

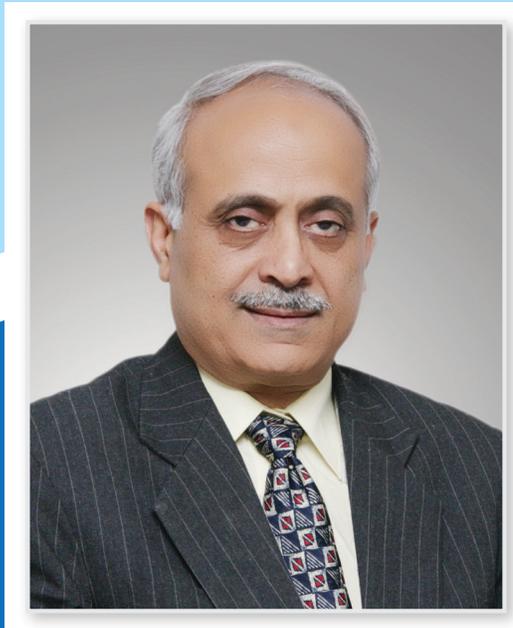


Annual  
**REPORT**  
(2010-11)

**ENDOWMENT FUND SECRETARIAT (EFS)**  
UNIVERSITY OF AGRICULTURE, FAISALABAD

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Prof. Dr. Iqrar Ahmad Khan (*Sitara-i-Imtiaz*)  
Chairman BoD / Vice Chancellor



Prof. Dr. Zafar Iqbal  
Executive Director



Dr. Naeem Mahmood  
Additional Director /  
Associate Professor



Mr. Amir Saeed Rana  
Deputy Director /  
Assistant Professor



Mr. Sajid Ali  
Lecturer



Mr. Ejaz Hussain  
Accounts Officer



## INTRODUCTION

### Background

Of all lucrative lines of work, nothing is better for a well-bred man than Agriculture. This reflects that no other human profession encompasses so wide and gainful field as Agriculture. It seems pleasant to mind to make valuable innovations and discoveries which enlighten the world with cheers and beauty. Undoubtedly, the field of Agriculture is so to make such discoveries.

The Government of Pakistan and United States of America recalling the close ties in scientific and technological cooperation, signed a US\$ 12.4 million Food for Progress Agreement on September 15, 2003. Under this Agreement, University of Agriculture, Faisalabad (UAF) established FDTTPC Endowment Fund. The Ministry of Finance transferred Rs. 650.00 million to UAF in 2006, which has been expanded to Rs. 743.00 million by the recurring addition of 15% of annual income. The principal amount is invested in banks approved by Board of Directors. The income generated is allocated for different activities in line with the Pakistan's long term goals for the agriculture sector. The goals focus on food security, poverty alleviation and promoting broad based equitable and sustainable agriculture.

US funding is also provided through the Endowment Fund Secretariat (EFS) established in 2003 between the Government of Pakistan and the USA for \$12.4 million under the Food for Progress Program. The EFS program supports short term training, travel grants for presentations at scientific meetings and for short professional visits, workshops, seminars and conferences, and for technology transfer efforts to the point of product commercialization in the private sector.

### Objectives

The Endowment Fund is an independent entity and possess all of the powers necessary to carry out its following objectives:

- a. To support UAF Programmes for advanced training in biotechnology, agricultural sciences research, technology transfer and product commercialization
- b. To strengthen the faculty and support R&D activities of UAF
- c. To support similar Programmes with other institutions of higher learning, private sector, not-for profit organizations, and domestic and international organizations
- d. To encourage increased cooperation among scientists conducting agriculture-related research at universities in Pakistan and the United States of America

## Establishment of Endowment Fund

The Syndicate in its meeting held on 11.09.2004 under Section 25(2)(i) of the University of Agriculture Faisalabad Act, 1973 approved to establish Endowment Fund at UAF. The Board of Directors (BoD) is the governing body of this Fund and responsible for Fund's program, its financial, and managerial policies. Following is the composition of Board:

- |   |             |
|---|-------------|
| • Vice Chancellor, UAF (Chairman)                       | Ex-off      |
| • Vice Chancellor, Agriculture University Peshawar, KPK | Ex-off      |
| • USDA Agri. Attache in Pakistan or his nominee         | Ex-off      |
| • Agri. Specialist, USDA, US Embassy in Pakistan        | Ex-off      |
| • Eminent Scientists (Two)                              | For 3-years |
| • Progressive Farmer (One)                              | For 3-years |
| • Executive Director, ALP (PARC), Islamabad             | Ex-off      |
| • Registrar, UAF  | Ex-off      |
| • Treasurer, UAF  | EX-off      |
| • Executive Director, EFS/Secretary                     | Ex-off      |



8<sup>th</sup> meeting of Board of Directors of Endowment fund was held on October 7, 2010

## Endowment Fund Secretariat

Endowment Fund Secretariat is responsible for the operation of the Fund which consists mainly of the selection, processing, approval, monitoring, evaluation and coordination of projects supported in whole or in part by it. All the activities are planned, approved and coordinated through Endowment Fund Secretariat (EFS) under the supervision of Executive Director.

As per agreement, the staff of Endowment Fund is provided by the University of Agriculture, Faisalabad. Their salaries are drawn out of University budget. Operational budget is provided out of annual income of Endowment Fund.

# Section-1

## FACULTY DEVELOPMENT

Under Faculty Development Component, EFS offers travel grants for short training, for presenting papers in conferences/seminars, specialized short visits and financial support for organizing seminars/conferences/workshops at UAF. Following procedure are followed for execution of this program:

1. Initial evaluation of all applications by Endowment Fund staff as to their eligibility and availability of funds.
2. Short visits/grant applications for less than Rs. 1 lac are processed by Endowment Fund Secretariat and approved by the Vice Chancellor/Chairman BoD.
3. Grant applications for more than Rs. 1 lac are processed through Faculty Development Committee and approved by the Vice Chancellor/Chairman BoD.
4. Funds are released in advance for travel grants.
5. The grantees submit an activity report after completion of the event.

### 1.1 Short Term Trainings

The opportunities for training of UAF faculty in agricultural and allied sciences are open throughout the year. The following applicants have completed/ proceeded for short term training abroad during the year 2010-11 with total expenditure of Rs. 3.2 million.

Sr.#	Name of Trainee	Title of training/Host Institute	Duration
1.	Dr. Muhammad Yaqoob Department of Livestock Management, UAF	Application of Precision Farming Technologies (DGPS/GIS) to Animal Grazing System. Nova Scotia Agriculture College, Canada	June- October 2010
2.	Dr. M. Hamid Bashir Department of Entomology, UAF	Studies on the Compatibility of Entomopathogenic Fungi with Predatory Mites for Whitefly Management. South China Agriculture University, China	July- November 2010
3.	Mr. Bahadur Ali Department of Social Sciences & Humanities, UAF	ESL (English as a Second Language) and Technical Report Writing. Washington State University Pullman, USA	April - August 2011
4.	Mr. Hassan Munir Department of Crop Physiology, UAF	Molecular Markers Development Techniques with Specific Emphasis on Quinoa ( <i>Chenopodium Quinoa</i> Willd). University of Brigham Young Provo, USA	June- September 2011

### 1.2 Travel Grants to Present Papers (Abroad)

Endowment Fund Secretariat encourages faculty members to have international exposure by presenting their research findings at various international seminars, conferences, workshops, etc. In this regard following travel grants were provided to faculty members to present papers at international events with total expenditure of Rs. 1.4 million.

Sr.#	Name of Grantee	Title of Paper//Host Institute	Country Visited
1.	Dr. Mian Kamran Sharif National Institute of Food Science & Technology, UAF	Food Safety and Security Situation in Pakistan. Paper presented in International Conference of Food Security During Challenging Times (ICFSDCT). July 5-7, 2010	Malaysia
2.	Dr. Moazzam Rafiq Khan National Institute of Food Science & Technology, UAF	Prospects of Value Addition with Reference to Food Security in Pakistan. Paper presented in International Conference of Food Security During Challenging Times. July 5-7, 2010	Malaysia
3.	Dr. M. Anjum Zia Department of Chemistry, UAF	Diabetes Diagnostic Enzyme "Glucose Oxidase" Hyper-production by Mutagenesis. Paper presented in Second International Biotechnology and Biodiversity Conference (BIO JOHOR 2010) at Johor Bahru, Malaysia. July 6-8, 2010.	Malaysia
4.	Dr. Mahr-un-Nisa Institute of Animal Nutrition & Feed Tech., UAF	Impact of Rumen Digesta Inoculation on Feeding Value of Urea-Molases Treated Wheat Straw. Paper presented in the international symposium/Conference during 2011 ADSA-ASAS Joint Annual meeting. July 10-14, 2011	USA
5.	Prof. Dr. Javed Iqbal Sultan Institute of Animal Nutrition & Feed Tech., UAF	Chemical Composition and in situ Digestion Kinetics of Fodder Tree Leaves. Paper presented in 2010 ADSA-PSA-AMPA-CSAS-ASAS joint Annual meeting. July 11-15, 2010	USA
6.	Prof. Dr. Tariq Javed Department of Pathology, UAF.	Prevalence of Bovine Tuberculosis in Zoo Animals in Pakistan on the Basis of Single Comparative Cervical Intradermal Tuberculin Test. Paper presented in 2nd Veterinary Association Malaysia Congress and 4th Asian Society of Zoo and Wildlife Medicine International Meeting, Kuala Lumpur. July 30 - August 1, 2010	Malaysia

Sr.#	Name of Grantee	Title of Paper//Host Institute	Country Visited
7.	Dr. Waseem Akram Department of Entomology, UAF	An Inventory of the fireflies of Pakistan from Natural and Agriculture Ecosystems. Paper presented in the second International Firefly Symposium 2010, Kaula Lampur. August 2-6, 2010	Malaysia.
8.	Prof. Dr. Muhammad Iqbal Department of Farm Machinery & Power, UAF	Development and Fabrication of an Energy Efficient Zone Disk Tiller for Sowing Wheat after Harvesting Paddy Crop. Paper presented in the European Congress on Conservation Agriculture-Towards Agro-Environmental Climate and Energetic Sustainability in Madrid, Spain. October 4-7, 2010	Spain

### 1.3 Travel Grants for Short Visits

Travel grants for short visits abroad are provided for strengthening international collaboration and signing of MoUs etc. Following short visits were provided with total expenditure of Rs. 0.7 million.

Sr. #	Name and Address	Country Visited
1.	Prof. Dr. Iqrar Ahmad Khan Vice Chancellor, UAF.	The Delegate visited different Institutions/ Universities of Thailand during May 21-27, 2011
2.	Prof. Dr. Faqir Muhammad Anjum Director General, National Institute of Food Science & Technology, UAF	-do-
3.	Prof. Dr. Asif Ali Director External Linkages, UAF	-do-
4.	Major General (Rtd.) Muhammad Farooq Representative from Civil Society	-do-

### 1.4 Seminars/Conferences/Workshops/Trainings organized at UAF

Financial support is provided to UAF faculty members to organize seminars/conferences/workshops at the campus. Following events were sponsored by Endowment Fund during the year 2010-11 with total expenditure of Rs. 12.029 million.

Sr. #	Name and Address	Event
1.	Prof. Dr. Faqir Muhammad Anjum Director General, National Institute of Food Science & Technology, UAF	Workshop on Development of Dual/Joint Degree Program in MBA and Food Science between USA Universities and UAF. August 5-8, 2010

Sr. #	Name and Address	Event
2.	Prof. Dr. Allah Bakhsh Director Research, UAF	Seminar on Spatial Variability and Precision Agriculture. August 5-27, 2010
3.	Dr. Mumtaz Akhtar Cheema Department of Agronomy, UAF	Workshop on Edible Oilseed Crops: Threats and Challenges from Production to Consumption. August 4, 2010
4.	Prof. Dr. Muhammad Ashfaq (T.I) Dean, Faculty of Agriculture, UAF	Training workshop on Sustainable Management of Insect Pests of Fruits with Special Reference to Citrus through Modern Protection and Post Harvest-Losses-Reduction Techniques. September 1-4, 2010
5.	Dr. Atif Riaz Institute of Horticultural Sciences, UAF	Workshop on Career Development in Floriculture Chain in Pakistan. September 17-18, 2010
6.	Dr. Abdul Rehman Department of Plant Pathology, UAF	Workshop on Recent Advances in the Etiology and Management of MSDS. October 27-31, 2010
7.	Dr. Atif Riaz Institute of Horticultural Science, UAF	International Seminar on Exploring Potential Marketing Avenues in Floriculture Industry. October 19, 2010
8.	Dr. Muhammad Ashfaq Department of Agricultural Economic, UAF	Workshop on Challenges and opportunities in Agriculture-Post flood Scenario. October 25, 2010
9.	Prof. Dr. Faqir Muhammad Anjum Director General, National Institute of Food Science & Technology, UAF	Seminar on Value Chain in Different Foods. November 8, 2010
10.	Prof. Dr. Allah Bakhsh Director Research, UAF	Workshop on Human Resource Development in Using Remote Sensing and GIS. November/December, 2010
11.	Prof. Dr. Rai Niaz Ahmad Dean, Faculty of Agri. Engineering & Technology, UAF	Workshop on Strengthening Agricultural Engineering through Stakeholder Workshop. December 23, 2010
12.	Prof. Dr. Zafar Iqbal Department of Parasitology, UAF	Training Workshop on Novel/International Approaches for Diagnosis and Control of Parasites. December 27, 2010 to January 12, 2011
13.	Prof. Dr. Ashfaq Ahmad Maann Department of Rural Sociology, UAF	International Conference on Migration and Desertification. January 1-7, 2011

Sr. #	Name and Address	Event
14.	Prof. Dr. Rai Niaz Ahmad Dean, Faculty of Agri. Engineering & Technology, UAF	Seminar on Water Crisis and Choices: Post Flood Scenario. January 10, 2011
15.	Dr. Khalid Mehmood Ch. Department of Agri. Extension, UAF	Workshop on Development of Internship Module and Improvement of Research and Outreach in Agri. Extension. February 12, 2011
16.	Prof. Dr. Faqir M. Anjum Director General, National Institute of Food Science & Technology, UAF	International Seminar on Halal Food Production. January 14, 2011
17.	Dr. Muhammad Jalal Arif Department of Entomology, UAF	Seminar on Developing Linkage and Internship Modules with the Stakeholders for Placement of the Internees of the Department. February 15, 2011
18.	Dr. Babar Shabaz Department of Agri. Extension	Symposium/Workshop on Sustainable Rural Development and Food Security. January 15, 2011
19.	Prof. Dr. Muhammad Sajjad Khan Department of Animal Breeding & Genetics, UAF	Seminar on Implementation of Development and Application of Decision Support Tools to Conserve and Sustainably Use Genetic Diversity in Indigenous Livestock and Wild Relatives. January 24, 2011
20.	Dr. Mahmood A. Randhawa Chairman, Department of Continuing Education, UAF	Workshop on Technical and Vocational Education in Agriculture & Livestock. February 08, 2011
21.	Dr. Abdul Rehman Department of Plant Pathology, UAF	Workshop on Training on Identification of Plant Pathogenic Fungi. February 8 & 9, 2011
22.	Dr. Mohammad Asif Ali Institute of Horticultural Science	Workshop on Mushroom Cultivation. February 16, 2011
23.	Dr. Muhammad Jafar Jaskani Institute of Horticultural Science	Workshop on 50 Years of Horticulture in Pakistan. February 14, 2011
24.	Prof. Dr. M. Ashraf Dean, Faculty of Sciences, UAF	Workshop on Linking Biodiversity Preservation and Food Security. February 17, 2011
25.	Prof. Dr. Faqir Muhammad Anjum Director General, National Institute of Food Science & Technology, UAF	Conference on Technological and Scientific Aspects of Dairy Products with Special Reference to French Cheeses. February 21-23, 2011

Sr. #	Name and Address	Event
26.	Mr. Tasleem Mustafa Department of Computer Science, UAF	Workshop on Software Exhibition/Competition. March 15-16, 2011
27.	Mr. Zeeshan Goreja Department of Business Management Sciences, UAF	Workshop on Software Development "SMS for Information Management. December 23, 2010 - February 22, 2011
28.	Mrs. Naheed Abbas Incharge, Rural Home Economics, UAF	Art Exhibition. March 10, 2011
29.	Mrs. Naheed Abbas Incharge, Rural Home Economics, UAF	Workshop on Rehabilitation and guidance of special children (Inclusive Education). March 11-12, 2011
30.	Dr.Sajjad-ur-Rahman Department of Microbiology, UAF	Workshop on Molecular Diagnosis of Avian Mycoplasma Species in Poultry Birds and Farm Premises. April 10-11, 2011
31.	Prof. Dr. Zahid Ata Department of Agronomy, UAF	Workshop with the Stakeholders/Industry Partners for Internship Program, Curriculum Revision and Collaborative Projects. March 24, 2011
32.	Prof. Dr. Muhammad Sarwar Director, Institute of Animal Nutrition & Feed Technology, UAF	Workshop on Development of Research Linkages in Animal and Poultry Production in the Public and Private Sector of Pakistan. March 28, 2011
33.	Mr. Naveed Irshad Department of Social Sciences, UAF	Workshop on Communication Skills. March 28, 2011
34.	Dr. Anjum Suhail Department of Entomology, UAF	International Seminar on Recent Trends in Entomological Education. April 05, 2011
35.	Prof. Dr. Iqrar Ahmad Khan Centre of Agricultural Biochemistry and Biotechnology (CABB), UAF	Field Training Workshop on Citrus Diagnostics. March 21- April 10, 2011
36.	Prof. Dr. Iqrar Ahmad Khan Institute of Horticulture Sciences, UAF	International Symposium on Date Palm Domestication, Distribution, Production and Marketing. April 4-5 2011
37.	Mr. Naveed Irshad Department of Social Sciences, UAF	Symposium on Pakistan's Foreign Affairs. April 7, 2011
38.	Prof. Dr. Faqir Muhammad Azhar Department of Plant Breeding & Genetics, UAF	International Seminar on Breeding Crop for Stressed Environments. April 18-19, 2011

Sr. #	Name and Address	Event
39.	Prof. Dr. Hafeez Ahmad Sadaqat Department of Plant Breeding & Genetics, UAF	Stakeholders workshop on Development of Internship Modules for B.Sc. (Hons) Agri. Plant Breeding and Genetics. April 20, 2011
40.	Prof. Dr. Muhammad Sajjad Khan Department of Animal Breeding & Genetics, UAF	Workshop on Linear Scoring System for Beauty in Dairy Animals. May 11-12, 2011
41.	Prof. Dr. Sultan Mahmood Department of Poultry Sciences, UAF	Two Days Training Workshop on Environment Controlled Housing. May 5-6, 2011
42.	Prof. Dr. Laeeq Akbar Lodhi Dean, Faculty of Veterinary Science, UAF	Workshop on Rabies Clinic and Walk on World Veterinary Day. June 10, 2011
43.	Prof. Dr. Zahid Ata Department of Agronomy, UAF	International Seminar on Crop Management: Issues and Options. June 1-2, 2011
44.	Prof. Dr. Faqir M. Anjum Director General, National Institute of Food Science & Technology, UAF	Special Lecture on Importance & Utilization of Statistic in Food Science. May 3, 2011
45.	Prof. Dr. M. Tahir Saddiqui Department of Forestry, Range Management & Wildlife, UAF	Workshop with Stakeholders/Industry Partners for Internship Programme, Curriculum Revision and Joint Research Projects. May 5, 2011
46.	Dr. Abdul Nasir Department of Structures & Environmental Engineering, UAF	International Seminar on One week jubilee year celebrations of the Department of Structures & Environmental Engineering, UAF. June 6-8, 2011
47.	Dr. Assad Farooq Department of Fiber Technology, UAF	Workshop on Bridging the Gap between Academia and Textile Industry. June 9, 2011
48.	Prof. Dr. Laeeq Akbar Lodhi Dean, Faculty of Veterinary Science	Seminar on Animal Health and Production Program in the USA. June 10, 2011
49.	Prof. Dr. Amer Jamil Department of Chemistry and Biochemistry, UAF	Training Workshop on Molecular and Biochemical Technique. June 8-14, 2011
50.	Dr. M. Mahmood-ul-Hassan Department of Zoology & Fisheries, UAF	Training in Field and Laboratory Techniques for Studying Volant and Non-Volant Small Mammals. June 26-30, 2011

### 1.5 Foreign Visitors Sponsored during 2010-11

Visit of foreign scholars is of utmost importance for faculty development as more people are benefited than the visit abroad of one individual. Therefore, EFS sponsors foreign scholars who intend to visit Pakistan for academic purpose. EFS spent Rs. 3.71 million for sponsoring 25 scientists during 2010-11.

Sr.#	Name of Visitor	Visitor's Institute	Date	Title of Workshops/ Seminars/Conferences/ Organizer
1.	Dr. Waqar Ahmad	CSIRO, Australia	Nov/Dec, 2010	Workshop on Human Resource Development in Using Remote Sensing and GIS. Organized by Director Research, UAF
2.	Dr. Qamar-uz-Zaman	Nova Scotia Agriculture College, USA	August 9-22, 2010	Seminar on Spatial Variability and Precision Agriculture. Organized by Department of Irrigation & Drainage, UAF
3.	Ali Al Adawi	Sultan Qaboos University, Oman	October 27-31, 2010	Workshop on Recent Advances in the Etiology and Management of MSDS. Organized by Department of Plant Pathology, UAF
4.	Dr. Mike Deadman			
5.	Dr. Jean-Francois Grongnet	Agrocampus Quest, Rennes-France	October 27-29, 2010	Technological, Biochemical, Sensorial and Manufacturing Aspects of French Cheeses. Organized by National Institute of Food Science and Technology, UAF
6.	Dr. Frederic Gaucheron	INRA-France		
7.	A. A. Wulfften Palthe	PUM, Netherlands	October 19, 2010	International Seminar on Exploring Potential Marketing Avenues in Floriculture Industry. Organized by Institute of Horticultural Sciences, UAF
8.	Prof. Dwight Douglas Bowman	College of Veterinary Medicine, Cornell University Ithaca, New York	December, 2010 - January 12, 2011	Training workshop on Novel/ International Approaches for Diagnosis and Control of Parasites; Development of Curricula and Exploring Possibilities of Collaboration with US Universities. Organized by Department of Parasitology, UAF

Sr.#	Name of Visitor	Visitor's Institute	Date	Title of Workshops/ Seminars/Conferences/ Organizer
9.	Prof. Dr. Beatrice Knerr	University of Kassal, Germany	January 5-7, 2011	International Conference on Migration and Desertification. Organized by Department of Rural Sociology, UAF
10.	Dr. Debbie Templeton	Australia	January 13, 2011	Australian Delegates. Organized by Prof. Dr. Ashfaq Ahmad, Director, External Linkages, UAF
11.	Dr. Jim Lang			
12.	Dr. Bhajan Greewal			
13.	Munwar Raza Kazmi			
14.	Dr. Winai Dahian	Chulalongkorn University, Thailand	January 14, 2011	International Seminar on Halal Food Production. Organized by National Institute of Food Science and Technology, UAF
15.	Dr. Jean-Francois Grongnet	Agrocampus Quest, Rennes-France	February 21-23, 2011	Conference on Technological and Scientific Aspects of Dairy Products with Special Reference to French Cheeses. Organized by National Institute of Food Science and Technology, UAF
16.	Dr. Florence Valence-Bertel	CIRM-INRA-France		
17.	Dr. Antonio Carvalho	University Federale of Vicosa, Brazil		
18.	Dr. Frederic Gaucheron	INRA-France		
19.	Dr. Jean Christophe Pintaud	France	April 4-5, 2011	International Symposium on Date Palm Domestication, Distribution, Production and Marketing. Organized by Institute of Horticultural Science, UAF
20.	Dr. Adel Ahmed Abul Soad	Egypt		
21.	Dr. Abdulbasit Oudah Ibrahim	Syria		
22.	Dr. M. S. Hoddle	University of California, USA	April 05, 2011	International Seminar on Recent Trends in Entomological Education. Organized by Department of Entomology, UAF
23	Dr. Du Xiongming	Cotton Research Institute of Chinese Academy of Agricultural Sciences, China	April 18-19, 2011	International Seminar on Breeding Crops for Stressed Environments. Organized by Department of Plant Breeding & Genetics, UAF

24.	Prof. Dr. Jerome Pages	Agrocampus Rennes, France	May 03, 2011	Special Lecture on Importance & Utilization of Statistic in Food Science. Organized by National Institute of Food Science and Technology, UAF
25.	Dr. Muquarrab A. Qureshi	USDA-National Institute of Food and Agriculture, Washington DC, USA	June 10, 2011	Seminar on Animal Health and production program in the USA. Organized by Faculty of Veterinary Science, UAF.

## SIGNIFICANT SEMINARS/CONFERENCES/TRAININGS

- **A Training workshop on “Identification of Plant Pathogenic Fungi”** was organized on February 08-09, 2011. The objective of the training was to train the researchers for the diagnosis of different pathogenic fungi on the bases of their morphological and phylogenetic characters. Two resource persons one Prof. Dr. Qaiser Abbas, a renowned mycologist from Karachi and Ms. Irum Mukhtar from Institute of Plant Pathology University of Punjab Lahore participated. Dr. Mohammad Kashif Saleemi from Veterinary Pathology presented and demonstrated the role of microscopy and molecular techniques in fungal identification. Participants discussed very actively about the limitations of identification of fungal pathogens morphologically and on molecular basis.



- **A seminar on “50 Years of Pakistan Horticulture”** was organized on February 14, 2011. The objective of the seminar was to evaluate the progress in the field of horticulture during last fifty years, highlight weaknesses and develop strategies for its improvement in future. The Vice Chancellor in his keynote address presented the international scenario of horticulture on the basis of productivity, breeding and export. He stressed the faculty to work in the weak areas of the subject so that we can not only meet the domestic demand but export horticultural products to earn foreign exchange. Following eminent scientist participated in the event.

1. Dr. Shahid Niaz, Director Vegetable Research Institute, AARI
2. Dr. Nadeem Abbasi, Professor Department of Horticulture, PMAS Arid Agriculture University Rawalpindi
3. Dr. Akhlaq Hussain Shah, ex-DG FSCRD, Islamabad
4. Dr. Abdul Hameed, Professor, Faculty of Agriculture, Rawalakot, AJK
5. Dr. Babar Ehsan Bajwa, PAMCO, Lahore



- **A One Day Symposium on “Mushroom Cultivation”** was organized on February 18, 2011.



The objective of the symposium was to evaluate the progress in the field of mushroom cultivation, highlight weaknesses and develop strategies for its improvement in future. Prof. Dr. Muhammad Asif, Incharge, Mushroom Laboratory discussed in detail the present status and future scope of mushroom industry in Pakistan. He expressed that commercial cultivation of mushrooms exists on a small scale with a few private farms. Pakistani farmers and consumers are also deprived of significant income because foreign exchange goes to import tinned mushrooms that Pakistan cannot produce itself and losses are estimated to be in millions of dollars (U.S.). Following progressive farmers also participated in the event:

1. Prof. Riaz Ahmad Qureshi, an experienced mushroom grower from Lahore
2. Mr. Farooq Jang, a mushroom grower from Faisalabad

- **The seminar on “Technological and Scientific Aspects of Dairy Products with Special Reference to French Cheeses”** was organized on February 21-23, 2011.

Thirty one lectures were delivered on technological and scientific aspects of dairy products with a focus on French cheeses by looking into European Dairy industries ambience and R&D needs in Pakistan. Collaborations were promoted between French and Pakistani Institutes as this was the first activity after signing a recent MOU by the Vice-Chancellor, UAF in June 2010 in France with Agro-campus Ouest.



- **A three weeks Field Training Workshop on the “Citrus Diagnostics”** was organized on March 21 to April 10, 2011. The objective was to create awareness about the potential threats to citrus farming and strategies for saving the citrus orchards and to provide training on the biological control of citrus diseases especially citrus Greening (HLB). Scientists from USA i.e., Dr. Mark S. Hoddle and Mrs. Christina Hoddle were invited to UAF, Pakistan. They imparted training to the researchers, students and farmers about diagnosis of vector and biological control of citrus greening disease.



- **The seminar on “Pakistan’s Foreign Affairs with Particular Reference to India”** was organized on April 07, 2011. Senator (R) Akram Zaki was the guest speaker of the Seminar. He is a former Senator and Chairman of Senate Committee on Foreign Affairs and a distinguished former Career Diplomat, who has to his credit rich and varied diplomatic experience of forty years (1954-1993). As Pakistan’s Ambassador he served in China, USA, Nigeria, Philippines and rose to be the Foreign Secretary-General, with the rank and duties of Minister of State for Foreign Affairs (1991-1993). So the main aim of the event was to acquire and share knowledge from his experience especially in the context of “Pakistan’s Relation with India”.



### 1.6 UAF-Washington State University Legacy Year-2011

The successful collaboration between Washington State University (WSU) and University of Agriculture, Faisalabad is an example of the massive impact a long term sustainable educational program can bring forth on the development of agriculture, food processing capacity and food security within a county. In the 1960's fourteen WSU faculty came to assist the West Punjab Agricultural College in Lyallapur, now Faisalabad, to increase its status to a full fledged agricultural university based upon the US land-grant model. Dr. S.P. Swenson was the primary US partner along with other faculty and Dr. Z.A Hashmi was Vice Chancellor of the new University.



#### Representatives at the IPA Signing from WSU

B. Rasco (IPA manager), S. Ghazanfar (WSU alum), S. Sablani (Faculty), R. Porter (International Programs), D. Bernardo (Dean, Agriculture, CAHNRS), T. Zahoor (UAF IPA manager), M. Memon (UVAS graduate and WSU faculty), P. Sturko (Associate Dean, Graduate School), B. Swanson (Secretary, Faculty Senate)



#### New UAF scholars at WSU at the Grosses

Dr. H. Pappu (advisor), M. Gross Lopes, K. Naveed (student), S. Gross, P. Gross, R. Maqbool (student), B. Rasco, S. Borhan, K. Gill (advisor)

WSU and UAF have entered into a new Institutional Partnership Agreement in 2009 to provide scholar exchange between the two institutions including doctoral education for what we anticipate to be 100 scholars over the next decade, predicated upon funding. This program is slated for at least 10 years and Pakistani scholars are enrolled with partial tuition waivers. Following is the success indications:

- Up gradation of Punjab Agricultural College and Research Institute Lyallpur to University of Agriculture, Faisalabad.
- Establishment of six Faculties viz; Agriculture, Animal Husbandry, Veterinary Medicine, Agricultural Engineering & Technology, Sciences and Agricultural Economics & Rural Sociology
- Development of curriculum for various B.Sc./M.Sc./Ph.D. degree programs
- Launching of new degree program with collaboration of USA
- Capacity Building

The Board of Directors, Endowment Fund in its meeting held on 07.10.2010 approved to celebrate UAF-USA legacy during the Golden Jubilee Year 2011.



## Section-2

# TECHNOLOGY TRANSFER

This component provides an opportunity for the scientists to get financial support for transfer of technologies, developments or improvements made after extensive research, to the stakeholders. Endowment Fund Secretariat accepts proposals for technology transfer from all public entities which demonstrate needed research and development capabilities and financial responsibilities. The portfolio under this component consists of outreach projects, demonstration on campus, organizing Farmers' Fairs/Exhibitions and Horse & Cattle Show.

The technologies disseminated through these projects relate to Animal Nutrition Strategies, Livestock Management through IT, Animal Disease Control, Water Use Strategies, Drip Irrigation, Policy Studies, Fruit Germplasm Collection, Soil Reclamation Strategies, Propagation of Floriculture, Reverse Engineering, Citrus Diagnostic Services and Nursery, Food Quality, Silk Production, Precision Agriculture, Seed Production Technologies, Cyber Extension, FM Radio, Integrated Farming and Gender Empowerment, use of ICT in Agriculture.

Under Technology Transfer component, the project proposals are processed in accordance with the procedures approved by the BoD as under:

- Invitation of proposals in the National Press.
- Initial evaluation by Endowment Fund Secretariat.
- Review of proposals by two national referees (Nominated by the Chairman BoD/ Vice Chancellor)
- Submission of detailed projects to TAC along with recommendations of referees for evaluation. The TAC is composed of:

1.	Vice Chancellor, University of Agriculture, Faisalabad (Chairman)	Ex-off
2.	Vice Chancellor, University of Arid Agriculture Rawalpindi (UAAR)	Ex-off
3.	Vice Chancellor, University of Veterinary and Animal Sciences, Lahore	Ex-off
4.	USDA Agri. Attache in Pakistan or his nominee	Ex-off
5.	Representative of private sector (Board nominee)	For three years
6.	One Eminent Scientist from Punjab (Board nominee)	For three years
7.	One Eminent Scientist from KPK (Board nominee)	For three years
8.	One Eminent Scientist from Sindh (Board nominee)	For three years
9.	Director General Agriculture (Research), AARI, Faisalabad	Ex-off
10.	Director General Agriculture (Extension & Adoptive Research), Lahore	Ex-off
11.	Director General (Research), L&DD, Lahore	Ex-off
12.	Director General (Extension), L&DD, Lahore	Ex-off
13.	All Deans of Faculties, UAF	Ex-off
14.	Executive Director, EFS/Secretary	Ex-off



5<sup>th</sup> meeting of Technical Advisory Committee of Endowment fund was held on April 28, 2011

- Rationalization of the recommended projects by the Committee constituted by the Chairman BoD.
- The rationalized projects are submitted to the BoD for final approval and allocation of budget.
- Implementation Agreement between the executor/PI and UAF.
- Issuance of Administrative approval of the projects.

### **Monitoring & Evaluation**

- Endowment Fund monitors the execution of the projects through its own staff and subject experts.
- Annual and six monthly progress reports are submitted by the PIs to the Endowment Fund Secretariat.
- Annual reports are got evaluated through two experts nominated by the Vice Chancellor/ Chairman BoD.
- Next release is made after evaluation of the satisfactory reports.
- On termination of the project, final financial report and completion report will be submitted for evaluation and settlement of accounts with Endowment Fund Secretariat at UAF.

**2.1 Approval of Projects during 2010-11**

Nineteen (19) project proposals were presented before the Technical Advisory Committee in its meeting held on 29.04.2011. The BoD in its meeting held on 09.06.2011 approved following 14 projects:

Sr.#	Title of the Project	Name of PI
1.	Demonstration of Fogging and Spraying at the Campus UAF for the Control of Mosquitoes	Prof. Dr. Anjum Suhail Department of Entomology, UAF
2.	Demonstration of Production Technology of Quinoa ( <i>Chenopodium quinoa</i> Willd.) as a New Climate Proof Grain Crop	Prof. Dr. Shahzad Maqsood Ahmed Basra Department of Crop Physiology, UAF
3.	Establishment of a Model Fruit Plant Nursery for Demonstration of Container Grown Plant Production in Citrus, Mango and Guava	Dr. Muhammad Usman Institute of Horticultural Sciences, UAF
4.	Seed Technology Transfer to Farmers of Pothwar	Prof. Dr. Muhammad Iqbal Lone PMAS-Arid Agriculture University, Rawalpindi
5.	Component-I Strengthening Informal Seed Supply System at Two Locations in Potohar Trough Participatory Technology Transfer	Dr. Abdul Razzaq PMAS-Arid Agriculture University, Rawalpindi
6.	Component-II Rhizobacterial Formulations Application Technology for the Control of Major Pathogenic Root Infecting Fungi in Chickpea for Sustainable Crop Production.	Dr. Muhammad Inam-ul-Haq PMAS-Arid Agriculture University, Rawalpindi
7.	Component-III Technology Transfer to Potato Growers in Relation to Pathogen Free Seed Potato, Management of Diseases and Adoption of Improved Agro-techniques	Dr. Ishfaq Ahmad Hafiz PMAS-Arid Agriculture University, Rawalpindi
8.	Rearing and Maintenance of Breeds of Livestock at University of Agriculture, Faisalabad	Prof. Dr. Muhammad Sarwar Faculty of Animal Husbandry, UAF
9.	Establishment of Integrated Farming Facility for Crops/vegetables, Fish and Livestock at Proka Farms of University of Agriculture, Faisalabad	Prof. Dr. Zafar Iqbal Department of Parasitology, UAF
10.	Component-I Establishment of Fish Farming Facility in Integration with Poultry/Crop Farming at Proka Farms University of Agriculture, Faisalabad	Prof. Dr. Javed Akhtar Department of Zoology & Fisheries, UAF
11.	Component-II Establishment of Poultry Farming Facility in Integration with Fish/Crop Farming at Proka Farms University of Agriculture, Faisalabad.	Prof. Dr. Ahsan-ul-Haq Department of Poultry Science, UAF

Sr.#	Title of the Project	Name of PI
12.	Component-III Improving Degraded Soil and Low Quality of Water Using Farm Wastes and their Use for Crop Farming	Dr. Ghulam Murtaza Institute of Soil & Environmental Sciences, UAF
13.	Component-IV Improving Degraded Soil and Low Quality of Water Using Farm Wastes and their Use for Vegetable Farming (Vegetable Tunnel Farming)	Prof. Dr. M. Aslam Pervez Institute of Horticultural Sciences, UAF
14.	Drip Irrigation Systems for Fruit Orchards and Row Crops for Research and Demonstration Purpose (an extension of the EFS awarded drip irrigation project).	Prof. Dr. Rai Niaz Ahmad Water Management Research Center, UAF

## 2.2 Projects Initiated & Completed during 2010-11

Sr.#	Title of the project	Name of the PI	Duration	Starting Date
1.	Redefining of the Cropping Pattern in Various Ecological Zones of Punjab	Prof. Dr. Ehsanullah Department of Agronomy, UAF	One year	01.07.10
2.	Preparation of Policy Paper on Economic Aspects of Irrigation Water	Dr. Muhammad Ashfaq Department of Agri. Economics, UAF	One Year	01.07.10
3.	Impact of Wheat Price Policy on Food Security in Pakistan	Prof. (Rtd.) Dr. Muhammad Siddique Javed Department of Business Management Sciences, UAF	One Year	01.07.10
4.	Internship/ Outreach Program for the Students of UAF	Prof. Dr. Allah Bakhsh Director Research, UAF	One Year	01.07.10
5.	Umbrella Project for Faculty Outreach through Short Hands-on Training Courses	Dr. Asif Ali Director External Linkages, UAF	One Year	01.07.10
6.	Demonstration of a Groundwater Model to Simulate Pumping Effects on Water table of a Faisalabad Water Supply Scheme.	Prof. Dr. Allah Bakhsh Department of Irrigation and Drainage, UAF	One Year	01.07.10
7.	Skill Development in Reverse Engineering at Agricultural Machinery Pool, UAF	Prof. Dr. Muhammad Iqbal Department of Farm Machinery & Power, UAF	One Year	01.07.10



Demonstration of a Groundwater Model to Simulate Pumping Effects on Water table

### 2.3 Projects Initiated during 2010-11

Sr.#	Title of the project	Name of the PI	Duration	Starting Date
1.	Technology Transfer of Value Addition in Floriculture to Farmers	Prof (Rtd.) Dr. M. Aslam Khan Institute of Horticultural Sciences, UAF	Two Years	01.07.10
2.	Establishment of Biomonitoring Cell for Certification of BT Cotton Efficiency	Dr. H. Masooma Naseer Cheema Department of Plant Breeding & Genetics, UAF	Two Years	01.07.10
3.	Field Demonstration of Salt Tolerant Tree and Forage Species on Salt-affected Land at Proka Farm, UAF	Dr. Muhammad Saqib Institute of Soil & Environmental Sciences, UAF.	Three Years	01.07.10
4.	Operation and Management of Drip Irrigation System for Demonstration at PARS	Prof. Dr. Allah Bakhsh Water Management & Research Center, UAF.	Three Years	01.07.10
5.	Technology Transfer through on Farm Demonstration of Innovative Techniques for the Sustainable Bovine Dairy Farming and Keeping Herd Healthy by Manipulation of Management Practices	Dr. Muhammad Riaz Department of Livestock Management, UAF	Three Years	01.07.10

Sr.#	Title of the project	Name of the PI	Duration	Starting Date
6.	Use of Low Quality Water in Conjunction with Amendments During Reclamation of Salt-Affected Soils by Growing Wheat and Sesbania Crops	Dr. Ghulam Murtaza Institute of Soil & Environmental Sciences, UAF	Two Years	01.07.10
7.	Citrus Diagnostic and Certification Services	Muhammad Mubin CAGSA, UAF.	Three Years	01.07.10
8.	Synthesis of Available Fertilizer Trials Data for Site-Specific Recommendations and Diagnostic Survey for Low Adoption of Fertilizer Use Technology (three components)	Dr. Muhammad Rashid Ex-Director General Agri. (Research) Punjab/Subject Specialist, Institute of Soil & Environmental Sciences, UAF	Two Years	01.01.11
9.	Relay Cropping of Sesbania in the Wheat for Residues Management and Improving Soil Health	Prof. Dr. Ehsanullah Department of Agronomy, UAF	Two Year	01.01.11
10.	Technology Transfer through Cyber Extension: Helping Communities to Help Themselves	Dr. Babar Shahbaz Department of Agri. Extension, UAF.	Three Years	01.03.11
11.	Creating Knowledge-Based Society through Agricultural Technology Transfer via FM Radio	Prof. Dr. Tanvir Ali Division of Education & Extension, UAF	Two Years	01.03.11
12.	Epidemiology and Control of Foot & Mouth Disease in Punjab	Dr. Muhammad Arshad Institute of Microbiology, UAF	Two Years	01.05.11



Dr. M. Aslam Khan (Project Director) Explaining the Essential Oil Extraction Technology in Farmers Gathering



Dr. Javed Laghari, Chairman Higher Education Commission, Islamabad visiting the Rosa lab

**2.4 Ongoing Projects.**

Sr.#	Title of the project	Name of the PI	Duration	Starting Date
1.	Construction of Mobile Communal Dip and Demonstration and Dissemination of its Use for Tick Control	Prof. Dr. Zafar Iqbal Department of Veterinary Parasitology, UAF	Three Years	01.01.09
2.	Transfer of Pheromone Control Techniques for the Control of Fruit Fly to the Farmers of District Lasbela, Balochistan, Pakistan	Prof. Dr. Abdul Hameed Bajoi Vice Chancellor, Lasbela University of Agriculture, Water and Marine Sciences, Uthal Balochistan	Three Years	01.03.09
3.	A Rural and Peri-Urban Outreach Mastitis Control Program Focusing on Transfer of Technologies Developed by University of Agriculture, Faisalabad	Prof. Dr. Ghulam Muhammad Department of CMS, UAF	Three Years	01.03.09
4.	Technology Transfer for the Control of Inclusion Body Hepatitis Hydropericardium Syndrome in Commercial Poultry by the Use of Improved Adjuvanted Vaccine Produced Indigenously	Prof. Dr. Iftikhar Hussain Institute of Microbiology, UAF.	Three Years	01.03.09
5.	Collection and Establishment of Germplasm Unit (GPU) of Fruit Plants at Square No. 32.	Dr. Saeed Ahmad Institute of Horticultural Sciences, UAF	Three Years	01.03.09
6.	Demonstration of Plant Pathological Technologies at U-Road on the Main Campus.	Dr. Nazir Javed Department of Plant Pathology, UAF.	Three Years	01.03.09
7.	Demonstration of Technologies Developed by the Department of Agronomy.	Dr. Zahid Atta Department of Agronomy, UAF	Three Years	01.03.09
8.	Demonstration of Elite Breeding Lines of Different Crops at U-Road in the Main Campus.	Prof. Dr. Faqir Muhammad Azhar Department of Plant Breeding and Genetics, UAF	Three Years	01.03.09

Sr.#	Title of the project	Name of the PI	Duration	Starting Date
9.	Demonstration of Farmer Friendly Equipments Developed by Department of Poultry Science	Prof. Dr. Ahsan Ul Haq Department of Poultry Science, UAF	Three Years	01.03.09
10.	Spring and Winter Flower Exhibition/ Demonstration for Transfer of Technology at UAF	Dr. Atif Riaz Institute of Horticultural Sciences, UAF	Three Years	01.03.09
11.	National Horse and Cattle Show for Farmers Education	Prof. Dr. Muhammad Younas Faculty of Animal Husbandry	Three Years	01.03.09
12.	Low Cost Technologies for Enhanced Ruminant Animal Productivity	Dr. Mahr-un-Nisa Institute of Animal Nutrition and Feed Technology, UAF	Three Years	01.03.09
13	Enhancing Crop Productivity on Salt-affected Soils through Combined Use of Soil Applied Gypsum and Pre-sowing Seed Treatments	Dr. Saif Ullah Institute of Soil & Environmental Sciences, UAF	Three Years	01.03.09
14.	Documentation of Traditional Agricultural Knowledge and Technologies in Punjab, Pakistan	Prof. Dr. Iqrar Ahmad Khan Vice Chancellor, UAF	Three Years	01.03.09
15.	Establishment of Demonstration Orchard for Transfer of Technology to the Growers.	Dr. Saeed Ahmad Institute of Horticultural Sciences, UAF	Three Years	01.03.09
16.	Demonstration of Innovative Technology of the Department at the Main Campus.	Prof. Dr. Rashid A. Khan Department of Forestry, Range Management and Wildlife	Three Years	01.03.09
17.	Demonstration of Strategies for Enhancing Cereal Yields under Normal Conditions	Prof. Dr. Shahzad Maqsood Ahmad Basra Department of Crop Physiology, UAF	Three Years	01.03.09
18.	Demonstration of Improved Boom Sprayer and Zone Disk Tiller Drill	Prof. Dr. Muhammad Iqbal Department of Farm Machinery & Power, Univ. of Agri. Faisalabad	Three Years	01.03.09
19.	Salt Affected Soils - Technologies Associated with their Management	Mr. Muhammad Sarfraz Soil Salinity Research Institute, Pindi Bhattian	Three Years	01.03.09

Sr.#	Title of the project	Name of the PI	Duration	Starting Date
20.	On Farm Demonstration of Technologies for Accelerated Growth of Calves and Weaners for Reducing the Age at First Calving of Replacement Dairy Heifers	Dr. Shukat Ali Bhatti Institute of Animal Nutrition and Feed Technology, UAF	Three Years	01.03.09
21.	Demonstration of Modern Technologies through Kissan Mela	Dr. Ghulam Murtaza Director Farm, UAF	Three Years	01.03.09
22.	Facilitation of the Demonstration of Different Technologies under UAF-Technology Park Projects at Postgraduate Agricultural Research Station (PARS), University of Agriculture, Faisalabad	Mr. Amir Saeed Rana Assistant Professor/ Superintendent PARS, Directorate of Farms, UAF	Three Years	01.03.09
23.	Demonstration and Transfer of Entomological Technologies as Income Generating Source for Small Farmers	Prof. Dr. Muhammad Ashfaq (T.I.) Department of Entomology, UAF	Three Years	01.04.10



## 2.5 Projects Completed during 2010-11

Sr.#	Title of the project	Name of the PI	Duration	Starting Date
1.	Use of Sodium Bicarbonate for Optimum Weight Gain of Growing Buffalo Calves and Lambs	Prof. D. Muhammad Sarwar Institute of Animal Nutrition & Feed Technology	Three Years	01.01.08
2.	Dissemination of Technologies for Profitable Dairying at Farmer's Level	Dr. M. Qamar Bilal Department of Livestock Management, UAF	Three Years	01.01.08
3.	Epidemiology of Parasitic Fauna of Domestic Animals of T.T.Singh	Prof. Dr. Muhammad Nisar Khan Department of Parasitology, UAF	Three Years	01.01.08
4.	Control of Newcastle Disease in Rural Poultry of Tehsil T.T. Singh	Dr. Muhammad Arshad Department of Microbiology, UAF	Three Years	01.01.08
5.	Distribution and Management of Root-Knot Nematodes ( <i>Meloidogyne spp.</i> )	Dr. Tariq Mukhtar Department of Plant Pathology, PMAS Arid Agriculture University, Rawalpindi	Three Years	01.01.08
6.	Survey and Management of Mite Pests of Stored Grains in Tehsil Toba Tek Singh	Dr. M. Hamid Bashir Department of Entomology, UAF	Three Years	01.01.08
7.	Demonstration of Light Equipped Power Insect Killer (LEPIK Technology) for Mechanical Insect Pest Control in Croplands	Prof. Dr. Rashid A. Khan Department of Forestry, Range Management and Wildlife, UAF	Three Years	01.01.08
8.	Improving Water Use Efficiency in Cereals through ACC-Deaminase Biotechnology	Prof. Dr. Muhammad Arshad (T.I.) Institute of Soil & Environmental Sciences, UAF	Three Years	01.01.08
9.	Demonstration of Multi-Nutrients Foliar Feeding Technology for Sustainable Crop Production	Dr. Muhammad Yaseen Institute of Soil & Environmental Sciences, UAF	Three Years	01.01.08
10.	Dissemination of Raised Bed Technology to Address Water Shortages in Irrigated Areas	Prof. Dr. Rai Niaz Ahmad Water Management Research Centre, UAF	Three Years	01.01.08

Sr.#	Title of the project	Name of the PI	Duration	Starting Date
11.	Investigating Aquifer Storage and Recovery (ASR) Techniques to Recharge Saline Groundwater at Farmer's Field	Prof. Dr. Allah Bakhsh Department of Irrigation and Drainage, UAF	Three Years	01.01.08
12.	Impact Assessment & Evaluation of Projects under FDTTPC Endowment Fund in Tehsil T.T. Singh	Prof. Dr. Ashfaq Ahmad Maan Department of Rural Sociology, UAF	Three Years	01.01.08
13.	Technology Transfer for Using Tube well Water on Salt-Affected Soils for Crop Production	Dr. Ghulam Murtaza Institute of Soil & Environmental Science, UAF	Three Years	01.07.08
14.	Computer Assisted Identification of the Large Ruminants	Prof. Dr. Muhammad Younas Department of Livestock Management, UAF	Three Years	01.07.08
15.	Controlled Atmosphere Technology For Storage and Export of Horticultural Crops	Prof. Dr Aman Ullah Malik Post-harvest Horticulture, Institute of Horticultural Sciences, UAF	Two Years	01.03.09
16.	Demonstration of Techno-Chemical Method for Reclamation of Hard Layered Saline Sodic Soils	Prof. Dr. M. Shafi Sabir Faculty of Agri. Engg. & Tech. UAF.	Three Years	01.03.09



Dr. Sohail H. Naqvi, Executive Director, HEC and Vice Chancellor, UAF inaugurating the Agri. Exhibition



Sardar Muhammad Latif Khosa, Governor Punjab visiting Agri. exhibition

## 2.6 Outreach Activities

Under this program faculty members submit a proposal for an activity ranging from one day to one week. The proposals may cover hands-on trainings, demonstrations, farmers gathering, exhibition and lectures/seminars for the awareness/sensitization of the community for development of agriculture and livestock in Pakistan.

The scope of activities under the program was widened to reach stakeholders. The major issues addressed were Kitchen Gardening, Biogas Production, Milking Methods, Food Preservation, Child Care, Dying and Stitching, Dairy Farming, Silage making and Awareness about Dengue, etc. Three mega outreach activities have been conducted; one at Sub-Campus T. T. Singh, Goat Show at Main Campus UAF and one at the Private Farm (S. B. Dairy). These programs have received enormous response and have been highly admired. The outreach activities conducted during the year 2010-11 are listed below.

Sr. #	Name & Department of Organizer	Activity/Date	Location
1.	Prof. Dr. Faqir Muhammad Anjum National Institute of Food Sciences & Technology, UAF	Outreach Training for Household Processing of Mango Products July 18-24, 2010	Gujrat, Mir Pur (Badala) and Bhimber
2.	Miss. Qurat-ul-Ain Department of Rural Home Economics, UAF	Child Care July 22-28, 2010	Dijkot
3.	Miss. Fareha Ghaffar Department of Rural Home Economics, UAF	Art & Craft July 22-28, 2010	Dijkot
4.	Dr. Muhammad Tahir Department of Agronomy, UAF	Importance of Green Manuring in Crop Production July 15-18, 2010	Thekriwala
5.	Dr. Tahir Siddique Department of Forestry Range Management & Wildlife, UAF	Tree Plantation on Farmlands July-August, 2010	Amin Pur Bangla
6.	Prof. Dr. Muhammad Amjad Institute of Horticultural Sciences, UAF	Kitchen Gardening August 2-9, 2010	Faisalabad
7.	Prof. Dr. F.M. Azhar Department of Plant Breeding & Genetics, UAF	Production of Pure Cotton Seed at Farmers' Field August 15-22, 2010	Chak No. 452/JB Tandalianwala
8.	Dr. Muhammad Umar Chatha Department of Agronomy, UAF	Sugarcane Production Technology July-August, 2010	Sangla Hill
9.	Dr. Shahbaz Talib Sahi Sub Campus, Depalpur, UAF	Maize Production Technology August 02, 2010	Depalpur, Okara
10.	Prof. Dr. Ehsan Ullah Department of Agronomy, UAF	Green Manuring and Revival of Soil Fertility through Wheat & Rice Residues August 2-9, 2010	Hafizabad
11.	Dr. Muhammad Aslam Mirza UAF Sub-Campus, T.T. Singh	Home-Mixing for Small Scale Rural Laying Flocks-Basic Course August 09, 2010	T.T. Singh

Sr. #	Name & Department of Organizer	Activity/Date	Location
12.	Prof. Dr. Laeeq Akbar Lodhi Faculty of Veterinary Sciences, UAF	Provision of Preventive and Curative Support to Livestock in Flood Affected Areas through Outreach (Phase-I) August 10, 2010	Khushab & Sargodha
13.	Prof. Dr. Muhammad Younas Faculty of Animal Husbandry, UAF	Educating People for Profitable Dairy Farming August, 2010	Cholistan
14.	Prof. Dr. Laeeq Akbar Lodhi Faculty of Veterinary Science, UAF	Provision of Preventive and Curative Support to Livestock in Flood Affected Areas through Outreach (Phase-II) August 25, 2010	Mazafar Gharh, Kot Adu & Rajanpur
15.	Dr. Javaid Iqbal College of Agriculture, Dera Gazi Khan	Farmers' Training Program for Wheat Production Technology December, 2010	D.G. Khan
16.	Mrs. Sumaira Bano College of Agriculture, Dera Gazi Khan	Socio-Economic Effects of Domestic Violence on Rural and Agricultural Community March, 2011	D.G. Khan
17.	Dr. Javaid Iqbal College of Agriculture, Dera Gazi Khan	Reduction in Post Harvest and Storage Losses in Wheat April-May, 2011	D.G. Khan
18.	Dr. Javaid Iqbal College of Agriculture, Dera Gazi Khan	Non-Chemical Control of Insect Pests of Cotton before Cotton Sowing March-April, 2011	D.G. Khan
19.	Prof. Dr. Asif Ali Institute of Horticultural Sciences, UAF	Training Course on Mushroom Cultivation March, 2011	UAF
20.	Prof. Dr. Mansoor-ul-Hassan Department of Entomology, UAF	Awareness to Farmers and Employees of Food Handling Agencies about Management of Stored Grain Pests to Ensure Food Security April, 2011	UAF
21.	Dr. Waseem Akram Department of Entomology, UAF	Improving Socio-Economic Conditions of Farmers in Mosquito Abundant Areas through Surveillance and Source Reduction Outreach Program & Identification and Management of Cotton and Rice Pests at Farmers Fields April-May, 2011	UAF

Sr. #	Name & Department of Organizer	Activity/Date	Location
22.	Prof. Dr. Anjum Suhail Department of Entomology, UAF	Development of Entomological Cottage Industries: Beekeeping & Bee farming April, 2011	UAF
23.	Prof. Dr. Anjum Suhail Department of Entomology, UAF	Development of Entomological Cottage Industries: Preparation of Showcases of Insects of Aesthetic Value April, 2011	UAF
24.	Dr. Ghulam Murtaza Institute of Soil & Environmental Sciences, UAF	Management and Reclamation of Degraded Soils and Low Quality Irrigation Waters April, 2011	UAF
25.	Dr. Muhammad Jafar Jaskani Institute of Horticultural Sciences, UAF	Date Plum Pest and Disease Management April, 2011	UAF
26.	Prof. Dr. Muhammad Ashfaq (T.I.) Faculty of Agriculture, UAF	Rehabilitation Program of Flood Affected Farmers	18 Hazari Area, Distt. Jhang

### Services for Flood Affected Areas

Heavy monsoon rains resulted in sever floods during 2010, which affected the Indus River basin. Approximately one-fifth of Pakistan's total land area was underwater. According to an estimate the floods directly affected about 20 million people, mostly by destruction of property, livelihood and infrastructure, with a death toll of close to 2,000. The Pakistani economy was harmed by extensive damage to infrastructure and crop. Wheat crop damages were estimated to be over US\$500 million. Total economic impact may have been as much as US\$43 billion.

Floods submerged 17 million acres (69,000 km<sup>2</sup>) of Pakistan's most fertile crop land, killed 200,000 livestock and washed away massive amounts of grain. A major concern was that farmers were unable to meet the fall deadline for planting new seeds in 2010, which may result in a loss of food production in 2011, and potential long term food shortages. The agricultural damage reached more than 2.9 billion dollars, and included over 700,000 acres (2,800 km<sup>2</sup>) of lost cotton crops, 200,000 acres (810 km<sup>2</sup>) of sugar cane and 200,000 acres (810 km<sup>2</sup>) of rice, in addition to the loss of over 500,000 tonnes of stocked wheat, 300,000 acres (1,200 km<sup>2</sup>) of animal fodder and the stored grain losses.

In response to the Flood Relief Program, UAF contributed a lot through donations by the students, employees and collection from the general public. Endowment Fund Secretariat also distributed 3000 bags (30 kg packing) of wheat seeds among the farmers of District Jhang (18-Hazari) through Flood Relief Program Committee.

Further, Endowment Fund provided Preventive and Curative Support to Livestock in Flood Affected Areas through Outreach Program at Mazafar Gharh, Kot Addu, Rajanpur, Khushab & Sarghodha.

# Section-3

# PRODUCT COMMERCIALIZATION

Commercialization is the process that converts ideas, research, or prototypes into viable products that retain the desired functionality. This area was lacking earlier but it needs to narrow down the gaps between academia and industry. For commercialization of cutting edge product and technologies, concept papers are invited from scientists working in the public sector agricultural organizations. EFS identified 13 products from UAF and completed their business brief. EFS has also established an independent facility "Business Incubation Center" in 2009, with the joint support of Competitive Support Fund (CSF) and Higher Education Commission (HEC), Islamabad.

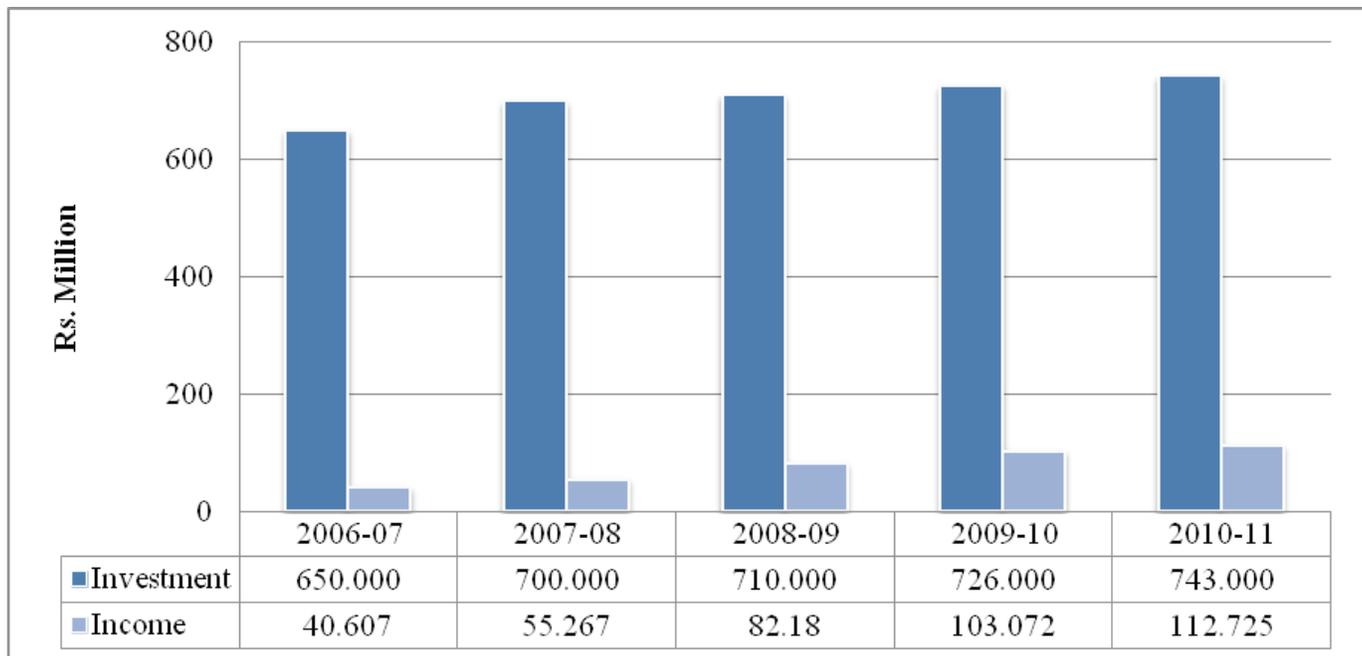
The scientists at University of Agriculture, Faisalabad, in addition to teaching, are also actively engaged in research for improving the agricultural production in the country to cope with the hazards of food security and ever growing population. Modern and more efficient technologies and tools are under work. University always strives best for its researchers and teachers to provide conducive and workable environment. Endowment Fund, created after an MOU between UAF and USAID, has always supported university scientists for activities leading to Faculty development, Technology Transfer and product Commercialization. The Board of Endowment Fund approved to establish an Exhibition Centre for holding exhibitions and showcasing technologies of the university funded by Endowment Fund Secretariat. The total cost of the project is Rs. 144 million.

# Section-4

## FINANCIAL REPORT

#### 4.1 Income from Endowment Fund's Investment

The Principal Amount of Rs. 650.0 million was invested during the year 2006-07, which increased to Rs. 743.0 million in 2010-11 with the annual addition of 15% of the profit on investments from the year 2006-07 to 2010-11 to counter the impact of inflation/devaluation. Income of Rs. 40.607 million from investment during 2006-07 has risen to Rs. 112.725 million in 2010-11, having remarkable increase of (177.6%) over last four years.



#### 4.2 Estimates for the Financial Year 2010-11

##### 4.2.1 Income

The income from investment of Funds was originally estimated at Rs.123.297 million during 2010-11, but actual income remained at Rs. 112.725 million. The total funds estimated for allocation for the year 2010-11 remained at Rs. 237.236 million.

**Table 1**

(Rs. Million)

Allocations/Expenditure	Budget Estimates	Revised Estimates
Unspent balance for 2009-10	132.932	132.912
Income from Investment 2010-11	123.297	112.725
Total amount available for allocation	256.236	245.637
Expenditure against components	237.236	93.079
Transfer to Principal Amount	19.000	17.000
Closing Balance		135.558

#### 4.2.2 Allocation/Expenditure

Income from investment was allocated to components of Faculty Development (FD), Technology Transfer (TT), Product Commercialization (PC) and Operational Cost (OC). Estimated allocation remained at Rs. 237.236 million. However, the activities relating to the construction of Exhibition Centre could not be started due to revision of its design. Therefore, the year under review closed with downwards revised expenditure of Rs. 93.079 million. Component wise break-up of expenditure has been given in Figure 2.

