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Investigating the development of production-economic relations in the agricultural sector of Iran

Mojahed Babapour¹, Seyedmohammadreza Seyednourani², Isa Aliyev³

¹Doctor of Theoretical Economics from Baku State University, University lecturer and expert in charge of customs affairs of Tabriz Customs, ²Faculty Member of the Faculty of Economics, Allameh Tabatabai University (Full Professor), ³Institute of Economics of ANAS, AZ1073, Baku, H.Javid ave., 115 - Position Head of the Department of Agrarian Reforms and Food Security

drmojahedbabapour@gmail.com¹, seyednourani@atu.ac.ir²

Abstract. The agricultural sector in developing countries is the main engine of economic growth and development. Developing countries can go to their agricultural sector to overcome the crisis of underdevelopment, and while trying to expand agricultural production, they are thinking of combining this sector with advanced technologies in order to make their products more efficient. Due to its extensive connections with other economic sectors, this sector can provide the ground for wealth production, market creation, currency exchange and industry growth with its growth. The purpose of this study was to investigate the development of production-economic relations in the agricultural sector of Iran. In this regard, the impact of development policy and growth of the agricultural sector on employment, total economic output and other economic sectors has been evaluated. The methodology of this research has been done with the approach of input and output table and social accounting matrix. The analysis is based on the approach of technical coefficients, Leontief coefficients, backward and forward linkages and employment coefficients. Results show that there are strong linkages between the "Agriculture and Horticulture" and "Livestock and Fisheries" sectors and the "Agriculture and Horticulture" sector has a strong and rapid impact on the final demand of the "Chemical Industries" sector as well as the "Livestock and Fishing" has had a strong and rapid impact on the final demand of the "Livestock and Fisheries" sector. The backward and forward linkages of the agriculture section in the economy are at a moderate level and this sector has a high coefficient and potential in job creation and in line with strategies to reduce unemployment with lower investment has the ability to create high employment.

Keywords. Agriculture, Growth and Development, Employment, Input and Output Table

1- Introduction

Human societies throughout history have always sought prosperity, growth, evolution and development. This concept has gained more momentum and broader and more scientific dimensions during the last three centuries. So that in the last years of the twentieth century, a broad agreement has been formed among thinkers who believe that achieving sustainable, inclusive and real development requires a different approach and solutions than before. The post-World War II era has been associated with the acceleration of economic growth and the emergence of the field of scientific development studies. Underdeveloped and often newly

independent countries, in order to compensate for their historical backwardness, often tried to be in the ranks of developed countries by adopting balanced or unbalanced growth patterns. Historical experiences of economic development show that most developed countries and many successful or even failed countries in development have used the strategy of unbalanced growth and change of economic structures (change of relations between sectors). Although this theory was expressed in raw form by Walt Rostov, it was first theorized by Albert Hirschman. According to this theory, the main role in development is played by the key sectors of the economy, i.e. the sectors that have the most stimulating effects on the growth of other sectors and also on the growth of the economy as a whole. Therefore, investing in sectors that have strong backward and forward linkages leads to economic development and growth. Therefore, in this research, the development of production-economic relations in the agricultural sector of Iran is investigated.

Considering that the agricultural sector consists of two main sub-sectors, "Agriculture and Horticulture" and "Livestock and Fisheries", so the hypotheses of the agricultural sector are defined in relation to these two sub-sectors:

- ✚ In the production process of the agricultural sector, the sub-sectors "Agriculture and Horticulture" and "Livestock and Fisheries" have a strong and complementary direct and indirect relationship with each other.
- ✚ "Agriculture and Horticulture" and "Livestock and Fisheries" sectors have a strong forward / backward linkage in the Iranian economy.
- ✚ Macro variables of consumption, investment and export have a high impact on the sectors of "agriculture and horticulture" and "livestock and fishing".
- ✚ "Agriculture and Horticulture" and "Livestock and Fisheries" sectors have high direct and indirect job creation in the economy.

2- Research backward ground

The concept of economic growth is the literal meaning of the word growth, enlargement and increase. In other words, growth expresses small changes in a variable. Economically, growth is the increase in a country's GDP over a period of time. Economic growth is divided into two types: 1- Endogenous growth 2- Exogenous growth, endogenous growth is growth that is based on production. Exogenous growth is growth based on God-given gifts such as oil.

The concept of economic development is the literal meaning of the word development, expansion and improvement. Development is a qualitative concept and cannot be expressed in numbers. It is the improvement of the political, economic, social and cultural foundations of a society or, in short, the movement from the current situation to the desired situation is called development.

One of the major problems facing developing countries today is the lack of financial resources for investment. This constraint has led developing countries to shift to economic planning. To be able to allocate financial resources to their policy priorities due to financial shortages. The issue here, from a policy perspective, is to direct investment in one or more sectors that lead to the growth and development of economic sectors and overall competitiveness of the economy. From Gunnar Myrdal's point of view, development means "the movement of a unified social system forward. In other words, not only the method of production, distribution of products and volume of production are considered, but also changes in the standard of living, institutions of society, ideas and policies are considered"¹.

Economic development as a branch of economics has been raised among social and economic researchers since the mid-twentieth century, when the issue of development in developing countries became increasingly important; But despite the fact that it is not more than three

decades old, it has been challenged and challenged more than any other field related to economics due to the interest and enthusiasm of most intellectuals in achieving the development and progress of their country. Economic development was initially defined as the ability of the national economy to create and sustain the annual growth of gross national product at rates of fifty to seven percent and more ².

In general, the main activity of the villagers of Iran is agriculture and almost all the employees of the agricultural sector live in rural areas. According to the latest official report of the Statistics Center of Iran on the area under cultivation of agricultural products, about 86% of irrigated land, 85% of rain fed land and 78% of existing gardens and orchards belong to the exploiting villagers. Agriculture is a geographical environment and space called rural space and plays an important role in the economy and rural employment ³.

Iran's agricultural sector is one of the most important and capable economic sectors in the country. This supplies more than a quarter of GDP, a quarter of employment, more than four-fifths of food needs, a quarter of non-oil exports and about nine-tenths of industry needs for agricultural products. Despite the positive role of the agricultural sector in the growth and development of the national and local economy, the current realities show the weakness of the economy based on production and the recession of the agricultural sector in rural areas. In general, per capita productivity in the agricultural sector is lower than other sectors and higher crop yields are far from the average of developed countries ⁴. Most exploits are exposed to natural and climatic hazards and do not have the strength to withstand environmental pressures. The production efficiency of the agricultural sector is low compared to the facilities used and the needs of society and the allocation of resources in this sector is not associated with productivity and efficiency ⁵.

It is argued that the factors hindering agricultural development are related to two ideas and general views. One group of theories refers to ecological and environmental factors such as: climatic conditions, soil type, access to water and the second group refers to the factors of political economy which are related to the mutual relations between political and economic forces and their effect on Formation of economic policies ⁶.

In general, agriculture is a natural process of land use and is one of the sectors that is strongly influenced by natural variables and is directly related to soil resources, water, climate and biological compounds. Natural resource management is effective in reducing poverty and equitable distribution of income among agricultural operators and enhances access to agricultural facilities. Disruption of the natural ecosystems of the agricultural sector also leads to long-term degradation of soil resources, pollution of water resources and changes in climate and weather conditions and affects the profitability of the sector ⁷.

The general consensus is that the process of development planning in the agricultural sector is tied to government action and is traditionally associated with government intervention, while in some cases, the implementation of development planning in the agricultural sector from the government does not lead to good results and the efforts made do not meet the development requirements in that sector ⁸. The evaluation of the development process in recent decades shows that the agricultural sector has not changed structural and is unable to play its economic role in rural areas.

3- Research method

The type of research method is descriptive and using theories of growth and development, the importance of the agricultural sector in the development process of the national economy has been studied. Then, using the data-output model, the impact of agricultural development and growth policy on employment, total production of the economy and other economic sectors, as

well as production-economic relations between different sectors of the economy will be evaluated. Meanwhile, by analyzing the value of indicators obtained from the above method, the key sectors of the economy are determined.

Considering that the latest available information in the field of input-output table is related to the year 2015, that is, according to the latest data and output table of Iran, the results have been calculated and interpreted. This table contains 71 intermediate sections. The gross value added part includes the sub-sections of employee service compensation, net tax on production and imports, gross income, gross, operating surplus, gross, and finally the final demand section includes the sub-sections of final household consumption, final government consumption and fixed capital formation. Gross are the export of goods and services and the import of goods and services. Also considering that the latest social accounting matrix of the Islamic Republic; the social accounting matrix is from 2015, so in the form of this social accounting matrix, the behavior of households in the agricultural sector is also analyzed. Also, by collecting employment statistics from the Statistics Center of Iran, the effects of employment have been studied.

4- Research findings

4-1 Direct effects (technical coefficients) of the agricultural sector

This section examines the direct effects in the "Agriculture and Horticulture" and "Livestock and Fisheries" sections. To calculate the matrix of technical coefficients, it is first necessary to divide the intermediate purchase of section j from section i by the production amount of section j. The matrix of technical coefficients can be calculated as follows for each of the economic

$$a_{ij} = \frac{x_{ij}}{x_j} \quad i, j = 1, \dots, n$$

sectors:

In the above relation, it indicates what proportion of section j meets its needs from section i, and in terms of the concept of technical or direct coefficients, it indicates that how much does a sector or group of economic activity use the inputs of other sectors and economic activities to produce one million Rials of product? The results of technical coefficients are given in (Table 1).

Table1. Technical coefficients of the agricultural sector in the Iranian economy

Agriculture and Horticulture sector			Livestock and fishing sector		
Section	Technical coefficients	rank	Section	Technical coefficients	rank
Agriculture and horticulture	91,334	2	Agriculture and horticulture	171,283	1
Livestock and fishing	14,173	7	Livestock and fishing	109,891	2
Mine	641	16	mine	353	16
Agricultural industries	8,493	8	Agricultural industries	103,342	3
Petrochemical and chemical industries	98,519	1	Petrochemical and chemical industries	60,049	5
Metal industry	4,199	9	Metal industry	2,900	10
Machinery industry	1,078	12	Machinery industry	567	15
Transportation manufacturing industry	1,808	11	Transportation manufacturing industry	320	17
Other industries	1,037	13	Other industries	3,670	9
Electric water and gas	21,115	3	Electric water and gas	6,330	8
Building	817	15	Building	1,970	13
Wholesale, retail, vehicle and goods repair	17,992	5	Wholesale, retail, vehicle and goods repair	66,735	4
Hotel and restaurant	385	17	Hotel and restaurant	281	18
Transportation and Communications	19,794	4	Transportation and Communications	32,319	6
Financial intermediation	16,393	6	Financial intermediation	11,963	7

Real estate and business rent	3,951	10	Real estate and business rent	2,379	12
Public Affairs, Defense and Social Security	147	18	Public Affairs, Defense and Social Security	134	19
Education	129	19	Education	107	20
Health	45	20	Health	2,810	11
other services	878	14	other services	1,420	14

Source: Research Findings

The results show that the "Agriculture and Horticulture" sector in the production process of one million Rials has the most use of "chemical industry" and "water, electricity and gas" with 98.519 and 21.115 Rials, respectively. The "Livestock and Fishing" sector in the production process of one million Rials has the most use of the "Agriculture and Horticulture" and "Food-related industries" sectors with 171,283 and 103,342 Rials, respectively. This indicates the very high dependence of the "livestock and fisheries" sector on the "agriculture and horticulture sector" in the Iranian economy.

Considering that the most connection between the "Livestock and Fisheries" section is with the "Agriculture and Horticulture" section and also directly among the applicant sections of the "Agriculture and Horticulture" section of the "Livestock and Fisheries" section, it is in the seventh place. Therefore, in general, it can be said that there is a strong and direct relationship between the sectors of "livestock and fishing" and "agriculture and horticulture". Also, the first hypothesis of the research, which states that in the production process of the agricultural sector, the sub-sectors of "agriculture and horticulture" and "livestock and fishing" have a strong and complementary relationship with each other, cannot be rejected.

4-2 Direct and indirect effects (reverse Leontief) of the agricultural sector

The results of direct and indirect effects of injection of one million Rials in the agricultural sector are given in (Table 2), in the production process of the agricultural sector, the sub-sectors of "Agriculture and Horticulture" and "Livestock and Fishing" have a strong and indirect direct and complementary relationship with each other.

Table 2. Inverted coefficients of Leontief in the agricultural sector of Iran's economy

Agriculture and Horticulture sector			Livestock and fishing sector		
Section	Technical coefficients	rank	Section	Technical coefficients	rank
Agriculture and horticulture	1,108,992	1	Agriculture and horticulture	247,244	2
Livestock and fishing	23,988	7	Livestock and fishing	1,177,728	1
Mine	15,050	10	Mine	15,195	10
Agricultural industries	17,657	8	Agricultural industries	142,778	4
Petrochemical and chemical industries	167,729	2	Petrochemical and chemical industries	167,498	3
Metal industry	15,602	9	Metal industry	18,395	9
Machinery industry	2,390	15	Machinery industry	2,321	17
Transportation manufacturing industry	3,711	12	Transportation manufacturing industry	2,716	16
Other industries	2,675	13	Other industries	7,385	12
Electric water and gas	46,046	3	Electric water and gas	41,196	7
Building	2,665	14	Building	4,800	13
Wholesale, retail, vehicle and goods repair	38,914	4	Wholesale, retail, vehicle and goods repair	111,423	5
Hotel and restaurant	1,697	17	Hotel and restaurant	1,927	18
Transportation and Communications	36,214	5	Transportation and Communications	65,505	6
Financial intermediation	28,671	6	Financial intermediation	30,969	8
Real estate and business rent	9,457	11	Real estate and business rent	10,786	11
Public Affairs, Defense and Social Security	526	19	Public Affairs, Defense and Social Security	639	19
Education	440	20	Education	565	20
Health	592	18	Health	3,836	14
other services	2,216	16	other services	3,736	15

Source: Research Findings

Considering that the most connection between the "livestock and fishing" sector is with the "agriculture and horticulture" sector. Also, directly and indirectly among the applicant sectors, the "Agriculture and Horticulture" section of the "Livestock and Fisheries" section is in the seventh.

In general, it can be said that there is a direct and indirect relationship between "livestock and fishing" and "agriculture and horticulture", so regarding the first hypothesis of the research, which states that in the production process of agriculture, sub-sectors "agriculture and horticulture" "Livestock and fisheries" have a strong and complementary direct and indirect relationship with each other, cannot be ruled out.

4-3 Analysis of backward and forward linkages of agricultural sub-sectors

The results of direct and indirect backward and forward linkages are given in Table 3. Considering that the rank of the forward link of the "Agriculture and Horticulture" section is higher than the middle of the table, the forward link is relatively weak in the economy, so the research hypothesis that states; "Agriculture and horticulture" has a strong forward link in the Iranian economy "cannot be accepted.

Due to the fact that the rank of the forward link of the "livestock and fishing" sector is lower than the middle of the table, the forward link has been relatively strong in the economy. Therefore, the research hypothesis that states; the "livestock and fisheries sector has a strong forward link in the Iranian economy" cannot be ruled out.

Given that the rank of the forward link of the "Agriculture and Horticulture" sector is lower than the middle of the table, so this sector has a relatively strong backward link in the economy. Therefore, the research hypothesis that states; "The 'agriculture and horticulture sector' has a strong backward link in the Iranian economy." cannot be rejected.

Given that the rank of the forward link of the "Livestock and Fisheries" sector is lower than the middle of the table, so this sector has a relatively strong backward link in the economy. Therefore, the research hypothesis that states; the "livestock and fisheries sector" has a strong backward link in the Iranian economy "cannot be ruled out.

Table3. Backward and Forward linkages of the agricultural sector

Section	Forward	Rank	Backward	Rank
Agriculture and horticulture	1.53	11	1.86	7
Livestock and fishing	2.06	8	1.84	8
Mine	1.08	20	1.51	10
Agricultural industries	2.39	2	1.88	6
Petrochemical and chemical industries	2.07	7	3.78	1
Metal industry	2.11	4	2.84	2
Machinery industry	2.16	3	1.32	13
Transportation manufacturing industry	2.55	1	1.45	11
Other industries	2.09	5	1.24	14
Electric water and gas	1.19	19	2.32	4
Building	2.09	6	1.22	15
Wholesale, retail, vehicle and goods repair	1.38	15	2.58	3
Hotel and restaurant	1.82	9	1.06	17
Transportation and Communications	1.61	10	2.05	5

Financial intermediation	1.40	14	1.57	9
Real estate and business rent	1.26	17	1.43	12
Public Affairs, Defense and Social Security	1.42	13	1.02	19
Education	1.25	18	1.02	20
Health	1.31	16	1.02	18
other services	1	12	1	16

Source: Research Findings

4-4 Investigation of Klein Conversion Matrix Theory in Iranian Economy with Agricultural Sector Approach (Investigation of the Effects of Final Demand Components on Value Added of Agricultural Sector in Iranian Economy)

This section examines the effects of increased consumption, investment and exports on the agricultural sector. According to macroeconomic theories, increasing each of the components of final demand such as consumption, investment, exports, etc., only stimulates demand and increases aggregate demand in the economy, and in this regard we have ¹⁵:

$$Y^d = M(G + C + X + I) \quad \text{And as a result} \quad \Delta Y^d = M(\Delta G + \Delta C + \Delta X + \Delta I)$$

M = increasing demand of the whole economy C = consumption of the whole economy
Y^d = demand of the whole economy, G = Government Expenditures, X = Exports, I = investment

The results of the effects of macro variables on the agriculture sector ("Agriculture and Horticulture" and "Livestock and Fisheries") are shown in Table 4.

Table 4. Investigation of the effects of final components on the value added of sectors (by separating the agricultural sector in the Iranian economy)

Section	Consumption	Rank	Investment	Rank	Export	Rank
Agriculture and horticulture	1.99	7	0.51	14	0.17	8
Livestock and fishing	3.03	3	1.12	9	0.21	6
Mine	0.57	19	0.61	13	2.40	2
Agricultural industries	5.62	2	1.20	7	0.36	4
Petrochemical and chemical industries	6.13	1	1.50	5	2.73	1
Metal industry	1.99	6	4.84	1	0.92	3
Machinery industry	0.72	18	2.52	3	0.12	11
Transportation manufacturing industry	2.14	4	3.32	2	0.07	14
Other industries	1.60	10	1.21	6	0.16	10
Electric water and gas	1.93	9	0.63	11	0.16	9
Building	0.37	20	2.52	4	0.03	17
Wholesale, retail, vehicle and goods repair	2.01	5	1.16	8	0.19	7
Hotel and restaurant	1.37	12	0.48	15	0.07	13
Transportation and Communications	1.96	8	0.88	10	0.25	5
Financial intermediation	1.58	11	0.42	16	0.11	12
Real estate and business rent	1.32	13	0.28	18	0.06	15
Public Affairs, Defense and Social Security	1.00	16	0.33	17	0.01	18
Education	1.11	14	0.09	20	0.01	19
Health	1.08	15	0.16	19	0.01	20
other services	0.95	17	0.62	12	0.03	16

Source: Research Findings

Considering that the rank of the impact of the macro consumption variable on the "Agriculture and Horticulture" sector is in the seventh rank and this rate is lower than the middle of the table, so this research hypothesis that states that "the macro consumption variable has a high impact on the" agriculture and horticulture" sector is" cannot be rejected.

Considering that the impact of the macro consumption variable on the "livestock and fishing" sector is in the third place and this rate is lower than the middle of the table, so this research hypothesis that states "the macro consumption variable has a high impact on the" livestock and fishing "sector is" cannot be rejected.

Considering that the rank of the impact of the macro investment variable on the "Agriculture and Horticulture" sector is in the fourteenth rank and this rate is higher than the middle of the table, so this research hypothesis that states "the macro investment variable has a high impact on the" agriculture and gardening "is" cannot be accepted.

Given that the impact of the macro-investment variable on the "Livestock and Fisheries" sector is in the ninth place and this rate is lower than the middle of the table, so this research hypothesis that states "the macro-investment variable has a high impact on the sector "Livestock and fishing" is" cannot be ruled out.

Considering that the rank of the impact of the macro export variable on the "Agriculture and Horticulture" sector is in the eighth rank and this rate is lower than the middle of the table, so this research hypothesis that states "the macro export variable has a high impact on the "Agriculture and gardening "is" cannot be ruled out.

Considering that the rank of the impact of the macro export variable on the "livestock and fisheries" sector is in the sixth rank and this rate is lower than the middle of the table, so this research hypothesis that states "the macro export variable has a high impact on the "livestock and fishing "is" cannot be ruled out.

4-5 Increasing employment coefficients of economic sectors in terms of the impact of community institutions

The increasing employment coefficient shows the effects of direct and indirect employment creation of sectors per unit of injection in the items of final demand in the economy. The increasing coefficients of employment are obtained by multiplying the diagonal matrix of direct employment in the inverse of Leontief. The column sum of this matrix represents the increasing coefficient of employment of each sector ¹². The results of these calculations are given in Table5.

Given that the "Agriculture and Horticulture" sector has the second rank in direct employment among economic sectors, and since this sector is located in the lower part of the table among the economic sectors, so about this research hypothesis that states ""Agriculture and horticulture" has a high direct employment in the economy"" cannot be ruled out.

"Given that the" Livestock and Fisheries "sector has the fifth rank in direct employment among the economic sectors, and since this sector is located in the lower part of the middle of the table among the economic sectors, so about this research hypothesis, which states" The "livestock and fisheries sector" has a high level of direct employment in the economy "" cannot be ruled out.

Considering that the "Agriculture and Horticulture" sector has the first rank in direct and indirect employment among the economic sectors and since this sector is located in the lower part of the middle of the table among the economic sectors, so about this research hypothesis Which states that the "agriculture and horticulture sector" has a high direct and indirect employment in the economy "" cannot be ruled out.

Considering that the "Livestock and Fisheries" sector has the fifth rank in direct and indirect employment among economic sectors, and since this sector is located in the lower part of the middle of the table among economic sectors, so research on this hypothesis Which states that the "livestock and fisheries " has a high direct and indirect employment in the economy "" cannot be ruled out.

Table5. direct and indirect employment coefficients of economic sectors

Row	Section	Direct employment	Rank	Indirect employment	Rank	Total employment	Rank
1	Agriculture and horticulture	12.65	2	2.98	7	15.63	1
2	Livestock fishing	9.67	5	3.50	4	13.17	5
3	Mine	0.26	15	2.01	12	2.27	14
4	Industry	2.24	12	1.68	13	3.92	12
5	Water, electricity and gas	1.05	13	1.64	14	2.69	13
6	Building	4.68	10	3.66	2	8.34	9
7	Wholesale, retail, repair of vehicles and goods	6.36	6	2.68	8	9.04	7
8	Hotels, hostels, restaurants and tourism	12.66	1	2.41	10	15.07	3
9	Transportation and Communications	4.87	9	2.01	11	6.87	11
10	Financial intermediation	0.70	14	1.46	15	2.16	15
11	Real estate services	6.17	7	4.12	1	10.29	6
12	Compulsory public, urban, defense, police and social security affairs	11.85	3	3.61	3	15.46	2
13	Education	10.43	4	3.06	6	13.50	4
14	Health and social services	5.43	8	3.09	5	8.52	8
15	other services	4.24	11	2.65	9	6.89	10

Source: Research Findings

5- Research results

The summary of research hypotheses is summarized in the following table:

Table9. summarizes the results of research hypotheses

Row	Hypothesis	Result
1	In the production process of the agricultural sector, the sub-sectors "Agriculture and Horticulture" and "Livestock and Fisheries" have a strong and complementary direct relationship with each other.	Do not reject the hypothesis
2	In the production process of the agricultural sector, the sub-sectors of "Agriculture and Horticulture" and "Livestock and Fisheries" have a strong and indirect direct and complementary relationship with each other.	Do not reject the hypothesis
3	The "agriculture and horticulture" sector has a strong forward link in the Iranian economy.	Rejection of the hypothesis
4	The "livestock and fishing" sector has a strong forward link in the Iranian economy.	Do not reject the hypothesis
5	The "agriculture and horticulture" sector has a strong backward link in the Iranian economy.	Do not reject the hypothesis
6	The "livestock and fishing" sector has a strong backward link in the Iranian economy.	Do not reject the hypothesis
7	The macro consumption variable has a high impact on the "agriculture and horticulture" sector.	Do not reject the hypothesis

8	The macro consumption variable has a high impact on the "livestock and fishing" sector.	Do not reject the hypothesis
9	The macro-investment variable has a high impact on the "agriculture and horticulture" sector.	Rejection of the hypothesis
10	The macro-investment variable has a high impact on the "livestock and fishing" sector.	Do not reject the hypothesis
11	The macro-export variable has a high impact on the "agriculture and horticulture" sector.	Do not reject the hypothesis
12	The macro export variable has a high impact on the "livestock and fishing" sector.	Do not reject the hypothesis
13	The "agriculture and horticulture" sector has a high level of direct employment in the economy.	Do not reject the hypothesis
14	The "livestock and fishing" sector has a high level of direct employment in the economy.	Do not reject the hypothesis
15	The "agriculture and horticulture" sector has a high level of direct and indirect employment (total employment) in the economy.	Do not reject the hypothesis

Source: Research Findings

6- Suggestions

6-1 Policy suggestions

- 1- Due to the strong relationship between the sub-sectors of the agricultural sector and the strong impact on each other, in order to increase production by investing in the chain of the agricultural sector, this sector was further strengthened, For example, the relationship between forage production and storage with the industrial livestock sector.
- 2- Although the agricultural sector has an impact on production in the economy, but the backward and forward relationship of this sector is not very strong and is average, so we can try to stabilize the relationship between the agricultural sector and other sectors.
3. An increase of one unit in household consumption causes an increase of 1.99 and 3.03 units in the value added of "Agriculture and Horticulture" and "Livestock and Fisheries", respectively. By comparing this case, it shows that the effects of increasing consumption on the "livestock and fisheries" sector are approximately one and a half times that of the "agriculture and horticulture" sector. Therefore, the role of the consumption sector in creating added value in the "livestock and fishing" sector is very high, which politicians pay attention to creating high added value in the agricultural sector. Also, between the implementation of final demand, consumption and investment, respectively, create the most added value in the economic sectors, which economic planners can use for economic development and increase production.
- 4- Considering that both "agriculture and horticulture" and "agricultural-related industries" will generate more income for rural households. Therefore, in line with the development strategy of economic sectors along with the balanced distribution of income between urban and rural households, the development strategy of "agriculture and horticulture" and "agricultural-related industries" sectors can be used.
- 5- Considering that the direct and indirect employment coefficient of the "Agriculture and Horticulture" sector is in the first rank and the "Livestock and Fisheries" sector is in the fifth rank among the economic sectors. Therefore, in general, due to the need to create employment in the Iranian economy, he used these sectors.

6-2 Suggestions for future studies

- 1- Considering that there are different regional advantages in Iran for agriculture, animal husbandry and fisheries, it is better to study the development of economic relations of different

provinces separately and the effects of these provinces should be created as a community development plan for the provinces in the agricultural sector.

2- In order to strengthen the backward and forward links of the agricultural sector, it is necessary to conduct a study plan in investing in areas related to the agricultural sector to develop industries that have the ability to help mechanize agriculture, increase productivity and reduce water consumption in the agricultural sector, helps to create.

3- In addition to this study, another study is needed to increase the comparative advantage in the production of products that have a competitive advantage, so that by studying the export products of Iran and neighboring countries, we can move towards specialization and advantage in agricultural products.

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