



Jatropha plantation at AAU, Anand



Anand Agricultural University
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Anand Agricultural University - Annual Report-2006-07



Anand
 Agricultural
 University

Annual Report 2006 2007



Bio-diesel Pilot Plant



Bio-diesel Pilot Plant



Board of Management



Vice Chancellor
Prof. M. C. Varshneya
Chairman



Secretary
Agriculture &
Cooperation Department
Dr. Avinashkumar



Secretary
Finance Department
Shri A. K. Jyoti



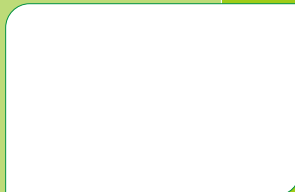
Secretary
Education Department
Shri P. Paneervel



Director of Agriculture
Dr. R. A. Sherasiya



Director of Animal Husbandry
Dr. R. B. Shukla



Director of Horticulture
Dr. B. R. Shah
up to 22-01-2007
Dr. S.R. Chadhary
from 22-01-2007



Dean, Agriculture College
Dr. A. M. Shekh
Nominated by Vice-Chancellor



Director
NRC M & AP (Boriavi)
Dr. S. Maiti
Nominated by I.C.A.R.



Registrar
Shri V. P. Macwan
Member Secretary



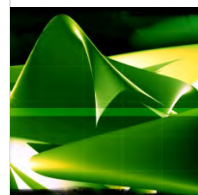
Kankrej bull in weeding operation at Main Vegetable Research Station, AAU, Anand



Kankrej breed at Livestock Research Station, AAU, Anand



APPENDICES





Appendix- 1

Members of Academic Council

Vice Chancellor
Prof. M. C. Varshneya
Chairman

Director of Research & Dean, PG Studies
Dr. A. R. Pathak

Dean, Agriculture
Dr. A. M. Shekh

Dean, Veterinary Science
Dr. M. C. Desai up to 16.05.06
Dr. J. V. Solanki from 17.05.06

Dean, Dairy Science
Dr. Sukhminder Singh up to 01.09.06
Dr. B. P. Shah from 02.09.06

Dean, Food Processing Technology & Bio-energy
Dr. D. C. Joshi

Dean, Agriculture Information Technology
Dr. S. K. Dixit

Director of Extension Education
Dr. K. F. Patel up to 31.05.2006
Dr. Ashok A. Patel 01.06.06 to 31.12.06
Dr. P. P. Patel from 01.01.07

Research Scientist Bio-control Department
Dr. D N. Yadav (Nominated)
up to 30.09.2006

Professor & Head Veterinary Pathology
Dr. K. S. Prajapati (Nominated)

Research Scientist, Bio-Control Godhra
Dr. S. N. Goyal (Nominated)
up to 30.06.2006

Prof. & Head
Agriculture Botany
Dr. G. C. Jadeja (Nominated)
from 25.07.06

Prof & Head Veterinary surgery
Dr. D.B. Patil (Nominated)
from 25.07.2006

Professor & Head
Dairy Microbiology
Dr. J. B. Prajapati (Nominated)
from 25.07.2006

Professor & Head
Post Harvest Engineering & Technology
Dr. R. F. Sutar (Nominated)
from 25.07.2006

Retd. Prof. Horticulture
Dr. K. P. Kikani (Co-opt)

Librarian
Dr. V. V. Ushabala (Co-opt)

Director of Student Welfare
Dr. A. M. Thaker (Co-opt)

Professor & Head Gynaecology
Dr. F. S. Kavani (Co-opt)

Managing Director, Vidhya Dairy
Dr H.K. Desai (Co-Opt)

Rt. Principal Dairy Science
Dr. S.S. Sannabhadti (Co-Opt)
from 25.07.2006

Rt. Principal Veterinary Science
Dr. M. C. Desai (Co-Opt)
from 25.07.2006

Vice-Chancellor
M. S. University, Baroda
Dr. Manoj Soni (Co-Opt)
from 25.07.2006

Asstt. Director General (Edn)
I.C.A.R., New Delhi,
Dr. G. C. Tiwari (Co-Opt)
from 25.07.2006

Director, IRMA (Co-Opt)
from 25.07.2006

Registrar
Shri V. P. Macwan
Member Secretary

Appendix- 2

Officers of the University

Chancellor
Shri Nawal Kishore Sharma

Vice Chancellor
Prof. M. C. Varshneya Chairman

Registrar
Shri V. P. Macwan

Director of Research & Dean PG Studies
Dr. A. R. Pathak

Dean, Agriculture
Dr. A. M. Shekh

Dean, Dairy Science
Dr. Sukhminder Singh
up to 1-09-2006
Dr. B. P. Shah
from 2.09.2006

Dean, Veterinary Science
Dr. M. C. Desai
up to 16-05-2006
Dr. J. V. Solanki
from 17.05.2006

Dean Food Processing Technology & Bio-energy
Dr. D. C. Joshi

Director of Extension Education
Dr. K. F. Patel up to 31.05.2006
Dr. Ashok A. Patel
01.06.2006 to 31.12.2006
Dr. P. P. Patel from 01.01.2007

Comptroller-cum-Accounts Officer
Shri P. S. Vyas

Librarian
Dr. V. V. Ushabala

Director of Students' Welfare
Dr. A. M. Thaker

Director, Information Technology
Dr. J. G. Sarvaiya

Executive Engineer
Shri B. N. Bhalia





Appendix- 3

Heads of the Department Agriculture Faculty

Agronomy

Dr. T. G. Meisheri
Professor Agronomy

Agri. Chem. & Soil Science

Dr. J. C. Patel
Professor, Agril. Chem.
and & Soil Sc

Plant Pathology

Dr. B. N. Patel
Research Scientist, Tobacco

Bio-Control/Entomology

Dr. D. N. Yadav
Research Scientist
Biological Control

Plant Breeding

Dr. S. N. Goyal
Professor, Botany

Agricultural Meteorology

Dr. A. M. Shekh
Professor, Agricultural
Meteorology

Horticulture

Dr. K. I. Joshi
Professor, Horticulture

Agril. Economics

Dr. B. D. Bhatt
Professor, Agril. Economics

Extension Education

Dr. P. P. Patel
Extension Educationist (In-charge)

Microbiology

Dr. M. S. Vohra
Research Scientist (P) (In-charge)

Nematology

Dr. B. A. Patel
Assoc. Research Scientist
Nematology (In-charge)

Agricultural Statistics

Dr. S. K. Dixit
Professor, Agricultural Statistics

Bio-Chemistry

Dr. R. Bhatnagar
Research Scientist (P)

Veterinary Faculty

Veterinary Microbiology

Dr. J. H. Purohit
Professor, Vety. Microbiology/
Bacteriology

Veterinary Parasitology

Dr. A. I. Patel
Professor, Veterinary Parasitology

Animal Breeding and Genetics

Dr. J. V. Solanki Professor
Animal Breeding and Genetics

Veterinary Anatomy

Dr. Y. L. Vyas Professor(P)
Veterinary Anatomy (In-charge)

Animal Re-production Gynaecology and Obste.

Dr. F. S. Kavani
Professor, Animal Re-production
Gynecology and Obste

Clinical Veterinary Medicine

Dr. P. R. Patel
Professor, Clinical Vety. Medicine

Epidemiology and Veterinary Medicine

Dr. P. R. Patel
Professor, Epidemiology and
Veterinary Medicine

Veterinary Pathology

Dr. K. S. Prajapati
Professor, Veterinary Pathology

Livestock Production & Management

Dr. A. M. Patel
Professor, Livestock Production
& Management

Animal Nutrition

Dr. Subhash Parnerkar
Research Scientist(P)
Animal Nutrition

Veterinary Bio-Chem./Biotech.

Dr. A. M. Pandey Professor(P)
Veterinary Physiology

Veterinary Pharmacology and Toxicology (In-charge)

Dr. A. M. Thaker Professor(P)
Veterinary Pharmacology &
Toxicology (In-charge)

Veterinary Surgery

Dr. D. B. Patil
Professor, Veterinary Surgery
(In-charge)

Livestock Production Technology

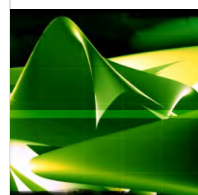
Dr. M.N. Brahmbhatt
Associate Professor(P)
Livestock Production Technology
(In-charge)

Veterinary Public Health

Dr. M.N. Brahmbhatt
Associate Professor(P)
Veterinary Public Health

Teaching Veterinary Hospital

Dr. D. M. Patel (P)
Teaching Veterinary Hospital
(In-charge)





Dairy Science Faculty

Dairy Chemistry
Dr. Sukhminder Singh
Professor, Dairy Chemistry

Dairy Technology
Dr. M. J. Solanki
Professor, Dairy Technology

Dairy Engineering
Dr. B. P. Shah
Professor, Dairy Engineering

Dairy Microbiology
Dr. J. B. Prajapati
Professor, Dairy Microbiology

Dairy Business Management
Dr. R. H. Patel
Associate Professor
Dairy Business Management
(In-charge)

Food Processing Technology and Bio-Energy Faculty:

Food Engineering
Dr. D. C. Joshi
Professor, Food Engineering

**Post-Harvest Engineering &
Technology**
Dr. R. F. Suthar
Professor, Post-Harvest
Engineering & Technology

Bio-Energy
Dr. S. S. Kapdi
Associate Professor
Bio-Energy



S.M.C. College of Dairy Science, Anand

Appendix- 4 Subject wise Intake Capacity for Post-graduate Admission

Agricultural Faculty :

Sr. No.	Subject	M. Sc. (Agri.)		Ph. D.	Total
		Open / SC / ST / SEBC	ICAR / GOI / OTHER		
1	Agronomy	17	03	03	23
	Water Management	03	01	-	04
2	Ag. Chem. & Soil Sci.	08	02	03	13
3	Biochemistry	07	01	02	10
4	Pl. Breeding & Genetics	17	03	10	30
5	Agril. Entomology	17	03	10	30
6	Ag. Statistics	04	02	06	12
7	Plant Pathology	11	03	06	20
8	Agril. Economics	03	01	-	04
9	Extension Education	15	03	10	28
10	Plant Physiology & Ecology	02	03	02	07
11	Agril. Meteorology	06	03	04	13
12	Nematology	04	02	02	08
13	Horticulture	09	01	04	14
14	Agril. Microbiology	14	01	04	19
15	Agril. Biotechnology	07	-	-	07
TOTAL:		144*	32	66*	242

* Out of Intake Capacity of 144 Seats for M.Sc. (Agri.), 32 Seats shall be filled in by NRI/NRI Sponsored / Payment Seat from Gujarat / Other States in order of preference/ availability.

• Out of Intake Capacity of 66 Seats for Ph.D., 33 Seats shall be filled in by NRI/NRI Sponsored / Payment Seat from Gujarat / Other States in order of preference / availability.

Veterinary Science Faculty :

Sr. No.	Subject	M.V.Sc. (Vety.)		Ph. D.	Total
		Open / SC / ST / SEBC	ICAR / GOI / OTHER		
1	Anatomy	07	01	01	09
2	Veterinary Pathology	05	01	02	08
3	Parasitology	05	01	-	06
4	Veterinary Microbiology	-	-	-	
5	Animal Physiology and Biochemistry	02	01	01	04
6	Livestock Production & Management	03	01	01	05
7	Animal Genetics and Breeding	05	01	02	08
8	Veterinary Surgery	09	01	01	11
9	Veterinary Pharmacology	02	-	01	03
10	Veterinary Obstetrics and Gynaecology	06	01	01	08

Sr. No.	Subject	M.V.Sc. (Vety.)		Ph. D.	Total
		Open / SC /	ICAR / GOI /		
11	Veterinary Medicine	09	01	03	13
12	Animal Nutrition	07	01	02	10
13	Reproductive Biology	02	01	01	04
14	Veterinary Public Health	02	01	03	06
15	Poultry Science	06	-	01	07
16	Animal Biotechnology	07	-	-	07
17	Veterinary Extension	-	-	-	-
TOTAL :		77*	12	20*	109

- * Out of Intake Capacity of 77 Seats for M.V.Sc., 12 Seats shall be filled in by NRI / NRI Sponsored / Payment Seat from Gujarat / Other States in order of preference / availability.
- Out of Intake Capacity of 20 Seats for Ph.D., 10 Seats shall be filled in by NRI/NRI Sponsored / Payment Seat from Gujarat / Other States in order of preference / availability.

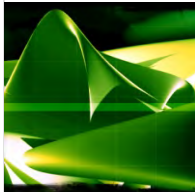
Dairy Science Faculty :					
Sr. No.	Subject	M. Sc. / M.Tech.		Ph. D.	Total
		Open / SC / ST / SEBC	ICAR / GOI / OTHER		
1	Dairy Technology	06	01	03	10
2	Dairy Engineering	05	01	02	08
3	Dairy Microbiology	01 M.Sc.	01	01	03
4	Food Biotechnology	02 M. Tech.	-	01	03
5	Dairy Chemistry	06	01	01	08
TOTAL :		20*	04	08*	32

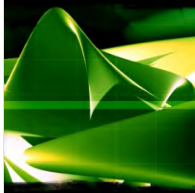
- * Out of Intake Capacity of 20 Seats for M.Sc./M.Tech., 04 Seats shall be filled in by NRI / NRI Sponsored / Payment Seat from Gujarat / Other States in order of preference / availability.
- Out of Intake Capacity of 08 Seats for Ph.D., 04 Seats shall be filled in by NRI / NRI Sponsored / Payment Seat from Gujarat / Other States in order of preference / availability.\

Food Processing Technology & Bio-Energy Faculty :					
Sr. No.	Subject	M. Tech. (FPT)		Ph. D.	Total
		Open / SC / ST / SEBC	ICAR / GOI / OTHER		
1	Food Processing Technology	05	01	03	09
TOTAL :		05*	01	03*	09

- * Out of Intake Capacity of 05 Seats for M.Tech. 01 Seat shall be filled in by NRI / NRI Sponsored / Payment Seat from Gujarat / Other States in order of preference / availability.
- Out of Intake Capacity of 03 Seats for Ph.D., 50 % Seats from Gujarat / Other States should be on payment.

Statement showing details of the examination held on December-2006/January-2007 : B. A. College of Agriculture, AAU, Anand									
Semester	Date of Exam		Total students of sitting in exam	Pass out students	Promoter students	Fail students	Remarks		
	Practical Exam	Theory Exam							
First Semester (Regular)	18-12-2006 to 21-12-2006	02-01-2007 to 11-01-2007	90 Admission Year 2006	47	40	03	---		
Second Semester (Supple.)	11-12-2006 to 13-12-2006	15-01-2007 to 19-01-2007	07	07	---	---			
Third Semester (Regular)	18-12-2006 to 22-12-2006	02-01-2007 to 12-01-2007	50 Admission Year 2005	38	11	01			
Fourth Semester (Supple.)	11-12-2006 to 14-12-2006	15-01-2007 to 19-01-2007	11	08	03	---			
Fifth Semester (Regular)	16-12-2006 to 22-12-2006	02-01-2007 to 13-01-2007	56 Admission Year 2004	48	08	---			
Sixth Semester (Supple.)	03-01-2007 to 04-01-2007	15-01-2007 to 17-01-2007	11	09	---	02			
Seventh Semester (Regular)	December-2006 RAWE		55 Admission Year 2003	54	---	01			
Eighth Semester (Supple.)	11-12-2006	---	02	02	---	---	02 Pass Class		
Total :			282	213	62	07			

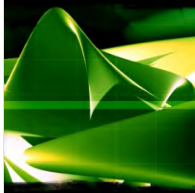




Statement showing details of the examination held on June/July, 2007: B. A. College of Agriculture, AAU, Anand							
Semester	Date of Exam		Total students of sitting in exam	Pass out students	Promoter students	Fail students	Remarks
	Practical Exam	Theory Exam					
First Semester (Supple.)	11-06-2007 to 14-06-2007	12-07-2007 to 18-07-2007	33	27	06	--	---
Second Semester (Regular)	18-06-2007 to 22-06-2007	02-07-2007 to 11-07-2007	80 Admission Year 2006	48	25	07	
Third Semester (Supple.)	11-06-2007 to 14-06-2007	12-07-2007 to 18-07-2007	08	06	--	02	
Fourth Semester (Regular)	18-06-2007 to 22-06-2007	02-07-2007 to 11-07-2007	53 Admission Year 2005	45	07	01	
Fifth Semester (Supple.)	11-06-2007 to 15-06-2007	12-07-2007 to 18-07-2007	08	07	--	01	
Sixth Semester (Regular)	18-06-2007 to 23-06-2007	02-07-2007 to 11-07-2007	57 Admission Year 2004	51	05	01	
Eighth Semester (Regular)	28-05-2007 to 02-06-2007	11-06-2007 to 16-06-2007	54 Admission Year 2003	54	--	--	(1) First Class with Distinction : 11 (2) First Class : 07 (3) Second Class : 18 (4) Pass Class : 18 (Awarded to degree certificates in fourth Annual Convocation)
Total :			293	238	43	12	

Statement showing details of the examination held on December-2006/January-2007 : Sheth M. C. College of Dairy Science, AAU, Anand							
Semester	Date of Exam		Total students of sitting in exam	Pass out students	Promoter students	Fail students	Remarks
	Practical Exam	Theory Exam					
First Semester (Regular)	11-12-2006 to 19-12-2006	20-12-2006 to 29-12-2006	57 Admission Year 2006	47	05	05	---
Second Semester (Supple.)	02-01-2007 to 06-01-2007	08-01-2007 to 11-01-2007	23	22	---	01	
Third Semester (Regular)	11-12-2006 to 19-12-2006	22-12-2006 to 29-12-2006	66 Admission Year 2005	47	19	---	
Fourth Semester (Supple.)	02-01-2007 to 05-01-2007		08	04	---	---	
Fifth Semester (Regular)	22-01-2007 to 04-01-2007	24/25/31, January, 2007	46 Admission Year 2004	46	---	---	Total 4 – Student passed in Fifth Semester, but out of them 3 students failed in Fourth Semester and 1 Student failed in one subject in Third Semester.
Seventh Semester (Regular)	26-12-2006 to 04-01-2007	05-01-2007 to 12-01-2007	57 Admission Year 2003	54	03	---	
Eighth Semester (Supple.)	26-12-2006 to 28-12-2006	29-12-2006 to 30-12-2006	05	05	---	---	(1) Second Class : 05
Total :			262	225	31	06	





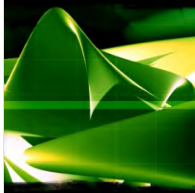
Statement showing details of the examination held on June/July, 2007
Sheth M.C. College of Dairy science, AAU, Anand

Semester	Date of Exam		Total students of sitting in exam	Pass out students	Promoter students	Fail students	Remarks
	Theory Exam	Practical Exam					
First Semester (Supple.)	11-06-20067 to 14-06-2007	15-06-2007 to 18-06-2007	05	03	--	02	---
Second Semester (Regular)	25-05-2007 to 31-05-2007	01-06-2007 to 08-06-2007	52 Admission Year 2006	35	15	02	
Third Semester (Supple.)	11-06-2007 to 16-06-2007	18-06-2007 to 25-06-2007	19	08	10	01	
Fourth Semester (Regular)	22-05-2007 to 31-05-2007	01-06-2007 to 08-06-2007	63 Admission Year 2005	46	16	01	
Sixth Semester (Regular)	Vidya Dairy held in July, 2007		46 Admission Year 2004	46	--	--	
Seventh Semester (Supple.)	11-06-2007 to 14-06-2007	15-06-2007 to 18-06-2007	03	02	01	--	
Eighth Semester (Regular)	22-05-2007 to 31-05-2007	01-06-2007 to 08-06-2007	56 Admission Year 2003	51	--	--	(1) First Class with Distinction : 02 (2) First Class : 29 (3) Second Class : 20 (4) fail : 05 (Awarded to degree certificates in fourth Annual Convocation)
Eighth Semester (Supple.)	13-11-2007 to 17-11-2007	17-11-2007 to 27-11-2007	05	5	--	--	(1) Second Class : 5 (One student passed in Eighth Semester and failed in Seventh Semester)
Total :			249	196	42	11	

Statement showing details of the examination held on August/September, 2006
College of Veterinary Science & A.H., AAU, Anand

Semester	Date of Exam		Total students of sitting in exam	Pass out students	Promoter students	Fail students	Remarks
	Practical Exam	Theory Exam					
First Year (Sem. 1 and 2)	18-08-2006 to 24-08-2006	05-08-2006 to 17-08-2006	84 Admission Year 2005	51	---	33	Regular Exam
"	30-09-2006	27-09-2006	16	16	---	---	Compartment Exam
Second Year (Sem. 3 and 4)	12-12-2006 to 22-12-2006	12-11-2006 to 22-12-2006	56 Admission Year 2004	45	---	11	Regular Exam
"	---	05-02-2007 to 09-02-2007	04	04	---	---	Compartment Exam
Third Year (Sem. 5 and 6)	20-11-2006	24-11-2006 to 11-12-2006	60 Admission Year 2003	39	---	21	Regular Exam
"	---	12-12-2006 to 21-12-2006	14	14	---	---	Compartment Exam
Fourth Year (Sem. 7)	31-07-2006 to 08-08-2006	17-07-2006 to 29-07-2006	61 Admission Year 2002	61	---	---	Regular Exam





Semester	Date of Exam		Total students of sitting in exam	Pass out students	Promoter students	Fail students	Remarks
	Practical Exam	Theory Exam					
Fifth Year (Sem. 8 and 9)	03-10-2006 to 12-10-2006	16-09-2006 to 29-09-2006	52	51	01	---	Regular Exam
"	---	11-12-2006	01	01	---	---	Compartment Exam
Fifth Year (Sem. 10)	08-05-2007	---	52 Admission Year 2001	52	---	---	(1) First Class with Distinction : 04 (2) First Class : 30 (3) Second Class : 18 (Awarded to degree certificates in Fourth Annual Convocation)
Total :			400	334	---	66	

Appendix- 6

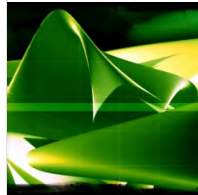
Second Annual Convocation, Dtd. 16-05-2006

ANAND
AGRICULTURAL UNIVERSITY
ANAND 388110

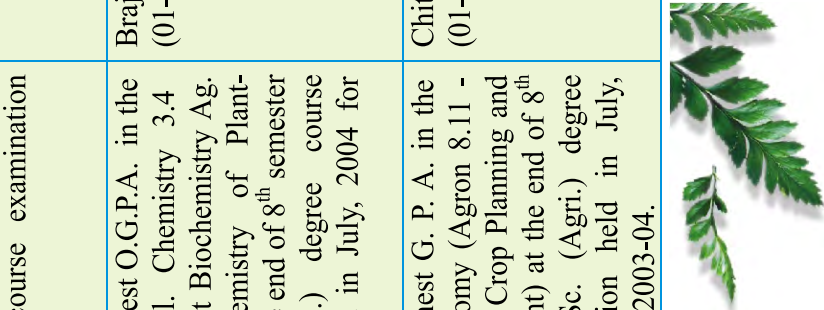
List of Gold Medal/Gold Plated Silver Medals Award/Cash Prize

Sr. No.	Name of Gold Medal	Degree	Particulars	Name of Student	Name of College
Faculty of Agriculture					
1	Chancellor's Gold medal	Post Graduate	For being adjudged the best Post-graduate student of Ph.D degree in the field of studies of Agriculture during the year 2004-05.	Shri. Maghodia Ajaykumar Bhagvanji (04-5308-2002)	B.A. College of Agriculture, Anand
2	Dr. C. B. Shah Gold Plated Silver Medal	Post Graduate	For getting the highest O.G.P.A. including excellence in thesis in the subject of Agronomy at the M. Sc. (Agri.) Examination, for the year 2004-05	Seema Sharma (04-5863-2003)	B.A. College of Agriculture, Anand
3	Vice-Chancellor's Gold Medal	Under Graduate	Adjudged the best student of faculty of Agriculture during the year 2004-05.	Shri Yadav Anand Dinanath (01-8246-2001)	B.A. College of Agriculture, Anand
4	Dr. Ramjibhai M. Patel Gold Plated Silver Medal	Under Graduate	For securing highest C. G. P. A. in the subject of Agricultural Statistics and related courses at the end of Eight Semester of B. Sc. (Agri.) degree course examination held in July-2005.	Shri Shah Ravi Jagdish (01-8235-2001)	B.A. College of Agriculture, Anand
5	Dr. Ranchhodbhai M. Patel Gold Medal	Under Graduate	For securing highest C. G. P. A. in the related courses of Plant Breeding & Genetics at the end of the 8 th Semester of B. Sc. (Agri.) degree course examination held in July-2005.	Shri Shah Ravi Jagdish (01-8235-2001)	B.A. College of Agriculture, Anand
6	Prof. H. N. Patel, Memorial Gold Plated Silver Medal	Under Graduate	ForsecuringhighestO.G.P.A.in the subject of Extension Education upto the end of the 8 th Semester of B.Sc. (Agri.) degree course examination held in July-2005.	Shri Shah Ravi Jagdish (01-8235-2001)	B.A. College of Agriculture, Anand

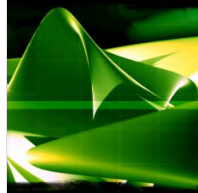




Sr. No.	Name of Gold Medal	Degree	Particulars	Name of Student	Name of College
7	Dr. Purachand D. Mistry Gold Plated Silver Medal	Under Graduate	For securing highest C. G. P. A. in the subject of Agricultural Meteorology and related Courses at the end of the 8 th Semester of B. Sc. (Agri.) degree course examination held in July-2005.	Shweta Shambhavi (01-8238-2001)	B.A. College of Agriculture, Anand
8	Dr. B. V. Mehta Gold Plated Silver Medal	Under Graduate	For Securing highest C.G.P.A. in the subject of Agricultural Chemistry and Soil Science up to the 7 th Semester at the end of the 8 th Semester of B.Sc. (Agri.) examination held in July-2005.	Shweta Shambhavi (01-8238-2001)	B.A. College of Agriculture, Anand
9	Dr. M. V. Desai Gold Plated Silver Medal	Under Graduate	For securing highest C. G. P. A. in the subject of Plant Pathology and related Courses at the end of 8 th semester of B. Sc. (Agri.) degree course examination held in July, 2005.	Shweta Shambhavi (01-8238-2001)	B.A. College of Agriculture, Anand
10	Dr. Z. B. Patel Gold Plated Silver Medal	Under Graduate	For securing highest C. G. P. A. in the subject of Horticulture up to 7 th semester at the end of 8 th semester of B. Sc. (Agri.) degree course examination held in July, 2005.	Shweta Shambhavi (01-8238-2001)	B.A. College of Agriculture, Anand
11	Dr. Ravjibhai Chhotabhai Patel Gold Plated Silver Medal.	Under Graduate	For Securing highest O.G.P.A. in the subject of Agricultural Entomology at the end of 8 th Semester B.Sc. (Agri.) degree examination held in July, 2005.	Shweta Shambhavi (01-8238-2001)	B.A. College of Agriculture, Anand
12	Dr. Mrinal Kanti Chakraborty Gold Plated Silver Medal	Under Graduate	For Securing highest O. G. P. A. in the subject of Agricultural chemistry 3.4 (Introductory Plant Biochemistry), Ag.Chem. 5.6 (Chemistry of Plant Products) at the end of 8 th semester of B. Sc. (Agri.) degree course examination held in July, 2005.	Shweta Shambhavi (01-8238-2001)	B.A. College of Agriculture, Anand



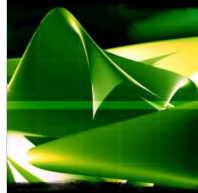
Sr. No.	Name of Gold Medal	Degree	Particulars	Name of Student	Name of College
13	Dr. Sureshbhai N. Patel Memorial Gold Plated Silver Medal.	Under Graduate	For securing highest O. G. P. A. in the subject of Entomology up to the 7 th semester of B. Sc. (Agri.) degree course examination held in July, 2005.	Shweta Shambhavi (01-8238-2001)	B.A. College of Agriculture, Anand
14	Late Shri Jashbhai J. Patel Gold Plated Silver Medal	Under Graduate	For securing highest G. P. A. in the subject of Agronomy (Agron 8.11) Organic Farming Crop Planning and Farm Management at the end of the 8 th semester of B.Sc. (Agri.) degree course examination held in July, 2005.	Divya Gopalakrishnan Nair (01-8174-2001)	B.A. College of Agriculture, Anand
15	Dr. Harikaka Gold Plated Silver Medal	Under Graduate	For securing highest O. G. P. A. in the course of applied Entomology at the end of 7 th semester of B. Sc. (Agri.) degree course examination held in July, 2005.	Shri Kalpeshkumar Amrutlal Patel (01-8212-2001)	B.A. College of Agriculture, Anand
16	Dr. Mrinal Kanti Chakraborty Gold Plated Silver Medal	Under Graduate	For securing highest O.G.P.A. in the subject of Agril. Chemistry 3.4 Introductory Plant Biochemistry Ag. Chem 5.6 (Chemistry of Plant-Production) at the end of 8 th semester of B.Sc. (Agri.) degree course examination held in July, 2004 for the year 2003-04.	Brajesh Kumar (01-7803-2000)	B.A. College of Agriculture, Anand
17	Late Shri. Jashbhai J. Patel Gold Plated Silver Medal	Under Graduate	For securing highest G. P. A. in the subject of Agronomy (Agron 8.11 - Organic Farming Crop Planning and Farm Management) at the end of 8 th semester of B.Sc. (Agri.) degree course examination held in July, 2004 for the year 2003-04.	Chitra Mishra (01-7811-2000)	B.A. College of Agriculture, Anand



Sr. No.	Name of Gold Medal	Degree	Particulars	Name of Student	Name of College
Faculty of Veterinary Science					
1	Chancellor's Gold medal	Post Graduate	Being adjudged the best Post-graduate Student of Master degree in the field of studies of Veterinary Science during the year 2004-05.	Shri Patel Nilenkumar Prafulchandra (04-5627-2003)	College of Veterinary Science & A.H., Anand
2	Late Shri K. K. Shukla Gold Plated Silver Medal	Post Graduate	For best P. G. Research work from the subjects of faculty of Veterinary Science & Animal Husbandry, after completion of Post-graduate study during the year 2004-05.	Amit Gaba (04-5508-2002)	College of Veterinary Science & A.H., Anand
3	Late Shri K. K. Shukla Gold Plated Silver Medal	Post Graduate	For best P. G. Research work from the subject of faculty of Veterinary Science & Animal Husbandry after completion of Post-graduate study during the Year 2003-04.	Shri Patel Mayurkumar Navanitbhai (04-5526-2002)	College of Veterinary Science & A.H., Anand
4	Vice-Chancellor's Gold Medal	Under Graduate	For being adjudged the best student of Faculty of Veterinary Science and Animal Husbandry during the year 2004-05.	Shri Mankad Manan Yogeshbhai (02-2054-1999)	College of Veterinary Science & A.H., Anand
5	Dr. R. K. Shukla Gold Plated Silver Medal	Under Graduate	For securing highest O.G.P.A. in all subjects of B.V.Sc. & A.H. degree course examination held in July, 2005.	Jyoti Kumar (02-2049-1999)	College of Veterinary Science & A.H., Anand
6	Prof. M. R. Varia Gold Plated Silver Medal	Under Graduate	For securing highest C.G.P.A. in the subject of Veterinary Pathology, Microbiology, Bacteriology, Parasitology and LTD at the end of Final year B.V.Sc. & A.H. degree course examination held in July, 2005.	Jyoti Kumar (02-2049-1999)	College of Veterinary Science & A.H., Anand

Sr. No.	Name of Gold Medal	Degree	Particulars	Name of Student	Name of College
7	Silver Jubilee Celebration (S.J.C.) Veterinary College, Anand Gold Plated Silver Medal (Basic Subjects).	Under Graduate	For securing highest O.G.P.A. in the Basic subjects viz., Anatomy, Biochemistry, Physiology and Pharmacology at the end of the 10 th semester B.V.Sc. & A.H. degree course examination held in July, 2005.	Jyoti Kumar (02-2049-1999)	College of Veterinary Science & A.H., Anand
8	V. C. Desai Charities Gold Plated Silver Medal	Under Graduate	For securing highest O.G.P.A. at the end of the 10 th semester B.V.Sc. & A.H. degree course examination held in July, 2005.	Jyoti Kumar (02-2049-1999)	College of Veterinary Science & A.H., Anand
9	Vidhyalabh Avasthi Cash Prize	Under Graduate	For securing highest C.G.P.A. in the 7 th semester in the subject of Parasitology, Oathology and Microbiology (Pre-Clinals) B.V.Sc. & A.H. degree course examination held in July, 2005.	Jyoti Kumar (02-2049-1999)	College of Veterinary Science & A.H., Anand
10	Silver Jubilee Celebration (S.J.C.) Veterinary College, Anand Gold Plated Silver Medal (Clinical Subjects).	Under Graduate	For securing the highest O.G.P.A. in Clinical subjects viz., Surgery, Medicine, Gynaecology and Veterinary Public Health in B.V.Sc. & A.H. degree course examination held in July, 2005.	Satish Kumar (02-2077-1999)	College of Veterinary Science & A.H., Anand
11	Late Prof. V. A. J. Pinto Cash Prize	Under Graduate	For securing highest C.G.P.A. in Medicine subject at the end of B.V.Sc. & A.H. degree course examination held in July, 2005.	Satish Kumar (02-2077-1999)	College of Veterinary Science & A.H., Anand
Faculty of Dairy Science					
1	Vice-Chancellor's Gold Medal	Under Graduate	For being adjudged the best student of faculty of Dairy Science during the year 2004-05.	Animesh Kumar (03-1245-2001)	Sheth M.C. College of Dairy Science, Anand
2	Late Shri. R. J. Patel Memorial Gold Plated Silver Medal	Under Graduate	For Securing highest C. G. P. A. in the subject of Dairy Economics up to the end of 8 th semester of B. Tech (D.T.) examination held June-July, 2005.	Animesh Kumar (03-1245-2001)	Sheth M.C. College of Dairy Science





Sr. No.	Name of Gold Medal	Degree	Particulars	Name of Student	Name of College
3	Late Bhogibhai V. Patel Gold Plated Medal	Under Graduate	For Securing highest O.G. P. A. in all the courses of 7 semester & 8 semester of B.Tech. (D.T.) examination held in June-July,2005.	Contractor Helly Yogesh (03-1250-2001)	Sheth M.C. College of Dairy Science
4	Sheth Mansukhlal C. Desai Gold Plated Silver Medal.	Under Graduate	For Securing highest C. G. P. A. in all the subjects offered by the Dairy Chemistry Department up to the end of Eighth semester B.Tech. (D.T.) examination held in June-July,2005.	Contractor Helly Yogesh (03-1250-2001)	Sheth M.C. College of Dairy Science
5	Sheth Mansukhlal C. Desai Gold Plated Silver Medal.	Under Graduate	For Securing highest C. G. P. A. in all the subjects offered by the Dairy Technology Department up to the end of 8 th Semester B. Tech. (D.T.) examination held in June-July-2005	Vora Hiral Narendrabhai (03-1282-2001)	Sheth M.C. College of Dairy Science
6	Sheth Mansukhlal C. Desai Gold Plated Silver Medal	Under Graduate	For Securing Highest C. G. P. A. in all the subjects offered by the Dairy Microbiology Department up to the end of 8 th semester B.Tech. (D.T.) examination held in June-July,2005.	Vora Hiral Narendrabhai (03-1282-2001)	Sheth M.C. College of Dairy Science, Anand
7	Late Smt. Taraben Maganlal Khatri Gold Plated Silver Medal	Under Graduate	For securing highest C.G.P.A. in Dairy Technology subjects up to the end of the 8 th semester examination of B.Tech. (D.T.) degree course held in June-July, 2005.	Vora Hiral Narendrabhai (03-1282-2001)	Sheth M.C. College of Dairy Science, Anand
8	Late Dr. J. R. Patel Gold Plated Silver Medal.	Under Graduate	For securing highest C.G.P.A. in the Dairy Technology subjects of B.Tech. (D.T.) degree course examination held in June-July, 2005.	Vora Hiral Narendrabhai (03-1282-2001)	Sheth M.C. College of Dairy Science, Anand
9	Shri Indubhai R. Patel Gold Plated Silver Medal.	Under Graduate	For securing highest C.G.P.A. in all the subjects offered by the Dairy Microbiology Department up to the end of 8 th semester B.Tech. (D.T.) examination held in June-July, 2005.	Vora Hiral Narendrabhai (03-1282-2001)	Sheth M.C. College of Dairy Science, Anand

Sr. No.	Name of Gold Medal	Degree	Particulars	Name of Student	Name of College
10	Sheth Mansukhlal C. Desai Gold Plated Silver Medal.	Under Graduate	For securing highest C.G.P.A. in all the subjects offered by the Dairy Engineering Department up to the end of 8 th semester B.Tech. (D.T.) degree course examination held in June-July, 2005.	Chandrabhushan Kumar (03-1248-2001)	Sheth M.C. College of Dairy Science, Anand
11	Late Smt. Kapilaben Babubhai Patel Gold Plated Silver Medal.	Under Graduate	For securing highest C.G.P.A. in Dairy Engineering subject of B.Tech. (D.T.) degree course examination held in June-July, 2005.	Chandrabhushan Kumar (03-1248-2001)	Sheth M.C. College of Dairy Science, Anand
12	Late Shri Shankarlal Ratilal Shah Gold Plated Silver Medal.	Under Graduate	For securing highest C.G.P.A. in Dairy Engineering subjects up to 4 th semester at the end of the 8 th semester examination held in June-July, 2005.	Chandrabhushan Kumar (03-1248-2001)	Sheth M.C. College of Dairy Science, Anand
13	Shri Indubhai R. Patel Gold Plated Silver Medal	Under Graduate	For securing highest C.G.P.A. in all the subjects offered by the Dairy Microbiology Department up to the end of 8 th semester B.Tech. (D.T.) examination held in June-July, 2004 (For the year 2003-2004).	Mallik Jarita Mahadeb	Sheth M.C. College of Dairy Science, Anand





Appendix- 7

A. Faculty Agriculture

AGRONOMY

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- Khadtre, S. V. and Patel, M. V. (2006). Influence of vermicompost on quality parameters and soil fertility status of sweet corn. J. Soil and Crops. 16(2): 384-89.
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- Patel, M.R.; Sadhu, A.C.; Patel, P.C.; Patel, C.C. and Parmar, H.P. (2007). Effect of fertilizer management on seed production of Lucerne (*Medicago sativa* L.) Forage Res. 32 (4) : 267-268.
- Patel, M.R.; Sadhu, A.C.; Patel, P.C.; Patel, C.C. and Patel, N.N. (2007). Forage yield and quality of Pandadiu (*Chicorium intybus* L.) as influenced by seed rate and nitrogen levels under middle Gujarat conditions. Forage Res. 32 (4) : 233-235.

- Patel, P. C. and Kotecha, A.V. (2006). Forage yield and quality of Lucerne as affected by phosphorus and potassium application. Forage Res. 31(4): 269-270.
- Pathan, M.; Patel, M. V. and Khadtre, S. V. (2007). Effect of Integrated nutrient management on growth and yield of Rabi Maize (*Zea mays* L.). Bioinfolet. 4(1): 6-10.
- Reddy, B. P.; Sadhu, A. C.; Patel, M. R. and Patel, P. C. (2006). Effect of FYM and fertility levels on forage yield and quality of lucerne (*Medicago sativa*, L.). Forage Research 32(2): 126-127.
- Reddy, B.P.; Sadhu, A.C.; Patel, M.R., and Patel, P.C. (2006). Effect of farm yard manure and fertility levels on forage yield and quality of Lucerne (*Medicago sativa* L.). Forage Res. 32 (2) : 126-127.
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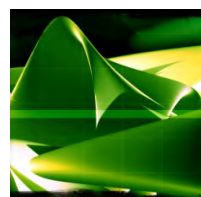
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- Meena, M. C.; Patel, K.P. and D. D. Rathod (2007) Effect of Zn and Fe enriched FYM on mustard yield and micronutrient availability in loamy sand soil (Typic Ustochrepts) of Anand. Journal of the Indian Society of Soil Science, 54 (4).

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- H.R. Patel and Shekh, A.M. (2006). Pest epidemic and role of meteorological services: An





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M. Kumar; Vyas Pandey and A. M. Shekh. (2006). Coupling of evapo-transpiration rate, hydrological cycle and land surface processes over Sabarmati River Catchment's area. In Disaster Management Ed. NC. Narosa Publishing House, Delhi,:113-123

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Patel, M. A.; Fatteh, U. G; Patel, J. S., Patel, D. H. and Sriram, S. (2005). Heterosis in sesamum (*Sesamum indicum* L.) Crop Res., 29(2): 259-264.

Tukadiya, A. R.; Kathiria, K. B. and Modha, K. G.. (2006). Genetic components analysis for yield and its related traits in Indian bean (*Lablab purpureus* var. typicus). Vegetable Science, 33 (2) : 183-184.

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Jhala, R.C.; Patel, R.K.; Sisodiya, D.B; Joshi, B.K; Stonehouse, J.M; Verghese, A; and Mumford, J.D. (2005). Potentiation and interference between methyl eugenol and cue lure in fruit fly attraction. Pest Management in

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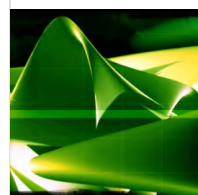
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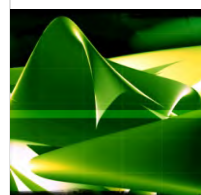
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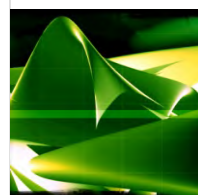
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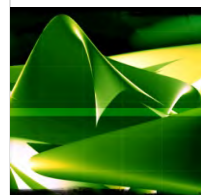




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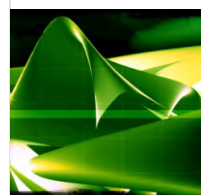
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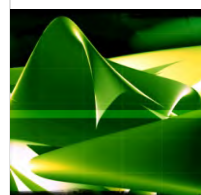
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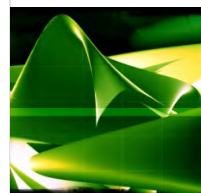
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9	Dr. P.K.Borad	RAVI PAKO MA PAK SAMRAKSHAN NI BHALAMANO	26-01-07 06-02-07
10	Dr.R.H.Patel	UNALU PAKOMA PIYAT MATE NI AGATYANI BHALAMANO	06-02-07 16-02-07

Appendix- 9

TELEVISION TALKS DELIVERED

Sr. No.	Scientist	Topic	Date (Time of broadcast 6.00 to 6.30 p.m.)
1	Dr. K.F.Patel	ATMA PROJECT VISTARAN NI NAVI TARAH	10-04-06
2	Dr. D.C.Joshi	KRUSHI UTPADANO MA MULYA VRUDHHI	17-04-06
3	Dr. A.M.Mehta	UNALU DANGARMA PAK SANRAKSHAN	24-04-06
4	Dr.P.P.Patel	KRUSHI VISTARAN SEVAO	04-05-06
5	Dr. G.C.Mandli	PASHUONA ROGO ANE GHARGATHU UPAYO	11-05-06
6	Dr. J.V.Solanki	PASHU UCHHER MA BIO TECHNOLOGY	25-05-06
7	Dr.S.N.Goyal	MAKAI NI VAIGNANIK KHETI	29-05-06
8	Dr. K.P.Patel	SANKALIT KHATAR VYAVASTHA	01-06-06
9	Dr. K Sundram	KSHARIYA ANE BHASMIK JAMINNI SUDHARANA	09-06-06
10	Dr. R.H.Patel	KHARIF MAGFALI NI KHETI	12-06-06
11	Dr. S.J.Patel	MASHROOM NI KHETI	10-07-06
12	Dr. H.C.Patel	BAGAYAT PAKOMA PAK SAMRAKSHAN NU MAHTVA	25-07-06
13	Dr. D.C.Joshi	BAGHAYATI PAKO MA MULYA VARDHHI MATE CHAVIRUP MUDDAO	22-08-06
14	Dr.K.B.Kathiriya	SHAKBHAJI NI NAFAKARAK KHETI MATENA CHAVIRUP MUDDAO	21-09-06
15	Dr. Kuldeep Khanna	ADARSH MARGHA PALAN ANE NAFAKARKTA MATE DHYAN MA RAKHAVANA MUDDAO	26-10-06
16	Dr. V.V.Sonani	PIYAT NI NAVI PADHATIONI JANKAI ANE FAYADAO	03-11-06
17	Dr.M.M.Pathak	SURATI BHENS NI PRAJANAN SHA MATA VADHARI VADHU UTPADAN MELAVIE	08-11-06
18	Dr.R.B.Patel	RAVI PAKONI NINDAN NIANTRAN NI NAVI BHALAMANO	20-11-06
19	Shri N.R.Rao	AMLA NI MULYA VRUDHHI	21-11-06
20	Dr. R.H.Patel	PIYAT ANGENA NAVA SANSHODHANO JANIE	08-12-06
21	Dr. M.M.Pathak	PASHUOMA GARBHA PRATIROPAN	13-12-06
22	Dr. P.R.Pandya	SAGARBHA JANVARO NA AHARMA RAKHAVANI KALAJI	10-01-07
23	Dr. R.B.Patel	UNALU PAKOMA NINDAN NIYANTRAN	15-01-07
24	Dr.K.B.Kathiriya	SHAKBHAJI NI NAVINTAM JATO	23-01-07



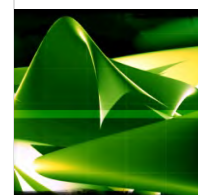


Sr. No.	Scientist	Topic	Date (Time of broadcast 6.00 to 6.30 p.m.)
25	Dr.F.P.Savaliya	BROILAR FARM MATHI VADHAREMA VADHARE AVAK MELAVAVA MATENI MAVJATO	25-01-07
26	Dr.D.C.Patel	PASHUONA AHARMA ZERI TATVO ANE TENE NIVARVANA UPAYO	31-01-07
27	Dr.P.K.Borad	PIYAT, UREA ANE ROG-JIVATNO UPADRAV	02-02-07
28	Dr.P.V.Patel	PASHUOMA VIVIDH KRUMIO THI THATA ROGO	28-02-07
29	Dr. Kuldeep Khanna	ADVIASHI ANE NANA KHEDUTO MATE BACKYARD POULTRY FARMING MATE THAYEL SANSHODHANO	08-03-07
30	Dr.K.S.Patel	BAGAYATI PAKOMA PIYAT VYAVASTHA	09-03-07



Appendix- 10 PUBLICATION OF AGRICULTURAL LITERATURE

Sr. No.	Name of publication
1	SOYABEAN NI VAIGNANIK KHETI PADDHATI
2	ADU NI VAIGNANIK KHETI PADDHATI
3	BHINDA NI VAIGNANIK KHETI PADDHATI
4	DUNGALI NI VAIGNANIK KHETI PADDHATI
5	LASAN NI VAIGNANIK KHETI PADDHATI
6	TUVER PAKMA JIVAT NIYANTRAN
7	AMALA MA AVATA ROGO ANE TENU NIYANTRAN
8	AMALA MA MULYA VRGDDHI
9	KHEDUTONI SEVAMA - ATIK- KRUSHI TAJAGNATA MAHITI KENDRA
10	IN THE SERVICE OF FARMERS - AGRICUTURAL TECHNOLOGY INFORMATION CENTRE
11	MILIBAGNU SANKALIT NIYANTRAN
12	KARUSHI MAHOTSAV – 2006
13	IN THE SERVICE OF FARMERS ATIC (English & Gujarati)
14	GUJARAT MA ATMA PROJECT NU AMALIKARAN
15	MARGDARSHIKA-AGRICULTURAL TECHNOLOGY MANAGEMENT AGENCY "ATMA" PROJECT.
16	MASALA PAK VISHESHANK

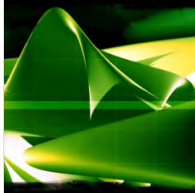




Appendix- II

CAPACITY BUILDING OF AAU STAFF

Sr. No.	Scientist	Topic	Duration	Institution
1	Shri N.K. Dhamsaniya	Emerging trends in Agri Informatics	13-02-07 to 05-03-07	USI, IARI New Delhi
2	Dr.Kuldeep Khanna Dr.F.P.Savaliya	XXV th scientist meet (ICAR)	12 & 13 -04-07	Orissa University of Agri.Techology Bhubaneshwar
3	Dr. S.G.Vohra	National Symposium on "Recent trends in policy initiatives & technological interventions for rural prosperity in small holders livestock production system	20-06-07 to 22-06-07	LPM Dept Vet. college Sri veractshwara Vety.Uni. Tirupati (AP)
4	Shri N.B.Patel	Weed management in kharif crop	29-08-07 to 01-09-07	National Research center for weed science Jaballpur
5	Dr.Kuldeep Khanna Dr.J.G.Patel Smt. M.C.Patel	Workshop on I.C.T. for vocational education in Agriculture sector	03 & 04-09-07	Media lab Asia & MANAGE, Hyderabad





ACKNOWLEDGEMENT

During the Year 2006-2007 the Anand Agricultural University received assistance from many quarters in running the activities of the University research projects and various Educational and other programmes

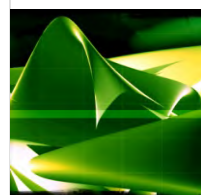
We gratefully acknowledgement the assistance provided by:

ICAR
Government of India
Ministry of Science & Technology, Dept. of Biotechnology, New Delhi
APEDA, New Delhi
Gujarat Livestock Development Board, Gandhinagar
Director of Horticulture, Gandhinagar
National Innovative Foundation, Ahmedabad
Sumitomo Chemical India Pvt. Ltd., Mumbai
Bayer Crop science Ltd., Mumbai
PI Industries Ltd., Gurgaon
E.I. Dupont India Pvt. Ltd., Manjusar, Dist. Vadodara
Potash & Phosphate Institute of Canada, Gurgaon
Amar Bio-tech, Kaveri Seed Co. Ltd., Mahyco
Nandi Seed Ltd, Nuziveedu Seeds
Pravardhan Seeds Ltd., Vibha Agro-tech Ltd.
Tulshi Seed Co., Vikram seeds Ltd
Punjab Chemical & Crop Production Pvt. Ltd., Mumbai
Cadila Pharmaceuticals, Ahmedabad
Dudhsagar Research & Development Association, Mehsana
Gujarat Alkalies & Chemicals Ltd., Vadodra
Phyton products, VV Nagar
M/s Punjab Chemical & Crop protection Ltd.
AVRDC, Taiwan

The Anand Agricultural University take the opportunity to thank them
all our special gratitude goes to especially
Agricultural Cooperation Department,
Government of Gujarat, Sachivalaya, Gandhinagar
Indian Council of Agricultural Research (ICAR)

Donors of Gold Medals

Dr. C.B. Shah
Dr. Ramjibhai .M. Patel
Dr. Ranchodbhai M. Patel
Prof. H.N. Patel
Dr. Purachand D. Mistry
Dr. B.V. Mehta
Dr. M.V. Desai
Dr. Z.B. Patel
Dr. Ravjibhai Chhotabhai Patel
Dr. Mrinal Kanti Chakraborty
Dr. Sureshbhai N. Patel
Late Jashbhai J. Patel
Late Dr. Haribhai K. Patel
Late K.K. Shukla
Dr. R.K. Shukla
Prof. M.R. Varia
Shri V.C. Desai Charity
Vidhyalabh Avasthi
Late Prof. V.A.J. Pinto
Late Shri R.J. Patel
Late Bhogilal V. Patel
Sheth Mansukhlal C. Desai
Late Smt. Taraben Maganlal Khatri
Late Dr. Jashbhai R. Patel
Indubhai R. Patel
Late Smt. Kapilaben Babubhai Patel
Late Shri Shankarlal Ratilal Shah





Anand Agricultural University

3rd
Annual Report

01-04-2006 to 31-03-2007

Published in pursuance of Section 49 of the
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Anand Agricultural University
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Prof. M. C. Varshneya
Vice Chancellor



FOREWORD

Anand Agricultural University has stepped in to the 4th Year. It's my immense pleasure to present the Third Annual Report of the AAU for the year 2006-07. It gives an opportunity for retrospection that how far the Anand Agricultural University has achieved its goal to make the Gujarat State agriculturally prosperous.

The AAU has made rapid stride in all the three facets of its activities i.e., Education, Research and Extension Education in agricultural sciences. The 33 new research projects to the tune of Rs. 1893.63 lakh and US \$ 6000 have been sanctioned during the year under report by GOI, GOG, overseas and other agencies.

The Second and Third Convocation of the AAU held at Anand in which 290 and 242 graduates and post-graduates received their degree. Total 99 students got job placement through campus interviews.

The year 2006-07 brought in several outstanding achievements to the university. New improved variety of Rice crop 'Ashoka 200F' has been released. Fruit Grader was developed for Fruit Grower farmers. Protein enriched Peanut Spread was also developed for the benefit of dairy industry. The university has also passed 47 research recommendations for farming community.

Krusha Mahotsav 2006 was launched from the university to motivate the Farmers of Central Gujarat for adopting modern scientific methods of farming. Under Soil Health Card program, the university has developed the web-base application software useful for the Farmers and extension workers for fertilizer recommendations.

Infrastructure developmental activities have been carried out to boost up the research and extension activities of the university. The major construction work like Mega Seed Complex, PG Girls hostel, Farmers Hostel, Medicinal and Aromatic Plant, High Tech Floriculture Laboratory, Amala and Apiary Processing Unit were started during the year for the future development of the university.

As a Nodal officer of the agricultural university of Gujarat state, constant guidance in the matter of academic and administration resulted into progress of all four SAUs with innovative approaches.

I would like to congratulate my entire team of scientists, academicians, administrators and subordinates for carrying out the various activities of the university and bringing out the results in a comprehensive manner as reflected in this report. I firmly believe that the university will achieve new horizons of success in forthcoming years.

M. C. Varshneya
Vice Chancellor
Anand Agricultural University

EXECUTIVE SUMMARY

The year 2006-07 had been a causatively hectic, extensively active and extremely lucrative period for Anand Agricultural University. There were many achievements and innumerable accomplishments.

Honorable Vice Chancellor of AAU, Prof. M.C. Varshneya, had been assigned by the Government of Gujarat as The Nodal Officer with special responsibilities for all the SAUs of Gujarat state. To name only few of his accomplishments, as Nodal Officer for academic and examination matters, Prof. Varshneya successfully organized the voluminous task of central admission at UG and PG level for the four SAUs of Gujarat. Under his dynamic leadership and initiative, 33 new projects to the tune of Rs. 1893.63 lakh and US \$ 6000/- have been sanctioned by different authorities. Apart from his responsibilities as Nodal officer, as Chairman of various Committees and Councils of the institution, in altogether 20 meetings of several Committees and Councils, Prof. Varshneya actively participated, guided and motivated the personnel of the University, and set up new standards.

Education

The Second and Third Convocation of Anand Agricultural University took place on May-6, 2006 and January 23, 2007, in which, His Excellency the Governor of Gujarat and the Chancellor of AAU, Shri Naval Kishore Sharma conferred degrees on 290 and 242 graduate and post-graduate candidates, respectively. Forty one gold medals were awarded to distinguished graduate and post graduate students in the Second Annual

Convocation.

Research

The scientists of Anand Agricultural University are always actively engaged in developing cutting edge technology with a multi-dimensional research approach in different aspects of agricultural and related fields as per the requirement of different agro-climatic zones and ecological situations. Under the crop improvement program the improved variety namely Ashoka-200F(Rice) has been verified through Farmers Participatory Research program which was endorsed for cultivation under rainfed drilled (upland) rice growing areas of South and Middle Gujarat was released. The Agricultural Product Process Engineering Unit, AAU, developed a precision weight based Fruit Grader for grading of selected, specifically irregular shaped fruits. On the Dairy Science front, research is always targeted towards quality improvement. The protein enriched product named Peanut Spread was developed under Dairy Technology Department. These are only some examples of the enormous research work being done at AAU in all the three faculties.

Total 47 research recommendations were passed by the research council for the benefits of the farming community. The university has produced 426.65 q breeder seed and 5243.32 q other stage seeds at various research stations, which was sold under the brand name of "Anubhav seed".

Extension Education

The role played by the scientists and, singularly enough, the Post-graduate students, and even more specially, the women scientists of Anand Agricultural University in the Krushi Mahotsav-2006 was commended extensively. Approximately, 118 Nodal Officers, Scientists and other supporting staff were assigned pious duty to move with the Kisan Rath into the heart land of Gujarat. As a consequence of the undaunted efforts of AAU scientists, the Central Gujarat

farmers were motivated to adopt modern, Scientific methods of farming. They were guided to prepare a crop production plan for individual and for whole village, plant protection measures, farm implements, water conservation, organic farming, irrigation methods, bio-fertilizers, botanical and herbal products, bio-pesticides, bio-control of insects/ Pests, animal husbandry, cultivation practice of major field crops, fruit crops, vegetable crops and medicinal plants and much more. Soil Health Cards and manuals of model action plan of each taluka for crop production were distributed among the farmers. The Scientists and technical personnel of the university educated the farmers in overcoming the production constraints. Besides this, the AAU publishing KRUSHI GOVIDHYA monthly farm magazine regularly since 1948 for the benefit of farming community.

Students Welfare

The Directorate of Students Welfare and the SRCs operating under the DSW were thoroughly engaged in endeavors for the overall development of personality, character and elaborate humanistic values in the graduate and post-graduate students of AAU, in addition to organizing several extra curricular activities. Considerable progress was made in the hostels. The construction of Ladies' Hostel in the Veterinary College campus, and the renovation of UG Girls Hostel of B.A. College of Agriculture were completed. The construction of one more Ladies hostel was in progress. The placement Cell, on the other hand, was extremely busy dealing with the heavy demand from various prestigious companies and organizations from India and abroad like Pest Control India, Godrej Agrovate, Mahyco Seeds, Amul Dairy, Bharatiya Agro Industries Foundation, Glaxo Smithkline, Aurigene Discovery Technologies, Dudhsagar Dairy, Almarari Dairy (Saudi Arabia), Alembic, Mother Dairy and GCMMF for the dynamic prodigy of AAU. In addition to regular activities, certain special camps like Eye Camps and Ayurvedic Camp and Homeopathic were also organized.

Estate Management

The rapid progress being made by Anand Agricultural University is plainly evident in various magnificent constructions taking place like the Mega Seed Complex, PG Girls Hostel, Farmers Hostel, Medicinal and Aromatic Plant building, High Tech Floriculture, Laboratory, Amla and Apiary Processing Unit and numerous others.

Information Technology

The information Technology Center of AAU earned the admiration and won laurels from ICAR itself. The ITC had prepared the AAU web site with the domain name www.aau.in. When the Government of Gujarat selected AAU to establish and implement the state-wide Soil Health Card program, the ITC developed web based software which generates and provides fertilizer recommendation on the basis of soil analysis and the nutrient requirements of the crop for each field. Owing to the efficiency, the Director, IT was given state level responsibilities regarding the IT work of the Krushi Mahotsav-2006 and soil Health Card by the Agriculture and Cooperation Department, Government of Gujarat.

Regional E-Library

Dr. M.D. Patel Regional Library is the first e-Library among the state SAUs. It became integral part of a nation-wide consortium with 100 mpbs LAN connectivity, and 2 mpbs internet and 27 work stations. Nearly 38000 readers are being benefited using library & cyberary with regards to collection of information/ materials pertaining to education, research and knowledge oriented literature. Dr. M.D. Patel Regional e-Library is a boon to the users.

These are only some of the achievements of Anand Agricultural University. It is not feasible to accommodate innumerable success stories glorifying the institution. AAU cherishes many dreams, and no dream is too big for AAU to accomplish.

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Acknowledgement



Chapter I Vision & Mission

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

Vision

Agriculturally Prosperous Gujarat and India

Mission

- Search for new frontiers of Agricultural Sciences
- Development of excellent human resources and innovative technologies
- Services to farming community

Goals and Objectives

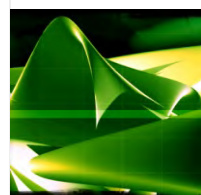
The goal of the university is to promote the integration of teaching, research and extension training with a view to promote the productivity in agriculture by serving as a premier educational and research organization in the fields of agriculture and allied sciences in the State of Gujarat.

It is also the goal of the university to produce graduate and post graduate students of very high quality capable of meeting growing needs of the society in cutting edge technology and of the farming community.

The following are the objectives to be

served by the University to achieve the goals viz.:

- Making provision for imparting education in agriculture and allied sciences and humanities;
- Furthering the advancement of learning and prosecution of research in agriculture and other allied sciences;
- Undertaking the extension, through appropriate media of agriculture and other allied sciences, especially to the rural people of the state.
- Making provision for the study of basic sciences and humanities with a view to support other professional studies and thereby integrating such studies in the University curricula;
- Undertaking the integration of teaching, research and extension education with a view to promote the productivity of agriculture;
- Conferring such degrees, diplomas, certificate and other academic distinctions as the university may deem fit;
- Such other purpose not inconsistent with the provisions of the Act, which the State Government may, on application by the university, by notification in the Official Gazette, specify in this behalf.





History

The Anand Agricultural University (AAU) has entered into fourth year of its existence. Established by the Gujarat Act No. 5 of 2004, which was passed by the Gujarat Legislature and assented by H.E. the Governor of Gujarat on 4th March 2004, the AAU has been incorporated as a teaching and affiliating University for imparting education in agriculture and allied sciences.

The AAU has a long cherished history. Sardar Vallabhbhai Patel, a Statesman and Iron man of India and Dr. K. M. Munshi, one of the authors of Indian Constitution had established *Krush-Go-Vidhya Bhavan* or Institute of Agriculture, Anand in 1938 to revitalize agriculture and train farmers and their sons and daughters in modern practices of agriculture so that they can raise their head and live in prosperity.

The Institute of Agriculture was popularly known as *Khetiwadi*, which later on in June, 1972 became the part of Gujarat Agricultural University. The Institute of Agriculture, Anand had B. A. College of Agriculture, established in 1947 which was affiliated to Bombay University upto 1956 then with Gujarat University upto 1962 and finally with Sardar Patel University, Vallabh Vidhyanagar along with Sheth M. C. College of Dairy Science, established in 1960. Later on in 1972 they became integral part of Gujarat Agricultural

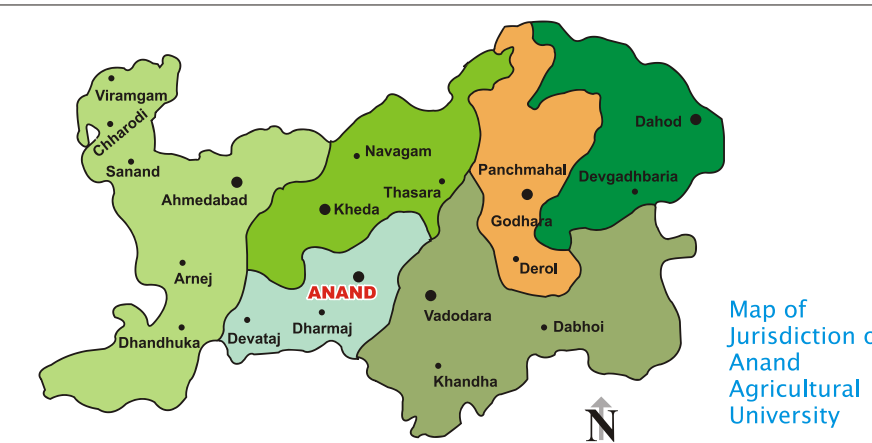
University along with the Government College of Veterinary Science and Animal Husbandry, Anand which was established in 1964.

The activities of Anand zone of erstwhile Gujarat Agricultural University, as it was known then, have 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 and 17 Research Stations, one Extension Education Institute and 22 Extension Education Centres.

Powers and Functions of the University

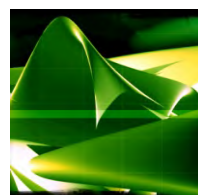
Under Section 6 of the GAU Act, 2004 the University is empowered to exercise the following powers:

- (1) to provide for education and instruction in agriculture and allied sciences and in such other branches of learning as the University may deem fit;
- (2) to make provision for research in agriculture and allied branches of learning;
- (3) to make provision for dissemination of the findings of research and technical information through extension education programmes;
- (4) to make such provision which



- would enable affiliated colleges and recognised institutions to undertake specialisation of studies;
- (5) to institute degrees, diplomas and other academic distinctions;
- (6) to lay down courses of study and instruction for various examinations;
- (7) to hold examinations and confer degrees, diplomas and other academic distinctions and grant certificates to persons who-
 - (a) have pursued approved courses of study in the University or in 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) to withdraw or cancel any degree, diploma or certificate conferred or granted by the University in such manner as may be prescribed;
- (9) to confer honorary degrees and

- other distinctions in the manner prescribed;
- (10) to provide lectures, instructions and training to persons who are not enrolled students of the University and to grant such certificates to them as may be prescribed;
- (11) to co-operate with any other University or authority in such manner and for such purpose as the University may determine;
- (12) to establish and maintain colleges for imparting education in agriculture and allied sciences,
- (13) to establish and maintain laboratories, libraries, research stations and institutions and museums for teaching, research and extension education;
- (14) to create such teaching, administrative and other posts as the University may deem necessary from time to time and make appointments thereto;
- (15) to institute and award fellowships,



scholarships and prizes in accordance with the Statutes;

(16) to associate or admit educational institutions imparting education in agriculture and allied sciences with, or to the privileges of the University by way of affiliation or recognition;

(17) to withdraw or modify, either in whole or part, affiliation or recognition of educational institutions;

(18) to inspect colleges and recognised institutions and to take 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) to 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 of the University;

(20) to 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) (a) to control and co-ordinate the activities of, and to give financial aid to, affiliated colleges and recognised institutions; and

(b) to regulate fees to be paid by the students in affiliated colleges and

recognised institutions;

(22) to institute and maintain residential accommodation for students and staff of the University;

(23) to fix, demand and receive or recover such fees and other charges as may be prescribed;

(24) to supervise, regulate and control the residence, conduct and discipline of the students of the University, and to make arrangements for promoting their health and general welfare;

(25) to conduct, co-ordinate, supervise, regulate and control post-graduate teaching and research work in the University departments and affiliated colleges and recognised institutions;

(26) to co-ordinate, supervise, regulate and control conduct of undergraduate teaching and instruction in the affiliated colleges and to undertake the same in University colleges;

(27) to make special provision for agricultural education, research and extension in relation to arid areas and areas prone to scarcity in the University area;

(28) to do all such other acts and things, whether incidental to the powers aforesaid or not, as may be requisite in order to further the objects of the University.



Chapter 2 Functioning of Authorities

Authorization

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

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

Functioning of the Authority

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

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

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

Board of Management

The Board of Management considers and decides matter of general policies relating to progress and development of

University. The list of the Hon'ble members of the Board is given on back of the Title page-2.

During the year under report, five regular meetings, one meeting by circulation and one joint meeting with Academic Council were held under the Chairmanship of Prof. M. C. Varshneya, Vice Chancellor. Shri V. P. Macwan was the Secretary of the Board.

Important Decisions of the Board of Management

Academic

Increase in intake capacity

- Increased payment seats in different faculties.
- Also fixed discipline wise intake capacity at postgraduate level. Please see details in Chapter 4.

Proposal for New Colleges

- The Board approved the proposal for establishment of Agricultural Information Technology College in 11th Five Year Plan.
- Also the Board approved the proposal for Establishment of Food Processing Technology and Bio-energy College during the 11th Plan.

Memorandum of Understanding

- The Board approved an MOU signed

between Department of Science and Technology of Guangxi Zuang Autonomous Region, China and AAU.

Conferment of Degrees

- The Board approved the list of 290 graduates and postgraduates for the conferment of degrees for the year 2004-05 in Second Annual Convocation held on 16-05-2006.
- Also the Board approved the list of 242 candidates for conferment of graduate and postgraduate degrees in third Annual Convocation held on 23-01-2007.
- The Board also approved the Chancellor's and Vice-Chancellor's Gold Medals and Medals instituted by the Donors, to be awarded in second and the third convocation

Financial

- The Board of Management approved the Annual Development Programme for the year 2006-07 to the tune of Rs.980 lakh.
- The Board also approved non-plan

budget of the University to the tune of Rs.2675.27 lakh.

Construction

- Administratively approved construction of Bio-diesel shed costing Rs.37.08 lakh, Tissue Culture Laboratory of Rs.30.22 lakh and Seed Processing Plant costing Rs.93.50 lakh.

Administration

New Appointments:

During the year under report, the Board of Management approved the selection of Principals of Veterinary Science College, Dairy Science College and teachers/scientists in various faculties. The Board in all approved 82 appointments of teachers as given in Table 2.1 below:

- New Department of Bio-technology was established and Professor and Head, Biotechnology was declared as Unit Officer.
- Board approved First Annual Report of the University for the year 2004-05.

Table 2.1 Appointments of Teachers approved by the Board

Posts	No of teachers appointed			Total
	Agriculture	Veterinary	Dairy Science	
Principal	-	1	1	2
Professor	8	4	2	14
Associate Professor	6	-	-	6
Assistant Professor	40	10	10	60
Total	54	15	13	82



Contributory Provident Fund Scheme

- The Board of Management approved the implementation of new contributory Provident Fund Scheme to be implemented with effect from 01-04-2005 for newly recruited employees of the University in lieu of pension scheme available to transferred employees.

Academic Council

The Academic Council has been established in the University under Section 21 of GAU Act. The Academic Council is responsible for maintenance of standard of teaching and examinations of the University. It controls and regulates the quality of teaching, education and examinations in the University.

During the year under report Prof. M. C. Varshneya, Vice Chancellor was the Chairman of the Council and Shri V.P. Macwan, Registrar was Secretary of the Academic Council. The list of the members of the Academic Council is

given in Appendix-1

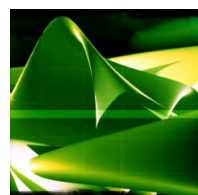
During the year under report, the Academic Council held five meetings to consider various issues pertaining to improvement of education, course curricula, course credits, and recruitment rules for teachers and such other items. Besides making recommendations to the Board of Management as mentioned above,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

- Revised the fee structures of undergraduate and post-graduate courses.
- Approved course curriculum for two years Home Science Diploma. The University had upgraded the programme of certificate course in Home Science to Diploma in Home Science
- Revised and amended the regulations for Ph. D. for in-service candidates. It allowed research fellow and research associates, who are working in different projects to pursue Master and Ph.D. programme of the University.
- The Board of Studies for Dairy Business Management was constituted.

Board of Studies

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

During the year under report following Board of Studies were





Sr. No.	Name of Board of Studies	Date of Meeting
	Agriculture Faculty	
1	Board of Studies of the subject of Crop Production.	17-08-06
2	Board of Studies of the subject of Plant Science.	28-11-06 23-02-07
3	Board of Studies of the subject of Plant Protection.	01-07-06
4	Board of Studies of the Basic and Social Science subjects.	20-07-06
	Dairy Science Faculty	
5	Board of Studies of the subjects of Dairy Technology.	23-09-06
6	Board of Studies of Basic subjects of Dairy Science Faculty.	23-09-06
7	Board of Studies of Dairy Business Management.	
	Veterinary Faculty	
8	Board of Studies of the Basic Subjects of Veterinary Faculty	06-07-06
9	Board of Studies of the Pre-clinical subjects of Veterinary Faculty	13-07-06
10	Board of Studies of the subject of Clinical subjects of Veterinary Faculty.	20-07-06
11	Board of Studies of the subjects of Animal Production.	11-07-06
12	Board of Studies of Faculty of Post Graduate Studies:	14-04-07

➤ The Board of Studies of all faculties specially considered the following 5 items:

- Scrutiny of application for recognition of teachers as Ph. D. guide.
- List of experts in the subjects dealt with by that Board of Studies.
- List of examiners from the field of subjects of that Board of Studies.
- Research Problems to be given to the students for M.Sc. /Ph.D. theses were discussed in Board of Studies.
- The evaluation of examination

results of all semesters and their analysis.

➤ Other decisions by different Board of Studies:

- The Board of Studies of Basic Subjects of Dairy Science Faculty had reviewed and repositioned the programme launched on PG Diploma in Dairy and Quality Food Assurance. It constituted a committee of (1) Dr. R. S. Sharma (2) Dr. S. S. Sannabhadti and (3) Mr. S. K. Bhalla, GM, GCMF for re-structuring of the syllabus, mode of examination, mode of

admission, requirement of training, eligibility criterion, etc., for the said course.

- The Board of Studies of Dairy Technology considered the issue of enhancing the knowledge of students with regard to dairy equipment and machines. To strengthen the knowledge of dairy equipment and machineries and to provide the exposure to the students in dismantling and assembling of various equipments, it was suggested to establish a new department under the name of Dairy Plant Machines and Operations.
- The Board of Studies of Social Science and Humanities in the Faculty of Agriculture suggested to establish language laboratory, coaching classes for CAT and JRF besides other item as listed above.

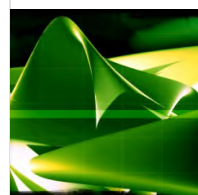
➤ Joint Meeting of the Board and Academic Council

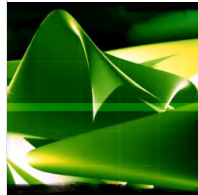
- A joint meeting of Board of Management and Academic Council was held on 02-01-2006 to consider the nomination of one member to be nominated jointly in Search Committee for appointment of the Vice Chancellor. The Joint meeting decided to nominate Dr. Y. L. Nene, Founder Chairman, Asian Agri.-History Foundation, Securanabad.

➤ Search Committee Constituted

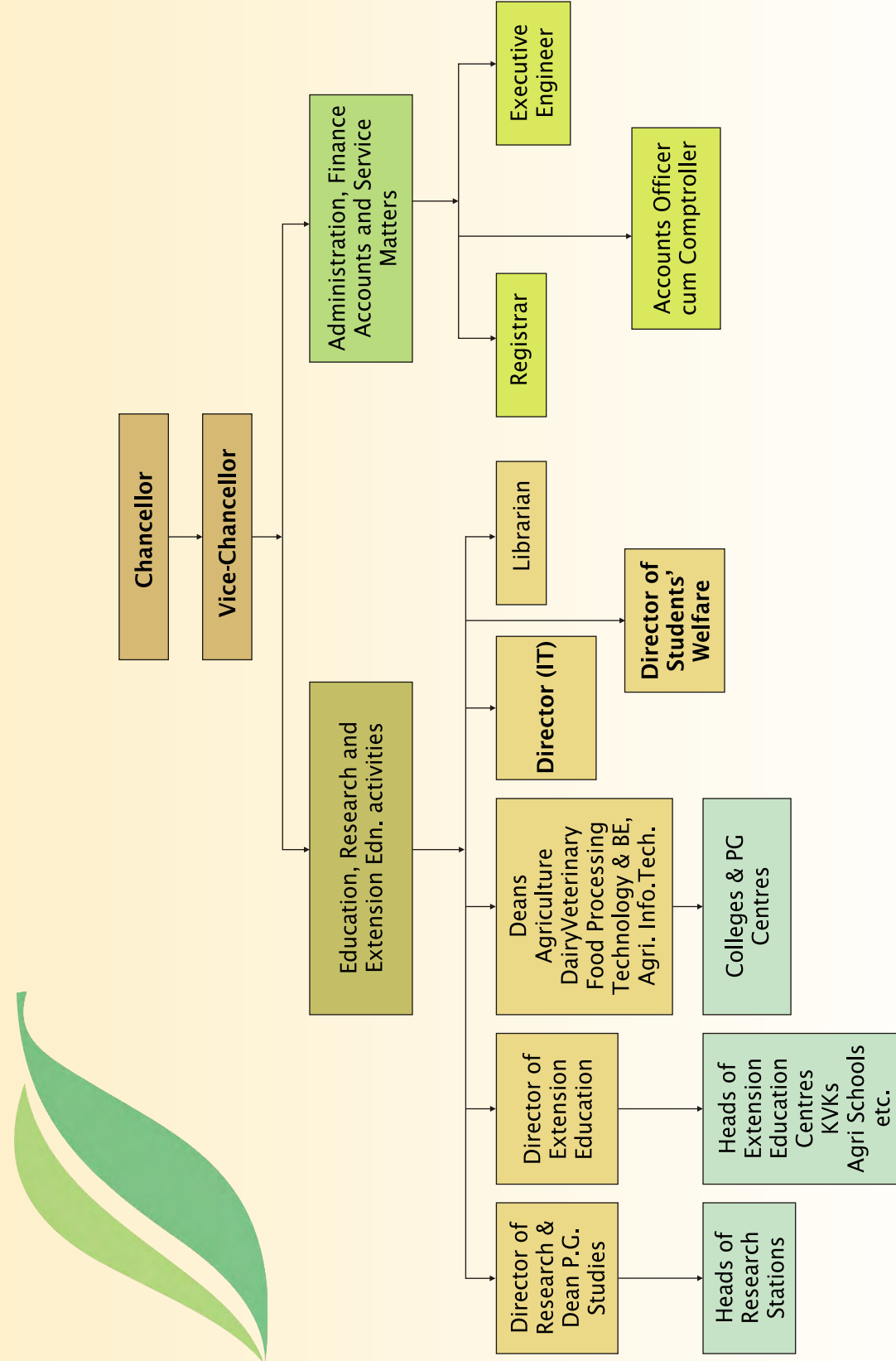
The term of appointment of the first

Vice Chancellor, Prof. M. C. Varshneya was expired on 21-05-2006, but it was extended till the new Vice Chancellor is appointed by the Govt. of Gujarat. Therefore, the Registrar initiated the procedure for Search Committee for appointment of the Vice Chancellor. The joint meeting of the Vice Chancellors of SAUs in Gujarat was held on 02-11-2006, which nominated Dr. K. N. Shelat, Retired Principal Secretary, Agri. & Coop. Department, Govt. of Gujarat and Founding Chairman, International School for Public Leadership, Gandhinagar. The Joint meeting of Board of Management and Academic Council, as mentioned above, had nominated Dr. Y. L. Nene and the ICAR had nominated Dr. Mangala Rai, Director General, ICAR, while the Hon'ble Chancellor appointed Dr. Parmatma Singh, Vice Chancellor of Rajasthan Agricultural University, Bikaner as the Chairman. The meeting of the Search Committee was held on 29-01-2007 at meeting room, ICAR, New Delhi and the recommendation of the committee was sent to Hon'ble the Chancellor and His Excellency the Governor of Gujarat. As recommended by the Search Committee, the Chancellor re-appointed Prof. M. C. Varshneya as the Vice Chancellor in accordance with Section 10(4)(a)(b) of the GAU Act, 2004. Prof. M. C. Varshneya took over as Vice Chancellor in pursuant to the Notification No. G.S. 11.8/26/Con. 16/2007 dated 13-02-2007.

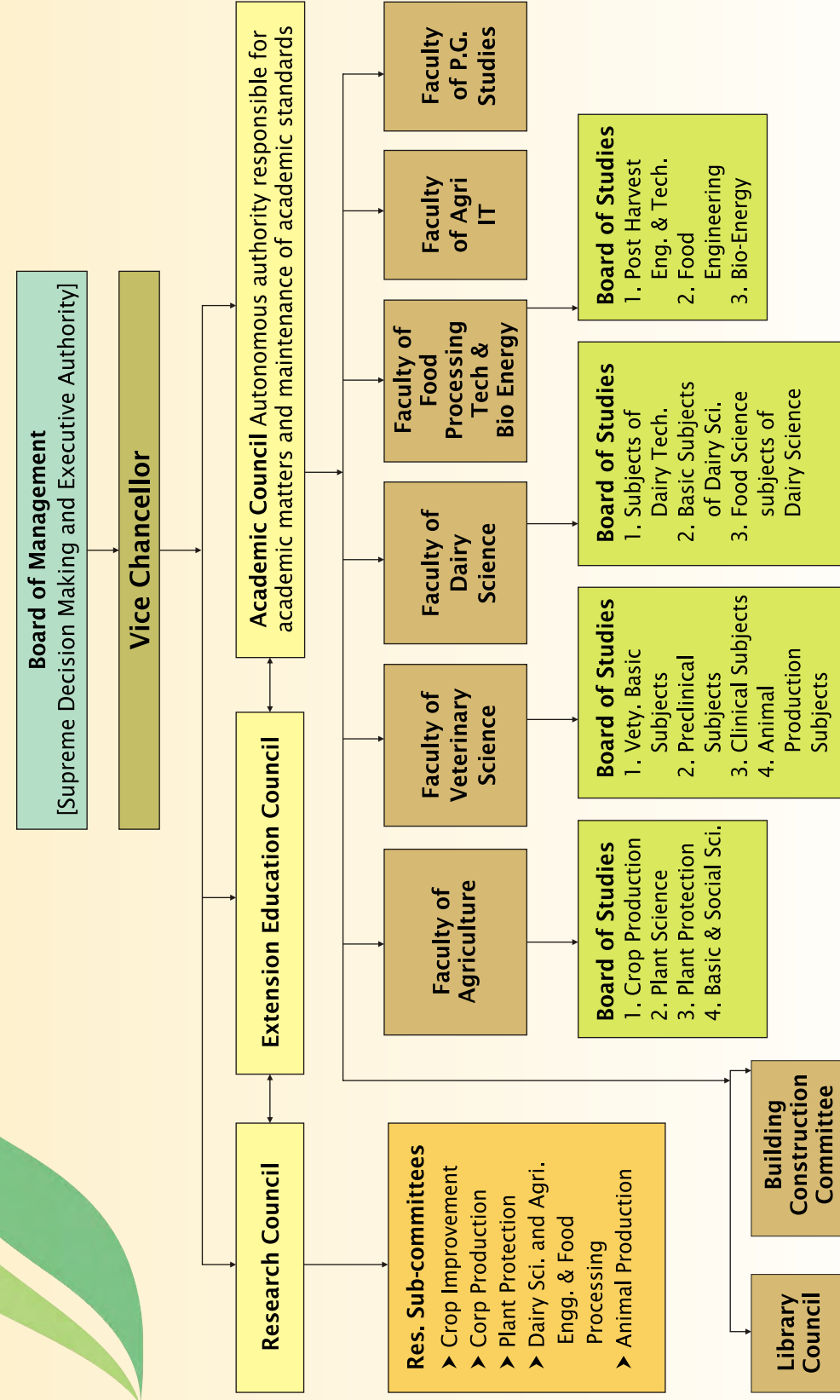




ORGANIZATIONAL SET-UP



Organizational Chart & Decision channels



Our Logo



Our Motto : *Krunavanto Rashtram Krushisampannam*
कृणवन्तो राष्ट्रं कृषिसंपन्नम्

Our Song :

હો સંસ્કૃતિ કૃષિ વત્સલમ્, કલ્યાણ કીજો મંગલમ્,
કૃણવન્તો રાષ્ટ્રં કૃષિસંપન્નમ્... કૃણવન્તો રાષ્ટ્રં કૃષિસંપન્નમ્
કૃણવન્તો રાષ્ટ્રં કૃષિસંપન્નમ્

સરદાર ગાથા ગુર્જરી, ચારૂ અમુલ ચરોતરી,
ક્ષીર સંસ્કૃતિ મહીસાગરી, આતિથ્ય આદર સે ભરી,
કૃણવન્તો રાષ્ટ્રં કૃષિસંપન્નમ્

ડાકોર શ્રીઠાકોર કા, કાચાવરોહણ કાલિકા,
વડતાલ ભાલ ગુલાલ, સૂન કરતાલ ધૂન નારાયણી,
કૃણવન્તો રાષ્ટ્રં કૃષિસંપન્નમ્

સંતરામ બોડાણા શ્રીમદ્, હરિ મારગી જોબન ભગત,
દિલ કે દિયે જલતે કિયે, ગુંજી ગીરા રવિશંકરી,
કૃણવન્તો રાષ્ટ્રં કૃષિસંપન્નમ્

સરદાર રાસ અડાસમેં, બાપુ ચલે થે સાથ મેં,
વિધાનગર આણંદ મેં, વિજ્ઞાન જ્ઞાન ગંગોતરી,
કૃણવન્તો રાષ્ટ્રં કૃષિસંપન્નમ્

ડૉ. બાલકૃષ્ણ જોષી

Chapter 3

The Vice Chancellor - High Winds Blow on High Hills

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. Vice-Chancellor gives effects to the order to the Board of Management regarding appointment, dismissal, suspension of the officers, teachers and employees of the University.

Prof. M. C. Varshneya, a renowned Agro- Meteorologist took over as the first Vice-Chancellor on 21-05-2004 and continued to be Vice-Chancellor of the University during the year under report.

The authorities of the University like Academic Council, Faculties, Board of Studies of different groups of subjects, Research Council, constituted by Prof. M. C. Varshneya as first Vice-Chancellor, continued to perform their responsibility under his direction and guidance. He also completed the task of drafting Statutes of the University and sent it to the Government for the approval after approval from the Board of Management.

The Government of Gujarat has

assigned him special responsibilities as Nodal Officer of all the four agricultural Universities of Gujarat for taking care of administrative and academic matters concerning the state agricultural universities.

National and State level Representation of the Vice Chancellor:

Prof. M.C. Varshneya has been nominated /appointed on the various State Level and National Level Committees by the competent authorities, which are given below:

- Member-Advisory Board, Sri Sri Institute of Agril. Science and Technology from 22nd August 2006
- Member- Task Force Food Processing Industries in Gujarat from 27th April 2006
- Member Work Plan Inter Departmental Co-ordination Committee from 21st November 2006.
- Member - State Food Security Mission from 6th November 2007

Trustee

- Trustee Narmada Integrated Rural & Environmental Development Society from 22/08/06



Table 3.1 Admission given in four SAUs

UNDER GRADUATE LEVEL (2006-07)					
Degree	Number of application received or admission	Actual admission given in SAUs			
		Anand	Junagadh	Navsari	Sardar Krushinagar
B.Sc.Agri	2590	101	78	78	68
B.V.Sc.and A.H	2370	56	00	00	51
B.Tech (D.T)	756	52	00	00	00
POST GRAUDATE LEVEL (2006-07)					
M.V.Sc.	110	52	00	00	26
Ph.D (Veterinary)	09	06	00	00	00
M.Sc.(Agri)	318	76	50	49	44
Ph.D (Agri)	65	20	07	08	11
M.Tech(Dairying)	23	05	00	00	00
M.Tech(FPT)	06	01	00	00	00
The annual convocation was organized.					

Gujarat, Overseas and other agencies.

Seminars and Meetings:

During the year under report Prof. Varshneya attended various seminars and meetings and presented papers. The details are as under:

- Attended Protection of Plant Varieties and Farmer's Right Authority Seminar organized by Mahyco R. & D. Centre Jalna on 7th April 2006.
- Attended Joint AGRESCO at Junagadh on 21st April 2006.
- Visited Israel to accompanied Hon' ble Chief Minister Shri Narendrabhai Modi in Agriculture Tech. 2006 at Israel from 7th May to 15th May 2006.
- Delivered Radio Talk on 21st May 2006
- Attended Krushi Mahotsav-2006 Seminar on Value addition, Market reforms and Agro-Industrial Policy organized by AAU, at Ahmedabad on 23rd May 2006.
- Attended One Day Seminar on Monsoon-2007 organized by College of Agriculture, Pune on 25th May 2008.
- Attended National Commission on Farmers Committee Meeting held at Gandhinagar on 14th-15th June 2006.
- Attended Workshop on ICT and Agriculture from Potential Global Perspective organized by Agriculture

Activities Of Nodal Officer

Administrative Matters:

Prof. M. C. Varshneya as a Nodal Officer of the four agricultural Universities of Gujarat has vigorously pursued various pending problems of the staff. He also took-up the issue of displacement of staff of erstwhile Gujarat Agricultural University and due to his painstaking efforts, problems related to pay commission, transfer, promotion etc. have been solved.

A major problem of regularisation of appointment of Assistant Professor (promoted) which was pending since 1990 was solved by the untiring efforts of Prof. M. C. Varshneya. Also raising the age of superannuation from 60 to 62 years was pending since 1996. This was also solved by the tenacious efforts of Prof. Varshneya.

As the Nodal Officer, he has been providing constant guidance in the matter of academic and personnel /management and has solved many problems with innovative approaches. During the year under report ten appointments on compassionate grounds to the nearest relatives of deceased employees have been made.

Anand Agricultural University also acts as the facilitator for the State Council of Agricultural Universities wherein all administration and other supports are provided to the council through out the

year.

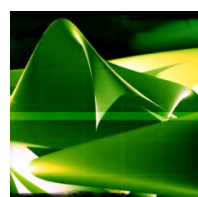
Academic and Examination Matters:

As the Nodal Officer for Academic and Examination matters Prof. M. C. Varshneya successfully organized tedious and tiresome exercise of central admission at UG and PG level for four SAUs of Gujarat. As Nodel Officer, he convened meetings of Registrars and Deans of four SAUs and conducted examinations and paper evaluation exercise for centralized admissions. The details of the students admitted are given in Table 3.1.

University Administration:

Prof. Varshneya has provided direction and pace to the university through participative management and committee approaches. During the year under report, 44 meetings of different authorities, important committees and councils 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, which were delayed till October were started two months in advance i.e. in August.

Under the dynamic leadership of Prof. M. C. Varshneya as Vice-Chancellor 33 new research projects to the tune of Rs.1893.63 lakh + US\$ 6000 have been sanctioned during the year under report by Government of India, Government of



- and Rural Dept. held at Gandhinagar on 16th June 2006.
- Participated in International Conference on Integrated Value Education held at Bangalore on 26th 27th June 2006.
 - Attended a seminar on Biogas-Bio-diesel held at Pipariya on 9th June 2006.
 - Attended First Meeting of More Crop & Income per Drop under the Chairmanship of Dr. M.S. Swaminathan, held at New Delhi on 9th September 2006.
 - Attended Second meeting of More Crop and Income per Drop under the Chairmanship of Dr. M.S. Swaminathan, held at New Delhi on 29th September 2006.
 - Attended working group on Horticulture for Plan Proposals for the Horticulture Sector held at New Delhi on 6th October 2006.
 - Attended National Conference on Aonla held at Ahmedabad on 21st November 2006.
 - Attended and made presentation on Climate and Weather Forecast in Agriculture at Annual Meeting of Indian Science Congress at Annamalai University, Chindabaram, Tamil Nadu on 4th 7th January 2007.
 - Attended State Credit Seminar-2007-08 organized by NABARD held at Ahmedabad on 18th January, 2007.
 - Attended International Workshop on Monsoon Climate variability and Change and their Impacts on Water, Food and Health in Western India at Nirma University, Ahmedabad on 6th February, 2007.
 - Attended Regional Meeting of IAUA (Indian Agricultural University Association) and VIII Agricultural Science Congress-2007 held at Tamil Nadu Agricultural University, Coimbatore.
 - Attended a Meeting of Mega Seed Project held at New Delhi organized by Directorate of Seed Research, MAU, (UP) on 1st March 2007.



Chapter 4 Human Resource Development: Man is the Mega Resource

The AAU while managing other resources takes special care for development of its human resources. Keeping in view the changing global scenario, traditional research and market driven economy, the AAU scientists are constantly encouraged to acquire and update knowledge, improvement of skill, development and generation of new technology through cutting edge research. Thus, at AAU the Human Resource Development Process is now accelerated.

Seminar/Workshop organized:

The University during the year under report organized following programmes/trainings/workshops/seminars and number of scientists were sent to attend training/seminar.

Training Programmes

1. "Regional soil testing workshop cum training programme" was organized on 8-9 February, 2007 in association with Project Coordinator (STCR), Bhopal. Eighty five members were participated from staff of soil testing laboratories of Maharashtra, Rajasthan, Madhya Pradesh, Gujarat and staff members of AAU, Anand.
2. "Analytical methods of soil, water, manures and pollutants in agriculture" jointly organized by Deputy Director of Agriculture (S.C.), Department of

Ag. Chem. & Soil Science, BACA, AAU, Anand and director of Extension Education, AAU, Anand at Sardar Smruti Kendra, Anand on 01.08.2006 to 02.08.2006 and 07.08.2006 to 08.08.2006 for the technical staff of soil testing laboratory, Dept. of Agriculture, Gujarat State.

3. A laboratory training on "Aonla Processing for 'MAITREE', A association of consultant doctors of Anand was organized on 16-12-2006 at Department of Horticulture, B.A.C.A., A.A.U., Anand. Demonstration and training was given on preparation of different aonla products like candy, aonla-ginger flakes, pachan aonla, pickles, powder and drying of aonla by Prof. N. R. Ray.
4. Two (2) Farmers Training each of two days on Jatropha Nursery Raising and Plantation were organized under the NOVOD sponsored project during 7-8th and 12-13th December, 2006.
5. Two (2) trainers training of 3 days each on Jatropha Nursery Raising and Plantation were organized under the NOVOD sponsored project during 14-16th May, 2006 and 22-24th November, 2006.
6. Short-term training Program for Academia on "New Horizons in Promoting Human Health and Well-





being using Synbiotics” was conducted by Dept. of Microbiology from 12th to 17th Feb 2007 at SMC College of Dairy Science, AAU, Anand. Seventeen participants from various part of the country associated with various educational institutes attended the training programme

- Short-term training programme for Industry on “Synbiotic Functional Dairy Products Novel Business Prospects for Dairy Industry” was conducted by Dept. of Microbiology from 29th Jan to 3rd Feb 2007 at SMC College of Dairy Science, AAU, Anand.

Winter School

- Winter School sponsored by ICAR, New Delhi on “Molecular Detection of Seed Borne diseases and Seed Health Status as Global Prospective” was organized by Dept. of Plant Pathology, BACA, Anand from December 12, 2006 to January 01, 2007. The total 30 participants attended the training programme. Out of these, eight participants were from AAU of which three were on the merit basis and five on self finance.
- Winter School on “Challenges in Poultry Farming” organized by Poultry Complex, AAU, Anand from Jan. 24 to Feb. 13, 2007. Total 27 participants from various parts of the country including seven from AAU attended the training programme.

National Seminar

- Seminar on “Opportunities for

graduates in Globalization for Agriculture, Dairy Science and Veterinary students” AAVCA Seminar Anand Agricultural University 11 January, 2006.

- Seminar on Opportunities and challenges for Agriculture sector in Globalization, Organized by GAAS, Ahmedabad Chapter in 19 June, 2006. Total 148 participants from AAU attended the seminar.

Conference - Workshop

Workshop on “Plant Variety Protection” was organized on 15th Nov, 2006 at AAU, Anand in collaboration with Gujrat Council on Science & Technology (GUJCOST), Gandhinagar.

Scientists' Meeting

Biological Control Research Laboratory Anand organized one day interface meeting on " Popularizing Biocontrol- Problems and Perspectives" at Anand on 17th February 2007 in which the entrepreneurs producing and/or marketing various biocontrol agents, officers from co-operative sugar factories and scientists of plant protection discipline participated.

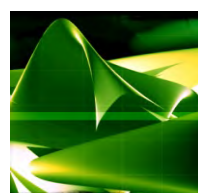
Managerial Training:

Besides the above mentioned seminar/trainings/ following administrative and managerial training were also organized by the University.

Sr. No	Subject of training	Duration	Venue	Name of the training Institute	Numbers of trainees
1	Adminstrative training to promotees and newly recruited class-III employees	21-07-06 to 23-07-06	Dairy Science College, Anand	A.A.U., Anand	50

The University has also sent its employees for other managerial, skill enhancement training, the detail of such training is given below:

Sr. No.	Subject of training	Duration	Venue	Name of the training Institute	Numbers of trainees
1	The right to information Act 2005 PIO/A.P.I.O.	21-07-06 to 23-07-06	Ahmedabad	SPIPA Ahmedabad	18
2	Course on Computer Concepts	05-04-06 to 04-05-06	Mogri Dist: Anand	I.T.C. Centre, Mogri	300
3	The right to information Act- 2005 PIO/A.P.I.O.	05-05-06 to 06-05-06	Ahmedabad	SPIPA Ahmedabad	07
4	Reservation policy for scheduled castes/ scheduled Tribes and other backward classes in Government/PSUS	07-04-06 to 08-04-06	Ahmedabad	Ahmedabad Management Association	05
5	The right to information Act- 2005 PIO/A.P.I.O.	16-06-06 to 17-06-06	Ahmedabad	SPIPA Ahmedabad	06
6	Service Rules Finance Rules and General Administration.	10-07-06 to 15-07-06	Ahmedabad	SPIPA Ahmedabad	24
7	"Pension & New Pension Scheme its application and Implications"	14-09-06 to 16-09-06	New Delhi	Socio Economic Research & Action, New Delhi	03
8	"Sustainable Agriculture for Poverty Eradication"	09-10-06 to 14-10-06	Ahmedabad	SPIPA Ahmedabad	05
9	Training Programme on "Promotion of Entrepreneurship in Agricultural"	27-11-06 to 02-12-06	NIRD Rajendranagar Hyderabad	NIRD Rajendranagar Hyderabad	02
10	"Finance Act-2006 in depth analysis of Salient aspects with special reference to TDS & its Complexities electronics filling of TDS returns Taxation of fringe benefits and company Taxation etc."	16-12-06	Ahmedabad	Institute of Socio Economics Research & Action (ISERA) New Delhi	02





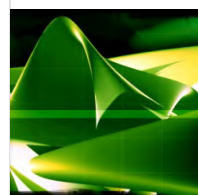
11	Spoken English	26-02-07 to 03-03-07	Anand	Prof.H.K.Mehta	11
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Human Resource:

The staff position as on 31-03-2007 in the Anand Agricultural University is given below:

Sr. No.	Cadre	Sanctioned post	Filled up posts	Vacant posts
1 University Officer's				
A	Vice-Chancellor	1	1	-
B	Director of Research	1	1	-
C	Registrar	1	1	-
D	Director of Extension Education	1	1	-
E	Account Officer-cum- Comptroller	1	1	-
F	Director (I.T.)	1	-	1
G	Director, Students' Welfare	-	-	-
H	University Librarian	-	-	-
Total		6	5	1
2. Teaching / Research / Extension:				
A	Principal	3	3	
B	Associate Director of Research	2	2	
C	Professor & equivalent	51	33	18
D	Associate Professor & equivalent	152	100	52
E	Asstt. Professor & equivalent	242	189	53
F	Asstt. Librarian	1	-	1
G	Physical Instructor	2	2	-
H	Farm Manager	4	4	-
I	Asstt. Farm Manager	4	2	2
Total		461	335	126
3. Administration - Class-I				
A	Assistant Registrar	2	1	1
B	Adm-cum-Accounts Officer	1	-	1
C	Legal Officer	1	-	1
Total		4	1	3
4. Non Technical Class-I				
A	Executive Engineer	1	-	1
B	Deputy Engineer	2	2	-
C	Medical Officer	1	-	1
Total		4	2	2

Sr. No.	Cadre	Sanctioned post	Filled up Posts	Vacant posts
5. Administration - Class-II				
A	Accounts Officer (Cash)	1	1	-
B	Accounts Officer (P.F/ Cash)	1	1	-
C	Assistant Adm. Officer	3	3	-
D	Audit Officer	1	-	1
Total		6	5	1
6 Adm- Class -III				
A	Office Supdt	27	18	9
B	Head Clerk	21	16	5
C	Senior Clerk	95	89	06
D	Junior Clerk	142	141	01
Total		285	264	21
7. Technical Class -III				
A	Agri Officer /S.R.A (Agri) & equivalent	120	91	29
B	Programme Assistant	5	3	2
C	Veterinary Officer & equivalent	15	10	5
D	Senior Research Assistant (Agri. Engg)	4	4	-
E	Senior Research Assistant (Dairy)/ Dairy Supervisor	13	-	13
F	Agri Supervisor & equivalent	49	24	25
G	Agri Asstt. & equivalent	173	173	-
Total		378	279	99
8. Non Technical - Class- III				
A	Steno Grade - I	3	3	-
B	Steno Grade - II	13	13	-
C	Steno Grade -III	10	05	05
D	Lab Technician	65	53	12
E	Driver	58	47	11
F	Tractor Driver	20	13	07
G	Stockman / Live Stock Assistant	11	8	3
Total		180	142	38
9. Isolated Cadres - Enclosed proforma		65	48	17
Total		65	48	17
10. Class - IV Cadres (Regular)		315	259	56
Total		315	259	56
11 As per Supreme Court order Created posts				
A	Class - III (Jr.Clerk /Agri Asstt./ Driver/Tractor Driver)	15	14	1
B	Class - IV	247	212	35
Total		262	226	36
Grant Total		1966	1566	400





Details of Isolated Cadres				
Sr. No.	Cadre	Sanctioned	Filled up	Vacant
1	Blacksmith	2	2	-
2	Carpenter	2	2	-
3	Compounder	2	2	-
4	Junior Mechanic-cum-wiremen	1	1	-
5	Mechanic	1	-	1
6	Boiler Attendant	3	2	1
7	Compressor Attendant	2	2	-
8	Sanetary Inspector	1	-	1
9	Fitter	2	1	1
10	Bakery Operator	1	1	-
11	Plumber	1	1	-
12	Hatchery Supervisor /Chick Sexior	1	1	-
13	X- ray Technician	1	-	1
14	Qualify midwife	1	-	1
15	Project Operator	2	1	1
16	Electrician	1	-	1
17	Junior Instructor (Bakery)	1	-	1
18	Craft Teacher	1	1	-
19	Balwadi Teacher	1	1	-
20	Shaving Teacher	1	1	-
21	Teaching Assistant	3	2	1
22	Hostel Warden	1	1	-
23	Tracer	1	1	-
24	Junior Instructor	1	1	-
25	Junior Instructress	1	1	-
26	Assistant Instructor	1	1	-
27	Mechanic cum Draftsman	1	1	-
28	Draftsman	1	-	1
29	Senior Wireman	1	1	-
30	Wireman	3	3	-
31	Wireman (Electrical)	1	-	1
32	Librarian	1	-	1
33	Artist/ Photographer	1	1	-
34	Artist	1	1	-
35	Statistical Assistant	1	1	-
36	Computer Operator	2	1	1

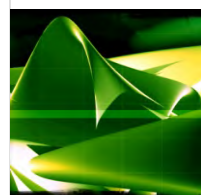
Sr. No.	Cadre	Sanctioned	Filled up	Vacant
37	Data Entry cum Disk Librarian	1	1	-
38	Library Assistant	1	1	-
39	Programmer	1	1	-
40	Data Processor	1	1	-
41	Senior Technician	2	1	1
42	Instructor (Baking /Science)	3	3	-
43	Senior Lab Technician (Electronics)	1	-	1
44	Junior Engineer (Civil/Electric)	4	4	-
45	Prof reader	1	-	1
46	Electrician (Arnej)	1	1	-
Total		65	48	17

Reservation policy implemented:

The Anand Agricultural University implements the reservation policy of the Govt. in University service in letter and spirit. During the year under report the SC / ST / SEBC backlog was as under:

Sr. No.	Cadre	Backlog as on 31-03-2007			
		SC	ST	SEBC	Total
1.	Agril. Officer	01	02	--	03
2.	Agril. Assistant	--	08	--	08
3.	Laboratory Technician	--	05	--	05
Total		01	15	--	16

Note: Out of 16 backlog, 3 posts of Agril. Officers & 5 posts of Laboratory Technicians are filled up by the University in year 2007-08.





The University Flag

Chapter 5 Education: Chiseling Agri-tech Entrepreneurs

Capacity building through market driven courses with high quality entrepreneur skill is the main focus of education in the Anand Agricultural University.

Having a great heritage behind, Anand Agricultural University (AAU) stands for revitalization of technology in order to develop rural community and caters the need for knowledge workers to make India a developed country. On one hand, this University imparts graduate and post-graduate programs in Agriculture, Veterinary Science and Dairy Technology, Food Process Technology & Bio-Energy under the administration of the Registrar, on the other; it imparts diploma and certificate courses in Agriculture, Home Science, Extension Education and Baking Technology under the supervision of Director of Extension Education.

The AAU imparts effective education in Agricultural and allied sciences through residential courses under semester system for providing the graduate and Post-graduate degrees in three faculties namely, Agriculture, Dairy Science and Veterinary Science and Animal Husbandry and Post-graduate degree in Food Processing Technology & Bio-Energy. Also the University imparts PG Diploma in Agricultural I.T. and 14-month PG Diploma in Dairy Food Quality Assurance.

These programmes run at following

colleges and institutions.

1. B. A. College of Agriculture, Anand
2. Sheth M. C. College of Dairy Science, Anand
3. College of Veterinary Science & Animal Husbandry, Anand
4. Post-graduate Institute of Extension Education, EEI, Anand
5. Post-graduate Institute of Food Processing Technology & Bio-energy, Anand

B. A. College of Agriculture:

The B. A. College of Agriculture, one of the oldest Colleges of Agriculture in the country which saw the light of the day in independent India was established with generous donation of Sheth Amrutlal Hargovandas to impart education involving exposure to concepts, skills and knowledge in agriculture and related sciences. It prepares students for B.Sc. (Agri.), M.Sc. (Agri.) and Ph.D. degree with values to serve rural people, farming community and having thorough entrepreneur skills. The college has so far produced 5175 graduates, 1333 post-graduates including Ph.D. During the period under report 56 B.Sc. (Agri.), 63 M.Sc. (Agri.) and 24 Ph.D. students have completed their studies from the College.

The B. A. College of Agriculture has following full-fledged departments with



well equipped laboratory and equipments.

1. Department of Agronomy
2. Department of Agril. Economics
3. Department of Agri. Chem. & Soil Science
4. Department of Extension Education
5. Department of Plant Pathology
6. Department of Microbiology
7. Department of Bio-Control/ Entomology
8. Department of Nematology
9. Department of Plant Breeding
10. Department of Agricultural Statistics
11. Department of Agricultural Meteorology
12. Department of Bio-Chemistry
13. Department of Horticulture
14. Department of Agricultural Bio-Technology

The college has 20 hectare Land for field experiments for PG & UG students. Besides this, plants and machineries for experiential learning in following areas along with Rural Agricultural Work Experience programme, have been established.

1. Value addition in Aonla, Mango, Tomato and Kagzi lime.

2. High tech Floriculture
3. Bio-Pesticide Laboratory for Commercial Production
4. Apiary and Apiculture Training Centre
5. Cultivation, Processing and Marketing of Medicinal and Aromatic Plants.

Sheth M. C. College of Dairy Science:

Sheth M.C. College of Dairy Science was started in 1961. Over the years, the College broadened its educational base and the dairy students started earning their Bachelor of Science degrees in Dairy Technology [B.Sc.(D.T.)]. In 1989, the course work was upgraded to an enormous extent with many new subjects and wider orientations. Students who enrolled in 1989 and afterward were awarded the Degree of Bachelor of Technology in Dairy Technology [B.Tech.(D.T.)]. The College has so far produced 1015 graduates, 149 post-graduate including Ph.D. During the year under report 57 B.Tech. (D.T.) and 5 M.Sc.(Dairying) candidates have completed their studies from the College.

The Sheth M. C. College of Dairy Science has following departments with well equipped laboratory and equipments.

1. Department of Dairy Chemistry
2. Department of Dairy Technology
3. Department of Dairy Engineering

4. Department of Dairy Microbiology
5. Department of Dairy Business Management
6. Department of Dairy Processing and Operations

The students of the Dairy Science College are provided with one year practical work experience in a commercially viable environment at Vidya dairy, a Rs 13crore state-of-art dairy, established in 1994. The distinguishing feature of Vidya dairy is that in addition to provide students an opportunity of having first-hand experience of modern dairy processing and management practices, it has established itself as a commercially viable, self-supporting venture.

College of Veterinary Science & Animal Husbandry:

Under Veterinary Science Faculty the College of Veterinary Science & Animal Husbandry, Anand, established in the year 1964, played a key role in development and growth of livestock sector in Gujarat. The College shoulders major responsibilities in teaching subjects of Veterinary and Animal Science, conducting high quality research, and enhancing the economic productivity, as well as transferring the technology to the farmers. The college has so far produced 1640 graduates, 512 post-graduates including Ph.D. During the year under report 52 B.V.Sc. & A.H. and 31 M.V.Sc. candidates have completed their studies

from the College.

The College of Veterinary Science & Animal Husbandry has following departments with well equipped laboratory and equipments.

1. Department of Veterinary Microbiology
2. Department of Animal Breeding and Genetics
3. Department of Veterinary Parasitology
4. Department of Veterinary Anatomy
5. Department of Animal Reproduction Gynaecology and Obstetrics
6. Department of Veterinary Bio-Chemistry/Biotechnology
7. Department of Clinical Veterinary Medicine
8. Department of Veterinary Pharmacology and Toxicology
9. Department of Epidemiology and Veterinary Medicine
10. Department of Veterinary Surgery
11. Department of Veterinary Pathology
12. Department of Livestock Production Technology
13. Department of Livestock Production & Management
14. Department of Veterinary Public Health





- 15. Department of Animal Nutrition
- 16. Department of Veterinary Hospital
- 17. Department of Veterinary Physiology
- 18. Department of Veterinary & Animal Husbandry Extension

The college has a referral hospital named Zaveri Hospital, for treatment of animals and hands-on-training of the students.

The college has 29.9 ha. Land for field experiments for PG students.

Post-graduate Institute of Food Processing Technology & Bio-energy, Anand:

What was started as a Department of Agricultural Product Process Engineering (APPE) in the year 1977 is now transformed into a Post-graduate Institute of Food Processing Technology and Bio-energy with commencement of master level programme in Food Processing Technology & Bio-energy [M.Tech. (FPT)]. The Institute provides M. Tech degree in Food Processing Technology. It has the following departments.

- 1. Department of Food Engineering
- 2. Department of Post-Harvest Engineering & Technology
- 3. Department of Bio-Energy

The institute is having full fledged Mechanical Engineering workshop and a

pulse mill for hands on training in Post Harvest Technology. Since its inception in the year 2005 as many as 04 students obtained Post graduate degree in [M. Tech.(FPT)]. Total intake capacity of the institute is 5 Masters and 3 Ph.D candidates.

Post-graduate Institute of Extension Education:

The Extension Education Institute, Anand was started by Govt. of India on 17th September 1962 to provide training on different aspects of extension management to the government officials of Western Region, which covers States viz. Gujarat, Rajasthan, Maharashtra, Madhya Pradesh, Chattisgarh, Goa, Union Territory Dadra Nagar Haveli, Diu & Daman. The Institute has been recognized by university for post graduate teaching. It admits 10 students for M.Sc.Aagri. in Extension and Ph.D.

Graduate Study Programme and Admission Procedure:

The University is mainly a residential one and follows semester system of education. Duration of B.Sc. (Agri.) and B. Tech. (Dairy Technology) study course is of four years divided into eight semesters, while B. V. Sc. & A.H, is of five years divided into ten semesters. The candidates should have passed Higher Secondary School Certificate examination in science stream with English, Physics, Chemistry, Biology and Mathematics (optional for Agri.) for admission in all the

degree courses run by the University. Candidates are selected for admission strictly on merit basis. The medium of instruction is English.

Reservation:

Reservations for different categories, as per the Government directives, are followed in the University. For the category of SC 7% seats are reserved while 15% for ST and 27% for SEBC candidates are reserved. Also 15% seats are reserved for candidates who passed All India Common Entrance Test conducted by the ICAR in B.Sc.(Agri.) and B.Tech.(DT) courses. In the B.V.Sc. & A.H. degree course nine seats are reserved for candidates who have passed the common entrance test conducted by the Veterinary Council of India, New Delhi. The candidates of Central Board of Secondary Education of Gujarat are admitted on pro-rata basis to the Gujarat Secondary Education Board students.

Weightage of 5% marks is given to the members of farmers' family on submission of certificate (7-12 record)

from a competent authority for having land in Gujarat under cultivation. At graduation level, 20 seats in Agriculture, 15 seats in Veterinary and 15 seats in Dairy faculty are reserved as NRI/Payment seats. The fee for NRI seat is \$3500 for each semester, and for the payment seats, one needs to pay Rs.25,000/- per semester. Three per cent seats are reserved for the physically challenged candidates according to the verdict of the Supreme Court.

The number of seats and the actual admitted students' details for the academic year 2006-07 are given in Table 5.1.

Exemption of Tuition Fees for Girls:

The girl students (except girls of NRI/payments seats) are exempted from tuition and hostel fees.

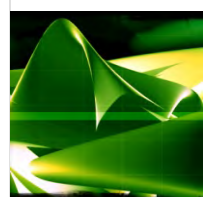
Post-Graduate study course:

There is no separate building or department for the PG programme. The faculties meant for the UG studies and Research handle the PG studies in their



Table 5.1 Students admitted in AAU for academic year 2006-07

Graduate Study Course-Admission & Output (UG)								
Sr. No.	Graduation & its duration	Name of the College	Admission capacity				Students Admitted	Students Passed
			Gen/ SC/ ST/ OBC	NRI/ Payment	ICAR/ VCI	Donor		
1.	B.Sc. (Agri.) 4 Years (8 semesters)	B. A. College of Agriculture, Anand	65	20	10	13	98	56
2.	B.V.Sc. & A.H. 5 years (10 semesters)	College of Vety. Sci. & A.H., Anand	50	15	09	-	71	52
3.	B. Tech. (Dairy Tech.) 4 Years (8 semesters)	Sheth M.C. College of Dairy Science, Anand	40	15	06	02	52	57





respective subjects.

Admission procedure:

A candidate aspiring to take admission in PG 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 55% in aggregate as well as in the field in which he/she seeks admission.

Entrance test and personal interview are conducted and on the basis of performance in the entrance test, interview, and as per the intake capacity students are admitted.

Two academic years (four semesters) are required for the course work, research thesis preparation and examination leading to the Master's Degree. A minimum period of three academic years (six semesters) is required for the Ph.D. degree.

Intake Capacity:

The Anand Agricultural University has taken up an innovative approach for fixing intake capacity for master's and Ph.D. programmes.

Till the Academic Council fixed the intake capacity in a particular discipline the question of how many students should be admitted was dependent on the willingness of a teacher in that discipline. Therefore, the Hon'ble Vice-Chancellor proposed that intake capacity for Post-graduate programmes in a particular discipline should be fixed on the basis of

departments, infrastructure in that department and the experts / recognized teachers available.

The Academic Council had unanimously decided and fixed the intake capacity as follows:

Faculty	Masters	Ph.D.
Agriculture	176 (32)	66 (33)
Veterinary	89 (12)	20 (10)
Dairy	24 (4)	8 (4)
F.P.T. & B.E.	7 (1)	3 (2)
Total.	296	97

Note:

- Figures in parentheses show NRI / Payment seats
- 25% seats are reserved for ICAR/GOI candidates
- The intake capacity in P.G. Diploma in Agril. I.T is 15 and Dairy and Food Quality Assurance - 20

Subject wise fixed intake capacity is given in Appendix-4

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 in the University. However, since the Council was not adequately staffed and functional the central admission for all SAUs of Gujarat are processed by the Vice Chancellor & Nodal Officer, Anand Agricultural University.

In response to the advertisement published in popular Gujarati dailies the applications were processed through computer OMR system and merit list was prepared. Thereafter, the candidates were called for counselling. During the year under report, details of applications received and students admitted in four SAUs are given in Table 5.2.

Admission and Output (PG):

During the year under report

admissions given in different faculties at Masters and Ph.D level under Anand Agricultural University, Anand are as under:

The details of admission in PG studies are given in Table 5.3.

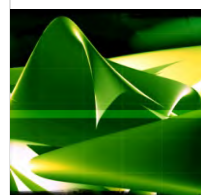
As mentioned earlier, the admission for PG programmes in all four Agricultural Universities were processed centrally by the AAU. In response to the advertisement published in popular

Table 5.2 Students admitted in four SAUs

Sr. No.	Name of Course	No. of applications received	Candidates called for interview	No. of Students admitted
1.	B.Sc. (Agri.)	2590	1110	325
2.	B. V. Sc. & A. H.	2370	1921	107
3.	B. Tech. (Dairy Technology)	756	544	52

Table 5.3 Students admitted in PG studies at AAU

No	Name of the Course	Duration of the course	Name of the College	Students Admitted	Students passed
1.	M.Sc. (Agri.)	2 Years (4 semesters)	B.A. College of Agriculture, Anand	110	63
2.	M.V. Sc.	2 Years (4 semesters)	College of Vety. Sci. & A. H., Anand	61	31
3.	M.Sc. (Dairying)	2 Years (4 semesters)	S.M.C. College of Dairy Science, Anand	05	05
4.	M. Tech. (D.T.)	2 Years (4 semesters)	S.M.C. College of Dairy Science, Anand	08	--
5.	M.Sc.	3 Years (6 semesters)	B.A. College of Agriculture, Anand	16	--
6.	M.Tech (FPT)	2 Years (4 semesters)	Faculty of Food Processing Technology and Bio-Energy	01	--
7.	Ph. D.	3 Years (6 semesters)	All the above colleges	37	24
8.	PG Diploma in Agril. (I.T.)	1 ½ Years (3 semesters)	B.A. College of Agriculture, Anand	07	--





Sr. No.	Name of Course	No. of application	Students admitted
Agriculture			
1.	M. Sc. (Agri.)	318	219
2.	M.Sc.	39	16
3.	Ph.D.	65	44
Veterinary			
4.	M.V.Sc.	110	78
5.	Ph.D.	09	06

Gujarati as well as English daily newspapers the applications received and entrance test papers were processed through computer OMR system and merit list was prepared. Thereafter, the candidates were called for counseling. During the year under report following admission were issued at PG level in all four Agricultural Universities of Gujarat State.

Examination:

The University conducted its

examinations regularly, as per schedule for the various degree courses mentioned herein. The results were also declared in time. Annual examinations prescribed by the Veterinary Council of India for B.V.Sc. and A.H. were conducted during September-October 06. Detailed programme of Examinations are given in Appenndix-5.

Result Analysis:

The number of students passed with different level of success during the academic year 2006-07 are given in Table 5.4.

Convocation:

Convocation is the most pious ritual or the highest *yajna* for any University known as temple of learning. The AAU

performs the ritual ceremoniously every year and organizes convocation. The Board of Management and Academic Council have fixed *Vasant Panchmi*, the day of *Saraswati Puja* (Worship of Goddess Saraswati) for convocation. Since special convocation for students of erstwhile GAU was organized on 11-01-2006, the second annual convocation was organized on May 16, 2006.

Second Annual Convocation:

His Excellency the Governor of Gujarat and the Chancellor of the University, Shri Nawal Kishore Sharma presided over second Annual Convocation and Dr. M.S. Swaminathan, Chairman,

M.S. Swaminathan Research Foundation, Chennai, and National Commission on Farmers delivered the Convocation address as the Chief Guest. Shri Bhupendrasinhji Chudasma, Hon'ble Minister of Agriculture, Gujarat State, was present as the Guest of Honour.

In all, 290 graduate and post-graduate candidates were conferred the degrees in this Convocation.

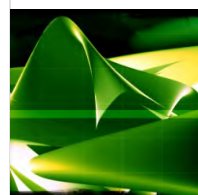
Gold Medals:

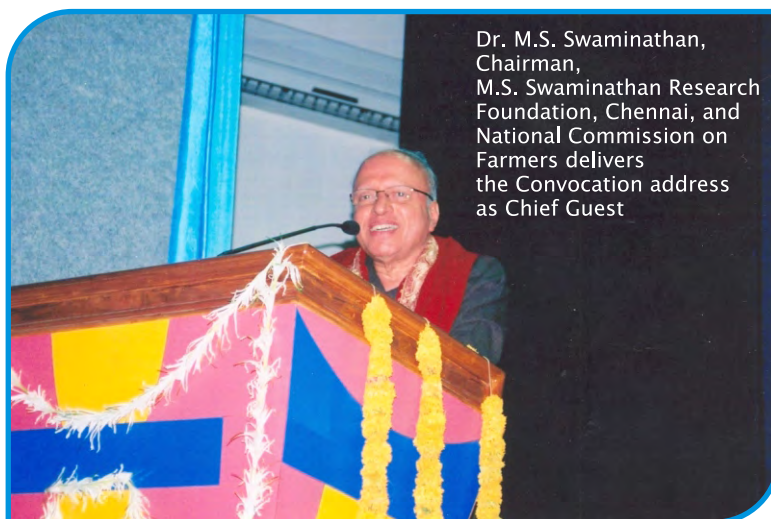
Shri. Ajaykumar Bhagvanji Maghodia was awarded Chancellor's Gold Medal for Ph.D. thesis entitled, "Biometrical Analysis and Bio-Ecology of *Spodoptera litura Fabricius* on Different Hosts Along

Table 5.4 Results Analysis					
Degree	No. of students Passed with				Total (passed out)
	First class with Distinction	First class	Second Class	Pass Class	
Graduate					
B.Sc.(Agri.)	11	07	18	20	56
B.V.Sc. and A.H.	04	30	18	-	52
B.Tech.(D.T.)	02	29	26	-	57
Post Graduate					
M.Sc.(Agri.)	04	24	35	-	63
M.V.Sc.	13	13	05	-	31
M.Sc.(Dairying)	-	02	03	-	05
M.Tech. (D.T.)	-	-	-	-	-
M.Sc.	-	-	-	-	-
M.Tech.(FPT)	-	-	-	-	-
Ph.D.	-	-	-	-	24
PG Diploma in Agril. (I.T.)	-	-	-	-	-



Hon'ble Chancellor Shri Nawal Kishore Sharma, Dr. M.S. Swaminathan, Chairman, NCF, Hon'ble Minister of Agriculture, Shri Bhupendrasinhji Chudasma, and Vice Chancellor of AAU Prof. M. C. Varshneya are seen on the dias at the Second Annual Convocation of the AAU





Dr. M.S. Swaminathan, Chairman, M.S. Swaminathan Research Foundation, Chennai, and National Commission on Farmers delivers the Convocation address as Chief Guest

Technology, Udaipur delivered the Convocation address as the Chief Guest. Shri Bhupendrasinh Chudasma, Hon'ble Minister of Agriculture, Gujarat State, was present as the Guest of Honour.

In all, 242 graduate and post-graduate candidates received the degrees in this Convocation.

Gold Medals:

Dr. Harshal Eknath Patil was awarded Chancellor's Gold Medal for Ph.D. Thesis entitled, "Genetic Analysis of Grain Yield, its Components and Drought Resistance in Pearl Millet [*Pennisetum glaucum* (L). R. Br. *emend stultz*]" in Agriculture faculty while Miss Roshni R. Samarth, a student of B. A. College of Agriculture was awarded Chancellor's Gold Medal for M.Sc. degree.

Also Shri Mohanjai Kumar Jha, a student of B. A. College of Agriculture, Shri Jhala Shivrajsinh, a student of Veterinary Science and Shri Deepti Divakaran, a student of Dairy Science college were awarded Vice Chancellor's Gold Medal for the year 2006-07 at Under-graduate level.

Details of other medals and their recipients are given in Appendix-6.

Placements:

Details of placement and other co-curricular activities are given in chapter-7.



Chapter 6 Research : Expanding Agri-horizons

The main objectives of research of Anand Agricultural University are;

1. To enhance production and productivity of agricultural and horticultural commodities viz., paddy, maize, wheat, pulses, oilseeds, cotton, tobacco etc.
2. To increase milk production, processing and value added milk products.
3. To improve the genetic potential and animal health for the upliftment of socio-economic conditions of farming community.

Technologies generated by Anand Agricultural University are valuable and important for the farming community to revolutionize Indian Agriculture and to change the life style of Indian farmers.

Six districts of Gujarat viz., Ahmedabad, Anand, Dahod, Kheda,

Panchmahal and Vadodara fall under the jurisdiction of the University. It has 21.70 lakh ha of cultivable area with varying soil and climatic conditions covered under agricultural zones III, IV and VIII. The Agro-climatic zonewise Research Stations of the AAU are given in Table-6.1.

Research activities carried out by the scientists of different faculties are focused on multi-dimensional research approach to solve problems of farmers and to satisfy the needs.

Recommendations that have emerged out are the result of integrated research activities carried out during 2006-07 by the different research centre / departments of Anand Agricultural University as a part of scientific programmes funded by different agencies viz., GOG, GOI, ICAR, DBT, DST, ISRO and private organizations.

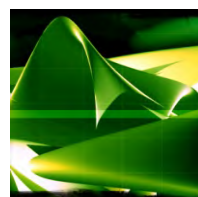
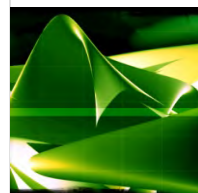




Table- 6.1: Agro-climatic zonewise Research Stations with area

Sr. No.	Name of Centre	Mandated Crop / Research	Area (ha)
Middle Gujarat Agro-Climatic Zone-III			
A.1 Research Stations, Anand			
a)	Agronomy Farm	Instruction farm, Seed production and Departmental research	40.70
b)	Animal Nutrition Research Station	Animal feed, food and by-product utilization for better health and production of animal	1.93
c)	Bidi Tobacco Research Station	Research on Tobacco, Seed Production	25.43
d)	Centre for Organic Farming	Organic food testing and production	-
e)	Centre of Excellence on Bio-technology	Biotechnological Research on Plant, Animal and Food Bio-technology	-
f)	Food Processing Technology and Bio-energy Research	Technology development for processing horticultural and food crops, biofuel & biogas	-
g)	Forage Research Station	Research on Forage crops and seed production	18.44
h)	H. F. Project	Bull mother farm and ET in Exotic Cattle	51.18
i)	Horticulture Farm	Research on Horticultural crops and maintenance of germplasm	34.70
j)	Livestock Research Station	Production of crossbred. Improvement of Kankrej	21.20
k)	Medicinal & Aromatic Plants Project	Medicinal & Aromatic Plants	6.30
l)	Micronutrient Research Project	Research on Micronutrient of different crops	
m)	Poultry Research Station	Poultry breeding for high producing layers, rural poultry farming and training to the rural youth	-
n)	Bio-control Research Project	Bio-control Research	
o)	Regional Research Station	Research on Cotton, Oilseeds, Pearl millet, Wheat, Water management and Seed Production on commercial basis and its research and training	29.69
p)	Reproductive Biological Research Unit	Improving reproductive efficiency of farm animals	2.00

q)	Vegetable Research Station	Research on Vegetable crops	23.99
B Off-campus Research Stations			
2.	Main Rice Research Station, Nawagam	Paddy Research & Seed production	25.92
3.	Agril. Research Station, Derol	Drilled paddy, Pulses and Oil seed Research	38.42
4.	Agril. Research Station, Thasra	Research on Sugarcane, Cotton and irrigated crops	15.71
5.	Agricultural Research Station, Dahod	Minor Millet, Drilled Paddy, Maize and Pulses Research, KVK and Tribal Training	46.70
6.	Maize Research Station, Godhra	Maize Research & Seed production	22.15
7.	Narmada Irrigation Research Project, Khandha	Water management on field and horticultural crops in Narmada command	24.62
8.	Paddy Research Station, Dabhoi	Paddy Research and Seed production Water management Research in Narmada Command	29.13
9.	Pulse Research Station Vadodara	Pulses crops, production of cuttings/saplings of horticultural crops	33.08
10.	Tobacco Research Station, Dharmaj	Research on Chopadiu type tobacco	11.92
11.	Tribal Research-cum-Training Centre, Devgadhi baria	Maize and Budded cotton, Tribal Training Centre	8.00
North Gujarat Agroclimatic Zone -IV			
12.	Agricultural Research Station, Sanand	Cotton Seed production	6.44
13.	N. C. Farm, Chharodi	Breeding of Kankrej cow, Research on Arid Horticultural crops and Jatropha cultivation. Seed production	809.40
14.	Regional Cotton Research Station,Viramgam	Research on Deshi Cotton and Dual Sorghum, Seed production.	24.43
Bhal and Coastal Agro-climatic Zone-VIII			
15.	Agricultural Research Station, Arnej	Research on rainfed wheat, gram, rabi sorghum and problematic soils, KVK and NCMRWF	60.84
16.	Agril. Research Station, Dhandhuka	Research on Rainfed wheat, gram, cotton and water management, Seed production	44.32





Seasonal Weather and Crop Condition

The onset of monsoon was normal, on 16th June with 9.8 mm rainfall (Table-6.2). Thereafter, rainfall activity started on 21st June which was favourable for sowing of rainfed crops. During this period other areas of the state also received good rainfall resulting in large scale sowing operations in about 90 % area. Subsequently, in the 26 and 27 mw wide spread rainfall was received, which helped in completion of sowing operations. Thereafter, a dry spell of 17 days was experienced. Rainfall activity remained satisfactory in the month of August with 16 rainy days. During the month of September there was another dry spell of 17 days duration, which did not affect standing crops because of maturity stage of crops. The higher temperature prevailed during this period helped in maturity. Monsoon withdrew in 39 mw in September. July month received the highest rainfall of 491.1 mm in 11

rainy days as against 287.7 mm normal rainfall. The total annual rainfall of 1140.5 mm received in 43 rainy days as against the normal rainfall of 853 mm in 38 rainy days was favourable for the growth and development of crops. The distribution of monthly rainfall is depicted in Figure 6.1 and Table 6.2. The District wise rainfall during 2007 is given in Table 6.4.

The weekly distribution of weather parameters along with their normal values are depicted in Table 6.3. The maximum temperature was 2 to 4 °C higher than the normal temperature except for few weeks. Similar trend was observed for minimum temperature also during whole year. Morning and afternoon relative humidity were also remained higher. Weekly evaporation was also found on higher side as compared to normal value. During the monsoon period bright sun shine hours showed higher fluctuations. The lower BSS was recorded during this period. On an average year 2007 was favourable for rainfed crops.



Table 6.2: Daily rainfall (mm) during 2006 at Anand

DATE	June	July	August	September
01	0.0	129.6	37.0	1.6
02	0.0	156.0	1.0	20.0
03	0.0	23.5	0.0	0.5
04	0.0	20.6	38.6	0.0
05	0.0	0.0	4.2	0.0
06	0.0	0.0	2.5	0.0
07	0.0	0.0	33.2	1.4
08	0.0	0.0	8.8	0.0
09	0.0	25.1	37.8	0.0
10	0.0	25.8	8.7	0.0
11	0.0	42.5	2.0	0.0
12	0.0	0.0	7.4	0.0
13	0.0	0.0	8.8	0.0
14	0.0	0.0	0.8	0.0
15	0.0	6.0	18.7	0.0
16	9.8	0.0	0.0	0.0
17	0.0	0.0	1.0	0.0
18	0.0	0.0	1.0	0.0
19	0.0	0.0	1.0	4.2
20	0.0	0.0	0.0	12.4
21	41.0	0.0	1.2	23.4
22	13.2	0.0	15.4	0.4
23	0.0	0.3	0.0	34.2
24	2.6	0.0	0.0	25.8
25	15.8	0.0	2.0	45.5
26	4.1	0.0	0.0	28.3
27	0.0	0.0	0.0	5.4
28	8.1	0.0	6.4	0.0
29	0.0	18.7	51.2	0.0
30	0.0	4.2	52.6	0.0
31	--	38.8	12.4	--
Total	94.6	491.1	351.7	203.1
Rainy days	7	11	16	9

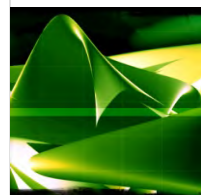




Table 6.3: Weekly weather parameters during the year 2007

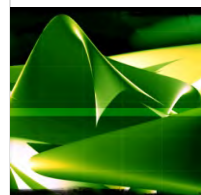
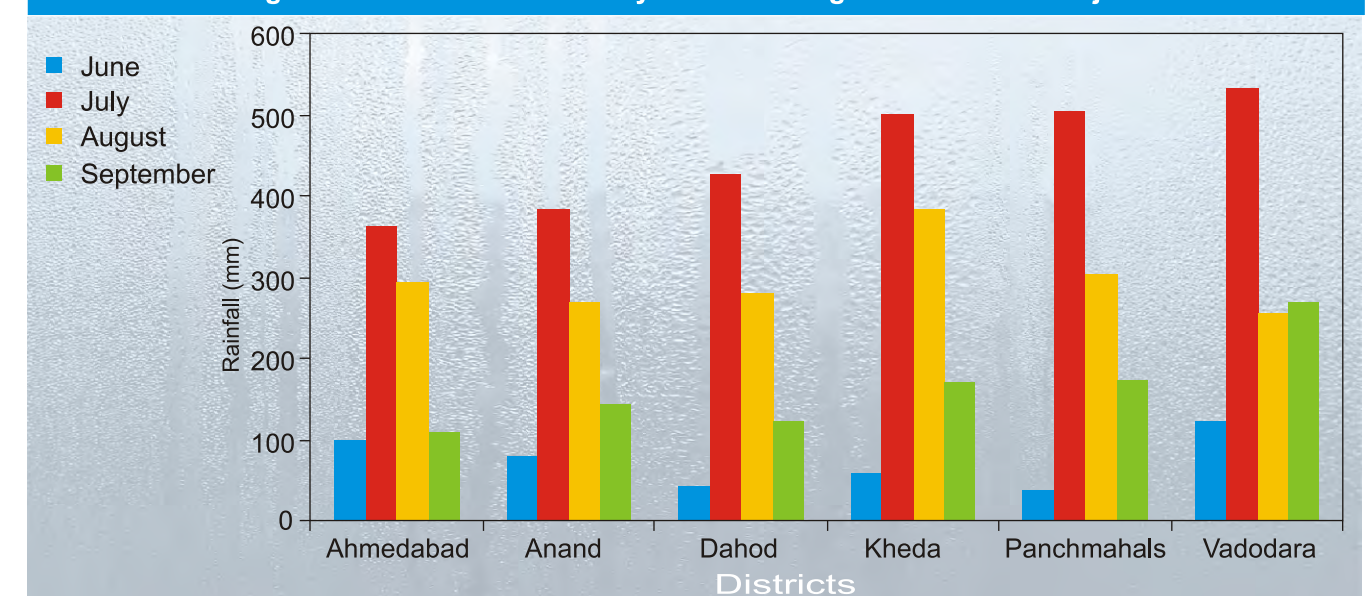
Met. Week	EP (mm)	BSS (h)	RF (mm)	WS (kmph)	MaxT (°C)	MinT (°C)	RH-I (%)	RH-II (%)
01	3.0	9.0	0.0	2.5	26.4	11.6	93	46
02	3.5	8.5	0.0	4.5	26.0	11.5	80	37
03	3.5	9.7	0.0	3.0	27.9	10.3	81	36
04	4.3	9.6	0.0	3.7	29.8	12.9	78	37
05	4.0	8.3	0.0	2.6	30.9	13.2	89	39
06	4.5	8.8	2.4	3.4	31.4	15.4	90	43
07	4.4	9.8	0.0	3.8	29.0	13.4	91	33
08	5.0	9.8	0.0	3.0	34.0	15.7	79	28
09	5.1	9.8	0.0	3.5	31.9	14.7	84	33
10	6.2	10.1	0.0	3.3	33.6	14.9	71	27
11	6.2	9.8	0.0	4.2	34.6	16.3	76	25
12	7.8	10.1	0.0	4.5	35.9	20.2	61	27
13	8.0	10.3	0.0	3.2	39.9	18.9	61	25
14	7.6	10.4	0.0	3.4	39.7	19.6	65	19
15	7.9	10.3	0.0	4.4	39.2	22.0	71	24
16	8.3	9.6	0.4	5.5	40.2	23.9	80	31
17	8.2	10.7	0.0	4.9	39.4	24.1	75	27
18	8.5	9.7	0.0	5.0	40.6	25.8	72	33
19	8.3	10.5	0.0	7.1	39.3	25.9	81	41
20	9.0	11.2	0.0	7.1	38.7	26.4	74	39
21	9.0	10.9	0.0	7.2	38.6	26.9	76	34
22	9.4	10.1	0.0	6.5	40.0	28.2	70	36
23	8.8	7.5	0.0	7.4	39.5	28.1	76	41
24	9.0	8.5	9.8	8.7	39.4	28.4	78	43
25	7.2	7.4	56.8	6.5	37.1	26.7	89	62
26	3.2	5.2	157.6	6.8	33.3	26.1	93	77
27	2.2	0.0	200.1	10.1	29.9	26.0	90	84
28	2.7	2.7	99.4	6.8	30.7	25.8	93	80
29	4.8	5.4	0.0	5.6	33.6	25.8	94	63
30	3.9	5.3	19.0	4.3	33.9	26.2	92	72
31	2.4	2.2	123.8	3.5	31.5	25.8	96	85
32	2.5	1.8	100.4	6.6	30.3	24.8	94	85
33	3.6	4.7	29.3	8.0	31.7	25.4	89	73
34	2.8	6.6	18.6	3.9	31.7	25.0	95	76
35	3.0	3.0	144.2	3.1	32.2	24.5	98	78
36	3.0	5.2	1.9	4.9	32.9	25.5	94	70

37	4.5	8.2	0.0	4.2	33.9	25.4	89	57
38	4.3	6.1	74.6	4.5	33.6	24.2	93	66
39	3.1	3.9	105.0	4.5	31.1	23.9	95	74
40	5.1	9.0	0.0	3.4	34.0	21.4	81	48
41	4.8	8.9	0.0	2.7	35.5	21.7	88	50
42	5.5	9.4	0.0	2.4	35.9	17.3	84	32
43	4.4	8.7	0.0	2.5	34.8	18.0	79	32
44	4.6	8.8	0.0	3.6	35.1	21.2	73	35
45	3.7	8.6	0.0	1.8	35.6	19.6	87	31
46	4.1	9.1	0.0	2.0	33.8	16.6	79	25
47	4.1	9.7	0.0	2.5	32.1	12.6	76	21
48	3.2	7.8	0.0	2.2	31.4	14.5	84	30
49	3.3	7.6	0.0	3.6	29.1	15.3	80	41
50	3.9	8.5	0.0	4.9	28.3	13.6	75	39
51	4.0	8.8	0.0	4.6	28.5	14.0	78	37
52	3.4	9.0	0.0	2.6	29.3	13.2	83	36

Table 6.4: District wise rainfall during 2007

Zone	District	Total rainfall (mm)	% Against normal
Middle Gujarat	Ahmedabad	864	120
	Anand	876	120
	Dahod	872	120
	Kheda	1114	127
	Panchmahals	1016	125
	Vadodara	1183	118

Fig. 6.1 : District wise monthly rainfall during 2006 of Middle Gujarat





Research Council

The Research Council was constituted by the Board of Management as given below:

Sr.No.	Name, Designation & Address	
A.	Prof. M.C. Varshneya, Vice Chancellor	Chairman
B.	Dr. A.R. Pathak, Director of Research & Dean, PG Studies	Secretary
C.	1. Dr. R.H.Patel, Associate Director of Research, (Agriculture)	Member
	2. Dr. M.M. Pathak, Associate Director of Research (Animal Science)	Member
D.	Faculty Deans	
	1. Dr. A.M. Shekh, Dean, Faculty of Agriculture	Member
	2. Dr. B. P. Shah, Dean, Faculty of Dairy Science	Member
	3. Dr. J.V.Solanki, Dean, Faculty of Vety. Science & A.H.	Member
	4. Dr. D.C. Joshi, Dean, Food Processing Tech. & Bio-energy	Member
	5. Dr. S.K. Dixit, Dean, Information Technology	Member
E.	Dr. P.P. Patel, Director of Extension Education	Member
F.	Conveners of the AGRESCO Sub-committees	
	1. Dr.G.C.Jadeja, Convener, Crop Improvement Sub-Committee and Professor, Botany	Member
	2. Dr.K.P.Patel, Convener, Crop Production Sub-Committee and Research Scientist, Micronutrients	Member
	3. Dr.R.N.Pandey, Convener, Plant Protection Sub-Committee and Professor, Plant Pathology	Member
	4. Dr.D.C.Joshi, Convener, Dairy Science, Agril. Engineering and Processing Sub-Committee & Dean (FPT & BE)	Member
	5. Dr.P.R.Patel, Convener, Animal Health Sub-Committee and Professor, Veterinary Medicine	Member
	6. Dr.P.H.Vataliya, Convener, Animal Production Sub-Committee and Professor, Animal Genetics and Breeding	Member
	7. Dr. P.P. Patel, Convener, Social Science Sub-Committee and Director of Extension Education	Member
G.	Eminent Scientists	
	1. Dr. Satyabrata Maiti, Director & Project Coordinator, National Research Centre for Medicinal & Aromatic Plants, Boriavi, Anand	Member
	2. Dr. B.G.Bagle, Principal Scientist & Head, Central Horticultural Experiment Station, Vejalpur	Member
H.	Progressive Farmers	
	1. Shri Ranchhodbhai Patel, At. & Po. Radhavanaj, Dist: Kheda	Member
	2. Mr. Gunvantbhai Ravjibhai Patel, At. & Po. Sarsa, Dist.: Anand	Member

Research Sub-Committees

To monitor and evaluate research programmes in different faculties, research stations, crops and various aspects of agriculture, veterinary and dairy sciences of the university, seven research sub-committees have been constituted as under

Faculty of Agriculture

- Crop Improvement (Plant Breeding & Genetics, Plant Biotechnology, Plant Physiology and Biochemistry)
- Crop Production (Agronomy, Soil Science, Horticulture, Agricultural Meteorology and Bio-fertilizers)
- Plant Protection (Entomology, Plant Pathology and Nematology)
- Social Science (Agril. Statistics, Economics and Extension Education)

Faculty of Veterinary Science

- Animal Production (Animal Biotechnology, Animal Genetics & Breeding, Animal Physiology & Biochemistry, Livestock Production and Management, Animal Nutrition, Reproductive Biology and Poultry Science)
- Animal Health (Vet. Anatomy, Vet. Medicine, Vet. Microbiology, Vet. Pharmacology, Vet. Surgery, Vet. Pathology, Vet. Parasitology, Gynaecology & Obstetrics, Vet. Public Health and Vet. Clinics)

Faculty of Dairy Science and Food Processing Technolgy & Bio Energy

- Dairy Science, Agril. Engineering and Processing (Dairy Chemistry, Dairy Microbiology, Dairy Engineering, Dairy Technology, Dairy Processing and Operations, Dairy Business Management, Food Bio-technology, Post Harvest Technology, Food Processing and Packaging Technology and Bio-Energy)

Research Accomplishment

Research Sub-committees met and evaluated the outcome of different research programmes and approved recommendations for the benefit of stake holders. Number of recommendations approved are given in Table 6.5.

The details of recommendations approved in the Joint AGRESCO meeting of SAUs of Gujarat held at Juangadh are given here.

I - CROP IMPROVEMENT

Rice: Ashoka - 200F

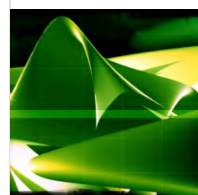




Table 6.5 No. of recommendations approved for farming community

Name of the sub-committee	Meeting held on	Recommendations
Crop improvement	12-13 April, 2006	01
Crop production	7-8 April, 2006	28
➤ Cultural practices		03
➤ Cropping system		05
➤ Nutrient management		04
➤ Organic farming (Bio-fertilizers)		03
➤ Water management		09
➤ Horticultural crop		04
Plant Protection	4-5 April, 2006	06
➤ Pest Management		04
➤ Disease management		02
Dairy Science & Agril. Engineering	3 April, 2006	06
Animal Production	1-2 April, 2006	06
Animal Health	1-2 April, 2006	-
Social Science	4-5 April, 2006	-
Joint Agresco	15 April, 2006	47
Joint AGRESCO of SAU's	20-22 April, 2006	47

The variety was endorsed for cultivation under rainfed drilled (upland) rice growing areas of South and Middle Gujarat. It exhibited 16, 13 and 40 per cent yield advantage over GR-8, IRTP-10800 and Hira, respectively. It matures in 85-90 days with average grain yield of 1500-2000 kg/ha. It possesses long slender grains with 1000 grain weight of 19.5-20.5 g. The variety has been evolved through Farmers Participatory Research Programme.

II-CROP PRODUCTION

[A] CULTURAL PRACTICES

1. Fodder bajra cutting interval

The farmers of Middle Gujarat Agro-climatic Zone- III (AES-II) growing summer forage *bajra* (AFB-1 or AFB-2/GFB-1) are advised to take four cuts at an interval of 40 + 25 + 25 + 25 days and harvest the crop at a stubble height of 15 cm above the ground for higher forage production with better quality and net realization.

2. Castor spacing

Farmers of Middle Gujarat Agro-climatic Zone - III (AES -II) growing hybrid castor (GCH 5) under irrigated condition are advised to adopt 150 x 60 cm or 150 x

75 cm spacing and apply 60 kg N/ha besides basal application of FYM @ 12.5 t/ha and 50 kg P₂O₅/ha for securing maximum production and higher net realization.

3. Chilli-spacing and seed rate for nursery

Farmers of Middle Gujarat Agro-climatic Zone-III(AES-II) growing chilli (cv. S-49) are advised to adopt 5 cm spacing between row with 1.0 kg seed/100 m² for raising healthy seedlings in nursery and to get higher green fruit yield and profit.

[B] CROPPING SYSTEM RESEARCH

4. Rice Wheat sequence - N and Zn application to rice

Farmers of Middle Gujarat Agro-climatic Zone-III (AES-II) practicing rice (*Gurjari*) wheat (GW 496) sequence are advised to apply 125 kg N/ha along with ZnSO₄ @ 12.5 kg/ha in rice and recommended dose of nitrogen (120 kg/ha) to wheat on soils having marginal Zn and high available P₂O₅ status for getting higher yield of rice as well as wheat and profit of the sequence.

5. Bajra cabbage sequence sewage sludge

The farmers of Middle Gujarat Agro-climatic Zone III (AES - II) practicing *bajra* (MH 179) cabbage (Golden acre) sequence using sewage sludge as organic manure are advised to apply 2.5 t/ha



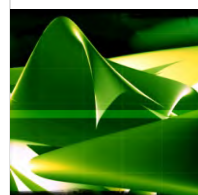
treated sewage sludge along with 10 t FYM/ha besides recommended dose of NPK in *bajra* (80-40-0 kg/ha) and cabbage (75-37.5-0 kg/ha) to get higher yield and net return with a minimum risk to soil health.

6. Potato summer pearl millet sequence cow dung slurry

The farmers of Middle Gujarat Agro-climatic Zone-III (AES-II) following potato (Kufri lauker) summer pearl millet (GHB 316) cropping sequence are advised to fertilize potato crop with 150 kg N/ha + 7.5 t/ha cow dung bio-gas slurry along with the recommended dose of P₂O₅ (100 kg/ha) and K₂O (200 kg/ha) and recommended dose of NPK (80-40-0 kg/ha) to pearl millet to get higher yield and economic return.

7. Lucerne + Pandadiu mix cropping

The farmers of Middle Gujarat Agro-climatic Zone- III (AES-II) growing lucerne (GAUL 1) and *pandadiu* (Wild chicory local) crops are advised to adopt mix cropping of lucerne and *pandadiu* with 5



kg/ha seeds of each crop along with 30 kg N/ha as a basal and 15 kg N/ha after alternate cut to obtain higher green forage, dry matter, crude protein yield and net realization (A common basal application of 10 t FYM/ha + 50 kg P_2O_5 /ha should also be given to the crop).

8. Sorghum + Cowpea

Farmers of Bhal and Coastal Agro-climatic Zone-VIII (AES-II) growing sorghum alone are advised to sow the *kharif* sorghum (SSG-59-3) with cowpea (GFC-3) intercropped in 2:1 row ratio and fertilize it with 40 kg N/ha and 15 kg P_2O_5 /ha to secure higher forage yield with good quality and higher returns under rainfed condition.

[C] NUTRIENT MANAGEMENT

9. Rice organic manure

The farmers of Middle Gujarat Agro-climatic Zone-III (AES II) growing rice (GR-11) are advised to use organic fertilizer in conjunction with chemical fertilizer (75% N from Urea + 25% N from castor cake) for obtaining higher grain yield and net profit. The farmers interested in organic farming are advised to use organics *viz.*, green manure (*Sesbania*) or 100 per cent N through castor cake for getting higher yield, better quality and more economic return besides improvement in physical and chemical properties of soil.

[D] MICRONUTRIENT

10. Drilled paddy Fe- chlorosis management

Farmers of Middle Gujarat Agro-climatic Zone - III (AES - II) growing drilled paddy (GR 5) having problem of Fe-chlorosis are advised to give four sprays of $FeSO_4$ @ 1.0 per cent without neutralization starting from 15 to 20 days after sowing at an interval of 8 to 10 days to get higher yield and net return.

11. Groundnut (Summer)- sea weed liquid fertilizer

The farmers of Middle Gujarat Agro-climatic Zone III (AES- II), growing summer groundnut (GG.2) on soils having marginal status of Zn and Fe are advised to spray 1% of multi micronutrients mixture (Fe 2%, Mn 0.5%, Zn 4.0%, Cu 0.3% and B 0.5% equivalent to Govt. notified general grade-I) or sea weed liquid fertilizer (SLF) @ 1.5% at 15, 30 and 45 days after sowing to get higher groundnut yield and profit.

12. Cabbage micronutrient

The farmers of Middle Gujarat Agro-climatic Zone - III (AES-II) growing cabbage (var. Golden acre) on soils having marginal Fe and Zn status are advised to spray 1% of foliar grade of micronutrients mixture having Fe-4%, Mn-1%, Zn-6%, Cu-0.3% and B-0.5% equivalent to Govt. notified grade-IV (for Fe & Zn deficiency) at 15, 30, 45 and 60 days after transplanting to get higher yield and economic return.



[E] BIOFERTILIZERS

13. Maize (kharif)

Farmers of Middle Gujarat Agro-climatic Zone-III (AES-III) growing kharif maize (GM-4) are advised to inoculate seeds with *Azospirillum lipoferum* (ASA -1) and *Torulospora globosa* (PBA -22) or *Bacillus coagulans* (PBA -16) having 10^8 CFU/g carrier @ 30 g culture/ kg seed before sowing along with soil application of 40 kg N/ha and 20 kg P_2O_5 /ha to save 20 kg each of N and P for higher yield and economic return.

14. Pigeonpea

Farmers of Middle Gujarat Agro-climatic Zone -III (AES-II) growing pigeonpea (BDN-2) in kharif are advised to use

(i) RDF + *Rhizobium* (RBA-5) + *Azotobacter* (ABA-1) OR

(ii) RDF + *Rhizobium* (RBA-5) + *Azotobacter* (ABA-1) + phosphorus solubilizer (PBA-22) through either seed treatment (30 g/kg seed) or soil

application (5 kg/ha) for getting higher yield and net return.

15. Sugarcane

The farmers of Middle Gujarat Agro-climatic Zone-III (AES-II) growing sugarcane (Co-6304) are advised to fertilize the crop with 150 kg N + 125 kg P_2O_5 + 125 kg K_2O /ha and use sugarcane sets for planting after a treatment of *Acetobacter diazotrophicus* ACG-2 (containing 10^8 CFU/g carrier) @ 4 kg/ha to save 100 kg N/ha for higher cane yield (14%) and net return.



[F] WATER MANAGEMENT

16. Okra drip irrigation

The farmers of Middle Gujarat Agro-climatic Zone-III (AES II) growing okra (cv. GOH-1) during summer are advised to adopt drip irrigation to save 60 per cent irrigation water without affecting yield. They are also advised to fertilize the crop with 100 kg N/ha and 25 kg K₂O/ha by water soluble fertilizers in six equal splits starting from 21 days after sowing at six days interval.

The crop should be sown in triple row group at 30 cm distance and 60 cm between two groups keeping plant to plant distance at 15 cm. The system should be laid out at 16 mm lateral size at 1.2 m and 2 drippers (4 LPH) at 45 cm distance. This system should be operated at every two days interval at 1 hr and 50 minutes duration through out the crop season.

17. Cotton (deshi / hybrid)

Farmers of the Bhal and Coastal Area Agro-climatic Zone-VIII (AESII) are advised to give two irrigations each of 60 mm at 20 and 40 days after withdrawal of monsoon to deshi (G.Cot.13, G. Cot.21) and hybrid (Hy.-6, Hy.-8 and Hy.-10) cotton for securing higher seed cotton yield.

18. Mustard

The farmers of Middle Gujarat Agro-climatic Zone-III (AES-III) cultivating



mustard (GM-2) in Narmada command are advised to irrigate the crop at sowing, node elongation, flowering and pod development stages with 5 cm depth to get higher net return. Use of black plastic mulch gave higher yield, but not economical.

19. Gram

The farmers of Middle Gujarat Agro-climatic Zone-III (AES-III) cultivating gram (var. GG-2) in Narmada command are advised to irrigate the crop with canal irrigation at branching stage to get higher yield as well as higher profit.



20. Wheat - canal irrigation

The farmers of Middle Gujarat Agro-climatic Zone-III (AES-III) cultivating wheat (var. GW-496) in Narmada command are advised to irrigate the crop with canal irrigation of 60 mm depth at critical growth stages of CRI, milking, dough and grain filling stages besides one irrigation at sowing to achieve higher yield and net profit. In order to save the water, four irrigations at sowing, CRI, flowering and dough stages are also advised.



21. Tomato - IW/CPE ratio and mulch

The farmers of Middle Gujarat Agro-climatic Zone-III (AES-II) in Narmada command growing tomato (Namdhari-2535) are advised to give total 11 irrigations each of 60 mm depth @ 1.0 IW/CPE ratio at an interval of 15 days during December and January and 11 days during February upto last picking for getting higher yield (27% more) and net return. They are also advised to mulch the crop either with paddy straw @ 5 t/ha or black plastic for getting higher net return.

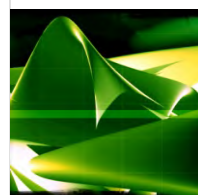
22. Castor

The farmers of Middle Gujarat Agro-climatic Zone-III (AES-II) in Narmada command area growing castor (GCH-5) (late *kharif*) are advised to give total five irrigations each of 50 mm in all furrow at

an interval of 25 to 30 days to get higher yield (17.4%) and net profit (29.8%). Use of black plastic mulch is beneficial which gave higher yield, but found uneconomical.

23. Maize (rabi)- sprinkler

The farmers of Middle Gujarat Agro-climatic Zone-III (AES-II) growing *rabi* maize (GM-3) in Narmada command area are advised to give 7(1+6) irrigations through sprinkler to get higher yield (27.0%) and net return (38.0%). The first irrigation should be given at the time of sowing and remaining six irrigations



should be given at an interval of 17 days. However, to save 26% water, 5 (1 + 4) irrigations should be given through sprinkler to get 15 % higher yield and net return (16%). First irrigation should be given at the time of sowing and remaining four irrigations should be given at an interval of 25 days.

The sprinkler system should be laid at 12 × 12 m spacing and should be operated at 2.75 kg/cm² pressure to achieve 1.67cm/hr application rate. The system should be operated for a period of three hours.

24. Cabbage (rabi) okra (summer) ; drip irrigation

The farmers of Middle Gujarat Agro-climatic Zone-III (AES-II) in Narmada command area are advised to adopt drip system in cabbage (*rabi*)- okra (summer) crop sequence. In cabbage, irrigation should be applied at 0.8 PEF (drip) to get higher yield (29.5%), net return (31.2%) and water saving (14.5%). Okra should be irrigated at 0.6 PEF (drip) to get higher yield (28%), net return (29.7%) and water saving (59%). The drip system should be



laid out at a lateral distance of 0.90 m (in alternate row) and dripper (4.0 LPH) spacing at 0.60 m.

Cabbage (cv. Golden acre) should be planted across the lateral line and system should be operated at 1.2 kg/cm² pressure for 50 minutes on alternate day.

Summer Okra (cv. Parbhanikranti) should be sown along the lateral line and system should be operated at 1.2 kg/cm² pressure for 75 minutes on alternate day.

[G] HORTICULTURAL CROPS

25 Banana

Banana (cv. Basrai) growers of Middle Gujarat Agro-climatic Zone -III (AESII) are advised to apply 50 g FeSO₄ + 40 g ZnSO₄ per plant as basal on soils having marginal status of Zn and Fe along with the recommended dose of 200 + 100 + 200 g NPK + 10 kg FYM per plant to obtain higher yield of quality fruit with higher net return.

26. Spider lily

The spider lily growers of Middle Gujarat Agro-climatic Zone III (AES-II) are

advised to apply 25 t/ha farm yard manure with 150 kg N/ha in form of castor cake as a basal dose in month of July. After 60 days, 150 kg N/ha should be applied through urea for getting higher flower production and net profit.

27. Safed musli

Farmers of Middle Gujarat Agro-climatic Zone-III (AES-II) who wish to



cultivate *safed musli* (*Chlorophytum borivillianum*) are advised to plant single fasciculated root at 10 cm x 10 cm spacing to get higher production of fasciculated roots with higher net profit.

28. Shankpushpi

Farmers of middle Gujarat Agro-climatic Zone-III (AES-II) who wish to cultivate *Shankpushpi* (*Convolvulus microphyllus*) are advised to sow *Shankpushpi* in the first week of July and commence the harvest in the month of October with subsequent two harvests at ground level keeping 90 days interval i.e. in January and April to get higher yield as well as good quality with higher net profit (Sowing of 400 g seed/ha during onset of



monsoon at a spacing of 45 cm is necessary).

III PLANT PROTECTION [A] PLANT PATHOLOGY

1. Potato early blight

The farmers of middle Gujarat growing potato are advised to manage the early blight disease by spraying propineb @ 0.2 per cent (ICBR 1: 6.58) thrice i.e. first spray at the initiation of the disease and subsequent two sprays at 15 days interval.

2. Root rot management in forage cowpea

The farmers of middle Gujarat are advised to give seed treatment of



carbendazim @ 2.0 g/kg seed (ICBR 1:128.66) for the management of root rot in forage cowpea.

[B] AGRICULTURAL ENTOMOLOGY

3. Mango hopper

The mango growers of middle Gujarat who want to use neem based formulations are advised to spray azadiractin based EC formulation at 0.0018 per cent or neem seed kernel extract at 5 per cent or neem oil at 0.5 per cent for the management of mango hopper.

4. Lucerne pest

For the effective and economic control of Spodoptera litura, Helicoverpa armigera and rust disease in lucerne, following module is recommended:

- Raising of marigold (0.5 m apart) on border and bunds in the field.
- Raising the castor plants (3.0 m apart) on border and bunds in the field.
- Application of NSE 5 per cent and mancozeb 0.2 per cent at the time of



flowering.

iv. Application of HaNPV and SINPV @ 250 LE/ha at the time of appearance of 2 larvae/m² followed by application of mancozeb 0.2 % (ICBR 1:3.87).

5. Chilli thrips

For effective and economical management of chilli thrips, alternate spray of triazophos @ 0.04 %, imidacloprid @ 0.005 % and acephate @ 0.075 % following ETL (1 thrips/leaf) is recommended to the farmers of Middle Gujarat (ICBR 1 : 8.51).

6. Okra mites

For effective and economic management of mites in okra, two sprays of fenazaquin 0.01 % (ICBR 1:3.67) or difenthiuron 0.05 % (ICBR 1:3.98), first spray at appearance of mites and second after 10 days of the first spray are recommended in addition to previously recommended acaricides i.e. wettable sulphur 0.125% (ICBR 1:16.11) and dicofol 0.03% (ICBR 1:7.79).

IV-DAIRY SCIENCE, AGRIL. ENGINEERING AND PROCESSING

[A] DAIRY SCIENCE

1. Peanut spread

Protein enriched peanut spread can be prepared employing the traditional method by partially replacing roasted groundnut seeds with Defatted

Groundnut Flour (DFGF) and Whey Protein Concentrate (WPC) along with sugar and salt without compromising on sensoric characteristics as compared to the control. The product has a better nutritional value (higher protein content, lower fat and improved essential amino acid content) and better stability.

[B] AGRICULTURAL ENGINEERING

2. Fruit grader

The precision weight base grader for selected fruits is recommended to the farmers and concerned entrepreneurs for grading of fruits. The developed machine has high capacity as compared to manual



grading. It is also efficient and economical in grading of the fruits especially irregular shape fruits such as mango.

3. Banana

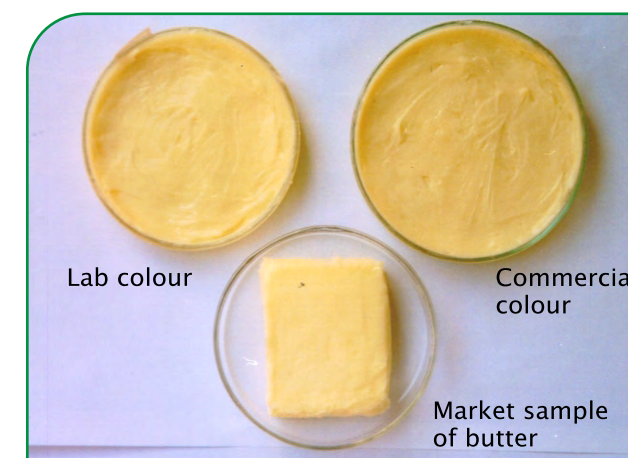
Growers and suppliers of banana cv. Robusta are advised to pre-cool (7 °C) the bunches for extension of its self life. The pre-cooled banana can be stored up to 24

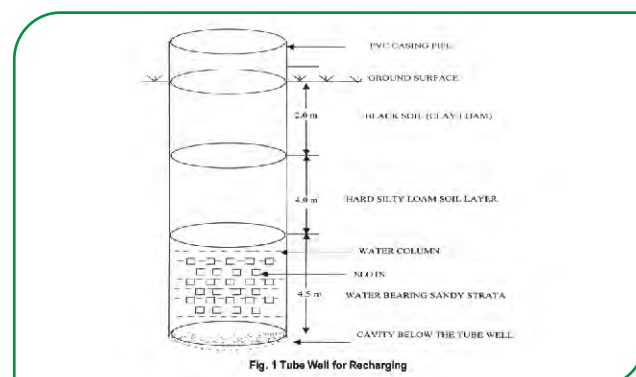


days under cold storage (13.5 ± 0.5 °C and 85 to 90 % RH) or up to 19 days under evaporative cooled storage conditions. However, pre-cooling is not suggested for banana to be stored under ambient storage condition.

4. Biogas

The standard KVIC design biogas plant has been modified with replacing the masonry work of the digester by a 3000 μ HDPE film lining. The modified version developed is cheaper by about 36 % as compared to the standard KVIC biogas plant of the same size and also requires 22 per cent less time for its installation.





5. Groundwater recharging system

The farmers of Bhal region are advised to use groundwater recharging system using tube well with sand stone filter made of five layers, each of 30 cm thickness of various sized stones, aggregates and coarse sand for filtering the runoff water available during rainy season from 5 hectares of land to recharge and improve the quality of groundwater. The farmers can obtain about 45-50 per cent additional yield and income by utilizing the recharge water.

6. Deep tillage with MB plough

The farmers of Bhal region are advised to perform deep tillage up to 30 cm with mould board plough at conducive field condition for tillage after considerable rainfall in the month of June in order to conserve more soil moisture in black soil of Bhal region and subsequently 26 per cent higher grain yield of wheat as compared to that under conventional tillage.

V-ANIMAL PRODUCTION

1. Buffalo feed

A. The lactating buffaloes of



Satlasana, Becharaji and Kadi talukas yielding above five liters of milk per day were underfed for energy and that of Becharaji and Kadi for both, protein and energy. Hence, the farmers of Satlasana are advised to feed additional 1.25 kg grain or grain by product and that of Kadi and Becharaji to feed 1.25 kg grain or grain by product with 0.5 kg oil cake.

B. During summer, the protein intake of dry buffaloes was found short of the requirement in Satlasana, Kadi and Becharaji talukas of Mehsana district. The farmers are advised to feed additional 1.0 kg compound concentrate mixture to bridge this gap.

2. Buffalo & cow feed

The farmers of Dediapada taluka of Narmada district are advised to feed additional 1.0 kg compound concentrate mixture to the lactating buffaloes. The cow heifers and dry cows of Dang and buffalo heifers of Narmada district should be fed additional 250 g oil cake or 500 g compound concentrate mixture. The farmers of Halvad taluka of Surendranagar district are advised to feed 2 kg compound concentrate mixture

or 1 kg oil cakes to their lactating buffaloes giving more than 5 kg of milk and compound concentrate mixture 1.5 kg to buffalo heifers and 1 kg to cow heifers.

3. Zinc supplement to Animals

To ensure adequate supply of zinc, the farmers of Dang, Valsad, Narmada and Surendranagar districts are advised to supplement mineral mixture as per BIS specifications i.e. daily @ 40 g to their lactating cows, buffaloes and pregnant animals and 30 g to heifers and bullocks.

4. Purchasing of concentrate mixtures

The farmers of Mehsana district are advised to be cautious while purchasing some private compound concentrate mixtures as these are low in protein and high in crude fiber and silica content. Similarly, Maize bhanda sold in local market is also found adulterated and poor in nutritive value.

5. Hormonal application in Goat

In non-breeding seasons hormonal applications (Progesterones and Pregnant Mare Serum Gonadotropin combinations) can induce estrus up to 75 per cent in

goats with kidding rate of 35-38 per cent.

NUCLEUS, BREEDER AND OTHER STAGES OF SEED PRODUCTION

Seed is the key factor for raising the production and productivity of any crop and availability of quality seeds is prime need for wide adaptability of released variety. Therefore, the university produces nucleus as well as breeder seeds in enough quantities to cater the needs of seed industry in public and private sectors.

The university has also produced certified / truthful seed of the most adapted varieties in large quantities. During the year 2006-07, the university produced 5243.32 q of seed (Table-6.6). The seed was sold to the farmers under the brand name of "Anubhav Seed".





Table- 6. 6 : Seed and Seedling production

Sr. No.	Crop	Breeder seed(q)	Other stage seed(q)
1	Paddy	223	3835
2	Maize	56	409
3	Wheat	0	340
4	Bajra	0	15
5	Green gram	0	21
6	Gram	30	132
7	Pigeon Pea	0	60
8	Castor	3	0
9	Mustard	0	16
10	Cotton	57	37
11	Tobacco	0	160
12	Lucerne	12	45
13	Oat	33	0
14	Sorghum	0	20
15	Cluster bean (Seed)	0	30
16	Cluster bean (Veg.)	11	15
17	Chilli	0.2	29
18	Brinjal	0.1	0.4
19	Cucumber	0.01	0.1
20	Okra	0.23	23
21	Tomato	0.01	0.1
22	Bottle gourd	0.1	1.4
23	Cowpea	1	7
24	Cumin	0	5
25	Fennel	0	14.32
26	Sun hemp	0	25
27	M & A Plants	0	3
	Total	426.65	5243.32

The University also distributed seedlings/grafts of tobacco and horticultural crops to the farmers as given in Table 6.7 below:

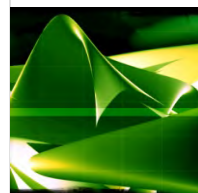
Table 6.7 Seedling/Grafts Production 2006-07

Sr. No.	Crop	Seedlings/Graft	Sr. No.	Crop	Seedlings/Graft
1.	Tobacco	26,65,000	6.	4 Sapota	1,053
2.	Chilli	23,42,000	7.	Kagzilime	15,465
3.	Rose	2,500	8.	Marigold	22,000
4.	Mango	2,253	9.	Gaillardia	20,000
5.	Aonla	11,660	10.	Custard apple	4,468

RESEARCH PROJECTS

Besides 103 state plan, 75 non-plan and 20 ICAR co-ordinated projects, following 44 private agency/GOG and GOI's schemes were sanctioned during the year.

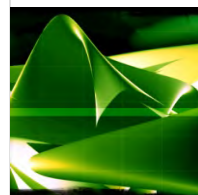
Sr. No.	Name of Project	Principal Investigator	Financing Authority	Grant (Rs. in lacs)
A. GOVERNMENT OF GUJARAT				
1.	Establishment of frozen semen station and breeding of animals at Chharodi	Principal, College of Vety. Science & A. H., Anand	Gujarat Livestock Development Board,Gandhinagar	950.00
B. NATIONAL HORTICULTURE MISSION				
2.	Leaf/Tissue Analysis for Integrated Nutrient Management	Dr. K. P. Patel Research Scientist, Micronutrient Research Project, Anand	Directorate of Horticulture Gandhinagar	20.00
3.	Frontline Demonstration of Horticultural Crops	Dr. H. C. Patel Professor & Head Dept. of Hort. BACA, Anand	Directorate of Horticulture, Gandhinagar	1.60
4.	Small Scale Nursery	Asstt. Res. Sci., NIRP, Khandha	Directorate of Horticulture, Gandhinagar	3.00
C. PRIVATE ORGANIZATION				
5.	Bio-efficacy Phyto-toxicity and effect on natural enemies of S-1812 and its mixtures on the Lepidopteron pests of cabbage & tomato	Dr. B. H. Patel, Asstt. Res. Sci., Main Vegetable Station, Anand	Sumitomo Chemical India Pvt. Ltd., Mumbai	2.06
6.	Bio-efficacy Phytotoxicity and effect on natural enemies of S-1812 and its mixtures on the Lepidoteran pests of Orka & Brinjal	Dr. B. H. Patel, Asstt. Res. Sci., Main Vegetable Station, Anand	Sumitomo Chem. India Pvt. Ltd., Mumbai	2.06





RESEARCH PROJECTS				
Sr. No.	Name of Project	Principal Investigator	Financing Authority	Grant (Rs. in lacs)
7.	Bio-efficacy testing of Flubendiamide 24% + Thiacloprid 24% - 480 SC against bollworms and sucking pests of cotton	Dr. R. C. Jhala, Prof. & Head, Deptt. of Ento., BACA, Anand	Bayer Crop science Ltd., Mumbai	1.74
8.	Bio-efficacy of NNI 0001 (Flubendiamide) against Lepidopterous pod borers and defoliators in b' gram	Dr. R. C. Jhala, Prof. & Head, Deptt. of Ento., BACA, Anand	Bayer Crop Science Ltd., Mumbai	1.54
9.	Bio-efficacy Phyto-toxicity of Antracol 70 WP against diseases of cotton	Dr. R. K. Patil, Prof. Deptt. of Plant Pathology, BACA, Anand	Crop Science Ltd., Mumbai	1.59
10.	Bio-efficacy of Pyridalyl (S-1812) 10 EC alone and with fenpropathrin & fenvalerate against pod borer complex in p'pea	Dr. R. C. Jhala, Prof. & Head, Deptt. of Ento., BACA, Anand	Sumitomo Chemical India Pvt. Ltd., Mumbai	1.92
11.	gossypiella (saunders)using bollworm (Pectinophora management of cotton pink Demonstration on area wide PB-Rope LTT	Dr. R. C. Jhala, Prof. & Head, Deptt. of Ento., BACA, Anand	PI Industries Ltd., Gurgaon	1.59
12.	Bio-efficacy of E2Y45 20 SC against pod borer complex in pigeon pea & fruit bore in Tomato	Dr. R. C. Jhala, Prof. & Head, Deptt. of Ento., BACA, Anand	E.I. DuPont India Pvt. Ltd., Manjusar, Distt. Vadodara	2.44
13.	Balance Fertilization for maximization of crop yields in Gujarat	Dr. K. P. Patel, Res. Scientist, Micronutrient Res. Project, Anand	Potash & Phosphate Institute of Canada, Gurgaon	4.10
14.	Evaluation of Bt cotton hybrids of different seed companies	Dr. B. N. Patel, Plant Breeder, Directorate of Research, Anand	Amar Biotech, Kaveri Seed Co. Ltd., MAHYCO, Nandi Seed Ltd., Nuziveedu Seeds, Pravardhan Seeds Ltd., Vibha Agro-tech Ltd., Tulsi Seed Co., Vikram Seeds Ltd.,	16.92
15.	Bio-efficacy, Phytotoxicity and effect on natural enemies of S-1812 and its mixture (Fenpropathrin) on the thrips and lepitopteron pests of chilli	Dr. B. H. Patel, Asstt. Res. Sci. Main Veg. Res. Station, Anand	Sumitomo Chemical India Pvt. Ltd., Mumbai	1.00

Sr. No.	Name of Project	Principal Investigator	Financing Authority	Grant (Rs. in lacs)
16.	Bio-efficacy, Phytotoxicity and Residues Studies on Emmamectin benzoate 5% SG against shoot & fruit borer infesting okra & fruit borer infesting Tomato	Dr. B. H. Patel, Asstt. Res. Sci., Main Veg. Res. Station, Anand	Punjab Chemicals & Crop Production Pvt. Ltd., Mumbai	3.14
17.	Residue studies of Flubendiamide 24% + Thiacloprid 24% (480 SC) on tomato	Dr. P. G. Shah, Residue Analyst, AAU, Anand	AINP on Pesticide Residue, ICAR, New Delhi	1.25
18.	Residue Studies of Alpha Endosulfan 35 % EC in cotton	Dr. P. G. Shah, Residue Analyst, AAU, Anand	AINP on Pesticide Residue, ICAR, New Delhi	1.00
19.	Research on Kalisena and Josh as biofertilizers against different horticultural crops	Dr. M. S. Vora, Research Scientist, Bio-fertilizer Project, Anand	Cadila Pharmaceuticals, Ahmedabad	5.19
20.	Residues studies of Emmamectin Benzoate 5 % SG in Tomato and Okra	Dr. P. G. Shah, Residue Analyst, AAU, Anand	AINP on Pesticide Residue, ICAR, New Delhi	1.00
21.	Residues studies of Propineb 70 WP in onion	Dr. P. G. Shah, Residue Analyst, AAU, Anand	AINP on Pesticide Residue, ICAR, New Delhi	1.00
22.	Parentage verification of P.T.Daughters	Dr. P.H.Vataliya, Prof. of AGB, Vety. College, Anand	Dudhsagar Research & Development association, Mehsana	4.00
23.	Feasibility of Biotreated Industrial waste in Agriculture	Dr. M.V.Patel, Prof. of Agronomy, BACA, Anand	Gujarat Alkalies & Chemicals Limited, Vadodara	11.56
24.	Testing of suckers in Bidi tobacco	Dr.J.C.Chavda, Assco. Res Sci., Tobacco Project, Anand	Phyton Products, VVNagar	0.45
25.	Residue studies of Emmamectin Benzoate 5% SG on tomato	Dr. P.G.Shah, Organic Farming Cell, Anand	M/s Panjab Chemicals & Crop Protection Ltd.	1.00
26.	Preliminary validation of selected indigenous practices for induction of oestrus in ruminants	Dr. A. Killedar, Res. Sci., RBRU, Anand	National Innovative Foundation, Ahmedabad	0.25
D. INTERNATIONAL				
27.	Pioneering Development of a public-private partnership in the use of Agri-bio-technology for sustainable solutions to insect problems on crucifer crops in India	Dr. R. C. Jhala, Prof. & Head, Deptt. of Ento., BACA, Anand	AVRDC, Taiwan	US \$6000
E. GOVERNMENT OF INDIA				
28.	Development of White Onion variety suitable for dehydration purpose (Project Extended)	Dr.K.B.Katheria Research Sci. (Veg), Main Veg. Research Station, Anand	APEDA New Delhi	36.00

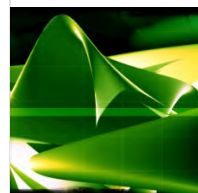




Sr. No.	Name of Project	Principal Investigator	Financing Authority	Grant (Rs. in lacs)
29.	Study on density, diversity and dynamics of ruminal microflora of buffalo	Dr. P. R. Pandya Assistant Res. Sci., Dept. of Animal Nutrition, Anand	Ministry of Science & Technology, Dept. of Biotechnology New Delhi	40.68
30.	Socio-economic Development of Women through reproductive biotechnologies in cattle and buffalo	Dr. (Mrs.) Ankita Killedar Res. Sci., R. B. R. Unit, Anand	Ministry of Science & Technology Dept. of Biotechnology New Delhi	21.04
31.	Differential gene expression in buffalo under during lactogenic pathway in induced lactation model	Dr. C. G. Joshi Professor (Biotechnology) College of Vety. Sci. & A. H. Anand	Ministry of Science & Technology Dept. of Biotechnology New Delhi	40.84

F. ICAR

32.	Experiential Learning – setting up of facilities for hands on training				
	A.	Cultivation, processing and marketing of Medicinal and Aromatic Plants	Research Scientist (M&AP) Medicinal & Aromatic Plants Project, AAU, Anand	ICAR, New Delhi	75.00
	B.	High-tech Floriculture	Professor & Head Dept. of Horticulture BACA, AAU, Anand	ICAR, New Delhi	39.00
	C.	Value addition in aonla, mango, tomato and kagzi lime	Professor & Head Dept. of Horticulture BACA, AAU, Anand	ICAR, New Delhi	25.00
	D.	Bio-pesticide Laboratory for Commercial Production	Professor & Head Dept. of Agril. Entomology BACA, AAU, Anand	ICAR, New Delhi	30.00
	E.	Apiary and Apiculture Training Centre	Professor & Head Dept. of Agril. Ento., BACA, AAU, Anand	ICAR, New Delhi	19.00
33	Niche Area of Excellence – Functional Fermented dairy product containing synbiotic		Dr. R. K. Shah Professor, Dept. of Dairy, Microbiology AAU, Anand	ICAR, New Delhi	85.00





RESEARCH PUBLICATIONS

a. Research Papers Published

- A. Faculty of Agriculture : 059
- B. Faculty of Dairy Science : 013
- C. Faculty of Food Processing Technology & Bio-Energy : 004
- D. Faculty of Veterinary Science : 083

Research papers published are given in Appendix-7.

b. Research Papers Presented

- A. Faculty of Agriculture : 120
- B. Faculty of Dairy Science : 043
- C. Faculty of Food Processing Technology & Bio-Energy : 006
- D. Faculty of Veterinary Science : 041

PARTICIPATION OF SCIENTISTS FOR CONFERENCE/SEMINAR/SYMPOSIUM/WORKSHOP/TRAINING

- A. Foreign / Abroad : 002
- B. National level : 418

DISTINGUISHED AWARDS

a. Best Research Award

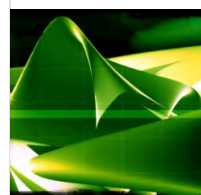
- Boghra, V. R. and Borkhatariya, V. N. were awarded Hari Om Ashram Award for the research works on "Detection of Vegetable Oils and or Hydrogenated Fats in Milk (Milk fat) by Rapid Method for Commercial Application" given by Gujarat Association for Agricultural

Scientists, Ahmedabad in a year of 2006.

- Ramani, V.P. won the Best Doctoral Research Presentation Award-2006 at the 71st annual convention of Indian society of soil science at OUAT, Bhubneshwar.
- Patel, P.C., was awarded Hari Om Ashram Ayojit J.P.Trivedi Award for Soil science for the year 2006-07 by the Gujarat Association for Agricultural Sciences, Ahmedabad.

b. Best Research Papers

- Rajasekhar, T; Prajapati, P.S. and Shah, B.P. (2006) Hari Om Ashram Prerit Shri Bhaikaka Smarak Trust Award for best research paper "Effect of SSHE shape on heat transfer coefficient in Basundi making" awarded by Sardar Patel University, Vallabh Vidyanagar.
- Patel, S.M.; Shah, B.P.; Solanky, M.J. and Prajapati, P.S. received Best Poster Presentation Award at the National Seminar Organized by Dairy Technology Society of India and ERS-NDRI, Kalyani during 26-27 Nov., 2006.
- 1st Prize Awarded for Best Poster Presentation on Research Paper "Heat Transfer Correlations for Continuous Basundi making Machine" Poster presented in the National Seminar on "Prospects and





Challenges of Manufacturing Organic Indigenous Milk Products for Export Market” held at Eastern Regional Station, NDRI, Kalyani- 741 235, on November 26-27, 2006.

- Bhayani, D. M. received Best Paper Award in National Symposium at JAMMU
- Vyas, Y. L. has been awarded Fellow Membership of Indian Association of Veterinary Anatomy.
- Dr. M. K. Jhala was awarded J.P. Trivedi, Award by GAAS, for the Research contribution in Animal Science. For the year 2003, presented on 19th July, 2006.
- Jhala M.K. received BOLT Best Teacher Award at District level sponsored by Air India Gujarat Samachar, presented on 18th Feb. 2007.
- Parikh, P. V. and Prajapati, K. S. Conferred A. K. Bhargav Memorial Gold Medal to Patil D. B. and Kelawala, N. H. of article entitled “Experimental prevention of intraabdominal adhesions in buffalo-calves” in Indian Journal of Veterinary Surgery for the year 2004.
- Mishra, G. K. received Best Presentation by Young Scientist Award for the research paper Genital Microflora in post-partum Holstein Friesian (HF) Cows in a XXII Annual Convention and National

Symposium on Innovative Technologies for Fertility Enhancement in Livestock at College of Veterinary Science and Animal Husbandry, JNKVV, Mhow during 10-12 November, 2006.

- Brahmabhatt, M. N. awarded “FELLOW” of Indian Association of Veterinary Public Health Specialists (IAVPHS) at the International symposium on “New strategies for prevention and control of zoonoses: An integrated veterinary and medical approach” and 5th Annual Conference of IAVPHS at Palampur (H.P.) during 12-14 October 2006.

VII-IMPORTANT EVENTS

Training Programmes/ Winter School/ National Seminar/ Conference/ Meeting/ Contest organised

Training Programmes

- “Regional soil testing workshop cum training programme” was organized on 8-9 February, 2007 in association with Project Coordinator (STCR), Bhopal. Eighty five members were participated from staff of soil testing laboratories of Maharashtra, Rajasthan, Madhya Pradesh, Gujarat and staff members of AAU, Anand.
- “Analytical methods of soil, water, manures and pollutants in agriculture” jointly organized by Deputy Director of Agriculture (S.C.), Department of Ag. Chem. & Soil

Science, BACA, AAU, Anand and director of Extension Education, AAU, Anand at Sardar Smruti Kendra, Anand on 1.08.2006 to 2.08.2006 and 7.08.2006 to 8.08.2006 for the technical staff of soil testing laboratory, Dept. of Agriculture, Gujarat State.

- A laboratory training on "Aonla Processing for 'MAITREE', A association of consultant doctors of Anand was organized on 16-12-2006 at Department of Horticulture, B . A . C . A , A A U , A n a n d . Demonstration and training was given on preparation of different aonla products like candy, aonla - ginger flakes, pachan aonla, pickles, powder and drying of aonla by Prof. N. R. Ray.
- Two (2) Farmers Training each of two days on Jatropha Nursery Raising and Plantation were organized under the NOVOD sponsored project during 7-8th and 12-13th December, 2006.
- Two (2) trainers training of 3 days each on Jatropha Nursery Raising and Plantation were organized under the NOVOD sponsored project during 14-16th May, 2006 and 22-24th November, 2006.
- Short-term training Program for Academia on “New Horizons in Promoting Human Health and Well-being using Synbiotics” was

conducted from 12th to 17th Feb 2007 at SMC College of Dairy Science, AAU, Anand. Seventeen participants from various part of the country associated with various educational institutes attended the training programme

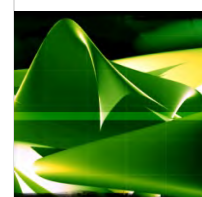
- Short-term training programme for Industry on “Synbiotic Functional Dairy Products Novel Business Prospects for Dairy Industry” was conducted from 29th Jan to 3rd Feb 2007 at SMC College of Dairy Science, AAU, Anand.

Winter School

- Winter School sponsored by ICAR, New Delhi on “Molecular Detection of Seed Borne diseases and Seed Health Status as Global Prospective” was organized for 26 participants from December 12, 2006 to January 01, 2007.
- Winter School on “Challenges in Poultry Farming” organized by Poultry Complex, AAU, Anand from Jan 24 to Feb 13, 2007

National Seminar

- Seminar on “Opportunities for graduates in Globalization for Agriculture, dairy science and veterinary students” AAVCA Seminar at Anand Agricultural University on 11 January, 2006.
- Seminar on Opportunities and challenges for Agriculture sector in



Globalization, Organized by GAAS, Ahmedabad Chapter on 19 June, 2006

Conference

- . XII Animal Nutrition conference on Technological Intervention in Animal Nutrition for Rural Prosperity held at College Veterinary Science and Animal Husbandry, Anand Agricultural University, Anand during 7th to 9th Jan, 2006

Workshop

- . Workshop on “Plant Variety Protection” was organized on 15th Nov, 2006 at AAU, Anand in collaboration with Gujrat Council on Science & Technology (GUJCOST), Gandhinagar.

Meeting

- . Biological Control Research Laboratory Anand organized one day

interface meeting on " Popularizing Biocontrol-Problems and Perspectives" at Anand on 17th February 2007 in which the entrepreneurs producing and/or marketing various biocontrol agents, officers from co-operative sugar factories and scientists of plant protection discipline participated in the meeting.

Contest

- . Organized “National Dairy Judging Contest” in October, 2006 for National Dairy Institutes and Commercial dairy plants all over India.
- Organized “Dairy Quiz Contest 2006” for the first time at Dairy Science College, Anand wherein 13 organizations hailing from Academic and dairy industry took part during October, 2006.



Chapter 7 Extension Education : Extensive Education and Technology Transfer

Directorate of Extension Education

The Directorate of Extension Education has to plan, coordinate, organize and guide the extension education programmes in the University and to ensure efficient working of the extension education activities in close coordination with the development departments, voluntary and private organizations.

Extension Education Council

The Extension Education Council has been constituted to consider and recommend the extension education programmes/activities of the University. The Extension Education Council is as under:

Zonal Research and Extension Advisory Committee (ZREAC)

The committee consists of representatives of development departments, the Centers of Extension Education, Director of Research, Deans of the faculties, crop and subject matter specialists, co-operatives sectors, industries and progressive farmers. Meetings are held regularly twice in kharif and rabi seasons. The discussion centres around adoption and feed back on research recommendations and the existing transfer of technology programmes and the recommendations are passed on to the concerned. The ZREAC rabi was held on 27-09-06 and kharif on 02-03-07.

1	The Vice-Chancellor	Chairman
2	The Director of Research	Member
3	The Director of Agriculture or concerned Joint Director	Member
4	The Director of Animal Husbandry or concerned Joint Director	Member
5	The Director of Horticulture or concerned Joint Director	Member
6	The Dean, Faculty of Agriculture	Member
7	The Dean, Faculty of Dairy Science	Member
8	The Dean, Faculty of Veterinary Science	Member
9	The Dean, Faculty of Food Processing Technology and Bio-Energy	Member
10	The Dean, Faculty of Information Technology	Member
11	The Principal, Extension Education Institute	Member
12	The Professor of Extension Education	Member
13	The Extension Educationist, EEL	Member
14	The Training Organizer, Krushi Vigyan Kendra, Dahod	Member
15	The Research Scientist , Poultry Training Centre	Member
16	The Associate Extension Educationist,(Publication)	Member
17	The Assistant Extension Educationist, Sardar Smruti Kendra	Member
18	The Assistant Extension Educationist, Agricultural School, Anand	Member
19	The Assistant Extension Educationist, Home Science School, Anand	Member
20	The Training Associate, TTC, Dahod	Member
21	The Director of Extension Education	Member Secretary



Release of AAU News letter in the Meeting of Zonal Research and Extension Advisory Committee (ZREAC), AAU, Anand held on at BACA Auditorium

Centres of Extension Education

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

Sr No..	Activities/Functions	Name of Centre	Location
1	Diploma/ Certificate Course	Agricultural Schools	Anand, Chharodi, Vadodara, Dahod
		Home Science School	Anand
		Bakery School	Anand
		Poultry Training Centre	Anand
		Mali Training Centre	Anand
2	Training Centers for Extension Workers	Extension Education Institute	Anand
		Training and Visit Training Centre	Anand, Vadodara
3	Training Centers for Farmers/ Farm women/ Rural Youth	Sardar Smruti Kendra	Anand
		Krushi Vigyan Kendra	Devataj, Dahod, Arnej
		Tribal Training Centre	Dahod
		Tribal Research cum Training Centre	D'baria
		Dept. of Extension Education	Anand
4	Advisory Services	Farm Advisory Services	Anand
		Agro-Advisory Services	Anand
		Centre for Communication Network	Anand
		Transfer of Technology Centre	Anand, Arnej
		Publication Unit	Anand
5	Other	ATMA	Arnej, Dahod

Extension Education and Training Programmes

1.Diploma/Certificate Courses for Farm Youths

Anand Agricultural University conducts various Diploma/Certificate courses as detailed given Table 7.1.

Sr. No.	Diploma/Certificate Course	Duration	Centre	Intake capacity
1.	Agricultural Diploma	Two years	Anand, Chharodi, Vadodara & Dahod	120
2.	Home Science Training	Two years	Anand	30
3.	Bakery Training (Two batches in a year)	20 weeks	Anand	50
4.	Poultry Training (Three batches in a year)	10 weeks	Anand	90
5.	Mali Training (One batch in a year)	Six months	Anand	20

2. Training Programmes for Extension Workers

(a) Extension Education Institute

The Extension Education Institute, Anand caters to the extension training needs of middle level functionaries of various development departments of Western Zone States namely Gujarat, Rajasthan, Madhya Pradesh, Chhatisgarh, Maharashtra, Goa and UTs of Diu, Daman and Dadara Nagar Haveli. The aim is to

improve their job performance wherever they are working in different capacities.

There is a Management Committee of EEI that approves action plan and review the progress of EEI activities. The constitution of the Management Committee is as under:

The details of the training courses conducted by the EEI, Anand during the year 2006-2007 are given in Table 7.2.

1	The Vice-Chancellor, AAU, Anand	Chairman
2	The Director of Extension (Trg.), Govt. of India, New Delhi.	Member
3	The Director of Administration, Govt. of India, New Delhi.	Member
4	The Additional Commissioner (Extn. Trg.), GOI, New Delhi.	Member
5	The Director General, National Institute of Agril. Extension Management (MANAGE), Rajendranagar, Hyderabad.	Member
6	The Director, Institute of Rural Management (IRMA), Anand.	Member
7	The Director of Agriculture, Govt. of Gujarat, Gandhinagar.	Member
8	The Director of Horticulture, Govt. of MP,Bhopal.	Member
9	The Director of Fisheries, Govt. of Chhatisgarh, Raipur.	Member
10	The Director of Agriculture, Govt. of Maharashtra Pune.	Member
11	The Director of Extension Education, AAU, Anand.	Member
12	The Principal, B.A.College of Agriculture, AAU, Anand	Member
13	The Comptroller, AAU, Anand	Member
14	Shri Kanubhai K. Patel, Progressive Farmer, Boria.	Member
15	Shri Vishnubhai.Patel, MLA, Umreth,	Member
16	Brother Galicya, Mogar Farm, Mogar, Anand.	Member
17	The Principal, EEI, AAU, Anand.	Member Secretary

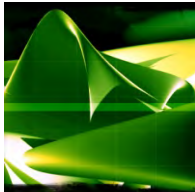




Table 7.2 Training courses conducted by EEI

Sr. No.	Training Course	No. of course	No. of participants
1	Scheduled Training courses		
	1. On campus	20	373
	2. Off campus	12	337
2	Additional Training Courses	10	115
3	Collaborative Training Courses	02	69

In addition to these courses, a workshop was held on follow up study on people participation and PRA techniques.

(b) Training and Visit Centres

The Anand Agricultural University has taken up the task of training the extension personnel of the Department

of Agriculture through the Training and Visit Training Centers at Anand and Vadodara. The details of bi-monthly workshops, pre-seasonal training workshops and short-term training programmes organized for the extension personnel of the Department of Agriculture are as under:

Sr No	Programme	No.	No. of Participant
1	Bimonthly workshop	3	25
2	Pre-seasonal training programme	2	67
3	Special Training	5	152
4	Short-term training programme	2	29
5	Five day training programme for the officers of the horticulture	1	22



Field Visit under T & V System

3. Training/Extension Education Programmes for Farmers/Farm Women/ Farm Youths

(a) Training Programs

Training is essential to increase the efficiency of the farmers, farm women and farm youths. 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) Centers, 126 on-campus and 122 off-campus training programmes were organized. The details are depicted in Table-7.3.

Table 7.3: Training Programmes Organized by the Transfer of Technology (TOT) Centres for Farmers/Farm Women

Sr. No.	TOT Centre	Training Programme	No. of participants				
			Farmers	Farm women	Farm Youths	Extension workers/ /other	Total
i	KVK, Devataj	A 21	269	81	82	45	477
		B 13	283	16	53	-	352
ii	KVK, Dahod	A 15	332	78	-	-	410
		B 24	467	284	-	-	751
iii	KVK,Arnej	A 07	82	58	10	-	150
		B 22	280	84	200	25	589
iv	SSK, Anand	A 68	405	243	957	163	1768
v	TTC, Dahod	A 15	312	125	-	70	507
		B 63	1661	740	-	119	2520
Total (i to v)		A 126	1400	585	1049	278	3312
		B 122	2691	1124	253	144	4212
Grand Total (A+B)		248	4091	1709	1302	422	7524

A = On-campus B = Off-campus



QRT Travel workshop at AAU, Anand



Vice Chancellor with participants at Farmers Meeting held at KVK, Arnej

(b) Extension Education Activities

The TOT centres have also planned and organized extension activities like, seminar /workshop /symposium, field/ farmers' day, agriculture fair/ exhibition,

film/ slide/ video show, field visit, farmers group/ demonstration meeting, etc. The details of the extension activities organized and number of beneficiaries are given in Table-7.4 and 7.5.

Table-7.4: Extension Education Activities carried out by TOT Centers

Sr No	Activities	Name of TOT centre					
		KVKs			SSK	TRTC	TTC
		Devataj	Dahod	Arnej	Anand	D'baria	Dahod
1	Farmers / field days	5 (325)	5 (499)	6 (300)	-	-	5 (232)
2	Agril fairs /exhibitions	-	-	1 (49)	-	-	1 (3523)
3	Khedut / women shibir / meetings	-	-	5 (167)	-	(6249)	17 (1322)
4	Seminar/workshop/kisan gosthi	4 (65)	4 (284)	2 (52)	-	-	23 (1153)
5	Agirl.tour /field visits	32 (122)	12 (575)	9 (85)	71 (2133)	-	13 (133)
6	Film/slide/video cassette show/radio talk/TV programmes	14 (175)	-	4 (201)	73 (1768)	-	15 (442)
7	Celebration of women in Agril.day/ world food day/van mahotsav	-	2 (107)	1 (26)	-	-	-
8	Guidance through letters/personal contact	82	52	41 (128)	37 (37)	-	12 (37)
9	Publication of farm literature	7 (3500)	7 (7)	6	2	-	-
10	Press Note released	32	3	3	5	-	-
11	Krishi-Go-Vidya subscriber registered	22	15	43	-	-	2
12	Escorting the visitors	285 (285)	3 (210)	243 (287)	1 (17035)	-	15 (118)
13	Telephone helpline services	54 (54)	-	34 (41)	1 (1273)	-	12 (37)
14	Crop diagnostic services	5 (22)	5 (5)	3 (34)	23 (23)	-	19 (67)
15	Farmer-scientists interactions	-	-	2 (72)	1 (mass)	-	14 (478)

Note : Figures in brackets indicates numbers of participants

Table-7.5: Extension Education Activities carried out by T&V Training Centre at Anand

Sr No	Activity	No.
1	Film/slide/video cassette show/radio talk/TV programmes	04
2	Guidance through letters/personal contact	300
3	Press Notes released / Articles Published	
4	Crop diagnostic services	25
5	Field Visits	18(360)
6	Lectures in Crop Seminar	16(80)
7	Technical Guidance Provided in Farmers meet / Shibir / Field Day	6
8	Farm Visits	6(355)
9	Training Programme for farmers in coordination with other institution	8
10	Guidance through special talk in different training programmes	4(152)
11	Guidance to farmers during Krushi Mahotsav	4(200)
12	Farmers problems solved by the scientists	2600

Note : Figures in paranthesis indicates no. of beneficiaries.

(c) Agriculture Fair

AAU has participated in different agricultural fairs to exhibit the agricultural technology.

The profile of AAU and the latest technologies developed by the Institution were displayed. Interactions between scientists and the farmers were also organized. Literature on the latest technology was distributed during these fairs.



Farmers Meeting at TOT Centre, Arnej

Sr. No.	Agril. Fair/ Exhibition	Place	Period	Beneficiaries
1	KVK, Arnej	Rojka, Ta. Dhandhuka	09-01-07	500
2	ATMA project, Dahod	Dasha, Ta. Limkheda	13-03-07	2460
3	Muvaliya Farm Dahod	Different villages of 7 Talukas of Dahod district	April 06	1063

d) Celebration of *Krushi Mahotsav* 2006

As a measure towards enlightenment of farming community *Krushi Mahotsav*-2006, a doorstep extension modus operandi of the State Government Visionary programme was launched from 30-04-06 to 29-05-06 throughout the Gujarat State. Hon'ble Chief Minister Shri Narendrabhai Modi inaugurated the function on 30-04-06 for Middle Gujarat at Anand Agricultural University.

The programme aimed at

(i) creating awareness amongst the rural mass regarding scientific innovations in crop production practices, farm implements, water conservation, irrigation methods, animal husbandry, etc. and bringing these innovations to the farming community through the concept

of people's participation.

(ii) bringing agricultural and rural development programmes at village level for the betterment of peasants implemented by various State Government organizations and thereby to create an atmosphere to motivate the farmers for their participation in such programmes.

(iii) making the farmer's income double during the span of five years.

The Government has assigned an important responsibility to the State Agricultural Universities to have a Kisan Rath along with a team of scientists for the purpose of guidance and demonstration of latest agricultural technologies based on 'agro-climatic' conditions in the villages.

In all, the Government has prepared a total of 227 *Kisan Rath*s, which were mobile with photography exhibition

along with TV / Audio Video Systems for different agro-climatic areas.

Glimpses of *Krushi Mahotsav*-2006





Role of Anand Agricultural University in the Celebration of KRUHSHI MAHOTSAVA 2006

The Anand Agricultural University has territory in six districts namely, Ahmedabad, Anand, Dahod, Kheda, Panchmahals and Vadodara having 59 talukas. The Nodal Scientists at District and Taluka levels with 118 scientists and equal number of supporting staff were assigned the duties of leading the Kisan Rath in the villages. Two groups of scientists were formed to lead the Kisan Rath for 15 days each. During the visit of the villages, the scientists delivered talk and interacted with farmers. They guided them to prepare a crop production plan at village as well as at individual level. They also provided guidance on plant protection measures, farm implements, water conservation, organic farming, irrigation methods, bio-fertilizers, botanical and herbal products, bio-pesticides, bio-control of insects /

pests, animal husbandry, cultivation practices of major field crops, fruit crops, vegetable crops and medicinal plants. Further, the soil health cards and manuals of model action plan of crop production were distributed to the farmers.

The scientists of AAU also participated in the *Khedut Shibirs* organized at Taluka levels by the Agricultural Produce Market Committees (APMCs) of respective talukas. In addition to this, the AAU had organized three training programmes for AOs, AEOs and STL Officers of Deptt. of Agriculture on Soil Health Card Programme.

The AAU has played a vital role in preparing Soil Health Cards, Model Action Plan and literature in the form of folders, leaflets, booklets, C.D. etc.

The important activities carried out by AAU's scientists during the *Krushishi Mahotsav* 2006 in middle Gujarat is as under :

No	District	Villages covered	Krushishi Shibir		Farmers Training		Village meeting	Guidance to farmers by scientist
			No	Beneficiaries	No	Beneficiaries		
1	Ahmedabad	561	8	480	5	2025	561	66447
2	Anand	366	6	360	3	1350	365	8326
3	Dahod	702	6	380	5	5385	702	107218
4	Kheda	637	9	540	7	3150	636	66983
5	Panchmahal	1179	9	530	1	125	1156	38347
6	Vadodara	1535	11	660	3	620	1535	78103

Feedback of the Programme

1. The farmers had chance to make face to face interactions with the scientists of AAU and with the personnel of various Line Departments
2. They were made aware of technical know-how of the latest scientific agricultural technology and various development programmes /schemes run by the State Government for betterment of the rural masses.
3. The scientists of AAU had unique experience to exchange their ideas and knowledge with the farmers.
4. It was a learning experience for scientists which will be useful in future research programmes.

(e) Frontline Demonstrations

The Frontline Demonstrations, carried out by KVKs aim to demonstrate the production potentialities of newly released and pre-released production technologies on farmers' fields. As many as 258 FLDs on various crops such as castor, sesamum, gram, groundnut, maize and wheat in 100.10 ha during kharif, rabi and summer seasons were organized. The details of these FLDs are given in Table 7.6.

(f) Department of Agricultural Extension Education

The Extension Wing of BACA is to provide theoretical and practical field trainings to undergraduate and postgraduate students for offering knowledge and experience of extension

principles, techniques and education psychology.

The 20 weeks program of one semester (i.e., 7th Sem.) is being run by the department with a view to producing well trained graduates in the field of agriculture having broad-based knowledge and technical know-how to meet the emerging challenges in agriculture. The students are exposed to research stations, high-tech cells, farmers' fields in villages, NGOs, agro-based industries, cooperative sectors and agriculture related organizations /institutions of the state and the nation.

4. Advisory Services

(a) Farm Advisory Services (FAS)

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. During the year under report, various extension activities carried out by the scheme are given in Table 7.7.

(b) Agriculture Technology Information Centre (ATIC) at Anand

The Agriculture Technology Information Centre (ATIC) (a single window system) was established from August, 2005 in order to disseminate Agricultural information and Technology to the farmer and other Stakeholders with the following objectives.

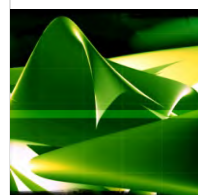




Table 7.6 Frontline Demonstrations conducted						
Sr. No.	Crop/Variety	No. of FLDs	Area (ha)	Yield (Kg/ha)		Increase in yield (per cent)
				Demonstration	Local	
I - KVK, Devataj						
1	Castor GCH-5	10	10	3143	2598	20.98
2	Mustard GM 2	20	10	1710	1440	18.25
3	Wheat GW322	20	10	3071	2670	15.02
II - KVK, Dahod						
1	Castor GCH-4	25	10.0	1550	1300	19.00
2	Summer G'nut GG2	34	6.8	2030	1550	31.00
3	Gram GG-2	25	10.0	1600	1250	28.00
4	Wheat GW-322	25	10.0	3000	2460	22.00
5	Summer G'nut GG-2 (IPM)	16	3.2	1985	1550	28.00
III - KVK – Arnej						
1	Castor GCH-5	4	2.0	1063.5	953.5	10.30
2	Cotton G.Cot 21,13	9	4.5	505.4	396.0	21.60
3	Gram GG-1,GG2	8	4.0	751.3	573.6	23.60
4	Wheat GW-1	10	5.0	1220.1	914.2	25.00
5	Cumin GC-4	6	3.0	557.2	410.8	26.20
IV - TTC- Dahod						
1	Gram G-1	43	9.80	1250	1000	25.00
2	Gram G-2	02	1.60	1100	900	22.22
3	Gram G-3	01	0.20	800	700	14.28

(i) To provide direct access for information & knowledge to the needy farmers.

(ii) To bring together different research divisions/units and users of technology i.e farmers.

(iii) To develop, publish and supply latest technology via folders, booklets, C.D.'s, Video Films and other media.

(iv) To help farmers in devising effective solutions to their problems, and

Table 7.7 Extension activities carried out by FAS			
Sr. No.	Extension Activities	No. of Activities	Beneficiaries
1	Farmer's / field Day	14	5260
2	Agri fair / Exhibition	05	4230
3	Farm Women Meeting	02	261
4	Field Visit	13	389
5	Seminars	08	9750
6	Krishi Goshthi	05	250
7	T.V. Programmes	11	Mass
8	Agricultural Literature Published	04	Mass
9	Escorting the visitors for guidance	20	1300
10	Night meetings	02	94
11	Guidance in Farmers Day/field day/Khdut Shibirs	08	5475
12	Crop diagnostic service	18	28
13	Articles published for farming community	06	Mass
14	Lectures for transfer of technology delivered	55	1120
15	Lectures in crop seminar delivered	08	240
16	Field visit of scientists	20	210
17	Farmers –scientist interaction	23	1286
18	Telephone helpline	70	70

to increase their acute decision making competence.

(v) To supply seeds, planting materials, bio-fertilizers, bio-pesticides, earth worms and vermin composts etc.

(vi) To provide animal health service at ATIC.

(vii) To provide various analytical service of plants, soil & water for the nutrients contents etc.

(viii) To popularize the new technologies developed by the university & allied institutes in Agricultural Science.

(ix) To facilitate dynamic, enthusiastic feed-forward and feed-back

The various extension activities carried out by the centre during the year are given in Table 7.8.

(c) Transfer of Technology Centre at Anand and Arnej

The new programme on Transfer of Technology Centre at Anand and Arnej was sanctioned in the year 2004-05 by the Govt. of Gujarat, in which demonstrations, field days, training, advisory activities are under taken by the university in Anand and Ahmedabad district.

The extension activities carried out by the centre during the year are given in Table 7.9.

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

Since there will be an immediate need to develop strong communication network for maintaining regular contacts

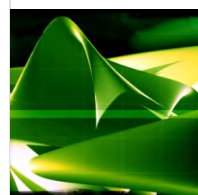


Table 7.8 Extension activities carried out by ATIC			
Sr. No.	Extension Activities	No. of Activities	Beneficiaries
1	Field Visit	27	1068
2	Film / Slide / V.C. Show	16	1005
3	Escorting the visitors for guidance	-	1011
4	Press note published	04	Mass
5	Guidance through telephone / letter	1173	1173
6	Distribution of the farm literature	9 folders	Mass
7	Provide information and guidance to visitors	19	1011
8	On campus training programme	08	220

Table 7.9 Extension activities carried out by TOTs			
Sr No	Extension Activities	Centres	
		Anand	Arnej
1	Farmers Day	2 (330)	-
2	Guidance through letters/personal contact	150	-
3	Publication of farm literature/ Distribution	250	21(2000)
4	Press Note released / Articles Published	16+2	-
5	Krishi-Go-Vidya subscriber registered	10	-
6	Escorting the visitors	15 (900)	5 (189)
7	Crop diagnostic services	8 (160)	-
8	Field Visit	14 (1320)	8 (32)
9	Lecture for transfer of technology delivered	35 (12000)	-
10	Lecture delivered in crop seminar	8 (400)	-
11	Technical Guidance Provided in Farmers meet / Shibir / Field Day	4 (196)	-
12	Telephone helpline	96	-
13	Guidance in farmers day, filed day / khedut shibir	24 (14969)	2 (142)
14	Interactive Demonstration	4 (800)	3
16	Farmers scientist interaction and filed visit of scientist	11 (220)	2 (11)
17	Farm Women meeting	2 (136)	-
18	Kishan Goshti	1 (66)	-
19	Group Discussion	16 (532)	-

Note : Figures in brackets indicate number of beneficiaries.

with agricultural university, the Govt. of Gujarat sanctioned the scheme “Centre for communication Network” under Tenth

Plan in the year 2005-2006 with following specific objectives:

a.To establish the *Gram Kisan*



Farmers Meeting under TOT Centre, AAU, Anand

agricultural and allied technologies through *Gram Kisan Samities* in rural areas.

d. To carry out different extension activities through GKS in different villages.

e. To know the feedback from the farmers.

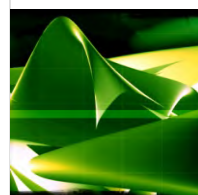
Samities (GKS) in the rural areas.

b. To train the members of *Gram Kisan Samities* in leadership communication and co operation for transfer of technologies.

During the year under report, various extension activities carried out by the scheme are given in Table 7.10.

c.To disseminate the latest

Table 7.10 Extension activities carried out by CCN			
Sr. No.	Extension Activities	No. of Activity	Beneficiaries
1	Agricultural Tour	01	42
2	Film/slide/video cassette show	02	132
3	Farm literature / distribution	20	Mass
4	Field Visit	03	83
5	Seminar	04	3508
6	Krishi Goshthi	01	24
7	T.V. Programme	03	Mass
8	Agricultural literature published	01	300
9	Escorting the visitors for guidance	05	38
10	Group discussion	01	30
11	Guidance through telephone/letter	45	45
12	Crop diagnostic service	03	03
13	Lectures for transfer of technology delivered	03	72
14	Lectures in crop seminar delivered	04	292
15	Farmers –scientist interaction	01	30
16	Telephone helpline	45	45
17	Press note published	02	Mass
18	Guidance through Khedut Shibir	04	315
19	Establishment of GKS	20	300



(e) Extension activities carried out under NARP project at Main Maize Research Station, Godhra.

During the year under report, various extension activities carried out by the scheme are given in Table 7.11.

The details of radio talks are given in Appendix-8

(ii)TV Talks

In all, 30 television programmes on different aspects covering agriculture,

Sr. No.	Extension Activities	No of Activities	Beneficiaries
1	Farmer's Day	07	729
2	Escorting the visitors for guidance	42	1274
3	Guidance in farmer's day / khedut shibir	08	789
4	Guidance through telephone/letter	52	52
5	Articles published for farming community	06	Mass
6	Lectures for transfer of technology delivered	15	159
7	Distribution of the farm literature	30	3000
8	Press note published	04	Mass

(f) Mass Media

(i) Radio Talks

The scientists of the University delivered radio talks on agriculture and allied topics from All India Radio, Vadodara. During the year, 10 scientists have delivered talks on different topics related to agriculture, horticulture, agricultural engineering, animal husbandry, etc.

animal science, agricultural engineering, horticulture, home science, etc. were telecast through Doordarshan Kendra, Ahmedabad in "Gram Jagat" programme for the benefit of farming community. The details are given in Appendix-9.

(iii) Press Meet

One press meet was organized during the year to convey the control of Mealy bug in cotton and other crops on



Press Meet at AAU, Anand

(g) Publication

(i) Farm Magazine

The publication unit publishes the monthly farm magazine "Krushi-Go-Vidya" regularly. There were 8336 subscribers registered for this magazine during 2006-2007

Further special issues on Spices Crops have been published in February-

2007. A zero-budget revolving fund has been created to make this magazine self-sufficient.

Moreover, Krushigovidya Publication unit has provided guidance to farming community (about 2320 beneficiaries) through telephone / letters.





(ii) Publication of AAU Newsletter

The Director 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 any agricultural educationist, research scientist, and extension educationist. Special issue on Convocation was published during the year under report.

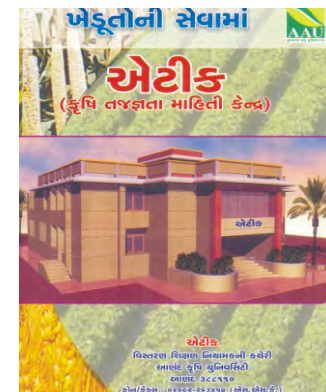
(iii) Publication of Agricultural Literature

Different folders / books/ leaflets on various subjects were published by



Project in 8 districts of Gujarat State. The Project aim is bottom of planning suggested by the farmers and it is demand driven and farmer accountable Anand and Dahod districts are selected

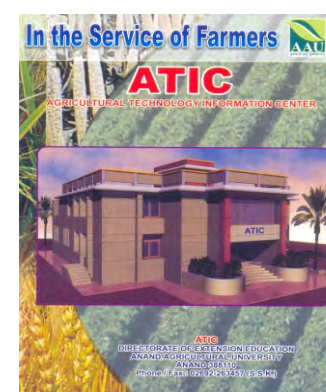
Publications at a glance



different extension education centers of AAU during year under report. The details of 16 publications are given in Appendix-10.

5. Other : Agricultural Technology Management Project (ATMA)

The Central Govt. sanctioned a project as support to State Extension Plan as ATMA



for the ATMA Project. The following extension activities are carried out by the ATMA Project at Dahod centre are given in Table 7.12.

contribute to the formulation of technical programs as well as in finalizing recommendations for the farmers.

Table 7.12 Extension activities carried out by ATMA Project, Dahod

Sr. No.	Extension Activities	No.
1	Field Day	6(779)
2	Publication of farm literature/ Distribution	4(Mass)
3	Mobilization of farmers group	87(1200)
4	Farmers Exposure Visit	196(196)
5	Demonstration	300(320)
6	Kishan Goshti	9(1752)
7	Training Programme	19(478)
8	District level Exhibition cum krushi mela	1(2400)

Note : Figures in paranthesis indicates no. of beneficiaries.

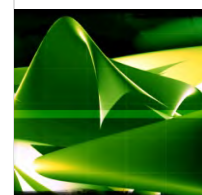
6. Coordination with Development Departments

- The Anand Agricultural University 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 System through bi-monthly workshops, pre-seasonal trainings, fortnightly trainings, diagnostic team, and state level crop seminars/workshops etc. The coordination exist in follow-up programs as well as planning of farm trials. In AGRESO, the officers of the line departments are the members, and they generously

- 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 are finalized by such coordinated efforts.
- For transfer of technologies to the farmers at large, Farmers' Day, Krushi Mela, farmer-scientist interactions, group discussions etc. are organized by collaborative efforts.

7. Capacity Building of AAU Staff

During the year under report, five scientists/teachers of Anand Agricultural University were deputed outside the Gujarat state for updating their knowledge and up gradation of skills in their respective disciplines. The details are given in Appendix-11





ANAND AGRICULTURAL UNIVERSITY

PLEDGE

We, the scientists, students, and
The employees of Anand Agricultural University, unitedly
Stand to make the solemn pledge
That we enrich and 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 8

Students' Welfare: Beyond the Curriculum Confines

The office of Directorate of Students' Welfare strives hard for the overall development of personality, character and high human values of all the students of the University. The University provides facilities like hostels, health care, training, scholarship and counseling and placement guidance to the students. It organizes various extra curricular activities like sports, adventure, cultural programs and meeting of alumni associations, festival celebration etc.

Students' Representative Council

All the constituent colleges of the University have the Students' Representative Council (SRC), which is formed by nominating the staff advisory committee including the students' representatives 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 were very active during the year, and various extracurricular activities like planning forum, sports, debate and elocution, college magazine, cultural programs, NSS, NCC, etc. were organized.

Apart from this, Alumni Associations

in all the three colleges were active and under which the conferences and workshops are being organized for strengthening the professional brotherhood and to create an atmosphere of oneness.

Student Amenities

(A) Hostels

Hostel environment plays an important role in the development of personality and social behavior of a student. As a residential University, good hostel facilities are provided to all the under graduate and postgraduate students at all the colleges of the University. The hostels have their own respective messes which are run and managed by students themselves while others are under contract basis under the supervision of the Rector/Assistant Rector. In the campus canteen facility for breakfast and snacks as well as other essential facilities are also available. Library facility is available, and the other amenities for day-to-day requirements like laundry, tailor, cycle store, provisional store, bus for transportation, telephones in the hostels as well as STD booths with ISD facility, Bank, ATM centers, etc. are also available in the premises of the University. The Rector and Assistant Rector are appointed in each college for maintenance of student



facilities and solving the residential problems of the students. The facility for solar water heater and water coolers are also available in the hostels.

The Construction of one Ladies Hostel with 34 seats in Campus of Veterinary College has been almost completed. In addition to this renovation of U.G. Ladies hostel is in final stage of completion. Further more a foundation stone for one more Ladies Hostel was laid by Dr. G. C. Tiwari, ADG Education ICAR on 4th January, 2007.

(B) Health Facilities

The maintenance of sound health of all the students, staff and farm labours is primary objective of the health centre of AAU and DSW monitors the routine activity of health centre. For this purpose, the University governs the Primary Health Centre with the appointment of the staff like doctor, nurse, compounder, laboratory technician and other administrative staff. Free service of the Health Centre is available to all the employees, their families, and students residing in the campus. Ambulance is available for emergency services as well as shifting of the patients to other hospitals. This Health Centre provides allopathic and ayurvedic treatment, and also provides guidance for diagnosis and treatment. An ayurvedic doctor and Homeopathic doctors are providing guidance and treatment in respective

system of medicine. The facility for blood grouping and thelaseemia testing of newly admitted students has been introduced. Approximately 7679 cases of University employees, their family members and students have been given treatment in the current year.

During the year of report various Medical/Alternate medicine system Camps were organized, the details are as under

Sr. No.	Name of the camp	Date	No.of patients attended the camp
1	Homeopathic camp	30-06-06	78
2	Eye camp	14-11-06	124
3	Ayurvedic camp	30-11-06	80
4	Homeopathic camp	01-12-06	45
5	Eye camp	14-12-06	94

Activities:

(A) Student Counseling

The student counseling cells are established at the colleges for guidance, solving the problems and to contact with various companies and organizations for job opportunities. It also provides coaching the students for various competitive examinations. A counseling lecture on “AAPnu sharir Olakhiye-Munjvan ane Ukel”- in gujarati, was scheduled on 16-09-2006 especially for girls and Dr. Rajalben Thakar, Assistant Professor, Municipal Medical College, Ahmedabad delivered lecture and solved the queries of girls in which, nearly 100

girls and staff women participated

(B) Placement:

During the year of report there was a heavy demand from the different companies and offering employment to the students of the university. Faculty wise details of the placement are given here under:

Faculty of Agriculture		
Sr. No.	Name of Institute	No. of Selected candidates
1.	Hindal Indundstires	1
2.	Pest Control India	7
3.	Dena Bank	5
4.	Vidya Dairy	1
5.	GESS	4
6.	Godrej Agrovet Ltd	4
7.	Mahyco Seeds	6
Total		28

Faculty of Veterinary Science		
Sr. No.	Name of Institute	No. of Selected candidates
1	Amul Dairy, Anand	7
2	Panchamrut Dairy, Godhara	7
3	Adhunik Pratisthan, Bhuj	1
4	Bharatiya Agro. Industries Fondation, Vadodara	5
5	Glaxo Smithkline, Ahmedabad	3
6	Aurigen Discovery Technologies, Bangalore	1
Total		24

Faculty of Dairy Science		
Sr. No.	Name of Institute	No. of Selected candidates
1.	Amul Dairy, Anand	7
2.	Dudhsagar Dairy, Mehsana	5
3.	Mother Dairy, Gandhinagar	4
4.	Sumul Dairy, Surat	3
5.	Panchamrut dairy, Godhra	2
6.	Sabar dairy, Himatnagar	9
7.	Vasudhara dairy, Valsad	4
8.	Gagar Foods, Wamaj	1
9.	Mother Dairy, Delhi	3
10.	GCMMF, Anand	4
11.	Almarai Dairy Co., Saudi Arabia	6
Total		47

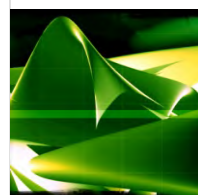
(C) Physical Education Program

The Physical Education and Sports play vital role for development and maintenance of personality, physical fitness, health and stamina, besides body-building of the students. Along with development of the academic career of the students, this University also puts in every effort to bring out the hidden qualities of the students by involving them in physical education, sports, cultural, adventurous activities etc. at college and university levels. Two Physical Instructors organize these activities at college level under the direct

guidance and supervision of Director of Students' Welfare. The following activities were carried out under the programme:

(D) Adventurous Activities

S w a m i Vivekananda State Mountaineering Academy, Mount Abu was contacted for organizing basic workshop in rock climbing with the aim to develop adventurous virtues and prepare them to





face adverse conditions. The university participated in basic mountaineering workshop organized by Swami Vivekananda State Mountaineering Academy at Mount Abu as under.

Sr.No	Type of workshop	Dates	No. of Participants
1	Basic	20-11-2006 to 29-11-2006	30-Boys

(E) Sports Activities

Along with the academic curriculum, the students are also trained for the development of skills and excellence in various sports activities. For this reason, Inter-Collegiate competitions for several games like chess, table-tennis, badminton, kabaddi, volley ball, basket

ball, kho-kho, cricket, weight-lifting, athletics, cultural activities, essay, debate and elocution competitions etc. are regularly arranged at various colleges under the direct guidance of the DSW.

The selected students from Inter-Collegiate competitions are nominated for Inter-University participation.

During the year under report, several inter-collegiate competitions were arranged at different colleges. The details are as under:

Sr. No.	Game	Place	Winner
1	Debate & elocution	College of food processing & Bio-energy ,Anand	SMC College of dairy science, Anand
2	Table Tennis	College of Veterinary Science & A.H., Anand	College of Veterinary Science & A.H., Anand
3	Badminton	SMC College of Dairy Science, Anand	B. A. College of Agriculture, Anand
4	Kabaddi	College of Veterinary Science & A.H., Anand	College of Veterinary Science & A.H.
5	Volley Ball	SMC College of Dairy Science, Anand	B. A. College of Agriculture, Anand
6	Basket Ball	B. A. College of Agriculture, Anand	B. A. College of Agriculture Anand
7	Cricket	B. A. College of Agriculture, Anand	College of Veterinary Science & A.H.
8	Kho-Kho	B. A. College of Agriculture, Anand	B. A. College of Agriculture Anand

During the year under report, the following university teams participated in inter-university competition in various games:

Sr.No	Competition/Tournament	Organizing Institute	Participation in the games	Remarks
1	8 th All India Inter Agricultural Universities Sports & Games Meet- 2006-07. 23.02.2006 to 26.02. 2007	Punjab Agricultural University, Ludhiana	Basket Ball, Volley Ball, Table Tennis (boys/girls), Athletic and Badminton (boys/girls)	Women team of Badminton captured first position and Won the Winner's Trophy and Gold Medal defeating the team of G. B. P.U. A.& T., Pantnagar in final in straight sets with 2 - 0 score
2	All India Inter Agricultural Universities Debate Competition (west zone) on 19-01-07 at Pune Uni.	Mahatma Fule Krushi Vidhyapith, Rahuri	Two students of AAU participated.	Both of them won First and Second prizes
3	All India Inter Agricultural Universities Debate Competition 14-02-2007	Tamilnadu Agricultural University, Coimbtore	Two students of AAU participated.	-

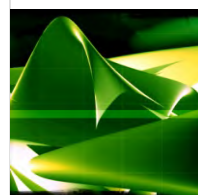
Anand Agricultural University took lead and for the first time organized First Gujarat Inter Agricultural University Literary and Cultural Competitions-2007 on February 9, 2007. The details of GIAU events and our achievements are as under.

Sr. no.	Gujarat Inter Agricultural University Tournaments	Organizing University and date	Remark/Position won
1	Literacy Events	AAU, Anand 09-02-2007	Essay (PG) First Rank
2	Cultural Events	AAU, Anand 09-02-2007	One Act Play- First Prize, Best Actor, Mono Acting (Male & Female) - First Prize
3	Chess, Khokho and Kabbadi	SDAU 21-03-07 to 22-03-07	Participation

(F) National Service Scheme (NSS)

The National Service Scheme is operated in all the Colleges of Anand Agricultural University. During the year under report, two units of 50 students and one unit of 100 students were allotted to different colleges. Details of the college-wise registered volunteers are as under:

Sr. No.	Name of College	No. of registered Volunteers
1	B. A. College of Agriculture, Anand	100
2	College of Veterinary Science & A.H., Anand	50
3	SMC College of Dairy Science, Anand	50
Total		200





During their spare time in their academic schedule, the students actively participate in the activities related to the problems and requirements of the society and its development and welfare through various fields of NSS activities, working in close coordination with Environment, Health, Family Welfare, Hospitals and other organizations during natural calamities. Dr. A. M. Thaker, Coordinator, NSS, attended an inaugural function for Launching of 'YUVA' (Youth Unite for Victory on AIDS) was organized by Ministry of Youth Affairs & Sports, Government of India, New Delhi on 27-6-2006, H.E.Vice President of India Shri Bhairon Singh Shekhawat Presided over the function & inaugurated it.

At Anand Agricultural University HIV/AIDS Adolescence Quiz was held on 5-10-2006. The World AIDS Day was celebrated on 1st December, 2006 and Red Ribbon Club of AAU was formed and declared open. Hon. Vice Chancellor addressed the member of Red Ribbon Club and administered OATH to them. On this occasion two technical lectures were arranged to educate the members of Red Ribbon Club. The total student members of the Red Ribbon Club are 218.

The social activities carried out by the NSS are divided into two categories:

i Regular Activities

The regular activities carried out by the Colleges of AAU during the year

includes tree plantation program, poster competitions, wasteland development, blood donation camp, literacy program, sanitation of colleges, hostels, campus etc., and other related social works.

ii Special Camp Activities

Under special camp activities, all the three colleges of AAU have organized special camps in which student volunteers have participated. During these camps, various programs like modern agricultural techniques, scientific preservation of fruits and grains etc. were arranged. Besides these, during these days, blood donation camps as well as Blood Grouping and Thalassemia testing program and animal treatment camps were also organized.

(G) National Cadet Corps (NCC)

With a view to give a boost to the youth for Nationalism and to serve the motherland the NCC Unit of B.A. College of Agriculture of AAU has been established which organizes various training programs for the development of quality leadership, patriotism, brotherhood, sportsmanship and adventurous attitude and unity among the students joining this unit willingly. This unit of NCC is attached with 4 Gujarat Battalion, NCC, V.V.Nagar. The unit consists of 2 platoons of 100 cadets. Our 40 cadets participated in Combined Annual Training Camps and Annual Training Camps held at Dakor, Petlad and

Ahmedabad

In addition, 29 cadets passed 'B' Certificate Examination, and 10 cadets have cleared 'C' Certificate Examination.

(H) College Magazine

The college magazine is published by each college of AAU with the aim to bring the potential of thinking in writing and expression of students. The teachers, staff members and Post-Graduate students of the College contribute for the overall development of the students through inspirational articles, poems, drama agricultural information useful to farmers and scientific community and other columns. The Director of Students' Welfare provides the needed financial assistance.

(I) Educational Tour

Educational tour is considered as a part of the academic syllabus of the degree courses of Anand Agricultural University. The duration of educational tour is of three weeks in Agriculture/Dairy faculty and two weeks in Veterinary faculty, which comprises of visits to reputed Institutes of Gujarat and other states of India.

The basic purpose of this tour is to gain knowledge and information

regarding their study by personal visit of the related institutes and research centers. From the educational tour during the year, various colleges of AAU have gained important and interesting information regarding the developments in agriculture, veterinary and industrial growth by visiting the research centers of AAU and other places.

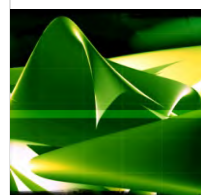
During the year under report, all the colleges have arranged their educational tour by University vehicles, thereby reducing University expenditure to a large extent.

(J) Other Activities

The students are encouraged to participate in the following:

- (i) Nature Club
- (ii) Rotary Club
- (iii) Eleve Forum
- (iv) Extension Club
- (v) Quest
- (vi) Alumni Association
- (vii) Gandhi Jayanti Celebration
- (viii) Republic and Independence Day Celebration
- (ix) World AIDS day
- (x) Annual Day celebrations

Sr. No.	Name of College	No. of Students	Duration of Tour
1	B.A.College of Agriculture	33	15.02.2007 to 02.03.2007
2	College of Veterinary Science	52	15.02.2007 to 02.03.2007
3	S.M.C.College of Dairy Science	56	26.02.2007 to 18.03.2007



(K) Financial Assistance to the Students

Anand Agricultural University provides scholarship and financial assistance on merit basis to the students admitted to various constituent colleges. Merit scholarship of Rs.75/- per month is awarded to the students of Veterinary Science and Rs.250/- per month to under-graduate girl students. The ICAR Merit cum Means scholarship of Rs.500/- per month, Merit scholarship Rs.60/- per month, and poor student's scholarship of Rs.60/- per month and free

scholarships of Rs.250/- per semester are awarded.

The amount of fellowship is Rs.1500/- per month for master degree and Rs. 2000/- per month for PhD awarded on merit basis.

(L) Students' Discipline

The discipline is being inculcated in students through sports, NCC and NSS activities creating a congenial atmosphere amongst teachers, students and staff members of the University.



Republic Day Celebration at gymkhana Ground, Anand on 26-01-2007

Annual Day Celebration in February ,2007



Inauguration of literacy and cultural competitions -2007 of GUJ.INTER AGRICULTURE UNIVERSITY on 09-02-2007 in auditorium of BACA

Team of one act play of AAU won the trophy of Best one Act play on 9-2-2007



Inauguration of cultural competitions on 09-02-2007



The photograph of Amit Singh delivering speech at the auditorium in Tamilnadu Agricultural University, who participated in National Elocution Contest in February 2007. The students first participated at zonal level which was held at pune in Rahuri Agricultural University. The student stood first at zonal level in pune and further participated at the national level held at coimbatore (Tamilnadu Agricultural University)



Model of New Building of Vice Chancellor's Office

Chapter 9 Estate Management : Architecting dream monuments

The year 2006-07 was very hectic for the construction activities in the university. Nearbefore in the history of the GAU grant of Rs. 6,00,00,000=00 were allotted for as many as 100 new works. It was a great challenge for the Executive Engineer and his team. the challenge was faced with enthusiasm and devotion. Out of 100 works many buildings and structures are planned for execution & as many as 21 construction projects were completed during the year under report.

The office of the Executive Engineer prepared, scrutinized, analyzed and granted as many as 100 Administrative Approval and 114 Technical Sanctions during the year under report.

In addition, the office of the

Executive Engineer also looks after transport, 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.

The following paragraphs show the enormity of the tasks carried by the Estate Managers of the university.

Construction Committee :

The Construction Committee is constituted to frame regulations, planning and approval of major works and excess/extra items as per powers delegated in statute-28.

The Construction committee consists of following members :

Sr. No.	Name of member	Designation	
1	Prof. M.C. Varshneya	Vice Chancellor	Chairman
2	Dr. A.R. Pathak	Director of Research	Member
3	Dr. A.A. Patel	Director of Extension Education	Member
4	Dr. M.C. Desai	Principal, Vet. Sci. College	Member
5	Dr. A. M. Shekh	Principal BACA	Member
6	Shri V.P. Macwan	Registrar	Member
7	Shri P.S. Vyas	Account officer-cum- comptroller	Member
8	Dr. B.N.Patel	Research Scientist (Tobacco)	Member
9	Dr. J.G.Sarvaiya Dr. Arun A. Patel	Director of Information Technology	Member
10	Dr. S. N. Goyal	Research Scientist (Makai) Godhra.	Member
11	Er. B.N. Bhalia	Executive Engineer	Member Secretary

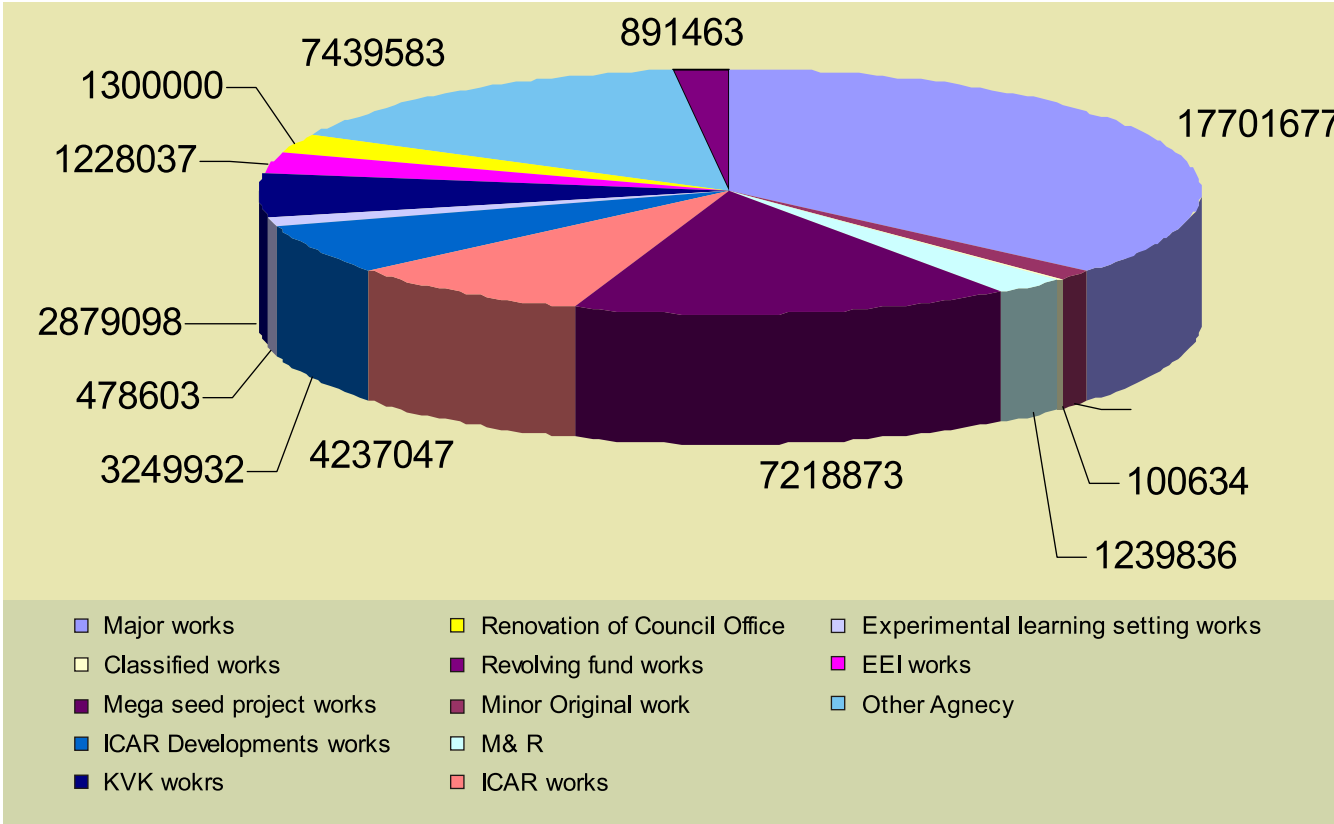
Meetings of Committee

Sr. No.	Meeting	Date
1	5 th meeting	04-05-2006
2	6 th meeting	22-08-2006



- Following works are completed during the period of report :
- (1) Construction of Office cum laboratory building at AAU, Dabhoi under SSNNL.
 - (2) Construction of Threshing yard at AAU, Chharodi.
 - (3) Renovation of implement shed at AAU, Chharodi.
 - (4) Construction of Seed godown at AAU, Chharodi.
 - (5) Construction of Seed godown at AAU, Viramgam
 - (6) Construction of Seed godown and pump room at AAU, Dhandhuka.
 - (7) Construction of Seed godown at AAU, Arnej.
 - (8) Renovation of pump room at AAU, Arnej.
 - (9) Repairing and renovation of existing threshing yard and store at RRS farm, AAU, Anand.
 - (10) Providing Chain link and wire fencing at RRS farm AAU, Anand.
 - (11) Renovation of Munshi hostel kitchen at AAU, Anand.
 - (12) Construction of toilet block for EEI at AAU, Anand.
 - (13) Costruction of Dining hall for EEI at AAU, Anand.
 - (14) Renovation of Conference hall of Vetrinary Science college at AAU, Anand.
 - (15) Renovation in Dairy Chemistry building at AAU, Anand.
 - (16) Repairing of godown of Agronomy farm at AAU, Anand.
 - (17) Renovation for Council office for SAU's at Krushi Bhavan, Gandhinagar.
 - (18) Providing seating arrangement for Registrar office at AAU, Anand.
 - (19) Renovation for grass godown at BTRS farm, AAU, Anand.
 - (20) Providing plinth protection to Tobacco cussing godown at AAU, Dharmej.
 - (21) Construction store cum godown at Forage farm, AAU, Anand.

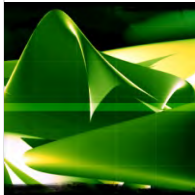
Statement showing expenditure for works		
Sr. No.	Plan/Scheme	Expenditure in Rs.
1	Major works	1,77,01,677.00
2	Minor original works	5,00,000.00
3	Classified works	1,00,634.00
4	Maintenance & Repairing works (M. & R.)	12,39,836.00
5	Mega seed project works.	72,18,873.00
6	ICAR woks	42,37,047.00
7	ICAR development works.	32,49,932.00
8	Experimental Learning-setting up of facilities for hands on training works.	4,78,603.00
9	KVK works.	28,79,098.00
10	EEI works.	12,28,037.00
11	Renovation of Council office	13,00,000.00
12	Other agency works.	74,39,583.00
13	Revolving fund development works.	8,91,463.00
	TOTAL	4,84,64,783.00



Planning of following buildings are completed and works started as per requirement of different departments of the University.

- (1) Construction of building for Seed production for Agriculture and Horticulture at AAU, Anand.
- (2) Construction of P.G. Girls hostel at AAU, Anand.
- (3) Construction of Amla and Apiary processing unit at AAU, Anand.
- (4) Construction of High-tech floriculture laboratory at AAU, Anand.
- (5) Construction of Farmer's hostel at AAU, Anand.
- (6) Construction of building for processing unit for Medicinal & Aromatic Plant at AAU, Anand.

Major Events		
Sr. No.	Detail of event	Date
1	Bhoomi puja of Seed complex.	05-10-2006
2	Bhoomi puja of P.G. Girls hostel.	04-01-2007
3	Bhoomi puja of Farmer's hostel.	10-02-2007
4	Bhoomi puja of Medicinal & Aromatic plant building.	10-03-2007



Bhumi Pujan of the Seed complex



Hon'ble Agriculture Minister
Shri Bhupendrasinh
Chudasma is unveiling
the plaque of
Bhumipujan of
Mega Seed Project at
Anand
Agricultural
University,
Anand

Seed complex

Model of
Mega Seed Project
office and
Laboratory



Bhumi Pujan of the
Farmer's Hostel



Bhumi Pujan of the
P.G. Girls Hostel

Model of Farmer's Hostel



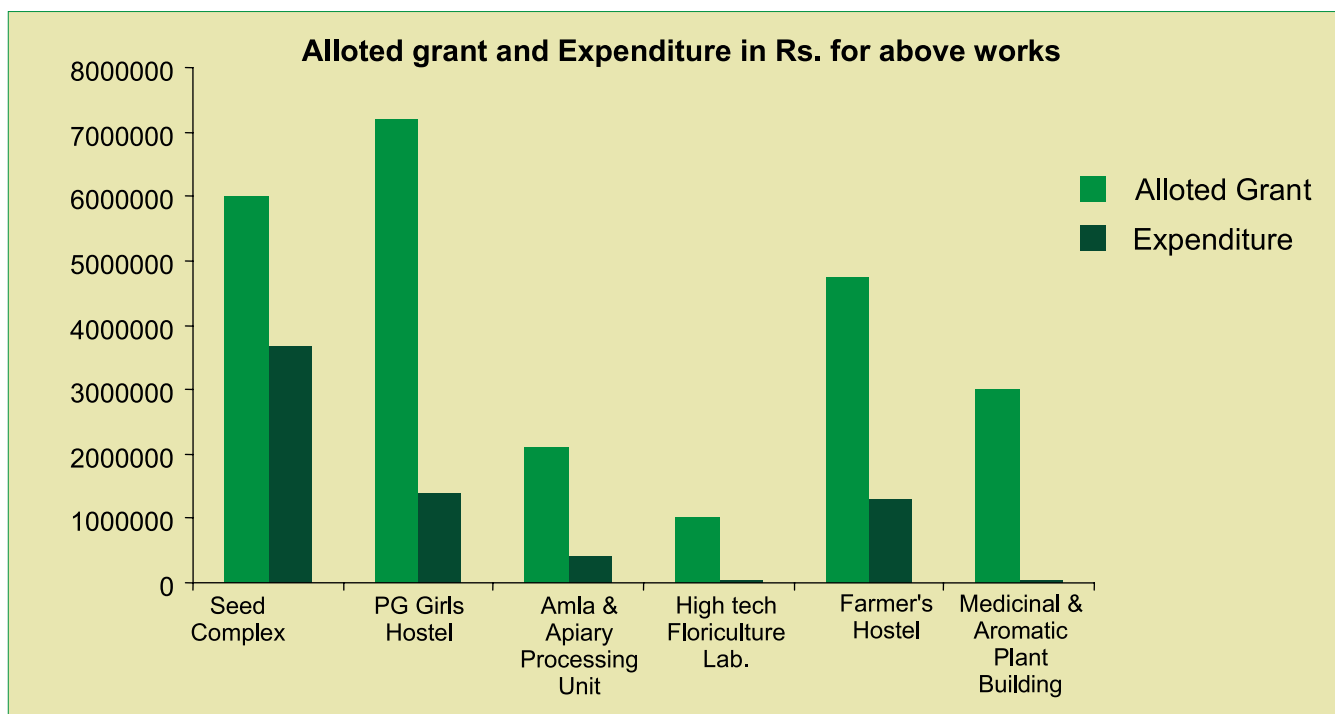
Model of P.G. Girls Hostel



Bhumi Pujan of the
M & AP Building

Model of M & AP Building





Housing Accomodation 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 statutory body formulated under statute 42.A Schedule XXVI para 4.1 as below :

Sr. No.	Name member	Designation	
1	Dr.A. R. Pathak	Director of Research	Chairman
2	Dr. M.C.Desai	Principal, Vet. Sci. College	Member
3	Dr. A. A. Patel	Director of Extension Education	Member
4	Dr. P.P. Patel	Principal E.E.I.	Member
5	Dr. A.M. Shekh	Principal B.A.C.A.	Member
6	Dr. R.H. Patel	Asso. Director of Research	Member
7	Dr. A.D. Patel	Research Scientist(Tobacco)	Member
8	Er. B.N. Bhalia	Executive Engineer	Secretary

Meetings of Committee		
Sr. No.	Meeting	Date
1	7 th meeting	20-06-2006
2	8 th meeting	13-11-2006

Chapter 10 Finance & Accounts: Navigating through fiscal flow

The Accounts Officer-cum-Comptroller

11.05.2004.

Considering the responsibility and answerability that lie with the Accounts Officer-cum-Comptroller, Item-13 in Chapter-2 of the first Statutes of Anand Agricultural University is devoted to the office and duties of the Comptroller, as reiterated in the Gujarat Agricultural University Act, Section No.5, which ordains the Officer-in- Charge of this office to follow the directives mentioned there under.

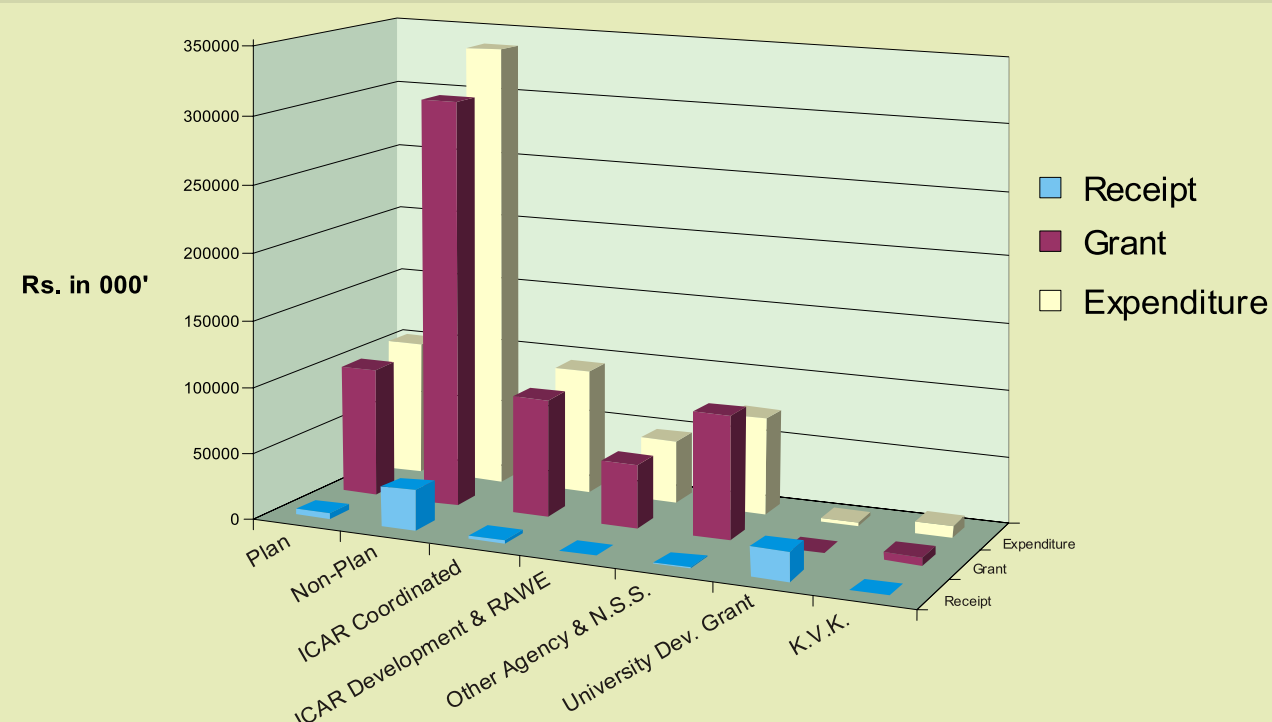
Shri P.S. Vyas was appointed as the Accounts Officer-cum-Comptroller by the Government of Gujarat vide Office Order No.GKV/102004/1661/K.2, dated

Annual Income/Expenditure Grant Statement

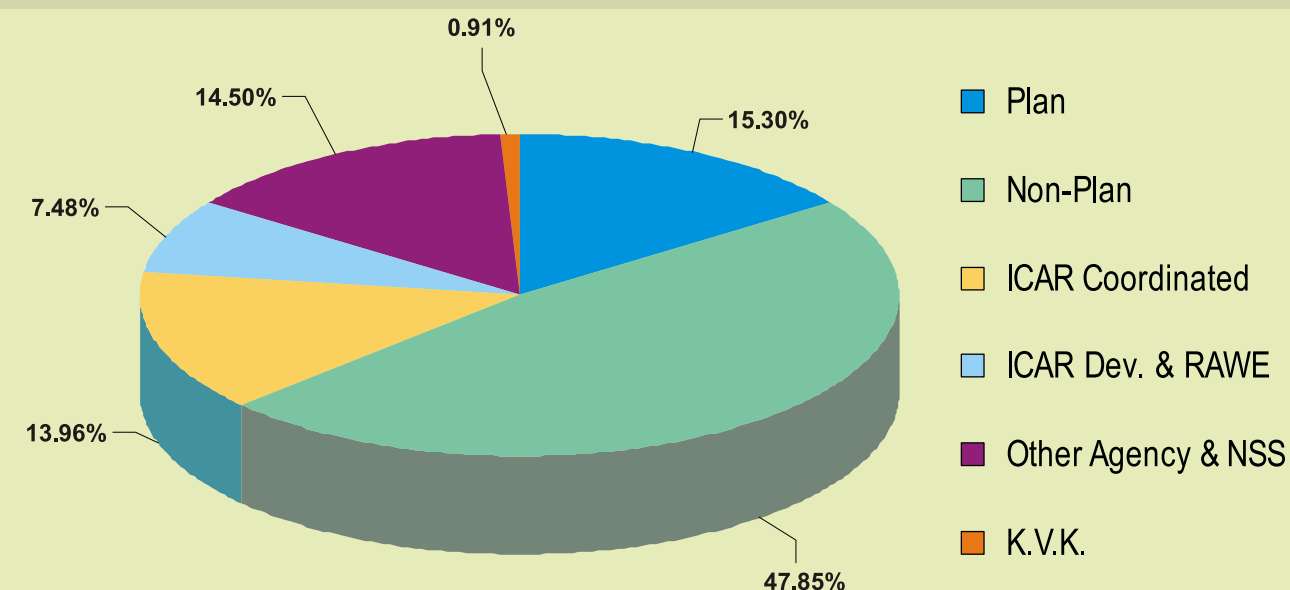
Anand Agricultural University has received State Plan & Non-Plan grants from Government of Gujarat. The research, extension & development grants were received from I.C.A.R., New Delhi. Further, Plan and Non-Plan grants for Extension Education Institutes were received from Government of India. The University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

Grant Received / Expenditure Incurred / Income Generated (2006-07)							
Sr. No.	Particulars	Grant received		Income generated		Expenditure incurred	
		Rs.	Ps.	Rs.	Ps.	Rs.	Ps.
(A)	Govt. Grant						
1	Plan Scheme	9,75,50,000.00		46,70,561.96		10,24,96,209.12	
2	Non Plan Scheme	30,50,32,000.00		3,10,90,740.59		33,58,07,993.14	
	TOTAL (A)	40,25,82,000.00		3,57,61,302.55		43,83,04,202.26	
(B)	Revenue Account						
1	I.C.A.R Co-ord. Scheme	8,89,68,818.00		26,58,575.63		9,49,01,278.36	
2	I.C.A.R. Adhoc Development	4,75,00,000.00		0.00		4,75,60,189.00	
3	RAWE	2,00,000.00		0.00		2,06,283.00	
4	Other Agencies Scheme	9,23,72,897.94		12,02,141.40		7,32,71,850.75	
5	N.S.S. (18273)	62,000.00		0.00		46,747.00	
6	K.V.K. Centre in AAU	58,22,000.00		0.00		89,22,000.00	
7	Development Grant (9599)	0.00		2,15,47,324.84		21,65,464.00	
	TOTAL:(B)	23,49,25,715.94		2,69,87,589.87		22,70,73,812.11	
	TOTAL : (A+B)	63,75,07,715.94		6,27,48,892.42		66,53,78,014.37	

Receipts, Grant & Expenditure for the year 2006-07



Funding Agency wise Grants for the year 2006-07



Audit

The University Accounts are to be audited as per the following arrangements.

(i) Internal Audit

Due to the shortage of manpower, the Internal Audit could not be conducted. The pay verification was done by this office.

(ii) Examiner Local Fund Audit : NIL

Compliance of old audit para raised by Local Fund Audit Examiner.

(iii) A.G. Audit

Compliance of old Audit Para raised by A.G. Audit Examiner.

Resources of Income and Financial Estimates

The Revenue generated by the University during 2006-07 is mainly through sale of farm produces, milk & milk products, animal, bakery products, transport & 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 2006-07, as approved by the State Government.

Sr. No.	Details of Head	Estimates for 2006-2007 (In Rs. lakhs)	
		Original	Revised
1.	Non Plan		
	Non-Plan (Normal)	2644.22	3001.67
	Non-Plan (Tribal)	46.05	48.65
	TOTAL (A)	2690.27	3050.32
2.	Plan		
	Education	270.00	270.00
	Extension Education	58.62	58.62
	Research	646.38	646.38
	I.T.	0.50	0.50
	TOTAL (B)	975.50	975.50

Physical Store Verification

Due to the shortage of manpower, the internal audit could not be conducted.

Training is being looked after by the Registrar.

Pension

Details of Pension cases	No. of cases finalize
(1) Final pension cases	60
(2) Revised pension cases	03
(3) Restoration pension cases	02

Provident Fund (PF)

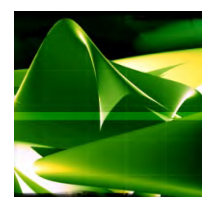
The details of P.F. cases disposed during the year.

No. of Final withdrawal cases	33
No. of Part-final withdrawal cases	278

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 are

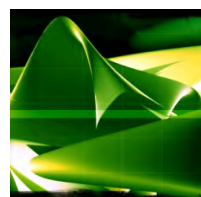
opened and maintained.

The work of computerization of the system has been taken up and run on trial basis.





www.aau.in



Chapter II Information Technology Hi-Tech Savvy

The Information Technology Center at Anand Agricultural University caters the demand for the use of Information Technology in the field of agriculture for the State Agricultural Universities of Gujarat and also for the Dept. of Agri. & Co-operation of State Government.

Network Services

Internet, E-mail, CAB Database and File/Printer sharing services at Anand Agricultural University have been provided and maintained through Local Area Network (LAN) having GSWAN and BSNL connectivity.

Beneficiaries

More than 3100 persons including the university staff, Undergraduate, Post-graduate students and the officials from various departments of the State have

taken benefit of ITC facilities like network services, internet, E-mail, scanning of photographs, CAB abstract service, printing, CD/DVD writing etc. these services are very useful to the students in their educational and research activities.

Training

Following short-term training courses were conducted for the officers of the Agricultural Universities and State Government at ITC, Anand.

1. Soil Health Card System
2. Website Updating
3. Database Management
4. Windows 2003
5. IIS Server
6. Microsoft Office Front Page 2003



Training
given under
Information
Technology
Center



Government level Meeting.

1. Soil Health Card System
2. Information Technology at AAU
3. *Krushi Mahotsav-2007*

Reference Services

CAB Abstract Service has been installed which has been put on intranet.

This enables the end users to get quick information through computer on any reference related to Agricultural research published from 1972 to 2007 through Network. This is unique kind of service not found anywhere in India which is provided free of cost to the scientists and the students of the University. This has expedited the reference services and has saved a lot of time of the scientists and the students.

Special Contribution/Achievements

Web Site For AAU

ITC has prepared a Web Site for Anand Agricultural University; the domain name is www.aau.in. This web site includes various aspects and activities of Anand Agricultural University like

administration, faculties, colleges, education, and extension, e-library, tender, Right to Information Act etc. Further, 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. There are more than 4500 e-mail users. The web site has been maintained and updated regularly.

Web-Base Application for Soil Health Card Program

Government of Gujarat has selected the Anand Agricultural University to establish and implement the state wide programme on Soil Health Card. Under this programme, centre has developed the web-base application software, which generates and provides the fertilizer recommendations on the basis of soil analysis and the nutrient requirements of the crop for each field. This will increase the efficiency of the fertilizer and saving in consumption of the fertilizer.

On the basis of Moisture Availability Index and other soil and meteorological parameters, Soil Health Card programme also advises the individual farmer for the selection of crop and cropping system for his field with economic benefit. It also provides cultivation practices for all the crops.

The action plan for the agricultural production at taluka and village level is available under this programme to coordinate the efforts of all the functionaries.

The web-sites for agricultural

universities, Department of Agril, Department of Animal Husbandry, Department of Horticulture and other Boards/Corporations engaged in agriculture has been established under this program, which provide information regarding different schemes, statistics, working system etc.

Technical Help

On inclusion in various committees of the university, the Director, IT took the 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 Network problems at all the four universities.

Because of the on-hand training given to various employees on computer applications, administrative and account activities have been improved. Further, theoretical and practical knowledge about IT and its related equipments are made available to other line department of the state, which help the other organizations also to strengthen their IT activities.

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. The meetings of the Soil Health Card programme committies are given in Table 11.1.

Network Installation & Maintenance

ITC looks after installation and maintenance services of the Network at the University level. A sizeable amount of money has been saved by using a free Network Operation System i.e. Fedora 7. The network is continuously monitored and the problem, if any, is attended and rectified. The Network Operating System is up-graded regularly adding the useful features.

Presentations/ Models

ITC has following Multimedia presentations covering various areas of University activities, which are updated from time to time. These presentations have been shown or displayed during the visits of the Guests, Board of Management Meetings, Krushi Fairs or at



Meetings of The Soil Health Card Programme Committee

Sr. No.	Particulars	Date
1	1 st Meeting	14-04-06
2	2 nd Meeting	17-04-06
3	3 rd Meeting	04-05-06
4	4 th Meeting	18-05-06
5	5 th Meeting	04-08-06
6	6 th Meeting	25-08-06
7	7 th Meeting	15-10-06
8	8 th Meeting	17-10-06
9	9 th Meeting	17-02-07
10	10 th Meeting	23-02-07
11	11 th Meeting	09-03-07
12	12 th Meeting	14-03-07
13	13 th Meeting	22-03-07
14	14 th Meeting	29-03-07

Visitors

The Center has been visited by a number of persons, who has remarked AAU a front-runner in IT activities out of all the Agricultural Universities of the Country.



Chapter 12 Library : Blooming toward e-resources



Dr.M.D.Patel Regional e-library is functioning independently as "University Library" and flourished in possession of foreign journals(44), national journals (182), books (600) and thereby total collection hiked to a pick of 57000 bar coded books, more than 12000 back volumes, reports & others contents along with 3000 theses of all faculties of University.

Library has rendered online services of CAB Abstracts data base through WINSPIRS / WEBSPIRS and Science Citation Index on ICAR internet to the users. Reprographic service was up graded with Colour Xerox facility. Book transaction automation through e-card has become advantageous

over old manual system. More than 900 students and staff have become e-card library holders.

Cyberary is furnished with LCD type computers (25) and scanning facility & that has become attractive point to access internet/intranets and e-resources by the students. Nearly 38000 readers are being benefited using library & cyberary with regards to collection of information/ materials pertaining to education, research and knowledge oriented literature.

More over for the first time library council meet was held on 25-06-06 and under chairmanship of Hon. Vice Chancellor, many important issues were discussed in the committee which helped in stream lining the library administration.

