6.5.1 Does your university as a body provide educational opportunities for local communities to learn about good water management?

The Green KSA Initiative

https://twitter.com/QassimUniv1/status/1670478362530181120 [1]



From الإخبارية - آخر الأخبار

Within the # المنصراء linitiative and to achieve the goals of the Kingdom's Vision 2030.

جامعة القصيم contributes to increasing the vegetation area within the university city and benefiting from approximately 524 thousand cubic meters of treated water to reduce the effects of desertification

Student's engagement in activities and community services about sustainability and climate change.

https://pdq.qu.edu.sa/laravel-

Main Initiatives:

A. Increasing involvement of students in activities related to sustainability and climate change. Key Performance Indicators:

- 1. The Number of student organizations related to sustainability (includes climate change).
- 2. Number of cultural activities on campus (e.g.Cultural Festival) including virtual activities involving sustainability concepts (includes climate change).
- 3. Number of organized community services to tackle the sustainability and climate change concepts.

The sustainable Development Corner of the Fourth Campaign

https://twitter.com/QassimUniv1/status/1659190282066497536 [3]





In order to raise the level of environmental awareness.

The sustainable development corner of the fourth #جامعة _ القصيم campaign "Awareness, Health and Education" provided the visitors of the campaign with educational materials in preserving the environment and encouraging practices in protecting and cultivating wild plants, in addition to rationalizing energy and water consumption, at the Celebrations Center in Qubbah in Al Asyah Governorate.

Memorandum of Understanding to Implement the Campaign of One Million Environmental Volunteer Hours

https://twitter.com/QassimUniv1/status/1640333907202650113 [4]

His Royal Highness Prince Dr. Faisal bin Mishaal bin Saud bin Abdulaziz, Governor of Al-Qassim region, witnesses the signing of a memorandum of understanding to implement the campaign of one million environmental volunteer hours between # القصيم and the branch of the Ministry of Environment, Water and Agriculture, and the National Center for Vegetation Cover Development and Combating Desertification in Al-Qassim, in the presence of His Excellency the President of the University, Professor Dr.





Our environment is our life.. we do not destroy it with our own hands..

Be responsible and protect the environment.

https://twitter.com/QassimUniv1/status/1635948481301839872 [5]



<u>Training course entitled (The Impact of Sediment Load on the Efficiency and Operation of Irrigation Systems - Treatment of Irrigation Water to Eliminate Sediment) in cooperation with the Agricultural Training Center in Qassim on 28/1/1440 by Dr. Ahmed Al-Zuhair</u>

https://cavm.qu.edu.sa/content/news/1331 [6]



A training course entitled Sources of Water Pollution with Sediments, in cooperation with the Agricultural Training Center in Qassim on 27/1/1440 for Dr. Ahmed Al-Zuhairi.

https://cavm.qu.edu.sa/content/news/1330 [7]



<u>The University's Services Department prepares to</u> afforestation parking lots for male and female students

https://qu.edu.sa/content/news/979 [8]

Eng. Saleh Al-Dhale, Director of the Services and Maintenance Department at the University, revealed the University's intention to tree and cultivate the positions of students in the University City, because of the environmental and health benefit, and to save expenses for the University, where the project began to cultivate the positions of the College of Sharia as a first stage, with more than 500



diverse trees, including: "Pazromia, Vix and Ficus", and the rest of the positions of the colleges are being completed.

Al-Dhalea pointed out that an irrigation network has been implemented for tree ponds to ensure the continuity of the presence of water for this project, and trees have been planted in the road (101) of the university, and the sites near it with an area of 10 thousand meters and some sites are being completed, where some cosmetic works are being done such as: the work of stone cladding and the renovation of the fat of sidewalks and artificial bumps in the roads in the university city, adding that 400 palms have been cultivated near the gym and a number of sites and a number of roads are being completed, and 3000 have been secured A citrus tree with a variety of "lemon, orange, tangerine" to plant near the administrative building and some colleges.

Al-Dhalea added that one of the contractors has been baptized to dig a well for the gym and housing in order to provide water to them, and to the green spaces in it, as the university seeks to expand the green spaces in it, and increase the rate of afforestation and attention to it continuously, this comes because of the continuous support we receive from His Excellency Prof. Dr. Abdulrahman bin Hamad Al-Dawood, Rector of the University, and Dr. Mohammed Al-Saawi, Vice President of the University, to manage services and maintenance to carry out its work and the remarkable interest in the development and development of the agricultural field at the university.

The University participates in the seventh phase of the campaign «The land of Qassim is green» to cultivate

10,000 seedlings

https://qu.edu.sa/content/news/2526 [9]

The University, represented by the General Directorate of Maintenance and Services, continues its participation in the seventh phase of the "Land of Qassim is Green" campaign, which was launched on Sunday, 23/7/1442 AH, and lasts for 30 days, where the University aims to plant approximately 10,000 seedlings of various trees



throughout the University City and the University sites, under the guidance and follow-up of His Excellency Prof. Dr. Abdulrahman bin Hamad Al-Dawood, President of the University.

Since the launch of the seventh phase of the campaign, which was launched by His Royal Highness Prince Dr. Faisal bin Meshaal bin Saud bin Abdulaziz, Governor of Qassim Province, the Maintenance and Services Department at the University has been able to plant a large number of seedlings in the University City, in addition to the seedlings planted in the University's branches in the governorates, with the active participation of all university entities in order to improve the environment within its branches.

For his part, the General Supervisor of the General Directorate of Services and Maintenance at the University, Eng. Saleh Al-Dhale, stressed that the administration has increased the green area and trees within the University City by more than 50% during the last three years, with the aim of making the University City a green area in conjunction with the campaign of His Highness the Amir of the region, pointing out that the University represented by the General Directorate of Maintenance and Services is interested in participating in this campaign every year and will continue to support it to ensure the provision of a healthy and clean environment for the people of the Qassim region.

Al-Dhalea added that the university's participation in this campaign aims to increase the green space in the university city and expand the afforestation work, and raise the percentage of total green spaces in it through planting, spreading and intensifying afforestation throughout the university sites, which contributes to improving the air and lowering temperatures in the university city and in all university sites in various governorates, while achieving the optimal utilization of treated water in irrigation works.

Environment and Community Service Laboratory https://cavm.qu.edu.sa/content/pages/1156 [10]

Due to the importance of the agriculture and livestock sectors in achieving food security and economic revenue, and due to the nature of the specialties and departments of the Faculty of Agriculture and Veterinary Medicine at Qassim University, which is concerned with maintaining the food chain completely, starting from the Department of Plant Production and Prevention, which grows, produces and maintains the vegetative part of the food chain, passing through the departments of veterinary medicine, animal production and breeding, which are concerned with the preservation and development of livestock and its importance in the food chain and last but not least the Department of Food Science and Human Nutrition, which It complements the rest of the roles of other departments by paying attention to the food industry and proper nutrition. This has made the college a mecca and a refuge for all farmers and breeders to solve their problems since its inception. In this context, the College spared no effort in providing various programs in the field of community service and the environment.

It was necessary to develop and expand the circle of community services, so came the decision of the college to establish a specialized unit concerned with community service, which was the most important objectives of which was excellence in community service and contribute to its development and solve its problems, as it includes a group of faculty members and assistant staff with experience in various fields of the college headed by the Dean of the College. The establishment of this unit is considered as a real breakthrough through the development of qualitative, specialized and new service activities that reach the beneficiary in several geographical areas inside the region (Qassim) and outside it through veterinary and plant therapeutic convoys, awareness, workshops and seminars.

First: The organizational structure of the Community Service Unit at the Faculty of Agriculture and Veterinary Medicine at Qassim University:

- 1- Vice Dean of the College as President
- 2- Essam Abdel Moneim Amin
- 3- Khalid bin Ayed Al-Harbi Member
- 4- Mohammed bin Sulaiman Al-Shuwaiman Member
- 5- Representative of the Department of Plant Production and Prevention Member
- 6- Representative of the Department of Animal Production and Breeding, Member
- 7- Representative of the Department of Veterinary Medicine Member
- 8- Representative of the Department of Food Science and Human Nutrition Member

Vision:

Excellence and leadership in providing diverse community services in the fields of agriculture and veterinary medicine locally and nationally.

Mission:

Providing various community service and awareness programs and activities in the fields of plant production and prevention, animal production and breeding, veterinary medicine, food science and human nutrition contribute to building sustainable development in the region and at the level of the Kingdom and to promote constructive partnership with the relevant sectors.

Objectives:

- Contribute to the achievement of the mission of the college regarding community service.
- Evaluate the link between the college and the community by providing programs and activities that meet actual community needs.
- Encourage faculty members to provide community service activities.
- Spreading awareness of good practices through the provision of awareness programs and veterinary caravans.
- Providing specialized scientific consultations to both the government sector and the private sector.
- Providing services with community needs in order to ensure and promote the development of the relevant sectors.

Second: Tasks and Responsibilities:

Tasks of the Head of the Unit:

1. Distribution of tasks to the members of the Committee.

- 2. Periodic follow-up to the implementation of the tasks of the Committee and evaluation of the performance of members.
- 3. Calling for a periodic meeting and recording this meeting.

Tasks of the Unit Supervisor:

- Work on the development and modernization of the work system within the unit.
- Work to deepen the communication of the unit with its community surroundings.

Tasks of the Unit's Rapporteur:

- 1. Follow up the implementation of the general policy set to achieve the objectives of the unit in accordance with the policy and objectives of the college and university in the service of society.
- 2. Follow up the formation of the administrative and organizational structure of the unit and determine the tasks of the committees of the unit.
- 3. Identify the names of distinguished people and nominations for workshops for community service.
- 4. Meet periodically with the members of the unit.

Community Service Unit Team Tasks:

- 1. Develop a proposal for the objectives and plan of the Community Service Unit.
- 2. Prepare annual reports.
- 3. Implement the college's policy in the service of the community.
- 4. Compilation of the activities of the faculty members of the college.

Second: The qualitative services provided by the Community Service Unit at the Faculty of Agriculture and Veterinary Medicine at Qassim University:

A- Veterinary Clinic:

The Veterinary Clinic of the Faculty of Agriculture and Veterinary Medicine provides specialized quality services to breeders of animals from the diagnosis and treatment of thousands of pathological conditions with an average of more than fifty-three thousand (53,000) cases for the academic year for various types of animals productive or racing or pets.

The veterinary clinic includes among its wings many veterinary medical specialties that play a distinguished role in serving the community such as the Department of Surgery, Anesthesiology and Radiology, the Department of Obstetrics and Reproduction Diseases, the Department of Clinical Medicine and veterinary laboratories. The veterinary clinic also has a laboratory for the diagnosis of animal diseases with the aim of raising diagnostic efficiency and excluding epidemic diseases (Figure 1 below).

The scope of the veterinary clinic's service has expanded beyond the Qassim region to receive other cases from distant areas such as Medina, Mecca and Dammam and even went beyond that to receive sick cases from neighboring countries such as Kuwait as these cases need experience and skill in diagnosis and treatment.

The veterinary clinic contains all the means that enable it to play its role in serving the community. Modern devices have been purchased to raise the efficiency of diagnostic technology such as radiological diagnostic devices, general anesthesia devices for small and large animals, surgical endoscopy, ultrasound devices, semen collection and examination devices and other tools and equipment.

Due to the need to initiate cases outside the veterinary clinic and also to exercise the role of therapeutic veterinary caravans, the mobile veterinary clinic (figure 2 below) was developed and equipped at a high level to meet the purpose and primary objective of its establishment.

Due to the importance of guidance and awareness and in view of the use of the time of patients and visitors to the veterinary clinic, the extension unit was established (Fig. 3 below) to practice counseling and raise awareness among breeders about infectious diseases, methods of prevention and correct scientific methods in breeding methods.





Figure 1:Some photos from the archives of the veterinary clinic



Figure 2:Side of the Mobile Veterinary Clinic



Figure 3:aspect of the veterinary guidance uni

B- Environment and Community Service Laboratory:

The Environment and Community Service Laboratory at the Faculty of Agriculture and Veterinary Medicine provides specialized quality services to farmers and various agricultural companies through its analysis services for all soil, water, plant and fertilizer samples, where the average number of samples analyzed by the laboratory reaches more than one thousand six hundred (3322) samples annually. The laboratory includes modern laboratory equipment and equipment that enable it to perform its tasks and objectives effectively (Figure 4 below). This is in addition to the consultancy services provided by the laboratory that may reach to visit the farms to identify problems in the field and make proposals to solve these problems.

Objectives of the Environment and Community Service Laboratory:

- Providing technical and scientific support to workers in the agricultural sector, whether individuals, companies, municipalities or research centers and the Ministry of Agriculture.
- Serving the community, participating in its development and supporting the sustainable development of the community through the practice of extension and raising the awareness of farmers.
- Preserving the environment.
- Solve farmers' problems related to soil, water, plant, plant pathogenesis and pests.

Tasks of the Environment and Community Service Laboratory:

- Analysis of elements in soil, water, plant and fertilizer samples that arrive from farmers.
- Evaluate the suitability of the soil for cultivation, identify the soil problems of farmers and develop appropriate solutions.
- Identify problems of soil fertility and plant nutrition and write appropriate fertilizer reports and recommendations through the results of soil and plant analysis for farmers.
- Estimating pollutants with heavy elements, whether in soil, plant or water to support environmental conservation and sustainable development.
- The factory receives water samples from farmers for examination and determination of suitability for agricultural irrigation as well as for drinking.
- Analysis of chemical contaminants and pesticides in soil, fruits and crops for the benefit of farmers.
- The plant clinic of the laboratory receives infected plant samples from farmers for examination, identification of the cause of the injury and determination of appropriate treatment.
- The Botanical Clinic provides extension services in many areas including the prevention and control of diseases of all plants and date palms, prevention and control of acacous and insect pests of all crops and date palms.
- Specialized faculty members go out to farms with farmers to identify problems on the ground
 to examine infected plants or soils and take samples to the environment and community
 service laboratory to conduct the necessary tests and analyzes and prepare technical reports
 to respond to the problems and all this is voluntary work.

In addition, the laboratory records the results of the analyzes and keeps them as information of great importance to support the sustainable development of society. The following are tables of some of the years in which the preparation of the analyzes carried out by the Community Service Laboratory shows the environment, as well as some pictures of problems examined by the Botanical Clinic and developed appropriate solutions to them.





Figure 4:Part of the Environment and Community Service Lab

C. The program of therapeutic and awareness caravans provided by the Community Service Unit at the Faculty of Agriculture and Veterinary Medicine at Qassim University:

The most important objectives of veterinary caravans:

- Providing veterinary medical services for cases that do not have access to the veterinary teaching hospital.
- Activating therapeutic convoys that strengthen the level of graduates and increase their knowledge of the actual problems that exist in society in their field of specialization.
- Introducing the community to the direct role of the university in solving their problems and deepening the link between the university and the community.

Objectives of the Red Palm Weevil Caravans:

- Alert to the danger of weevil and the destructive act it causes to palm fields.
- Educate the farmer on the methods of detection and diagnosis of weevil by the practical methods available.
- Educate the farmer about the signs and symptoms of weevil infection.
- Addressing the most important causes of weevil infestation, whether they are insect pests or errors in agricultural processes.
- Educate farmers on the proper and available methods in the fight against weevil (integrated management in the fight against weevil).
- Introduce the farmer to the life cycle of the insect and the harmful phase and know the behaviors of the pest .
- Proper and correct methods in how to get rid of the affected parts .
- Noting the importance of agricultural quarantine and the danger of transporting liquids and palms without making sure that they are free of infection.

Objectives of the Nutrition Awareness Caravans:

- Raising the awareness of high school students about the different components of food and the importance of proper and balanced nutrition.
- Raising the awareness of high school students of the right eating habits.
- Educate school students about the harms of fast food.
- Evaluate the nutritional status of a representative sample of high school students to provide nutritional recommendations to the community.

Third: Specialized activities provided by the Community Service Unit at the Faculty of Agriculture and Veterinary Medicine at Qassim University:

A. Event Posts:

The College participates in many festivals and events at the level of the Qassim region and at the level of the Kingdom.

B- Specialized workshops and seminars:

Specialized workshops and seminars are one of the most important activities carried out by the College of Agriculture and Veterinary Medicine for the agricultural and livestock sector in the Kingdom. These activities are multiple, diverse and in various fields that contribute to covering the societal needs of farmers, companies and breeders working in the agricultural and livestock sector.



Organizing environmental community awareness campaigns:

<u>Training course entitled (Raising the efficiency of crop</u> water consumption)

https://cavm.qu.edu.sa/content/news/1154 [11]

In cooperation with the Agricultural Training Center in Qassim in Onaiza, the College of Agriculture and Veterinary Medicine organized a course entitled "Raising the efficiency of crop water consumption" on 26/7/1438 AH - 1/8/1438 AH, where the course dealt with several important topics for the agricultural sector, including:

Developed surface irrigation - subsurface drip irrigation - Water needs - Drought-resistant crop varieties - Modern breeding methods to tolerate drought - Rationalization of consumption - Drought models for crops - Scarce irrigation - The most important problems facing drip irrigation and sprinkler irrigation systems and ways to overcome them.





The Department of Kindergarten at the Faculty of Education holds an event on the occasion of (World Water Day)

https://coe.qu.edu.sa/content/news/673 [12]

The Faculty of Education Montazah Department of Kindergarten held an event on the occasion of (World Water Day)

On Monday, 9/8/1442H

where Her Excellency Dr. Ghada Al-Tamimi delivered a speech on this occasion and Dr. Amal Mustafa Abu Al-Alaa delivered a speech in which she explained that the allocation of this day aims to focus on the importance of water and the call for the good management of its sources as she pointed out that all this is clear in the Kingdom's efforts to educate its citizens.

The event was then concluded with the participation of students Muzna Al-Saeed and Shaden Al-Saqib.



The Faculty of Agriculture and Veterinary Medicine invites you to attend a lecture entitled "The tree is the solution" next Tuesday via ZOOM.

https://cavm.qu.edu.sa/content/news/1394 [13]



تقيم وحدة خدمة المجتمع بكلية الزراعة والطب البيطري بالتزامن مع حملة أرض القصيم خضراء محاضرة بعنوان:



يقدمها: أ.د. عبدالرحمن بن عبدالله الصقير







The Department of Plant Production and Prevention held a symposium on sustainable agriculture on 27/2/2019 entitled (Sustainable Agriculture: A Safe Product and a Clean Environment)

https://cavm.qu.edu.sa/content/news/1336 [14]



A training course entitled (The impact of irrigation water quality on agricultural soils - the impact of irrigation water quality on crop production) in cooperation with the Agricultural Training Center in Qassim on 2/2/1440 for Dr. Ahmed Ajaj.

https://cavm.qu.edu.sa/content/news/1335 [15]



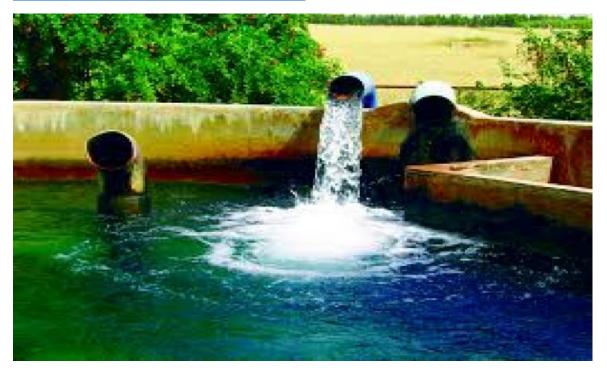
A training course entitled Irrigation Water Quality

Assessment, in cooperation with the Agricultural

Training Center in Qassim on 1/2/1440 for Dr. Ahmed

Ajaj.

https://cavm.qu.edu.sa/content/news/1334 [16]



Course entitled (Agriculture and Irrigation in Greenhouses)

https://cavm.qu.edu.sa/content/news/1155 [17]

In cooperation with the Agricultural Training Center in Qassim in Onaiza, the Faculty of Agriculture and Veterinary Medicine organized a course entitled Agriculture and Irrigation in Greenhouses on 15-19/5/1438 AH, where it included a number of important aspects as follows:

Construction of greenhouses - Components of irrigation systems in greenhouses - Design of irrigation systems in greenhouses - Evaluation of irrigation systems in greenhouses - Methods of growing vegetables in greenhouses - Management and maintenance of irrigation systems in greenhouses.





College Participation in Tree Week

https://cavm.qu.edu.sa/content/news/176 [18]

The Faculty of Agriculture and Veterinary Medicine is one of the main participants in Tree Week every year. The participation of the College this year is represented by its delegate in the Media Committee, Mr. Sulaiman Ibrahim Al-Mashal, and the Committee is interested in highlighting the importance of this week in various media.

The College also participates in agricultural guidance leaflets, where more than 1,000 leaflets were distributed during the Tree Week period during previous years. How-to flyers can be found by clicking here.



Activating the role of students in society inside and outside the university:

A university offers 10 research grants worth more than 1.5 million riyals to serve development in the Qassim region

https://www.qu.edu.sa/content/news/1923 [19]

The research grants offered by the university include several vital areas, foremost of which are roads and transportation, water and environment, animal production, and plant protection. The Civil Engineering Department, Plant Production and Protection Department, Veterinary Medical Department, and Animal Production and Breeding Department are implementing these projects. Its results and outputs include several relevant government agencies, such as the Directorate of Water Services in Qassim, the branch of the Ministry of Transport in Qassim, and the branch of the Ministry of Environment, Water and Agriculture in Qassim. Dr. Mansour Al-Sharida, Dean of Scientific Research at the university, explained that these research grants are offered to serve development in the region, as they were directed to many scientific types of research in the relevant departments, where research in the field of transportation discusses the causes of the phenomenon of rutting and its treatment in the roads of Qassim region, and the effectiveness of Recycling asphalt in road paving, while research in the field of water and environment discusses ways to detect leaks in water supply networks and strategies to reduce them, as well as leakage in strategic water tanks, as well as management of backwash sludge through the development of new absorbent materials for water treatment, in addition to research on The green technology to exploit the returns of water purification plants in the Qassim region, and to reduce the environmental pollution caused by poultry houses by using modern technologies.