

The importance of discovery for a country's agriculture

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ABSTRACT: Because of the increasing need for food in Iran after the Islamic revolution, as well as because of current employment levels, increasing national income levels and rising immigration, the importance of agricultural activities in daily lives will focus Government attention on the agricultural sector. Reaching better development in agricultural production can be attained by providing solutions to producers' problems and incorporating commercial people. The development of agricultural industries to provide their needs and organising departments can be provided by new technologies. The level of impure production of agriculture examined was 20%. By paying closer attention to agricultural discoveries, agricultural production levels can be increased and employment generated. This may further be developed in other industries. The portion of discovery projects focused on impure production was about 20-59%, while the agricultural portion stood between 8-24%, and the portion of discovery dedicated to the government was about 5%. In this paper, the author discusses the role of discoveries in developing agriculture and advises some important methods to resolve current problems in the agricultural sector.

INTRODUCTION

Until a few decades ago, the oil-producing sector did not have any noticeable growth; it also did not generate as much income as it does today.

Iran is considered as an agricultural country. Its economy was dependent on the agricultural sector: most people and most of the workforce were involved in this area. Furthermore, it had the biggest share in producing Gross National Product (GNP) – more so than for any other section.

Economic growth and continuous changes in production and job market structure is invertible because of technology advancements. The most important changes were a decrease in the agricultural workforce and an increase in the services and industrial section, a lower share of agriculture in the GNP, as well as more imported food materials compared to exports, which can be attributed to the results of advances and development in technology.

In this article, the author studies the role of technology and training, and research in agriculture growth and development, and offers some alternatives to solve existing problems.

IMPACT OF THE AGRICULTURAL SECTOR

Researchers agree that slow agriculture growth is one of the major reasons that growing countries are not able to reach ideal economic growth [1-6].

The importance of the agricultural sector in economic development can be concluded as follows:

- Catering to increases in the food material needs of society;
- Producing substitution goods to decrease imports;

- Providing investment and foreign exchange opportunities by producing export goods;
- Supplying the workforce to other economic sectors to generate a buying market for the industry section.

Today, many economists insist that increases in production and productivity in the agriculture sector are mandatory for the overall economic development of developing countries. Moreover, to aid in the fight against hunger and poorness in these countries, they also recommend a tight relation between agriculture and other economic sectors, particularly the industry sector.

AGRICULTURAL RESEARCH

Considering the economic and social environmental effects, agricultural plans cannot succeed without effective research and knowledge into the utilisation of resources; this is why related international organisations consider the lack of research to be the number one problem facing developing countries.

Agricultural research can identify potential areas with regard to the following:

- More productive procedures;
- Better planting, growing, harvest and storage of food products;
- The supply of hybrid seeds and young trees that are resistant to harsh environments.

These elements should result in a wider range of products plus savings in resources and, finally, lower costs and higher profits for producers with no actual need for price increases.

Access to new varieties of wheat and rice have brought about a *green revolution* that has generated great changes in

agriculture, such as wheat and rice production increases, as well as job creation in the agricultural and related sectors. This is also relevant with regard to important research.

International Comparison of Agricultural Research

Agricultural research has not always experienced effective development; Table 1 displays the portion of research in agriculture with regard to other countries.

Table 1: Comparison of research between countries.

Country	Year	Research Population in One Million Persons	The Portion of Researcher Force with Profession Human	The Portion of Researcher Fee with Cvr
USA	1980	2,800	23.4	2.40
Turkey	1979	221	3.3	0.60
India	1977	46	4.0	0.50
Iran	1981	48	0.4	0.12
Iran	1987	82	0.6	0.21

By attending to positive background capacity and the effectiveness of agriculture production, this identifies how money is dedicated to agricultural research internationally. The portion of researcher force contains the original effect of production growth and agricultural income for farmers.

In order to identify a solution for production problems and the best use of facilities, much more portion of the national economy should be dedicated to research in agriculture. Also, in all cases of research in Iran, agricultural research has carried an important status.

Table 2: A comparison of the agriculture research credits between certain countries, ranked by \$ per capita.

Country	Year	Total Agriculture Research Credit \$	\$ Per Capita
Denmark	1996	92	17.4
Finland	1996	86	16.7
Canada	1998	397	13.5
Ireland	1996	38	10.4
Netherlands	1996	145	9.3
France	1997	474	8.1
England	1997	391	6.6
USA	1998	1,545	5.7
Austria	1996	45	5.6
Sweden	1996	49	5.5
Belgium	1996	56	5.4
Portugal	1996	54	5.4
Japan	1997	54	5.0
Germany	1997	406	4.9
Greece	1996	40	3.8
Spain	1996	115	2.9
Italy	1997	143	2.5
Iran	1998	605	1.0

In classifying countries according to research expenditure, the list is as follows:

1. The USA: more than 200 billion dollars;
2. Japan: 90 to 100 billion dollars;
3. Germany: 40 to 50 billion dollars;
4. France, England and China: 20 to 30 billion dollars each;
5. Canada: 20 billion dollars;
6. Italy: 10 billion dollars;
7. Sweden, the Netherlands and India: 5 to 10 billion dollars each;
8. South Korea and Switzerland: 4 to 5 billion dollars each;
9. Spain: 3 to 4 billion dollars;
10. Austria and Taiwan: 2 to 3 billion dollars;
11. Finland: 1 to 2 billion dollars;
12. Portugal: 500 to 600 million dollars;
13. Ireland: 400 to 500 million dollars;
14. Singapore and Greece: 200 to 300 million dollars;
15. Iran: less than 200 million dollars.

CONCLUSION

Attention needs to be paid to developing agriculture in Iran by way of the dedication of money.

Insufficient research dollars has placed Iran's economy in this regard behind many developed and developing nations. Further, there is no match between research supplied and farmer production requirements.

It is necessary to dedicate an important part of national income to agricultural field research, as well as achivery, focusing on the following:

- Utilising and protecting research;
- Improving the relationship between agricultural universities and those organisations that are responsible;
- Over the last years, the importance of development was accelerated and money and credits for this component increased;
- In last few years, the importance of researchers and research increased; moreover, the number of research projects increased too;
- The researcher and research and the programme of the researchers will play an important role in developing the agricultures industrial of the country.

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