

**AN ASSESSMENT OF THE CAREER SUCCESS OF SECONDARY  
AGRICULTURAL EDUCATION GRADUATES AT EAST AZERBAIJAN  
PROVINCE, IRAN**

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**Abstract**

*The current mission of agricultural education-to prepare and support individuals for careers, build awareness and develop leadership for the food, fiber, and natural resource systems accurately articulates the vision of the future of agriculture. The purpose of this study was to assess the career success of secondary agricultural education graduates. Design of the study was a descriptive survey. The population for this study was all secondary agricultural education graduates (N=401) of Ministry of Agriculture in East Azerbaijan province from 1994 to 2000. Research results indicated 36% of graduates were unemployed, 30% were employed full time, and 19.2% of graduates were employed part time. About twelve Percent (12.3%) of graduates were continuing their education. The greatest number of employed graduates (62.5%) was employed in the none-agricultural sectors and 37.5% were employed in the agricultural sector. Graduates somewhat were satisfied with teaching methods, general courses, especially courses and teachers, and graduates were little unsatisfied with educational aids. According to the findings, there is a significant and positive relationships between graduates' perceptions as to their level of satisfaction in their specially courses with career success.*

**Introduction**

The current mission of agricultural education-to prepare and support individuals for careers, build awareness and develop leadership for the food, fiber, and natural resource systems accurately articulates the vision of the future of agriculture (Case and Whitaker, 1998). A secondary agricultural education program can be a vital part of rural community economic development efforts (Conroy, 2000). Super and Bohn (1970) defined a Career as a Sequence of positions or a course of continued progress in the life of a person. They stated: Careers begin before employment and they are shaped by parental background through its determination of exposure to occupations and educational opportunities, by aptitudes and interests, and by educational attainments.

Career success has been defined as positive psychological or work related outcomes or achievements that the individual accumulates as a result of work experiences\_ (Siebert *et al.*, 1999, p. 417).

Prior research has also looked at a variety of individual and macro organizational factors that are theorized to have an influence on career success (Greenhaus, 2003; Judge, et. al., 1995; Seibert, et. al., 1999).

A number of individual personality variables have been assessed for their influence on career success (Boudreau *et al.*, 2001; Judge and Higgins, 1999; Seibert and Kraimer, 2001). More recently, significant research has looked at the relationship between proactive personality and career success (Crant, 2000).

The research has also examined the influence of organizational characteristics on career success. These characteristics include type of industry within which the company operates, human resource staffing and development strategies, size of the organization, and many others (Malos and Campion, 2000; Spell and Blum, 2000). In general, the research results for the influence of these organizational characteristics on individual career success have been inconsistent (Greenhaus, 2003).

This study was conducted to assess the career success of secondary agricultural education graduates at East Azerbaijan province, Iran. The agricultural sector in the East Azerbaijan province has had an important role in the agricultural development in Iran.

### **Purpose and Objectives**

The purpose of this study was to assess the career success of secondary agricultural education graduates. The objectives of this study were to:

1. Describe The occupational status of graduates;
2. Assess graduates' perceptions as to their level of satisfaction in their educational factors teaching methods, general courses, especially courses, educational aids and teachers; and
3. Determine the relationships between graduates' perceptions as to their level of satisfaction in their educational factors and career success.

### **Theoretical Base**

Career success has been defined as being able to live out the subjective and personal values one really believes in and to make a contribution to the world of work (Derr, 1966). Callana (2003) claims that career success has objective and subjective components, and much research uses objective rather than subjective measures. Success has traditionally been measured according to such objective measures as income, occupational status and promotion. Career success has been found to depend on such factors as one's personality, education, and gender, as well as on the mentoring relationships and career tactics that one undertakes (Heslin, 2003).

Although many measures of career success exist, such as Monfared (2000) the relationships between secondary agricultural education and employment of graduates and Amiry-Ardakani and Zamani (1997) the most relevant career success factors of this research. Career success factors of this research are fifteen factors that assesses overall career success of secondary agricultural education graduates. Monfared (2000) investigated career success of secondary agricultural education graduates, indicating that factors have very good reliability and the extensive body of literature on studies conducted using career success factors. Amiry-Ardakani and Zamani determined of career success of B. Sc. Agricultural College graduates of Shiraz University, indicating that factors have good reliability (Amiry-Ardakani and Zamani, 1997).

### Methods/Procedures and Data Sources

Design of the study was a descriptive survey. The population for this study was all secondary agricultural education graduates (N=401) of Ministry of Agriculture in East Azerbaijan province from 1994 to 2000. A random sample of graduates (n=150) was selected. The questionnaire was developed to collect data and it contained four sections: graduates' perceptions as to their level of satisfaction in their educational factors (teaching methods, general courses, especially courses, teachers and educational aids), social/economic characteristics, personal characteristics, status and career success of graduates. Content and face validity was established by a panel of experts consisting of faculty members at Tarbiat Modarres University. A pilot test was conducted with 30 graduates. Questionnaire reliability was estimated by calculating Cronbach's alpha. Reliability for the overall instrument was estimated at 0.85, which showed the reliability of the questionnaire. After the initial mailing and two follow-ups (calling and sending another copy of the instrument), a total of 130 graduates responded, for response rate of 86%. Early and late respondents were compared on variables identified in the questionnaire as suggested by Miller and Smith (1983). No significant difference was found between early and late respondents, and the data were generalized to the population.

### Results/Findings

The first objective sought to describe the employment and occupational status of secondary agricultural education graduates. Graduates who participated in the study were all male with the average age of 24. About thirty-six (36%) Percent of graduates were unemployed, while about forty-nine percent (30%) of graduates were employed full time, and limited number of graduates (19.2%) was employed part time. About twelve Percent (12.3%) of graduates were continuing their education. The greatest number of employed graduates (62.5%) was employed in the none-agricultural sectors and the other individuals (37.5%) were employed in the agricultural sector. Grade point average of graduates during their education was 14.52. Approximately forty-five percent (44.7%) of graduates lived in city. About five percent (4.8%) of graduates had agricultural inputs. The number of graduates, who used public credit and supports, were only 7.7 percent.

The second objective sought to assess graduates' perceptions as to their level of satisfaction in their educational factors.

*Teachers: Graduates' perceptions as to their level of satisfaction in their teachers are one of the important factors in the teaching- learning process. In this research, graduates' perceptions as to their level of satisfaction in their teachers were measured using a Likert-scale, including eighteen factors. Table 1 shows the social behavior of teachers with student and creation of mutual respect and interest in student, scientific ability and information and acknowledge of teachers in agricultural subject matter with mean scores of 4.12, 4.08 and 4 respectively as the three highest rated factors. Encouraging students to participating in teaching process, usage of enough resources, subject and tasks, and teacher's availability out of the class with mean scores of 3.50, 3.33 and 3.21 respectively were the lowest rated factors.*

**Table1. Graduates' Perceptions as to their Level of Satisfaction in their Teachers.**

Factor	N	Mean	SD.	Rank
Social Behavior of Teachers with Student and Creation of Mutual Respect and Interest in Student	129	4.12	0.80	1
Scientific Ability	130	4.08	0.80	2
Information and Acknowledge of Teachers in Agricultural Subject Matter	130	4	0.82	3
Power of Explanation and Transfer of Subject	130	3.97	0.91	4
Patience and Interest in Answering to the students	130	3.95	0.86	5
Total Position of Teachers	130	3.90	0.86	6
Extent of Interest in Teachers to Agricultural Field	130	3.89	0.92	7
Consideration of the Educational Institute Regulations and Order	130	3.88	0.85	8
Teaching Style and Usage of Suitable Methods	130	3.77	0.92	9
Usage of Useful Resources, Subject and Tasks	130	3.66	0.85	10
Creation of Motive in Students	130	3.65	1.14	11
Extent of Acquaintance with the Agricultural Scientific Resources and References	130	3.64	0.86	12
Creation of Intellectual Creativity in Students	130	3.62	1.08	13
Presentation of Adjusted Titles and Consideration of the Continuation of the Subjects	130	3.56	0.83	14
Usage of Diverse and Suitable Educational Methods and Aids	130	3.54	0.96	15
Encouraging Students to Participating in Teaching Process	130	3.50	1.12	16
Usage of Enough Resources, Subject and Tasks	130	3.33	1.04	17
Teachers Availability Out of the Class	130	3.21	1.14	18

Note: Scale: 5) very satisfied; 4) satisfied; 3) moderate; 2) unsatisfied; 1) very unsatisfied

*Teaching Methods:* Graduates' perceptions as to their level of satisfaction in their teaching methods are a very important part in the education process that influence the career success of graduates. Five factors, which have been investigated in several previous studies, were used in the questionnaire. Graduates were asked to indicate on a scale of 1(very unsatisfied) to 5 (very satisfied), perceptions as to their level of satisfaction in their teaching methods. As shown in table 2, teaching methods suitability to quality of courses content with a mean score 3.88 as the highest rated factor. Teaching methods suitability to conditions and equipments exist in place of education (M=3.44) was the lowest rated factor.

**Table 2. Graduates' Perceptions as to their Level of Satisfaction in their Teaching Methods**

Factor	N	Mean	SD.	Rank
Teaching Methods Suitability to Quality of Courses Content	130	3.88	0.76	1
Teaching Methods Suitability to Interests of learners	130	3.78	0.93	2
Overall Quality of Teaching Methods	129	3.62	0.92	3
Teaching Methods Suitability to Ability of learners	130	3.58	0.92	4
Teaching Methods Suitability to Conditions and Equipments Exist in Place of Education	130	3.44	1.08	5

Note: Scale: 5) very satisfied; 4) satisfied; 3) moderate; 2) unsatisfied; 1) very unsatisfied

*Educational Aids:* Graduates' perceptions as to their level of satisfaction in their educational aids are a very important part in the education process. Eight factors, which have been investigated in several previous studies, were used in the questionnaire. Graduates were asked to indicate perceptions as to their level of satisfaction in their educational aids. Table 3 shows that extent of access to educational aids, correct and diverse usage of educational aids and diversity of educational aids with mean scores of 3.55, 3.30 and 3.18 respectively as the three highest rated factor. Extent of access to Internet (M=1.61) was the lowest rated factor.

**Table 3. Graduates' Perceptions as to their Level of Satisfaction in their Educational Aids**

Factor	N	Mean	SD.	Rank
Extent of Access to Educational Aids	130	3.55	0.98	1
Correct and Diverse Usage of Educational Aids	130	3.30	1.03	2
Diversity of Educational Aids	130	3.18	1.05	3
Total Position of Educational Aids	125	3.05	0.96	4
Extent of Access to Educational Materials	129	2.97	1.08	5
Ability of Teachers in Usage of Computer	130	2.21	1.27	6
Extent of Access to Computer	128	1.72	1.19	7
Extent of Access to Internet	127	1.61	1.10	8

Note: Scale: 5) very satisfied; 4) satisfied; 3) moderate; 2) unsatisfied; 1) very unsatisfied

*General Courses:* Graduates' perceptions as to their level of satisfaction in their general courses are one of the important factors in the teaching- learning process that influence the career success of graduates. In this research, graduates' perceptions as to their level of satisfaction in their general courses were measured using a Likert-scale, including four factors. The data presented in table 4 reveals that the volume of general courses with a mean score 3.75 as the highest rated factor. General Course's suitability to career needs of society (M=3.29) was the lowest rated factor.

**Table 4. Graduates' Perceptions as to their Level of Satisfaction in their General Courses**

Factor	N	Mean	SD.	Rank
The Volume of General Courses	130	3.75	0.93	1
Quality of General Courses Content	130	3.73	0.83	2
Overall Quality of General Courses	130	3.51	0.87	3
General Courses Suitability to Career Needs of Society	130	3.29	1.08	4

Note: Scale: 5) very satisfied; 4) satisfied; 3) moderate; 2) unsatisfied; 1) very unsatisfied

*Especially Courses:* Graduates' perceptions as to their level of satisfaction in their especially courses are a factor that can influence the career success of graduates. In this research, graduates' perceptions as to their level of satisfaction in their especially courses was measured using a Likert-skale, including four factors that effect especially courses. These factors were derived from several previous studies and were applied after a pilot-test. As shown in Table 5, the volume of especially courses with a mean score 3.75 as the highest rated factor. Especially courses suitability to career needs of society with a mean score 3.75 was the lowest rated factor.

**Table 5. Graduates' Perceptions as to their Level of Satisfaction in their Especially Courses**

Factor	N	Mean	SD.	Rank
The Volume of Especially Courses	130	4.02	0.99	1
Quality of Especially Courses Content	130	3.91	0.97	2
Overall Quality of Especially Courses	130	3.62	0.98	3
Especially Courses Suitability to Career Needs of Society	130	3.51	1.18	4

Note: Scale: 5) very satisfied; 4) satisfied; 3) moderate; 2) unsatisfied; 1) very unsatisfied

*Career success:* The goals of secondary agricultural education to prepare individuals for careers in the agricultural sectors and creating career success. In this research, Employed graduates' level of career success was measured using a Likert-scale. This research included fifteen factors that determined employed graduates' level of career success. These factors were derived from several previous studies. Table 6 shows extent of increase of your information, extent of increase of your career abilities and skills, and extent of need to continuing education with mean scores of 3.57, 3.51 and 3.33 respectively as the three highest rated factors. Extent of increase of your rights and rewards, extent of reached desired occupational goals and extent of increase of your income with mean scores of 2.56, 2.54 and 2.46 respectively were the lowest rated factors.

**Table 6. Employed Graduates' career success level.**

Factor	N	Mean	SD.	Rank
Extent of Increase of your Information	64	3.57	0.85	1
Extent of Increase of your Career Abilities and Skills	64	3.51	0.87	2
Extent of Need to Continuing education	60	3.33	1.08	3
Extent of Educational Field Suitability to your Occupation	64	3.20	1.43	4
Extent of Need to Secondary Education for Other Individuals Who Activity in your Occupation Field	64	3.03	1.15	5
Extent of Effect of your Educational Experience in your Activity Continuation or Occupation Fixation	64	3.03	1.19	6
Extent of Interest in your Occupation	63	3	0.96	7
Extent of Improvement of quality of your Products or goods	61	2.98	1.05	8
Extent of Job Market Need to your Specialization	63	2.85	1.31	9
Extent of Market Demand for your Products or Services	61	2.83	1.15	10
Extent of Continuance Job Market for your Employment	63	2.73	1.13	11
Extent of the Enjoyment of Career Security	62	2.66	1.12	12
Extent of Increase of your Rights and Rewards	64	2.56	1.18	13
Extent of Reached Desired Occupational Goals	62	2.54	1.24	14
Extent of Increase of your Income	63	2.46	0.99	15

Note: Scale: 5) very strong; 4) strong; 3) moderate; 2) weak; 1) very weak

The third objective sought to determine the relationships between graduates' perceptions as to their level of satisfaction in their educational factors and career success.

*Correlation Between Graduates' Perceptions as to Their Level of Satisfaction in Their Educational Factors with Graduates' Career Success:* To determine the correlation between

graduates' perceptions as to their level of satisfaction in their educational factors with graduates' career success, factors making career success were considered as ordinal variables. The correlation between graduates' perceptions as to their level of satisfaction in their educational factors and factors enhancing career success are shown in Table 7.

**Table 7. Correlation Between Graduates' Perceptions as to Their Level of Satisfaction in Their Educational Factors with Graduates' Career Success.**

Variables	Dependent Variable	R	Sig.
Graduates' Perceptions as to Their Level of Satisfaction in Their Educational Aids	Extent of career success	0.209	0.97
Graduates' Perceptions as to Their Level of Satisfaction in Their Teaching Methods	Extent of career success	0.212	0.093
Graduates' Perceptions as to Their Level of Satisfaction in Their Teachers	Extent of career success	0.204	0.106
Graduates' Perceptions as to Their Level of Satisfaction in Their General Courses	Extent of career success	0.224	0.075
Graduates' Perceptions as to Their Level of Satisfaction in Their Specially Courses	Extent of career success	0.248*	0.048

Note. \* P<0.05

There was a significant and positive correlation between graduates' perceptions as to their level of satisfaction in their specially courses and career success.

### **Conclusions/Implications/Recommendations**

This study has provided insight into occupational status and career success of secondary agricultural education graduates of Ministry of Agriculture in East Azerbaijan province. About 36% of graduates were unemployed, 30% were employed full time, and 19.2% were employed part time. About twelve Percent of graduates were continuing their education. The greatest number of employed graduates (62.5%) was employed in the none-agricultural sectors and 37.5% were employed in the agricultural sector.

It is recommended that studied graduates attraction reason in the non-agricultural sector and employ practicable strategy for prevention from entrance of graduates in the non-agricultural sector.

Considering the majority of employees were employed in livestock subsection. It is suggested that carry out secondary agricultural education toward livestock education in East Azerbaijan province.

Graduates' perceptions as to their level of satisfaction in their teachers, general courses and teaching methods were from moderate to satisfied and regarding the educational aids was from unsatisfied to satisfied. Also, graduates' perceptions as to their level of satisfaction in their especially courses was satisfied.

According to these research findings, employed graduates' level of career success was from weak to strong. It is suggested that improved employed graduates' level of career success. Because of significant and positive correlation that exist between graduates' perceptions as to their level of satisfaction in their specially courses and career success; it is necessary that improved the quality of especially courses content and also, especially courses become coordinated with career needs of society.

### Educational/Practical Importance

The current findings give credence to the strength and versatility of the secondary agricultural education curriculum, program, and advising individuals for career success in agricultural sector. The information gained from this study should be used by Agricultural Education Centers as they examine the effectiveness and quality of the secondary agricultural education programs within the department. Also, Iran's Ministry of Agriculture and Agricultural Education Centers and Ministry of Education can use the result of this study to develop and delivery suitable secondary agricultural education to improve the career success of graduates.

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