



## RESEARCH PAPER

## OPEN ACCESS

## Effective factors on development decline of production and packaging peanut crop in Astaneh-Ashrafieh, Iran

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### Abstract

This study aimed to identify factors affecting development decline in production and packing peanut was carried in the most important area in the Astaneh-Ashrafieh. This study, a descriptive survey was conducted in 2013. Population of this research of experts producers in the study area were which 12 of them make up statistical sample that number is randomly selected and was studied. Multiple responses technique was used for analyzing data because there was open question in questionnaire of this study. Results showed that the factors lack of investment by the private sector in production and processing of peanuts and lack of peanut seeds resistant to diseases, pests and environmental factors of the most important factors affecting underdevelopment the cultivation of peanuts in the study area. Also, other factors such as the lack of automation systems planting and harvesting, especially peanuts, the petty land farms peanut, the lack of specific expertise to manage lands under cultivation peanuts and the lack of peanut research institute of Iran the next priority was factors the dry peanuts cultivation in the region and the lack of irrigation water, distribution of land under cultivation of peanuts and poor product quality due to the high moisture peanuts producing region in Iran were the next priorities.

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## Introduction

Rapid population growth, the increase need to produce more food and agricultural demands. Oilseeds in terms of calories and energy requirements in humans and animals have a special place in between crops and agricultural products are the most valuable. Peanut (*Arachis hypogaea*) is a plant from the family leguminosea. It is an annual plant. If the region lacks the frost, it is capable to being a permanent plant. It has a straight, short stem with 30 cm length (Khajehpoor, 2007). As peanut is one of major source of supplying the raw materials of food industries, this plant is of particular importance in the agriculture worldwide. Peanut is cultivated in many countries but its economic importance varies. Variation in the application of technology and farm management are among the most important factors influencing on the regional differences in respect of performance, thus on the economic importance of peanut (Smart, 1994). China, India, unites states of America, Nigeria, Indonesia, Senegal and Burma is among the major producers of this crop. Peanut in Iran is planted in golestan, Khuzestan and Guilan provinces. In Guilan province, it is planted mainly in Astaneh Ashrafieh city and alongside the sapid rood (Noorhosseini and Haghdoost, 2010).

Meanwhile, several studies have been performed to analyze the obstacles and problems of development in the agriculture sector where each research has considered different factors and components as important. Here, according to their relevance to the study subject, we will address some of them. Hall (2003) suggested profitability is achieved through improving the pricing processes, mean while this author considers decisions relating to pricing as one of problems among the decisions on the marketing of their studied products, he recognizes lack of adequate knowledge on productions and product costs and prices of competitors as well as required time interval for producing and sending the product to the market as major obstacles of development. He considers using past information and data related to future logical budgeting and developing a proper pricing strategy consistent to budgeting decision as the only

possible way to succeed. Furthermore, Blokland (2003) identifies effective product supplying to the market as the key point for profitability of products. He suggests improvement of function and processes of marketing and market supplying as the most important factors influencing in development factors influencing on development. In the study by Behnia and Arvandi (2005), issues such as lack of proper management of ground providing, lack of production institutions, lack of suitable aeration, lack of training and continuous visit are suggested as the factors and abstracts to develop greenhouse cultivation in Khouzeestan province of Iran. Scholars and professionals, mentioned following problems as the variables contributing in the general factor with preventive role in the development of novel agricultural technologies: unemployment (Bischoff, 2002), financial unsuitable bases of shortage of income (Rasoulzadeh, 2002), attention of farmers to traditional production (Khatoon Abady, 2000), cooperation moral (Valizadeh, 2007), location of construction (Motaghy Talab and Balalaey, 2003), roads connecting sestems and transportation, communication infrastructure (Samaei, 2005), reasonable loan repayment, rules relating to export and import (Mirza Amini, 2005), infrastructures of power supply (Samaey, 2005), rules relating to the intellectual property (Khosravy, 2003), rules of world trade organization (Bischoff, 2002), Administrative bureaucracy (Khosravy, 2003), rules relation multinational companies (Bischoff, 2002), formation of businesses through offering various services, providing business and marketing plans, constructing managerial plans, capital gain and accessibility of services (Sherman and Chappell, 1998).

This study was carried to identify aim of factors affecting development decline of production and packing peanuts in the most important area in the Astaneh-Ashrafieh, North of Iran.

## Materials and methods

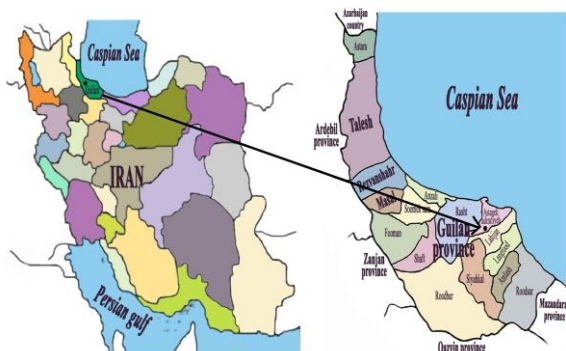
### *Study area*

In this study, a descriptive survey was conducted in 2013. Region studied was Astaneh-Ashrafieh city in

east province of Guilan, north of Iran (Fig. 1).

#### *Statistical population and sample size*

Statistical population of this research was expert's producers of peanut crop in the study area which 12 of them make up statistical sample size. These numbers is randomly selected and were studied.



**Fig. 1.** Site of study.

#### *Data Collection*

Data collection tools a questionnaire containing open questions the study was an open question as peanuts grower's problems, were examined.

#### *Data analysis*

The multiple responses a technique was use analyzing data that for analyzing this statistical method was used from SPSS software. The output data analysis consisted of frequency responses, the percentage of responses, the frequency of cases and percentages.

### **Results and discussion**

#### *Responses and Cases*

Frequency tables of multiple responses indicated that lack of investment by the private sector in production and processing of peanuts and lack of peanut seeds resistant to diseases, pests and environmental factors problems in the area are peanut crop producers so that 14.06% of the responses on the problems related to these factors. Also factors the lack of automation systems planting and harvesting, especially peanuts, the petty land farms peanut, the lack of specific expertise to manage lands under cultivation peanut crop and the lack of peanut research institute of Iran problems in the area are peanut crop producers so that 25% of the responses on the problems related to these factors. Frequency tables of multiple responses

indicated that the lack of union organization specifically for peanut crop farmers, the lack of union processing industry for peanuts and low education level in peanut crop farmer's problems in the area are peanut crop producers so that 16.38% of the responses on the problems related to these factors. Also factors lack of proper processing industries in peanut crop production area and low prices and lack of buying guarantee of peanut crop problems in the area are peanut crop producers so that 9.36% of the responses on the problems related to these factors. Frequency tables of multiple responses indicated that the high age of peanut crop farmers and equipping and integrating the area peanut crop problems in the area are peanut crop producers so that 7.8% of the responses on the problems related to these factors.

Also factors lack of cultural appropriate for the consumed new products of peanut in the country, unauthorized construction on agricultural land, especially peanuts and lack of supportive organization of factories production and processing of peanut crop problems in the area are peanut crop producers so that 9.36% of the responses on the problems related to these factors. Frequency tables of multiple responses indicated that lack of knowledge farmers the proper operation of planting and harvesting, system was not suitable for the storage of raw peanut crop in different seasons, low interest peanuts cultivated land due to high production costs and the lack of the shopping center for facilitating in the production of raw peanuts problems in the area are peanut crop producers so that 7.02% of the responses on the problems related to these factors. Also factors the lack of low-cost inputs required for peanuts cultivated land (fertilizer, pesticide, etc), lack of proper drainage and irrigation systems for peanut crop farms, the lack of centralized villages to cultivate Peanuts and lack of attention to increasing the acreage of land under cultivation peanut crop with a dependent natural resources problems in the area are peanuts crop farmers so that 6.24% of the responses on the problems related to these factors. Frequency tables of multiple responses indicated that the dry peanut crop cultivation in the region and the lack of irrigation water, distribution of land under cultivation

of peanut crop and poor product quality due to the high moisture peanut crop producing region in Iran problems in the area are peanut crop farmers so that

2.34% of the responses on the problems related to these factors.

**Table 1.** Frequency of multiple responses.

Limitations	Number of Responses	Percent of Responses	Percent of Cases	Rank
Lack of investment by the private sector in production and processing of peanut crop	9	7.03	75.00	1
Lack of peanut seeds resistant to diseases, pests and environmental factors	9	7.03	75.00	1
Lack of automation systems planting and harvesting, especially peanut crop	8	6.25	66.67	2
The petty land peanut crop farms	8	6.25	66.67	2
Lack of specific expertise to manage lands under cultivation peanut crop	8	6.25	66.67	2
Lack of peanut research institute in Iran	8	6.25	66.67	2
Lack of union organization specifically for peanut crop farmers	7	5.47	58.33	3
Lack of union processing industry for peanuts	7	5.46	58.33	3
low education level in peanut crop farmers	7	5.46	58.33	3
Lack of proper processing industries in peanut crop production area	6	4.68	50.00	4
Low prices and lack of buying guarantee of peanut crop	6	4.69	50.00	4
The high age of peanut crop farmers	5	3.90	41.66	5
Equipping and integrating the peanut crop farms	5	3.90	41.66	5
Lack of cultural appropriate for the consumed new products, peanut in the country	4	3.12	33.33	6
Unauthorized construction on agricultural land, especially peanut crop	4	3.12	33.33	6
Lack of supportive organization of factories production and processing of peanut crop	4	3.12	33.33	6
Lack of farmers knowledge the proper operation of planting and harvesting	3	2.34	25.00	7
System was not suitable for the storage of raw peanut crop in different seasons	3	2.34	25.00	7
Low interest peanut crop cultivated land due to high production costs	3	2.34	25.00	7
Lack of the shopping center for facilitating in the production of raw Peanuts	3	2.34	25.00	7
Lack of low-cost inputs required for peanut crop cultivated land (fertilizer, pesticide, etc.)	2	1.56	16.66	8
Lack of proper drainage and irrigation systems for peanut crop farms	2	1.56	16.66	8
Lack of centralized villages to cultivate of peanut crop	2	1.56	16.66	8
Lack of attention to increasing the acreage of land under cultivation of peanut crop with a dependent natural resources	2	1.56	16.66	8
The dry peanuts crop cultivation in the region and the lack of irrigation water	1	0.78	8.33	9
Distribution of land under cultivation of peanut crop	1	0.78	8.33	9
Poor product quality due to the high moisture peanut crop producing region in Iran	1	0.78	8.33	9
Total	128	100	1066	-

#### *Comparison with previous studies*

Many studies were performed in the past years which were consistent to the results of present study. In the previous studies, variables involving in the general

factors playing the promoting role in the novel agricultural technologies development are: presence of academic and non-academic research centers (Motaghi Talab, 2003), cultivated area (Damad Zadeh

and Seifollahy, 1996), general governmental policies related to the agricultural development (Khatoon Abady, 2000), risk decreasing rules of presence of growth centers (Navabpour, 2004), mental, legal, marketing supports, stepwise supportive rules (Behian, 2006), technology transfer (Khosravym 2003), reverse engineering (Sedigh and Ardeshtiry, 2003), accordance to social networks programs and their economic plans (Motaghy Talab, 2003), acceptance culture, education and specialty of managers and executors of growth centers (Moatazavypour, 2003), utilizing the knowledge management (Sedigh and Ardeshtiry, 2003), suitable cultural grounds (Moradi *et al.*, 2003), education, specification and commitment of park managers (Motaghy Talab, 2003), presence of consumption and demand market (Rezvany, 2002), supplying the credit required for investment (Rasool Zadeh, 2002), resultant income consistent to international market and contrary to the society's economic slope, tax exemption (Valy zadeh, 2007) and Work and live near the lower cost (Sepehr, 1992).

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