

Iranian Agricultural Graduates and Agri-Business Ventures

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Abstract: Unemployment is a major problem of both developing and developed countries. Recently we can see increasingly growth of agricultural students in Iran. Thus, Iranian agricultural graduates dealing with unemployment. Iran's public agricultural extension organization cannot deliver sufficient service to every single client in the country therefore; ministry of agriculture has decided to transform agricultural extension delivery system to supplement the efforts of the government extension system in making available inputs and services to the farmers and to provide gainful employment to the agricultural graduates. This paper presents work to examine factors affecting agri-business ventures to provide opportunities for self employment to agricultural graduates, as one of results of establishing new extension system. A survey study conducted among agri-business ventures consultants. To do so, a questionnaire was designed. The study found that there was statistically significant relationship between current governance structure and capacity, management and organization and advisory methods with meeting scheme aim.

Key words: Agri-business ventures % Employment % Contract extension system % Zanjan province % Iran

INTRODUCTION

The unemployment problem is not only confined to developing countries. A stark example is Italy, a member of the Group of Seven largest economies: In 1998 over 30% of the 20-24 age group was unemployed in Italy. This indicates that the youth unemployment situation can exist in both developing and developed countries, but is considerably worse in the former regions of the world [1]. More young people are about to enter the labor market worldwide than ever before in history. Between now and 2010, 700 million young people will enter the labor force in developing countries (more than the entire labor force of the developed countries in 1990). The International Labor Organization projects more than a billion jobs will need to be created to accommodate these new workers and reduce unemployment [2]. In Iran, youth (15-29 years old) account for 70 % of the population of more than 66 million. An average of about 760,000 persons will enter the Iranian job market each year [3]. Iran's official unemployment rate is 15% [4].

Trends and attitudes of agricultural students at university level have undergone major changes over the past decades in Iran. In spite of disinterest of students for enrollment to higher agricultural fields in

past decades [5] recently we can see increasingly growth of these students in Iran [6]. According to recent statistics, there are nearly 43,000 unemployed agricultural graduates [7]. The relative proportion of agricultural graduates finding employment in the public sector in Iran is also shrinking gradually due to the absence of genuine demand for technical education. More jobs should, therefore, be created in the private sector, besides increasing avenues for self employment.

To deal with this problem, Iranian Ministry of Agriculture has stimulated the emergence of private extension agencies in Iran by proposing a "Scheme for financing setting up of agricultural consultancy services private network" in 2006. The increasing the availability of appropriate advice and information to agricultural producers and beneficiaries, providing opportunities for self employment to agricultural graduates (in agriculture and allied activities) and increasing involvement in the planning and implementation of extension activities are of important Scheme aims. The government plans to achieve these aims by providing public funds to service providers on a scaled counterpart contribution basis that foresees the proportions of the farmers' contribution gradually increase. Under this program, Agriclincs and Agribusiness Centers by agriculture graduates were

launched with the support of the Iranian Agricultural Extension organization and Agricultural Engineering System Organization. Essentially, these service providers operate on contractual bases with farmers' organizations. They are firms offering advice or training on agricultural production. These centers provide a package of soil and input testing facilities and other consultancy services. Some necessities to set up this network has been large number of unskilled field level staff for extension work, unemployment of nearly 43,000 agricultural graduates [7] large number of illiterate farmers (80% of Iranian farmers are illiterate or *low-Literate* [7]). Setting up this network was due to this belief that an effective alternative would be to delink certain services from the public sector and allow the private sector to handle those services. Hence, outsourcing strategy of privatization of extension was adopted to promote and support private sector involvement in extension provision. In fact, outsourcing is a way of involving the private sector in an agricultural system that is coordinated and regulated by the public sector. Under this approach, responsibility for extension delivery is contracted out to private extension sector [8].

Reform of governance structures while contracting-out and cost-recovery (fee-for-service provision) have often been introduced together with decentralization and devolution, these two approaches can also be combined with other models. They reflect a broader trend in public-sector service provision, where contracting-out is also referred to as outsourcing [9]. It reflects the idea that the state should play a "facilitating role" rather than engaging itself in delivering frontline services. Rivera and Zijp [10] compiled experiences and emerging practices of a range of industrialized and developing countries with contracting for agricultural extension. In developing countries, contracting-out usually still entails considerable public funding even if the provider is private. Systems that involve contracting of private sector extension agents are also referred to as public-private partnerships (PPPs). This term is also used to refer to systems where a private sector firm and a public sector extension agency decide to jointly finance and/or provide extension services. Government-funded contracts were expected to be gradually reduced as farmers' cost sharing would increase (e.g., in Iran) [9]. Contracting extension is one strategy increasingly being promoted by the World Bank and other donors to expand extension coverage and improve performance and impact [11].

On one hand, Contracting for extension is a useful strategy for public sector extension systems for two reasons. First, the strategies involved tend to promote a

greater number and variety of providers of agricultural extension information and thereby encourage more competition in an area that has been strongly criticized for its ineffectiveness and inefficiencies since the mid-1980s. Second, the strategies of contracting for extension tend to foster cost sharing by end-users and thereby tend to insure more relevance and responsiveness to clients. Rivera and Alex [12] and in the other hand, because contracting for extension is widespread both geographically and across various agricultural interests and as Rivera and Alex [12] concluded " While we find that contracting for extension is a positive development and a vital strategy for the advancement of knowledge transfer in the agricultural domain, we stress that it should not be considered and cannot be, an answer to unresolved management problems or the incapacities within an institution. In short, despite its advantages and benefits, contracting is not a panacea". Little is known about systems for contracting extension. They are generally too new to show evidence of impact on the farming community or service provision. there is a need for empirical evidence of the effectiveness of the new system [11]. Hence, contracting for extension deserves greater in-depth research as to its performance in different locations and environment. This investigation attempts to assess factors affecting effectiveness of mentioned scheme as a kind of contract extension system with regard to ability to provide opportunities for self employment to agricultural graduates (in agriculture and allied activities) and to provide information that could be used to improve upon the program as it covers more provinces.

Purpose and Objectives: The main purpose of this research is to assess factors affecting effectiveness of contract extension system in Zanjan province.

The main objectives were to:

1. The Identification of some important background characteristics of respondents
2. Assess the relationship between contract extension system (agri-business ventures) characteristics and meeting the aim
3. The Identification of background characteristics associated with meeting scheme aim.

METHODS

Case Study: The study was conducted in Zanjan province with nearly one million inhabitants which is located in the northwest of Iran with the Zanjan city being its center.



Fig. 1: Location of the study area in Iran country [Zanjan province (green)]

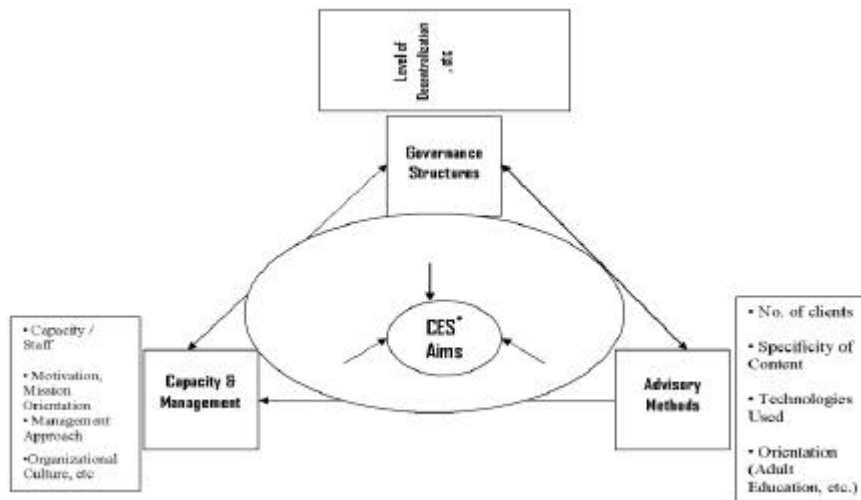


Fig. 2: Study's theoretical framework
*Contract Extension System

The province lies 330 km northwest of the capital, Tehran (Fig. 1). This province with arid - semi arid climatic condition and with average of 360 mm, because of its numerous plains with the surface area of 22164 km² of which agricultural lands exceed of 50% Zanjan province has appropriate capabilities and potentials for agriculture. In the province, Agriculture is the principal occupation and crops include rice, corn, oilseeds, fruits and potatoes. Poultry, cattle and sheep are raised [13]. The province was selected purposively for being the most progressive province with regard to launching contractual extension and as well as there is very economic and agricultural similarities between other country provinces and this province, due to these characteristics, Zanjan province was expected to be very receptive to the new extension system and to provide valuable experiences for provinces with similar conditions as this system spreads across the country. The study was done in all 7 counties of the province_ Abhar, Eejrud, Khodabandeh, Khorramdarreh, Zanjan, Tarom and Mahnesan County.

Selection of Sample: According to Zanjan province agricultural extension organization authorities, there were 95 consultants who were in the 19 agri-business ventures throughout the province. To carry out the study research, all of them surveyed to gather reliable information on the agri-business ventures.

Study's theoretical framework was designed based on literature review in Iran and foreign countries especially a framework proposed by Extension Research Group at IFPRI, (Fig. 2). This framework has recently proposed by this group for learning efficiently about best-fit solutions and supporting a shift from a best practice or one-size-fits-all to a best fit approach in the reform of public advisory services [14]. The framework disentangles the major characteristics of agricultural advisory services: (1) governance structures, (2) capacity, management and organization and (3) advisory methods. Also some major frame conditions are identified that need to be considered when deciding on these characteristics. This framework can be very valuable because as Anderson [9] noted

"While the continuing and evolving need for agricultural advisory services is well established, the challenge is to devise systems for providing and financing these services in a cost-effective and sustainable way that fits country-specific frame conditions", it can help to identify the best appropriate agricultural advisory services characteristics to meet country -specific goals and frame conditions.

As shown in Fig. 2, in this study we assessed the impacts of the current 3 contract extension system (CES) characteristics on meeting the "to provide opportunities for self employment to agricultural graduates (in agriculture and allied activities)" CES aim. In other words, we attempted to identify appropriateness of current CES characteristics to meet this aim.

On the basis of study's theoretical framework a questionnaire was designed. Reliability of this questionnaire was measured by computing of Cronbach's Alpha coefficient, a measure of internal consistency, that this coefficient was 0.89, 0.82, 0.81 and 0.77 for basic skills determining the consultants' capacity, ventures' physical facilities, agreed contract terms between government and ventures and ventures' level of decentralization parts, respectively. Totally these values indicate moderate measure of internal consistency. To evaluate validity of this instrument, questionnaire was assessed by some Tehran university agricultural extension and education department scientific board members and agricultural extension organization authorities' experts. Data were collected through personal structured interviews (face to face interview) with respondents.

Data Analysis: In this study research, descriptive and inferential statistics were used to analyze collected data. Descriptive statistics were included frequency values (mean, standard deviation and so forth) and some inferential statistics were included logistic regression procedures, correlation coefficients calculations. All data were analyzed using the SPSS for Windows, version 11.5.0 and Microsoft Excel.

RESULTS AND DISCUSSION

As shown in Table 1, the overwhelming majority of consultants were young; the highest share of young respondents on one hand, indicates high potential of consultants to carry out their job due to their youthful abilities and on the other hand there will be a concern that they do not have enough experience particularly in practical agriculture to perform their work well. Lack of other occupational opportunities was selected as main

motive behind doing extension work in more than half (53%) of consultants indicating high concern with regard to lack of sufficient interest in agriculture which is very important in agricultural activities due to existence of hard work condition. Only 18% of consultants were female indicating low potential of these ventures to perform advisory services to female farmers. Totally, consultants with enough practical experience in agriculture prior to their current job and In-service training were very low. Finally nearly 40% of consultants' considered their current job as temporary work; this can highly decrease ventures' performance.

As shown in Table 2, there were positive relationship between meeting the second aim and consultants' interest in agricultural activities and in contrast, there was negative relationship between meeting the second aim and consideration work as temporary activity by consultants.

Impacts of Capacity, Management and Organization Characteristic on Meeting the Aim (Providing Opportunities for Self Employment to Agricultural Graduates (In Agriculture and Allied Activities)):

According to findings, ventures with more location fitness to serve their clients had higher possibilities to employ agricultural graduates (to meet the second aim), this can be due to increasing their clients (first aim) and in return they should employ more consultants. Existence of skillful consultants with regard to use ICTs can give this opportunity to ventures to advertize more effectively about their missions, activities and as a result of that they will have higher chance to employ more consultants (as mentioned above, this variable(mastering in ICTs) could influence directly to meet the first aim. Likewise ventures with better initial budget in the establishment time, general and administrative, technical and specialized and training and extension facilities had higher possibilities to employ agricultural graduates. Similar to above findings, existence of consultants with positive attitude toward scheme abilities to benefit the farmers was another effective factor to meet the second aim. And also in cases when consultants had higher awareness of scheme aims and they had higher ability to response to farmers' feed-backs, there were more likely to meet the second aim.

Impacts of Advisory Methods Characteristic on Meeting the Aim: Unsurprisingly, according to the findings, there was negative relationship between use of group-based or mass approaches advisory methods and meeting the aim, indicating the higher use of group-based or mass

Table 1: Summary of some background characteristics of consultants

Variables	Name	Values
Age	Mean	29.85
	SD	2.91
	Max	37.00
	Min	21.00
Your motive behind doing extension work	Lack of other occupational opportunities	52.6%
	Your interest in agricultural activities	47.4%
Job number	one	93.7%
	More	6.3%
Sex	male	82.5%
	female	17.5%
Years of Education	Diploma	2.2%
	Associate degree	9.9%
	Bachelor	82.4%
	Ms.c	5.5%
Practical experience in agriculture before current job(years)	0	20.0%
	0-2.5	51.6%
	2.5-5	22.1%
	More than 5	6.3%
In-service training (Month)	Lower than 6	33.7%
	6-12	58.9%
	Higher than 12	7.4%
Considering your work as(Job Longevity)	Permanent work	63.0%
	temporary work	37.0%

Table 2: The relationship between meeting the scheme aim and some background characteristics of consultants

First variable	Meeting the aim
Having second job	-.136
Your motive behind doing extension work	/.275**
Considering your work as(Job Longevity)	-.207*

*Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed).

Table 3: The relationship between meeting the scheme aim and current CES capacity, management and organization characteristics

Variables	Meeting the aim
Technical agricultural skills	.191
communication skills	.222
management, accounting skills requirements in the administration of advisory services	.195
Awareness of the scheme aims	.334*
making participatory monitoring and evaluation	.241
Ability to use of GIS software	.209
Ability to design programs that support the agricultural and rural development strategy	.147
skill of appropriate responsiveness to feed-back from farmers	.326*
Your professional ethics level	.256
Understanding the principles of adult education	.193
Skill to manage complex relations among a wide set of partners.	.144
Skill to apply management approaches to mainstream gender concerns	.169
Ventures' location fitness to serve clients	.471**
The ability to use of ICTs	.279**
Level of job satisfaction	.275
Initial budget to establish your venture	.299*
Status of General and administrative facilities	.403**
Technical and specialized facilities	.488**
Training and extension facilities	.445**
Will CES improve to benefit your province agricultural sector	.074
Will CES improve to benefit the farmers	.387**
Will CES improve to benefit the consultants	.311

*Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed).

Table 4: The relationship between meeting the scheme aim and current CES advisory methods characteristics

Variables	Meeting the aim
Advisory methods based on number of clientele (individual, group-based, mass approaches)	-.199*
Advisory methods based on Specificity of content (limited to specific crops/livestock or dependent on needs identified by clients in different fields)	.163
Advisory methods based on Types of media used (information and communication technology or ICT, radio, drama, newspaper)	.128
advisory methods based on Involvement of clients in planning and problem-solving ("top-down" methods; participatory methods)	.092

Table 5: The relationship between meeting the scheme aim and current CES governance structures characteristics

Variables	Meeting the aim
The existence of procedures that are clearly defined and documented, with legal contract documents to formalize agreements between parties	.370*
The existence of a detailed "Operation Manual" describing contracting procedures and roles and responsibilities of parties involved; type of people served and geographical area of program coverage	.276
The existence of a contracting process that advertises widely for service providers and provides adequate time and information for potential providers to prepare and submit proposals	.3*
The existence of a clear contract objectives and verifiable monitoring indicators	.479**
To establish competitive prices for contracted services	.181
The existence of strategies to reach disadvantaged groups	.179
Level of integration of terms of reference of the bidding process in such a way that they reinforce each other	.233
Appropriateness of considered tariff on services delivery	.301*
The existence of regulations which promote involvement in important decision makings	.259
The level of authority over advisory methods selection	.343*
The level of authority over appointing consultants.	.181
The level of authority over determining consultants' starting salary	.126
The level of authority over establishing advisory programs evaluation policies	.233

approaches the lower need to employ consultants which is very clear.

Impacts of Governance Structure Characteristic on Meeting the Aim: According to the findings, there were significant relationship between meeting the second aim and the existence of clear contract objectives and verifiable monitoring indicators, procedures that are clearly defined and documented, with legal contract documents to formalize agreements between parties, a contracting process that advertises widely for service providers and provides adequate time and information for potential providers to prepare and submit proposals, appropriateness of considered tariff on services delivery and level of authority over advisory methods selection.

CONCLUSION AND RECOMMENDATIONS

The variety of approaches being tried has certainly advantages over the promotion of a "one-size-fits-all" approach, which has long dominated extension, most notably with the TandV system. Yet it has remained a major question for policy-planners and analysts to identify those types of extension systems that are most appropriate to meet country-specific goals and frame conditions. In other words, understanding of what works well in the diverse circumstances of the developing world is still far from complete and there is thus a clear need for continuing research effort to fill these gaps [9]. This investigation assessed factors affecting effectiveness of the CES or its appropriateness to meet the scheme aim as a new extension system established recently in Iran. There was statistically significant relationship between current governance structure and capacity, management and organization and current advisory methods with meeting scheme aim. According to the on the one hand,

overwhelming majority of consultants were young and on the other hand, they did not sufficient amount of practical experience in agriculture activities, Iranian agriculture ministry should provide in-service training for them. It was revealed that in more than half of the consultants, lack of other occupational opportunities was main motive behind doing extension work (This is what happened in the study conducted by Qamar [15]), thus it is essential to examine carefully consultants' motivation in their appointing time or provide incentives to increase their interest in agriculture. In this research, it was discovered the high contribution of GIS software and ICTs in meeting the scheme aim. So it is recommended providing some educational classes and workshops to introduce them to consultants Ventures with better initial budget in the establishment time, general and administrative, technical and specialized and training and extension facilities had higher possibilities to employ agricultural graduates. So it is recommended ventures' support by the government particularly in establishment time which they are usually weak. According to this findings that ventures' level of decentralization with the regard to the level of ventures' authority over advisory methods selection, appointing consultants, determining consultants' starting salary and establishing advisory programs evaluation policies is important factor to meet the scheme aim we therefore recommend delegating more authorities to ventures.

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