



Understanding the Entailment to Establish the Entrepreneurial University of Agriculture and Natural Resources

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Abstract

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Today, due to the effective role of higher education in building a knowledge economy, varied missions and expectations have been assigned to the university. Accordingly, the university must, with the long-term support of economic development through the production of knowledge, and the mechanism of technology transfer, affect the economies of countries and promote their economic prosperity. In this context, it is merely an entrepreneurial university that, as a third-generation university with a more Transcendental duty than traditional universities, ensures a better university capacity in response to changes and expectations, Such as improving the job skills of graduates and reducing the number of unemployed graduates, especially in agriculture. The Iranian agricultural sector, being one of the most important sectors of the economy, desperately needs to develop and improve, therefore, building Entrepreneurial Agriculture and Natural Resources University (EANRU) and making fundamental changes in current universities is more urgent. Therefore, this study aims to identify the necessities of creating an entrepreneurial university using the qualitative paradigm. The statistical society was comprised of 37 faculty members of the Iranian Higher Education Centers. Grounded theory was used to collect data. Snowball sampling method was used. The conceptual model of entailments for creating EANRU was developed after reaching the theoretical saturation, open coding, axial coding and eventually selective coding. Finally, practical suggestions for implementing the model were presented.

1. Introduction

Economic, health and geopolitical trends have created divergent outcomes for labor markets globally in 2023. While tight labor markets are prevalent in high-income countries, low- and lower-middle-income countries continue to see higher unemployment than past. In addition, Employers anticipate a structural labor market churn of 23% of jobs in the next five years (World Economic Forum,2023; International Labor Organization, 2023). In this situation Unfortunately, the unemployment of most university graduates has emerged as a problem in our country. This has caused the disappointment of current students and reduces their enthusiasm for learning (Khademi Kelelu et al.,2023; Mirzaei et al., 2021). In order to solve this problem, several solutions have been proposed, the most logical, practical and irreplaceable option is the training of self-employed and entrepreneurial graduates. Therefore, any action to transportation an academic system to the entrepreneurial system is considered as beneficial activity to solve the problem of employment of young people and especially university graduates.

The entrepreneurial factors of a university are a very broad subject because the formation of an "entrepreneurial university" requires a lot of variables. In general speaking, a set of environmental factors such as government policies, general conditions of society and the economic, political, social and cultural status (Apostolopoulos et al., 2018) of one side and The internal factors of the university such as incentive systems, the status and location of the university,

the university culture, the status of the faculty members, and the policies applied by the university to develop entrepreneurship in the university environment are required and The phenomenon of entrepreneurship is the result of the co-operation and interaction of the sum of the proposed factors (Rocha et al., 2022; Rothaermel et al., 2007). Accordingly, the university community has been studying entrepreneurship and its main factors for more than two decades, developing logic and key arguments, evaluating policies and how they are implemented, and creating frameworks and tools to help academic leaders and staff to set up entrepreneurial universities as well as addressing the entailments of building these types of universities (Hannon, 2013).

Over the past two decades, Higher education has undergone significant changes; having to adapt to these transformations led to the emergence of the concept of entrepreneurialism in universities. How does a university commit itself to an entrepreneurial strategy? And, consequently, what internal changes should be made? The answers to these questions lie in the identities, norms, and structures of the university. That is, the university must define its strategy, according to how entrepreneurial and environmentally-oriented activities are (Kuratko and hornsby, 2004).

Accordingly, the main characteristics of an entrepreneurial university, distinguishing it from the traditional university, can be explored in its goals, structure, financial resources, rules and regulations, and its organizational culture (Awad and Salaimeh, 2023; Bhayani, 2015; Ropke, 1998), which will be discussed later.

The unique structure of the Entrepreneurial University is visible in its financial, administrative, and supporting sectors. The specific financial structure allows the university while interacting with its stakeholders, to expand its financial resources and raise its revenue from NGOs. (Gibb and Hannon, 2006). Its flexible administrative structure also allows for appropriate decision-making in different situations. This structure is neither fully centralized nor totally decentralized but has the necessary authority at senior, middle and lower management levels. To succeed in commercialization the research results, an entrepreneurial university requires support from technology transfer offices, the incubators, business enterprises, entrepreneurship centers, Science and Technology Park and etc. (Bazan, 2022; AlHarathy, 2014; Audretsch and Phillips, 2007).

All the above changes are subject to an entrepreneurial culture, including a significant change in the management style at the university. In fact, the main task of managers is to create an entrepreneurial culture throughout the university by incentive factors. Culture considered to be the key in creating innovative capacities among staff and faculty members and includes the precisions integration of the independent units, the equalization of the goals of the managers and faculty members, the customer orientation and the attempter management, the continuous encouragement to make new venture capital investments and the creation of informal networks and learning through entrepreneurial initiatives at University (Bhayani, 2015; Clark, 1998; Sporn, 2001; Al Harathy; 2014; Wong, Ho & Singh, 2007; Audretsch and Phillips, 2007).

Supportive laws and regulations must exist not only at the university but also at the national level. In recent years, a significant increase in legal considerations and supports, such as Bayh-Dole Act, in which the ownership of intellectual property from research Grant is effectively leveraged from the sponsoring organizations to the university, led to promoting entrepreneurial activities of universities (Al Harathy, 2014; Audretsch and Phillips 2007; Siegel et al., 2007).

The Entrepreneurial University can be considered as a vital factor in the development of the local economy with a facilitating role in the region's economy. It is worth mentioning the importance of universities and science and technology parks in the development of a series of the regional technical zones. The Stanford University and Massachusetts Institute of Technology (MIT) are examples of such influences of entrepreneurial universities in the local economy. Therefore, the role of universities and other higher education institutions is known to be prominent in the entrepreneurial economy (Nabi and Linan, 2011). The authors aim to recognize the main parts of an entrepreneurial university and its entailments in Iran, because:

1. Despite increasing pressures such as unemployment, the need to create new job opportunities for students, the economic pressures entrusted to governments, globalization, social mobility, the development of online technologies, competition and policy-making, and of course, The economic, social and technological progress on Higher education throughout the world to transform (Gibb, 2012; NCEE, 2015) in order to move from their traditional role, focusing solely on education and research (Two former missions of universities) to participate actively in the economic development of the region through entrepreneurship as the third mission (Rocha et al., 2022; Panos Castro et al., 2021; Sadek et al., 2015), most universities in Iran are in the second generation, i.e. a research-based university and has little activity in commercializing research findings, educating entrepreneurs and becoming third-generation universities, means entrepreneurship universities. In additions, the commercialization of domestic universities is often limited to

the creation of science and technology parks, providing not much output to the business market (Salamzade et al., 2011). Therefore, the transformation of universities from the traditional and old forms into entrepreneurial universities, as the regional development engine, is a critical issue with great importance for studying (Salamzad et al., 2015; UNISO, 2002-2004; Clark, 2004).

2. The high unemployment rate among agricultural students (Habibi, 2015; Movahedi et al., 2014; Karimi et al., 2010; Hosseini et al., 2008; Abedi et al., 2017a; Islamic Republic of Iran Agricultural and Natural Resources Engineering Organization Iran, 2014) as a growing crisis and unemployed agriculture graduates beside the lack of industrial agriculture and knowledge base (Road-Dana Information Network, 2017). In addition, agricultural colleges encounter many challenges and difficulties in entrepreneurship, the most important of which are educational barriers (Ebrahimi Meymand and Savari, 2013; Rahmanian Koushkaki et al., 2012; Yaghoubi, 2010; Abedi et al., 2017b; Fallah Haghighi et al., 2014), the poor quality of practical training and experiential learning opportunities, as well as the inability of the agricultural education system to meet the needs of the labor market (Mojaradi and Karmidehkordi, 2016), and eventually the old attitude that considers the government as the main factor for the job creation or recruiting the graduated students (Karimi et al., 2010; Hosseini et al., 2008).

So far, a lot of research have been conducted on entrepreneurship inside and outside the country. However, the research conducted specifically on the Entrepreneurial University is very limited. Also, the research team fully believes that there is no research has ever been conducted over the topic which is covered in this thesis. These are the differences that make over thesis distinguished from former research.

2. Materials and Methods

Today, the grounded theory is known as the most popular and used methods of qualitative research in a wide range of fields. This research method is especially useful when looking at the causes-and-effects relation according to human factors perspective. According to researchers like Dey (2007), in fact, explains the cause-and-effect relationship as the basis of this approach (Rose et al., 2015). So far, several types of research have been carried out using Grounded theory in a variety of fields, including various aspects of entrepreneurship (Razavi, et al., 2014; Sarani et al., 2013; Orban, 2001; Burykhina, 2009; Devadas et al., 2011; Douglas, 2004). In this study, grounded theory has been used to identify barriers to creating an entrepreneurial university and to identify the causal relationships between these barriers. The main reason for adopting this method is the nature of the problem and the research purpose, and little information about it.

The grounded theory was first proposed by Glaser and Strauss (1967) as a way to construct the theory systematically using data from social research. This method consists of several key steps, shown in Figure 1 (Rose et al., 2015).

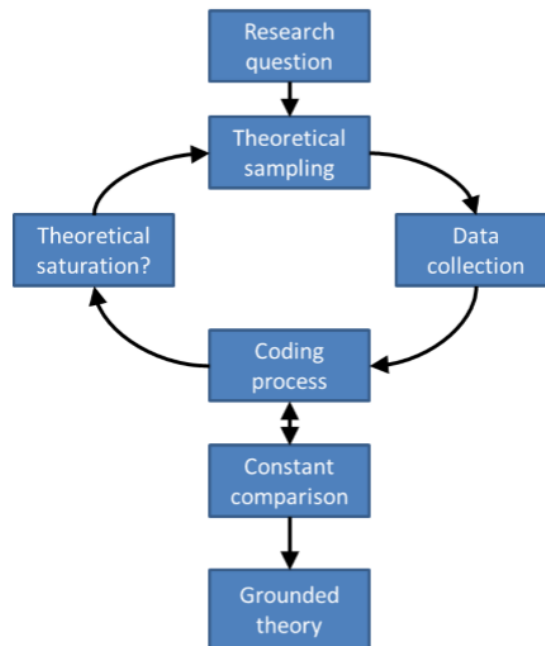


Figure 1. Construction steps of grounded theory

Sampling and data collection

As shown in Figure 1, sampling should be fulfilled to collect data. The sampling method is one particular feature of grounded theory, known as theoretical sampling, in which the initial data battery is initiated by a relatively random group, which have experienced the studied phenomenon to develop concepts and are used to generate further data to confirm or reject the main categories and ultimately the creation of the theory (Charmaz, 1990). In the present study, a purposeful sampling method, namely theoretical sampling and Snowball were used. To this end, by using the theoretical sampling method, several faculty members, experienced in entrepreneurship and specialized in agriculture and natural resources in Higher education in the cities of Ahvaz, Mollasani, Tehran, Hamedan, Kermanshah, Zanjan, Ilam, Lorestan, Gorgan, Sari, Kurdistan, and Tabriz were identified. Using the snowball method, the interviewed subjects were asked to introduce the same other people in the same situation. The included people were also received in-depth interview face to face and through open questionnaires. Accordingly, the statistical population of the study consists of 37 faculty members with the stated conditions.

Data collection was done using a semi-structured In-depth Individual Interview and, an open-ended questionnaire. In-depth interviews were conducted face to face, that started with simple and in-depth questions and went into more detailed questions, with each interview lasted an average of 40 minutes. In the open and semi-structured questionnaires, participants were asked to transmit the answers to the virtual address of the research group. The data collection period lasted 52 days. The analysis of the collected data was done in the form of common grounded theory encodings.

Coding process

In this research approach, to develop the evolving theory, the researcher collects, codes, analyzes and decides collectively what data to collect and where to find them (Glaser and Strauss, 1967).

The main process, in the grounded theory method, as a data analysis method, is the coding and categorizing raw data (Corbin and Cisneros-Puebla, 2007). The extraction of the main concepts and categories and the relationships between them is achieved within the framework of a researcher-made theory, which will take into account the situation and the position of the research. Accordingly, in order to analyze the data in the grounded theory method, three open, axial and selective coding methods are used (Strauss and Corbin, 1990). In open coding, the categories and sub-categories are identified with respect to their dimensions, and initial categorization took place by labeling concepts and accidents. The next step, axial coding, focuses on the relationships between categories and subcategories, including conditions, cause-and-effect relationships, and their interactions. Finally, selective coding includes integration of categories and subcategories with a central concept and provide sufficient details of the evolving theory. In summary, the data collection, analysis, and sample selection processes depend on the evolving theory, the extracted concepts, and their characteristics (Bitsch, 2005). The analysis method in this study is corresponding Strauss and Corbin three-step coding. In this three-step non-linear process, the primary data themes were defined. Then the concepts and categories were extracted from them, and in this way conceptual clusters were formed, each belonging to the categories. Finally, the relationship between these categories formed a base and the model was developed to explain the subject. In the first step (open coding), 92 concepts were extracted after a detailed study of several interviews. In the second step (axial coding), to ensure greater accuracy, two steps encode the original concepts extracted from the open source coding step. In the first step, 12 propositions of categories were extracted. In the next step, these 12 categories of the proposition were divided into 5 categories, which considered each of the necessary requirements for the entrepreneurship of agricultural universities and natural resources more abstractedly. Then, in the third step of coding (selective coding), a grounded theory was presented based on the axial categories in the form of a paradigmatic model. These three coding steps are discussed in details in the findings section. The general process of grounded theory, from the sampling, collection, and coding step of data, has been followed up to the model or theory in this study, as shown in Figure 1.

Theoretical saturation

Sampling and data collecting will continue to achieve theoretical saturation. Saturation can be simply defined as data satisfaction. It is when the researcher reaches a point where no new information is obtained from further data. So the general rule for constructing theory is to collect data up to the saturation time of each category. (Glaser and Strauss, 1967). In this research, using the Saturation Index, a sample was taken from the research community. The researcher should keep collecting the data until all the categories reach the saturation. Otherwise, the theory will not be well developed and will not have the proper precision and density (Lawrence and tar, 2013). Accordingly, in conducting this research, interviews, and questionnaires were sent to the subjects of the study until the time of reaching theoretical saturation. In total, from the beginning of the research until the stage of theoretical saturation, the number of samples reached 25.

3. Results and Discussion

Considering that the research endeavors to recognize the entailments of the establishing Entrepreneurial University in agriculture and natural resources in Iran, the findings obtained within three-step coding by Strauss and Corbin (1990) are summarized in Table (1). In this part of the paper, each of these findings is described as an entailment recognized by the team.

Table 1. The results of the coding process

Selective coding	Axial coding	Open coding
Motivational-Educational	Teaching-Learning Process	- Academic Membership entailments - Student-related entailments - Teaching methods
	Entrepreneurship Facility and Incentives	- University Activities to Improve Student Entrepreneurship - Student Business Facility
	Changes in Educational Planning System	- Changes in Educational Planning System
	Cultural-Communication	- Cultural entailments - Communication entailments
grounded institutional	Institutional changes	- institutional changes at university level - institutional changes at the ministry level
	Policy-making Legislation	- Strategies and Policies at a grand Level - Policy-making and legislation at the agricultural sector level

92 conceptual propositions

As Table (1) shows, the findings were grouped in a hierarchy of coding in a grounded theory in the form of two categories of subject, each of which analyzes an aspect of the entailments of creating an entrepreneurial university of agriculture and natural resources in the country. Proposals for each category of well-known entailments are provided:

1. Motivational-Educational Entailments: It refers to essential components in the educational and incentive processes of the university to motivate entrepreneurial activities and includes three sub-categories of teaching-learning, facilities, and incentives for entrepreneurship and changes in the educational planning system.

1.1 Teaching-Learning: Those are the necessities that should be considered in the teaching-learning process and should be subject to modification and review; this category includes the requirements for faculty members, students, and teaching methods (Table, 2).

The following activities are suggested for teaching-learning entailments:

- Creating knowledge and developing the skills of faculty members in the project management as one of the most important principles of entrepreneurial activity, the introduction of teachers with innovative, creative teaching methods (Brainstorming, Discussion, etc.) and empowering them to teach entrepreneurship through meetings, workshops and training classes in an effective way, and also, use successful and competent entrepreneurs in teaching;

- Introducing instructors to entrepreneurship and business skills in its true sense, and strengthening or connecting faculty members and private sectors related to their expertise;

- Using successful managers of manufacturing companies and successful entrepreneurs to present more relevant, practical courses, to motivate students and improve faculty members' communication with outside academics;

- Familiarizing students with entrepreneurship and its mechanism and creating the necessary space for entrepreneurial activities, through establishing a coherent and coordinated relationship among students with different education levels and disciplines to exchange entrepreneurial experiences and encourage team activities, considering the interconnected nature of agricultural trends

1.2 Facilities and incentives for entrepreneurship: It refers to cases in which the university encourages students to engage in entrepreneurial activities through their educational and supra-educational activities or through financial support. It includes two categories of business facilities and university activities to improve the student entrepreneurship morale (Table, 3).

Table 2. Teaching –Learning entailments

Selective coding	Axial coding	Open coding
Motivational-Educational Entailments	Student-related entailments	<ul style="list-style-type: none"> - Teaching students about the skills and principles of entrepreneurship and business, - Using virtual tutorials for entrepreneurship education, - Leading theses and dissertations to solve problems and developing entrepreneurship, - To provide the facilities of knowledge-based agricultural companies for the internship of students, - Integration of entrepreneurship in specialized courses in all disciplines.
	Entailments related to faculty members	<ul style="list-style-type: none"> - Training faculty members on the principles of entrepreneurship and business (knowledge, insight, and skills); - The key role of faculty members in implementing entrepreneurship education programs, - Using entrepreneurial instructors with entrepreneurial characteristics in entrepreneurship education, - The existence of public teaching skills and effective entrepreneurial teaching skills in faculty members involved in entrepreneurship education, - Changing the role of faculty members from knowledge transferring to mentor, guide, and facilitator.
	Entailments related to teaching methods	<ul style="list-style-type: none"> - Continuous monitoring of internship and training courses, - The use of entrepreneurs in the teaching process, - Presenting documentary and real films about the behavior of entrepreneurs, - Using pragmatic and inclusive teaching methods, - Using the Case Study Method.

Table 3. Entailments of Entrepreneurship Facility and Incentives

Selective coding	Axial coding	Open coding
	Entailments for providing student business facilities	<ul style="list-style-type: none"> - Granting facilities to universities cooperatives - Formation of production cooperatives in colleges and admission of students, on condition of the proposal of a production project, - The welcome and support of student ideas up to the stage of production, - Facilitating skilled graduates
Motivational-Educational Entailments	University activities to improve students' entrepreneurship morale	<ul style="list-style-type: none"> - Holding workshops and seminars by entrepreneurs and taking advantage of them to manage and direct production projects, - Revisiting successful entrepreneurship centers by students and faculty members, - Entrepreneurship superconducting activities such as attending design contests, lectures and business competitions, - Practical participation of students in production and cost-guaranteeing, in order to increase their sense of responsibility and risk, -The need for entrepreneurs and experts in manufacturing affairs at universities.

The following activities are proposed in this regard:

- Supporting graduates by providing agricultural land, gardens, fish ponds, poultry, livestock, lending, financial facilities, etc. to motivate them to participate in productive and entrepreneurial activities;
- Allocation of resources (financial, laboratory, institutional and human) and more time to the required operational training of all trends in agriculture and natural resources, and the need to emphasize the enrichment of these trainings by motivating and encouraging students and faculty members (Sales of training products, contracting, and the award of some facilities such as space, land, etc., to the instructors and top students of these classes) and so on.

1.3 Changes in the Educational Planning System: It refers to the changes and reforms demanded in the educational planning system to create an entrepreneurial university of agriculture and natural resources

The Ministry of Science, Research and Technology should clearly outline how to integrate and institutionalize entrepreneurship education in other disciplines in an Action Plan and turn the educational system from bureaucratic to flexible (Table, 4).

Table 4. The entailments of changes in the educational planning system

Selective coding	Axial coding	Open coding
Motivational- Educational Entailments	Changes in the Educational Planning System	<ul style="list-style-type: none"> - A major revision of curriculum and the development of new entrepreneurial education schedules using new knowledge and skills, - Determine how to institutionalize entrepreneurship education at all levels of education and provide an Action Plan by the ministry, - Increase experience from failed activities to institutionalize entrepreneurial education in some universities, - Having a flexible and non-bureaucratic educational system; - To form a committee of entrepreneurship education professionals to examine the weaknesses and strengths of the current situation in the universities, - Requesting a within the system solution using existing capabilities.

In this regard, categories of actions are proposed as follows:

- Causing fundamental changes to the curriculum framework, such as providing entrepreneurship lessons (creativity, teamwork, production unit management, virtual business) and creating psychological entrepreneurial capabilities, self-employment skills, and self-financing skills in graduating students to move towards the creation of an entrepreneurial educational planning system through reforming and revising a single and a half-year system, because this system is not compatible with entrepreneurial education; due to the non-flexible educational programs in terms of time and place and the lack of suitable space for the engagement of faculty members and students in productive activities.

- Including courses on entrepreneurship ethics and fair business - keeping the interests of the community and its values - and green and sustainable entrepreneurship in business entrepreneurship course categories.

2. Grounded institutional: Refers to policies, communications or administrative changes that should be created and implemented at university, ministry or country level in order to create an entrepreneurial university of agriculture and natural resources; and include three sub-categories of cultural-communication, institutional change and policy making-legislation.

2.1 Cultural-communication: As said, cultural activities, the promotion of entrepreneurial culture and, finally, the creation of an entrepreneurial attitude and atmosphere in faculty members are among the main domains to build an entrepreneurial university. Additionally, the establishment of an entrepreneurial university is a requirement for communicating with related private organizations and institutions outside the university and employing successful entrepreneurs. This category is comprised of two sub-categories of culture and communication Entailments.

Table 5. cultural-communication entailments

Selective coding	Axial coding	Open coding
	Cultural entailments	<ul style="list-style-type: none"> - Promoting the importance of entrepreneurship and business in society and reforming society's attitude toward it. - Explaining and promoting the foundations of entrepreneurship, - Changing the culture of managers, faculty members, students, - Distribution of publications to develop entrepreneurship culture, - Broadcasting videos from domestic and foreign successful entrepreneurship centers.
	Communication entailments	<ul style="list-style-type: none"> - Establish mechanisms for interaction between the university and the provincial executive and administrative institutions, - Connecting the administrative system of the university with government agencies such as the Ministries of Agriculture, industry and also the private sector, - Establishing a cooperating mechanism between the agricultural sector (private and public) with the university, - Institutionalizing the concept of Triple Helix and promoting it with the participation of the Ministry of Science, Research and Technology, - Establishing a coherent relationship between the ministry of science with the Ministries of Education, Industry, Mine and Trade, Labor and Economics, and Provide a coherent and binding framework. - Regular communication with the production centers and farmers and agricultural conversion centers, - Regular and constant communication with successful agricultural entrepreneurs, - Establishing a strong relationship between faculty members and students with organizations associated with agriculture and natural resources, fisheries, and so on.

The following suggestions are presented regarding cultural and communication entailments:

- Culture-building and encouraging the prioritization of entrepreneurship education and activities for all managers at different levels of the university, faculty and educational groups in practice;
- Creating a culture of entrepreneurship among the academic community and other stakeholders in the field of agriculture and natural resources, regular communication and collective work to build confidence, eliminate pessimism, and create a positive attitude between the university and community;
- Establishing a link between the universities, the pre-incubators, the incubators, the science and technology parks, and, finally, the establishment of a job-related vocational counseling center for the agricultural sector at the university;
- University collaboration to develop educational and promotional guidelines on entrepreneurship for use in high school to promote entrepreneurship by the Ministry of Education;

2. 2 Institutional changes: refers to structural changes and strategies that the ministry and university need to set up for the entrepreneurial university of agriculture and natural resources, which includes two sub-categories of the university- and ministry- level changes.

Proposals for university-level changes:

- To create, extend, integrate and update the Management Information System (M.I.S) at all university levels;
- To develop an Entrepreneurial Science Association, or the Student Entrepreneurship Center, aimed at the promotion of entrepreneurship culture, especially through extra-curricular activities;
- Designing and implementing an organizational model and non-bureaucratic management style consistent with the entrepreneurial university;
- To build the required infrastructure and combine them into the university organizational chart, such as:
 - To establish an Intellectual Property Office
 - To start a social service office,
 - To build Science and Technology Park,
 - To establish an Idea Bank. Actualizing this offer requires a review and update in the terms and conditions for the preservation and protection of intellectual achievements;

Table 6. The entailments of institutional changes

Selective coding	Axial coding	Open coding
Grounded institutional	Entailments for university level changes	<ul style="list-style-type: none"> - Strengthening the place of entrepreneurship in the university's functional and structural system. - The formation of incubator units and science and technology park in the university or at the level of the city, province, etc., with the supervision and administration of the university - To use the successful experiences of international and regional universities - Modifying the deterrent rules and regulations in the establishing an entrepreneurial university, - Training entrepreneurship basics to handlers in the creation of a third-generation university, - Changing the current structure to move toward an entrepreneurial university, - Development of knowledge-based companies in the academic and non-academic sectors, - Providing competitive conditions for agricultural fields, - Identifying and evaluating different strategies to push universities to entrepreneurial universities, - Form a strategic plan for the development of an entrepreneurial university and carry out activities in agreement with supervision, - Converts the top-down relationship between ministries and universities to win-win relations.
	Required changes at the ministry level	

Table 7. Policymaking-Legislation entailments

Selected coding	Axial coding	Open coding
Grounded institutional	Agricultural policy and legislation	<ul style="list-style-type: none"> - The prosperity of the labor market and agricultural activities, - Establishing appropriate supportive policies for activists and professionals in the agricultural sector, - Decentralization of higher education and the change of universities into task-oriented ones, - Providing facilitating and directional laws and regulations to integrate entrepreneurship education in the higher education system, - Allocation of funds to enhance the Entrepreneurial Universities, - Assignment of Agricultural Research Centers to Entrepreneurial Universities, - The evolution of the faculty members' payment system, with emphasis on entrepreneurship, - Establishing an academic network nationwide.
	Country's grand strategy	<ul style="list-style-type: none"> -Discontinuance of unprofitable, rentier, and opportunistic pseudo-state institutions from financial, natural and provincial sources. - Enhancing the flexibility of the country's bureaucratic system in the field of business startups, - Explain, categorize and prioritize agricultural problems nationwide, - Explaining professionals about the necessity and importance of the issue - Focusing on Knowledge-Based Economies, - Dividing Iranian universities into national, regional and local levels with different functions - Consolidating agriculture higher education, - Promoting the status of the agricultural sector - The scientific building of agriculture environments from the ministry to production and management institutes in the agriculture sector.

Proposals for the ministry-level Changes:

- To open a specific office to establish the engineering and the technical and vocational system at the university;
- To Form a committee, entitled «council of graduate annual meeting», to monitor the graduates' condition, particularly in terms of employment, and also to exchange graduate experience, track their occupational career and occupational pathology;

2.3 Policymaking-Legislation: It refers to the rules and policies that should be put in place at the national level and in the agricultural sector (higher education and agricultural labor market). Proper policy-making will promote the standing of agriculture and facilitate entrepreneurial activities in this sector. It includes two sub-categories: agricultural policymaking and legislation and macro national strategies (Table 7).

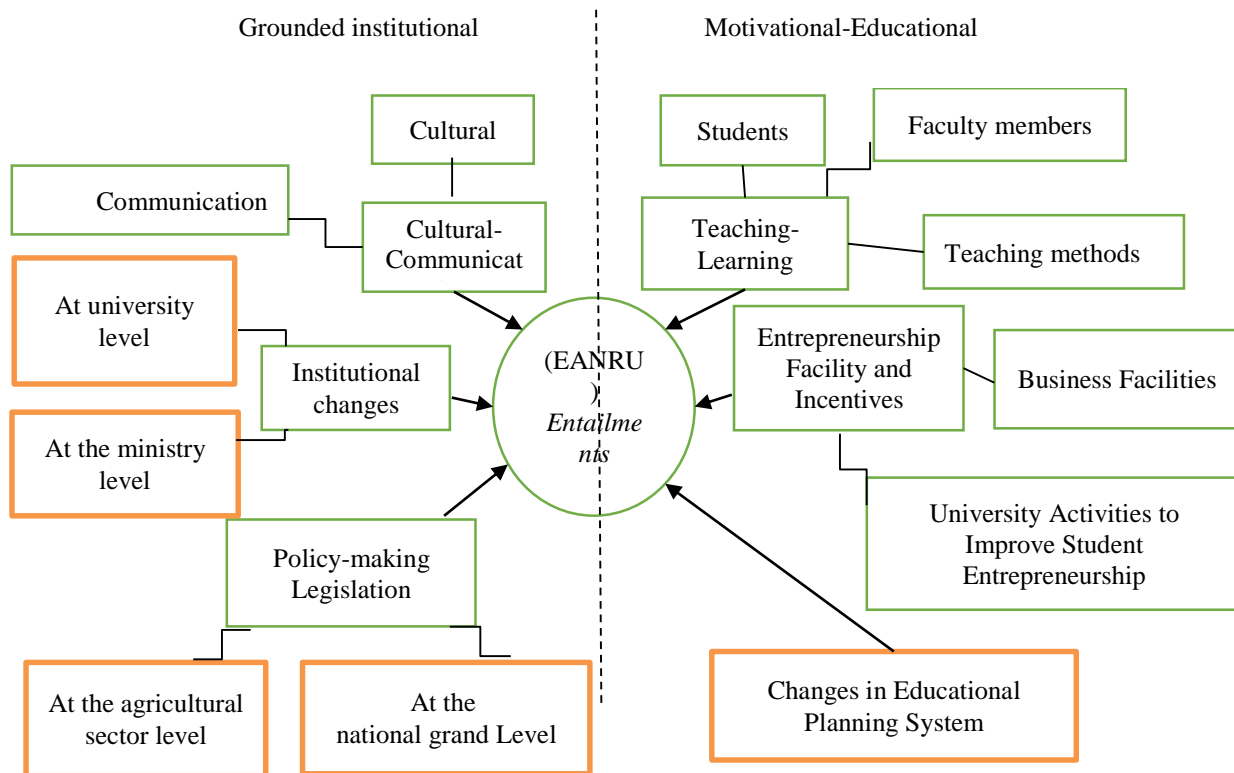


Figure 2. The Conceptual Model of Entailments for the Establishment of an Entrepreneurial University of Agriculture and Natural Resources in Iran

4. Conclusion and Recommendation

Entrepreneurial universities are the motors of the regional social and economic development. In addition to fulfilling their traditional duties of teaching and research, entrepreneurial universities carry out their tasks in conjunction with the community, to specifically focus on their new responsibilities, namely entrepreneurship, placing it at the heart of all their activities. Therefore, it is necessary to have a specific and distinct structure compared to other universities in the field of educational and research processes. Also, in Iran, universities are research-oriented, often dominated by government agencies. Therefore, to realize entrepreneurial universities, in addition, to change the structure of the current Iranian universities, there is a need for legislation, policy, and cultural support at national- and regional levels. The high unemployment rate of agricultural graduates has made it essential to transform the structure of agricultural universities.

According to the research findings, in addition to the problems considered in the theoretical foundations for the introduction of the structure of entrepreneurship universities, there are such entailments as changes in the educational planning system, institutional changes at both levels of the university and the ministry, and the provision of facilities

and entrepreneurial incentives in the two areas of creating business facilities for students and enhancing university activities are essential in improving student entrepreneurship ability to build Iranian Entrepreneurial agricultural and Natural Resources Universities. The findings suggest that special attention to policy and legislation in the field of education and operation in the agricultural sector is very necessary.

Recommendations

- Setting up an intellectual property office.
- Setting up Idea Bank.
- Forming a scientific entrepreneurship association or student entrepreneurship center in order to create an entrepreneurial culture in the university.
- Rectifying amendments and regulations that avert the creation of an entrepreneurial university.
- The formation of incubator units for students to gain business experience by supporting the university.
- Consistent and continuous communication of the University of Agriculture with leading farmers and production units around the university.
- Changing the culture of academic managers through holding educational workshops, seminars and in-service courses in the field of academic entrepreneurship.
- Guiding thesis to solve problems and develop entrepreneurship.
- Making fundamental changes in the curriculum planning system of the agricultural field, such as changing the unit system to a project system.
- Visiting successful agricultural entrepreneurship centers by students and faculty members.

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