

A Multiple Response Analysis: Technical Problems of Gardening in North of Iran¹Seyyed Ali Noorhosseini-Niyaki, ²Zahra Changiz-Dalivand, ¹Seyyed Mustafa Sadeghi, ²Seyyedeh Fatemeh Noorhosseini-Niyaki and ³Amirhossein Pirmoradi¹Department of Agronomy, Lahidjan Branch, Islamic Azad University, Lahidjan, Iran²Young Researchers Club, Lahidjan Branch, Islamic Azad University, Lahidjan, Iran³Department of Agricultural Extension and Education, Sciences and Researches Branch, Islamic Azad University, Tehran, Iran

Seyyed Ali Noorhosseini-Niyaki, Zahra Changiz-Dalivand, Seyyed Mustafa Sadeghi, Seyyedeh Fatemeh Noorhosseini-Niyaki and Amirhossein Pirmoradi: A Multiple Response Analysis: Technical Problems of Gardening in North of Iran

ABSTRACT

This study was conducted in order to find out the technical problems in north of Iran. This study was carried out by descriptive survey at March 2011. Target population was formed from 21 actuary experts of gardeners that sample size was including 17 experts. Questionnaire was used as the main tool to collect data with an open question. Data was analyzed using the multi-response analysis. The results showed that improper and inconvenient usage of suitable fertilizers and chemical toxins, lack of mechanized, industrialized and even orchards to better usage of equipments, lack of proper and necessary usage of equipments and machineries in production and utilization of orchard's products, traditional systems of plantation and utilization, unfamiliarity of farmers about modern and updated technologies and knowledge in respect of farming, lack of using seeds, seedlings and cuttings of suitable and improved (lack of using improved varieties), shortage of irrigation water supplies and unsuitable distribution of irrigation by farmers and no-awareness usage of technical-engineering tools required in respect of advantages of mechanization were among the most important issues presented by experts.

Key words:**Introduction**

Generally, agricultural sector is the most important sector of Iran economy that has 23% inside gross production. In other hand, supply people needed food and food security depends on this sector that annually consumes much expense from government to grow and develop agricultural sector [1]. Also, agricultural systems should plan on the base of a suitable management strategy to reach sustainable products and economic ones to protect resources and assure high environment quality and effective cost [4]. Guilan province (north of Iran) despite of its least area in north due to been next to Khazar sea and having sufficient rain and humidity is the most important agricultural area of Iran that covers many strategic garden and agricultural products. In recent years many economic problems have created to produce these products [5].

In this respect proper comparison with limitation and satisfying the agricultural development

objectives dependent on the reviewing past experiences, understanding the existing condition, describing the future background and proper evaluation of possibility to transmit from existing condition is necessary. this is not practicable without planning and providing required arrangements fitted to conditions specific for each are and accordance to the country's needs to benefit from new scientific and technical advancements, i.e. development culture. For this purpose, governments bound themselves to provide conditions where agriculturalist could obtain required technical information and facilities easily, simply and rapidly [8]. Sedaghatoor and Shadparvar [7] in line with Guilan strategic garden products describe that government studies to find causes of tea failure had not much effect on solving Iran tea problem. Noorhosseini and Allahyari [6] also introduced economic problems on the top of limiting issues in a part of Guilan province farmer's activities. Therefore, regarding to increasing grows of country population and production of resource limitation

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need to know existing obstacles and efficient management to remove them for different agricultural and gardening parts stability. In this study was conducted to evaluation of gardeners technical problems of Guilan province, north of Iran.

Materials And Methods

This study was carried out by descriptive survey at March 2011 in Guilan province near to Caspian Sea, north of Iran (Fig. 1). Target population was formed from 21 actuary experts of gardeners that sample size was including 17 experts. Questionnaire was used as the main tool to collect data with one open question as to technical problems of gardeners. As regards that multi-response analysis is appropriate

technique for analyzing data from open questions of questionnaire, so this statistical method was used to analyze problems among gardeners. At first step, all responses to these questions were assessed. Then maximum number of responses by respondents, were identified which is determined that 8 responses by two experts had been most problems. In addition, 22 kinds of problems were represented by experts, that codes 01-22 were specified for each from problems. And because no one represented more than 8 problems out of 22 problems, so 8 variables were determined for each from problems and they were analyzed statistically by SPSS₁₆ software. Output data of this analyze were: frequency of responses, percentage of responses, frequency of cases and percentage of cases.

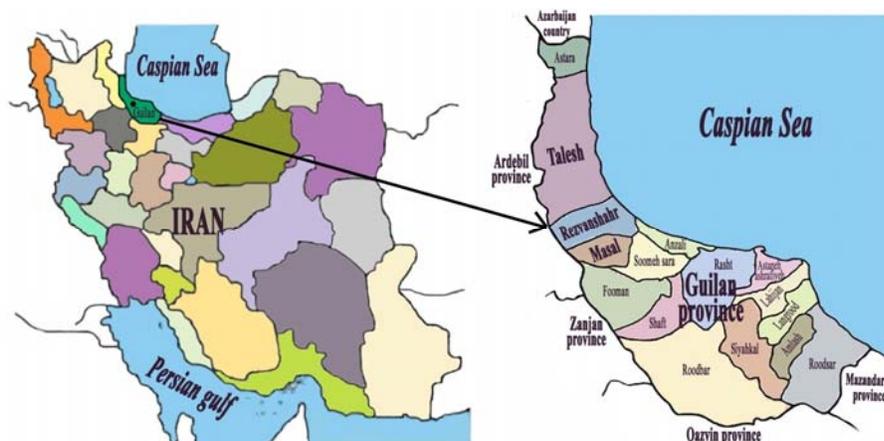


Fig. 1: Site of study

Results And Discussion

Results of this discussion are given in Table-1. In this study, results indicated that improper and inconvenient usage of suitable fertilizers and chemical toxins and lack of mechanized, industrialized and even orchards to better usage of equipments were the most important of technical problems. As 8.8% responses introduced relative to these strategies. 6 experts (35.3%) introduced these technical problems of gardeners. Lack of proper and necessary usage of equipments and machineries in production and utilization of orchard's products, traditional systems of plantation and utilization of north of Iran and unfamiliarity of farmers about modern and updated technologies and knowledge in respect of farming were that strategy introduced by 5 experts (29.4%) that included 7.4% responses. Each of cases the lack of using seeds, seedlings and cuttings of suitable and improved (lack of using improved varieties), shortage of irrigation water supplies and unsuitable distribution of irrigation by farmers and no-awareness usage of technical-engineering tools required in respect of advantages of mechanization were represented by 23.5% of the respondents, separately, to which each of them

dedicated themselves to 5.9% of all responses. Cases such as increased lack of conversion industries and processing plants such as canning, juice and dried fruits production industries, lack of consideration in spacing for planting the trees and mainly plantation in very much densities, unavailability of necessary and required springhouses all over the Guilan province, low quality and unacceptability of orchard's products for market in Guilan province and shortage of skilled manpower in farming especially in operational sector were introduced by 17.6% experts. Each of cases the lack of reconstruction and renovation of orchards especially, plants and lack of economic justification to use conversion industries, unsuitable packaging and quality rating for products, early spoilage of orchard products during transportation and lack of updated technology, modern facilities for plantation, maintenance and harvest of orchard products were represented by 11.8% of the respondents, separately, to which each of them dedicated themselves to 2.9% of all responses. In addition to represented cases, 4 of these experts began to say something about some other technical problems, separately, which were: improper pruning of trees by farmers, lack of using packaging and vacuuming equipments to prevent spoilage, high

losses of orchard products in north of Iran and lack of modern irrigation facilities and wasting the water.

Karimzadegan *et al.* [3] believe that additional subsidies for chemical fertilization make sever not improve consume and cause environment instability. Unfortunately despite the water limitation, using it in agriculture with greatest water consumption is not optimum. Irrigation in Iran is mainly through superficial methods where water efficiency is low. Thus, selecting modern and optimum irrigation methods is necessary [2]. Torkamaani and Shajari [9] in respect of production risk on acceptance of novel

technologies concluded that if desirable production conditions are not provided, planting new varieties are more likely than traditional varieties. In general, removing this problem requires more considerations of state authorities and experts of agricultural Jihad. So that, in addition to supporting efforts such as allocating the loans and credits, providing modern equipments along with experienced experts maybe among the most important efforts to decrease the risks threatening the orchards of Guilan province, north of Iran.

Table 1: Technical Problems Frequencies of Gardeners in North of Iran

Rank	Technical Problems	Responses		Percent of Cases
		N	Percent	
1	Improper and inconvenient usage of suitable fertilizers and chemical toxins	6	8.8	35.3
2	Lack of mechanized, industrialized and even orchards to better usage of equipments	6	8.8	35.3
3	Lack of proper and necessary usage of equipments and machineries in production and utilization of orchard's products	5	7.4	29.4
4	Traditional systems of plantation and utilization of Guilan province	5	7.4	29.4
5	Unfamiliarity of farmers about modern and updated technologies and knowledge in respect of farming	5	7.4	29.4
6	Lack of using seeds, seedlings and cuttings of suitable and improved (lack of using improved varieties)	4	5.9	23.5
7	Shortage of irrigation water supplies and unsuitable distribution of irrigation by farmers	4	5.9	23.5
8	No-awareness usage of technical-engineering tools required in respect of advantages of mechanization	4	5.9	23.5
9	Lack of conversion industries and processing plants such as canning, juice and dried fruits production industries	3	4.4	17.6
10	Lack of consideration in spacing for planting the trees and mainly plantation in very much densities	3	4.4	17.6
11	Unavailability of necessary and required springhouses all over the Guilan province	3	4.4	17.6
12	Low quality and unacceptability of orchard's products for market in north of Iran	3	4.4	17.6
13	Shortage of skilled manpower in farming especially in operational sector	3	4.4	17.6
14	Lack of reconstruction and renovation of orchards especially	2	2.9	11.8
15	Plants and lack of economic justification to use conversion industries	2	2.9	11.8
16	Unsuitable packaging and quality rating for products	2	2.9	11.8
17	Early spoilage of orchard products during transportation	2	2.9	11.8
18	lack of updated technology and modern facilities for plantation, maintenance and harvest of orchard products	2	2.9	11.8
19	Improper pruning of trees by farmers	1	1.5	5.9
20	lack of using packaging and vacuuming equipments to prevent spoilage	1	1.5	5.9
21	High losses of orchard products in north of Iran	1	1.5	5.9
22	Lack of modern irrigation facilities and wasting the water	1	1.5	5.9
Total		68	100	400

Source: Survey Results, 2011

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