

Full Length Research Paper

Agricultural production cooperatives, entrepreneurship and education in Iran

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Accepted 5 January 2012

Training is one of the components affecting the human resource development in a society. It is an effective component for developing entrepreneurship in agricultural production cooperatives. This study purpose is evaluating and classifying the needed trainings in agricultural production cooperatives to develop entrepreneurship. This study is descriptive and applicatory. Statistical population included 492 managing directors of active agricultural production cooperatives of Khuzestan province, of which 101 cooperatives were selected by sampling. Questionnaire was the data collection instrument, which its validity and reliability were proved using a panel of experts and Cornbach's alpha coefficient (0.82), respectively. Results show that five factors groups clarify about 83.99 of the training needed for the development of entrepreneurship in the Khuzestan agricultural cooperatives. These factors include Regulation training (23.42%), risk management training (21.46%), creativity training (18.57%), marketing training (12.83%), training for registering ideas, and moral ownership (7.68%).

Key words: Training, entrepreneurship, agricultural production cooperative.

INTRODUCTION

Rapid growth of the world's population coupled with rising unemployment has contributed to a large gap among different income groups, and an increase in socioeconomic problems. Moreover, lack of business opportunities and insufficient income among rural areas have encouraged developing countries to consider new strategies such as creating job opportunities and enhancing rural livelihood. To meet this challenge, entrepreneurship strategy as a new paradigm has been proposed by many countries. This approach has also attracted numerous experts in diverse fields such as economics, sociology and psychology (Papzan et al., 2008).

Various studies have shown that one of the most important economical development objectives (whether in cities or villages) is employment, and most important mechanism and tool of it is the entrepreneurship.

Entrepreneurship reduces unemployment, increases the people's productivity, resource, and the community's income. Entrepreneurship requires a particular culture, which is very difficult to grow, and requires a long-term effort. Ability of understanding the changes and discovering the opportunities, participation and teamwork, creativity, spirit of independence and responsibility, risk and jeopardizing are all the constructive elements of this culture, which are not achieved by short-term, and task force plans. Best strategy for developing entrepreneurial culture in rural areas is improving entrepreneurial education through various promotional and training programs (Lashgarara et al., 2011).

Winn (1998) believes that entrepreneurship training brings up entrepreneurs by increasing knowledge about the labor market, increasing the psychological characteristics such as self-confidence, self-esteem, and

self-efficacy. Jones and English (2004) in their studies found that there is a significant relationship between entrepreneurial training, self-confidence, and the skills of individuals in recognizing the business opportunities.

About the role and influence of training in the development, there are some necessary notes:

1. There is a mutual relationship between training and both society and entrepreneurship development. It means that training, in one hand, is the society's production and yield and, in the other hand and under special conditions, is the main factor of the social changes. From the economical-social development point of view, training is a historical subject related to the developments different strategies and its objectives, contents, methods, and scope are formed by the economical-social development and influence the development process.

2. Apart from other factors and with its important role in the development, entrepreneurship training cannot be so productive. Behavioral changes and evolutions resulted from training, however, can make areas and tendencies leading to the development objectives; but these changes can cause a real development when integrated and combined with non-educational inputs and factors (Jafarzadeh and Bazargan, 2005).

Entrepreneurship is a process of starting a creative venture by spending time, effort, and accepting and facing the risks like financial, psychic and social that result in the monetary as well as personal rewards. According to life cycle approach, entrepreneurial career has nine phases and business education is one of them. If the individual is getting education, encouraging decision making and skills building, then more entrepreneurial capabilities will be produced in individuals, provided such individuals enter family business in childhood (Sindhu et al., 2011).

Entrepreneurship in the 21st Century states that anyone wishing to become an entrepreneur must learn the following”:

1) Identify opportunity: A business opportunity is defined as any venture that can bring a good return on investment within a reasonable period. In order to identify opportunity, created by changes in the environment, the entrepreneur must learn to be at alert and go out of his way to find out how his/her business is doing and how it could be improved upon.

2) Assemble required resources: It is one thing to identify an opportunity, but it is another thing to bring together the resources needed for the business to succeed. These resources include - people, capital, material and information. Of all these resources, the people are considered the most important.

3) Entrepreneurial management: With the opportunity identified and resources mobilized for implementation, the next task is how to manage the business. The choice

of entrepreneurial management style in a small or medium scale enterprise is informed by increased international style of management that focuses on the pursuit of opportunities rather than on minimizing the use of existing asset or resources as in the conventional administrative management (Sotunde et al., 2011).

Problem statement

Based on the necessity of the move on commercial and competitive agriculture based market forces, Iranian farmers must work in a different form than previous one. So, one of the most important Iranian agricultures problems is that how the Iranian agriculture innovatively and creatively change from an “agricultural producer” to an “agricultural entrepreneur” so that it can identify the markets available opportunities and use it properly. Accordingly, what the Iranian agriculture needs is starting a difficult process of structural changes in this sector leading to have an active and effective agricultural market and develop the entrepreneurial activities in the agriculture sector.

Agricultural production cooperatives have capabilities for restructuring in Iran's agricultural sector. In Iran until 2010, nearly 1,046 agricultural production cooperatives in the country's activities, that 4,963 villages have been covered and the number of members they have 278,362 people (Table 1).

Agricultural production cooperatives are one of the most rural organizations. The results show that the growth rate of production cooperatives in the decade before has increased. Performance and Acreage of major products has increased (Table 2). Therefore, the development of entrepreneurial activities in agricultural production cooperatives is important role in creating employment and production in rural areas.

Therefore, providing appropriate training to members of agricultural production cooperatives can be the starting point of the entrepreneurship development programs. This study purpose is identifying, classifying, and prioritizing the effective methods for entrepreneurship development training in Khuzestan's agricultural production cooperatives.

MATERIAL AND METHODS

This is an applied and non-experimental (descriptive) research. The methodology of this research is survey. Statistical population is 692 Director of agricultural production cooperatives, of which, according to Cochran formula, 101 were selected by proportional stratified sampling. Questionnaire was designed as the main tool of the study; these three parts are the managers personal and professional characteristics, cooperatives' features, and entrepreneurship development training. Sample selection, randomly from each region, was done by multi sectional stratified method suitable with the volume in Ahwaz, Dezful, Behbahan, Ramhormoz, and Abadan according to the geographical location of the city (north, south, east, and west); an appropriate number of managers

Table 1. Status of agricultural production cooperatives in Iran.

Status	2008	2010
Cooperative	1016	1046
Rural coverage	4872	4963
Number of member	272359	276362
The amount of farmland(ha)	2996219	3202791
irrigated land	1631231	1755448.5

Source: agricultural ministry, 2010.

Table 2. Functional indices of agricultural production cooperatives in Iran.

Product type	Cultivation (ha)	Yield (ton/ ha)
Wheat	640581	4.08
Barley	146183	3.43
Corn	71733	7.93
Rice	52387	4.61
sugar beet	152875	32.67
Canola	29202	2.08

Source: agricultural ministry, 2010.

were selected from each city. For measuring the study tools, validity of the questionnaire used panel of experts, and a primary-test that involved completing 30 questionnaires for measuring reliability was done and the Cronbach alpha coefficient was 80%. In this study, descriptive and inferential statistics were calculated and reviewed. The data were analyzed through SPSS version11.5 software.

RESULTS

Personal characteristics

Evaluating the personal characteristics showed, 92.1% of. Respondents were male and 95% were married. Age evaluation of respondents also indicated that the average age was about 40.8, which the most frequent ages were 30 to 40 (55.4%). Respondents work record evaluation indicates that the average year of work in cooperatives is 8.24 years; the most frequent is below 5 years. The income average of respondents is 412.96 dollar monthly; the most frequent is below 400 dollar. The total income average of individuals is 495.46 dollar; the most frequents are 400 to 500 dollar (Table3).

Cooperatives characteristics

80.2% of the studied cooperatives were Co-production of crops, 5.9% Pisciculture cooperative, 4% were fattening cooperative, and 3% were distributing cooperative. A member evaluation indicated that the average number of

cooperative members is 423, minimum 6 and maximum 2500 members; the most frequent numbers are 100 to 300 (36.6%) (Table 4).

Cooperatives, according to the date of establishment, are classified into 4 classes. Most of them have been established from 1997 to 2006 (49.5%) and only 11 cooperatives have been established during the last five years.

Entrepreneurship training

Results show that training the ways to use the bank facilities is the priority; further priorities are management skills and management training, familiarity with agriculture products insurance and its related regulations, knowing the business and traditional insurance, and training the skills for starting entrepreneurial businesses. Other priorities are familiarity with the laws and regulations of natural resources exploitation, being introduced to the concepts and methods of the general and partial planning in the production units, and the ICT roles and concepts in the cooperation sector (Table 5). Factor analysis was used for evaluating the features influencing entrepreneurship development training in the agriculture production cooperatives .in this regard and to determine the suitability of data for factor analysis, KMO coefficient and Bartlett test were used. Results show that the KMO coefficient was 0.825 and Bartlett test was significant so data was suitable.

Evaluation of the results indicate that there are five

Table 3. Descriptive evaluation of the respondents' personal characteristics.

Variable		Frequency	Percent	Valid percent	Cumulative percent	Descriptive statistics
Gender	Male	93	92.1	92.1	-	Mode= male
	female	8	7.9	7.9	-	
	Sum	101	100	100		
Age	Below 30	7	6.9	6.9		Mean= 40.8
	30 to 40	56	55.4	55.4	6.9	Mid=39
	40 to 50	27	26.7	26.7	62.4	S.D=7.98
	More than 50	11	10.9	10.9	89.1	Min=28
	Sum	101	100	100	100	Max=60
Experience	Below 5 years	48	47.5	49.5		Mean=8.24
	5 to 10	25	24.8	25.8	49.5	Mid=5.5
	10 to 15	7	6.9	7.2	75.3	S.D = 5.87
	More than 15	17	16.8	17.5	82.5	Min=2
	No answer	4	4	-		Max=20
	sum	101	100	100	100	
Income from the cooperative	Below 400 dollar	35	34.7	59.3		Mean=412.96
	400 to 500 dollar	17	16.8	28.8	59.3	Mid=400
	More than 500 dollar	7	6.9	11.9	88.1	S.D=96.26
	No answer	42	41.6	-		Min=300
	sum	101	100	100	100	Max=600
Income per month	Below 400 dollar	20	19.8	30.8	30.8	Mean=495.46
	400 to 500 dollar	28	27.7	43.1	73.8	Mid=450
	More than 500 dollar	17	16.8	62.2		S.D=158.49
	No answer	36	35.6	-		Min=300
	sum	101	100	100	100	Max=1000

factors determining about 83.99% of the variance related to factors influencing the entrepreneurship training in the agriculture production cooperatives of Khuzestan (Table 6).

The first factor named established cooperative Regulations training with a 5.62 Eigen value, which points up about 23.42% of the effective

factors. This factor points out that instructing the regulations of cooperative legal, Rules and standards of export, Familiarity with laws and regulations of natural resources' exploitation, and the cooperatives' concepts are essential to develop the entrepreneurship in the agriculture production cooperatives. One of the barriers of

entrepreneurship development is the members and managers' lack of knowledge about the regulations of cooperatives, entrepreneurship, and supports so training programs should be planned

Table 4. Descriptive evaluation of cooperatives characteristics.

Variable	Frequency	Percent	Valid percent	Cumulative percent	Descriptive statistics	
Kind of cooperative	Co-production of crops	81	80.2	80.6	-	Mode= Co-production of crops
	Service cooperative	4	4	4.2	-	
	Fattening cooperative	3	3	3.2	-	
	Pisciculture cooperative	6	5.9	6	-	
	Rural cooperative	1	1	1.1	-	
	Distributive cooperative	4	4	1.5	-	
	No answer	2	2	-	-	
Sum	101	100	100	-		
Number of members	Below 100	36	35.6	38.7		Mean=423.66
	100 to 300	34	33.7	36.6	38.7	Med=157
	300 to 500	7	6.9	7.5	75.3	S. 24.5
	More than 500	16	15.8	17.2	82.8	Min=6D =7
	No answer	8	7.9	-	-	Max=2500
	Sum	101	100	100	100	
Year of establishment	Before 1979	18	17.8	19.4		
	1980 to 1996	18	17.8	19.4	19.4	
	1997 to 2006	46	45.5	49.5	38.7	
	After 2006	11	10.9	11.8	88.2	
	No answer	8	7.9	-	-	
Sum	101	100	100	100		

to explain these regulations.

The second factor entitled risk management training determines 21.46% of the effective factors with a 5.15 Eigen value. Therefore, training the risk management, production insurance, variety of business insurance, and risk management concepts and strategies is essential so that production cooperatives, more easily, would accept and produce their innovations.

The third factor named creativity training determines about 18.57% of the variance related to the factors. Lack of creativity in the agriculture production cooperative is one of barriers for the

entrepreneurial development so training to develop creative ideas is necessary.

The fourth factor entitled marketing training determines about 12.83% of factors` variance. It points out the cooperatives` weakness in marketing the agricultural production which has weaken the financial foundation and the cooperatives` risk taking power .So, agricultural production marketing training is necessary.

The fifth factor named idea registration and intellectual property factor determines about 7.68% of the effective factor .It points out the problems related to the innovation and invention

registration which the cooperatives are not familiar with. Therefore, knowing the invention registration process and the intellectual property are progressing factors for developing the entrepreneurship in cooperatives (Table 7).

DISCUSSION AND SUGGESTION

Although entrepreneurship in the agriculture

Table 5. Respondent's distribution based on the entrepreneurship development training in cooperation.

Items	Mean	Sd	CV	Rank
Methods of using the bank facilities	4.2	0.87	0.209	1
Management skills and entrepreneurial businesses training	3.9	0.86	0.225	2
Familiarity with agricultural products insurance and related laws	3.8	0.90	0.235	3
Familiarity with a variety of businesses and profession insurance	3.7	0.90	0.241	4
Training skills for starting entrepreneurial businesses	3.6	0.91	0.250	5
Training laws and standards of production and supply of products and services	3.8	0.95	0.251	6
Introduction to the stock market of agricultural products	3.5	0.88	0.253	7
Health and safety principles in production and supply products	3.2	0.81	0.255	8
Training companies and economic institutions` legal issues	3.7	0.98	0.256	9
Training concepts and principles of products marketing and market updating	4	1.06	0.257	10
Familiarity with the concepts and types of budgeting methods and techniques	3.4	0.97	0.258	11
Familiarity with international organizations and non-governmental organizations	3.1	0.88	0.286	12
Network communication of producers and suppliers of products and services	3.4	0.97	0.287	13
Rules and standards of export	3.5	1.03	0.291	14
Problem finding and decision methods training	3.8	1.1	0.293	15
Familiarity with technology producer enterprises	3.2	0.96	0.303	16
Familiarity with the process of localization of research results	3.3	1.01	0.306	17
Familiarity with the rights of producers, consumers and distributors of products	3.3	1.02	0.307	18
Training the commissioning and management of company issues	3.8	1.18	0.310	19
Familiarity with entrepreneurial educational organizations and counseling centers	3.6	1.12	0.314	20
New economical concepts (globalization, international trade and ...)	3.2	1.05	0.328	21
Principles, concepts ,and strategies for risk management	3.4	1.15	0.335	22
Creativity and innovation development training	3.4	1.16	0.341	23
Familiarity with the concepts and principles of cooperation and cooperatives laws	3.6	1.26	0.348	24.5
Familiarity with the concepts of project writing and business planning	3.6	1.25	0.348	24.5
Familiarity with the rules of privatization	3.5	1.22	0.360	26
Training the familiarity with various stages of private companies, cooperatives	2.8	1.01	0.366	27
Familiarity with the hierarchy and structure of the ministry of cooperation	3	1.13	0.374	28
Familiarity with the concepts and functions of ICT in the cooperative	3.2	1.27	0.391	29
Familiarity with general and partial programming concepts and techniques	3.2	1.26	0.393	30
Familiarity with laws and regulations of the exploitation of natural resources	3.1	1.24	0.396	31
Familiarity with activities of research centers and institutions	2.9	1.26	0.438	32

Table 6. extracted factors with Eigen value, variance percent and cumulative variance percent.

Factors ^l	Eigen value	Variance percent	Cumulative variance
1st	5.62	23.42	23.42
2nd	5.15	21.46	44.89
3rd	4.45	18.57	63.47
4th	3.08	12.83	76.31
5th	1.84	7.68	83.99

production cooperative, according to its nature and basics, is not different from ones in the metropolitan areas or all other economical sectors, inputs needed for developing entrepreneurship such as capital, management, training, technology, institutions and

organizations, transportation infrastructures, market accessibility, distribution network, and skilled labor, more effortlessly, can be found in the metropolitan areas. Therefore, as long as there is entrepreneurship development problems in the metropolitan areas, there is

Table 7. Variables related to each coefficient, coefficient rate gained through rotational matrix.

Factor	Items	Coefficient rate
Established cooperative regulations training	Training commissioning and managing a company's legal issues	0.779
	Rules and standards of export	0.682
	Familiarity with laws and regulations of natural resources` exploitation	0.711
	Familiarity with the concepts and principles of cooperation and cooperatives` laws	0.776
Risk management training	Familiarity with agricultural products` insurance and related laws	0.676
	Familiarity with a variety of professions and businesses` insurance	0.721
	Principles, concepts and strategies for risk management	0.825
	Network communication of producers and suppliers of products and services	0.793
	Ways to use the banking facilities	0.790
Creativity training	Training the Problem finding and decision methods	0.853
	Training ways for developing creativity and innovation	0.733
	Training the Management skills and entrepreneurial businesses administration	0.907
Marketing training	Training concepts and principles of products marketing and market updating	0.815
idea registration and intellectual property	Training the familiarity with the idea registration process and intellectual property	0.919

more in the rural and agricultural ones.

It is clear that there are not enough supports and strategies for developing the cooperatives and entrepreneurship but, because of the lack of knowledge about these regulations and laws, agriculture production cooperatives were successful in the entrepreneurship development. It should be considered that entrepreneurship, through training, cannot be motivated rapidly in the agriculture production cooperatives and we have lost much time in this field. If, today, all conditions for the entrepreneurship development are ready, the effect would be appeared in a long-term period so, in short- term, activities to form appropriate structures for developing the entrepreneurship in the agriculture production cooperatives can be constructive. The results of this study are in accordance with the study results

of Bahrami and Zamani (2006), Boroumandnasab (2002) and Karimi et al. (2006).

Agriculture production cooperatives have a weak economical basis which is related to the rural economical basis weakness. Therefore, farmers are weak in taking risks doubting them to face the innovation and, finally, they reject it. Training the Insurance regulation for entrepreneurial projects` investment, risk management strategies, banking and insurance networks for supporting the entrepreneurs in the production cooperatives, in a medium –term period, can solve some of the entrepreneurship development problems. The results of this study are in accordance with the study results of Jafarzadeh and Bazargan (2005), Papzan et al. (2008), Jelodar et al. (2007).

Other factors affecting the development of entrepreneurship training are marketing trainings, which, due to the weakness of the marketing system in agriculture products, need more attention. Marketing training should be in the fields of information and production statistics, supply, demand, exports, distribution channels, market research, and registration training in order to maintain the intellectual rights of people, since achieving these changes may need a long time.

In this regard, it is suggested that educational preparations adopted in training packages for entrepreneurial skills training to enhance directs agricultural cooperatives about these cases and the entrepreneurial skills training centers should be developed too. For training the directors, the

required infrastructures should be strengthened to equip the entrepreneurial training centers. And government should invest in entrepreneurial training projects. Suggestions which prepared these changes to be observable in entrepreneurship training in agricultural production cooperatives are:

1. Designing appropriate policies and programs to develop the content, methods, and cooperation-learning environment in entrepreneurial training.
2. Designing programs to develop entrepreneurial skills and characteristics in the cooperatives educated members.
3. Creating the entrepreneurial culture in the cooperative environment by managing directors and board members.
4. Changing the members viewpoint from governmental support to the utilization of cooperatives ability to improve the life conditions.
5. Bilateral relationship between the university and research and cooperation; cooperation incubators configuration is suggested.
6. Moral and financial support for members by the cooperative to conduct and assess the projects innovatively and creatively.
7. Organizing workshops, festivals and seminars for entrepreneurs to be familiar with cooperatives entrepreneurship issues by the Ministry of Cooperation; it should be member centered, regional, and organized in the cities.
8. Publishing brochures, magazines, pamphlets, and videos about cooperatives entrepreneurship.
9. Entrepreneurship has both theoretical and practical dimensions. So, entrepreneurship training should cover the cognitive, emotional, and mental - moving domains, and should not be limited to the cognitive domain.
10. Developing detailed research about the cooperatives entrepreneurship training and other related fields according to the conditions and requirements of Iran.

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