



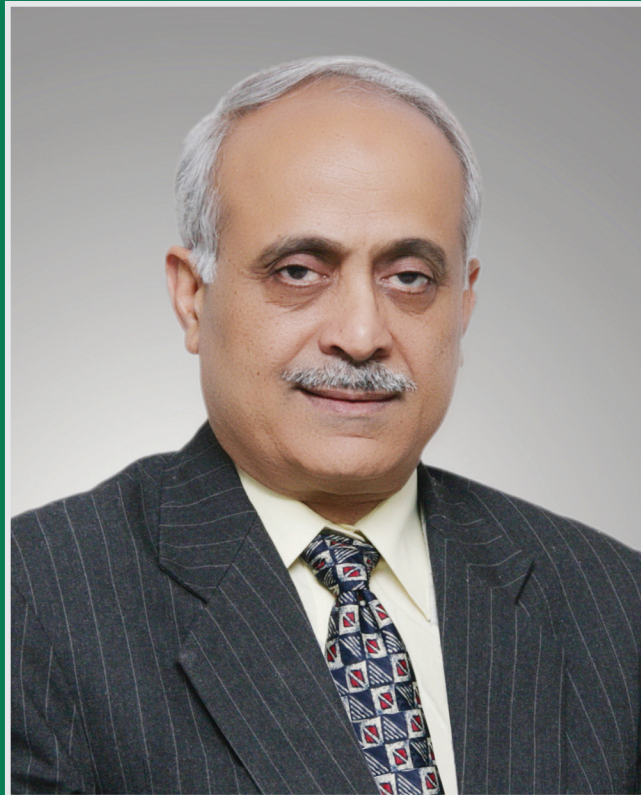
# ANNUAL REPORT

(2011-12)

ENDOWMENT FUND SECRETARIAT  
UNIVERSITY OF AGRICULTURE, FAISALABAD

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



**Prof. Dr. Tahir Zahoor**  
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

### Establishment of Endowment Fund at UAF

Endowment Fund was established with the assistance of USDA with seed money of Rs. 650.00 million. The Syndicate under Section 25(2)(i) of the University of Agriculture Faisalabad Act, 1973 approved to establish Endowment Fund at UAF. The major objectives enshrined in the agriculture were:

- a. To support UAF programmes for advanced training in biotechnology, agricultural sciences research, technology transfer and product commercialization
- b. Strengthening of 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



11th meeting of Board of Directors of Endowment Fund was held on October 24, 2011

### Management of the Fund

The Board of Directors (BoD) is the governing body of this Fund and is responsible for Fund's program and 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      |

## 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.

### Evaluation of the Proposals

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.
- Rationalization of the recommended projects by the Committee constituted by the Chairman BoD.
- Submission of rationalized projects 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.

Activities of the Endowment Fund Secretariat during 2011-12 have been summarized under its components/sections. Faculty Development, Technology Transfer, Research & Development and Product Commercialization. Financial Summary has also been presented in the report.



The background consists of two large, overlapping geometric shapes. The top shape is a large orange triangle pointing downwards, and the bottom shape is a large green triangle pointing upwards. They meet at a central point, creating a white space where the text is located.

**Section-1**  
**FACULTY**  
**DEVELOPMENT**

## Overview of the Component

The focus of the activities under Faculty Development is to provide opportunity to the faculty members for enhancing their skills. Further interaction with the international community and exposure to the developed systems are the outcomes of this program. 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 is the brief of achievements during the year 2011-12 with total expenditure of Rs. 18.651 million

|   |    |
|---|----|
| 1. Short training (abroad)                        | 01 |
| 2. Short training (inland)                        | 01 |
| 3. Travel grants for presenting papers (abroad)   | 15 |
| 4. Short visit for institutional collaboration    | 12 |
| 5. Seminars/Workshops/Conference organized at UAF | 48 |

### 1.1 Short Term Trainings

The following applicants were granted assistance for training during the year 2011-12:

#### a). Abroad

| Sr.# | Name of Trainee   | Title of training/Host Institute   | Duration            |
|------|---|--|---------------------|
| 1.   | Mr. Muhammad Nadeem Asi<br>Department of Clinical Medicine & Surgery, UAF | Learning in Advanced Veterinary Practices.<br>Department of Clinical Sciences in College of Veterinary Medicine, Cornell University, USA | January-April, 2012 |

#### b). Inland

| Sr.# | Name of Trainee                                   | Title of training/Host Institute   | Duration             |
|------|---|--|----------------------|
| 1.   | Dr. Iram Liaqat<br>Institute of Microbiology, UAF | Third National Training Workshop on Electron & Confocal Microscopy.<br>NIBGE, Faisalabad | December 12-21, 2011 |

### 1.2 Travel Grants for Presenting Paper (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 in international events:

| Sr.# | Name of Grantee   | Purpose of Travel Grant   | Country Visited |
|------|---|---|-----------------|
| 1.   | Dr. Shukat Ali Bhatti<br>Institute of Animal Nutrition & Feed Technology, UAF | Effect of Pre-weaning Feeding Regimes on Post-weaning Growth Performance of Sahiwal Calves.<br>Paper presented in the International Symposium/ Conference during 2011 ADSA-ASAS Joint Annual Meeting.<br>July 10-14, 2011 | USA             |



| Sr.# | Name of Grantee   | Purpose of Travel Grant   | Country Visited |
|------|---|---|-----------------|
| 2.   | Dr. Mahr-un-Nisa<br>Institute of Animal Nutrition &<br>Feed Technology, UAF   | Impact of Rumen Digesta Inoculation<br>on Feeding Value of Urea-molases<br>Treated Wheat Straw.<br>Paper presented in the International<br>Symposium/ Conference during 2011<br>ADSA-ASAS Joint Annual Meeting.<br>July 10-14, 2011   | USA             |
| 3.   | Prof. Dr. Rai Niaz Ahmad<br>Faculty of Agri. Engineering &<br>Technology, UAF | Raised Bed Technology for Crop<br>Water Productivity of Maize and<br>Cotton.<br>Paper presented in the 21 <sup>st</sup> ICID<br>Congress on Irrigation and Drainage,<br>8 <sup>th</sup> International Micro-Irrigation<br>Congress & 62 <sup>nd</sup> IEC Meeting.<br>October 16-23, 2011                           | Iran            |
| 4.   | Prof. Dr. Muhammad Arshad<br>Department of Irrigation and<br>Drainage, UAF    | Performance Assessment of Irrigation<br>System in Rice-Wheat Cropping Zone<br>Using Modern Techniques.<br>Paper presented in the 21 <sup>st</sup> ICID<br>Congress on Irrigation and Drainage,<br>8 <sup>th</sup> International Micro-Irrigation<br>Congress & 62 <sup>nd</sup> IEC Meeting.<br>October 16-23, 2011 | Iran            |
| 5.   | Prof. Dr. Zafar Iqbal<br>Department of Parasitology, UAF                      | In Vitro Anthelmintic Activity of<br>different Fractions of <i>Azadirachta<br/>indica</i> A. Juss Seeds.<br>Paper presented in 4 <sup>th</sup> International<br>Conference on Drug Discovery and<br>Therapy.<br>February 12-15, 2012  | UAE             |
| 6.   | Prof. Dr. Ahrar Khan<br>Quality Enhancement Cell, UAF                         | Arsenic Induced Toxicity in Broiler<br>Chicks and its Attenuation with<br>Ascorbic Acid.<br>Paper presented in the 9 <sup>th</sup> Annual<br>Scientific Conference (ASCON-IX),<br>2012 in Chittagong Veterinary and<br>Animal Sciences University. March<br>7-8, 2012   | Bangladesh      |
| 7.   | Prof. Dr. M. Younas<br>Department of Livestock Man-<br>agement, UAF           | White Gold! The Camel Milk.<br>Paper presented in 1 <sup>st</sup> National<br>Congress of Camel.<br>April 18-19, 2012   | Iran            |

| Sr.# | Name of Grantee   | Purpose of Travel Grant   | Country Visited |
|------|---|---|-----------------|
| 8.   | Prof. Dr. Zahid Ata<br>Department of Agronomy, UAF            | Scope of Allelopathy in Organic Agriculture.<br>Paper presented in the 12 <sup>th</sup> Symposium of the Malaysian Society of Applied Biology (MSAB).<br>June 1-3, 2012   | Malaysia        |
| 9.   | Dr. Rao Zahid Abbas<br>Department of Parasitology, UAF        | Anthelmintic Activity of <i>Albizia lebbek</i> L. bark and <i>Cassia fistula</i> L. Fruit against <i>Trichostrongylus</i> Lid Nematodes of Sheep.<br>Paper presented in the 3 <sup>rd</sup> International Symposium on Pharmacology of Natural Products.<br>June 6-10, 2012 | Cuba.           |
| 10.  | Dr. Anjum Zia<br>Department of Chemistry & Biochemistry, UAF  | Production of L-Asparaginase from <i>Aspergillus niger</i> by using Agro Wastes by-products in Submerged Fermentation Process.<br>Paper presented in the 3 <sup>rd</sup> International Biotechnology and Biodiversity Conference (BIO JOHOR, 2012).<br>June 9-11, 2012      | Malaysia        |
| 11.  | Dr. Zia ud Din Sindhu<br>Department of Parasitology, UAF      | Control of Cattle Tick with Application of Indigenous Plant Extracts.<br>Paper presented in the 1 <sup>st</sup> Regional Conference of the Society for Tropical Veterinary Medicine.<br>June 18-21, 2012  | Thailand        |
| 12.  | Dr. Ahmad Sattar<br>Institute of Horticultural Sciences, UAF. | Prospects and Challenges of Organic Fruit Production in Pakistan.<br>Paper presented in the 2 <sup>nd</sup> International Organic Fruit Research Symposium-2012, Washington State University & International Society for Horticultural Sciences (ISHS).<br>June 18-21, 2012 | USA             |

| Sr.# | Name of Grantee   | Purpose of Travel Grant  | Country Visited |
|------|---|--|-----------------|
| 13.  | Dr. Saeed Ahmed<br>Institute of Horticultural Sciences, UAF           | Effects of Pre-Harvest Spray of Salicylic Acid on the Quality of Sweet Oranges in Cold Storage.<br>Paper presented in 7 <sup>th</sup> International Postharvest Symposium 2012<br>June 25-29, 2012 | Malaysia        |
| 14.  | Prof. Dr. M. Amjad<br>Institute of Horticultural Sciences, UAF        | Degradation Pattern of Bioactive Compounds in Carrots During Storage.<br>Paper presented in 7 <sup>th</sup> International Postharvest Symposium 2012 (IPS-2012).<br>June 25-29, 2012               | Malaysia        |
| 15.  | Dr. Raja Aadil Sarfraz<br>Department of Chemistry & Biochemistry, UAF | Assessment of Zine, Cadmium, Nickel and Chromium in Neurological Disorder Patients.<br>Paper presented in EsAn 2012 Chemistry Conference.<br>June 27-30, 2012                                      | Turkey          |

### 1.3 Short Visits for International Collaboration

Travel grants for short visits abroad are provided for strengthening international collaboration and signing of MoUs etc. Following short visits were provided:

| Sr. # | Name and Address   | Country Visited  |
|-------|--|--|
| 1.    | Prof. Dr. Iqrar Ahmad Khan<br>Vice Chancellor, UAF.                                  | Paid short visit to discuss scholarship and co-operation program with University of Western Australia and other Institutions.<br>August 25 to September 09, 2011             |
| 2.    | Prof. Dr. Iqrar Ahmad Khan<br>Vice Chancellor, UAF.                                  | Paid short visit to participate in the "Eighth Annual Meeting of the Science and Technology in Society (STS) forum."<br>October 2-4, 2011                                    |
| 3.    | Prof. Dr. Tahir Siddiqui<br>Department of Forestry, Range Management & Wildlife, UAF | Delegate to discuss detailed collaboration plan for the development of agriculture between University of Agriculture, Faisalabad and IPM, Indonesia.<br>February 10-15, 2012 |
| 4.    | Prof. Dr. Ashfaq Ahmad<br>Director External Linkages, UAF                            | -do-   |
| 5.    | Prof. Dr. Aslam Pervez<br>Institute of Horticultural Sciences, UAF                   | -do-   |

| Sr. # | Name and Address   | Country Visited |
|-------|--|-----------------|
| 6.    | Prof. Dr. Tahir Zahoor<br>Executive Director, EFS  | -do-            |
| 7.    | Prof. Dr. M. Jaffar Jaskani<br>Institute of Horticultural<br>Sciences, UAF                   | -do-            |
| 8.    | Prof. Dr. Asif Ali<br>Director, ORIC, UAF  | -do-            |
| 9.    | Prof. Dr. Muhammad Amjad<br>Director, Institute of Horticultural<br>Sciences, UA F           | -do-            |
| 10.   | Prof. Dr. Rashid Ahmed Khan<br>Department of Forestry, Range<br>Management & Wildlife, UAF   | -do-            |
| 11.   | Dr. Muahmmad Farrukh Nawaz<br>Department of Forestry,<br>Range Management & Wildlife,<br>UAF | -do-            |
| 12.   | Dr. Abdul Ghafoor<br>Institute of Business<br>Management Sciences, UAF                       | -do-            |

#### 1.4 Seminars/Conferences/Workshops 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 2011-12:

| Sr. # | Name of Organizer  | Event   |
|-------|--|---|
| 1.    | Prof. Dr. Allah Bakhsh<br>Department of Irrigation and<br>Drainage, UAF                    | Seminar on GIS Application in Agriculture -Precision<br>Agriculture.<br>July 11, 2011 |
| 2.    | Prof. Dr. Khalid Mustafa<br>Institute of Business<br>Management & Sciences, UAF            | Seminar on Business Incubation: Challenges and<br>Opportunities.<br>July 13, 2011     |
| 3.    | Prof. Dr. Zafar Iqbal Qureshi<br>Director, Student Affairs, UAF                            | Seminar on Pak-USA Relation-Looking Towards Future.<br>July 21, 2011                  |
| 4.    | Prof. Dr. M. Tahir Siddiqui<br>Department of Forestry, Range<br>Management & Wildlife, UAF | Conference on Forestry and Climate Change.<br>July 25-26, 2011                        |
| 5.    | Prof. Dr. M. Ashfaq (T.I)<br>Dean, Faculty of Agriculture, UAF                             | Seminar on <i>Moringa oleifera</i> : A Multipurpose Plant.<br>August 18, 2011         |

| Sr. # | Name of Organizer   | Event  |
|-------|---|--|
| 6.    | Prof. Dr. Asif Ali<br>Director, ORIC, UAF   | Stakeholder Workshop on Social Research to Foster Effective Collaboration and Strengthen Pro-Poor Value Chains (ACIAR).<br>September 20-23, 2011 |
| 7.    | Prof. Dr. Shahzad Maqsood<br>Ahmad Basra<br>Department of Crop Physiology,<br>UAF         | Workshop on Seed Testing through ISTA Standards.<br>September 29, 2011   |
| 8.    | Dr. M. Yousuf Hussain<br>Department of Physics, UAF                                       | Workshop on Vacuum Technology.<br>October 03-04, 2011  |
| 9.    | Prof. Dr. M. Inayat<br>Department of Math & Statistics,<br>UAF                            | Workshop on Statistical Techniques by Using SPSS and Minitab.<br>October 05-07, 2011   |
| 10.   | Dr. Iftikhar Ahmad<br>CABB, UAF   | Seminar on GM Crops: a Gateway to successful Agriculture.<br>October 15, 2011  |
| 11.   | Prof. Dr. Asif Ali,<br>Director, ORIC, UAF  | Conference on Urban, Peri-Urban Agriculture, Employment and Value Chain Management.<br>October 18-22, 2011                                       |
| 12.   | Prof. Dr. Asif Ali<br>Director, ORIC, UAF   | Seminar on Entrepreneurial Eco System and Understanding of Concept of Commercialization.<br>October 22, 2011                                     |
| 13.   | Dr. Nisar Ahmad<br>CABB, UAF  | Prof. Masahiko Maekawa, Okayama University, Japan was invited to UAF.<br>October 23-29, 2011   |
| 14.   | Prof. Dr. Faqir Muhammad Anjum<br>National Institute of Food<br>Science & Technology, UAF | Workshop on Applied Nature Need Based Research Projects of Food Industries.<br>October 31, 2011  |
| 15.   | Prof. Dr. Abdul Wahid<br>Department of Botany, UAF  | Seminar on Role of Botany in Agricultural Development.<br>November 04, 2011  |
| 16.   | Prof. Dr. Faqir Muhammad Anjum<br>National Institute of Food<br>Science & Technology, UAF | Conference on Emerging Issues in Food Safety.<br>November 14-16, 2011  |
| 17.   | Prof. Dr. Asif Ali<br>Director, ORIC, UAF   | Seminar on Changing Mindset and Building Capacity for Innovation and Commercialization.<br>November 18, 2011.                                    |
| 18.   | Prof. Dr. Tahira Iqbal<br>Department of Chemistry, UAF                                    | 10 <sup>th</sup> International and 22 <sup>nd</sup> National Chemistry Conference 2011.<br>November 21-23, 2011                                  |

| Sr. # | Name of Organizer   | Event   |
|-------|---|---|
| 19.   | Prof. Dr. M. Arshad (T.I)<br>Institute of Soil & Environmental<br>Sciences, UAF           | Seminar on Soil Quality for Food Security,<br>Environmental Issue and Remedies.<br>November 22-23, 2011   |
| 20.   | Prof. Dr. Laeeq Akbar Lodhi<br>Faculty of Veterinary Sciences,<br>UAF                     | Stakeholder Workshop on Equine Breeders.<br>November 26, 2011   |
| 21.   | Prof. Dr. Nazir Javed<br>Department of Plant Pathology,<br>UAF                            | 8 <sup>th</sup> National Conference of Plant Pathology 2011.<br>November 28-29, 2011  |
| 22.   | Prof. Dr. Asif Ali<br>Director, ORIC, UAF   | International Conference on Applied Genetics and<br>Biotechnology.<br>December 8-10, 2011   |
| 23.   | Prof. Dr. Allah Bakhsh<br>Department of Irrigation &<br>Drainage, UAF                     | International Seminar on High Efficiency Irrigation<br>System/Resource Conservation Technology Water<br>Resources Management and Future Scenario.<br>December 12-14, 2011   |
| 24.   | Prof. Dr. Ashfaq Ahmad<br>Director, External Linkages, UAF                                | Australian Delegates Meeting for Scoping of New<br>Projects.<br>December 15-16, 2011  |
| 25.   | Dr. Qari M. Iqbal<br>Department of Islamic Studies,<br>UAF                                | Seminar on World Peace and Islamic Teachings.<br>December 20, 2011  |
| 26.   | Endowment Fund Secretariat,<br>UAF  | Role of Natural Products as Biting Deterrents/Repellents<br>against <i>Aedes aegypti</i> (A vector of Dengue)<br>Lecture delivered by<br>Dr. Abbas Ali, Senior Research Scientist, National Center<br>for Natural Products Research, School of Pharmacy, the<br>University of Mississippi, USA.<br>January 21, 2012 |
| 27.   | Prof. Dr. Faqir Muhammad Anjum<br>National Institute of Food<br>Science & Technology, UAF | International Symposium on Diet as an Adjunctive<br>Measure for the Prevention and Management of<br>Dengue Epidemics.<br>January 30-31, 2012  |
| 28.   | Prof. Dr. Zahid Ata<br>Department of Agronomy, UAF  | Workshop on Allelopathy.<br>February 04, 2012   |

| Sr. # | Name of Organizer  | Event  |
|-------|--|--|
| 29.   | Prof. Dr. M. Ashfaq (T.I.)<br>Faculty of Agriculture, UAF  | Seminar on Moringa for Human Health.<br>February 04, 2012  |
| 30.   | Prof. Dr. Rai Naiz Ahmad<br>Faculty of Agricultural<br>Engineering & Technology, UAF                   | Dawn Agri Expo 2012 & Conference.<br>February 17-18, 2012  |
| 31.   | Prof. Dr. Asif Ali<br>Director, ORIC, UAF  | Seminar on Intellectual Property Management in<br>Pakistan.<br>February 25, 2012   |
| 32.   | Prof. Dr. Muhammad Iqbal<br>Department of Farm Machinery<br>& Power, UAF                               | Food Engineering Programs<br>1. Presentation in the HEC on the Need of Food<br>Engineering Education in Pakistan. March 13, 2012 by<br>inviting Malaysian Food Engineering Experts<br>2. Seminar at UAF on Food Engineering-Way to Food<br>Security. March 16, 2012 by inviting Malaysian Food<br>Engineering Experts. |
| 33.   | Prof. Dr. Muhammad Younas<br>Department of Livestock<br>Management, UAF                                | Workshop on Camel Production, Management, its<br>Review and Future Plan for R & D.<br>March 25, 2012   |
| 34.   | Prof. Dr. Ashfaq Ahmad<br>Director, External Linkages, UAF   | Workshop regarding TIKa project "The Poverty<br>Alleviation and Rural Women Empowerment through<br>Propagation of Beetle Goats".<br>March 26-30, 2012  |
| 35.   | Prof. Dr. Anjum Suhail<br>Department of Entomology, UAF  | Workshops on Training of Termite Management for<br>Stakeholders as Community Service.<br>April, May, & June, 2012  |
| 36.   | Dr. Muhammad Mahmood-ul-<br>Hassan<br>Department of Zoology &<br>Fisheries, UAF                        | Workshop on Determining Species Richness Patterns<br>and Species Distributions in Pakistan Using Species<br>Distribution Modeling Techniques.<br>April 10-14, 2012   |
| 37.   | Prof. Dr. Muhammad Ashraf<br>Faculty of Sciences, UAF  | Workshop on Strategies for Conservation of Endangered<br>Ecosystem.<br>April 16-18, 2012   |
| 38.   | Prof. Dr. M. Jalal Arif<br>Principal Officer,<br>Department of Public Relations &<br>Publications, UAF | Seminar on Media Ethics with special reference to Mass<br>Communication and Agri. Journalism.<br>April 24, 2012  |

| Sr. # | Name of Organizer   | Event  |
|-------|---|--|
| 39.   | Prof. Dr. M. Jaffar Jaskani<br>Institute of Horticultural<br>Sciences, UAF                          | Conference on Citrus Growers.<br>May 09-10, 2012   |
| 40.   | Prof. Dr. Muhammad Amjad<br>Institute of Horticultural<br>Sciences, UAF                             | Workshop on Pre and Postharvest Technology of<br>Selected Fruits in Punjab.<br>May 23, 2012. |
| 41.   | Dr. Aisha Siddique<br>Institute of Rural Home<br>Economics, UAF                                     | Workshop on Curriculum Development.<br>June 7, 2012  |
| 42.   | Dr. Zubair Aslam<br>Department of Agronomy, UAF   | Seminar on Direct Seeded Rice: Developments and<br>Future Strategies.<br>June 09, 2012       |
| 43.   | Prof. Dr. Muhammad Tahir<br>Siddiqui<br>Department of Forestry, Range<br>Management & Wildlife, UAF | Seminar on Forestry and Environment.<br>June 11, 2012  |
| 44.   | Dr. Yasir Jamil<br>Department of Physics, UAF   | Seminar on Nanomaterials.<br>June 12, 2012   |
| 45.   | Dr. Aisha Siddique<br>Institute of Rural Home<br>Economics, UAF                                     | Stakeholder Workshop on Creative Ventures by Home<br>Economists.<br>June 16, 2012            |
| 46.   | Prof. Dr. Muhammad Younas<br>Department of Livestock<br>Management, UAF                             | Workshop on World Camel Day.<br>June 22, 2012  |
| 47.   | Prof. Dr. Anjum Suhail<br>Department of Entomology, UAF   | Stakeholder Workshop of Entomology to Develop<br>Linkage with Industry.<br>June 23, 2012     |



## SIGNIFICANT SEMINARS/WORKSHOPS/CONFERENCES

### Seminar on GIS Applications in Agriculture – Precision Agriculture

The seminar was organized on July 09, 2011. The objective of the seminar was to disseminate the latest knowledge of GIS for use in agriculture and its prospects from precision agriculture point of view. The activity helped to learn and create awareness regarding use of modern technologies in agriculture for increasing crop productivity. The achievements of the Institute of Advanced Technology at University of Putra Malaysia were presented and their applications in agriculture along with discussing possibility of developing collaborations between UAF and UPM in the area of Precision agriculture were discussed. An MOU was prepared and sent to UPM for their feedback.





## Workshop on Seed Testing through ISTA Standards and Stakeholders' Meeting

This workshop was organized on September 29, 2011.

The objective of the workshop was to provide a platform for professionals, faculty, students and seed industry people to share the knowledge and future research prospects and to build up strong linkage with seed sector of the country. The workshop was comprised of some interesting lectures about "An introduction to seed tests organizations by ISTA" and "Seed Sampling and Purity Analysis" by Professor Dr. Norbert Leist, Past President ISTA and Seed Testing According to AOSA Standards by Dr. Fawad Shah, Grain and Seed Administrator, Department of Agriculture, Commodity Inspection Division, Yakima, WA, USA. The seed workshop was followed by Stakeholder's meeting and the main theme of the meeting was "Pakistan Seed Industry: Issues and future prospects". Mr. Altaf Azid Khan, Managing Director, Punjab Seed Corporation and Syed Muhammad Nasir Ali, DG, FSC & RD chaired the meeting as chief guest and guest of honor, respectively. Before detailed discussion among the participants on the issues and prospectus of national seed industry, Prof. Dr. Shahzad Ahmad Basra briefed about the seed physiology lab and research activities at University of Agriculture, Faisalabad. Later on Dr. Jin Hu gave an overview about the Chinese seed system as a model for developing national seed supply and delivery system in the country to ensure certified seed supply for sustainable crop production. The focal persons for the stakeholder's meeting were Dr. Asif Ali Shah, (Pioneer Pakistan Limited), Mr. Jamshed Cheema (Auriga Group of Companies) and Dr. Qaiser Rashid (Vice President, Seed Association of Pakistan).

## Seminar on *Moringa oleifera*: A Multipurpose Plant

A Seminar was organized on August 18, 2011. The objective of the seminar was to create awareness about potential of Moringa as multipurpose tree and plantation at campus on the eve of National Tree Plantation Day. Scientists, farming communities, politicians and extension department were motivated for Moringa plantation and focusing it for research so that nation can be benefited.



## Workshop on Statistical Techniques Using MSTAT-C, SPSS and MINITAB

Workshop was organized on October 5-7, 2011. The objective of workshop was to train teachers and researchers from different disciplines for effective use of statistical softwares in analyzing their research data and writing report. This workshop helped to refresh the knowledge of statistics of the researchers for better understanding and planning of their research.

### 1.5 Foreign Visitors Sponsored During 2011-12.

Foreign scientists/scholars/delegates etc. are often invited at various occasions. This provides an opportunity for the Faculty members and students to update and refresh their knowledge. Endowment Fund Secretariat provides Financial Support for organizing such events. During 2011-12 Rs. 3.133 million were spent on this activity.

| Sr. # | Name/Institute   | Date                  | Event  |
|-------|--|-----------------------|--|
| 1.    | Dr. Abdul Rashid Bin Mohammad<br>Amed Sharif<br>University of Putra Malaysia | July 11, 2011         | Seminar on GIS Application in Agriculture-Precision Agriculture. Organized by the Department of Irrigation & Drainage, UAF                                   |
| 2.    | Prof. Dr. Sarfraz A. Mian<br>Oswego State University of New York, USA.       | July 13, 2011         | Seminar on Business Incubation: Challenges and Opportunities. Organized by the Institute of Business Management Sciences, UAF                                |
| 3.    | Dr. Shafiq-ur-Rehman Khan<br>Development of Forestry Resources, AJK          | July 25-26, 2011      | Conference on Forestry and Climate Change. Organized by the Department of Forestry, Range Management & Wildlife, UAF   |
| 4.    | Prof. Dr. Abdul Majeed<br>University College of Agriculture, Rawalakot, AJK  | July 25-26, 2011      | Conference on Forestry and Climate Change. Organized by the Department of Forestry, Range Management & Wildlife, UAF   |
| 5.    | Dr. John Spriggs<br>Australia  | September 20-23, 2011 | Stakeholder Workshop on Social Research to Foster Effective Collaboration and Strengthen Pro-Poor Value Chains (ACIAR). Organized by the Director, ORIC, UAF |
| 6.    | Dr. Sandra H. Mustafa<br>Australia   | September 20-23, 2011 | Stakeholder Workshop on Social Research to Foster Effective Collaboration and Strengthen Pro-Poor Value Chains (ACIAR). Organized by the Director, ORIC, UAF |
| 7.    | Prof. Dr. Norbert Leist<br>Past President, ISTA, Germany                     | September 29, 2011    | Workshop on Seed Testing through ISTA Standards and Stakeholders Meeting. Organized by the Department of Crop Physiology, UAF.                               |

| Sr. # | Name/Institute   | Date                    | Event  |
|-------|--|-------------------------|--|
| 8.    | Dr. Fawad Shah,<br>Grain Yakima WA<br>USA  | September 29,<br>2011   | Workshop on Seed Testing through ISTA Standards and Stakeholders Meeting. Organized by the Department of Crop Physiology, UAF. |
| 13.   | Dr. Nisar Ahmad<br>CABB, UAF   | October 23-29,<br>2011  | Prof. Masahiko Maekawa, Okayama University, Japan was invited to UAF.  |
| 9.    | Dr. Kazim R. Chohan<br>Director, Andrology Laboratory,<br>State University of New York, USA  | November 14-16,<br>2011 | Conference on Emerging Issues in Food Safety.<br>Organized by the National Institute of Food Science & Technology, UAF         |
| 10.   | Dr. Mian N. Riaz<br>Texas A & M University, College<br>Station, USA  |                         |  |
| 11.   | Dr. Mujahid Masood<br>Department of Food Science,<br>Cornell University, New York, USA   |                         |  |
| 12.   | Dr. G. Sarwar Gilani<br>Scientific Advisor, FAO, Canada  |                         |  |
| 13.   | Mr. Aizad Ahmad<br>Canadian College of Business &<br>Hadi Insitiute, Toronto, Canada   |                         |  |
| 14.   | Prof. Dr. Gulam Rasul Rahmat Ali<br>Food Technology Division, School<br>of Industrial Technology, Universti<br>Sains Malaysisa                                 |                         |  |
| 15.   | Dr. Shahzad Hussain<br>Department of Food Science and<br>Nutrition, College of Food and<br>Agricultural Sciences, King Saud<br>University Riyadh, Saudi Arabia |                         |  |
| 16.   | Dr. Winai Dahlan<br>Director, The Halal Science Centre,<br>Chulongkorn University Thailand   |                         |  |
| 17.   | Dr. Tipayanate Ariyapitipun<br>The Halal Science Center<br>Chulalangkorn University 254<br>Phayathai Rd, Pathumwan,<br>Bangkok, Thailand                       |                         |  |
| 18.   | Prof. Dr. Ahmad Hassan El-Ghorab<br>Head of Flavors and Aroma<br>Department, National Research<br>Centre, Tahrir St. Dokki, Cairo, Egypt                       |                         |  |

| Sr. # | Name/Institute   | Date                    | Event  |
|-------|--|-------------------------|--|
| 19.   | Dr. Athar Ata<br>The University of Winnipeg, MB,<br>Canada   | November 21-23,<br>2011 | Conference of 10 <sup>th</sup> International and<br>22 <sup>nd</sup> National Chemistry.<br>Organized by the Department of<br>Chemistry and Biochemistry, UAF  |
| 20.   | Prof. Dr. Peter Langer<br>Organische Chemie Universitat<br>Rostock Albert-Einstein-Str.<br>Germany   |                         |  |
| 21.   | K.S. Siddiqi<br>Aligarh Muslim University, Aligarh,<br>India   |                         |  |
| 22.   | Prof. Dr. Sven Schubert<br>Nutrition, Justus Liebig University,<br>Giessen, Germany  | November 22-23,<br>2011 | Seminar on<br>i. Soil Quality for Food Security<br>ii. Environmental Issue and<br>Remedies<br>Organized by the Institute of Soil &<br>Environmental Sciences, UAF  |
| 23.   | Prof. Dr. Remesh Kanwar<br>Deptt. of Agricultural & Biosystems<br>Engineering, IOWA State University,<br>USA   | December 12-14,<br>2011 | International Seminar on<br>i. High Efficiency Irrigation System/<br>Resource Conservation Technology<br>ii. Water Resources Management and<br>Future Scenario<br>Organized by the Department of<br>Irrigation & Drainage, UAF |
| 24.   | Dr. Syed Mehtab Ali<br>Senior Hydrologist, Climate & Water<br>Division Common Wealth Beauru<br>Meteorology, Australia  |                         |  |
| 25.   | Prof. Dr. John Blackwell<br>International Center for Food &<br>Water Security, Charles Sturts<br>University, Australia   |                         |  |
| 26.   | Dr. Li. Zhaohua<br>School of Resources and<br>Environmental Sciences, Hubei<br>University, Wuhan, China  |                         |  |
| 27.   | Mr. Aitzaz Ahsan<br>Lecturer/Research Assistant,<br>Precision Agriculture Research<br>Program Engineering<br>Department, Nova Scotia<br>Agricultural College, Canada |                         |  |

| Sr. # | Name/Institute of Visitors  | Date                          | Event   |
|-------|---|-------------------------------|---|
| 28.   | Dr. Kosambo Linus M.D.O.<br>Coast, Kenya  | December 8-10,<br>2011        | International Conference on Applied Genetics and Biotechnology.<br>Organized by the Director ORIC, UAF  |
| 29.   | Dr. MD. Salim Khan<br>BCSIR Lab. Dhaka  |                               |   |
| 30.   | Muhammad Athar Tariq<br>California, USA   |                               |   |
| 31.   | Dr. Shugga Manageneva<br>Kazzakhstan  |                               |   |
| 32.   | Dr. Nick Austin<br>Chief Executive Officer, Australian<br>Centre for International Agricultural<br>Research (ACIAR) | December 15-16,<br>2011       | Australian Delegates hosted by<br>Director, External Linkages, UAF  |
| 33.   | Mr. Les Baxter<br>ASLP Coordinator & Research<br>Program Manager for Horticulture                                   |                               |   |
| 34.   | Mr. Andrew Nobles<br>Research Program Manager Land &<br>Water   |                               |   |
| 35.   | Munawar R. Kazmi<br>Program Officer ASLP (ACIAR)  |                               |   |
| 36.   | Melissa Kelly<br>(member PAC)   |                               |   |
| 37.   | Dr. Tausneem<br>(member PAC)  |                               |   |
| 38.   | Dr. Yus Aniza Yusof<br>University Putra, Malaysia   | March 13, 2012                | Presentation on the Need of Food<br>Engineering Education in Pakistan<br>Organized by the National Institute of<br>Food Science and Technology, UAF   |
| 39.   | Dr. Muhammad Nordin Ibrahim<br>University Putra, Malaysia   |                               |   |
| 40.   | Dr. Yus Aniza Yusof<br>University Putra, Malaysia   | March 16, 2012                | Seminar on Food Engineering- Way<br>Food Security<br>Organized by the National Institute of<br>Food Science and Technology, UAF   |
| 41.   | Dr. Muhammad Nordin Ibrahim<br>University Putra, Malaysia   |                               |   |
| 42.   | Dr. Alice Catherine Hughes<br>Prince of Songkla University,<br>Thailand   | March 31 to April<br>14, 2012 | Workshop on Determining Species<br>Richness Patterns, and Species<br>Distributions in Pakistan Using<br>Species Distribution Modeling<br>Techniques<br>Organized by the Department of<br>Zoology and Fisheries, UAF |

| Sr. # | Name/Institute of Visitors  | Date              | Event   |
|-------|---|-------------------|---|
| 43.   | Dr. Munir Ozturk, Botany Department, Ege University Izmir, Turkey   | April 16-18, 2012 | Workshop on Strategies for Conservation of Endangered Ecosystem.<br>Organized by Faculty of Sciences, UAF |
| 44.   | Dr. Dawud Mohammad Hasan AL-Eisawi, Department of Biological Sciences, Faculty of Science, University of Jordan, Amman  |                   |   |
| 45.   | Dr. Abdul Latiff Bin Mohamad Professor Emeritus, Faculty of Science and Technology, Universiti Kebangsaan Malaysia  |                   |   |
| 46.   | Dr. Faridah-Hanum Ibrahim Faculty of Forestry, University Putra Malaysia  |                   |   |
| 47.   | Dr. Salih Gücel, Environmental Sciences Institute, Near East University, Cyprus   |                   |   |
| 48.   | Yong-Ping Yang Deputy Director, Institute of Tibetan Plateau Research, Chinese Academy of Sciences, No. 18 Shuangqing Road, Haidian District, Beijing , China |                   |   |
| 49.   | Shi Suqi College of Life Sciences, Northwest A & F University, Yangling 712100, P. R. China   |                   |   |
| 50.   | Izmir Zhang Lixin College of Life Sciences, Northwest A & F University, Yangling 712100, P. R. China  |                   |   |



| Sr. # | Name/Institute of Visitors  | Date              | Event   |
|-------|---|-------------------|---|
| 51.   | Dr. Xuzhe Zhao<br>State Key Laboratory of Grassland Agro-ecosystems, MOE Engineering Research Center for Arid Agriculture and Ecological Restoration, Lanzhou University, China | April 16-18, 2012 | Workshop on Strategies for Conservation of Endangered Ecosystem.<br>Organized by Faculty of Sciences, UAF |
| 52.   | Dr. Cengiz Kaya<br>Harran University, Agriculture Faculty, Soil Science and Plant Nutrition Department, Sanliurfa-Turkey  |                   |   |
| 53.   | Dr. Mohammad Kafi<br>Department of Agronomy, Faculty of Agriculture, Ferdowsi University of Mashhad, Iran   |                   |   |
| 54.   | Dr. Ihsanullah Daur<br>Department of Arid Land Agriculture, Faculty of Meteorology, Environment & Arid Land Agriculture, King Abdulaziz University, Jeddah, Saudi Arabia        |                   |   |
| 55.   | Shujaul Mulk Khan<br>Department of Biology, University of Leicester, UK   |                   |   |



Role of University of Agriculture, Faisalabad in Ensuring Livelihood Strategies for Small Farmers” held on November 02, 2011.



Emerging Issues in Food Safety held on November, 14-16, 2011



Golden Jubilee Celebrations Week of the Institute of Soil and Environmental Sciences held on November 21 -26, 2011.



Seminar on IPR Management in Pakistan and Establishment of IPR Office at UAF



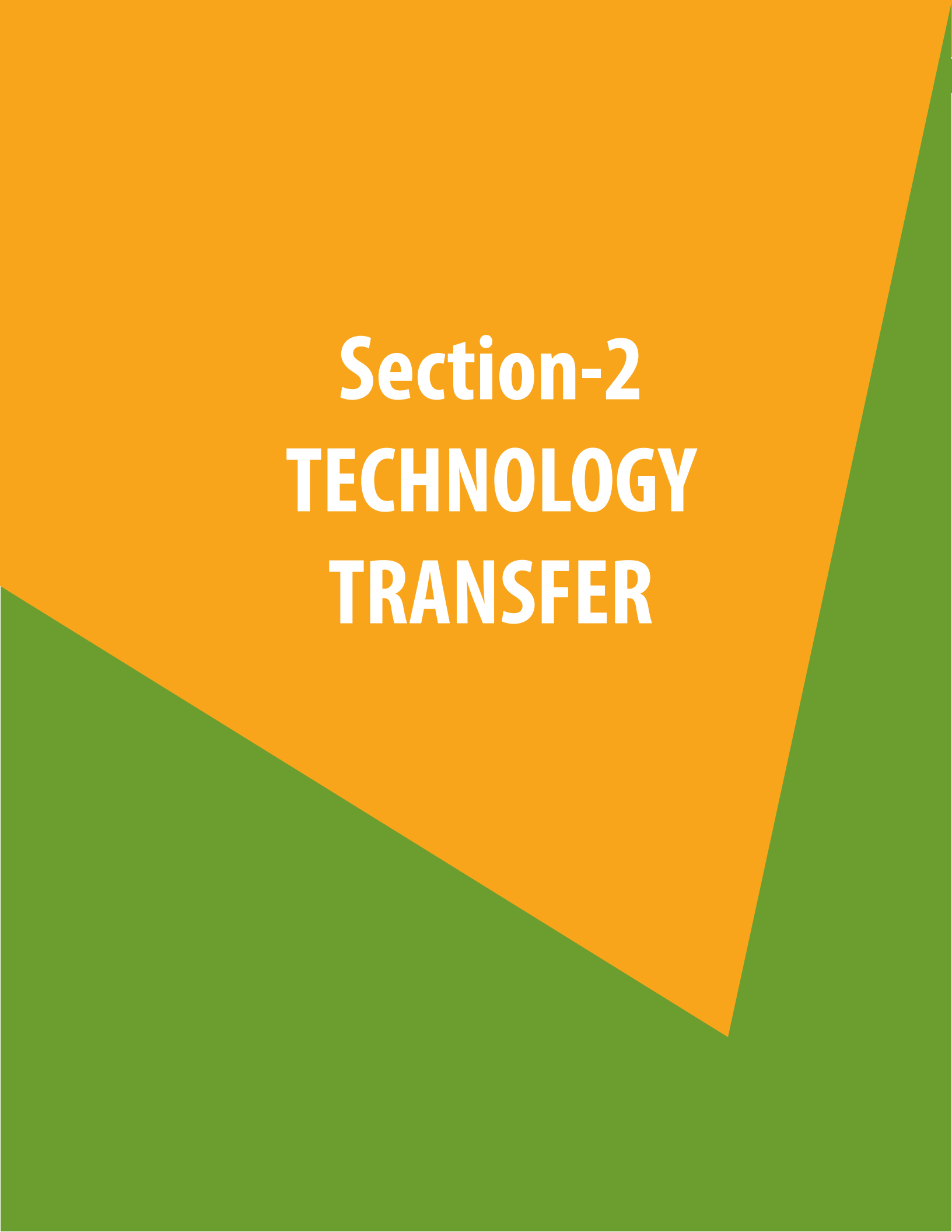
Seminar on Strategies for Conservation of Endangered Ecosystems held on April 16-18, 2012



Workshop on Pre and Postharvest Technology of Selected Fruits in Punjab held on May 23, 2012



Workshop on Curriculum Development Institute of Rural Home Economics, UAF held on June 07, 2012

The image features a background with a large orange shape on the right and a green shape on the left, meeting at a diagonal line. The text is centered in the orange area.

**Section-2**  
**TECHNOLOGY**  
**TRANSFER**

## Overview

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. Faculty Outreach Program was initiated this year and 17 events were held throughout Punjab. Under this program community services were also performed like flood relief activities and training workshops for land grantees.

### 2.1 Projects Initiated & Completed During 2011-12

| Sr.# | Title of the project   | Name of the PI   | Duration |
|------|--|--|----------|
| 1.   | Gender Empowerment and Home Life Improvement of Rural Poor through Appropriate Technology Transfer | Prof. Dr. Tanvir Ali<br>Division of Education and Extension, UAF | One Year |

### 2.2 Projects Initiated During 2011-12

| Sr.# | Title of the project   | Name of the PI   | Duration    |
|------|--|--|-------------|
| 1.   | Demonstration of Fogging and Spraying at the Campus UAF for the Control of Mosquitoes  | Prof. Dr. Anjum Suhail<br>Department of Entomology, UAF                  | One Year    |
| 2.   | Establishment of a Model Fruit Plant Nursery for Demonstration of Container Grown Plant Production in Citrus and Guava                                   | Dr. Muhammad Usman<br>Institute of Horticultural Sciences, UAF           | Two Years   |
| 3.   | Development of Molecular Diagnostics for Livestock Based Food Pathogens  | Dr. Muhammad Irfan<br>Forman Christian College University, Lahore        | Two Years   |
| 4.   | Demonstration of Production Technology of Quinoa ( <i>Chenopodium quinoa</i> Willd.) as a New Climate Proof Grain Crop                                   | Prof. Dr. Shahzad M. A. Basra<br>Department of Crop Physiology, UAF      | Three Years |
| 5.   | Strengthening Informal Seed Supply System at Two Locations in Potohar Trough Participatory Technology Transfer   | Dr. Abdul Razzaq<br>PMAS-Arid Agriculture University, Rawalpindi         | Two Years   |
| 6.   | Rhizobacterial Formulations Application Technology for the Control of Major Pathogenic Root Infecting Fungi in Chickpea for Sustainable Crop Production. | Dr. Muhammad Inam-ul-Haq<br>PMAS-Arid Agriculture University, Rawalpindi | Two Years   |
| 7.   | 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<br>PMAS-Arid Agriculture University, Rawalpindi   | Two Years   |
| 8.   | Establishment of Integrated Farming Facility for Crops/Vegetables, Fish and Livestock at Proka Farms of UAF  | Executive Director, EFS, UAF<br>(Coordinator)                            | Three Years |

| Sr.# | Title of the project  | Name of the PI  | Duration    |
|------|---|---|-------------|
| 9.   | Establishment of Fish Farming Facility in Integration with Poultry/Crop Farming at Proka Farms University of Agriculture, Faisalabad  | Prof. Dr. Muhammad Javed<br>Department of Zoology & Fisheries, UAF    | Three Years |
| 10.  | Establishment of Poultry Farming Facility in Integration with Fish/Crop Farming at Proka Farms University of Agriculture, Faisalabad. | Prof. Dr. Ahsan-ul-Haq<br>Department of Poultry Science, UAF          | Three Year  |
| 11.  | Improving Degraded Soil and Low Quality of Water Using Farm Wastes and Their Use for Crop Farming                                     | Dr. Ghulam Murtaza<br>Institute of Soil & Environmental Sciences, UAF | Three Years |
| 12.  | Improving Degraded Soils and Low Quality of Water Using Farm Wastes and Their Use for Vegetable Farming (vegetable tunnel farming)    | Prof. Dr. M. Aslam Pervez<br>Institute of Horticultural Sciences, UAF | Three Years |
| 13.  | Drip Irrigation Systems for Fruit Orchards and Row Crops for Research and Demonstration Purpose                                       | Prof. Dr. Rai Niaz Ahmad<br>Water Management Research Center, UAF     | Three Years |

### 2.3 Projects Completed during 2011-12

| Sr. | Title of the project  | Name of the PI   | Duration    |
|-----|---|--|-------------|
| 1.  | Construction of Mobile Communal Dip and Demonstration and Dissemination of its Use for Tick Control   | Prof. Dr. Zafar Iqbal<br>Department of Parasitology, UAF   | Three Years |
| 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<br>Vice Chancellor, Lasbela<br>University of Agriculture, Water and Marine Sciences, Uthal<br>Balochistan | Three Years |
| 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<br>Department of Clinical Medicine & Surgery, UAF  | Three Years |
| 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<br>Institute of Microbiology, UAF.  | Three Years |
| 5.  | Collection and Establishment of Germplasm Unit (GPU) of Fruit Plants at Square No. 32.  | Dr. Saeed Ahmad<br>Institute of Horticultural Sciences, UAF  | Three Years |
| 6.  | Demonstration of Plant Pathological Technologies at U-Road on the Main Campus, UAF  | Dr. Nazir Javed<br>Department of Plant Pathology, UAF.   | Three Years |

| Sr.# | Title of the project  | Name of the PI  | Duration    |
|------|---|---|-------------|
| 7.   | Demonstration of Technologies Developed by the Department of Agronomy in the University of Agriculture, Faisalabad            | Dr. Zahid Atta<br>Department of Agronomy, UAF                                     | Three Years |
| 8.   | Demonstration of Elite Breeding Lines of Different Crops at U-Road in the Main Campus, University of Agriculture, Faisalabad  | Prof. Dr. Faqir Muhammad Azhar<br>Department of Plant Breeding and Genetics, UAF  | Three Years |
| 9.   | Demonstration of Techno-chemical Method for Reclamation of Hard Layered Saline Sodic Soils                                    | Prof. Dr. M. Shafi Sabir<br>Faculty of Agri. Engg. & Tech. UAF.                   | Three Years |
| 10.  | Demonstration of Farmer Friendly Equipments Developed by Department of Poultry Science  | Prof. Dr. Ahsan-ul-Haq<br>Department of Poultry Science, UAF                      | Three Years |
| 11.  | Spring and Winter Flower Exhibition/ Demonstration for Transfer of Technology at UAF  | Dr. Atif Riaz<br>Institute of Horticultural Sciences, UAF                         | Three Years |
| 12.  | National Horse and Cattle Show for Farmers Education  | Prof. Dr. Muhammad Younas<br>Faculty of Animal Husbandry, UAF                     | Three Years |
| 13.  | Low Cost Technologies for Enhanced Ruminant Animal Productivity   | Dr. Mahr-un-Nisa<br>Institute of Animal Nutrition and Feed Technology, UAF        | Three Years |
| 14.  | Enhancing Crop Productivity on Salt-Affected Soils through Combined Use of Soil Applied Gypsum and Pre-sowing Seed Treatments | Dr. Saif Ullah<br>Institute of Soil & Environmental Sciences, UAF.                | Three Years |
| 15.  | Establishment of Demonstration Orchard for Transfer of Technology to the Growers at PARS                                      | Dr. Saeed Ahmad<br>Institute of Horticultural Sciences, UAF                       | Three Years |
| 16.  | Demonstration of Innovative Technology of the Department at the Main Campus, UAF  | Prof. Dr. Rashid A. Khan<br>Department of Forestry, Range Management and Wildlife | Three Years |
| 17.  | Demonstration of Strategies for Enhancing Cereal Yields under Normal Conditions   | Prof. Dr. Shahzad M. A. Basra<br>Department of Crop Physiology, UAF               | Three Years |
| 18.  | Demonstration of Improved Boom Sprayer and Zone Disk Tiller Drill   | Prof. Dr. Muhammad Iqbal<br>Department of Farm Machinery & Power, UAF             | Three Years |
| 19.  | Citrus Diagnostic and Certification Services  | Dr. Muhammad Mubin<br>CAGSA, UAF.   | Two Years   |

## 2.4 Ongoing Projects

### Title of the project

Documentation of Traditional Agricultural Knowledge and Technologies in Punjab, Pakistan

### Name of the PI

Prof. Dr. Iqrar Ahmad Khan  
Vice Chancellor, UAF

### Duration

Three Years



### Title of the project

Salt Affected Soils - Technologies Associated with their Management

### Name of the PI

Mr. Muhammad Sarfraz  
Soil Salinity Research Institute, Pindi Bhattian

### Duration

Three Years



### Title of the project

Demonstration of Modern Technologies through Kissan Mela

### Name of the PI

Dr. Ghulam Murtaza  
Director Farms, UAF

### Duration

Three Years



Inauguration and visit of the Chief Guest to the exhibition stalls at the eve of Rabi Kissan Mela during October, 2011





**Title of the project**

Facilitation of the Demonstration of Different Technologies under UAF-Technology Park Projects at Postgraduate Agricultural Research Station (PARS), University of Agriculture, Faisalabad

**Name of the PI**

Mr. Amir Saeed Rana  
Superintendent PARS, Directorate of Farms, UAF

**Duration**

Five Years

**Title of the project**

Establishment of Biomonitoring Cell for Certification of Bt Cotton Efficiency

**Name of the PI**

Dr. H. Masooma Naseer Cheema  
Department of PBG, UAF

**Duration**

Two Years

**Title of the project**

Field Demonstration of Salt Tolerant Tree and Forage Species on Salt-affected Land at Proka Farm, UAF

**Name of the PI**

Dr. Muhammad Saqib  
Institute of Soil & Environmental Sciences, UAF.

**Duration**

Three Years

**Title of the project**

Operation and Management of Drip Irrigation System for Demonstration at PARS

**Name of the PI**

Prof. Dr. Rai Niaz Ahmad  
Water Management Research Center

**Duration**

Three Years





**Title of the project**

Technology Transfer through on Farm Demonstration of Innovative Techniques for the Sustainable Bovine Dairy Farming and Keeping Herd Healthy by Manipulation of Management Practices

**Name of the PI**

Dr. Muhammad Riaz  
Department of Livestock Management, University of Agriculture,  
Faisalabad

**Duration**

Three Years

**Title of the project**

Relay Cropping of Sesbania in the Wheat for Residues Management and Improving Soil Health

**Name of the PI**

Prof. Dr. Ehsanullah  
Department of Agronomy, UAF

**Duration**

Two Year

**Title of the project**

Epidemiology and Control of Foot & Mouth Disease in Punjab

**Name of the PI**

Dr. Muhammad Arshad  
Institute of Microbiology, UAF

**Duration**

Two Years

**Title of the project**

Synthesis of Available Fertilizer Trials Data for Site-Specific Recommendations and Diagnostic Survey for Low Adoption of Fertilizer Use Technology (three components)

**Name of the PI**

Dr. Muhammad Rashid  
Ex-Director General Agri.  
(Research) Punjab/Subject  
Specialist, Inst. of Soil & Envi. Sci.  
UAF

**Duration**

Two Years

**Title of the project**

Technology Transfer through Cyber Extension: Helping Communities to Help Themselves

**Name of the PI**

Dr. Babar Shahbaz  
Department of Agri. Extension, UAF.

**Duration**

Three Years

**Title of the project**

Creating Knowledge-Based Society through Agricultural Technology Transfer via FM Radio

**Name of the PI**

Prof. Dr. Tanvir Ali  
Division of Education & Extension, UAF

**Duration**

Two Years

## 2.5 Capacity Building of Land Grantees

Endowment Fund Secretariat in collaboration with Planning and Evaluation Cell, Lahore organized capacity building workshops at 8 locations at the farms of land grantees. All Wings of Agriculture Department participated in these events. Following is the detail of the workshops conducted:

| Sr.# | Venue                   | Date              |
|------|-------------------------|-------------------|
| 1.   | T. T. Singh             | February 27, 2012 |
| 2.   | Sheikhupura             | February 29, 2012 |
| 3.   | Okara                   | March 06, 2012    |
| 4.   | Kot Adu, Muzaffargarh   | March 19, 2012    |
| 5.   | Jalapur Pirwala, Multan | March 20, 2012    |
| 6.   | Mandi Yazman            | March 21, 2012    |
| 7.   | Rahim Yar Khan          | March 22, 2012    |
| 8.   | Sillanwali, Sargodha    | April 03, 2012    |

A detailed report has been compiled highlighting the issues and giving recommendations to the Government of the Punjab for the success of the scheme. Some glimpse of the workshops are given as under:

Kot Adu, Muzaffar Garh dated March 19, 2012



Jalal Pur Pir Wala, Multan dated March 20, 2012





Mandi Yazman, Bahawalpur dated March 21, 2012

Rahim Yar Khan dated March 22, 2012



Sargodha Division (at Sillanwali) dated April 03, 2012

## 2.6 Technical Assistance for Development of Lands Attached with the Danish Schools

On the request of Chief Executive Officer of Punjab Danish Schools and Centers of Excellence Authority, the Vice Chancellor, UAF entrusted the assignment to Endowment Fund to suggest innovative ways to promote agriculture, forestry, commercial crops, livestock in the attached land which could provide sustainable economics and financial assistance for the sustenance of the schools. Endowment Fund organized the visits at Chistian, Hasilpur, Rahim Yar Khan and Harnoli (Mianwali). A comprehensive report containing recommendations has been submitted to the Government of Punjab.

## 2.7 Outreach Activities

The University Outreach Program initiated as a project during 2010-11 was converted into a Program with recurring budget under Technology Transfer Component. Under this program, faculty members submit a proposal for an activity ranging from one day to one week. Under outreach program, proposals may cover hands-on trainings, demonstrations, farmers gathering, exhibition and lectures/seminars for the awareness/sensitization of the community.

These programs have received enormous response and have been highly admired. The outreach activities conducted during the year 2011-12 are as under:

| Sr.# | Name & Department | Title   | Location                |
|------|-------------------|---|-------------------------|
| 1.   | EFS               | Technology Transfer Workshop<br>December 11, 2011 | Sub-Campus, T. T. Singh |



**Name & Department**

Dr. Saira Akhter  
Department of Rural  
Sociology, UAF

**Title**

Social Organization  
October-November,  
2011

**Location**

Chak No. 370 G.B. Gojra,  
T. T. Singh



**Name & Department**

Mrs. Rakhshanda Akhter  
Department of Rural Sociology

**Title**

Training of Women For Food Processing and  
Preservation for Income Generation and  
Home Life Improvement in Rural Areas of  
Faisalabad

October-November, 2011

**Location**

Chak No. 370 G.B. Gojra, T. T. Singh

**Name & Department**

Dr. Muhammad Farooq Khalid  
Sub-Campus T.T. Singh, UAF

**Title**

Nutrition of the Chicken-a Basic Course  
March 01, 2012

**Location**

Chak No. 325JB T.T. Singh

**Name & Department**

Dr. Arshad Iqbal  
Department of Livestock Management, UAF

**Title**

Camel Production and Management  
September 14-15, 2011

**Location**

Rakh Mahni, Bhakkar

**Name & Department**

Mrs. Asma Lodhi,  
Department of Rural Home Economics, UAF

**Title**

Food Preparation and Preservation  
November-December, 2011

**Location**

Dijkot Faisalabad



**Name & Department**

Mrs. Ayesha Hussain  
Department of Rural Home Economics, UAF

**Title**

Techniques of Dying & Stitching  
November-December, 2011

**Location**

Dijkot, Faisalabad



**Name & Department**

Mrs. Qurat-ul-Ain  
Department of Rural Home Economics, UAF

**Title**

Child Care and Training Methods  
November-December, 2011

**Location**

Dijkot, Faisalabad

**Name & Department**

Mrs. Ayesha Riaz  
Department of Rural Home Economics, UAF

**Title**

Art & Craft  
November-December, 2011

**Location**

Dijkot, Faisalabad

**Name & Department**

Prof. Dr. Muhammad Younas  
Department of Livestock Management, UAF

**Title**

Revolution and Reformation of the Peri-Urban Dairy Farming in  
Faisalabad

**Location**

Chokera and Bhaiwala, Faisalabad



**Name & Department**

Prof. Dr. Shahzad M.A. Basra  
Department of Crop Physiology, UAF

**Title**

On-Farm Seed Application of Moringa Leaf Extract as Natural Plant Growth Enhancer to Improve the Stand Establishment and Yield in Wheat

December, 2011 - January, 2012

**Location**

Sahiwal/ Okara Sheikhpura Chiniot Faisalabad



**Name & Department**

Prof. Dr. Muhammad Sarwar (T.I)  
Faculty of Animal Husbandry,  
UAF

**Title**

National Goat Show 2011  
November 4-5, 2011

**Location**

University of Agriculture,  
Faisalabad

**Name & Department**

Prof. Dr. Mahmood Ahmad  
Randhawa  
Department of Continuing  
Education, UAF

**Title**

Awareness about Dengue  
Mosquito  
April 16, 2012

**Location**

University of Agriculture,  
Faisalabad

**Name & Department**

Prof. Dr. Ijaz Javed Hassan  
Department of Physiology  
and Pharmacology, UAF

**Title**

Rational Use of Drugs in  
Animals  
December, 2011 - January,  
2012

**Location**

Chiniot & T.T.Singh





**Name & Department**

S.B Dairy Farm

**Title**

Mechanization of Silage Preparation

May 14, 2012

**Location**

71 JB Sarlian, Thikriwala, Fsd.



**Name & Department**

Prof. Dr. Asif Ali, Director, ORIC, UAF

**Title**

Challenges & Opportunities in  
GMOs for Agriculture

June 21, 2012

**Location**

University of Agriculture, Faisalabad

**Name & Department**

Prof. Dr. Laeeq Akbar Lodhi,  
Faculty Veterinary Science, UAF

**Title**

Creation of Awareness regarding  
the new Technologies in Goat  
Management Among Resource  
Poor Lady Farmers

June 19, 2012

**Location**

University of Agriculture, Faisalabad

The image shows a cover page with a background split into two colors: orange on top and green on the bottom. The text is centered in white. The top part of the text is 'Section-3' in a large, bold, sans-serif font. Below it, 'RESEARCH &' is written in a smaller, bold, sans-serif font. The bottom part of the text is 'DEVELOPMENT' in the same large, bold, sans-serif font as 'Section-3'.

**Section-3**  
**RESEARCH &**  
**DEVELOPMENT**

### 3.1 Overview

During the current year, a new component (Research & Development) was created to grant funds for proposals relating to Research & Development. Keeping in view the emergent situation of Dengue virus outbreak, the BoD allowed for funding proposals related to control of Dengue virus as a special case. Twelve projects were initiated during the year.

The Government of Punjab, specially health related institutions, appreciated and acknowledged that the Endowment Fund UAF made a very prudent and wise decision to initiate the Dengue Research Program (DRP) to respond to the Dengue Epidemic that had spread into many parts of the Western Punjab with Faisalabad alone reporting over 1500 cases of Dengue Fever during the period from August-December, 2011. A rapid response Program to deal with Dengue Fever was initiated with funding provided to Scientists from 4 different Institutions. A multi-disciplinary, multi-institutional Research and Surveillance Program was launched and named Dengue Research Program (DRP) with Professor Saiyed I. Ahmed, HEC Foreign Professor of the Institute of Microbiology, UAF as its Coordinator. A total of about Rs. 10 million was allocated for funding the following projects started during December, 2011:

| Sr.# | Title of the project  | Name of the PI  |
|------|---|---|
| 1.   | Molecular Basis of Dengue Hemorrhagic Fever Pathophysiology through Gene-Networking   | Dr. Junaid Ali Khan<br>Department of Physiology & Pharmacology, UAF |
| 2.   | Molecular Characterization of Dengue-Disease Related Viruses from Pakistan  | Dr. M Shah Nawaz-ul-Rahman<br>Virology Lab.,CABB, UAF               |
| 3.   | The Quantification of Different Serotypes of Dengue Virus Titre Using Real Time PCR in Patients Showing Variable Symptoms to Study the Disease-Titre Relationship | Dr. Muhammad Mubin<br>Virology Lab., CABB, UAF                      |
| 4.   | Molecular Detection of Dengue Virus Occurring Among Different Mosquitoe Populations in some Districts of Punjab   | Prof. Dr. Sajjad-ur-Rahman<br>Institute of Microbiology, UAF        |
| 5.   | Elucidation of Envelope Protein Domain III Consensus Sequence for the Further Development of Tetravalent Dengue Virus Subunit Vaccine Using Transgenic E.coli     | Dr. M. Khalid Mansoor<br>Institute of Microbiology, UAF             |
| 6.   | Whole-Genome Sequencing of Local Dengue Virus Strains in Pakistan   | Dr. Mehdi Toufeer<br>Institute of Microbiology, UAF                 |
| 7.   | Management of Dengue Virus and Malarial Vector Control through Biomoskill   | Prof. Dr. Sajjad-ur-Rahman<br>Institute of Microbiology, UAF        |
| 8.   | Efficient Use and Safety of Bacillus Pathogens as Vector Control for Effective Dengue Fever Prevention  | Dr. Iram Liaqat<br>Institute of Microbiology, UAF                   |
| 9.   | Micropropagation and Commercial Exploitation of Papaya ( <i>Carica papaya</i> ): a Potential Candidate for Dengue Fever Treatment                                 | Dr. Bushra Sadia<br>CABB, UAF                                       |
| 10.  | Wolbachia Bacteria-Based Dengue Control   | Prof. Dr. Iftikhar Hussain<br>Institute of Microbiology, UAF        |
| 11.  | Epidemiology of Recent Epidemic of Dengue Fever in Pakistan   | Prof. Dr. Muhammad Arshad<br>Institute of Microbiology, UAF         |
| 12.  | Botanicals: an Alternative Approach for the Vector Management   | Dr. Khuram Zia<br>Department of Entomology, UAF                     |

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**Section-4**  
**PRODUCT**  
**COMMERCIALIZATION**

#### 4.1 Activities

Up to 2010, infrastructure development was supported by Endowment Fund by establishing Business Incubation Center and UAF-TECH Company (Pvt.) Ltd. After restructuring of the Office of Research by adding the component of Innovation and Commercialization, operational aspects of the commercialization are taken up by BIC, ORIC and Endowment Fund jointly. The proposals having potential for commercialization are evaluated jointly and their fate is decided keeping in view the stage of the product.

Endowment Fund Secretariat, UAF sponsored a series of workshops under different topics conducted by ORIC, UAF

1. Entrepreneurial Eco System and Understanding of Concept of Commercialization.
2. How to Write a Winning Research Proposal for PSF
3. University Industry Linkages

Another milestone is the construction of Exhibition Center which was started at Main Campus UAF in Dec. 2011. This is meant for display/demonstration of developed and tested innovative and cost effective technologies to attract the stakeholders of agricultural industry in the country. The themes of exhibitions are generally pertinent to educational, economic, social or technological developments. The centre will act as incubator of scientific knowledge. The exhibits will serve as excellent material for complementing science teaching.



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**Section-5**  
**FINANCIAL REPORT**

## 5.1 Financial for the Year 2011-12

The income from investments of Endowment Fund was originally estimated at Rs. 116.530 million during the financial year 2011-12. However, the income from investments remained at Rs. 113.453 million. This happened mainly due to lower short term investment which was Rs. 65.0 million as compared to Rs. 92.0 million during the previous year. The total funds allocated to components were Rs. 235.088 million. Principal amount has incurred to Rs. 760 million as under:

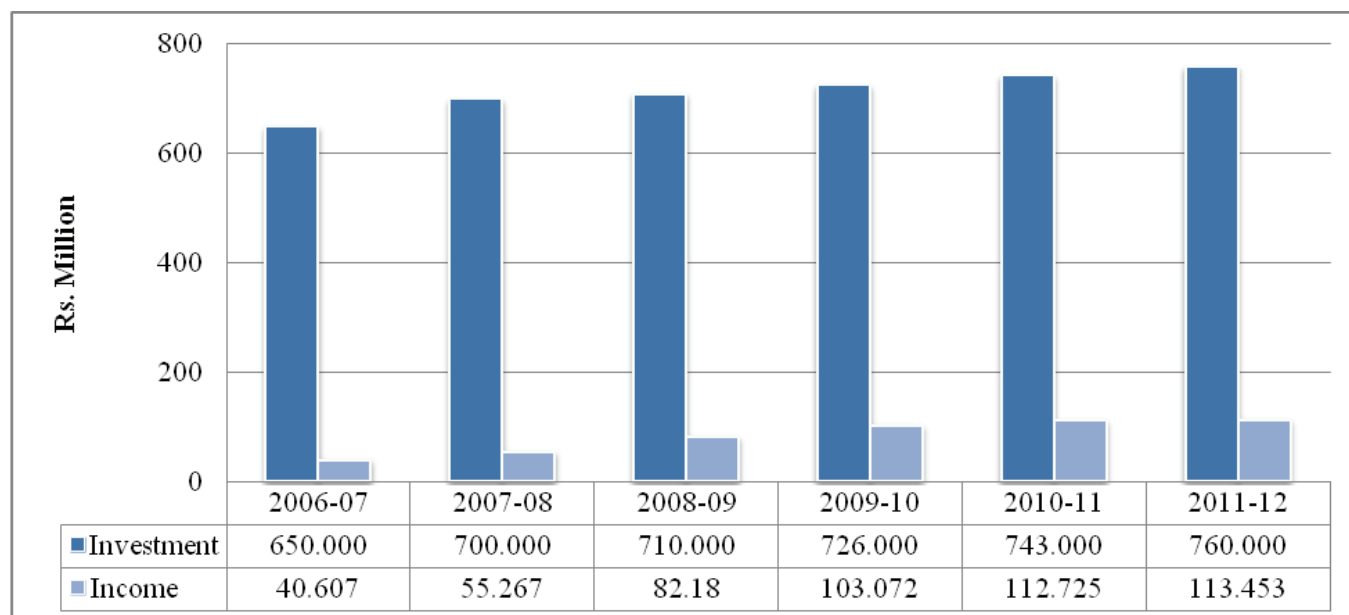


Fig 1: Investment & Profit Trend

## 5.2 Allocation/Expenditure

Budgeted income from investment was allocated to components of Faculty Development (FD), Technology Transfer (TT), Research & Development (RD) and Product Commercialization (PC). Originally the expenditures were estimated at Rs. 235.088 million with the expectation that the construction activities of the Exhibition Centre will pick up the momentum. However, due to unexpected reasons, the construction of Exhibition Center was delayed and expenditure could not be incurred as per expectations. Therefore, the year under review closed with revised expenditure of Rs. 140.778 million leaving a saving of Rs. 91.233 million. Component wise break-up of expenditure has been given in Figure 2.

Table 1: Budget Estimates 2011-12

(Rs. Millions)

| Head                                  | Budget Estimates | Revised estimates |
|---------------------------------------|------------------|-------------------|
| Unspent balance for 2010-11           | 135.558          | 135.558           |
| Income from Investment 2011-12        | 116.530          | 113.453           |
| Total amount available for allocation | 252.088          | 249.011           |
| Expenditure against components        | 235.088          | 140.778           |
| Transfer to Principal Amount          | 17.000           | 17.000            |
| Closing Balance                       | Nil              | 91.233            |

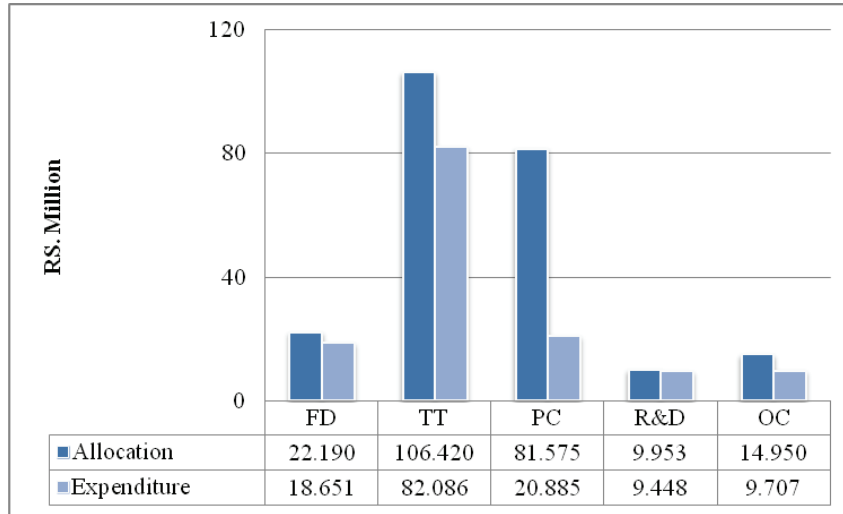


Fig 2: Component-Wise Allocation/Expenditure during the Year 2011-12

### 5.3 Operational Budget 2011-12

| Code    | Budget Head                                | Amount Rs. Million |
|---------|--|--------------------|
| A-01273 | Honorarium                                 | 1.24               |
| A-03201 | Postage and Courier etc.                   | 0.06               |
| A-03202 | Telephone and Trunk calls, E-mail/Internet | 0.06               |
| A-03702 | Management (Contractual Services)          | 0.51               |
| A-03805 | Traveling Allowance                        | 0.17               |
| A-03807 | POL Charges                                | 1.30               |
| A-03901 | Stationary                                 | 0.20               |
| A-03902 | Printing and Publication etc.              | 0.20               |
| A-03903 | Seminar/Workshops                          | 1.02               |
| A-03904 | Hire of Vehicles                           | 0.06               |
| A-03905 | News paper, periodicals and books          | 0.03               |
| A-03907 | Advertising & Publicity                    | 0.09               |
| A-03940 | Unforeseen                                 | 0.60               |
| A-06301 | Entertainment Charges                      | 0.50               |
| A-09203 | Purchase of I.T Equipment                  | 0.35               |
| A-09501 | Purchase of Transport                      | 2.00               |
| A-09601 | Purchase of Plant & Machinery              | 0.46               |
| A-09701 | Purchase of Furniture & Fixture etc.       | 0.06               |
| A-13001 | Repair of Transport                        | 0.20               |
| A-13101 | Repair of Plant & Machinery                | 0.50               |
| A-13201 | Repair of Furniture and Fixture            | 0.03               |
| A-13301 | Repair and Maintenance of Office Building  | 0.50               |
| A-13703 | Repair of I.T Equipment                    | 0.05               |
| A-12470 | Other-Civil Work                           | 5.21               |
|         | <b>Total:-</b>                             | <b>14.95</b>       |