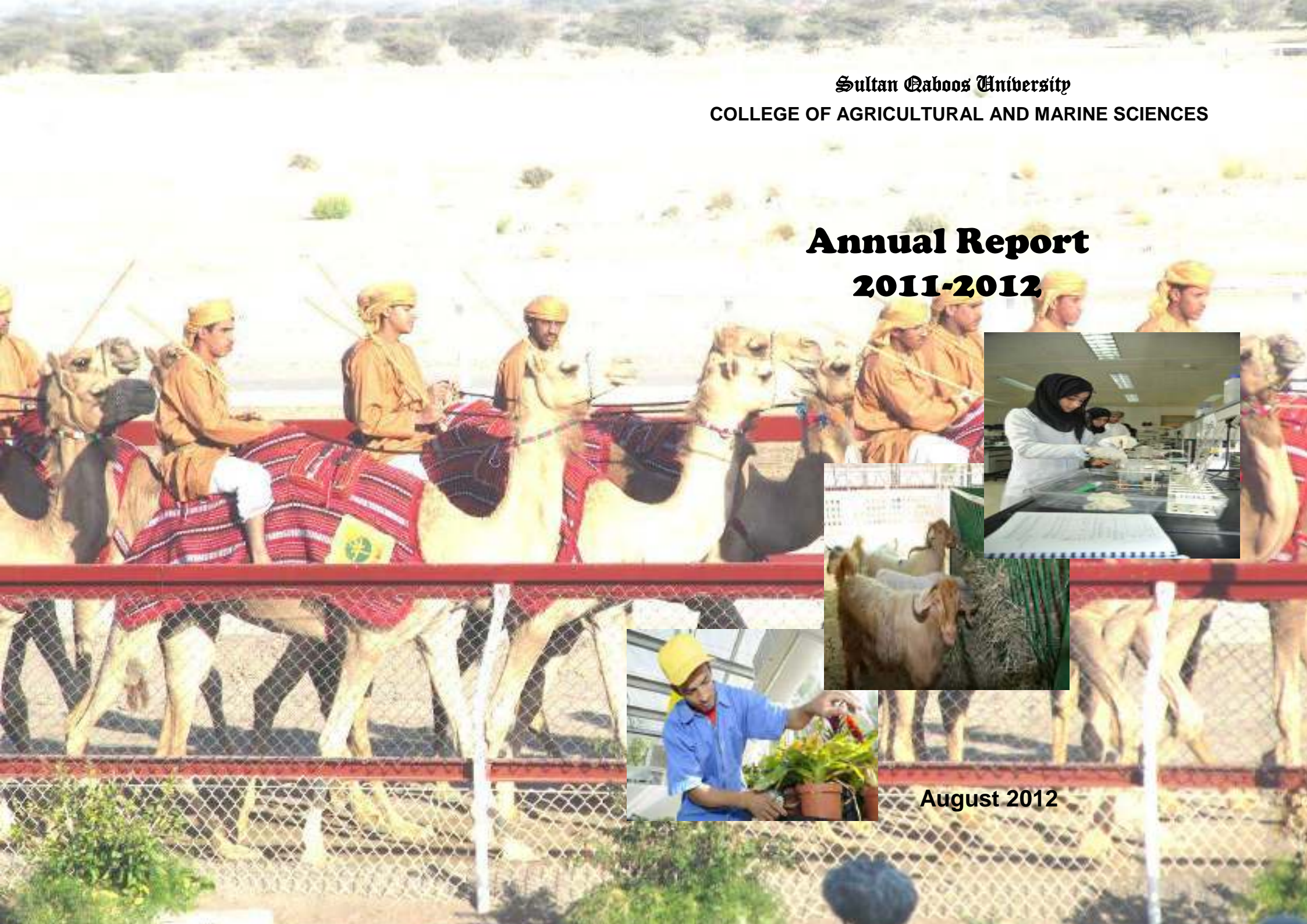


Annual Report
2011-2012



August 2012

Sultan Qaboos University
COLLEGE OF AGRICULTURAL AND MARINE SCIENCES

Annual Report 2011-2012



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Dean's Report

The vision of the College of Agricultural & Marine Sciences (CAMS) is to foster learning by enhancing access to educational opportunities and expanding knowledge through research. Recognizing its unique research and educational mission to the people of Oman, CAMS provides leadership in discovering, accessing, and disseminating knowledge through high quality research, instruction and extension programs. These contribute to food security and promote the well-being of individuals and communities. CAMS seeks to enhance the sustainability of agricultural and economic systems and to promote stewardship of natural resources. This is achieved through 10 bachelor, 8 MSc and 4 PhD programs. Our graduates are multi-skilled with entrepreneurial spirits, and face their futures with confidence.

CAMS considers itself an integral part of SQU. As a research-intensive College, CAMS remains a unique locus, where teaching, advising, service to the farming-fishing community are intertwined with curiosity-driven research endeavours, which make lasting connections of almost 60 faculty members, more than 100 technicians and administrators with other like-minded SQU scholars. CAMS also supports extracurricular social and cultural activities, provided they nourish the quests for new knowledge, social responsibility and alliances serving the Sultanate. In 2011 and 2012, CAMS received two "Awards for Best Educational Institute in Agriculture"; successfully competing against other Asian higher education institutions.

Our undergraduate enrollment has been increasing steadily over the years. The CAMS intake was more than 300 students over the last three academic years. Noticeable achievements of CAMS are seen in the robustness of the graduate program and the commencement of PhD programs in Crop Sciences, Food Science & Nutrition, Marine Science & Fisheries and Soils, Water & Agriculture Engineering. CAMS faculty maintain high quality research productivity with a total of 100 refereed journal papers in 2011, with a yearly average of 1.5 papers per faculty. Moreover, CAMS faculty and affiliated staff/students aim for top-level outlets for their publications, e.g. books published by Nova-Science, Taylor & Francis, SQU Press and journals indexed by Web of Science and highly ranked by the Australian Research Council. Furthermore, CAMS faculty secured and are currently working on several major grants from TRC, HM Trust Fund, and Agricultural and Fisheries Development Funds (MAFW). CAMS academic staff serve as Chief Editors, Editors or as members of editorial boards of more than ten internationally reputed journals.

We collaborate locally with several ministries, agencies and NGOs in Oman, e.g. Ministries of Agriculture & Fisheries Wealth, Environment & Climate Affairs, Health, and Regional Municipalities & Water Resources. One of our noticeable strengths is international collaboration with recognized institutions to develop academic interchange on the basis of research and student exchanges. CAMS maintains local and international networks to facilitate our goals in preparing students for leadership in an innovation-driven economy and global society. It promotes research and creative work, which increases intellectual, social and economic conditions and improves the quality of life for Omanis through extension, outreach and service.

Prof. Kacimov Anvar
Dean

Teaching

The College maintained vigorous and diverse teaching activities covering ten undergraduate and nine postgraduate programs. The following two tables summarizes teaching activities at CAMS over the 2011-2012 academic year:

Total number of course sections and registrations per department

Department	Courses		Registrations	
	Fall 11	Spring 12	Fall 11	Spring 12
AVS	21	22	422	388
CROP	16	19	240	254
FSN	19	23	518	557
MSF	15	17	273	240
NRE	9	14	252	291
SWAE	20	28	631	658
Dean's Office	7	12	434	523
TOTALS	107	135	2770	2911

Graduate course sections and registrations per department

Department	Courses		Registrations	
	Fall 11	Spring 12	Fall 11	Spring 12
AVS	2	4	2	11
CROP	2	5	7	21
FSN	3	4	20	27
MSF	1	3	4	7
NRE	1	3	3	19
SWAE	1	4	5	25
Dean's Office	1	1	20	30
TOTALS	11	24	61	121

In December 2012, 118 CAMS students graduated, 34 with Master's degrees.

	BSc Graduates		MSc Graduates	
	Fall 11	Spring 12	Fall 11	Spring 12
AVS	11	4	5	1
CS	3	5	3	5
FSN	0	8	10	4
MSF	11	1	1	1
NRE	7	11	2	2
SWAE	8	15	0	0
TOTAL	40	44	21	13

* For explanation of departmental acronyms see pages 11 – 22.

Research

Research Output

Table 1. Publications from faculty and staff at CAMS during 2011.

Refereed journal articles	100
Books	3
Chapter in books	19
Conference proceedings	33
Technical reports	13
MSc thesis/PhD Dissertation (2 MSc; 1 PhD)	3
Articles in newspapers and other SQU publications	28
Others [poster (15); abstract (3); invited speaker (5); presented paper (6); oral presentation (4); TV coverage (1); Booklet (2)]	36
Total	235

Research Funding

Table 2. Research Grants awarded by The Research Council (TRC) to CAMS faculty in 2012.

	Title	Principal investigator	Amount (R.O.)
1	Numerical modeling of ocean circulation to investigate the regional marine environment and climate around Sultanate of Oman	V. Yellepeddi	131,000
2	Monitoring groundwater using energy water smart meters and precision irrigation	S. Zekri	173,350
Total			304,350

The College had eight ongoing HM projects in 2011 for a total budget of 771,100 Omani Rials, three of which were completed in October 2011 and one to be completed in April 2012 (Table 3).

Table 3. Ongoing research projects funded by HM strategic fund before 2012.

No.	Title of Research	Year Granted	Principal Investigator	Amount (RO)
1	Conservation and utilization of plant genetic resources in Oman	2007	N. Al-Saady	139,300
2	Rejuvenating lime and mango production in Oman: Resolving current challenges	2008	R. Al-Yahyai	100,000
3	Characterization, evaluation and conservation of indigenous animal genetic resources in the Sultanate of Oman	2008	O. M. Gaafar	80,000

4	Stock assessment of Kingfish	2008	A. Govender	79,800
5	Feasibility of managed aquifer recharge using excess treated wastewater in Oman	2009	M. Ahmed	85,000
6	Potential sources of soil-borne plant pathogenic fungi and bacteria into farms in Oman	2010	A. Al-Saadi	87,500
7	Economical, social and environmental impacts of marine biofouling in the Sultanate of Oman	2010	S. Dobretsov	80,000
8	Value added functional products from less-utilized biomaterials locally available in the Sultanate of Oman	2011	M.S. Rahman	119,500
Total				771,100



A total of 12 additional projects received funding from SQU Internal Grants (Table 4).

Table 4. Internally-funded projects awarded in 2011.

No.	Title of Research	Principal Investigator	Amount (RO)
1	Comparative oxidase respiratory burst and phagocytosis of neonatal and adult ovine polymorphonuclear leukocytes	E. H. Johnson	6,000
2	Extraction and value addition to Omani basil oil	A. Al-Maskri	6,500
3	An analysis on optimal plan on new-planting and re-planting of date Palm in Oman through a multiperiod linear programming optimization model	H. Kotagama	3,500
4	Glycemic index and glycemic load of traditional Omani foods: studies on the effects of methodological and food factors	A Ali	8,000
5	Screening novel biomarkers for early detection of autism in Omani children	M.Essa	8,000
6	Biochemical, physiochemical and microbial characteristics stability of traditionally dried <i>E. punctifer</i> in Oman during ambient storage	I. Al-Bulushi	6,000
7	Physicochemical properties and antimicrobial activity of Omani frankincense	MS. Rahman	4,000
8	Aroma profile of pasteurized camel milk	Z. Al-Attabi	3,000
9	Catching and economic performance of the demersal longline fishery	H. Al-Masroori	6,000
10	Plant-soil approach for irrigation scheduling of fruit crops	S. Al-Jabri	8,000
11	Nutrition of traditional foods with Omani dates	M Annamalai	6,000
12	Possibility of utilization solar stills to provide greenhouse water demand in arid environments	A Al-Ismaili	5,000
Total			70,000

During 2011 seven internally-funded projects were completed (Table 5).

Table 5. Internally-funded projects completed in 2011.

No.	Title of Research	Year Granted	Principal Investigator	Amount (RO)
1	Effect of manure amendment with varying C:N ratios on N mineralization in soil	2006	S. Ismaily	4,400
2	Application of water saving technologies in domestic water conservation in Oman	2007	M. Ahmed	4,900
3	Evaluation of Omani camel performance under intensive management for meat production and quality	2008	O.M. Gaafar	12,000
4	Characterization of gummosis and foot/root rot	2009	A. Al-Sa'di	11,600

diseases of citrus in Oman

5	The role of zooplankton in controlling the bloom-formation in Oman water bodies	2009	A. Al-Azri	10,500
6	A database on the Arabian sea ecosystem	2009	S. Piontkovski	11,000
7	Non-toxic antifouling compounds from marine bacteria	2009	S. Dobretsov	12,000
Total				66,400

Table 6. Externally-funded research and development projects awarded in 2011.

No.	Title	Principal Investigator	Sponsor/ Agency	Amount (RO)
1	Effect of dietary supplementation of fruits grown in Oman on cognitive decline in alzheimer's dementia, mild cognitive impairment, vascular cognitive impairment and traumatic brain injury	M. Essa	TRC	201,000
2	Development of Computer Vision (CV) technology for quality assessment of Dates in Oman	M. Annamalai	TRC	98,850
3	Development of low fat and low sugar Omani halwa	M.S. Rahman	IIC, Oman	4,924
4	Whole wheat products development and awareness creation in Oman	M. Annamalai	IIC, Oman	58,280
5	Determination of chemical contaminates of meat and meat products which threaten human health sold in Oman	I. Kadim	MoA	164,500
Total				527,554

Table 7. Other externally-funded research and development projects awarded in 2011 and completed in the same year.

No.	Title	Principal Investigator	Sponsor/ Agency	Amount (RO)
1	Treated wastewater analysis	M. Claereboudt	Mazoon Company (METS)	310
2	Determination of major heavy metals in fish products	M. Ahmed	ICBA, UAE	1,500
Total				1,810

Table 8. Ongoing externally-funded research and development projects awarded from previous years.

No.	Title	Principal Investigator	Year Granted	Sponsor/ Agency	Amount (RO)
1	Diversity, stocks and feasibility of sea-cucumber aquaculture in Oman	K. Al-Rashdi M. Claereboudt	2008	MFW	94,300
2	Assessment of shark population movements, delineations and	A. Henderson	2008	MFW	100,000

breeding grounds in the Sultanate of Oman

3	Assessments of mesoscale physical-biological interactions along the coast of Oman as the basis for understanding the periodic fisheries losses	A.Al-Azri	2009	MFW	222,900
4	Heavy metal contamination of fish and shellfish	S. Goddard S. Al-Barwani	2009	IIUM	14,400
5	Detection of citrus exocortis viroid, citrus cachexia viroid and citrus greening bacteria by PCR assays in citrus trees from Royal Gardens and Farms	A.J. Khan	2009	Royal Court Affairs, Oman	7,500
6	National strategy to combat salinity and protect water resources from pollution	S. Zekri	2010	ICBA	2,814
7	Oceanographical regime shift in the Sea of Oman	S. Piontkovski	210	TRC	146,000
8	Molecular characterization of begomovirus associated with tomato and other crops and screening of tomato cultivars tolerant to leaf curl virus	A.J. Khan	210	TRC	132,000
Total					719,914

Table 9. Other externally-funded research and development projects awarded from previous years and completed in 2011.

No.	Title	Principal Investigator	Year Granted	Sponsor/ Agency	Amount (RO)
1	Characterization of camel milk protein isolates as nuraceutical and functional ingredients	A. Alawi	2008	UAEU	40,000
2	Comprehensive master plan for Al Batinah	S. Zekri	2010	HMR Consultants, Oman	798
3	Food demand survey: indicative demographic trends	M. Mbagu	2010	GRM International Pty., Ltd., Dubai	9,728
4	The application of planning and management principles and techniques to the design of the fisheries component of the Duqm Commercial Port Deve-lopment	A.Palfreman	2010	MWF	2,450
5	Fatty acid analysis in fish samples	M. Claereboudt	2010	Ministry of Fisheries/ FQCC Oman	2,160
Total					55,136

Training and Community Services

The College maintained an extensive outreach program. The main features of this program are summarized below.

Conferences, Workshops, Training and Lectures Presented

Title	Beneficiary	Host Dept / Participant
<ul style="list-style-type: none"> • 3rd Conference of International Society of Camelid Research and Development 	SQU, Ministries and private sector	AVS, FSN
<ul style="list-style-type: none"> • Symposium on Increase in Fish Price in Sultanate of Oman 	SQU, Ministries and private sector	MSF, NRE Oman Fisheries Co.,
<ul style="list-style-type: none"> • International Symposium on Whole Grain Products 	SQU & Ministries	SWAE, Oman Flour Mills Company, Industrial Innovation Center
<ul style="list-style-type: none"> • Workshop on Advanced E-Learning 	CAMS Faculty and teaching staff	NRE
<ul style="list-style-type: none"> • Workshop on Sustainable Water Use for Food Security 	CAMS & Ministries	SWAE
<ul style="list-style-type: none"> • Workshop on Nutritional Related Health Challenges in Oman 	SQU, Ministries & Private sectors	FSN
<ul style="list-style-type: none"> • Workshop on Impact of Diet on Human Health 	CAMS, SQUH, Ministry of Health	FSN
<ul style="list-style-type: none"> • Trained 20 students from Higher College of Technology 	Students of Higher College of Technology; College of Sciences SQU	CS,FSN, AVS & Central Instrument Lab
<ul style="list-style-type: none"> • Trained one staff from Ministry of Manpower 	Ministry of Manpower	CS
<ul style="list-style-type: none"> • Trained one staff from Ministry of Heritage and Culture 	Ministry of Heritage and Culture	CS

• Trained one staff from Royal Army of Oman	Royal Army of Oman	CAMS Labs
• Trained one student from ABS School Counselor	ABS School Counselor	MSF
• Trained one student from Institute of Biotechnology of Monastir, Tunisia	Institute of Biotechnology of Monastir, Tunisia	FSN
• Trained one student from VIT University, India	VIT University	CS
• Trained two students from Vocational Training Center, Saham	Vocational Training Center, Saham	CS
• Trained two students from Fishermen Training Institute, Al-Khaboura	Fishermen Training Institute, Al-Khaboura	FSN, MSF
• Trained five students from Sufana School	Sufana School	AVS, SWAE
• Trained one student from University of Nizwa	University of Nizwa	CS
• Trained one student from College of Science	College of Science	FSN
• Training on Oceanography, Marine Pollution and Management of Coastal Areas	Oman Navy	MSF

Other Selected Outreach Activities

• CAMS Sports Day	CAMS	Social Activities Committee
• The World Water Day Exhibition	SQU & Private Sectors	SWAE
• Participation in workshop on the Possible Genetic Resources Database for the Center	Research Council	AVS,CS, MSF
• Participation in First Omani Campaign in Nutrition and Dietetics	Ministry of Health	FSN
• Participation in workshop on Fish Quality control and Safety See Food	MSF	FSN
• Seminar on Assessment of Serum Leptin and Insulin Status among Newly Diagnosed Omani Type 2 Diabetic Adults	SQU Staff	CAMS
• Seminar on Innovating Oman	SQU Staff	CAMS
• Seminar on Hydroponic Agriculture Experience from Japan and Netherlands	SQU Staff	CAMS

• Seminar on Dhofar Ethnobotany and Plant Conservation	SQU Staff	CAMS
• Seminar on the Phylogeny, Morphology, and Taxonomy of Acridocarpus	SQU Staff	CAMS
• Seminar on Temperature Measurement by Volunteer Divers	SQU Staff	CAMS
• Seminar on Nanotechnology Applications in Environment, Water and Agriculture	SQU Staff	CAMS
• Seminar Monitoring Temperature in Coral Communities	SQU Staff	CAMS
• Seminar on Activity of Antibiotics in Environment and Applications on Propagation of Antibiotic-Resistance and Potential Collaborative Research at the University of Florida	SQU Staff	CAMS
• Seminar on Monitoring Plant-Soil-Water Relations Using Innovative Instrumentations	SQU Staff	CAMS
• Seminar on Blue Ocean Strategy	SQU Staff	CAMS
• Seminar on Energy Crisis: Bioenergy Solutions	SQU Staff	CAMS
• Seminar on The Arabian Tahr Research, Conservation and Community Project	SQU Staff	CAMS
• Seminar on Food Quality by Food Physics: Application of X-rays	SQU Staff	CAMS
• Seminar on Population Biology of Plankton Shrimps (<i>Acetes</i> spp.) in Malaysia	SQU Staff	CAMS
• Seminar on Art and Technology of Perfumery	SQU Staff	CAMS
• Seminar on Using Open Science and Open Data to Improve Environmental Governance in Oman	SQU Staff	CAMS
• Seminar on Characterisation of the Expression of NMDA Receptors in Human Primary Astrocytes	SQU Staff	CAMS
• Seminar on Anchovy in the Bay of Biscay: To eat or not to eat	SQU Staff	CAMS
• Seminar on <i>Cryptosporidium</i> in Drinking Water: A Detective Story	SQU Staff	CAMS
• Seminar on Groasis Technology	SQU Staff	CAMS
• Seminar on Utilization of Low Value Food and Biomaterials	SQU Staff	CAMS
• Seminar on Feasibility of Managed Aquifer Recharge Using Excess Treated Wastewater in Oman	SQU Staff	CAMS
• Seminar on Accounting the Unaccounted: A Case of Women's Participation in Fisheries	SQU Staff	CAMS
• Seminar on Economical, Social and Environmental Impact of Marine Biofouling in the Sultanate of Oman	SQU Staff	CAMS
• Seminar on Potential Sources of Plant Pathogenic Fungi and Bacteria into Oman	SQU Staff	CAMS

Departmental Highlights

Animal and Veterinary Sciences (AVS)

- * A book entitled “Goat Meat Production and Quality” has been published (November 2011) by the international publishing house, CABI International with ISBN #: 978-1- 84593-849-9. The book was edited by Professors Osman Mahgoub and Isam T. Kadim both from the Department of Animal & Veterinary Sciences, with Professor Edward C. Webb from the University of Pretoria, South Africa. The 361 page book contains 15 chapters, authored by 27 scientists hailing from various parts of the world, including: France, Morocco, Spain, Tunisia, South Africa, Oman, USA, Mexico, Australia, Sudan and Canada.
- * Professor Abdalla Hassan Eljack, a Fulbright scholar from School of Veterinary Medicine, Tuskegee University, USA, joined the Department of Animal and Veterinary Sciences for the academic year 2011/2012.
- * Dr. Isam T. Kadim was promoted from Associates Professor to Full Professor.
- * Professor Eugene H. Johnson, after having served on the Quality Assurance Team that oversaw the development of the Oman Research Council and subsequently served as a member of the review team for the Environmental and Biological Resource Sector for three years, agreed to serve for another three year period.
- * Professor Eugene H. Johnson, received an SQU internal grant, entitled: “Comparative oxidative respiratory burst and phagocytosis of neonatal and adult ovine polymorphonuclear leukocytes.
- * Professor Eugene H. Johnson represented the Sultanate of Oman as a keynote speaker at the World Islamic Economic Forum from June 7-9, 2011 held in Astana, Kazakhstan. His talk outlined the role of Oman during the advent of the Silk Trade Route.
- * Professor Eugene H. Johnson was one of three artists invited from Oman to exhibit works at the World Islamic Economic Forum from June 7-9, 2011 held in Astana, Kazakhstan
- * Dr. Mohammed H. Tageldin was promoted from Assistant Professor to Associate Professor.
- * Professor Isam Kadim was granted funding (164,500 R.O) from the Agriculture Research Funds granted for the research proposal entitled ‘Determination of Chemical Contaminates of Meat and Meat Products which Threaten Human Health Sold in Oman”
- * Dr. Dawood Bin Suliman Bin Juma Al-Ajmi Assistant Professor was transferred to the Diwan Royal Court, Environmental Conversation Affairs.
- * Mr. Mohammed Al-Abri went to Cornell University in Ithaca, New York, United States, to complete his PhD in Animal Breeding.
- * Ms. Salma R. Al Adwani joined the Department as Assistant Lecturer after completing her Master Degree in Immunology from Washington State University, USA.
- * Various laboratories in the Department assist veterinarians and other health care professionals on a regular basis (from the public and private sectors) in the diagnosis of disease conditions affecting a large spectrum of infectious

and non-infectious disorders. The ANVS faculty employ the use of postmortem examination, histopathology, serology, bacteriology, transmission electron microscopy, and immune-histochemistry to serve various animal sectors in Oman.

- * The Feed Analysis Laboratory of the Department served public and private sectors with sample analyses and trained students from Polytechnic Colleges (Ministry of Manpower) for various sophisticated and advanced food analysis technics.
- * The Department published 9 referred journal articles, 4 book chapters, one book, and presented 6 papers at International conferences and 3 research projects were granted.
- * Professor Osman Mahgoub participated as a keynote speaker in the International Conference on Camel Research and Development: Enhancing Sustainable Livelihood of Ethiopian Pastoralists. October 27-29, 2011, Jigjiga, Ethiopia
- * Professor Isam Kadim presented scientific papers in the 4th Arab Conference on Nutrition, Promotion of Healthy Nutrition in the Community. Jordan, Oman, 5-7 April, 2011.
- * Professor Isam T. Kadim visited Al-Farabi Kazakh National University in the Republic of Kazakhstan as part of the supervision of one of the PhD students. He lectured graduate students in various topic related to meat technology.
- * Raiymbek Gulzhan a PhD Student from Al-Farabi Kazakh National University in the Republic of Kazakhstan is visiting the Department of Animal and Veterinary Sciences to do part of her research work in the Meat Lab.
- * Salma Al-Adwani presented a poster at the Northwest branch meeting of the American Society for Microbiology in Seattle, Washington State. The poster was presenting her project of the Master's degree titled (Development of Egg-yolk derived IgY against *Campylobacter jejuni* Colonization Associated Proteins For Use In Passive Immunotherapy).
- * *Collaborative research links were established with:*
 - Washington State University in USA. Contact person: Dr. Mushtaq Ahmed Memon in clinical reproduction.
 - University of Porto in Portugal. Contact person: Dr. Albano Fereira in molecular genetics.
 - University of Hohenheim in Germany: Contact person: Dr. Andreas P and Dr. Eva Schecht in agricultural systems.
 - University of Pretoria. Department of Animal and Wild life Sciences, South Africa: contact person. Dr. Abubaker Hussain.
 - University of Pretoria. Department of Veterinary Tropical Diseases, Faculty of Veterinary Medicine, South Africa Contact person: Dr. B. Wallace.

Crop Sciences (CROP)

- * The Department of Crop Sciences finalized the degree program for the 2012 cohort. In order to offer a sustainable degree program, it evaluated suggestion from potential employers of crop science graduates. Representatives from Diwan of Royal Court, Royal Court Affairs, Ministry of Agriculture, and private sectors i.e. Tawoos Agriculture System and Nihad Agricultural Services, actively participated in a one day workshop in March 2012.
- * Prof. Deadman continued a consultancy with the Ministry of Environment and Climate Affairs on pesticide use within the farming communities of northern Oman.
- * Professor Deadman advised numerous farmers in all parts of Oman about crop disease control.
- * Professor Acelino Couto Alfenas, UFV Brazil visited the Department.
- * Year 2012 Dr. Abdullah Al-Sadi received the Best Researcher Award from SQU, Oman
- * Professor Tom Harrington, Iowa State University, visited the Department.
- * Professor Deadman and Dr. Abdullah Al-Sadi received funding from Vale, Oman for research collaboration
- * Dr. Jamal Khan has completed survey of all regions of Oman for begomovirus associated disease on vegetable crops
- * Dr. Jamal Khan have been invited to serve as lead Guest Editor for special issue on 'ssDNA Viruses' from the Journal of Biomedicine and Biotechnology (impact factor 2.45)
- * Dr. Jamal Khan Identified 2 plant viruses first time from Oman; 2 New recombinant plant viruses (not reported before) from Oman and 1 new species of plant virus
- * Plant Sciences Group, Department of Crop Sciences held an exhibition for the Tree Day celebration in collaboration with Muscat Municipality & Oman Botanic Garden during 5 - 6 November, 2012. The exhibition featured a lecture and book sale.
- * *Symposium/Conference*
 - Dr Fahad Al Said and Dr Rashid Al-Yahyai participated in the 2nd All Africa Horticulture Congress “Horticulture for Humanity” at Skukuza, South Africa, 15-20 January 2012.
 - Dr. Ahmed Al-Maskri presented an oral presentation “Wheat Production in Oman” at the International Symposium on Whole Grain Products, CAMS, SQU. April 14-15, 2012
 - Dr. Rashid Al-Yahyai attended the 7th International Postharvest Symposium 2012 (IPS 2012): Postharvest for Wealth & Health. MARDI-UPM-ISHS, Putra World Trade Center (PWTC), Kuala Lumpur, Malaysia, 25-29 June 2012.
 - Dr. Ahmed Al-Maskri was invited as session chair at the National Symposium of the Agricultural and Fisheries Development Fund Organization “Achievements and Future Directions”, Ministry of Agriculture and Fisheries, Sultanate of Oman 19-20 March, 2012
 - Dr. Ahmed Al-Maskri was invited as a poster judge at the Malaysia International Biological Symposium for “Sustainable Management of Bioresources” 11th – 12th July 2012, Residence Hotel, Salangor,

Malaysia.

* *Collaboration:*

- The department has very strong collaboration with several international universities and within the last year departmental faculty managed to collaborate with the following: Iowa State University, USA; Universidade do Algarve, Portugal; Central Bureau voor Schimmel Cultures (CBS), The Netherlands and Department for Agriculture, United Arab Emirates and initiated collaborative research with the University of Surrey, UK on information flow within farmer groups. There was one to one collaboration between the faculty of the Department and the following: Dr. M. Zamharir, Iranian Research Institute of Plant Protection, Iran; Dr. Jesús A. Instituto de Biología Molecular y Celular de Plantas, Spain; Sánchez Navarro; Prof Matthew Dickinson, the University of Nottingham, UK; Dr. Grazia Licciardello, the Science and Technology Park of Sicily, Italy.

Training Programs offered by the department

Training Program Title	Period/Dates	Participants	Position
Principles of plant pathogen detection and disease diagnosis	June, 2-11, 2012	10 staff from MAF	staff
Molecular techniques in plant pathology	January, 2012	4 students from Nizwa University	students
From isolation of Fungi to molecular identification	June-August, 2011	Nadiya Al-Shariani	graduate students
Polymerase chain reaction	July-August, 2011	Bahia Al-Azareh	BSc student College of Science
Isolation and identification of fungi from soils	February-May, 2011	Badriya Al Katri Dalal Al-Hatali	graduates

Food Science and Nutrition (FSN)

- * Published 46 refereed papers, 3 edited books, 7 book chapters, 3 conference proceedings, 12 conference abstracts, and presented 4 papers at international conferences and 3 papers in local conferences/workshops/seminars.
- * The Department received funding for 6 new projects: 1 HM Funded project (Dr. Rahman) 1 TRC Funded Grant (Dr. Essa), and 5 SQU Funded projects (Dr. Al Bulushi, Dr. Al Attabi, Dr. Mothershaw, Dr. Essa and Dr. Ali)
- * The Department organized a workshop on "Bacterial Identification: Current Techniques and Future Needs, SQU, Muscat, Oman, 31 January - 1 February 2011 (Dr. Al Bulushi, Chair Organizing Committee)
- * The Department organized a round table discussion with dieticians from different hospitals and the Ministry of Health regarding changes in the curriculum of the Human Nutrition and Dietetics Program (Chair: Dr. Al-Rasasi
- * Prof. Rahman served as a member of the International Advisory Committee of the "Third International Conference on Chemical Engineering", ICCChE 2011, Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh, 29-30 December, 2011
- * Prof. Rahman: served as a member of the Extended International Scientific Committee 11th International Congress on Engineering and Food, Athens, Greece, 22-26 May 2011
- * Dr. Mohamed Al-Khusaibi received his PhD degree from University of Reading in Food Biosciences
- * Ph.D student, Ms. Amani Al-Rawahi, received the best paper award for oral presentation at the "International Conference on Food and Nutrition Technology for Public Health Care" held in Jawaharlal Nehru University, New Delhi, India May 4-5, 2012 (Supervisor: Prof. Shafiur Rahman).
- * Ph. D student, Ms. Vandita Singh, received an award for the best for poster presentation at the "International Conference on Food and Nutrition Technology for Public Health Care" held in Jawaharlal Nehru University, New Delhi, India May 4-5, 2012 (Supervisor: Dr. Nejjib Guizani)
- * Ph. D student, Ms. Amani Al-Rawahi, received training on cell line techniques from Professor Gilles Guillemain, Department of Pharmacology, University of New South Wales, Sydney, Australia (15 June to 15 September 2011).
- * Ph.D student Vandita Singh received training on conducting *in vivo* animal studies- Department of Biomedical Sciences- Bundelkhand University- India (September 15-October 15, 2011)
- * BSc students Hanan Al Alawi and Hanan Al Hattali received six weeks training at Putra University, Malaysia. (Summer 2011)
- * Ph.D student, Mr. Kasim Al Shamsi, from University Kebangsaan Malaysia visited the Department to conduct part of his experimental work.
- * BSc. Student, Ms. Mouna Kilibi from the Institute of Biotechnolgy of Monastir, University of Central Tunisia conducted her final project in the Department on "Phenolics, antioxidant activities and glass transition of edible mushrooms" (March 1 to May 03, 2012)
- * Trained technicians from food sectors and hospitals on bacterial identification using VITEK 2 compact.

- * Ms. Neetha Udayakumar Achandira, visiting student from Waljat College of Applied Sciences, Muscat, Oman. "Health functionality of selected foods" (5 March to 30 June 2011).
- * Six students from Higher College of technology (Ministry of Manpower) were trained in our laboratories for 4 to 8 weeks in the areas of food chemistry, food microbiology and food processing.
- * *The Department established/continued collaboration with:*
 - Dr. Tariqur Rahman, Biomedical Science, International Islamic University Malaysia (Health functionality of papaya skin) (Dr. Rahman)
 - Professor M. Azlan Hussain, Department of Chemical Engineering, University of Malaya, Kuala Lumpur, Malaysia (Modeling techniques by artificial neural network and fuzzy logic) (Dr. Rahman)
 - Professor Aminah Abdullah, Department of Food Science and Nutrition, Universiti Kebangsaan Malaysia (UKM), Malaysia (Developing low fat Halwat) (Dr. Rahman)
 - Dr Tri Agustini, Marine Sciences, Diponegoro University, Tembalang, Semarang, Indonesia (Natural preservation of fresh fish)
 - Prof. Gary Dykes, Monash University, Australia in the areas of studying the microbial characteristics of Omani traditional foods (Dr. Al Bulushi)
 - Collaboration with Professor Patricia Kendall, Colorado State University: Designing education program for diabetes management (Dr. Al-Subhi)
 - Dr. Gilles J Guillemin, University of New South Wales, Australia (Dr. Essa)
 - Drs. Ted Brown and Abha Chauhan, New York State Institute for Basic Research, New York, USA (Dr. Essa)
 - Dr. Mustaq Memon, Washington State University, Pullman, WA, USA (Dr. Mohamed Essa)
 - Dr. Salwa Bornaz, Institute of Food Industry, University of Tunis II, in the area of commodity processing (Dr. Guizani)
 - Professor Patricia Kendall, Colorado State University: Designing education program for diabetes management (Dr. Al-Subhi)
 - Professor Aminah Abdullah of Universiti Kebangsaan Malaysia, in the area of sensory analysis of Omani halwa. One Ph. D student is being supervised jointly. (Prof. Shafiur Rahman)
 - Four groups from Al-Khaboura Training Institute visited our Department to see our food analysis/microbiology/chemistry laboratories.

Marine Science and Fisheries (MSF)

1. Governance and Finance

- Dr. Hussein Al-Masroori was appointed as HoD.
- Harib Al-Habsi was appointed as Department Superintendent.
- Some new guidelines and regulations were developed for lab management and safety.
- 10,000 OMR was attracted to fund the Al-Hail Aquaculture Research Unit.
- 10,000 OMR was attracted to help in maintaining the Research Vessel Al-Jamiah.

2. Teaching and Learning

- The Department organized a scientific-social field trip for the whole department on April 25, 2012. This trip imparted practical training to the students in fishing methods and oceanographic observations
- The Department organized a fieldtrip for staff and students to FULK AL-SALAMAH ship on December 2012.
- The Department launched an Aquaculture Award competition for undergraduate students. Two proposals were funded.
- Dr. Sergey Dobretsov received the Best Researcher award 2011.
- Mr. Sulaiman Al-Shuaili attended training in Ecosystem Approach to Fisheries in Netherlands in the period 31 October - 18 November.
- The Department successfully conducted a series of group presentations, where 3 staff on every Wednesday presented their research activities.
- The Department organized a field trip to Fishermen Training Institute, Al Khabura to acquaint the students with various fishing gear, aquaculture and navigational techniques.

3. Research

- Dr. Hussein Al-Masroori, Dr. Adnan Al-Azri and Captain Saleh Al-Maashari went on official trips to India and Qatar to explore the feasibility of buying a new marine research vessel and to develop collaborations with the countries' educational and research institutes.
- New food formula was developed by the department.
- The Department successfully cultured of Seabream and Grouper at Al-Hail Aquaculture Center.
- The Department successfully cultured Giant Freshwater Prawn, *Macrobrachium rosenbergii*, at AES.
- Dr. Veera Sarma received a TRC research grant entitled "Numerical Modeling of Ocean Circulation to Investigate the Regional Marine Environment and Climate around Sultanate of Oman".
- Dr. Michel, Dr. Stephen and Mrs. Aisha received publication awards from the Ministry of Agriculture and Fisheries Wealth.
- The Department staff published 35 papers at local and international journals.
- The Department staff presented 11 papers at local and international conferences.

4. Community Services

- The Department hosted a Symposium on “Increase in Fish Price in Sultanate of Oman” in collaboration with the Department of Natural Resource Economics and Oman Fisheries Company on April 10, 2012.
- Students from Fishermen Training Institute, Al-Khaboura visited the Department on April 2012.
- Two research related websites were developed and launched: www.omansea.org & www.biofouling.org
- The Department offered a training workshop for the Royal Navy of Oman in February, 2012.
- The Department offered training for students from the Fishermen Training Institute, Al-Khaboura.
- A series of newspaper articles were published in the “Observer”, “Times Of Oman”, “Oman Daily” and SQU Newsletter “Horizon” by faculty members.
- The Department contributed to the Expo Uoso International Exhibition in South Korea.
- Department staff participated and made presentations at four local workshops.

5. International Academic Cooperation

- The Department conducted a meeting with the Lighthouse R&D Enterprises on November 16, 2012 to explore the potential collaboration between the two parties.
- Dr. Adnan Al-Azri visited Red Sea Research Center, King Abdulla University for Sciences and Technology, KSA, February 2012.

6. Human Resources

- Dr. Gilha Yoon (Assistant Professor) joined the Department in January 2012.
- Dr. Arne Malzhan (Assistant Professor) joined the department in August 2012.
- Mrs. Wardalmuna AL-Manthri (Technician) joined the Department in January 2012.
- Dr. Fahad Al-Ajmi (Associate Researcher) was transferred to the Ministry of Agriculture and Fisheries Wealth.
- Dr. Adnan Al-Azri (Assistant Professor) is on his second year of secondment to the Ministry of Foreign Affairs.

7. The Student Environment

- The Department student society organized their Open Day in collaboration with students from Fishermen Training Institute, Al-Khaboura on April 10, 2012.
- HoD conducted several group meetings with the undergraduate students and the student society.
- HoD conducted several individual meetings with the postgraduate students.
- The Department has a total of 67 BSc, 5 MSc and 2 PhD students.

Natural Resource Economics (NRE)

1. Human Resources and Capacity Building

- Two experienced faculty, Dr. Bose, a fisheries economist and Dr. Sarath, an entrepreneurship specialist, joined the Department in September 2011.
- Two departmental staff were awarded scholarships for further studies. Mr. Juma Al Musalami (NRE superintendent) was awarded an Erasmus Mundus scholarship for a PhD in the University of Deusto, Spain. Juma will leave in May 28, 2012. Mrs. Ibtisam Al Ibri, a demonstrator, was awarded an SQU scholarship to continue her MSc. at the University of Florida, USA. Ibtisam will leave for the USA in August 2012.

2. Research

- Faculty members continued to work as PI's in their internally funded research projects on:
 - Effects of the food crisis on food security in Oman (Dr. Houcine Boughanmi)
 - Supply chain management in the small scale fishery sector (Dr. Omar Al Jabri)
 - Integrated urban water management in Great Muscat (Dr. Slim Zekri)
 - Marketing opportunities for Jabel Al Akhdar rose water (Dr. Msafiri Mbaga in collaboration with the Ministry of Agriculture)
 - Optimal plan on planting and re-planting of date palm in Oman (Dr. H. Kotagama)
- Dr. S. Zekri was awarded a new TRC grant for a research project titled "Monitoring Ground Water Using Smart Meter and Precision Irrigation" (R.O 213000).
- Dr. M. Mbaga submitted a new research proposal for SQU internal fund on the "The preferences and determinants of dairy farmer's participation in alternative marketing channels in Oman (R.O 13000).
- Dr. S. Bose submitted a new research proposal to SQU internal research fund on "Estimating the capital stock and investment in artisanal fishery in Oman (R.O 4900 OR.)

3. Consultancies

- Dr. S. Zekri completed a consultancy on Oman soil salinity strategy for the Ministry of Agriculture and Fisheries & International Center for Biosaline Agriculture April 2012.

4. Workshops/training Courses

- Dr. M. Mbaga coordinated the organization of a departmental workshop on "Data Analysis for Decision Making" for ministries' staff members and other local organizations. All department faculty contributed as resource persons in delivering lectures (4- 6 March 2012).

- Dr. H. Kotagama participated as a resource teaching person in delivering a 4 day training workshop on Environmental Impact Assessment (Center for Environmental Studies and Research-SQU).
- Dr. S. Bose and Dr. H. Kotagama participated as speakers in a workshop on “Fish Price Volatility in Oman” organized by MSF Department and NRE Department (May 2012).

5. International Conferences

- Dr. H. Boughanmi attended a conference on “Food Secure Arab World: a Road Map for Policy and Research” organized by IFPRI and ESWA, Beirut, Lebanon (6-7 February 2012).
- Dr. S. Zekri attended a conference on “Water Economics, Demand & Management”. Tenth Gulf Water Conference: Water in the GCC Countries. The Water-Energy-Food Nexus. Doha, Qatar (22-24 April 2012).
- Dr. M. Mbaga will attend a conference on “Visible Possibilities: The Economics of Sustainable Fisheries, Aquaculture and Seafood Trade”, Tanzania (July 2012).

6. Local Conferences

- Dr. S. Zekri, attended a conference on “Drought Management Strategies in Arid and Semi-Arid Regions”, Muscat, Oman (11-14 December 2011).
- Dr. M. Mbaga presented a paper on the economic potential of camel meat at the International Conference on Camelid, SQU (29 January-1 February 2012).
- Dr. S. Bose presented 2 papers on the importance of fisheries statistical monitoring program at the GCC workshop on the improvement and consolidation of Fisheries Statistics programs organized by the Ministry of Agriculture and Fisheries (April 2012).

7. Publications reports

- The Department published 8 journal papers, 5 book chapters, 2 books, and 3 technical reports

8. Others

- One master student successfully defended his thesis in February 2012 (Ahmed Shammakhi) and another is expected to defend in summer 2012 (Amani Al Alawi).
- Dr. Omar in collaboration with the technical staff organized a 3 day field trip to Dubai for NRE Students to visit the International Financial Center and various food processing companies. He also organized a number of other short field trips to enhance the practical skills of students.

Soils, Water and Agricultural Engineering (SWAE)

- * The Department organized a workshop on Sustainable Water Use for Food Security on the occasion of the World Water Day during the period 20-21 March 2012 and participated in the South Batinah Region Symposium on the same occasion.
- * The Department organized an International Symposium on Whole Grain Products during the period 14-15 April 2012 in collaboration with Atyab Food Tech LLC (Omani Flour Mills Company) and the Industrial Innovation Center (IIC).
- * The Department Faculty contributed to 20 refereed journal articles, 26 conference/workshop presentations, 5 conference proceedings, 6 chapters in books and 10 newspaper/SQU publication articles.
- * Dr. Manickavasagan edited a CRC book (2012) on Date Production. Processing, Food and Medicinal Values, by Taylor and Fancis Group (ISBN: 978-4398-4945-3). Dr. Manickavasagan also authored two chapters and co-authored a third in the book.
- * Dr. Manickavasagan received the best young Researcher Award (2012) in the College for his contributions.
- * Dr. Yaseen Al-Mulla received the Distinguished Academic Award in the University during the University Day in May 2012.
- * Dr. Salim Al-Rawahy was promoted as Associate Professor and Mr. Mohamed Al-Belushi was officially appointed as the Department Superintendent replacing Abdullah Al-Belushi who joined the Procurement Department.
- * Dr. Yaseen Al-Mulla received an invitation and a travel grant from the U.S. National Academy of Sciences to participate at the 1st Arab-American Frontiers of Science, Engineering, and Medicine (AAFSEM) Symposium, Organized by The U.S. National Academies and the Kuwait Institute for Scientific Research (KISR), Kuwait.
- * Dr. Mushtaque visited A'Saffa Foods at Thamrait (Salalah) on 25 May, 2011 to find solutions for their water treatment problems.
- * Dr. Ali Al-Maktoumi was invited by the Ministry of Environment and Regional Affairs through the VC office to be a member of the Scientific Committee and the Organizing Committee of a workshop for reviewing guidelines for delineation, protection, and management of well fields with coordination with the Ministry of Environment and Climate Affairs to be held at SQU in September 2012.
- * The Department faculty participated in conferences and professional society meetings held in Malaysia, India, Canada, USA, Russia, Germany and Greece besides the Sultanate of Oman during the year 2011 - 2012.
- * The Department faculty and staff actively participated at the International Conference on Drought Management Strategies in Semi-Arid Regions organized by the Ministry of Regional Municipalities and Water Resources during the period 1 – 14 December 2011 in the organizing committee and with paper and poster presentations.

- * Mr. Mansour Al-Haddabi was granted a fellowship from Curtin University in Australia to pursue a PhD in chemical engineering from June 30, 2012 to May 31, 2016.
- * Mr. Hamad Al-Busaidi was awarded a 3-months IAEA fellowship to attend a training program in Vienna, Austria in the Department of Nuclear Sciences and Applications, Division of Nuclear Techniques in Food and Agriculture; Soil and Water Management section during the period 15 May – 14 August 2012
- * The SWAE Student Group, supervised by Dr. Ahmed Al-Busaidi, successfully organized a public event in the A-Sahwa Park on the occasion of the World Water Day (2012) and organized an exhibition and gift-awarding for the children at SQU hospital.
- * A Group of SWAE Students won the first prize for their documentary film “Soils: a World of Secrets” awarded by the Deanship of Student Affairs in May 2012.

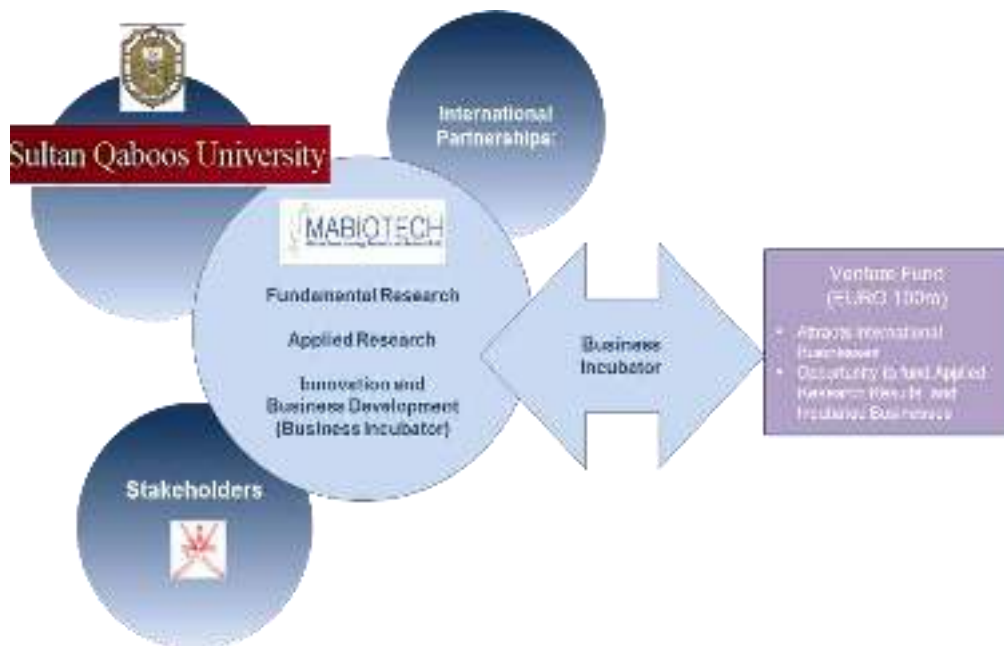


UNESCO Chair

The UNESCO Chair is on leave. However, the efforts of the UNESCO Chair continue toward the realization of the vision of creating a Marine Biotechnology Cluster in Oman. These efforts have resulted in the following:

- * *Development of The Centre of Excellence in Marine Biotechnology Oman so far:*
 - Operational framework established for The Centre of Excellence in Marine Biotechnology Oman ('CEMBO');
 - CEMBO launched as the Marine Biotechnology Research and Business Park (MABIOTECH)
 - Forming relationships with International Institutions for Omani capacity building and research and development activities;
 - Linkages developed with Omani government institutes, Omani research institutes and industries;
 - Reviewing and assessing infrastructure requirements for MABIOTECH including land, laboratories, incubators and fieldwork stations;
 - Reviewing and assessing equipment needs and options for installation, giving CEMBO state of the art laboratories; and
 - With international academic and industrial Partners, MABIOTECH is developing:
 - Proposals for fundamental research programs
 - Applied research programs
- * *How CAMS and Sultan Qaboos University Benefit*
 - Studying, researching and analysing at a new level, the latent diverse marine resources Oman has to offer;
 - Developing state of the art modern facilities accessible to students/researchers at all levels to undertake academic research with the possibility to further research towards IP development;
 - Strengthening post graduate programs, research and innovation, technology transfer and capacity building;
 - Business facilities and collaboration with venture funding
 - Training opportunities / Internships locally and internationally
 - Job opportunities for graduates.

The Figure illustrates the vision, the foundations, and the achieved structure



Agricultural Experiment Station (AES)

1. *Animal Section*

- Supported practical training labs of eight courses that took place at AES. Technical and labor staff was involved in the training of students in various activities in different sections.
- Two veteran staff retired from the unit, Dr. Attia Nageeb Mohammed and Mr. Reynaldo Bello. Sadly, Dr. Attia Nageeb passed away a few days after returning to his home country.
- Two new laborers joined the animal section.
- Two staff were paid through a training budget to attend training courses outside of Oman
- Increased the herd size of adult sheep from 100 to 160 in order to increase the production of new born lambs and maximize revenues.
- Increased the chicken flock in order to increase egg production due to the high demand for local eggs.
- A baby horse was delivered. This brought the total number of horses at AES to 4.
- More than RO. 100,000 was received from central administration to build a new milking parlor at AES.
- Modifications were carried out in the animal science building in terms of partitioning some rooms to have more space to accommodate the veterinary program requirement and equipment that are used in teaching courses.

2. *Plant Section*

- Supported practical training labs of eleven courses that took place at AES. Technical and labor staff was involved in training and demonstrating to students a variety of activities in different sections.
- Provided support in 14 research projects
- One new laborer joined the unit
- Built a larger greenhouse to support the extra teaching activities at AES
- Obtained RO 40,000 to build new greenhouses at AES
- Hosted a workshop on growing and propagation of indoor plants
- Hosted a workshop on beekeeping
- Hosted workshop in growing and propagation of indoor plants for students from several Muscat schools
- Participated in many activities by CAMS social committee and other societies

3. *Services Section*

- Supported practical training labs for six courses that took place at AES. Technical and labor staff were involved in training and demonstrating to students various activities in different sections
- Provided support for 5 research projects
- Obtained RO 16,000 to build a new water pump station at AES.
- One new laborer joined the unit

- Two staff members attended an international water management seminar in Spain funded by a private irrigation company
- One staff was paid through the training budget to attend training courses outside of Oman and another member attended a local workshop.
- Participated in the Flower Exhibition 2012 organized by Majan Expo LLC during 19 to 22 February 2012.
- Installed three flow sensors along with the new line feeding from AES wells 2 and three to the new water tank.
- Added new grass mowing machine.
- Installed and commissioned a chemical fertilizer injection unit for the linear irrigation unit.

4. Sales

Sales during the year 2011

Item	R.O.
Animals	25,141.00
Chickens	1,090.500
Eggs	2,213.600
Meat	400.00
Dairy products (Dairy Plant)	25,241.066
Date Palm	2,300.000
Date Offshoots	1,158.00
Indoor Plants	1,800.00
Honey and Bee hives	2,392.00
Sweet corn	819.10
Mango	387.00
Lemon	65.00
Total	63,007.266

Staffing

Staff List

Dean's Office	
Anvar Kacimov	Dean
Mohammed Al-Rawahi	Incoming Director of Administration
Masoud Al-Hinai	Outgoing Director of Administration
Majid Al-Mugheiry	College Superintendent
Ahmed Al-Alawi	Asst Prof & ADUS
Michel Claereboudt	Assoc Prof & ADPSR
Rashid Al-Yahyai	Asst Prof & ADTCS
Said Al-Ghanbousi	Asst Administrator
Aneesa Al-Jahwari	Clerk
Leonila Magpantay	Coordinator, DO
Wafa Al-Raeesi	Coordinator, ADMIN
Azza Al-Akhzami	Coordinator, ADUS
Fe Alcachupas	Coordinator, ADPSR
Huda Al-Busaidi	Coordinator, ADTCS
Jamal Al-Sabahi	Senior Tech
Mohammed Al-Darai	Storekeeper
Tariq Al Alawi	Computer Tech
Moza Saif Al-Kindi	Clerk
Safiya Hamed Al-Siyabi	Clerk
Badriya Saif Al-Rahbi	Clerk
Suroor Al-Ghafri	Driver
Juma Ali Al-Musalmi	Messenger
UNESCO Chair	
Bassam Soussi	UNESCO Chair for Marine Biotechnology
Cristina Buñiag	Coordinator
Agricultural Experiment Station	
Malik Al-Wardy	Asst. Prof & Director
Khalifa Al-Hinai	Deputy Director & Asst. Director (Services)
Abdullah Al-Abri	Asst Director (Animal)
Abdulbaqi Al-Raeesi	Acting Asst Director (Plant)
Mohammed Al-Rashdy	Coordinator
Negib Al-Raeesi	Clerk
Mohammed Al-Mubaishi	Clerk
Salim Khalfan Al-Waheebi	Tech (Poultry)
Abduljalil Al-Zadjali	Vet
Ahmed Al-Yaqoubi	Tech
Ananias Justan	Tech (Dairy)
Attia Nageeb Mohd	Tech (Dairy)
Manolito Mengullo	Tech (Dairy)
Reynaldo Bello	Tech (Sheep)
Salim Al-Waheebi	Tech (Poultry)
Anwer Mohiuddin	Labourer (Goats)
Mohammed Al Kuzairi	Asst. Tech
Khalfan Al-Hinai	Labourer
Maher Al-Bulushi	Labourer

Taher Al-Shabibi	Labourer
Mohd Al-Khuziri	Labourer
Hamed Al-Mahruki	Tech (Greenhouse)
Saleh Al-Shargi	Tech (Ornamental/Fruit)
Suleiman Al-Rahbi	Labourer
Yousuf Al-Belushi	Tech (Fields)
Hafidh Al-Mahruki	Tech (Bee)
Zahir Al-Abri	Clerk
Mohammed Akbar Khan	Labourer (Greenhouse)
Noor Khan	Labourer (General)
Salim Al-Nabhani	Labourer (General)
Sauod Al-Owasis	Labourer
Abdulla Al-Muqbali	Tech (Irrigation)
Ahmed Al-Ghafri	Tech (Irrigation)
Ali Suleiman Al-Zahimi	Tech (Mechanical)
Ernesto Pereira	Tech (Mechanical)
Salim Al-Mawaly	Tech (Central Store)
Abdullah Al-Qanoobi	Labourer (Irrigation)
Mohammed Mazher Uddin	Labourer (Mechanical)
Ahmed Al-Malki	Labourer (General)
Ibrahim Al-Julandani	Labourer
Animal & Veterinary Sciences	
Isam Kadim	Prof & HOD
Naseeb Al-Saqry	Superintendent
Nawal Al-Aghbari	Coordinator
Eugene H. Johnson	Prof
Osman Gaafar	Prof
Patrick Akin Bobade	Assoc Prof
Waleed Al-Marzooqi	Assoc Prof
Mohamed Tageldin	Assoc Prof
Yasmin El Taher Ahmed	Asst Prof
Mohammed Al-Abri	Lecturer
Salma R. Al-Adwani	Lecturer
Rashid Al-Busaidi	Assoc Researcher
Samera Khalaf	Senior Tech
Khalid Al-Habsi	Tech
Musab Al-Busaidi	Tech
Sadeq Al-Lawatia	Tech
Rabea Al-Maqbali	Tech
Kaadhia Al-Kharousi	Tech
Mathankumar Somasundaram	Vet
Crop Sciences	
Ahmed Al-Maskri	Assoc Prof & HOD
Yousef Al-Maqbali	Superintendent
Salwa Al-Zadjali	Coordinator
Michael Deadman	Prof
Akhtar Jamal Khan	Assoc Prof
Fahad Al-Said	Assoc Prof
Mumtaz Khan	Assoc Prof

Farid Talukder	Asst Prof
Nadiya Al-Saady	Asst Prof
Rashid Al-Yahyai	Asst Prof & ADTCS
Ali Khalfan Al-Wahaibi	Asst Prof
Abdullah Al-Saadi	Asst Prof
Amna Al-Ruheili	Lecturer
Ali Ahmed Al-Raeesi	Tech
Ali Masoud Al-Subhi	Tech
Issa Al-Mahmooli	Tech
Khamis Al-Habsi	Tech
Latifa Al-Kharousi	Tech
Omar Al-Mantheri	Tech
Yacoob Al-Mahrooqi	Tech
Food Science & Nutrition	
Nejib Guizani	Assoc Prof & HOD
Rashid Al-Bulushi	Superintendent
Fatima Al-Amri	Coordinator
Bassam Soussi	Prof & UNESCO Chair
Mohd Shafiur Rahman	Prof
Amanat Ali	Assoc Prof
Ann Mothershaw	Asst Prof
Buthaina Al-Rasasi	Asst Prof
Ahmed Al-Alawi	Asst Prof & ADUS
Lyutha Al-Subhi	Asst Prof
Mostafa Al-Waly	Asst Prof
Ismail Al-Bulushi	Asst Prof
Mohammed Essa	Asst Prof
Zaher Al-Attabi	Asst Prof
Mohd Al-Khusaibi	Asst Prof
◊ Nasser Al-Habsi	Lecturer
Mohammed Al-Ruzeiqi	Assoc Researcher
Dalila Al-Bahri	Tech
Buthaina Al-Bulushi	Tech
Insaaf Al-Marhubi	Assoc Researcher
Intisar Al-Zakwani	Tech
Raya Al-Malky	Tech
Salha Al-Maskari	Tech
Zahra Al-Kharousi	Tech
Jamila Al-Zadjali	Tech
Farhat Al-Naabi	Tech
Cesar Uñalivia	Dairy Plant Manager
Isauro Orlino	Tech
Sulium Al-Abri	Tech
Sami Suleiman Al-Kharusi	Engineer
Hamad Al Khatri	Labourer
Marine Science & Fisheries	
Hussein Al-Masroori	Asst Prof & HOD
Harib Al-Habsi	Superintendent
Nadia Al-Kalbani	Coordinator
Bassam Soussi	Prof & UNESCO Chair
Michel Claereboudt	Assoc Prof & ADPSR
Stephen Goddard	Assoc Prof
Sergey Piontkovski	Assoc Prof
Anesh Govender	Assoc Prof

Adnan Al- Azri	Assoc Prof
Sergey Dobretsov	Assoc Prof
Saud Al-Jufaili	Asst Prof
Y.V. B. Sarma	Asst Prof
**Aaron Henderson	Asst Prof
*Gil Ha Yoon	Asst Prof
*Arne Malzhan	Asst Prof
Miaad Al-Mammari	Demonstrator
**Fahad Al-Ajmi	Assoc Researcher
Said Al-Barwani	Assoc Researcher
Khalid Al-Hashmi	Assoc Researcher
Khamis Al-Riyami	Senior Tech
Aisha Ambu Ali	Lab Supervisor
Ahmed Al-Souti	Tech
Sulaiman Al-Sheili	Tech
Salim Al-Khusaibi	Tech
Mohammed Al-Gheithi	Tech
Saleh Al-Maashary	Boat Captain
Manolito Barte	Boat Engineer
*Ward Al-Muna Al-Mandhari	Tech
Natural Resource Economics	
Houcine Boughanmi	Assoc Prof & HOD
◊ Juma Saleem Al-Musalmi	Superintendent
Sabra Al-Rijaebay	Coordinator
Slim Zekri	Assoc Prof
Shekar Bose	Assoc Prof
Hemesiri Kotagama	Asst Prof
Msafiri Mbaga	Asst Prof
Omar Al-Jabri	Asst Prof
Sarath Kodithuwakku	Asst Prof
Ibtisam Al-Abri	Demonstrator
Amani Juma Al-Alawi	Tech
Soils, Water & Agricultural Engineering	
Hayder Abdel Rahman	Assoc Prof & HOD
Mohammed Al-Bulushi	Superintendent
Asila Al-Rashdi	Coordinator
Anvar Kacimov	Prof
Mushtaque Ahmed	Assoc Prof
Salim Al-Rawahy	Assoc Prof
Malik Al-Wardy	Asst Prof & DirAES
Said Al-Ismaily	Asst Prof
Salem Al-Jabri	Asst Prof
Yaseen Al-Mulla	Asst Prof
Mohammed Basunia	Asst Prof
Ali Khamis Al-Maktoomi	Asst Prof
Abdulrahim Al-Ismaili	Asst Prof
Hemanatha Jayasuriya	Asst Prof
Manickavasagan Annamalai	Asst Prof
◊ Talal Yasir Al-Shukeili	Lecturer
Ahmed Al-Busaidi	Assoc Researcher
◊ Mansour Al-Haddabi	Assoc Researcher
Seif Al-Adawi	Chief Tech
Mohammed	Chief Tech

Muna Al-Amry	Senior Tech
Mohamed Al-Balushi	Senior Tech
Hamed Al-Busaidi	Senior Tech
Hamid Al-Handali	Senior Tech
Najat Al-Khaifi	Senior Tech
Hamad Al-Hajri	Tech

◊ Adel Al-Mahdouri	Tech
Said Al-Saqri	Tech
Leelwa Al-Hamadani	Tech
Zeyana Said Al-Hashmi	Tech

* New Staff ** Departing Staff ◊ On Study Leave

Staff Promotions

Dept	Staff	New Position/Grade
AVS	Isam Kadim	Professor
	Mohammed Tageldin	Associate Professor
	Waleed Al-Marzooqi	Associate Professor
CROP	Michael Deadman	Professor
	Fahad Al-Said	Associate Professor
FSN	Intisar Al-Zakwani	T4
MSF	Adnan Al-Azri	Associate Professor
	Sergey Dobretsov	Associate Professor
	Harib Al-Habsi	Department Superintendent + T3
	Said Al-Barwani	T3
	Khamis Al-Riyami	T3
SWAE	Salim Al-Rawahy	Associate Professor
	Mohammed Al-Belushi	Department Superintendent

Scholarships & Training

Scholarships

Dept	Staff	Nature of Study
FSN	Nasser Al-Habsi	PhD
SWAE	Mansour Al-Haddabi	PhD

Short-term Training

Dept	Staff	Course
AVS	Khalid Al-Habsi	Advanced Hematology, Clinical Chemistry and Pathology Course, Malaysia
FSN	Farhat Al-Naabi	Body weight management, UK
	Rashid Al-Bulushi	Quality control activities in food processing, Malaysia
MSF	Suleiman Al-Shuali	Ecosystem Approach to Fisheries
SWAE	Hamed Al-Busaidi	Nuclear Techniques In Food and Agriculture: Soil and Water Management. Section (IAEA fellowship), Vienna Austria

Visitors

The College received many local and international visitors:

- Professor Ludger O. Figura, Food Physics/Food Engineering, Hochschule Osnabrück - University of Applied Sciences, Osnabrück, Germany
- Dr. Gilles J Guillemin, Head, Neuro-Pharmacology, Department of Pharmacology, University of New South Wales, Australia
- Samira al Balushi and Aisha Al Riyami- community dieticians Oman
- Dr Samia Al Ghannami, Dr Sahar Abdo , and Dr Jumana Abduwani, Ministry of Health, Oman
- Fatma Al Ajmi, Ministry of Finance, Oman
- Dr. Xabier Irigoien, Director of the Red Sea Research Center, King Abdulla University for Sciences and Technology, KSA
- Dr. Iman Sharif, Bangor Business School, UK
- Dr. Chris Voolstra, the Red Sea Research Center, King Abdulla University for Sciences and Technology, KSA
- Dr. Sven Rhode, Germany, Oldenburg University, Wilhelmshaven, Germany
- Mr. Pieter Hoff from AquaPro, The Netherlands and inventor of the “Water Box”
- Dr. Marla Reickes Professor, Department of Food Science and Nutrition University of Minnesota, MN, USA
- Dr. Thomas Gabriel Associate Professor, Faculty of Engineering University of Manitoba, MB, Canada



Student Society

The Agricultural and Marine Sciences Society (AMSS) have habitually demonstrated great commitment and given creative input to improve their activities and programs throughout the current academic year. It has strived to establish itself both inside and outside of the CAMS as follows:

At the college level:

The actively involved in the organization of the:

- Orientation Day to welcome newly admitted students to CAMS
- Major's Week in association with the Center of Career Guidance
- Educational workshops to develop the instructive skills of students
- Lectures delivered by invited speakers outside the University
- Launching the "Agricultural Echoes" a magazine designed to voice the aims and ambitions of CAMS
- Veterinary Medicine Annual Gathering
- College Sport Day
- The First Student Scientific Conference

At the University level:

- Participated in World Water Day, Food World Day and Arbor Day activities
- Participated in various universities' activities conducted by Deanship of Student Affairs
- Participated at the activities of Muscat Festival
- The Fourth Agricultural Festival & the Final Night Event

The crowning glory for AMSS was to be awarded first place, during the Student Activities Exhibition for 2011 for the second time. The society received a medal of honor in recognition of the care taken to provide an extra push ahead for the future. AMSS managed to secure first place for the second time due to the group work which characterized its exhibits. Additionally, the AMSS successfully organized its major event of this academic year; "Fourth Agricultural Festival" which exhibit many student's inventions from the different majors of the college under the patronage of HE the Chairman of Oman Chamber of Commerce and Industry.

AMSS is not only a spoken word; it is actually the consolidated and devoted efforts of its members to achieve its goals and to present the best activities throughout the year. Therefore, it has the responsibility to boost the college and its students to excel and to find solutions to any obstacles that could limit the creativity and distinction of CAMS students.



Major New Items of Equipment

The following major items listed below, all priced above RO 1,000-, were ordered or delivered during the academic year 2011-12.

No	PRODUCT DESCRIPTION	QUANTITY ORDERED	PRICE
1	HYDROGEN GENERATOR	1	3190
2	MICROPLATE READER	1	2200
3	HIGH SPEED COUNTER CURRENT CHROMATOGRAPH	1	15440
4	EPPENDORF MICROCENTRIFUGE	1	1047.701
5	VACUUM DISTILLER	1	1872.1
6	TENSIOMETER	1	1189.48
7	DATA LOGGER	1	1184.614
8	TEMPERATURE AND DISSOLVED OXYGEN LOGGER	1	1861.292
9	DIGITIZER	1	3402.375
10	NMR SETUP	1	39752.4
11	TRINOCULAR FLUOROSCENCE MICROSCOPE	1	1864
12	NANODROP 2000	1	4237.122
13	ELISA READER	1	2045.311
14	WATER ACTIVITY METER	2	4460.616
15	TRIMBLE GPS	1	5990
16	TRACTOR MOUNTED SPSRAYER	1	2860
17	TRANS-BLOT TURBO STARTER SYSTEM	1	1700
18	AGRICULTURAL TRAILOR	1	3450
19	BIOCHEMISTRY ANALYSER	1	11000
20	CURRENT METER	1	1630.125
21	PERMEAMETER	1	1449
22	SOIL COLUMN CYLINDER AUGER	1	2982.525
23	STANDARD TENSIOMETER SET	1	3042.683
24	AIR COMPRESSOR	1	2300
25	GEO-FENNEL FTD-05 (TOTAL STATION)	1	1582.5
26	MICRO HAMMER MILL	1	2300



CAMS Office Bearers

Anvar Kacimov	Dean
Michel Claereboudt	Asst. Dean for Postgraduate Studies & Research
Ahmed Al-Alawi	Asst. Dean for Undergraduate Studies
Rashid Al-Yahyai	Asst. Dean for Training and Community Services
Bassam Soussi	UNESCO Chair
Isam Kadim	Head, Dept. of Animal & Veterinary Sciences
Nejib Guizani	Head, Dept. of Food Science & Nutrition
Hussein Al-Masroori	Head, Dept. of Marine Science & Fisheries
Houcine Boughanmi	Head, Dept. of Natural Resource Economics
Hayder Abdel Rahman	Head, Dept. of Soils, Water & Agricultural Engineering
Malik Al-Wardy	Director, Agricultural Experiment Station
Mohammed Al-Rawahi	Director of Administration
Majid Al-Mugheiry	College Superintendent



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