# EFFECTIVE USE OF LAND AND RESOURCES IN KAZAKHSTAN THROUGH REDUCED ECOLOGICAL EFFECTS

Amirtay Elmira

Kazakhstan, Nazarbayev Intellectual School of Physics and Mathematics in Shymkent

## **ARTICLE INFO**

Received 21 March 2018 Accepted 13 April 2018 Published 01 May 2018

## **KEYWORDS**

earth, agriculture, reform, economy, business

# **ABSTRACT**

This study investigates Kazakhstan's agriculture in two sections. First, it discusses its importance, practical usage and research methods. Second, its benefit to the country, where effective land use is considered. It focuses on the usage of land and resources efficiently and at the same time to eliminate its negative impact on environment. It provides research based solutions for the issue. It has also supplemented with Kazakhstan's agricultural reforms and President N. Nazarbayev's messages to his country.

The study was written in compliance with research requirements and has its importance.

© 2018 The Author.

**Introduction.** South-Kazakhstan region is one of the largest agrarian and industrial regions of the Republic. The district accounts for 34 % of the total production. Agriculture of the South-Kazakhstan region over the past twenty years has become an innovative sector. Basically, agriculture unites two industries, closely connected with each other - plant growing and cattle breeding. They account for 53 % and 47 % of the country's agricultural production. The benefits of agriculture are invaluable for our country, so the use of terrains is of great importance. In general, sustainability of environment is a process in which all the demands of people are maintained without destroying the authenticity of nature.

Innovative development of the agricultural sector will allow Kazakhstan to be among the developed counties and to develop progressively. The role of the agricultural sector in the development of Kazakhstan's economy is very important. The products to export will not only bring money to country, but also enhance our reputation among other countries. The product quality depends on the farmland, so in recent years the government has been paying more attention to the "Green Economy" program. The main principle of the "Green Economy" is to increase the productivity of agricultural commodities and find the ways to increase the use of arable land. In this case, obviously, the use of cutting edge technologies, adoption of fertilizers and various types of pest control is necessary for our country.

One of the main reasons why I chose this topic is because I am really care about the profitable usage of land resources in our region, insufficient work force, lack of agronomist and land degradation that may led to environmental problems.

For these reasons, it is important to determine the benefits of agriculture on the country's economy and the extent to which the state is helping the sector. It is interesting for me to know who is responsible for the ecological situation of the South Kazakhstan region and study the impact of this industry on the social life of the population. It is also important for me to look for ways to use agricultural lands and focus on future changes.

The workflow is based on the findings of the survey and the assessment of the current routine. The focus is on the ways in which reforms are implemented to ensure that the work is done correctly.

Main Part. Research Questions.

From the moment of adoption of our independence, it is envisaged to undertake the agricultural sector for the country. "Our greatest asset is land and resources. Our task is to protect, enrich and preserve it," said President Nursultan Nazarbayev. Sustainable development of the Kazakh agricultural sector is always one of the important factors determining the economic and political stability of Kazakhstani society. we can achieve high results.

At present, the total agricultural land in the country amounts to 272.5 mln. hectares of land. The South-Kazakhstan region, which has the most prosperous agricultural sector, is about 12 million hectares belong to the farmland. Depending on the purpose of use, the areas include arable lands, pastures and meadows, as well as perennial fields (gardens and vineyards).

Because of the fact that they use agricultural land in certain years, they require additional melioration. In view of the strategy "Kazakhstan-2050", the idea of moving the agro-industrial sector to the most innovative type has been created. Renewal of the irrigation system in the innovative agricultural system, combines the ways of cultivation of humus soil with biological products, and the careful use of agricultural lands. However, this goal has not yet been fully realized. There are several reasons for the ecological degradation of agricultural lands. They include: low skilled professionals, land degradation after multiple use, weak cultivation and lack of new technologies.

For example, 4mln. In the Suzak district, which occupies about a hectare of agricultural land in 2014, the area of 0.5 hectares has been deserted and became depleted. This attempt to increase the number of agricultural products has caused damage to South Kazakhstan. Ecological degradation of the land has been caused by erosion, lack of control and experiments. Compared to Brazil, the fields and rangelands are used alternately over the seasons. Used in spring and autumn as gardening crops and vegetables, they use agricultural land as pastures in winter and summer. This method is very effective, as the animals are fertilized by soil sowing, and agronomists, in turn, enrich the soil with the most biological fertilizers.

Another factor that contributes to the deterioration of quality of crops. This, in turn, has a negative impact on the quality of agricultural products. Shardara district is known not only by field crops, but also by meat and seeds. Only in 2015 thanks to the subsidies through the "Sybaga" program, 179,455 sheep and goats, 24,531 heads of horns and horses and camels reached another 7414. In this region, the wastewater is polluting. Because they biologically deteriorate the soil cover. As a result, cotton, horticultural, vegetable, etc. are damaged and the arable lands are polluted, and the second order becomes unusable.

In order to develop the agroindustrial complex, the "Sybaga", the Agribusiness 2020 programs are developing in the country in full-scale development of livestock and crop production. Head of the Department of Entrepreneurship, Industrial-Innovative Development of South Kazakhstan region Marat Karabayev believes that in 2015 South Kazakhstan region will receive \$ 416 billion tenge for the agricultural sector abroad. In addition, South Korean cotton and textile factories, experts in cotton production, shared their knowledge of cotton harvesting and harvesting. High level of development of such international relations is directly supported by the fertility of our land and the state support. In the future, the state's control over the agricultural sector will be further enhanced due to the need to increase the quality and quantity of domestic goods.

**Research Methods.** In my research, I have used and analyzed the following methods, as it is an important and effective factor in the study of course work by applying a few methods:

The first approach is to use information sources that are specifically designed to expose the subject from the Internet. With the help of the Internet, I gained a wide variety of information, as it is important to study the environmental safety of agricultural lands of the South Kazakhstan region in accordance with any given arguments. In addition, the use of the Internet is efficient and convenient. And the abundance of information has helped to make the subject matter clearer. The real statistics are derived from specific sources such as the official page of the South Kazakhstan Town Council.

As a second method, online surveys were conducted through the Internet. The main reason for conducting the survey was to determine the extent to which people are aware of the issue. Different age groups have been able to fully consider course work by studying the opinions of the individuals concerned. There were pupils and workers in the survey. Through the social survey, the goal has been achieved through the knowledge and analysis of people's opinion on the state of the agricultural sector in South Kazakhstan, the impact on the situation in the country.

As a third method, a non-structured interview was held in Suzak Region, South Kazakhstan Oblast. The purpose of this study was to give a clear answer to the questions raised by the factual knowledge of the peasants, their knowledge of their own perennial knowledge.

By the first method, I found a lot of information through reliable online leaflets. I found out who was responsible for the deteriorating quality of agricultural land. The state is implementing various strategies and programs for agricultural land productivity. Research and observation helped to achieve real results. With the help of official websites, I have collected information on the innovative development of the agricultural sector of the South Kazakhstan Oblast. I have determined the role of this industry in the international arena. At the same time, it was important to disclose the theme of the

various programs providing this sector with funds, information about foreign investors. I got acquainted with the activities of such programs as "Sybaga", "Agronomics" and the amount of subsidies. The statistical data below shows the development index for South-Kazakhstan Region in 2010. Development indicators are directly related to chemical composition, geographical location and long-term experience in the field.

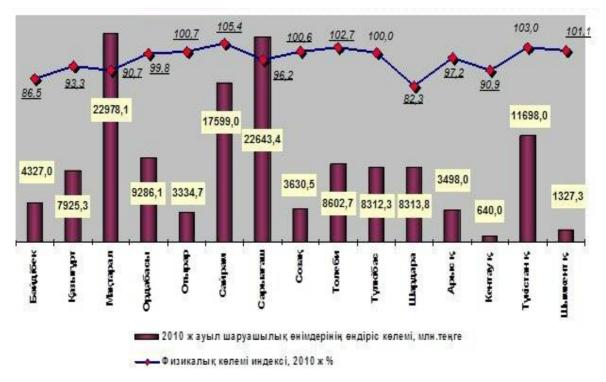


Fig. 1.

On the web pages there are a lot of information about the ecological safety of agricultural lands. However, there is no information on the reasons for the decline in humus soil quality. However, information on the types of agricultural machinery used in agriculture is insignificant.

The social survey also focuses on studying people's thoughts and finding ways to increase agricultural productivity. In order to further strengthen the course work, the questionnaire was obtained from NIS students aged 17-25 years and people with different workplaces. The total number of people surveyed is 118. The questionnaire consists of three parts: personal information of the respondent, knowledge about the current state of agricultural land in South Kazakhstan, the reasons and ways to counter them. The reasons and experience of fertility of agricultural land: high level of equipment failure, insufficient land reclamation and shortage of qualified personnel. The possible ways of solving the problem in the questionnaire are to improve technology, to exchange information and to increase the amount of funds. Because the government is responsible for this process, the problem of ecological security of the non-destructive lands is not fully resolved.

Assessment. By uncovering all the methods used in course work, the actuality of the rules of ecological safety in agricultural sector in South Kazakhstan region was found out. All the methods are effective, and they were based on previous analysis. During the research work, all the information was taken from reliable sources on the internet. The next method of research work, exactly interview, gave me an opportunity to cover all my questions that were mentioned in introduction part. In order to conclude and evaluate coursework, PEST method was used.

Table 1.

PEST Factors	Caused Influence
<ol> <li>Political</li> </ol>	- The rules for the sale of such lands may change when the composition of the laws
	that protect the ecological safety of agricultural lands is changed.
2. Economic	- The development of other industries in the country, for example, the development of
	the chemical industry, increases the use of pesticides, biological products and agricultural
	land. This increases soil productivity.
	<ul> <li>Exchane rate. Its stability throughout the country and its export effectiveness provide</li> </ul>
	technical support for the lands e.t.c.
	- Staying in international organizations will have an impact on agricultural land. For
	example: our membership in the World Trade Organization has increased the need for
	this industry. Because of that the importance of soil increases.
3. Social	- Population. In the domestic market agricultural commodity is increasing as the
	number of people increases. This leads to a change in the state of the land.
	- Quality of education. By employing peasants, the level of unemployment in the
	country will not only reduce, but also increase the relevance of this sphere.
4. Technological	- Technology provision. It is possible to take care of agricultural lands by providing
	them with necessary irrigation devices, cars.

Conclusions. The knowledge that I gained during this course work radically changed my perspectives. I have received detailed information on the use of agricultural lands in the South Region of our country. Thanks to the careful use of land, our country has developed my thinking not only economically but also the various effects of the people's lives. Through this course work, I realized the importance of our earthly life for each and every one of us. At the same time, I decided that this issue will be solved by means of financial assistance, exchange of experience with foreign countries. Even though the restoration of lands used without waste is a very complex challenge, the state should take this issue under strict control.

## REFERENCES

- 1. http://kazatu.kz/science/sf9 zem 101.pdf [Basics of effective use of agricultural land]
- 2. http://diplomnik.kz/diplomdyk-zhumystar?id=ID\_2103[Volume of agricultural land in South Kazakhstan region]
- 3. http://aikyn.kz/ru/news/show/20418-o t st k\_investiciya\_tartu\_a\_olaily\_aima\_[Investment in the South Kazakhstan region and international relations]
- 4. http://business.gov.kz/kz/business-support-programs/detail.php?ID=51597 ["Agribusiness 2020" Program and its achievements]
- 5. http://shardara.gov.kz/index.php?option=com content&view=article&id=721:e-bek-ozattary-marapattaldy&catid=15&Itemid=237&lang=kz [Agricultural products in the South-Kazakhstan region]
  - 6. http://bigox.kz/auyl-sharuashylygyn-damytu-maseleleri/ [ Codes and programs of careful farming]
- 7. http://www.uniface.kz/index.php?post=article&section=4&id=226 [Innovative ways of development of the agricultural sector]
  - 8. http://turkystan.kz/basty-akparat/6400 [Financial assistance provided through the "Sybaga" program]
- $9.\ http://ontustik.gov.kz/\ [Official\ site\ of\ the\ South-Kazakhstan\ region.\ More\ information\ about\ the\ news]$