

Explanation of Factors Affecting Income and Employment of Iranian Rural Residents

Case Study: Guilan Province

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Abstract: Rural society of Guilan province like Iran's and most developing countries' rural areas faces problems such as immigrant transmission, lack of income and employment, decrease in utilization of resources, problems of products' market, etc. Therefore, the present research considering important problems among Guilan rural areas, explains ways to increase income and employment in three coastal, plains and foothills rural areas in Guilan province. In this research, the method of research is descriptive – analytical and is of the applied kind. In order to achieve mentioned purposes, the survey – based analysis was used. In this way, the number of employed rural residents was determined in different job categories and after classification of villages into plains, coastal and foothills - mountainous areas, and according to the population of each village and population threshold of each job, the required job and the number of employed individuals were proposed in villages with empty job capacity. Finally, systematic strategies were proposed in order to increase income and employment of rural residents in different economic and non-economic sectors. Also, statistical tests resulted from analyzing data and variables indicated that there was a significant relationship between utilization of resources and characteristics of human resources. In this way, the increase in the level of education, self-employment courses' education and appropriate age will increase utilization of resources. There is a significant statistical relationship between the inefficiency of rural areas, barriers in the way of using earning and job capacity and employment, and the amount of supplying financial resources of rural residents in different economic sectors. Results of other statistical tests showed that there was a significant statistical relationship between new earning and job patterns, and increase of jobs and incomes of rural residents.

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1. Introduction

Since the agricultural activity is significantly important in rural areas and productive employed population in the economic sector lives in villages in all developing countries, villages should be seen as spatial capacities of every change in the agriculture and development of the agricultural sector should be done in terms of rural development [1].

Rural areas of developing countries face problems such as lack of educational facilities and work force, low proportion of doctors to population, lack of enough healthy drinking water network and electricity power, lack of appropriate rural passages, division of lands into small segments according to inheritance laws, and unfamiliarity with the concept of technology, and because of structural problems, economic activities of rural areas do not have the desired outcome for rural residents. These people face the problem of low level of incomes and consequently the level of life. In this way, one of the biggest problems in rural societies of underdeveloped countries is that in spite of serious lacks in food production and consequently the need for more

movement in rural areas with the purpose of an increase in the level of agricultural products, development of new executive plans and policies is toward meeting the needs of urban societies [2] so that the qualitative and quantitative level of providing social and economic services for aforementioned urban areas is so high and the result is the deprivation of rural areas, lack of employment facilities in the aforesaid areas and lack of agricultural production. Since the rural society has special features, development of a clear and certain pattern as well as prediction of special rural issues are necessary for the prosperity of the rural life [3].

In other words, since the rural economy cannot be divided from other sectors of the economic and social system of the country, there is a need for the development of comprehensive plans and policies in order to improve rural economy and increase the level of rural life [4] so that non-agricultural activities which create jobs and incomes, and the expansion of villages encourage cities, make rural residents' participation possible in decision making regarding the rural development, and implement social and

welfare plans and programs because the rural development happens when the required facilities and services for production are centralized in rural areas. In fact, a platform should be provided that actualizes rural growth and development purposes and improves the social and economic life condition in rural areas. These purposes cause an increase in the level of production and consumption in the rural society and modification of the network of products' distribution and service providing. Accordingly, an increase in the level of agricultural production, will improve rural residents' level of income and life, and an increase in their social welfare level, will increase their health and education level (Shafiq Consulting Engineers, 1992).

One of the most complex puzzles in the development process is the phenomenon of population immigration from rural areas to urban areas of developing countries [5]. Nowadays, many aforementioned countries face the problem of rural work force immigration to cities which causes a depression in the agricultural sector and also an increase in the level of unemployment in cities of developing countries [6].

This issue attracts the rural population surplus from one hand and increases unemployment in cities and the problem of providing infrastructural services from the other hand [7]. Since immigrants are typically youth and most active members of the rural society, their departure means the lack of human resources in rural areas which imposes adverse effects on the productivity of farmers and encourages more immigration [8]. The main reason of an immigration flow toward big cities of developing countries is rural areas' economic recession. Rural areas are areas which people exist. In fact, a significant number of people in underdeveloped countries live in rural areas [9]. The following factors are focused from among effective factors of the immigration flow which are sometimes caused by the tenancy system [8]: Difficulty of finding jobs in rural areas, low agricultural proficiency and income, population pressure and the lack of land.

According to above points and by considering the fact that a disproportionate number of unemployed and low-income individuals live in rural areas, any policy which is developed for reducing unemployment must be directed toward rural development generally and agricultural development particularly.

According to above cases, considering the issue of an increase in the level of rural residents' incomes and removing structural barriers are necessary and these considerations are done by

conducting a research regarding the determination of opportunities and agricultural and non-agricultural employment activities, and introducing them to rural residents. The recognition of ways of increasing the income and employment in rural areas is necessary in three coastal, plains and foothills areas:

A) Maintaining the population in rural areas; B) maintaining the employment and considering new earning methods and their increase; C) Paying attention to innovations in making changes in traditional methods; and D) utilizing all rural capacities and entities such as the land, asset, management, work force and other resources optimally in order to develop rural areas.

Therefore, the present research aims to study the employment and earning condition of rural residents in Guilan province and provide strategies to increase the level of employment and income in these areas, and also wants to answer the following questions:

1) Is there any relationship among indices such as personal characteristics of beneficiaries and inputs, sources of financing for economic units, the amount of income, new patterns of income and employment, job creation and fixed income?

2) What employment and income patterns and strategies exist in order to use opportunities in rural areas of the province?

2. Research Method

The type of this research is descriptive – analytical with a quantitative method. The method of data collection is library and survey-based in terms of preparing and distributing questionnaires. A descriptive method is used for data analysis according which all the collected data will be classified; then, they will be analyzed to test the proposed hypotheses. According to the lack of a standard questionnaire relating this research, based on the research's hypotheses and after studying several books, projects and articles, the questionnaire for this research was self - developed and its validity was confirmed by experts in these areas. The reliability of a measurement instrument can be calculated through 7 methods [10] from which, "Cronbach's alpha method" is used in this research. According to the information of the table below, in this research, there are 380 respondents and all of them are entered into the reliability analysis order. Also, the standardized alpha (0.968) shows that 89 items relating to indices under question have a high reliability in the questionnaire and in other words have a high internal harmony in order to evaluate mentioned indices.

Table 1. Evaluation of the reliability of the measurement instrument.

Number of sample	Number of effective questions in alpha	Cronbach's alpha	Standardized Cronbach's alpha
380	89	0.968	0.969

Source, Research findings and author's calculations using SPSS

3. Features of Statistical Population, Sample Size and Sampling Methods

The statistical population of the present research includes rural population of Guilan province according to the official census of population and housing in 2006. In this census, the rural population of Guilan province was more than 1,109,110 which from 4,83 household point of view, it included 229,629 households [11]. The sample size is 380 considering the wideness of the area under study, according to demographic and geographical indices, and the number of rural residents and their share, and by using Morgan's table. In the sampling method, the stratified sampling and the random sampling are used.

4. Research Results

4.1 Study of activity and employment's condition in families of the statistical population

The table below shows the number of employed members in each of families in the statistical sample. According to this information, 62 (16.3%), 156 (41.1%), 100 (26.3%), 40 (10.5%), 20 (5.3%) and 2 (0.5) families have 1, 2, 3, 4, 5 and 7 employed member(s), respectively.

Table 2. The number of employed members of rural families.

Number of employed members	Frequency	Percent
1	62	16.3
2	156	41.1
3	100	26.3
4	40	10.5
5	20	5.3
6	0	0
7	2	0.5
Sum	380	100

4.2 Income Condition of the Head of Sample's Families

According to information of table (3), 34 (8.95%), 138 (36.32%), 108 (28.42%), 66 (28.42%) and 34 (29.1%) members of the sample have the monthly income of less than 1,500,000 Rials, 1,500,000 – 3,000,000 Rials, 3,000,000 – 4,500,000 Rials, 4,500,000 – 6,000,000 Rials and more than 6,000,000 Rials, respectively.

Table 3. Sample distribution under study according to the amount of monthly income.

Description	Number	Percent
Less than 1500000 Rials	34	8.95
1500000-3000000 Rials	138	36.32
3000000-4500000 Rials	108	28.42
4500000-6000000 Rials	66	17.37
More than 6000000 Rials	34	8.95
Sum	380	100

Source, Research results

4.3 Sample Condition Regarding Passing the Self-employment Educational Course

According to the information of table (4), 32 (16.31%) persons of the statistical sample have passed their self-employment course and 318 persons (83.68%) have not passed their self-employment course. Also, from 16.31 % of individuals who passed their self-employment course, just 4 individuals (1,05%) have passed their educational course for more than 100 hours, and the rest have passed this course for less than 100 hours.

Table 4. Participation rate of rural residents in self-employment.

Description	Number	Percent
Trained	62	16.3
Untrained	318	41.1
Sum	380	100

Source, Research findings

4.4 Characteristics of Agricultural lands of Beneficiaries

According to the table below, the area of agricultural lands, 108 (28.42%), 66 (17.37%), 68 (17.89%) and 138 (36.32%) persons from the total sample have agricultural lands with 3000, 3000 –

7000, 7000 – 10,000 and more than 10,000 square meters in area, respectively.

Table 5. Beneficiaries' agricultural lands' areas.

Description	Frequency	Percent
Less than 3000 Sq.m.	108	28.42
3000-7000 Sq.m.	66	17.37
7000-10000 Sq.m.	68	17.89
More than 10000 Sq.m.	138	36.32
Sum	380	100

Source, Research findings.

According to table (6), 66 (17.37%), 54 (14.21%), 88 (23.16%) and 172 (45.26%) persons of the statistical population have job experience less than 5, 5 – 10, 10 – 20 and more than 20 years, respectively and this issue shows the antiquity of agriculture in the area under study and the high potential of Guilan province in agriculture throughout the history.

Table 6. Job experience of beneficiary human resources.

Description	Frequency	Percent
Under 5 years	66	17.37
5-10 years	54	14.21
10-20 years	88	23.16
Over 20 years	172	45.26
Sum	380	100

Source, Research findings

4.5 Effective Factors Relating the Inefficiency of Agricultural Lands and Decrease of Income in Rural Areas of Guilan

In the explanation of effective factors relating the inefficiency of agricultural lands and the increase of income in rural areas of Guilan province, 18 questions were posed and the selected statistical population considered the following factors as the most important reasons of the inefficiency of agricultural lands and consequently the decrease of income in rural areas of Guilan province:

Low level of working, using low-crop items, restriction of agricultural products' market, failure in taking complementary actions, single crop lands, not using agricultural inputs, immigration from villages to cities and the increase in the number of yeomen.

Table 7. Effective factors relating the inefficiency of agricultural lands and the decrease of income in rural areas of Guilan province.

Description	High	Good	Average	Low	Weak	Sum
Lack of awareness of modern agricultural methods	66	100	130	62	22	380
Low level of working	112	78	106	30	54	380
Having no capital	34	106	144	66	30	380
Pre-order of products in cash	60	72	138	94	16	380
Using low-crop items	76	76	154	20	34	380
Single crop lands	164	74	108	18	16	380
Failure taking complementary actions	136	76	106	44	18	380
Restriction of agricultural products	122	88	124	42	4	380
Illiteracy	96	102	112	52	18	380
Lack of incentive for work among youth	188	90	66	30	6	380
High expenses of work force	50	142	88	70	30	380
Not using agricultural inputs	124	134	72	34	16	380
Increase of agricultural products' wastes	82	146	72	70	10	380
Government's policies	112	112	92	36	28	380
Increase of rural population	86	98	122	64	10	380
Immigration from villages to cities	112	112	88	60	8	380
Increase in the number of yeomen	102	112	90	56	20	380
The decrease of land per capita	66	122	118	46	228	380

Source: Research results

16 questions were posed to help us understand the barriers in the way of using capacities of economic sectors and subsectors in rural areas of Guilan province and according to the sample's opinion, the following points are the main barriers:

Technical and technological barriers, expert human resources, problems of inputs, management barriers, cultural and social barriers, and legal, political and ownership barriers (table 9).

Table 8. Barriers in the way of using capacities of economic sectors and subsectors in rural areas of Guilan

Description	High	Average	Low	Sum
province	260	68	52	380
technical and technological barriers	118	162	30	380
capital barriers	106	198	76	380
expert human resources	188	162	30	380
market problems	106	198	76	380
problems of inputs	188	162	30	380
unanticipated activities	242	96	42	380
management barriers	260	68	52	380
raw material's barriers	106	198	76	380
social and cultural barriers	188	162	30	380
structural barriers	242	96	42	380
beneficiaries' influence	242	66	42	380
infrastructure's barriers	106	198	76	380
legal and ownership barriers	188	162	30	380
political barriers	188	162	30	380
etc	106	198	76	380

Source, research findings

4.6 Effective Factors Relating to the Increase of Income and Employment of Farmers

In order to study effective factors relating to the increase of income and employment of farmers in Guilan province, 22 items were considered. Accordingly, the rice import, especially in the first 6 months of harvesting crops, lack of agricultural land renovation and equipment, not supporting modern

methods of irrigation, decrease of the size and fragmentation of lands, lack of insurance for agricultural products, increase in the production's expenses of agricultural inputs and high amount of agricultural wastes are the most important factors which increase the income and employment of farmers in the area under study (Table 9).

Table 9. Samples' opinions about the role of different variables in the increase of income and employment of farmers.

Description	high	Very high	medium	low	Very low	non	Total
How much were the government's actions successful in job creation and increase on income?	56	76	82	62	96	8	380
How much does the time of importing rice in the first 6 months affect farmers' income?	166	106	72	4	22	10	380
Stabilization of agricultural products' price	40	82	102	66	60	30	380
Guaranteed purchase of agricultural products	80	72	106	90	32	0	380
Policies of modifying the structure of tea	86	118	88	44	34	10	380
The increase of supporting from modern methods of irrigation	94	116	102	34	26	8	380
Agricultural areas' renovation and equipment	138	72	94	32	44	0	380
Not using agricultural machinery due to non-economic lands	86	124	108	28	34	0	380
Decrease of size and segmentation of lands	82	100	122	40	26	10	380
Inaccessibility to bank's financial sources	110	94	104	30	32	10	380
Lack of the increase of production's cost proportional to the inflation rate	142	110	96	22	10	0	380
Not having agricultural calendar in order to take agricultural action during the year	88	118	120	28	26	0	380
Lack of insurance of agricultural products	90	136	98	36	20	0	380
Not having agricultural lands' ownership documents	76	114	114	32	30	114	380
Yeomen and lack of an appropriate incentive	104	88	100	38	38	12	380
Lack of education and rural promotion	98	156	86	32	4	4	380
Low level of efficiency of agricultural lands in the province	94	136	110	32	4	4	380
Inaccessibility to sales markets directly	100	108	124	34	14	0	380
Increase of production costs of agricultural inputs	114	132	96	32	6	0	380
High level of agricultural products' wastes	86	148	106	24	16	0	380
The time assigned to agricultural activities	60	134	142	30	14	0	380
The inheritance law in division of lands	56	110	118	52	30	14	380

Source, Research findings

5. Hypotheses Test

In this section of the research, according to research hypotheses, required variables for testing each hypothesis are selected and based on variables' type, the appropriate statistical test is selected and hypotheses' test is performed.

- **The first hypothesis:** "There is a significant relationship between utilizing resources and characteristics of human resources."

In order to study the relationship between utilizing resources and characteristics of human resources, Cramer's V and Spearman's correlation coefficients were used. The result of Spearman's test between the age and level of education variables, and the amount of utilizing resources showed that there was a significant relationship between age and level

of education variables and financing sources of economic units according to Spearman's correlation coefficients ((-0.299) and (0.708)) with the reliability of 0.99 and error level of less than 0.01. There is a weak negative relationship between the age and the amount of utilization of resources i.e. when the age increases, the amount of utilizing resources will decrease, and also there is a strong positive relationship between the level of education and utilizing resources i.e. when the level of education increases, the amount of utilizing resources will increase, too. In addition, the result of Cramer's V test shows a weak direct the relationship between participation in self-employment course and the amount of utilization of resources. Therefore, H₀ hypothesis is rejected and H₁ hypothesis is accepted.

Table 10. Spearman's correlation coefficient test between age and education variables, and the amount of utilization of resources.

Spearman's rho		Age	Rates of resource utilization
Age	Correlation Coefficient	1.000	-.299**
	Sig. (2-tailed)	.	.000
	N	380	380
Rates of resource utilization	Correlation Coefficient	-.299**	1.000
	Sig. (2-tailed)	.000	.
	N	380	380
Spearman's rho		Education	Rates of resource utilization
Education	Correlation Coefficient	1.000	.708**
	Sig. (2-tailed)	.	.000
	N	380	380
Rates of resource utilization	Correlation Coefficient	.708**	1.000
	Sig. (2-tailed)	.000	.
	N	380	380

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

Table 11. Cramer's V test between the variable of participation in self-employment educational course and the amount of utilization of resources.

Nominal by Nominal	Cramer's V	Value	Approx. Sig.
		.242	.000
N of Valid Cases		380	

- **The second hypothesis:** "There is a relationship between financing sources of economic units and the amount of utilization of lands."

According to the fact that variables of financing sources of economic units and the amount of land utilization are ordinal – ordinal (with square-like tables), in order to evaluate the level of relationship between variables, the test of correlation confident Kendall's tau b was used. The test results

indicate that according to Kendall's tau b (0.531) with the reliability of 0.99 and error level of less than 0.01, there is a significant relationship between two variables of financing sources of economic units and the amount of land utilization i.e. the amount of utilizing lands will be increased proportional to the increase of their economic units' financing sources. Therefore, the third hypothesis of the research will be supported.

Table 12. Test of correlation coefficient Kendall's tau b between financing sources of economic units and the amount of land utilization.

Kendall's tau_b		Utilization rates	Sources of Financing
Utilization rates	Correlation Coefficient	1.000	.531**
	Sig. (2-tailed)	.	.000
	N	380	380
Sources of Financing	Correlation Coefficient	.531**	1.000
	Sig. (2-tailed)	.000	.
	N	380	380

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

- **The third hypothesis:** "There is significant relationship between new earning and occupational patterns (recognition of capacities and innovations in rural areas) and an increase in rural residents' employment and income."

According to the fact that, variables such as new earning and occupational patterns, and an increase in rural residents' employment are interval – interval variables, in order to test these variables, Pearson's correlation coefficient was used and as variables such as new earning and occupational patterns, and an increase in rural residents' income are interval – interval ones, in order to evaluate the level of relationship between these variables, Spearman's correlation coefficient test was used. The result of Pearson's test between variables such as new earning and occupational patterns, and an increase in rural residents' income indicates that there is a significant relationship between new earning and occupational patterns, and an increase in rural residents' income, according Pearson's correlation

coefficient (0.952) with the reliability of 0.99 and error level of less than 0.04. Therefore, there is a strong positive relationship between new earning and occupational patterns, and an increase in rural residents' employment, i.e. when new earning and occupational patterns increase, rural residents' employment will increase, too. Also, the result of Spearman's test between variables of new earning and occupational patterns, and an increase in rural residents' income indicates that there is a significant statistical relationship between these two variables, according to Spearman's correlation coefficient (0.918) with the reliability of 0.99 and error level of less than 0.01. Therefore, there is a positive relationship between new earning and occupational patterns, and an increase in rural residents' income, i.e. when new earning and occupational patterns increase in rural areas, rural residents' income will increase, too. So, according to the above hypotheses, H_0 is rejected and H_1 is supported.

Table 13. Pearson's correlation coefficient test between new earning and occupational patterns, and an increase in rural residents' employment

Pearson		New patterns of income and employment	Employment rate
New patterns of income and employment	Pearson Correlation	1	.952**
	Sig. (2-tailed)		.000
	N	45	45
Employment rate	Pearson Correlation	.952**	1
	Sig. (2-tailed)	.000	
	N	45	45

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

Table 14. Spearman's correlation coefficient test between new earning and occupational patterns, and an increase in rural residents' income.

Spearman's rho		New patterns of income and employment	Income rate
New patterns of income and employment	Correlation Coefficient	1.000	.918**
	Sig. (2-tailed)		.000
	N	45	45
Income rate	Correlation Coefficient	.918**	1.000
	Sig. (2-tailed)	.000	
	N	45	45

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

6. Conclusion and Suggestions

Research findings and statistical tests resulted from analysis of data and variables showed that there was a significant statistical relationship between the amount of utilization of sources and characteristics of human sources, and financing sources of economic units, so that when education level, training of self-employment courses and appropriate age increase, the amount of source utilization will increase, too. In addition, it was determined that there was a significant statistical relationship among inefficiency of agricultural lands, barriers in utilizing earning and occupational capacities, decrease of income and employment and the amount of financing sources of rural residents in different economic sectors. Results of other statistical tests showed that there was a significant statistical relationship between new

earning and occupational patterns, and increase of employment and income of rural residents and also between government's policies and the amount of utilization of rural inputs.

According to findings obtained through research's steps (questionnaire, observation, and survey with authorities and rural municipality administrators) in order to create jobs and increase incomes considering advantages and limitations of rural areas of Guilan province, the future planning framework is proposed in terms of the following cases. Also, it is mentioned that these suggestions are generally in the framework of ecological and economic advantages of the area and if educations, promotion methods, assistances and special facilities continue, they can partly meet rural residents' earning and occupational needs.

A) Activity -based:

Short - term	Mid - term	Long - term
Recognition of places which have the capacity of investment in tourism industry and information propagation relating to these places at a regional and national level, and encouraging people to invest in these places.	The limit investment by people and government using local and provincial budgets, according to localizations carried out in target tourism areas.	Major investment using national budgets.
Recognition of local and regional markets and informing farmers timely, and also, recognition of productions in order to have a guaranteed purchase.	Recognition of national markets, informing farmers timely and guaranteed purchase of some of products.	Recognition of regional (foreign) and international markets, timely information propagation and also, preparation of facilities for export and purchase regional products.
Recognition of ways through which people can participate and encourage others to participate in the management through educational and cultural works.	Letting people participate in some managerial areas such as educational, health and service related issues by using consultant and supervision.	Comprehensive participation of people in the rural management.
Recognition of unfavorable places in terms of population settlement and favorable places for population settlement.	Preparation of optimized places for settling the population and encouraging people to settle in these places.	Population transfer and land preparation.
Recognition of handicrafts which were	Training of handicrafts and	Creation of large workshops through

common in the area before and the reason of their destruction and rehabilitating them.	creation of small workshops using local and provincial budgets.	cooperatives using national budgets, marketing and export.
Recognition of mines' capacity and methods of utilizing them.	Utilization of mines at a local and regional level by establishing mining cooperatives.	Utilization of mines at the national level.
Recognition of capacities and potential of forests, pastures, scaling and protecting them and informing people to use them optimally.	Establishment and restoration of pastures, farms and gardens using local and provincial budgets and also using grass and herbs which exist in the area.	Livestock's feed, establishment of workshops for the alteration of herbs, establishment of herbs' farms and species of trees with high a high new efficiency using national budgets.

B) Institutional:

Short - term	Mid - term	Long - term
Increase in people's knowledge of advantages of participation.	Participation in service, cultural and economic projects through prioritization.	Participation of people in all areas.
Increase in people's knowledge of the importance of education, promotion and recognition of different areas.	Education and promotion in necessary fields, including gardening, handicrafts, etc.	Public education and promotion.
Increase of people's knowledge and education relating to implementing projects and supporting them.	Limit participation in the implementation of projects and supporting them through supervision and consultant.	Participation in all areas.
Encouraging people toward investment.	Limit investment through consulting with rural management institutions.	Major investment.
Increase of people's knowledge of how to invest assigned facilities.	Granting facilities using local and provincial budgets and controlling their investment in 3 directions.	Granting macro facilities using national budgets.
Recognition of platforms for the creation of workshops and factories.	Establishment of small workshops relating to agricultural and native products through local and provincial budgets.	Establishment of factories using national budgets.
Recognition of real needs of the region in terms of inputs (pesticide, seed, fertilizer, high efficient species, etc.) and education of their correct use.	Establishment of farms with high – crop species, providing inputs and supervision of their correct use.	Supplying required inputs and using high – crop species at a large scale through cooperatives.
Recognition of areas of people's and government's participation	Limit investment of people and government using local and provincial budgets.	Macro investment by people and government using national budgets.

In addition to above cases, the following case are proposed to utilize facilities:

- Promoting optimized methods for increasing the efficiency in all agricultural levels (planting, preserving and harvesting), especially in family utilization.
- Increasing the utilization rate per unit area through promoting inputs optimally.
- Promoting the planting pattern considering natural features such as climate, soil and water level.
- Planting native species of different seeds, such as rice, wheat and other products due to accordance with natural condition of the region.
- Focus of the ministry of health on the restoration of herbs in recent years and complete accordance of plants' ecology with natural features of the province can provide a platform for planting herbs in the region by considering other factors and enough researches.
- Purchase guarantee of unnecessary products.

7. Emphasized recommendations for using correct irrigation methods which in this case, demonstration farms can be used.
8. According to climate characteristics of the region which has enough rain and considering the general slope of the province toward the Caspian Sea, the control of flowing waters and using them when necessary are very important.
9. Research on the better utilization of agricultural wastes for feeding livestock and more attention to the straw's enrichment scheme.
10. Launching factories relating to livestock and dairy products, and also guaranteed purchasing of milk.
11. Paying attention to ancillary activities such as aviculture and livestock breeding.
12. Expanding beekeeping and honey production in favorable areas.
13. Paying the loans so that their due date is when farmers can sale their product at a proper time.
14. Establishing centers for fixing agricultural machineries and pumps and supplying their spare parts in rural centers or near them.
15. Paying attention to establishment of sub-industries in the agricultural sector such as packing, drying and winnowing industries.
16. Developing agricultural research stations in the province.
17. Encouraging farmers to establish agricultural productions' cooperatives considering to issues such as lack of capital.
18. Paying attention to the role of promotion social workers as connectors of farmers and promotion experts.
19. The optimized utilization of available forces and attraction of required specialization are very important by considering the importance of human resources as one of the necessities of development.

20. Paying attention to the qualitative and quantitative improvement of rural passages in the province.

Reference

1. Okley P and Garforce C. promotion training manual. Mohammad Hossein Emadieh. Ministry of Construction. 1990.
2. Meysara R. P. and Sondaram K. V. Rural development options. Ali Akbar. ministry of construction. 1992.
3. Kamran F. Rural planning and development. Ava-e-Noor publications. 1987.
4. Meysara R. P. Rural development. problems and issues. Village and Development Journal. number 1. 1987.
5. Todarou M. Economic development in the Third World. Gholamali Farjadieh. Plan and Budget Organization (PBO). volume 1. 1989.
6. Taherie Sh. Economic development and planning, Arvin publications. 1997.
7. Hosseini S.A. Defects of underdeveloped planning of development in Iran. 15 discussions relating to urban and regional planning. Illia. 2010.
8. Lokayoun J. Pakert Ph. Morison Ch and Jermidis D. Analytical study of income distribution and economic development, Ahmad Akhavi. Institute for Trade Studies and Research. 1994.
9. Todarou M. Economy development in the Third World. planning and budgeting organization. Tehran. 1987.
10. Hinton P.R. Statistics Explained. 2nd Edition. Routledge Press. 2004.
11. Economic-social report of Guilan province. management and planning organization of Guilan province. 2012.

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