M.Tech(FPT) examination during the year 2011-12	Patel Payal Devendra-kumar	PG Institute of FPT & BE, Anand
8	Devidayal (Sales) Limited Gold Medal	For securing highest OGPA in MBA (IAB) at Master Level for the year 2010-11	Dave Darshna Harihar	Institute of International Agribusiness Management, Anand
UNDER GRADUATE : Agriculture Faculty - B.A. College of Agriculture, Anand				
1.	Vice Chancellor Gold Medal	For being adjudged the best student of faculty of Agriculture for the year 2011-12	Abhijeet Singh	
2	Dr.Purachand D.Mistry Medal	For securing highest CGPA in the subject of Agricultural Meteorology and related courses at the end of 8 th Semester of B.Sc. (Agri) degree examination held in May 2012		
3	Dr. Mrinal Kanti Chakraborty Medal	For securing highest OGPA in the subject of Agricultural Chemistry and related courses at the end of the 8 th semester of B.Sc.(Agri) degree examination held in May 2012		
4	Dr.Ravjibhai Chhotabhai Patel Medal	For securing highest OGPA in the subject of Agricultural Entomology at the end of 8 th Semester of B.Sc.(Agri) degree examination held in May 2012		
5	Dr.Sureshbhai N.Patel Memorial Medal	For securing highest OGPA in the subjects of Applied Entomology in 5 th and 6 th Semester of B.Sc.(Agri) degree course examination held in May 2012		
6	Gujarat State First Batch Agricultural Graduate Golden Jubilee (1960-2010) Memorial Medal	Awarded for securing highest C.G.P.A at the end of 8 th semester of B.Sc.(Hons.) Agri. degree examination held in May 2012.		

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7	American Spring & Pressing Works Pvt. Ltd.,	For securing highest OGPA in the subjects of Agril. Entomology and Plant Pathology at the end of 8 th Semester of B.Sc.(Agri) degree examination held in May 2012	Abhijeet Singh
8	Dr. Ranchhodbhai M. Patel Gold Medal	For securing highest CGPA in the related subjects of Plant Breeding & Genetics at the end of the 8 th Semester of B.Sc.(Agri) degree examination held in May 2012	Tanmay Rakshit
9	Dr.B.V.Mehta Medal	For securing highest CGPA in the subjects of Agricultural Chemistry and Soil Science up to the end of the 8 th Semester held in May 2012	
10	Dr.M.V.Desai Medal	For securing highest CGPA in the subjects of Plant Pathology and related courses at the end of the 8 th Semester of B.Sc.(Agri) degree examination held in May 2012	
11	Dr.Z.B.Patel Medal	For securing highest CGPA in the subjects of Horticulture at the end of the 8 th Semester of B.Sc.(Agri) degree examination held in May 2012	
12	Dr.Harikaka Medal	For securing highest GPA in the course of Fundamentals of Entomology (Ag.Ento-3.1) of B.Sc.(Agri) degree examination held in may 2012	
13	Late Shri Dahyabhai Ambalal Patel Gold Medal	For securing highest CGPA in the subjects of Horticulture at the end of the 8 th Semester of B.Sc.(Agri) degree examination held in May 2012	
14	Shri Babubhai Jashbhai Patel Shashtipurti Smruti Gold Medal	For securing highest CGPA in the subjects of Agronomy at the end of 8 th Semester of B.Sc. (Agri) examination held in May 2012	
15	Dr.Ramjibhai M.Patel Medal	For securing highest CGPA in the subject of Agricultural Statistics and related subjects at the end of 8 th Semester of B.Sc.(Agri) degree examination held in May 2012	Deepak Goyal
16	Prof.H.N.Patel Memorial Medal	For securing highest OGPA in the subject of Extension Education at the end of 8 th Semester of B.Sc.(Agri) examination held in May 2012	

17	Shri. Satyendrabhai K. Patel of Dabhoul Medal	For securing highest CGPA in the subject of Agricultural Economics at the end of 8 th Semester of B.Sc.(Hons.) Agri. degree examination held in May 2012.	Deepak Goyal
18	Late Shri Jashbhai J.Patel Medal	For securing highest GPA in the subject of Agronomy at the end of 8 th Semester of B.Sc. (Agri) degree examination held in May 2012	

Veterinary Faculty: College of Veterinary Science & Animal Husbandry, Anand

1	Vice Chancellor Gold Medal	For being adjudged the best student of Faculty Veterinary Science and Animal Husbandry during the year 2011	Sushant Labh
2	Silver Jubilee Celebration Gold Plated Silver Medal	For securing highest OGPA in the clinical Subjects viz., Surgery, Medicine, Gynaecology and Veterinary Public Health at the end of B.V.Sc. & A.H. degree examination held in 2011	
3	Dr. M.N. Mannari Gold Medal	For Securing Highest CGPA up to the end of the 9th Semester in the subject of Veterinary Surgery & Radiology of B.V.Sc. & A.H., degree examination held in 2011	
4	Prof. M.R. Varia Medal	For Securing Highest CGPA in the subjects of Veterinary Pathology, Microbiology, Parasitology at the end of 6th Semester of B.V.Sc. & A.H. degree examination held in 2011	
5	Dr. R.K. Shulka Gold Plated Silver Medal	For Securing highest OGPA at the end of 10th Semester in B.V.Sc. & A.H. degree examination held in 2011	
6	V.C. Desai Charities Gold Plated Medal	For securing highest OGPA at the end of the 10th Semester of B.V.Sc. & A.H., degree examination held in 2011	
7	IXth ISVPT-Anand Medal	For securing highest C.G.P.A in the subject of Veterinary Pharmacology & Toxicology at the end of 9th Semester of B.V.Sc. & A.H., degree examination held in 2011	

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8	SJC Gold Plated Silver Medal	For securing highest C.G.P.A. in the Basic subjects viz., Anatomy, Biochemistry, Physiology and Pharmacology at the end of 6th semester of B.V.Sc. & A.H., degree examination held in July-2011	
9	Dr. B.P. Pandya Cash Prize	For Securing highest C.G.P.A. in the subject of Animal Nutrition at the end of 9th semester of B.V.Sc. & A.H., degree examination held in July 2011	
10	Dr. Smt. Ramaben B. Awasthi Medal	For securing highest CGPA up to the end of 6th Semester in the subjects of Veterinary Parasitology of B.V.Sc. & A.H., degree examination held in 2011-12	Panchal Heena Natwarbhai

Dairy Science Faculty: SMC College of Dairy Science, Anand

1	Vice Chancellor Gold Medal	For being adjudged the best student of faculty of Dairy Science for the year 2011-12	Paul Preeti Ashok
2	Late Shri Kanubhai Chhotabhai Patel Gold Plated Silver Medal	For Securing highest OGPA in all the Dairy Technology subjects of B.Tech (DT) examination held in May 2012	
3	Sheth Mansukhlal C. Desai Medal	For securing highest C.G.P.A. in all the Dairy Microbiology subjects of B.Tech.(D.T.) degree examination held in May 2012	
4	Late Dr. Jashbhai Ranchhodhbhai Patel Gold Plated Silver Medal	For securing highest O.G.P.A. at the end of 8 th Semester of B.Tech (D.T.) degree examination held in May 2012	
5	Late Shri R.J.Patel Gold Plated silver Medal	For securing highest OGPA in all the Dairy Business Management subjects of B.Tech(DT) examination held in May 2012	
6	Late Indubhai R.Patel Gold Plated Silver Medal	For securing highest CGPA in all the subjects offered by the Dairy Microbiology Department up to the end of 8 th Semester of B.Tech(DT) examination held in May 2012	

7	Late Bhogibhai V.Patel Medal	For securing highest GPA in all the courses of 7 th & 8 th Semester of B.Tech(DT) examination held in May 2012	Patel Heenabahen Mahendralal
8	Sheth Mansukhlal C. Desai Medal	For securing highest C.G.P.A. in all the Dairy Technology subjects up to the end of 8 th semester of B. Tech. (D.T.) examination held in May, 2012	
9	Smt. Taraben Khatri Gold Plated Silver Medal.	For securing highest C.G.P.A. in all Dairy Technology subjects of B.Tech.(D.T.) degree examination held in May 2012	
10	Shresth Milk Gamdivala Gold Plated Silver Medal	For securing highest C.G.P.A. in all the Dairy Microbiology subjects up to the end of 8 th Semester of B.Tech (D.T.) degree examination held in May 2012	
11	Sheth Mansukhlal Desai Gold Plated Silver Medal	For securing highest C.G.P.A. in all the Dairy Engineering subjects of B.Tech. (D.T.) degree examination held in May 2012	Desai Harsh Dharmeshkumar
12	Late SMT Kapilaben Babubhai Patel	For securing highest CGPA in all the Dairy Engineering subjects of B.Tech (DT) degree examination held in May 2012	
13	Late Shri Shankarlal Ratilal Gold Plated Silver Medal	For securing highest OGPA in all the Dairy Engineering subjects at the end of 4 th Semester of B.Tech(DT) examination held in May 2012	
14	Sheth Mansukhlal C. Desai Medal	For securing highest C.G.P.A. in all the Dairy Chemistry subjects of B.Tech.(D.T.) degree examination held in May 2012	Salma

Agricultural Engineering Faculty: College of Agricultural Engineering & Technology, Godhra			
1	Vice Chancellor Gold Medal	For being adjudged the best student of faculty of Agricultural Engineering for the year May 2012.	Saswati Ray
2	Shri Venkata Subbaiah Siripurapu Memorial Medal	For securing highest OGPA at the end of 8th Semester of B.Tech.(Agri.Engg) degree examination held in May 2012.	

Appendix-7

List of Scientists Participated in Seminars/Symposia/Workshops/Group Meetings/Conferences/Trainings/Visits etc.

Sr. No.	Name of Scientist	Participated	Date	
			From	To
1	Dr. R. V. Vyas	Committee meeting to finalize the budget of extension period of sub projects under component-1 of NAIP at New Delhi	04-04-2012	04-04-2012
2	Mr. Y. M. Rojasara	XXVII Annual Group Meeting of AICRP-National Seed Project (Crops) 2012 at AAU, Anand	14-04-2012	16-04-2012
3	Mr. J. S. Doshi	XXVII Annual Group Meeting of AICRP-National Seed Project (Crops) 2012 at AAU, Anand	14-04-2012	16-04-2012
4	Dr. G.C. Jadeja	XXVII Annual Group Meeting of AICRP-National Seed Project (Crops) 2012 at AAU, Anand	14-04-2012	16-04-2012
5	Dr. R.N. Pandey	XXVII Annual Group Meeting of AICRP-National Seed Project (Crops) 2012 at AAU, Anand	14-04-2012	16-04-2012
6	Dr. S. T. Patel	XXVII Annual Group Meeting of AICRP-National Seed Project (Crops) 2012 at AAU, Anand	14-04-2012	16-04-2012
7	Dr. V. R. Gohel	XXVII Annual Group Meeting of AICRP-National Seed Project (Crops) 2012 at AAU, Anand	14-04-2012	16-04-2012
8	Dr.NJ Jadav	XXVII Annual Group Meeting of AICRP-National Seed Project (Crops) 2012 at AAU, Anand	14-04-2012	16-04-2012
9	Dr. J. N. Patel	XXVII Annual Group Meeting of AICRP-National Seed Project (Crops) 2012 at AAU, Anand	14-04-2012	16-04-2012
10	Dr. R. R. Acharya	27 th Group meeting of AICARP - National Seed Project (Crops) at AAU, Anand	14-04-2012	16-04-2012
11	Dr. B. R. Patel	27 th Group meeting of AICARP - National Seed Project (Crops) at AAU, Anand	14-04-2012	16-04-2012

Sr. No.	Name of Scientist	Participated	Date	
			From	To
12	Dr. R. G. Jani	12 th Indian Veterinary Congress at Mhow (M.P.)	20-04-2012	21-04-2012
13	Dr. D. B. Patel	55 th Annual Maize Workshop meeting at Hisar	20-04-2012	22-04-2012
14	Dr. S. M. Khanorkar	55 th Annual Maize Workshop meeting at Hisar	20-04-2012	22-04-2012
15	Dr. U. M. Patel	55 th Annual Maize Workshop meeting at Hisar	20-04-2012	22-04-2012
16	Mr. K. H. Patel	55 th Annual Maize Workshop meeting at Hisar	20-04-2012	22-04-2012
17	Dr. Ashish Roy	9 th Annual Scientist Review Meeting of AINP at New Delhi	23-04-2012	23-04-2012
18	Dr. C. G. Joshi	Sample collection for research scheme at Nasik	25-04-2012	27-04-2012
19	Dr. J. B. Prajapati	Review meeting of the project for XII plan at New Delhi	02-05-2012	02-05-2012
20	Dr. S. M. Khanorkar	Plant Breeder's meet at New Delhi	03-05-2012	04-05-2012
21	Dr. A. M. Mehta	Plant Breeder's meet at New Delhi	03-05-2012	04-05-2012
22	Dr. H. P. Parmar	National group meeting : Kharif-2012 at Pune	04-05-2012	06-05-2012
23	Dr. P. M. Patel	National group meeting : Kharif-2012 at Pune	04-05-2012	06-05-2012
24	Dr. G. J. Mistry	National group meeting : Kharif-2012 at Pune	04-05-2012	06-05-2012
25	Dr. J. A. Patel	Confidential Assignment of ASRB at New Delhi	09-05-2012	11-05-2012
26	Dr. J. K. Patel	Annual Group meeting on Castor at Yercaud	10-05-2012	12-05-2012
27	Dr. D. B. Patel	Annual Group meeting on Castor at Yercaud	10-05-2012	12-05-2012
28	Dr. J. A. Patel	Annual Group meeting on Castor at Yercaud (TN)	10-05-2012	12-05-2012
29	Dr. B. A. Patel	Annual Group meeting on Castor at Yercaud (TN)	10-05-2012	12-05-2012

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Sr. No.	Name of Scientist	Participated	Date	
			From	To
30	Dr. T. T. Patel	Annual Group meeting on Castor at Yercaud (TN)	10-05-2012	12-05-2012
31	Dr. R.V. Vyas	4 th Meeting of Task Force on Biological agents for Agriculture at Bangalore	11-05-2012	11-05-2012
32	Dr. P. G. Shah	XX Annual Group meeting of AINP on Pesticide Residues & 6 th Annual Workshop of Central sector scheme at Hyderabad	12-05-2012	13-05-2012
33	Dr. M. F. Raj	XX Annual Group meeting of AINP on Pesticide Residues & 6 th Annual Workshop of Central sector scheme at Hyderabad	12-05-2012	13-05-2012
34	Mr. A. R. Patel	XX Annual Group meeting of AINP on Pesticide Residues & 6 th Annual Workshop of Central sector scheme at Hyderabad	12-05-2012	13-05-2012
35	Ms. Kalpana Diwan	XX Annual Group meeting of AINP on Pesticide Residues & 6 th Annual Workshop of Central sector scheme at Hyderabad	12-05-2012	13-05-2012
36	Dr. J. B. Prajapati	Meeting of Pls for Centres on Dairy Microbes - VTC Project at Karnal	21-05-2012	21-05-2012
37	Dr. N. P. Sarvaiya	Training course of RSO level-1 at Mumbai	21-05-2012	29-05-2012
38	Dr. D. M. Korat	XXI Biocontrol Workers Group Meeting at Bangaluru	22-05-2012	23-05-2012
39	Dr. J. J. Jani	XXI Biocontrol Workers Group Meeting at Bangaluru	22-05-2012	23-05-2012
40	Mr. N. B. Patel	XXI Biocontrol Workers Group Meeting at Bangaluru	22-05-2012	23-05-2012
41	Dr. J. B. Prajapati	Seminar on Status, Opportunities and Sustainability of Dairying on the eve of "World Milk Day" at Ranchi	01-06-2012	02-06-2012
42	Dr. P. G. Shah	Expert Group Meeting for Revision of "Pesticide Residue Analysis Manual" at New Delhi	02-06-2012	04-06-2012
43	Dr. Subhash Parnerkar	Review meeting of AICRP on Improvement of Feed Resources and Nutrient Utilization in Raising Animal Production at New Delhi	04-06-2012	05-06-2012

Sr. No.	Name of Scientist	Participated	Date	
			From	To
44	Mr. C. B. Chauhan	UGC Sponsored Orientation Program at Ahmedabad	04-06-2012	01-07-2012
45	Dr. P. R. Pandya	Annual Review Meeting of Outreach Project at New Delhi	05-06-2012	05-06-2012
46	Dr. R.S. Pundir	Training workshop on Scientific Report Writing & Presentation at Hyderabad	05-06-2012	08-06-2012
47	Dr. Subhash N.	Regional committee meeting Zone-1 at Palampur	08-06-2012	09-06-2012
48	Dr. R. S. Fougat	Visit for survey and collection of Saffron germplasm in Kashmir	11-06-2012	15-06-2012
49	Dr. Amritpal Singh	Visit for survey and collection of Saffron germplasm in Kashmir	11-06-2012	15-06-2012
50	Dr. Sushil Kumar	Training program on DNA sequencer at Gurgaon (Delhi)	20-06-2012	22-06-2012
51	Mr. A. A. Sakure	Training program on DNA sequencer at Gurgaon (Delhi)	20-06-2012	22-06-2012
52	Dr. C. G. Joshi	6 th Annual Review Meeting of Niche Area of Excellence Program at New Delhi	21-06-2012	21-06-2012
53	Dr. S. K. Raul	Summer School on "Engineering Interventions in Conservation Agriculture for Enhancing Agricultural Productivity and Climate Change Mitigation" at Bhopal	22-06-2012	12-07-2012
54	Mr. M. P. Raj	Refresher Course in Computer Science at Ahmedabad	25-06-2012	15-07-2012
55	Dr. R. S. Fougat	Meeting of DBT network Project on Jatropha at New Delhi	26-06-2012	26-06-2012
56	Mr. G. P. Tagalpallewar	National training on "Newer Concepts and Techniques in Development of Health Foods" at Ludhiana	01-07-2012	21-07-2012
57	Dr. U. A. Patel	15 th Orientation Programme at Vidhyanagar	02-07-2012	29-07-2012
58	Dr. K. B. Vedamurthy	Workshop on "standardization of methodology for estimation of cost of milk production in India" and meeting for project at Karnal	06-07-2012	07-07-2012

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Sr. No.	Name of Scientist	Participated	Date	
			From	To
59	Dr. A. D. Patel	VII Group meeting of AINRP (T) at Rajahmundry	08-07-2012	09-07-2012
60	Dr. H. R. Patel	VII Group meeting of AINRP (T) at Rajahmundry	08-07-2012	09-07-2012
61	Dr. J. S. Patel	VII Group meeting of AINRP (T) at Rajahmundry	08-07-2012	09-07-2012
62	Dr. D. M. Mehta	VII Group meeting of AINRP (T) at Rajahmundry	08-07-2012	09-07-2012
63	Dr. K. R. Joshi	VII Group meeting of AINRP (T) at Rajahmundry	08-07-2012	09-07-2012
64	Dr. D. H. Desai	VII Group meeting of AINRP (T) at Rajahmundry	08-07-2012	09-07-2012
65	Mr. D. R. Delvadia	VII Group meeting of AINRP (T) at Rajahmundry	08-07-2012	09-07-2012
66	Dr. M. R. Saiyad	Collection of the rooted slips of BxN Hybrid grass for Kharif experiments at Jhansi (U.P.)	16-07-2012	19-07-2012
67	Dr. R. S. Parmar	Summer School on Forecast modeling in crops at New Delhi	17-07-2012	06-08-2012
68	Dr. M. A. Patel	Review meeting of the Scheme on Spices and Aromatic Plants at Bangalore	18-07-2012	19-07-2012
69	Dr. Subhash Parnerkar	Workshop on Microwave Plasma - Atomic Emission Spectrometer at Ahmedabad	19-07-2012	19-07-2012
70	Dr. D. M. Korat	QRT Review Presentation at Pune	20-07-2012	21-07-2012
71	Dr. B. M. Parasharya	QRT Review Presentation at Pune	20-07-2012	21-07-2012
72	Dr. J. J. Jani	QRT Review Presentation at Pune	20-07-2012	21-07-2012
73	Dr. J. A. Patel	Review meeting of ICAR Seed Project "Seed Production in Agricultural Crops" at New Delhi	25-07-2012	26-07-2012
74	Dr. M. D. Gurjar	International Conference on "Synchronizing Management Theories and Business Practices : Challenges Ahead" at Tamil nadu	27-07-2012	29-07-2012
75	Dr. D. S. Mistry	Training program on "Biological Control of Plant Parasitic Nematodes" at Bangalore	27-07-2012	31-07-2012

Sr. No.	Name of Scientist	Participated	Date	
			From	To
76	Dr. J. A. Patel	6 th CAC meeting of NAIP-4 at AAU, Anand	30-07-2012	31-07-2012
77	Dr. V. P. Ramani	6 th CAC meeting of NAIP-4 at AAU, Anand	30-07-2012	31-07-2012
78	Dr. A.D. Patel	6 th CAC meeting of NAIP-4 at AAU, Anand	30-07-2012	31-07-2012
79	Dr. D.B. Patel	6 th CAC meeting of NAIP-4 at AAU, Anand	30-07-2012	31-07-2012
80	Dr. A.D. Patel	Workshop on "Agricultural Biotechnology" at Hyderabad	31-07-2012	01-08-2012
81	Dr. H.R. Patel	Workshop on "Agricultural Biotechnology" at Hyderabad	31-07-2012	01-08-2012
82	Dr. A.M. Mehta	Workshop on "Agricultural Biotechnology" at Hyderabad	31-07-2012	01-08-2012
83	Dr.D.B.Patel	Workshop on "Agricultural Biotechnology" at Hyderabad	31-07-2012	01-08-2012
84	Dr.D.M. Korat	Workshop on "Agricultural Biotechnology" at Hyderabad	31-07-2012	01-08-2012
85	Dr. C.G. Joshi	Workshop on "Agricultural Biotechnology" at Hyderabad	31-07-2012	01-08-2012
86	Dr. S.V. Shah	Workshop on "Agricultural Biotechnology" at Hyderabad	31-07-2012	01-08-2012
87	Dr.Subhash Parnerkar	Workshop on "Detoxification and utilization of key agro-forest based non-conventional oilcakes in the feeding of livestock" at Bangalore	18-08-2012	19-08-2012
88	Dr.PJ Joshi	Refresher course on Agricultural Sciences at Vidhyanagar	20-08-2012	09-09-2012
89	Prof. B.C. Patel	Refresher course on Agricultural Sciences at Vidhyanagar	20-08-2012	09-09-2012
90	Prof. J.S. Doshi	Refresher course on Agricultural Sciences at Vidhyanagar	20-08-2012	09-09-2012
91	Dr. H.H. Sitapara	Refresher course on Agricultural Sciences at Vidhyanagar	20-08-2012	09-09-2012
92	Dr. J.C. Shroff	Refresher course on Agricultural Sciences at Vidhyanagar	20-08-2012	09-09-2012
93	Ms.Rucha B. Dave	Refresher course on Agricultural Sciences at Vidhyanagar	20-08-2012	09-09-2012

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Sr. No.	Name of Scientist	Participated	Date	
			From	To
94	Mr. B. V. Hirpara	Refresher course on Agricultural Sciences at Vidhyanagar	20-08-2012	09-09-2012
95	Mr. S. J. Macwan	Refresher course on Agricultural Sciences at Vidhyanagar	20-08-2012	09-09-2012
96	Mr. K. M. Patel	Refresher course on Agricultural Sciences at Vidhyanagar	20-08-2012	09-09-2012
97	Dr. S. R. Patel	Refresher course on Agricultural Sciences at Vidhyanagar	20-08-2012	09-09-2012
98	Mr. G. G. Patel	Refresher course on Agricultural Sciences at Vidhyanagar	20-08-2012	09-09-2012
99	Dr. N. J. Jadav	Refresher course on Agricultural Sciences at Vidhyanagar	20-08-2012	09-09-2012
100	Dr. R.G. Jani	Visit disease investigation in white tiger at Bokaro	21-08-2012	23-08-2012
101	Dr. A. B. Patel	Training program on “Nutritional and Management Strategies to Exploit the Genetic Potential of Hybrid Poultry” at Namakkal (TN)	22-08-2012	11-09-2012
102	Dr. R. V. Borichangar	Summer School on “Sustainable Shrimp Farming through adoption of Better Management Practices and Biosecurity” at Chennai	22-08-2012	11-09-2012
103	Mr. H. B. Patel	Group meet on 51 st All India Wheat and Barley Research Workers meet at Jaipur	24-08-2012	27-08-2012
104	Dr. D. N. Rank	11 th Annual Review Meet of Network Project on Animal Genetic Resources at Karnal	25-08-2012	25-08-2012
105	Dr. J.B. Prajapati	International Conference on “Probiotic for human health - new innovations and emerging trends” at New Delhi	27-08-2012	28-08-2012
106	Ms.Suja Senan	International Conference on “Probiotic for human health - new innovations and emerging trends” at New Delhi	27-08-2012	28-08-2012
107	Dr. P. M. Patel	Monitoring program Rabi-2012 at Rahuri	28-08-2012	31-08-2012
108	Dr. A. K. Makwana	Talk on Innovations in HR and Sales at Ahmedabad	01-09-2012	01-09-2012

Sr. No.	Name of Scientist	Participated	Date	
			From	To
109	Mr. H. B. Patel	Annual Chickpea Group meet of AICRP on Chickpea at Pantnagar	01-09-2012	03-09-2012
110	Mr.Mitesh R. Patel	Training on “Laboratory Quality Management System and Internal Audit as per ISO 17025:2005” at Jaipur	04-09-2012	07-09-2012
111	Mr. Kiran M. Vaghela	Training on “Laboratory Quality Management System and Internal Audit as per ISO 17025:2005” at Jaipur	04-09-2012	07-09-2012
112	Mr. Ritesh R. Panchal	Training on “Laboratory Quality Management System and Internal Audit as per ISO 17025:2005” at Jaipur	04-09-2012	07-09-2012
113	Mr. M.S. Shitap	Training on Crop yield forecasting using statistical models at Pune	04-09-2012	10-09-2012
114	Ms.Kalpana Diwan	Short course on “Food Pollutant Evaluation for Food Safety and Quality” at Bangalore	04-09-2012	13-09-2012
115	Dr. M. G. Makwana	Meeting of the Indian Hybrid Rice Consortium at New Delhi	06-09-2012	06-09-2012
116	Dr.HP Parmar	Monitoring team of AICRP on Forage crops Kharif-2012 at Jabalpur	08-09-2012	09-09-2012
117	Dr. F. P. Savaliya	Scientist Meet of AICRP on Poultry Breeding at Udaipur	09-09-2012	10-09-2012
118	Dr. H.P. Parmar	National Group Meeting : Rabi-2012-13 at Jhansi (U.P.)	14-09-2012	15-09-2012
119	Dr. P.M. Patel	National Group Meeting : Rabi-2012-13 at Jhansi (U.P.)	14-09-2012	15-09-2012
120	Dr. G. J. Mistry	National Group Meeting : Rabi-2012-13 at Jhansi (U.P.)	14-09-2012	15-09-2012
121	Dr. C.B. Pandya	Short course on “Efficient use of organic wastes for sustainable agriculture and enhancing soil health in low rainfall areas” at Jodhpur	17-09-2012	26-09-2012
122	Dr. R. A. Mathakiya	Training course on “Control of infectious diseases of animals, with particular emphasis on FMD control programme” at Hisar	18-09-2012	08-10-2012
123	Dr. V. P. Ramani	QRT meeting of AICRP on Micronutrients at Udaipur	20-09-2012	22-09-2012

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Sr. No.	Name of Scientist	Participated	Date	
			From	To
124	Dr. S. B. Patel	QRT meeting of AICRP on Micronutrients at Udaipur	20-09-2012	22-09-2012
125	Dr. R. V. Vyas	Review meeting of all NAIP BPD Units at Cochin	22-09-2012	22-09-2012
126	Dr.P.R. Pandya	Review meeting of AICRP Project at Pune	23-09-2012	24-09-2012
127	Dr.Subhash Parnerkar	Review meeting of AICRP Project at Pune	24-09-2012	24-09-2012
128	Dr. J. B. Upadhyay	National Seminar on Automation in Dairy Industry at Tirupati	24-09-2012	25-09-2012
129	Dr. F. P. Savaliya	Review Meeting of QRT for PDP-AICRP-PSP at Hyderabad	24-09-2012	25-09-2012
130	Dr. D. S. Nauriyal	Raksha Knowledge Summit-II at Agra	24-09-2012	25-09-2012
131	Dr. A. G. Bhadania	National Workshop on “Revamping Education and Research in Dairy Processing to meet Global Challenges” and National Seminar on “Automation in Dairy Industry” at Thrissur/Tirupati	24-09-2012	28-09-2012
132	Dr. R. A. Mathakiya	Procurring vaccines for AINP-HS project work at Izatnagar	01-10-2012	07-10-2012
133	Dr.P. G. Shah	Workshop on Emerging issues on pesticide residues in food and scientific development at New Delhi	02-10-2012	04-10-2012
134	Mr. B.V. Hirpara	Winter School on System Based Conservation Agriculture for Sustained Productivity and Soil Health at Meerut	03-10-2012	23-10-2012
135	Dr. M. R. Patel	XX Group meeting of the AICRP on Medicinal and Aromatic Plants at Hisar	03-10-2012	06-10-2012
136	Dr. M. A. Patel	XX Group meeting of the AICRP on Medicinal and Aromatic Plants at Hisar	03-10-2012	06-10-2012
137	Dr. S. M. Khanorkar	Monitoring of AICRP Trials Kharif-2012 at Ranchi, Bhubaneswar and Dholi	04-10-2012	08-10-2012
138	Dr. A. K. Makwana	Seminar on Emerging issues in Competitive Business Environment at Nadiad	06-10-2012	06-10-2012
139	Dr. K. K. Dakhore	Workshop “Meteorological Satellite Kalpana” at Ahmedabad	08-10-2012	09-10-2012

Sr. No.	Name of Scientist	Participated	Date	
			From	To
140	Dr. Vyas Pandey	Biennial Workshop of AICRP on Agrometeorology at Udaipur	09-10-2012	12-10-2012
141	Mr. B. H. Patel	International symposium on “Global Cotton Production Technologies vis-à-vis climate change” at Hisar	10-10-2012	12-10-2012
142	Mr. M. H. Patel	International symposium on “Global Cotton Production Technologies vis-à-vis climate change” at Hisar	10-10-2012	12-10-2012
143	Dr. B. D. Patel	International symposium on Global Cotton Production Technologies vis-à-vis climate change at Hisar	10-10-2012	12-10-2012
144	Mr. R.B. Modi	National Training on “Innovative Trends in Dairy and Food Products Formulation” at Karnal	10-10-2012	30-10-2012
145	Dr. R.C. Jhala	Standing committee meeting for evaluation of first year project work at New Delhi	11-10-2012	11-10-2012
146	Dr.R.R. Acharya	Vegetable Field Day at New Delhi	11-10-2012	11-10-2012
147	Dr.H.R. Patel	XII Biennial Workshop of AICRP on Agrometeorology at Udaipur	12-10-2012	12-10-2012
148	Dr. G. G. Patel	XII Biennial Workshop of AICRP on Agrometeorology at Udaipur	12-10-2012	12-10-2012
149	Mr. M.J. Vasani	Annual Review Meeting of AICRPAM-NICRA at Udaipur.	12-10-2012	12-10-2012
150	Dr.Sushil Kumar	Visit to NBPGR Regional Station at Trissur	12-10-2012	17-10-2012
151	Dr. H. G. Patel	Expert Member in Selection Committee at Tirupati	17-10-2012	17-10-2012
152	Dr. R. S. Fougat	4 th International Symposium on Advances in Saffron Biology, Technology and Trade at Srinagar	22-10-2012	25-10-2012
153	Dr. J. B. Prajapati	Review meeting of ICAR Niche Areas at New Delhi	26-10-2012	26-10-2012
154	Ms. Suja Senan	Review of the progress of the sanctioned R&D project in the 2nd meeting of the Task Force on “Biotechnological Approaches for Food and Nutritional Security meeting at New Delhi	26-10-2012	26-10-2012

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Sr. No.	Name of Scientist	Participated	Date	
			From	To
155	Dr. A.M. Mehta	AICRIP-QRT meeting to present the Research Report at DRR, Hyderabad.	26-10-2012	26-10-2012
156	Dr. R. V. Vyas	Meeting of Task force on Biological agents for Agriculture at Bangalore	27-10-2012	27-10-2012
157	Dr. J. A. Patel	Visiting various centers/SAUs for monitoring of DSR projects at New Delhi-Ludhiana-Palampur-Jammu-Srinagar	27-10-2012	04-11-2012
158	Dr. B. A. Patel	IFFCO Chair Professors Conference at Gurgaon	29-10-2012	30-10-2012
159	Dr. D. B. Patil	36 th Annual Congress of ISVS and Intl. Symposium on Ruminant Surgery in Polyclinics, Co-operative dairies and Shelters: Perspective 2020 at AAU, Anand	01-11-2012	03-11-2012
160	Dr. P. V. Parikh	36 th Annual Congress of ISVS and Intl. Symposium on Ruminant Surgery in Polyclinics, Co-operative dairies and Shelters: Perspective 2020 at AAU, Anand	01-11-2012	03-11-2012
161	Dr. Jayendra Ranpariya	36 th Annual Congress of ISVS and Intl. Symposium on Ruminant Surgery in Polyclinics, Co-operative dairies and Shelters: Perspective 2020 at AAU, Anand	01-11-2012	03-11-2012
162	Dr. P. H. Tank	36 th Annual Congress of ISVS and Intl. Symposium on Ruminant Surgery in Polyclinics, Co-operative dairies and Shelters: Perspective 2020 at AAU, Anand	01-11-2012	03-11-2012
163	Dr. D. R. Barvalia	36 th Annual Congress of ISVS and Intl. Symposium on Ruminant Surgery in Polyclinics, Co-operative dairies and Shelters: Perspective 2020 at AAU, Anand	01-11-2012	03-11-2012
164	Dr. Hitesh Makwana	36 th Annual Congress of ISVS and Intl. Symposium on Ruminant Surgery in Polyclinics, Co-operative dairies and Shelters: Perspective 2020 at AAU, Anand	01-11-2012	03-11-2012
165	Dr. K. S. Prajapati	National symposium on Challenges in Diagnostic pathology in Domestic pets, wild and aquatic animals and Annual Conference of IAVP at Hisar	05-11-2012	07-11-2012

Sr. No.	Name of Scientist	Participated	Date	
			From	To
166	Dr. B. P. Joshi	National Symposium on Challenges in Diagnostic pathology in Domestic pets, wild and aquatic animals and Annual Conference of IAVP at Hisar	05-11-2012	07-11-2012
167	Dr. A. M. Pande	XXI Annual Conference & National Symposium on Physiological Reach in Changing Environmental Scenario for Sustainable Livestock and Poultry Production at Navsari	06-11-2012	08-11-2012
168	Dr. J. S. Arya	XXI Annual Conference and National Symposium on Physiological Research in Changing Environmental Scenario for Sustainable Livestock and Poultry Production at Navsari	06-11-2012	08-11-2012
169	Dr. R. G. Shah	National Symposium and XXI Annual Conference of SAPI at Navsari	06-11-2012	08-11-2012
170	Dr. J. A. Patel	National Symposium and XXI Annual Conference of SAPI at Navsari	06-11-2012	08-11-2012
171	Dr. M. K. Jhala	XXI National Conference of Indian Virological Society at Mukteswar	08-11-2012	10-11-2012
172	Dr. R. P. Kacha	Biennial Workshop of AICRP-IFS' at Goa	16-11-2012	19-11-2012
173	Dr. Sushil Kumar	Workshop on Metabolomics Basics and Applications to Plant Sciences at New Delhi	19-11-2012	23-11-2012
174	Er. K. L. Dabhi	ICAR sponsored Winter School on "Technopreneurship Opportunities in Agricultural Mechanization" at Bhopal	20-11-2012	10-12-2012
175	Dr. R. V. Vyas	Core committee meeting at ICAR, New Delhi	20-11-2012	21-11-2012
176	Dr. A. J. Dhami	National Symposium on Addressing animal reproductive stresses through Biotechnological Tools at Guwahati	21-11-2012	23-11-2012
177	Dr. M.T. Panchal	National Symposium on Addressing animal reproductive stresses through Biotechnological Tools at Guwahati	21-11-2012	23-11-2012
178	Dr. Vyas Pandey	Sixth Annual Review Meeting of Integrated Agromet Advisory Service at Varanasi	21-11-2012	23-11-2012

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Sr. No.	Name of Scientist	Participated	Date	
			From	To
179	Dr. D. N. Rank	National Conference and National Symposium at Hyderabad	22-11-2012	23-11-2012
180	Dr. J. B. Prajapati	Review meeting of Erasmus Mundus Project at Mumbai	23-11-2012	23-11-2012
181	Dr. P. M. Patel	3 rd International Congress on "Agriculture Diversification, Climate Change Management and Livelihoods" at New Delhi	26-11-2012	30-11-2012
182	Dr. B. D. Patel	International Congress "Agriculture Diversification, Climate Change Management and Livelihoods" at New Delhi	26-11-2012	30-11-2012
183	Ram Niwas Choudhary	3 rd International Congress on "Agriculture Diversification, Climate Change Management and Livelihoods" at New Delhi	26-11-2012	29-11-2012
184	Dr. G. J. Mistry	3 rd International Congress on "Agriculture Diversification, Climate Change Management and Livelihoods" at New Delhi	26-11-2012	30-11-2012
185	Mrs. Seema Sharma	International Agronomy Congress at New Delhi	26-11-2012	30-11-2012
186	Mr. G. G. Patel	International Agronomy Congress at New Delhi	26-11-2012	30-11-2012
187	Dr. D. B. Patel	International Agronomy Congress at New Delhi	26-11-2012	30-11-2012
188	Dr. S. N. Shah	3 rd International Congress on "Agriculture Diversification, Climate Change Management and Livelihoods" at New Delhi	26-11-2012	30-11-2012
189	Dr. M. R. Patel	ICAR Winter School in Extension Education at Bikaner	01-12-2012	21-12-2012
190	Dr. D. B. Patel	Annual Convention of Indian Society of Soil Science at Ludhiana	03-12-2012	06-12-2012
191	Dr. C. G. Joshi	To defend the project at DBT, New Delhi and present report at Jammu	03-12-2012	07-12-2012
192	Dr. S. B. Patel	National Seminar on Development in Soil Science at Ludhiana	03-12-2012	06-12-2012
193	Dr. Sushil Kumar	Training Course at Hyderabad	03-12-2012	06-12-2012

Sr. No.	Name of Scientist	Participated	Date	
			From	To
194	Dr. K. C. Patel	National Seminar on “ Development in Soil Science - 2012” at Ludhiana	03-12-2012	06-12-2012
195	Dr. K. H. Patel	77 th Annual Convention of ISSS at Ludhiana	03-12-2012	06-12-2012
196	Sh.R.D. Dabhi	National Conference on “Innovative Practices in Management of Agricultural in the ICT Environment” at Bhubneswar	05-12-2012	07-12-2012
197	Dr.V.P. Ramani	Seminar and receiving of the award at Agra	10-12-2012	12-12-2012
198	Dr. A. M. Thakar	XII Annual Conference of Indian Society of Veterinary Pharmacology & Toxicology (ISVPT) at Bangalore	12-12-2012	14-12-2012
199	Dr. M. N. Brahmbhatt	International Symposium on “One Health: Way Forward to Challenges in Food Safety and Zoonoses in 21st Century” at Ludhiana	13-12-2012	14-12-2012
200	Dr. D. N. Rank	Sharing karyotyping experience in animal genetics at Mumbai	14-12-2012	15-12-2012
201	Dr. J. B. Upadhyay	Training programme on “Advances in Automation in Dairy Industry” at Anand	14-12-2012	15-12-2012
202	Mr. Tejas M. Shah	National Conference on Animal Genetics and Genomics at Hyderabad	16-12-2012	19-12-2012
203	Nidhi Parmar	National Conference on Animal Genetics and Genomics at Hyderabad	16-12-2012	19-12-2012
204	Ancy Antony	National Conference on Animal Genetics and Genomics at Hyderabad	16-12-2012	19-12-2012
205	Anand B. Patel	National Conference on Animal Genetics and Genomics at Hyderabad	16-12-2012	19-12-2012
206	Vaibhav D. Bhatt	National Conference on Animal Genetics and Genomics at Hyderabad	16-12-2012	19-12-2012
207	Maulik Upadhyay	National Conference on Animal Genetics and Genomics at Hyderabad	16-12-2012	19-12-2012
208	Dr. R. C. Parikh	National Conference on “Animal Genetics and Genomics” at Hyderabad	16-12-2012	19-12-2012
209	Dr. Manjusha Kulshrestha	Conference at Delhi	17-12-2012	22-12-2012
210	Dr. D. N. Rank	National Conference on Animal Genetics and Genomics & QRT meeting at Hyderabad/Karnal	17-12-2012	20-12-2012

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Sr. No.	Name of Scientist	Participated	Date	
			From	To
211	Dr. J. A. Patel	National Convention on “India Cotton” Gearing up for Global Leadership” at Surat	18-12-2012	20-12-2012
212	Mr. M. B. Parmar	National Convention on “India cotton”Gearing up for Global Leadership” at Surat	18-12-2012	20-12-2012
213	Mr. B. H. Patel	National Convention on “India Cotton”Gearing up for Global Leadership” at Surat	18-12-2012	20-12-2012
214	Mr. M. H. Patel	National Convention on “India Cotton”Gearing up for Global Leadership “ at Surat	18-12-2012	20-12-2012
215	Dr. S. K. Raul	5 th Groundwater Conference at Aurangabad	18-12-2012	21-12-2012
216	Dr. Y. C. Zala	Annual Conference of Indian Society of Agricultural Marketing as well as Executive Committee Meeting and General Body Meeting at Pune	22-12-2012	23-12-2012
217	Dr. Subhash Parnerkar	National Seminar on “Future Challenges and Opportunity to improve Health and Production of small Ruminants” at Makhdoom	22-12-2012	23-12-2012
218	Dr. R. V. Vyas	Mentoring programme at Hyderabad	24-12-2012	24-12-2012
219	Mr. Baljeet Singh	Mentoring programme at Hyderabad	24-12-2012	24-12-2012
220	Dr. P. G. Shah	24 th Meeting of Technical Committee for the Scheme “Monitoring of Pesticide Residues at National Level” and First meeting for the Procurement of Equipments under the monitoring Scheme at New Delhi	26-12-2012	27-12-2012
221	Mr. Milan N. Joshi	Training programme on “TSQ 8000 Mass and 1310 GC” at Mumbai	26-12-2012	28-12-2012
222	Mr. Badal V. Patel	Training programme on “TSQ 8000 Mass and 1310 GC” at Mumbai	26-12-2012	28-12-2012
223	Mrs. Hemlatta K. Patel	Training programme on “TSQ 8000 Mass and 1310 GC” at Mumbai	26-12-2012	28-12-2012
224	Mrs. Hetal N. Gor	Training programme on “TSQ 8000 Mass and 1310 GC” at Mumbai	26-12-2012	28-12-2012

Sr. No.	Name of Scientist	Participated	Date	
			From	To
225	Dr. A. A. Sakure	Training on Application of Genomics in Crop Improvement at Pantnagar	27-12-2012	16-01-2013
226	Mr. K. V. Vala	International Conference on Food Technology at Thanjavur	04-01-2013	05-01-2013
227	Dr. B. D. Patel	National Convention on "India Cotton: Gearing up for Global Leadership" at Surat	06-01-2013	08-01-2013
228	Dr. R. C. Jhala	National Convention on "India Cotton: Gearing up for Global Leadership" at Surat	06-01-2013	08-01-2013
229	Dr. P. K. Borad	National Convention on "India Cotton: Gearing up for Global Leadership" at Surat	06-01-2013	08-01-2013
230	Dr. T. M. Bharpoda	National Convention on "India Cotton: Gearing up for Global Leadership" at Surat	06-01-2013	08-01-2013
231	Dr. R. K. Thumar	National Convention on "India Cotton: Gearing up for Global Leadership" at Surat	06-01-2013	08-01-2013
232	Dr. N. A. Bhatt	National Convention on "India Cotton: Gearing up for Global Leadership" at Surat	06-01-2013	08-01-2013
233	Sh. N. B. Patel	National Convention on "India Cotton: Gearing up for Global Leadership" at Surat	06-01-2013	08-01-2013
234	Dr. H. L. Dhaduk	Training programme on "Accountability and Responsiveness in Scientific Organizations at Vasad	07-01-2013	11-01-2013
235	Dr. H. G. Bhatt	Training programme on "Accountability and Responsiveness in Scientific Organizations at Vasad	07-01-2013	11-01-2013
236	Dr. P. R. Patel	National Symposium of Vet. Medicine at Mhow	09-01-2013	11-01-2013
237	Dr. D. S. Nauriyal	National Symposium on "Advancing Veterinary Medicine and its Specialities for Augmented Productivity and Health: Issues and strategies in farm and companion animals" at Mhow	09-01-2013	11-01-2013
238	Dr. R. C. Jhala	National Seminar on "Tropical and Subtropical Fruits" at Navsari	09-01-2013	11-01-2013
239	Mr. K. D. Shah	National Seminar on "Tropical and Subtropical Fruits" at Navsari	09-01-2013	11-01-2013

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Sr. No.	Name of Scientist	Participated	Date	
			From	To
240	Dr. D. M. Korat	National Seminar on "Tropical and Subtropical Fruits" at Navsari	09-01-2013	11-01-2013
241	Dr. M. J. Patel	National Seminar on "Tropical and Subtropical Fruits" at Navsari	09-01-2013	11-01-2013
242	Dr. R. G. Jadav	National Seminar on "Tropical and Subtropical Fruits" at Navsari	09-01-2013	11-01-2013
243	Dr. D. A. Patel	National Seminar on "Tropical and Subtropical Fruits" at Navsari	09-01-2013	11-01-2013
244	Dr. N. S. Parekh	National Seminar on "Tropical and Subtropical Fruits" at Navsari	09-01-2013	11-01-2013
245	Prof. J. S. Patel	National Seminar on "Tropical and Subtropical Fruits" at Navsari	09-01-2013	11-01-2013
246	Dr. A. V. Kotecha	National Seminar on "Tropical and Subtropical Fruits" at Navsari	09-01-2013	11-01-2013
247	Dr. K. V. Patel	National Seminar on "Tropical and Subtropical Fruits" at Navsari	09-01-2013	11-01-2013
248	Dr. A. P. Patel	National Seminar on "Tropical and Subtropical Fruits" at Navsari	09-01-2013	11-01-2013
249	Sh. D. S. Nehete	National Seminar on "Tropical and Subtropical Fruits" at Navsari	09-01-2013	11-01-2013
250	Dr. P. G. Shah	Meeting at PC Cell at New Delhi	16-01-2013	17-01-2013
251	Dr. K. M. Gawai	National Seminar on "Prospects of Livestock and Dairying in India under changing Global Economic Era" at Anand	17-01-2013	18-01-2013
252	Ms. Suja Senan	National Seminar on "Prospects of Livestock and Dairying in India under changing Global Economic Era" at Anand	17-01-2013	18-01-2013
253	Dr. M. D. Gurjar	National Seminar on "Prospects of Livestock and Dairying in India under changing Global Economic Era" at Anand	17-01-2013	18-01-2013
254	Dr. Ashish Roy	Mid-term Review Meeting of All India Network Programme on H.S. at Izatnagar	18-01-2013	18-01-2013
255	Dr. R. N. Pandey	Symposium and Editorial Board Meeting at Navsari	20-01-2013	23-01-2013

Sr. No.	Name of Scientist	Participated	Date	
			From	To
256	Dr. A. D. Patel	34 th Annual Conference and Symposium at Navsari	21-01-2013	23-01-2013
257	Dr. H. R. Patel	34 th Annual Conference and Symposium at Navsari	21-01-2013	23-01-2013
258	Dr. K. K. Hadiya	Training programme for new CPCSEA nominee at Ballabgarh	21-01-2013	25-01-2013
259	Dr. R. K. Patil	Symposium at Navsari	21-01-2013	23-01-2013
260	Dr. V. P. Gohil	Symposium at Navsari	21-01-2013	23-01-2013
261	Dr. N.M. Gohel	Symposium at Navsari	21-01-2013	23-01-2013
262	Dr. P. K. Singh	National Symposium on "Climate Change and Indian Agriculture" at Hyderabad	22-01-2013	23-01-2013
263	Mr. S. S. Chinchokar	National Symposium on "Climate Change and Indian Agriculture" at Hyderabad	22-01-2013	23-01-2013
264	Dr. R. S. Parmar	National Symposium on "Climate Change and Indian Agriculture" Hyderabad	22-01-2013	23-01-2013
265	Dr. H.R. Patel	National Symposium at Hyderabad	22-01-2013	23-01-2013
266	Dr. Vyas Pandey	National Symposium on "Climate Change and Indian Agriculture: Slicing Down the Uncertainties" at Hyderabad	22-01-2013	23-01-2013
267	Dr. G. G. Patel	National Symposium at Hyderabad	22-01-2013	23-01-2013
268	Dr. M.P. Raj	National Symposium on "Climate Change and Indian Agriculture: Slicing Down the Uncertainties" at Hyderabad	22-01-2013	23-01-2013
269	Dr. B. M. Parasharya	Annual Group Meeting of All India Network Project on Agricultural Ornithology & AINP on Rodent Control at Guwahati	22-01-2013	24-01-2013
270	Dr. C. K. Borad	Annual Group Meeting of All India Network Project on Agricultural Ornithology & AINP on Rodent Control at Guwahati	22-01-2013	24-01-2013
271	Dr. R.M. Patel	Annual Group Meeting of All India Network Project on Agricultural Ornithology & AINP on Rodent Control at Guwahati	22-01-2013	24-01-2013
272	Sh. Y. M. Rojasara	Training on "Managing Plant Microbe Interactions for the Management of Soil-borne Plant Pathogens" at Pantnagar	22-01-2013	11-02-2013

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Sr. No.	Name of Scientist	Participated	Date	
			From	To
273	Dr. A. D. Patel	2 nd National Conference on “Integration of Medicinal and Aromatic Plants for Rural Development and Prosperity” at Anand	22-01-2013	23-01-2013
274	Dr. M. A. Patel	2 nd National Conference on “Integration of Medicinal and Aromatic Plants for Rural Development and Prosperity” at Anand	22-01-2013	23-01-2013
275	Dr. S. S. Kapdi	47 th Annual Convention and International Symposium on Bio-Energy-Challenges and Opportunities at Hyderabad	28-01-2013	30-01-2013
276	Dr. K. N. Wadhwani	XX Annual Convention of Indian Society of Animal Production and Management on New Paradigms in Livestock Production for traditional to commercial farming and Management at Karnal	28-01-2013	30-01-2013
277	Dr. M. M. Islam	XX Annual Convention of Indian Society of Animal Production and Management on New Paradigms in Livestock Production for traditional to commercial farming and Management at Karnal	28-01-2013	30-01-2013
278	Prof. K. L. Rathod	Annual Convention and Symposium of ISAE at Hyderabad	28-01-2013	30-01-2013
279	Dr. M.M. Trivedi	Seminar on “New paradigms in livestock production:From traditional to commercial farming and beyond” at Karnal	28-01-2013	30-01-2013
280	Dr. A. K. Makwana	National Conference on “Making Agriculture Profitable” at Gwalior	29-01-2013	30-01-2013
281	Dr. P. S. Prajapati	Interactive workshop on B. Tech. (D.T) e-course at Karnal	31-01-2013	31-01-2013
282	Prof. V. D. Shah	43 rd Annual Conference of Gujarat Economic Association at Anand	01-02-2013	03-02-2013
283	Dr. Ganga Devi	National Seminar at Jaipur	02-02-2013	03-02-2013
284	Dr. G. J. Mistry	1 st International Conference on “Bio-resource and Stress Management at Kolkata	06-02-2013	09-02-2013
285	Dr. G. J. Patel	1 st International Conference on Bio-Resource and Stress Management at Kolkata	06-02-2013	09-02-2013

Sr. No.	Name of Scientist	Participated	Date	
			From	To
286	Dr. A. S. Patel	1 st International Conference on Bio-Resource and Stress Management at Kolkata	06-02-2013	09-02-2013
287	Dr. A. S. Bhanvadia	1 st International Conference on Bio-Resource and Stress Management at Kolkata	06-02-2013	09-02-2013
288	Sh. H. C. Patel	Review meeting for the project on "National Information System for Pest Management (Bt. Cotton)" at Babhaleshwar (Ahmednagar)	06-02-2013	09-02-2013
289	Dr. D. N. Rank	National Symposium on "Integrated Development of Vast Biodiversity of Indigenous Livestock for Long Term Rural Livelihood Security" at Pantnagar	07-02-2013	08-02-2013
290	Dr. A. C. Patel	National Symposium on "Integrated Development of Vast Biodiversity of Indigenous Livestock for Long Term Rural Livelihood Security" at Pantnagar	07-02-2013	08-02-2013
291	Dr. R.C. Parikh	National Symposium on "Integrated Development of Vast Biodiversity of Indigenous Livestock for Long Term Rural Livelihood Security" at Pantnagar	07-02-2013	08-02-2013
292	Dr. M. R. Upadhyay	National Symposium on "Integrated Development of Vast Biodiversity of Indigenous Livestock for Long Term Rural Livelihood Security" at Pantnagar	07-02-2013	08-02-2013
293	Mr. Y. A. Lad	3 rd International Conference on Finance and Business Management at Jaipur	09-02-2013	10-02-2013
294	Dr. A. N. Khokhar	Training on "SAS for Data Reduction and Multivariate Analysis" at Mumbai	11-02-2013	16-02-2013
295	Dr. Amit Dadheech	Training on "SAS for Data Reduction and Multivariate Analysis at Mumbai	11-02-2013	16-02-2013
296	Mr. S. G. Patel	Training on "SAS for Data Reduction and Multivariate Analysis at Mumbai	11-02-2013	16-02-2013
297	Dr. H. P. Parmar	Monitoring Team of AICRP on Forage Crops Rabi 2012-13 at Urulikanchan & Rahuri	11-02-2013	14-02-2013

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Sr. No.	Name of Scientist	Participated	Date	
			From	To
298	Dr. R. K. Thumar	Review meeting for the project on "National Information System for Pest Management (Bt. Cotton)" at Babhaleshwar (Ahmednagar)	12-02-2013	13-02-2013
299	Dr. P. K. Borad	Review meeting for the project on "National Information System for Pest Management (Bt. Cotton)" at Babhaleshwar (Ahmednagar)	12-02-2013	13-02-2013
300	Mr. P. H. Rathod	NNRMS (National Natural Resources Management System) sponsored training programme on Remote Sensing and GIS Application in Natural Resource Management at Nagpur	12-02-2013	05-03-2013
301	Dr. H. L. Dhaduk	National Seminar on GM Crops and Food Security-Issues and Prospects at Ahmedabad	14-02-2013	15-02-2013
302	Dr. Sushil Kumar	National Seminar on GM Crops and Food Security-Issues and Prospects at Ahmedabad	14-02-2013	15-02-2013
303	Dr. S. M. Khanorkar	National Seminar on "GM Crops and Food Security-Issues and Prospectus" at Ahmedabad	14-02-2013	15-02-2013
304	Dr. D. M. Mehta	International Conference on Insect Science at Bangalore	14-02-2013	17-02-2013
305	Dr. J. J. Jani	International Conference on Insect Science at Bangalore	14-02-2013	17-02-2013
306	Dr. P. H. Godhani	International Conference on Insect Science at Bangalore	14-02-2013	17-02-2013
307	Dr. R. M. Patel	International Conference on Insect Science at Bangalore	14-02-2013	17-02-2013
308	Dr. B. M. Parasharya	National Seminar on 'Bird Habitats and their Conservation' at Patan	16-02-2013	16-02-2013
309	Dr. C. K. Borad	National Seminar on 'Bird Habitats and their Conservation' at Patan	16-02-2013	16-02-2013
310	Dr. J. B. Prajapati	PAI and VTCC meeting at New Delhi	18-02-2013	18-02-2013
311	Dr. AK Makwana	Tenth Biennial Conference on Entrepreneurship at Gandhinagar	20-02-2013	22-02-2013

Sr. No.	Name of Scientist	Participated	Date	
			From	To
312	Dr. G. J. Patel	Annual Workshop for the network project entitled, "Diatomaceous Earth as Silicon source in different Crops of India" at Bangalore	22-02-2013	23-02-2013
313	Dr. A. S. Patel	Workshop of the network research project on "Diatomaceous Earth as Silicon source in Different Crops of India" at Bangalore	22-02-2013	23-02-2013
314	Dr. K. C. Patel	Workshop meeting of Network Project on Silicon at Bangalore	22-02-2013	23-02-2013
315	Dr. A. J. Dhami	Seminar on "Advances in Veterinary Practices for Sustainable Productivity and Health" at Navsari	23-02-2013	23-02-2013
316	Dr. K. K. Hadiya	Seminar on "Advances in Veterinary Practices for Sustainable Productivity and Health" at Navsari	23-02-2013	23-02-2013
317	Dr. R. A. Mathakiya	Seminar on "Advances in Veterinary Practices for Sustainable Productivity and Health" at Navsari	23-02-2013	23-02-2013
318	Dr. B. B. Bhandari	Seminar on "Advances in Veterinary Practices for Sustainable Productivity and Health" at Navsari	23-02-2013	23-02-2013
319	Dr. A. C. Patel	Seminar on "Advances in Veterinary Practices for Sustainable Productivity and Health" at Navsari	23-02-2013	23-02-2013
320	Dr. R. P. Kacha	Regional Training cum Workshop on "Methodology for OFR experiments with special emphasis for ON-FARM Integrated Farming Systems" and Monitoring Meet at Amravati	26-02-2013	28-02-2013
321	Mr. M. M. Mori	Regional Training cum Workshop on "Methodology for OFR experiments with special emphasis for ON-FARM Integrated Farming Systems" and Monitoring Meet at Amravati	26-02-2013	28-02-2013

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Sr. No.	Name of Scientist	Participated	Date	
			From	To
322	Mr. D. J. Gohil	Regional Training cum Workshop on "Methodology for OFR experiments with special emphasis for ON-FARM Integrated Farming Systems" and Monitoring Meet at Amravati	26-02-2013	28-02-2013
323	Mr. R. S. Rana	Regional Training cum Workshop on "Methodology for OFR experiments with special emphasis for ON-FARM Integrated Farming Systems" and Monitoring Meet at Amravati	26-02-2013	28-02-2013
324	Mr. S. S. Rathva	Regional Training cum Workshop on "Methodology for OFR experiments with special emphasis for ON-FARM Integrated Farming Systems" and Monitoring Meet at Amravati	26-02-2013	28-02-2013
325	Mr. V. H. Rathva	Regional Training cum Workshop on "Methodology for OFR experiments with special emphasis for ON-FARM Integrated Farming Systems" and Monitoring Meet at Amravati	26-02-2013	28-02-2013
326	Mr. K. B. Raval	Regional Training cum Workshop on "Methodology for OFR experiments with special emphasis for ON-FARM Integrated Farming Systems" and Monitoring Meet at Amravati	26-02-2013	28-02-2013
327	Prof. K. C. Kamani	International Conference on "Intelligent Systems and Signal Processing (ISSP 2013)" at Vallabh Vidyanagar	28-02-2013	03-03-2013
328	Dr. B. P. Shah	National Seminar on "Innovative Approaches in Dairy Industry & 10th Alumni Convention at Anand	01-03-2013	02-03-2013
329	Dr. A. K. Makwana	National Seminar on "Innovative Approaches in Dairy Industry & 10th Alumni Convention at Anand	01-03-2013	02-03-2013
330	Prof. M. D. Gurjar	National Seminar on "Innovative Approaches in Dairy Industry & 10th Alumni Convention at Anand	01-03-2013	02-03-2013

Sr. No.	Name of Scientist	Participated	Date	
			From	To
331	Dr. K. D. Aparnathi	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
332	Prof. A. I. Shaikh	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
333	Prof. Amitkumar Jain	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
334	Prof. D. H. Patel	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
335	Prof. S. C. Parmar	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
336	Prof. B. M. Mehta	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
337	Prof. Smita Balkrishnan	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
338	Dr. P. S. Prajapati	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
339	Dr. Atanu Jana	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
340	Dr. H. G. Patel	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
341	Dr. J. P. Prajapati	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
342	Prof. Komal N.	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013

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Sr. No.	Name of Scientist	Participated	Date	
			From	To
343	Prof. H. M. Modha	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
344	Prof. A. M. Patel	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
345	Prof. K. S. Kadiya	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
346	Dr. A. J. Pandya	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
347	Prof. A. J. Gokhale	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
348	Prof. Jarita Malik	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
349	Mr. K. M. Gawai	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
350	Dr. A.G. Bhadania	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
351	Mr. J. B. Raol	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
352	Ms. Sreeja V.	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
353	Prof. I. A. Chauhan	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
354	Mr. A. D. Patel	National Seminar on "Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013

Sr. No.	Name of Scientist	Participated	Date	
			From	To
355	Dr. Subrota Hati	National Seminar on “Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
356	Ms. Suja Senan	National Seminar on “Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
357	Mr. C. S. Baladhiya	National Seminar on “Innovative Approaches in Dairy Industry & 10 th Alumni Convention at Anand	01-03-2013	02-03-2013
358	Mr. G. R. Patel	National Workshop on “Foresight and Future Pathway of Agricultural Research through Youth in India” at New Delhi	01-03-2013	02-03-2013
359	Mr. C. N. Dharaiya	National Semianr on “Innovative Approaches in Dairy Industry” at Anand	01-03-2013	02-03-2013
360	Dr. A. D. Patel	Workshop on Buyers-Sellers of Medicinal Plants and talk on Cultivation of Medicinal Crops at Junagadh	05-03-2013	05-03-2013
361	Dr. M. A. Patel	Workshop on Buyers-Sellers of Medicinal Plants and talk on Cultivation of Medicinal Crops at Junagadh	05-03-2013	05-03-2013
362	Dr. A. D. Patel	Annual Group Meeting of All India Coordinated Research Project on Plant Parasitic Nematodes with Integrated Approach for their Control at Rahuri	08-03-2013	09-03-2013
363	Dr. M. M. Trivedi	Seminar on “Advances in Animal Health & Application of Biotechnoogy” at Anand	09-03-2013	09-03-2013
364	Dr. R. M. Rajpura	Seminar on “Advances in Animal Health & Application of Biotechnoogy” at Anand	09-03-2013	09-03-2013
365	Dr. R. A. Mathakiya	Seminar on “Advances in Animal Health & Application of Biotechnoogy” at Anand	09-03-2013	09-03-2013
366	Dr. B. B. Bhanderi	Seminar on “Advances in Animal Health & Application of Biotechnoogy” at Anand	09-03-2013	09-03-2013
367	Dr. M. T. Panchal	Seminar on “Advances in Animal Health & Application of Biotechnoogy” at Anand	09-03-2013	09-03-2013
368	Dr. J. A. Patel	Seminar on “Advances in Animal Health & Application of Biotechnoogy” at Anand	09-03-2013	09-03-2013

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Sr. No.	Name of Scientist	Participated	Date	
			From	To
369	Dr. A. J. Dhami	Seminar on "Advances in Animal Health & Application of Biotechnoogy" at Anand	09-03-2013	09-03-2013
370	Dr. R.G. Shah	Seminar on "Advances in Animal Health & Application of Biotechnoogy" at Anand	09-03-2013	09-03-2013
371	Dr. K.K. Hadiya	Seminar on "Advances in Animal Health & Application of Biotechnoogy" at Anand	09-03-2013	09-03-2013
372	Dr. D. S. Nauriyal	Seminar on "Advances in Animal Health & Application of Biotechnoogy" at Anand	09-03-2013	09-03-2013
373	Dr. R. G. Jani	Seminar on "Advances in Animal Health & Application of Biotechnoogy" at Anand	09-03-2013	09-03-2013
374	Dr. S.V. Shah	Seminar on "Advances in Animal Health & Application of Biotechnoogy" at Anand	09-03-2013	09-03-2013
375	Dr. B.S. Divekar	Seminar on "Advances in Animal Health & Application of Biotechnoogy" at Anand	09-03-2013	09-03-2013
376	Dr. K. A. Sadariya	Seminar on "Advances in Animal Health & Application of Biotechnoogy" at Anand	09-03-2013	09-03-2013
377	Dr. M.K. Jhala	Seminar on "Advances in Animal Health & Application of Biotechnoogy" at Anand	09-03-2013	09-03-2013
378	Dr. S. M. Khanorkar	Germplasm Day cum training on DUS testing in maize at Hyderabad	09-03-2013	10-03-2013
379	Dr. Pinakin K. Parmar	Germplasm Day cum training on DUS testing in maize at Hyderabad	09-03-2013	10-03-2013
380	Dr. S. M. Khanorkar	Germplasm Day cum training on DUS testing in maize at Hyderabad	09-03-2013	10-03-2013
381	Dr. S. M. Khanorkar	Annual Breeder Seed Review Meeting at New Delhi	12-03-2013	12-03-2013
382	Dr. D. M. Korat	Annual Breeder Seed Review Meeting at New Delhi	12-03-2013	12-03-2013
383	Dr. J. B. Prajapati	41 st Dairy Industry Conference at Mumbai	14-03-2013	16-03-2013
384	Dr. Vyas Pandey	4 th Annual Review Meeting of FASAL Project at Hyderabad	18-03-2013	20-03-2013
385	Dr. J. A. Patel	All India Coordinated Pearl Millet Improvement Project (AICPMIP) Meet at Junagadh	22-03-2013	24-03-2013
386	Mr. B. C. Patel	All India Coordinated Pearl Millet Improvement Project (AICPMIP) Meet at Junagadh	22-03-2013	24-03-2013

Appendix-8

Research Papers published

A FACULTY OF AGRICULTURE

- 1 Amruta, Borate; Zala, Y. C. and Darji, V. B. (2011). Analysis of marketable and marketed surplus of red gram in Vadodara district of Gujarat. *Legume res.*, 34(4):267-272.
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- 13 Dabhi, M. R.; Korat, D. M. and Vaishnav, P. R. (2013). Reproductive parameters of *Bracon hebetor* Say on seven different hosts. *Acad. J.* 8(25): 3251-3254
- 14 Dabhi, M. R.; Koshiya, D. J. and Korat, D. M. (2013). Effect of abiotic factors on aphid and damage caused by shoot and fruit borer in okra during summer and kharif season at Anand

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- in Gujarat. *J. Agrimet.* 15(1): 71- 74.
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Appendix-9

Publication of Agricultural Literature

Sr. No.	Name of Publication
(A) Books	
1	<i>Adhunik khetima nindan niyantran vyavashtapan</i>
2	<i>Bhenspalan</i>
3	<i>Dery ane pashupalan vyavashay</i>
4	<i>Falpako</i>
5	<i>Krishipakoma sanklit jivat vyavasthapan</i>
6	<i>Pashupalakne munjavata prashno ane teno ukel</i>
7	<i>Pashupalako mate chuntela lekho</i>
8	<i>Shakbhaji pako</i>
9	<i>Vividh pakoni kheti paddhati ane tajagnata</i>
(B) Booklets	
1	<i>AAU at a glance</i>
2	<i>Dahod kendrano parichaya</i>
3	<i>Ghargatthu ayurvedik upachar dwara arogya jalvo</i>
4	<i>Khedutopyogi sanshodhan bhalamano 2012</i>
(C) Leaflets	
1	<i>Kharif makaini vaigyanik kheti paddhati</i>
2	<i>Rabi makaini vaigyanik kheti paddhati</i>
(D) Folders	
1	<i>Aduni vaigyanik kheti paddhati</i>
2	<i>Ardha shiyalu talni vaigyanik kheti paddhati</i>
3	<i>Bulk milk cooler ane teno karyxam upyog</i>
4	<i>Carp matsyabeejno uchher</i>
5	<i>Chomasu guvarani sudhareli vaigyanik kheti paddhati</i>
6	<i>Dangar ni kheti paddhati</i>
7	<i>Dery xetre laghu upyog</i>
8	<i>Dudha ni mulyavardhit vangio</i>
9	<i>Dudhala pashuno ahar ane tema baypass tatvonu mahatva</i>
10	<i>Dudhamaa bhelsel mate vaparata ketalak padartho/rasayano ane teni olakh</i>
11	<i>Fugnashak davao ane teno upyog</i>
12	<i>Gam talavma mishra matsya uchher</i>

Sr. No.	Name of Publication
13	<i>Gandhaknu pak utpadanma mahatva</i>
14	<i>Ghau ni kheti paddhati</i>
15	<i>Ghauni vaigyanik kheti paddhati</i>
16	<i>Gramya talavoma kudarati matsya khorakanu vyavasthapan</i>
17	<i>Jaminna namuna levani paddhati</i>
18	<i>Jevik khataronu mahattva</i>
19	<i>Jivatnashak davao ane teno upyog</i>
20	<i>Jivato na asarkarak niyantran matena pagala</i>
21	<i>Kharif makaini vaigyanik kheti paddhati</i>
22	<i>Khatarnak gajrajgasnu niyantran</i>
23	<i>Makaima mulyavardhan</i>
24	<i>Mungbeanni kheti paddhati</i>
25	<i>Rabi makaini vaigyanik kheti paddhati</i>
26	<i>Raini vaigyanik kheti paddhati</i>
27	<i>Sukshma dhiran,pak vimo,viswa vyapar sangathan</i>
28	<i>Svachh dudh udhyog</i>
29	<i>Svadesi bakarani olado</i>
30	<i>Vaigyanik pashupalan</i>
31	<i>Vividh pakoma nindan niyantran bhalamano</i>
(E) Farm Magazine	
1	<i>Krushigovidhya (Monthly)</i>
(F) Newsletters	
1	AAU Newspaper (Quarterly)
2	KVK Newsletter, Devataj (Half Yearly)
(G) Reports	
1	8 th AAU Annual Report
2	Comprehensive District Agricultural Plan (C-DAP) - Ahmedabad District
3	Comprehensive District Agricultural Plan (C-DAP) - Anand District
4	Comprehensive District Agricultural Plan (C-DAP) - Dahod District
5	Comprehensive District Agricultural Plan (C-DAP) - Kheda District
6	Comprehensive District Agricultural Plan (C-DAP) - Panchmahal District
7	Comprehensive District Agricultural Plan (C-DAP) - Vadodara District
8	<i>Krishi Mahotsav Aheval-2012</i>

Appendix-10

Video Films (DVD) Prepared

Sr. No.	Subject	No.
1	AAU at a glance	01
2	<i>Dangarni kheti padhdhati</i>	01
3	<i>Makaini kheti padhdhati</i>	01
4	<i>Khetpedashoma mulayvardhan</i>	01
5	<i>Falpakoni kheti padhdhati- kel, aambo, papaiya</i>	01
6	<i>Vermicompost ane biofertilizers</i>	01
7	<i>Aaadrsh pshupalan</i>	01
8	<i>Shakbhajina pakoni kheti padhdhati- marachi, tameta</i>	01
9	Success story of progressive farmers under RKVY scheme	04

Appendix-11

Radio Talks Delivered

Sr. No.	Scientist	Topic	Date (Time of broadcast 6.00 to 6.30 pm)
1	Prof. S.C. Parmar	<i>Doodh: Jalavanima takedari</i>	06-04-12
2	Dr.M.A.Patel	<i>Gharanganana aushadhiya pako</i>	25-05-12
3	Shri K.H.Patel	<i>Kharif makaini vaignanik kheti</i>	04-07-12
4	Dr. R.B.Patel	<i>Kharif pakoma nindan niyantran ange navi bhalmano</i>	03-08-12
5	Dr. M.V.Patel	<i>Ravipakoma safal ayojan</i>	05-10-12
6	Shri K.H.Patel	<i>Biofertilizersnu mahatva ane rog-jivat niyantranna upayo</i>	09-10-12
7	Dr. K.N.Wadhwani	<i>Anand krushi University ni pashupalan sevao</i>	06-11-12
8	Dr. S.M.Khanorkar	<i>Makaini jato ane seed village dhware tenu bijotapadan</i>	26-11-12
9	Shri K.H.Patel	<i>Rabi makaini vaignanik kheti</i>	28-11-12
10	Dr. S.K.Singh	<i>Rabi makaima paksarankshanna upayo</i>	30-11-12
11	Dr. K.B.Kathiria	Miracle of agriculture research in Gujarat	04-01-13
12	Dr. D.B.Patel	<i>Unalu Katholpakona sanshodhano</i>	01-02-13
13	Dr.P.P.Patel	<i>Krishi universityni vistaran shikshan pravuttio</i>	19-02-13

Appendix-12

Television Programs Telecast

Sr. No	Scientist	Topic	Date (Time of broadcast 6.00 to 6.30 pm)
1	Dr. D.R. Kathiriya	<i>Krushī kshetre information Technology (IT)ni upayogita</i>	18-04-12
2	Dr. S.H.Patel	<i>Kharif pakoma khatar vyavastha</i>	18-05-12
3	Dr. A.M.Maheta	<i>Kharif dangarma upayogi nava sanshodhano</i>	23-05-12
4	Dr. S.T. Patel	<i>Kharif pakoma sankalit rog-jivat niyantran</i>	25-05-12
5	Dr. D. B. Patel	<i>Kharif makaini kheti</i>	29-05-12
6	Dr. R.B.Patel	<i>Kharif pakoma nindan niyantranni bhalamano</i>	19-06-12
7	Dr. K.P.Patel	<i>Kharif pakoma sukshmatatvonu mahatva</i>	27-06-12
8	Dr. H.C.Patel	<i>Falpakama kalamni bandhani</i>	24-07-12
9	Dr. P.P.Patel	<i>Krushī vigyan kendr khedutono sacho sathi</i>	25-07-12
10	Dr. D.M.Korat Dr. K.S.Prajapati	<i>Khetipakoma rog-jivatnu niyantran</i>	03-08-12
11	Dr. H.R.Kher	<i>Shakbhaji pako mateni navin bhalamano</i>	08-08-12
12	Dr. B.R.Shah Dr. A.M.Shekh	<i>Gujaratma krushi sanshodhan ane krushi vikas</i>	15-08-12
13	Dr. A.C. Sadhu	<i>Kharif pakoma pachhotari mavajat</i>	21-08-12
14	Dr. K.P.Patel Dr. M.V.Patel	<i>Khetipakoma poshan vyavastha</i>	31-08-12
15	Dr. P.K.Borad	<i>Kharif pakoma sanklit jivat niyantran vyavastha</i>	11-09-12
16	Dr. M.A.Patel	<i>Sugandhit pakoni kheti</i>	19-09-12
17	Dr. P.G.Shah	<i>Khadhya padarthama jantunshak davana avsheshona bhaysthano</i>	25-09-12
18	Dr. M. S. Jakasaniya	<i>Binpiyat ghaun matena nava sanshodhan</i>	09-10-12
19	Dr. M.V.Patel Dr. J.S.Patel	<i>Ravipakonu ayojan</i>	26-10-12
20	Dr. P.G.Shah	<i>Shakbhaji pakoma jantunashk davaona avashesho</i>	07-11-12

Appendices

Sr. No	Scientist	Topic	Date (Time of broadcast 6.00 to 6.30 pm)
21	Dr. R.V.Vyas	<i>Pravahi jaivik khatarono upayog ane fayada</i>	20-11-12
22	Dr. R.B.Patel	<i>Pardeshi nindano ane tenu niyantran</i>	28-11-12
23	Dr. V.R.Bhatt Dr. A.C.Sadhu	<i>Ravipakoma poshan ane piyat</i>	07-12-12
24	Dr. D.M.Korat	<i>Vanaspatijanya davaoni banavat ane teni upyogita</i>	11-12-12
25	Dr. A.M.Thaker	<i>Anand krushi universityni pashupalan sevao</i>	19-12-12
26	Dr. A.M.Mehta	<i>Unalu dangarma vadhu utpadan melavavanu ayojan</i>	25-12-12
27	Dr. K.B.Kathiria	Miracle of agriculture research in Gujarat	23-01-13
28	Dr. M.V.Patel Dr. K.D.Mevada	<i>Unalu pakonu ayojan</i>	01-02-13
29	Dr. G.C.Mandli	<i>Pasuoma thata samanya rogo ane gharghatthu upayo</i>	05-02-13
30	Dr. C.B.Pandya	<i>Unalu khtholpako matena sanshodhano</i>	13-02-13
31	Dr. H.B.Parmar	<i>Ghasacharana pako matena nava sanshodhano</i>	26-02-13
32	Dr. D.C.Joshi	<i>Krushi pedashoma mulya vruddhini agatyata</i>	06-03-13
33	Dr. P.K.Borad Dr. K.S.Prajapati	<i>Unalu pakoma pak sanrankshan</i>	15-03-13
34	Dr. H.R.Kher	<i>Unalu shakbhaji pako mateni bhalaman</i>	19-03-13