

**FIELD AND STUDENT EVALUATION OF LANDSCAPE (GARDENS)  
OF THE HORTICULTURE DEPARTMENT AT AL-QASIM GREEN  
UNIVERSITY, AND PREPARATION OF NECESSARY  
PROPOSALS FOR THEIR DEVELOPMENT**

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**ABSTRACT**

This study was conducted during the 2024-2025 academic year to develop landscape (gardens) of the Horticulture Department building in the College of Agriculture, Al-Qasim Green University, by gathering student opinions and desires for developing the department's gardens. The study was conducted in two phases: the first, a theoretical study, and the second, a field study. The most important results of the field study, as assessed by the researcher, were that most of the gardens suffer from deterioration in their natural components, as well as a lack of structural components. This is attributed to deficiencies and neglect in applying the principles and characteristics of garden landscaping, scarcity of irrigation water, and insufficient quantities for plant irrigation. Furthermore, the soil is poor in nutrients and is not cleaned of construction waste. Furthermore, it is subject to pressure from heavy machinery used in construction, a shortage of skilled and experienced workers, and a lack of maintenance and service operations, which has led to deterioration. The results of the student survey showed that 84.2% and 80.6% of students felt the current state of the gardens was poor, and that most students expressed a desire to develop the department's spaces (gardens). Most also expressed a desire to contribute voluntarily to the development of the spaces, whether financially or physically, as well as their willingness to contribute to garden maintenance. The survey results also showed that most students in the department spend their free time wandering around the college. All students, both male and female, across all levels agreed on the need to develop landscape (gardens), as well as provide amenities such as seating and kiosks for snacks and drinks, as well as for conversation and exchange. The researcher recommended the need to educate new students about the importance of gardens and

their care through lectures, seminars, and tours of the college gardens. He also recommended organizing volunteer campaigns and providing amenities to attract students, such as fountains and benches. He also recommended planting plants, which have a psychological impact on students. The selection of unsuitable plants for the spaces and the lack of maintenance during the summer have led to the deterioration of most of these plants. Furthermore, the researcher recommended providing adequate financial and human resources to develop existing gardens. From this, we conclude the need to develop this important aspect and involve specialists in the fields of landscape and agriculture in preparing designs, taking into account students' opinions and desires. He also recommended that the gardens receive increased attention to the development of the college's gardens in general, and the Department of Horticulture and Landscape Architecture in particular, in a manner befitting them and their designations.

**Keywords:** Field Evaluation - Student Evaluation - Landscape - University Gardens

## **INTRODUCTION**

Universities are effective community institutions that play a significant role in preparing young people academically, socially, and culturally to fulfill their roles in society in various fields. Therefore, it is essential to provide them with a suitable university environment to perform their academic duties and engage in various extracurricular activities. Gardens are an important component of academic institutions, not merely a complementary component. They are among the most important elements that help create a comfortable and suitable university environment for students, whether schools or universities. This is due to their role in enhancing the academic progress of the institution through their importance in providing students with psychological and mental stability, which enhances their ability to comprehend academic curricula. This is in addition to their social, environmental, recreational, and aesthetic importance (Al-Hasnawi, 2009).

The world has been paying attention to university green spaces for several years, as university gardens are the first area students or visitors see. The beauty of green spaces and the extent of their care leave a profound impression on them. Therefore, they are considered a factor encouraging a sense of belonging to the university, in addition to other factors such as the availability of classrooms, scientific laboratories, and competent academic and administrative staff (Al-Sharifat, 2024).

A well-designed university campus is a key factor in enhancing students' academic capabilities, equal in importance to academic lectures, and closely linked to the mission of higher education. Many publications on the design of the physical requirements of university campuses have mentioned that they are small cities that have a significant impact on the environment and its resources, as universities are an important cultural center for the city in which they are located and have an important role in developing society scientifically, culturally, literary and morally through

holding seminars, study groups, theatrical, artistic and scientific performances. Therefore, the university is considered an important link between society and scientific institutions, and therefore it affects the social, moral, cultural and artistic development of the city's residents (Alnusairat, 2021).

The gardens of the Department of Horticulture and Landscape Architecture in the College of Agriculture were chosen as the research site due to the importance of the large spaces adjacent to the department in particular and the college in general, as most of these spaces have been used for gardens. Furthermore, the poor condition of these gardens left a negative impression on visitors and students, given that they are primarily the gardens of a department specializing in this field, and secondarily, of the College of Agriculture.

### **RESEARCH PROBLEM**

1. The failure of ornamental plant cultivation, despite repeated attempts, is due to the lack of an integrated curriculum to provide a suitable environment for plant cultivation.
2. Random planting in open spaces (gardens), which has led to the poor distribution of different plant species due to incorrect plant selection.
3. The negative psychological and moral impact that the current appearance of the space leaves on visitors.
4. Poor maintenance operations, as well as the lack of modern irrigation systems.
5. The lack of sufficient financial resources to undertake a comprehensive and thoughtful effort to identify the causes of the current problems that have led to the failure of cultivation and work to address them.
6. Failure to adopt recommended international design standards in designing university gardens.
7. The lack of seating areas for students in natural environments to engage in their activities, which causes students to gather at the entrance and corridors of the department. Furthermore, there is no suitable place near the department for students to eat and drink.

### **RESEARCH OBJECTIVES**

1. The researcher assessed the current state of landscapes (gardens) of the Horticulture Department.
2. Involved students through a questionnaire to determine their assessment of the current gardens and their desires and needs for development.
3. Plant plants appropriate to the location in terms of light and shade, according to the seasonal sequence, and provide appropriate structural components and supplies that enhance the aesthetics of the space.
4. Provide comfortable seating areas during breaks for reading, conversing with friends, and

- for eating and drinking.
5. Develop the spaces with affordable and simple facilities and easy maintenance by the department's various users.
  6. Importance of the Research:
  7. The importance of the research stems from the importance of the study site as well as the sense of belonging to the place.
  8. 2- Providing aesthetic and attractive values that provide psychological and visual comfort to students and visitors.
  9. 3- Working to develop the functional efficiency of existing gardens by assessing the current situation, identifying problems, and developing a future development plan.
  10. 4- Working to develop existing gardens according to a simple and uncomplicated program using modern scientific methods.
  11. 5- Working to provide comfort requirements, including natural and structural elements, in the university's landscape (gardens).

## **LITERATURE REVIEW UNIVERSITY**

Hanan (2013) defined the university as an important place for developing students' ideas, forming new ideas, and establishing relationships with each other and with the faculty. Al-Fahham (2018) defined it as a scientific educational institution where students receive various sciences for the purpose of obtaining a university degree in a specific field of science. It is also a place for conducting studies and research in various fields of science. Hamza (2009) explained that the modern concept of a university campus is a productive institution that enriches knowledge and science, develops technology, graduates human competencies, and prepares and nurtures new generations practically, culturally, intellectually, socially, and politically.

University Classifications: There are several classifications of universities, but according to modern sources, they are classified into two categories:

1. London: These are composed of independent colleges with a specialized nature, their own services, and are self-sufficient.
2. Oxbridge: These are colleges that provide services such as food and accommodations to users and are semi-independent.
3. District: These are composed of various central service facilities, and are of two types:

A- Integrated and Dispersed: There are courtyards between buildings, and services are provided to serve a single building.

B- University Campus: The buildings, or most of them, are arranged in a single, large location. (Ismail, 2021).

### **The Concept of Landscape (Gardens):**

The concept of landscape, in general, includes all types of landscape located between buildings that have a close relationship with various human activities. The size and shape of these spaces depend on the nature of the buildings and their design style (Abdul Razzaq et al., 2008).

Landscape are defined as an unroofed structure that enhances the human relationship with nature (Rached, 2012) (Tudorie, 2020).

Dobber (2000) has provided several definitions of outdoor space, including that it is the relationship of architecture to its surroundings. This reflects the integration of natural landscapes such as water, plants, rocks, and physical elements. These elements function as a single system and interact with each other, revealing their beauty as a work of art.

Laurie (1975) defined landscape from a design perspective as the part that is made, created, and coordinated by humans, starting with landscapes formed around buildings, public and private facilities, and roads, and extending to the vast nature. This is achieved by creating a complete relationship between buildings and landscape, with their natural components of plants, rocks, and man-made elements, while influencing the human aspect in terms of the human relationship with landscape in its three dimensions (ground, sky, walls).

### **Types of landscape (gardens):**

1. Open landscape: These are natural spaces extending around and within the city, such as lakes and forests.
2. Semi-open landscape: These are created by humans for human activities and are known as urban landscape, which include playgrounds, squares, fields, gardens, and public parks (Ashihara, 1981).

### **Components of Landscape (Gardens):**

Despite the different uses and types of landscape, they all share the same characteristic: a physical space designated for human activities and events. They consist of two components:

1. Physical components: These give landscape its shape, characteristics, and character, including both natural and man-made elements.
2. Humans: All related activities, events, behaviors, and actions within the space. This means that the physical components and human activities determine the character and formation of the space (Farhat, 2003).

Simond (1983) also stated that landscape have two components:

A. Natural components: These include everything that exists and is not created by humans, such as plants, water, natural rocks, soil, and climate.

B. Physical components: These include:

1. Wall or walls: The vertical plane that defines the space in terms of its shape and various characteristics.
2. Floors: This is the element that shares with the walls the formation and definition of the space.
3. Ceilings: These define the space from above, and the sky is often the determining factor.
4. Furniture: Furniture is defined as elements added to landscape to complement them and serve a functional and aesthetic role, such as fountains, benches, statues, stairs, fences, service buildings, and signage.

Hanan (2013) stated that the most important components of university landscape are:

1. Gates
2. Roads, walkways, and sidewalks
3. Gardens and green spaces
4. Paved squares
5. Balconies
6. Building courtyards
7. Individual and group seating areas
8. Parking spaces
9. Fountains, statues, and water basins

### **Gardens:**

Gardens are defined as urban spaces formed from the ground as a base, natural components, and structural components (Shuri, 2016).

### **Garden components:**

1. Natural components, including (plants, water, animals, soil, and terrain).
2. Structural components, including (seating benches, pergolas, walls, paths and courtyards, steps, lighting devices, etc.) (Shuri, 2016) (Hajoz, 2011).

### **The importance of university gardens:**

1. The psychological impact that the sight of gardens has on members, students, and visitors.
2. Providing a suitable atmosphere for various activities and events undertaken by students by enhancing the social and academic environment (Al-Sharifat, 2024).

**Conditions for university gardens:**

1. Ease of access from various university locations
2. Safety and security requirements must be met
3. Accessibility for all members
4. Provision of designated spaces for various activities
5. Design must be consistent with community customs and traditions
6. Aesthetic elements, whether natural or structural, must be present
7. Proper maintenance must be ensured (Torina Wilson, 2018).

Torina Wilson (2018) developed design guidelines for efficient landscape (gardens) on campus, including:

1. Landscape should include areas that encourage learning and support other social activities by providing study areas, recreation areas, etc.
2. Universities should support the creation of multi-use spaces and encourage students to use them by providing amenities and services.
3. Appropriate spaces, in terms of space, furnishings, services, and location, must be provided for all student activities and needs, according to the following criteria:

**First: Spaces designated for individual study:**

The purpose is to provide an environment in which the student can focus on their academic research needs. These spaces provide tables and chairs, as well as soothing visual comfort, such as natural landscapes and calming, distinctive colors that help the student concentrate and feel energized. It is preferable for these spaces to be isolated from noisy gatherings, by providing appropriate isolation by choosing areas surrounded by trees or buildings. Spaces must also be provided to accommodate different types of study habits, and individual furniture and small tables must be provided that are easy to move from one place to another.

**Second: Work and study spaces for groups of less than (4) people:**

Vigorous spaces must be provided for studying and engaging in various activities outdoors. Several factors must be met:

1. Providing a space that comfortably accommodates fewer than five people, along with the appropriate comfortable furniture requirements.
2. Use movable tables and chairs to accommodate movement and change of position when more than four people need to discuss.
3. Create visually appealing spaces that create a sense of security.
4. Solid flooring with grassy areas.

5. Provide shaded and sunny areas.
6. Prioritize privacy and comfort when designing these spaces.

**Third: Work and study spaces for groups of more than (4) people:**

There are several factors that must be taken into consideration when designing such spaces, namely:

1. The design of such spaces is not as important as the availability of appropriate furniture, such as large tables and movable chairs, while paying attention to the surrounding environment.
2. Factors such as climate and location play an important role when choosing the appropriate space for a large group of students, such as providing shaded, unshaded, or partially shaded areas (under a tree), and protection from rain.
3. Providing sufficient space for the group to feel comfortable sitting and moving around, regardless of its size, for social and academic activities.
4. Large tables with seating arranged in a way that allows for physical control of the space amidst the potential chaos of a larger group.
5. Using a circular arrangement of tables and seating to facilitate group discussion.
6. Creating a terraced area that allows for art displays or informal classroom gatherings.
7. Considering the provision of the necessary facilities to meet various needs and desires.
8. The landscape should include trees, green spaces, and natural seating areas to escape academic stress.
9. Providing complete shade, shade from trees with sunlight, and sunny areas.
10. Providing seating.

**Considerations to be taken into account when designing university landscape (gardens) are:**

1. The design should be attractive, provide comfort and enjoyment, and reflect the prevailing customs and traditions of the community.
2. The design should be distinguished in its various natural and structural features.
3. Encouraging community activities and human interaction.
4. It must be safe and convenient for all users.
5. The spaces must be well maintained. (Torina Wilson, 2018) (Barnett, 2001)

**FIELD STUDY**

**First: History and Description of the Study Site:**

The College of Agriculture, Al-Qasim Green University, formerly known as the College of Agriculture, Babylon University, is one of the scientific colleges at Al-Qasim Green University. It

is located to the southeast of Babylon Governorate, 5 km from the center of Hillah, opposite Al-Mustaqbal University. It is within the basic design boundaries of Hillah, where its building is located within the University of Babylon. This road (the main street) is characterized by a heavy traffic flow during the start and end of official working hours at the neighboring colleges and educational institutions, causing noise problems and visual disturbances to the overall appearance of the site. This street is considered one of the city's most vital streets, extending to connect Hillah to Najaf. The site can be reached via a single road: the Hillah-Najaf Road.

The college specializes in teaching scientific and engineering subjects related to agriculture, including soil science and water resources from physical, chemical, and biological perspectives. Founded on June 1, 2004, the college was initially affiliated with the University of Babylon. It comprised two departments: Animal Production and Soil and Water Sciences. The college's departments and activities expanded in 2006 with the opening of two new departments: Field Crops and Horticulture and Palm Trees. In 2010, the name of the Department of Soil and Water Sciences was changed to the Department of Soil and Water Resources Sciences. The following year, the name of the Department of Horticulture and Palm Trees was changed to the Department of Horticulture and Landscape Engineering. Later, in 2012, it was separated from the University of Babylon and became affiliated with the newly established Al-Qasim Green University. The college's official name was changed in October 2012 to the College of Agriculture, Al-Qasim Green University.

Second: Field Evaluation (Researcher's Evaluation): The College of Agriculture includes a number of gardens spread across its campus. These gardens were planned and designed according to a pre-planned design. Spaces located near the Department of Horticulture and Landscape Architecture were selected for the study, with two locations to the right and two to the left of the department. These spaces are among the large main gardens of the study site and serve as a gathering place for students of the Department of Horticulture and Landscape Architecture.

A field survey of the site revealed a discrepancy in the distribution of tissues. This is due to the fact that this soil is nursery soil transferred to this site and added to a depth of less than 30 cm. In addition, there is a layer of rubble that accompanied the construction of the College of Agriculture departments. The passage of heavy machinery resulted in compaction of the soil, which negatively impacted root movement and growth, as well as gas exchange and the movement of water and nutrients. This, in turn, affected plant growth. The addition of compost over a layer of rubble also increased the salinity of the soil to a level that many ornamental plants, which are sensitive to salinity, cannot tolerate. In addition, the process of flood irrigation combined with uneven soil conditions has led to water not reaching the higher areas and flooding the lower areas. From this, we conclude that the gardens are suffering from a deterioration in their natural components, as well as a lack of water. For structural components, this is attributed to the following reasons:

1. Deficiencies and neglect in applying the principles and characteristics of landscaping.
2. Lack of irrigation water and insufficient quantities for watering plants.
3. Poor soil nutrients, lack of cleaning from construction waste, and pressure from heavy machinery used in construction.
4. Lack of skilled and inexperienced labor, coupled with a lack of maintenance and service operations, have led to deterioration.



**Image 1: shows the soil of outdoor spaces**



**Image 2: shows the external spaces (gardens) of the College of Agriculture**



**Image 3: Modern structural elements**

Third: Student Evaluation: This is a field survey to determine students' opinions, desires, and assessment of the current state of landscape. Fifty questionnaires were prepared, including personal and garden-related questions. These questionnaires were distributed to the department's students based on their numbers in the four stages (18 questionnaires for the first stage), (8 questionnaires for the second stage), (12 questionnaires for the third stage), and (12 questionnaires for the fourth stage). The results of the survey were as follows:

**RESULTS AND DISCUSSION**

Gender	Table 1: What do you think of the current garden design and reality?				
	Stage	Poor	medium	Very Good	total
Male	1	7	1	0	8
	2	1	0	0	1
	3	4	1	0	5
	4	4	0	1	5
	total	16	2	1	19
	percentage	84.2%	10.5%	2%5.	
female	1	5	3	2	10
	2	7	0	0	7
	3	7	0	0	7
	4	6	1	1	7
	total	25	4	3	31
	percentage	80.6%	12.9	9.6%	

The survey results in Table (1) showed that 84.2% of males and 80.6% of females rated the current state and design of gardens as poor, with the least of them being in very good condition. From our perspective as specialists in this field, taking into account the gardens of international universities and some local universities, the current state and design of gardens is very poor for several reasons, including the lack of adoption of design standards for university gardens and the lack of a clear design for gardens. They are simply a green area surrounded by a disparate and disharmonious group of trees and shrubs, in addition to being devoid of aesthetic elements and lacking in exciting and interesting elements.

Gender	Table 2: Are you interested in beautiful and well-coordinated gardens?			
	Stage	yes	no	total
Male	1	8	0	8
	2	1	0	1
	3	4	1	5
	4	3	2	5
	total	16	3	19
	percentage	84.2%	15.7%	
female	1	8	2	10
	2	7	0	7
	3	7	0	7
	4	7	0	7
	total	29	2	31
	percentage	93.5%	6.4%	

The results of the questionnaire in Table (2) showed that females outperformed males, with the percentages being 93.5% and 84% respectively. This is due to the delicate nature of women’s feelings and their interaction with the aesthetic elements in life. Through our experience with second-year students, we noticed that there was interest from the students, competition for excellence, and a love of voluntary work to make the gardens more beautiful.

Gender	Table 3: Where do you spend your free time during working hours?						
	Stage	Department corridors	Halls	Department entrance	Tour the college	Go to the departments	total
Male	1	2	0	0	6	0	8
	2	1	0	0	0	0	1
	3	0	1	0	2	2	5
	4	1	0	2	2	0	5
	total	4	1	2	10	2	19
	percentage	21%	5.2%	10.5%	52.6%	10.5%	
female	1	0	1	1	7	1	10
	2	0	1	2	3	1	7
	3	1	0	2	3	1	7
	4	0	0	0	7	0	7
	total	1	2	5	20	3	31
	percentage	3.2%	6.4%	16.1%	64.5%	9.6%	

The results of the questionnaire in Table (3) showed that the majority of students, (52.6%) males and (64.5%) females, spend their free time walking around the college due to the lack of amenities in the gardens, whether in the department or the college.

Gender	Table 4: Do you prefer the development of the open space in the department to meet the needs of students?			
	Stage	yes	no	total
Male	1	8	0	8
	2	1	0	1
	3	4	1	5
	4	5	0	5
	total	18	1	19
	percentage	94.7%	5.2%	
female	1	6	4	10
	2	7	0	7
	3	7	0	7
	4	7	0	7
	total	27	4	31
	percentage	90%	10%	

The results of the questionnaire in Table (4) showed that the students' opinions were identical at a rate of 94.7% for males and 90% for females regarding the importance of developing the open space in the department, as some stages in the department worked on this trend with their simple capabilities in a way that served their desires and needs.

Gender	Table 5: Do you prefer to provide students with outdoor seating?			
	Stage	yes	no	total
Male	1	8	0	8
	2	1	0	1
	3	4	1	5
	4	5	0	5
	total	18	1	19
	percentage	94.7%	5.2%	
female	1	8	2	10
	2	7	0	7
	3	7	0	7
	4	7	0	7
	total	29	2	31
	percentage	93.5%	6.4%	

The results of the questionnaire in Table (5) showed that (94.7%) of males and (93.5%) of females prefer to provide outdoor seating areas, as we notice these days the gathering of male and female students to enjoy the warm sun rays at the department gate.

Gender	Table 6: Do you prefer to provide places for student activities?			
	Stage	yes	no	total
Male	1	8	0	8
	2	1	0	1
	3	4	1	5
	4	4	1	5
	total	17	2	19
	percentage	89%	10.5%	
female	1	9	1	10
	2	6	1	7
	3	7	0	7
	4	7	0	7
	total	29	2	31
	percentage	92%	8%	

The results of the questionnaire in Table (6) showed that (89%) of males and (92%) of females agreed on the necessity of providing places to hold various student activities and events. Therefore, when designing gardens, sufficient space must be provided to hold various student activities. It must also be taken into consideration to provide designated places for reading that provide the necessary supplies and furniture for this important activity that enhances the academic role of the university.

Gender	Table 7: Do you prefer to enter the structural elements and water elements?			
	Stage	yes	no	total
Male	1	8	0	8
	2	1	0	1
	3	4	1	5
	4	4	1	5
	total	17	2	19
	percentage	89.3%	10.5%	
female	1	8	2	10
	2	7	0	7
	3	7	0	7
	4	6	1	7
	total	28	3	31
	percentage	90.3 %	9.6 %	

The results of the questionnaire in Table (7) showed that (89.3%) of males and (90.3%) of females prefer the presence of structural elements and water elements in spaces. This is a good indicator of the development of the societal vision of the educated class on the subject of gardens and their importance, and indicates that there is a new generation that will work towards developing the current reality of gardens.

Gender	<b>Table 8: Are you willing to participate, whether financially or practically, in the development of the creation of department spaces?</b>			
	Stage	yes	no	total
Male	1	8	0	8
	2	1	0	1
	3	4	1	5
	4	4	1	5
	<b>total</b>	<b>17</b>	<b>2</b>	<b>19</b>
	<b>percentage</b>	<b>89.4%</b>	<b>10.5%</b>	
female	1	3	7	10
	2	7	0	7
	3	7	0	7
	4	7	0	7
	<b>total</b>	<b>24</b>	<b>7</b>	<b>31</b>
	<b>percentage</b>	<b>77.4%</b>	<b>22.5%</b>	

The results of the questionnaire in Table (8) showed that male and female students of the department expressed their willingness to contribute to the development of the space, and males outperformed the furniture with a percentage of (89.4) for males and (77.4%) for females. This is what we have known from our students of their many and effective contributions to the various activities of the department, and this reflects the spirit of belonging and love of public service to leave fruits for the generations that follow them. Therefore, the department administration needs to hold educational seminars to educate students, broaden their horizons and strengthen their belonging to the department.

Gender	Table 9: Are you willing to participate in the maintenance of natural and structural components of space?			
	Stage	yes	no	total
Male	1	6	2	8
	2	1	0	1
	3	4	1	5
	4	3	2	5
	total	14	5	19
	percentage	73.6%	26.3%	
female	1	4	6	10
	2	3	4	7
	3	6	1	7
	4	4	3	7
	total	17	14	31
	percentage	54.8%	45.1%	

The results of the questionnaire in Table (9) showed that males, at a rate of (73.6%), expressed their willingness to participate in the maintenance of the components of the spaces more than females, whose rate was (54.8%). This is due to the physical build of the man, his ability to work, and the love of participation and work among many of them, in preparing the plants and working on planting them in the space of the section.

Gender	Table 10: What are the desires and needs that you would prefer to have in gardens?						
	Stage	Hill	Hill	Herbal planting	Variety of seating options (shaded, wooden(	Seating	total
Male	1	1	0	2	1	4	8
	2	1	0	0	0	0	1
	3	4	0	0	0	1	5
	4	4	0	1	0	0	5
	total	9	0	3	2	5	19
	percentage	52.6%	%0	15.7%	5%	26.3%	
female	1	5	1	0	2	2	10
	2	7	0	0	0	0	7
	3	5	0	1	0	1	7
	4	4	0	1	1	1	7
	total	21	1	2	3	4	31
	percentage	67.7%	3.2%	6.4%	9.6%	12.9%	

The survey results in Table (10) show that 52.6% of males and 67.7% of females expressed a desire to establish a kiosk in the spaces near the Horticulture Department to offer simple meals and hot and cold drinks. This is due to the student club's distance from the department, as well as its non-operational nature for many years. Most of the department's male and female students come from distant locations and arrive at school without breakfast, remaining in this state until they reach their homes in the afternoon or evening. This forces them to gather under the stairs to collect their basic supplies from the department's supplies and drink tea or coffee to help them endure their hunger until they reach home.

Developmental Proposals: The need to take into account international design standards when designing landscape (gardens), based on the activities students engage in, their needs, and their desires, such as reading, group sessions, quiet and enjoyable sessions, and open spaces for holding events and various student activities, etc. The most important developmental proposals for the Horticulture Department's spaces are:

1. Resolving the current problems on the site.
2. Adopt recommended design standards when allocating appropriate spaces for each activity and the appropriate plant and structural elements.
3. Take weather conditions into account when selecting plant elements.
4. Develop an appropriate plant design by selecting appropriate plant elements to solve existing problems on the site, as well as using plant hedges to direct and highlight traffic.
5. Consider student suggestions and address their needs.
6. Provide a variety of seating areas, such as open or uncovered canopies.
7. Increase the use of water features such as fountains, water basins, and fountains, given their environmental and aesthetic importance.
8. Diversify the garden's levels to provide seating at various levels.
9. Emphasize aesthetic values to add enjoyment and beauty to the garden so that users can enjoy the beautiful views.
10. Highlight the college and department entrances and distinguish them through the use of ornamental cypress palms, roofs, pergolas covered with climbers, and plant arches.

## **CONCLUSION**

1. The lack of involvement of outdoor space planners, designers, and agricultural engineers in preparing future development designs for landscape (gardens) resulted in numerous design errors during preparation and implementation.
2. Most students are interested in gardens and desire to develop the department's spaces.
3. Most students prefer to establish a cafeteria in the department and provide the necessary seating.

4. Most students expressed a desire to contribute voluntarily to the development of the spaces, whether financially or physically, as well as to the maintenance of landscapes (gardens).
5. The failure to select appropriate plants for the spaces and the lack of maintenance during the summer resulted in the deterioration of most of these plants.
6. The lack of designated spaces for various student events and activities, including sports, recreational, and social activities.
7. The lack of student involvement and consideration of their opinions in any of the various areas practiced by the university.
8. The limited use of water features and their absence in most gardens, despite their aesthetic and environmental importance.
9. The lack of a clear maintenance program to guide workers on required tasks and appropriate timings, such as irrigation, mowing, fertilization, pest control, planting annual plants, etc.
10. First-year students are the least likely to contribute, which requires addressing this issue.

#### **RECOMMENDATIONS**

1. The need to pay attention to the college's spaces in general, and the Horticulture Department in particular. The Horticulture Department's administration should work to develop them to serve students and provide the necessary funds without burdening students with financial costs.
2. Develop development designs for landscape based on a future perspective and scientific data on student numbers and orientations in the coming years.
3. Involve specialists in the fields of landscape and agriculture in preparing the designs, taking into account students' opinions and desires.
4. Consider the prevailing climatic conditions during student attendance when designing gardens by providing canopies and shaded seating areas and selecting plant and structural elements.
5. Provide a student kiosk. This can be done by investing in and utilizing a neglected area of the garden for this purpose.
6. Conduct awareness seminars for undergraduate students on the importance of agriculture, their specializations, and the fields of work they can pursue after graduation.
7. Deal flexibly with first-year students to encourage their desire for cooperation and a sense of belonging to their place.
8. Organize educational and recreational trips for students at various levels, especially first-year students.

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