



## Conversion Experiments in the Fields of the Faculty of Agriculture to Productivity and its Impact on Development

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### ARTICLE INFO

#### Article history:

Received: 24 March 2015;

Received in revised form:  
16 May 2015;

Accepted: 20 May 2015;

#### Keywords

Development,  
Talent and human resources,  
Research fields to develop,  
Productivity.

### ABSTRACT

The University of message and specific objectives of teaching, scientific research and community service, they play an important and significant role in the practice of scientific research. The scientific research of the most important pillars of universities, a standard measure of scientific and academic level. The first universities and the natural place to conduct research because of the large number of specialists from faculty members as well as provide search requirements of laboratories and equipment, and the necessary resources for scientific research data collection. The research aims to shed light on the reality of experiments fields in the College of Agriculture and the statement of efficiency usability fields experiments in scientific research and to highlight the shortcomings and weaknesses and their impact on the conduct of the research process of The perspective of professors of the Faculty of Agriculture the aim of identifying determine inhibiting factors and the factors that help in the development of efficient use of the fields and converted of research fields to the research and production for the purposes of development.

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### Introduction

The universities specifically scientific radiation cultural enlightenment centers concerned with the preparation of cadres and followed for the collection of scientific and investment opportunities for the development of society in general, where the highlight here the importance of higher education and graduate studies in the achievement of the overall economic and social development, both which can be achieved only by virtue of the human element that development is the foundation of any development. Universities play an important role in the development of a pioneering project And human resources, and this point was the importance of studying and research fields of the Faculty of Agriculture at the University of Baghdad (Abu Ghraib) and their privacy distinguish them from other colleges where areas of teaching and research function, and to develop a planning frameworks for the development of research fields to productivity. The research includes the study of the reality of the allocated as fields of research in the College of Agriculture, University of Baghdad, and identify the problems of which made clear through the questionnaire and the consequent developmental suggestions spaces, then discuss the form and analysis, and cited the experience of some countries.

### Research problem

The problem with Search (A few devices and equipment for laboratories, a few financial allocations for research, the difficulty of obtaining chemicals and fertilizers, the need for large areas of land, lack of manpower full-time research purposes, the absence of support for the Excellence researcher, not to link scientific research with the reality on the ground results, the lack of irrigation water) all these constraints have contributed to not hire experiments and research fields for productive purposes in the College of Agriculture optimally to have a role in the revitalization of urban development areas surrounding the college.

### The research aims

- A. Identify ways to advance the fields to meet the development requirements
- B. Draw a realistic policies to how coordination between the college and private sector for development.

### Research Methodology

In light of the nature of the problem and objectives of the research will go according to the descriptive approach and analytical through the largest amount of data on the problem and research objectives collected through a questionnaire and personal interviews, a number of professors with expertise in the agricultural and livestock area, analyzing and drawing conclusions and recommendations that contribute to form solve the problem of search in addition to the review of the application forms pertaining to the subject of a successful search.

### Traditional research universities and Productivity

The difference between research universities and traditional universities is that research universities interested in exploration and innovation as part of the educational process and the focus on research leads to interest in graduate studies and a master's and doctoral degrees, and this is not necessarily the goal of traditional universities And despite the fact that productivity universities similarity research and traditional education, teaching and research process, but it focuses on the practical aspects that enable them to produce goods earned money that you use to expand and meet its liabilities towards the state, these activities are carried out by many agricultural colleges, colleges feminist its various sections, the coefficient of colleges Engineering and computer colleges, colleges and Commerce and Business Administration, producing some of the products and to provide some services also provide the faculties of medicine and therapeutic medical services in hospitals (Center for Strategic Studies, productivity universities p. 63) .

### Agricultural colleges

The process colleges in many universities to sell what is produced for their educational process on a limited scale with its

commitment to its origins nonprofit is that the return of the products trade contributes funded laboratories, workshops and experimental fields, along with support for education and research in departments and colleges produced to reach Products better. These activities carried out by many of the faculties of agriculture, produce goods put up for sale in especially in the United States almost closed or limited market, Where many universities began like agricultural universities mission peasants and farmers, service and promotion of trade and industry of agricultural and rural development, and most of what poses in the market of agricultural products have little and narrowly rate is fixed and without promote propaganda and that most of the beneficiaries are the employees of the university, and what is most important sold in many of the faculties of agriculture on a daily basis is milk products, At the University of Wisconsin, nicknamed the land of dairy products, we find the products are sold in the center of the university to college students and residents of the area has gained a reputation of university scientists who brought the process of strengthening dairy vitamin D to help the body absorb calcium and invent ways to save the dairy. At Iowa State University conducted research on the best ways to slaughter birds and eggs to generate strains and the poultry department to sell huge quantities of eggs and chicken diverse factions, As the raising livestock meat department sells beef, which conducted the research and how to make it fat and improve the taste and the university to sell vegetables, fruits and flowers in the market, along with agricultural agricultural and industrial productive activities in the university, the departments of Food Science concerned with taste, appearance and food preservation and packaging and canning whereupon numbers amounts great food and conduct surveys to see people have a taste of some of the university offers in restaurants versus small price to pay. (Center of Studies, King Abdul Aziz University, p. 64).

The traditional style of universities threatens university education rigid, but it has to be that the university look through their relationship to the social, economic and cultural development issues, through the establishment of universities, quality characterized in certain areas of specialization to serve the strategic activities in the areas of comprehensive development, such as finding a university characterized by agricultural development and other industrial development. And work to establish specialized colleges within the university holds funded institutions associated with the production areas of its work, to provide the funding and the possibility of a good number of students in practice. (Rummani 0.2013, p. 5).

**7. developmental role for the private sector:** in order to improve the economic situation of the individual and secure him to live to be university education link with the reality of the production of the labor market, so that the graduates abreast of the needs of development and economic advancement achieved this link with the participation of the business sector in the policies and strategies for education development and curriculum development and university teaching and the need to evaluate the graduates of university education and give them certificates. This leads to secure the labor market needs of skilled manpower equipped with university qualifications professional, scientific and appropriate finding jobs for university graduates, leading to the reduction of the unemployment problem and contributing to the development of the labor market, including available to him from the human capacity university preset (Habib 2007, p. 2 ), the importance of the relationship between the college and private sectors and the need for them is to promote and develop sources of funding

because of limited government funding and insufficient to strengthen the performance and development of its infrastructure, Conduct applied research and scientific training for students in business organizations, which develops practical skills and increases the chance of joining the labor market after graduation, providing the scientific research topics derived from scientific reality (Fourth Scientific Conference of the University of Aden 0.2010, p. 10). It impediments to strengthen the relationship between the private sector and universities lack of interest and lack of awareness of the importance of developing human resources and capabilities available in the college in particular and universities, in general, and exploited for development ,Weak private sector confidence and human skills, programs and research and scientific studies and the extent of their usefulness. Preoccupation with universities in general teaching and side academic on the practical side of the expense, lack of coordination between the strategic plans for universities and market needs of skills and abilities, lack of educational and instructional curriculum link to the current reality of the productive sectors and the problems it faces and the constraints and sufficiency side theory without the practical side in educational curriculum. There are many pictures of the aspects of cooperation between universities and the private sector, including support for students, where some companies are offering scholarships and awards and financial aid and loans deferred for after graduation does not charge them interest until it is paid, to support specialists students in the terms of reference of interest to them or useful in some aspects of focus the company in its activity, as some companies are providing opportunities for graduate students doing research in the company's external researcher for limited periods under the supervision of professors in research of interest to the company has been involved in the supervision of research expert from the company. Or offers companies grants open small amounts of professors who specialize in vital disciplines concern to them or to the scientific departments concerned with their development in universities and used open grants in any scientific purpose, such as the purchase of laboratory equipment and supplies, or the presence of a scientific or workshops conferences (eg, University of North Carolina provided a grant for a professor of food processing section modulus) .

**8. Description of the study area:** the College of Agriculture was founded in the ninth of the month of July 1952 (modern Farm Magazine, 1952), Faculty of Agriculture / University of Baghdad, is located in the north-western part of the province of Baghdad, which is beyond the basic design of the Baghdad city limits, within the basic design for the district of Abu Ghraib, as shown in (Figure -1), Size student for college-level preliminary Studies 3800 students and graduate-level students 86 Masters and 66 doctoral student, Faculty of Agriculture away from the center of Baghdad about 22 kilometers , Limits the Faculty of Agriculture from the East Abu Ghraib previously camps after the addition of the Agricultural Institute of the College, and bounded on the west district of Abu Ghraib, on the south by the street leading to the Al-Anbar province, and to the north of Abu Ghraib River, which passes adjacent to the northern border of the college. Distributed its buildings and fields on an area (56 acres and 14 Ulke and 46 m) according to the latest General Authority for space survey, of which approximately 150 acres spread out buildings deans and academic departments, the library and the halls and laboratories seminars, workshops and factories and orchards fields remain dedicated to the training of students and to conduct research and the experiences of professors and students Graduate Studies.

1	Fields	7	The entrance to the neighborhood
2	Groves	8	The main college entrance
3	Mpazl	9	Students entrance
4	Greenhouses	10	Abu Ghraib Street
5	Educational buildings	11	Major irrigation pump
6	Housing professors	12	Student housing

Source: engineering unit in the College of Agriculture

**Table 1. scientific departments in the College of Agriculture**

t	Scientific departments	Specialization
1	Livestock Department	Raising sheep, and poultry, fish
2	Field Crops Department	And physiology of crops and the production of anti-bush and fodder crops and the production of industrial crops and medicinal plants and seed technology
3	Department of Plant Protection	Entomology, plant pathology
4	Department of Horticulture and landscaping	Fruit science, Olericulture, science and engineering ornamental gardens, science, medical and fungal plant tissue culture techniques, conservation and storage of crops
5	Department of machinery and agricultural machinery	Machine Operation, maintenance and repair of machinery, machinery, machinery, tools Administration
6	Department of Food Science and technology biogenic	Food and dairy manufacturing, food and dairy chemistry, microbiology in food and dairy
7	Department of Agricultural Extension	Guidance and training programs and planning the transfer of agricultural technologies, implementation and evaluation
8	Department of Agricultural Economics	Agricultural policy, agricultural development, agricultural production economics, farm management, agricultural marketing, agricultural planning, economics of natural resources
9	Soil and water resources department	Soil chemistry, soil physics, scanning, classification and management of soils, soil microorganisms, soil fertility and fertilization techniques

Source: Researcher based on field survey

**Table 2. shows the field numbers and uses all of them and as shown in Figure(4)**

No. field	Usage	The beneficiary
1	Green food cultivation of fodder for cows	Cows and sheep field
2 +3 +4	Palm grove	Heal by the private sector for a fee paid to the college and the crop to the private sector
5	To conduct research of graduate students	Department of Soil
6	Green food cultivation of fodder for cows	Cows and sheep field
7	To conduct research of graduate students	Department of mechanization
8	Research professors and graduate students	Crops Department
9	Olive grove + belonging to the unity of medicinal plants Greenhouses	Department of Horticulture
10	Unfastened + farm houses	Prevention department
11	Field of fruit and vegetables + canopy ornamentals + canopy plants silhouettes	Department of Horticulture
12	Green fodder	Food for cows
13	Feed mill + cows field + sheep field	Livestock Department
14	Farm houses	Department of Horticulture + crops Department
15	Wooden houses for research professors and students Studies	Department of Soil

Source: researcher

**Table 3. the preparation of students admitted to graduate studies (Master - and PhD)**

t	Sectional	2010-2011		2011-2012		2012-2013		2013-2014		Total	Rate
		Doctorate	Master	Doctorate	Master	Doctorate	Master	Doctorate	Master		
	Industries	6	8		13	5	6	4	7	62	8
1	Economy	2	5	1	9	5	8	2	6	45	6
2	Gardening	5	7	2	11	6	9	7	12	71	9
2	Produce	8	21	3	22	8	15	---	8	97	14
4	Crops	6	5	4	8	5	11	6	10	66	8
4	Soil	5	8	5	11	8	11	8	9	76	10
6	Protection	10	10	6	17	3	12	4	7	78	10
7	Mechanization	---	5	7	---	---	9	---	---	14	2
8	Mentoring	---	3	8	8	---	6	---	8	25	3
9				9							70

Source: Researcher / Data was collected from the Graduate Division

Table 4. shows the obstacles and Suggestions researcher and solution

T.	Requirements and constraints	Proposals and solutions
1	Financial constraints	Activate cooperation with the private sector institutions and the farmers and external support,
2	Organizational obstacles	Marketing project before starting it by putting future plans and know the needs of sectors and selection of research to address the problems faced by the farmer to develop appropriate solutions.
3	The weakness of the media for advisory services that can be offered by the college for the private sectors and farmers	Organizing media and communications program to promote public understanding of the role of university projects and their impact on development.
4	The weakness of the relationship between the university and the private sector and lack of trust and resort to contracting with foreign expertise.	Strengthen the relationship and cooperation in the field of research projects between universities and various sectors of society, and the formation of joint committees to strengthen this cooperation and calendar
5	Preoccupation with professors teaching and lack of interest in conducting applied research	Put equivalents rewarding for researchers regarding the level of the results obtained from both Applied Scientific.

Source: Researcher

(Figure-2) describes the land use of the college, we note that the College has three entrances, all located on the Baghdad / Ramadi as well as through the site includes a set of orthogonal roads and parking space and buildings, educational include classrooms, laboratories, library and glasshouse and plastic umbrellas and buildings entertainment include Club room nationalization, sports stadiums and buildings service for students and buildings for maintenance services and buildings for special services such as the clinic as well as administrative buildings and the mosque site also includes an internal departments for students and residential area of the college professors and employees.

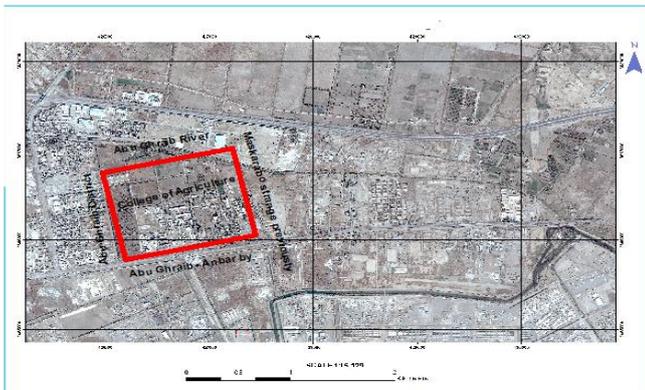


Figure 1. College of Agriculture - satellite image  
Source: General Directorate of space

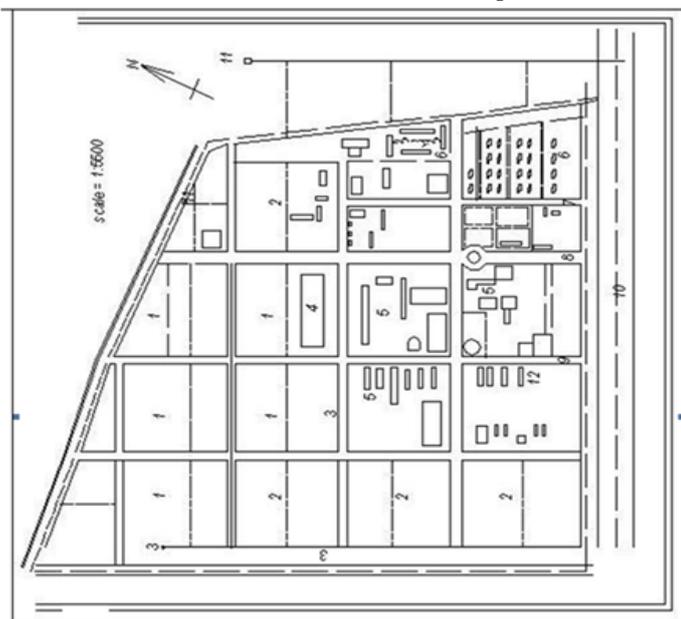


Figure 2. Land uses for the College of Agriculture

As with educational and research function spaces and shown on (Figure 3) include Experiments fields and palm groves and olive and dissolved and canopies, glass and wood and fields, poultry, sheep and cattle fields. With regard to the irrigation system in the College of Agriculture is runoff (immersion) and artesian wells, which is used to irrigate gardens and covered from green spaces, trees, bushes and Experiments fields, and scarves derived water from the Abu Ghraib River, which runs adjacent to the northern borders of the college and give irregular times (Arashn) have been drilled many artesian wells to irrigate gardens and fields tests (an interview with the engineering unit administrator) that the method of irrigation Alchrista wells is an old way and cause a lot from problems, particularly the problem of salinity, due to water evaporation and deposition of salt on the surface of the soil and salinity problem becomes tougher when the water is saline groundwater or when they become salt, as well as the method caused the lack of irrigation uniformity when the beginning of the irrigation department from soil sites saturated condition, while the other section, which will be at the end of the irrigation role in the case close to the wilting point, This problem is much when the earth is not flat, causing water to accumulate in low-lying areas and not arriving in the upland areas, as well as the wells need to be electrically operated pumps and electricity for long hours causes stop these pumps. The irrigation scheme plays an important role in providing necessary to sustain plant irrigation water. Most of the existing streams, especially those that reach the water from the Abu Ghraib River to the different parts of the sites is padded to note that the spread of the bushes and on the shoulders which impedes the movement of water and reduces the functional efficiency.

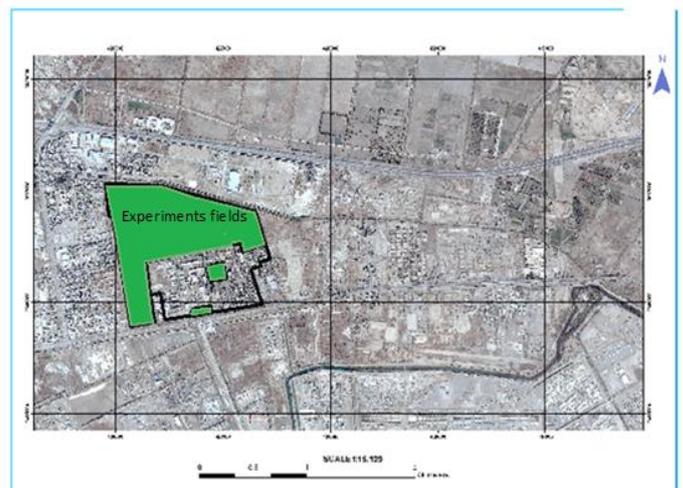


Figure 3. Dedicated to the fields of space experiments within the College of Agriculture

Source: prepared by the researcher using the program GIS  
**Educational facilities and productivity in the College of Agriculture**

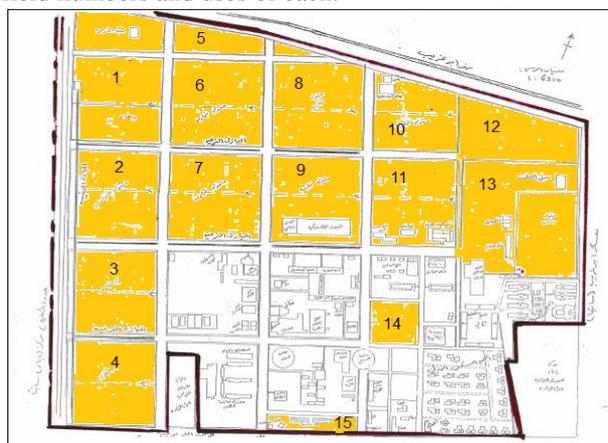
**A- food factory and dairy:** Dairy factory is integrated laboratories in terms of equipment equipped with the best of Danish companies that are used in the production of pasteurized milk and milk products include besides milk cheeses of all kinds and cream, butter, ice cream, dairy, cakes customized stressing that prices sold subsidized, appropriate and in line with market prices local . It is noteworthy that dairy College of Agriculture's Department of Food and technologies bio-science factory at the Faculty of Agriculture / Baghdad University was founded in 1975, came to train primary and graduate students and is subject to laboratory tests based health conditions for the production and supervised by professors of the Department of Food Science and technology biogenic in college and this lab a high efficiency and multiple production lines.

**B- Apiary College:** was established in the early sixties by (60) cell and its location in the olive grove and the cell production rate ranging from 15-25 km, of the problems that were facing apiary the use of pesticides in the fields by the lecturers and graduate students for research purposes, continued apiary and the number of cells in the year 1983 to (40) cell and distributed in the first two positions in college and the second in Ameria was supported in 86 cell in that year and became a 129 cell and suffered apiary from many problems, including the lack of experts and the destruction of the bees because of the use of pesticides and the impact apiary circumstances which passed out of the country during the war, That the production of the cell decreased during the nineties and so far as a result of these circumstances, to 2.5 to 3 kg of the cell. Now, Apiary cell is Apiary educational includes 30 cell is not interested in production, but for the purposes of teaching students, and the reasons for the deterioration of beekeeping particularly at the college and in general in Iraq is the security situation and the inability of the beekeepers of transfer cells to places food sources, the use of pesticides, especially in college by graduate students projects , Environmental changes and environmental pollution has led to the emergence of unnatural situations in bee hives, including the phenomenon of disappearance of bees, that the establishment of a business venture for the production of honey needs to be large and specialized staff and full-time job with hives and the clock is not available.

**10- Fields in the College of Agriculture**

Distributed fields in the College of Agriculture at the convergence space (416) acres included a variety of fields uses some of them exploited for the cultivation of fodder which is used as food for cattle, sheep, and other division exploited to conduct scientific research to graduate students and research the lecturers, as shown in (Figure 4) field (1 ) for the cultivation of feed used as food for sheep and cattle, And field (2, 3, and 4) is a groves of palm has been neglected because of the conditions experienced by the country, causing a lot of damage and a lack of varieties of palm and the emergence of the jungle and pests, he needs to work vaccination, control and removal of damaged and planting new varieties, either field (5) exploited by the Department of Soil Research graduate students, and the field (6, 7) are utilized for the cultivation of green fodder and part of the Research Department of the machines, and the number field (8) belongs to the Department of Crop, employing a research carried out by professors and graduate students , And field (9) contains olive trees and had a college production of olive annually sold on College employees, either number field (10) contains the College Apiary, who is producing honey and the other part

contains agricultural houses exploited for the purposes of scientific research of the Department of Prevention and field number (11 ) belonging to the Department of Horticulture includes many of the canopies of fruits and vegetables and plants silhouettes, and field (12) exploited for the cultivation of fodder, while the field (13) Contains the cattle field and poultry halls and previously was the college's production of eggs distributed to associate where quotas are distributed every week, but because of the siege, occupation and neglect of the halls and the shortage of providing an appropriate environment for the propagation of broiler conditions led to a decrease in the number of chicken and exclusive exploitation located for educational purposes and not productivity and field No. (14), which was set up 20 of the farm houses multiple brackets in which 1,600 m<sup>2</sup> by Awrad company but not exploited so far because of the need to create the soil and there is no financial support, On the other side there are houses some of them belonging to the Department of Horticulture and the other for the Department of Crop and exploited by masters and doctoral students, and field (15) exploited Research Department of Soil Query Table (2) shows the field numbers and uses of each.



**Figure 4. Uses experiments fields in the College of Agriculture**

Source: engineering unit in the College of Agriculture  
**Analyzing the results of the questionnaire**

Questionnaire was distributed to a group of lecturers specialists in the field of agriculture and livestock in the college of their title exclusively for their views on the subject, the form included a series of questions (Professor - Assistant Professor) as set out in the Annex and the results were as follows:

**The first question**

What do you think the most important needs in the future to develop a plan to manage the testing fields in the College of Agriculture?

By the results of the questionnaire was the opinion of specialists and by percentages shown by the questionnaire to provide water sources for irrigation of 20%, a special administration with practical experience 18%, the need for human resources workers and technicians 18%, the introduction of the machine and the mechanization of agricultural operations 14% create laboratories equipped with all the necessities to conduct research 12%, and the provision of a special budget for the fields experiences a 12% saving building private fields 6%.

**The second question**

Do you think that the allocated space research fields can be used on a production basis of development in accordance with the aspirations of the college and the needs of each department .....

Answered 42% of specialists that can not be exploited fields for productive purposes, because agricultural research requires taking measurements such as mild and dry weight weight and the number of roots, so the researcher must destroy some plants or most of them to get the information it needs are custom fields for the purposes of educational research, While the ratio was 58% of the results of the questionnaire that these fields can be invested for the purposes of development in the case of increasing the productivity of the area with the division of the fields to the Department of exploits on the basis of production and the other part in the research.

#### **Third question**

Is dedicated to research spaces meet the aspirations of teachers and students in a way that contributes to scientific research for the College of Iraqi society and supplement research and scientific expertise service?.

6% answered that it meets the aspirations of professors and 24% replied that they did not meet the aspirations Because there was no an independent administration, while it was the opinion of 52% does not meet Because there was no financial support and 18% Because there was no full-time workers work in the fields.

#### **Fourth question**

Can agricultural areas in the college, as well as animal production and fish farming and beekeeping areas of development to become an important financial resource for college ..?

Results of the survey confirmed that 82% of agricultural areas can be in college, as well as animal production areas to develop to become a financial resource for college, and laboratory experience in the food industry department a good example of what is due from the utility and financial payoff for college as well as the education and training of students. The optimal method proposed by some specialists :The development of the college gardens of floriculture is reflected in the evolution of the Apiary work to provide the flowers needed by bees as food, can exploit the plastic houses in vegetable production and can be productive, educational, and sections of prevention and gardening can be exploited greenhouses in the production of some ornamental plants and can be exploited for sale and the development of glasshouse, cultivation of abandoned land, seasonal vegetables and sell them to associate and students and provide financial returns to college and can involve students and Associates shares returned to them an annual profit.

#### **Fifth question**

What do you think the obstacles set up an advisory within the College Center provides services to the private sector in return for an agreed wage?.

Results of the questionnaire was the opinion of 38% of the lack of building and managing their experience and 23% weakness media side and 23% weak relationship with the companies and the private sector and 16% not connect with the reality on the ground search results

#### **The sixth question**

How to activate and strengthen the partnership and cooperation relationship between the Faculty of Agriculture and the private sector to achieve the benefit for both parties and to increase the access of graduates to the labor market after graduation?

The view of 5% for a mechanism to finance research projects and studies by the private sector and 20% transfer problems and constraints faced by agricultural companies to college and 23% finding a joint work program between the college and the private sector, and 10% have access to the

experiences of developed countries and 13% through a summer training for students in the fields of private sector and 24% through the holding of seminars, workshops and training courses of interest to the private sector

#### **The seventh question**

Is the palm grove in the College of Agriculture and meet the aspirations of the college can be one of the important production facilities?

Through interviews and questionnaire results turned out that the palm groves need intensive care and especially have been neglected occupation years ago and is currently the college include these orchards to the private sector to carry out vaccinations and service operations, and now the unit Palm Research research program began to employ the technology of plant tissue culture in the broad propagation of date palm and make up the shortfall,

**Eighth question:** Is following suggestions find it important in the development of the productive side of development in college?

- Ornamental fish breeding and propagate and marketing at the college level.
- The establishment of shows selling flowers and plants silhouettes
- The establishment of an educational botanical gardens - open and closed
- A lot of medicinal plants and marketing

The answers specialists about the last question that all assumptions are important, but there are obstacles to the implementation of each of them, there are key factors for the success of any project, whether for the purpose of entertaining or productive, educational, and these factors are summarized in:

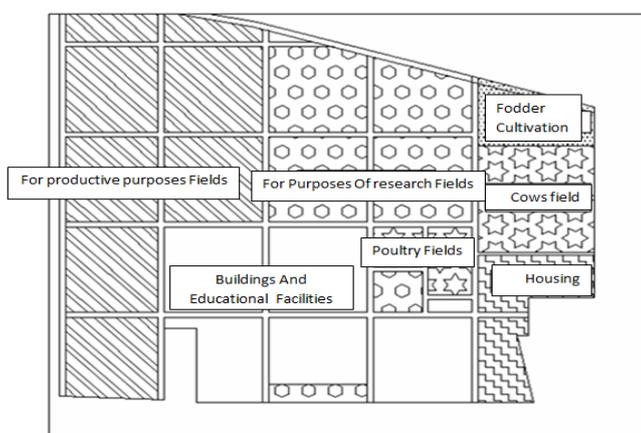
Adequate financial allocations, water sources (perfusion) networks, labor - with experience and practice adequate process, to assume command of these projects are familiar with and understand the importance of these projects Suggestions researcher on the development and optimization of the fields of

#### **Employment tests**

Planning process requires the identification of targets and identify possibilities available to be able to develop a plan within the scientific basis for the purpose of exploitation of human and natural resources and the researcher has organized a table showing the number of students admitted to graduate studies (Master - and PhD) for a period of five years, and as shown in Table 3. In order to determine the overall needs of the land for the purposes of research:

Through the table turns out that the rate of the number of master's and doctoral students is 70students, and to see the need of the fields spaces for research purposes were some sections exception (the economy - Guidance - production - industries) where the nature of the specialty does not require the cultivation of land to conduct research, and after collecting the numbers of students admitted to the the rest of the sections was number 61 students and through the fields responsible for interview turned out he is delivered researcher half acres to conduct research and the need for it to be ,And through personal interviews for a number of lecturers supervisors graduate students turned out that the section of the research are made outside the college contracted with the departments of Agriculture or the Ministry of Water Resources and by the nature of the research. Some are in Essaouira farms or or Tikrit, Mosul were also implemented a research student master contract with the Ministry of Agriculture in the implementation of agricultural research station to reclaim the land of gypsum using different tillage for crop cultivation feed and using well water for irrigation systems has been the

success of the research and be able to cultivate the land were not suitable for agriculture due to soil gypsum 31 acres for research purposes, And there was another search in the agricultural station in Mosul to cultivate a kind of bushes, depending on rainfall, which led to a decline in salinity and reclaim the land. To find out the number lecturers through the quality assurance department at the college was a total lecturers of the same sections mentioned is 453 teaching staff, but can not depend on this figure because most research is conducted with the participation of a group of professors because of the high cost of research borne by teaching, It includes research on many of the qualities and after the completion of Agriculture stage can get more than a search through the qualities that have been studied on cultivated plants, and it can be exploited section of the college land for the purposes of research and the other section exploited for the purpose of productive development and have a payoff a financial College and have a role in the creation of human development, social and economic to employees of the college and community college professors and the surrounding area college, As well as it can be exploited under the Ministry of Agriculture land which is close to the college, (Table 4) illustrates the obstacles and solutions, (Figure 5) shows the researcher Suggestions for the development of fields on the basis of production:



**Fig 5. of the proposed developmental fields College of Agriculture**

Source: Researcher

### Conclusions

- Absence of proper planning and optimization of fields experiences and loss mechanisms of action which regulate the management fields.
- lack of specialized technical division to oversee and follow-up planning process within the scientific program.
- College needed financial allocations sufficient to cover expenses.
- Irrigation followed Old system does not meet the need of the fields.
- need for poultry and sheep fields to the development and perpetuation to conform with the winning development in the countries of the world and to provide production requirements.
- You can not convert the dissolved from promiscuous tutorial into a productive for non-food sources provide sufficient and not put dissolved by making mobile solutions and shift it twice a year to Essaouira farms to secure food.

### Recommendations

1. The formation of a specialized team manages fields and have all the official of the Department of Labor and the division of space into a productive development and take advantage of the

revenue part of the development of dedicated research purposes segment.

2. overcome financial constraints through external support and contracting with the private sector institutions.

3. overcome regulatory obstacles and so develop a vision at the departmental level and particularly at the college level are generally required by the needs of society and the development of a general perception of cooperation between the college and community organizations for the marketing of the project before starting it

4. Put controls to regulate the exploitation of allocated for postgraduate research and lecturers Fields process includes determining the duration of exploitation and that the researcher exploiter of the land clean it and remove residues research and bring it back to the Commission also received, and that there will be programming in the process of irrigation determined by the Commission, according to the season and the type of crop.

5. the Commission to draw up a plan to reactivate unused or that have been exploited for many times the land and crops exhausting the soil by planting crops invigorating and supportive of the soil, such as jet and Albarsam.

6. chapter devoted to research fields allocated to the production of the fields because the first did not need large areas and can conduct experiments in specific areas, while in the second production requires large fields to give the production and provision of, and determine allocated to the experiences of research to suit the space and the number of graduate and faculty students and by section.

7. activation of the relationship with the private sector to find a joint program of work according to specialties that are the helm of this business, however, that there is a total agricultural production and animal joint projects between the college and the private sector.

8. cuttings and planting new varieties of new and re-activate the palm grove, which can be a financial return which is due in no small measure.

9. formation of specialized financial committee for the purchase of field kits, as well as to oversee the marketing of products.

10. provide building management field and budget private field and the work of the stores at the work site.

11. provide ground tanks for water sources to secure the water in the summer .oanachae drip irrigation system for the fields.

12. The introduction of the machine and the mechanization of agricultural operations, and the provision of fertilizers and pesticides needed by the researcher.

13. laboratories equipped with the necessary equipment for graduate students, researchers and scientific instruments.

14. establish an office staffed by full-time they prepare and publish About professors and expertise for distribution to private sector companies in order to advertise for them and provide opportunities for the use of their advisers.

### Sources

1. Habib, Magdi Abdel-Karim, New Horizons of university education in the light of global developments, working paper submitted to the Sixth Arab Conference on Higher Education, Egypt.2007.
2. Rummani, d. Zayd ibn Muhammad, article, investment in the field of higher education and scientific research.2013
3. The issuance of the Center for Strategic Studies Series, King Abdul Aziz University Center, the twenty-second version, the traditional research and production and investment universities. 2010.

4. partnership between the private sector and universities, research and consulting institute, King Abdul Aziz University, fifth edition).

5. collect information through personal interview for a number of professors and specialists in the field of agriculture and livestock.

6. engineering unit in the College of Agriculture.

7. Fourth Scientific Conference of the University of Aden, the quality of higher education towards sustainable development .2010

8. (modern farms magazine 1952).

#### -1- Extension

##### Questionnaire

Especially professors and specialists in the agricultural and livestock area:

Private questions to The person doing the questionnaire

- General jurisdiction:

- The exact specialty:

- Scientific title:

- Years of Experience:

- Area of expertise: academic ---- application ---- academic and practical ---

The first question: What are the most important needs in your mind to develop a future plan for the management of experiments in the fields of the Faculty of Agriculture ....?

Note: Please sign in front of the choice that you deem appropriate mode (You can choose more than one)

1. The need for special management expertise has practical in this area.

2-the need for human resources workers and technicians.

3. Building a private fields.

4. specialized agricultural machinery and agriculture requirements of fertilizer and seeds.

5-scientific laboratories equipped with the necessary equipment.

6. provision of water sources and irrigation systems developed.

7. provide special fields budget.

Second question: Do you think that the allocated space research fields can be exploited on the basis of productive development in accordance with the aspirations of the college and the needs of each department ....?

#### Both

1-it is not enough, a dedicated research purposes.

2. In the case of increasing the space between the insulation and the productive section and research section.

The third question: Is dedicated to research spaces meet the aspirations of teachers and students in a way that contributes to scientific research for the College of Iraqi society and supplement research and scientific expertise service.

1-Yes spaces meet the aspirations of the teachers.

2. does not meet the aspirations of both teachers and students because of: -

- Lacks a separate department manages agricultural research relevant to reality.

- Lack of financial support and the provision of all research supplies.

- Lacks the full-time workers and technicians to work in the fields.

Fourth Question: In your opinion what obstacles set up advisory centers within the college offers its services

To the private sector in return for an agreed wage?

1. The lack of building and managing its experience in this field.

2 weak-side media.

3. The weakness of the relationship with the companies and the private sector.

4. not connect with the reality on the ground search results.

Fifth question: Can the agricultural areas in the college, as well as animal production and fish farming and beekeeping areas of development to become an important financial resource for college ..?

1-Yes development can become a financial resource in case of availability of supplies.

2. both because they are intended for educational and research purposes.

The sixth question: How can activate and strengthen the partnership and cooperation relationship between the Faculty of Agriculture and the private sector to achieve the benefit for both parties and to increase the access of graduates to the labor market after graduation.

1-a mechanism to fund research projects and graduate students by private sector companies

2. Transfer the problems and constraints faced by agricultural companies and farmers to college.

3. create a joint work program between the college and the private sector

4. access to the experiences of developed countries in this field.

5-a summer training for students in the private sector fields.

6. holding seminars, workshops and training courses topics of interest to the private sector.

The seventh question: What plans and needs of the college for the rehabilitation of the palm grove and make up the shortfall and improve production.

1. The need to manage adopt regenerate planting new seedlings and new varieties and address located.

2-wide to date palm multiplication using tissue culture technology.

Question Eight: Are these proposals mentioned EMWIS important in the development of the productive side of development in college?

1. ornamental fish breeding and propagate and marketing at the college level.

2. exhibitions sale of flowers and plants silhouettes.

3. The establishment of educational Botanical Gardens - open and closed

4. A lot of medicinal plants and marketing.