AMERICAN JOURNALS
Open Access, Peer Reviewed Journals
American Journal of Business Management, Economics and Banking
ISSN (E): 2832-8078 Volume 22, | March - 2024

IMPROVING GOVERNMENT INVESTMENT POLICY IN THE AGRICULTURAL SECTOR

Yangiboev Sirojiddin Juromurodovich
Researcher at Tashkent State University of Economics,
49 Islam Karimov Avenue, Tashkent, 100066, Uzbekistan.

ABSTRACT	KEYWORDS
The article explores the economic relationships that arise in the process of attracting and managing investments in the agricultural sector of the region's economy.	Agriculture, investment activity, sectoral development, regional development, efficiency.

Introduction

Currently, much scientific research is underway in the world on the problems of increasing investment activity in agriculture in order to ensure the well-being of the population and food security. Developing innovative approaches to increasing investment activity in the agricultural network, improving the style of using the Agriculture Orientation Index (AOI) in evaluating the effectiveness of investment activity in the general national economy, evaluating the relative efficiency of agricultural-oriented investments, making and implementing decisions aimed at improving network investment activity are counted as crucial. The use of modern approaches to ensure the efficiency of improvement, evaluate the relative efficiency of investments in agriculture in regions is one of the most important aspects of scientific research in this area.

There is a special emphasis on the development of the agrarian sector in ensuring socio-economic development and the well-being of the population in Uzbekistan. The need for additional investment in the agricultural sector is also related to the transition to intensive and innovative types of governance within the framework of the next socio-economic model of the development of society, namely, the development strategy, and the solution of problems of expanding reproduction. This will create a framework for ensuring the quality of life, well-being of villagers, and food security of the regions. The need to improve the quality of human capital and provide for the maintenance of villagers is also among the most important tasks of investment policy.

II. LITERATURE REVIEW

Scientific, theoretical, and practical issues of improving the investment activities of the agricultural network and the efficiency of the use of investments in network development have been studied by a number of foreign and local economists.

Theoretical and applied research on this problem has included the works of F. Kene, A. Smith, J.M. Keynes, U.Petty, R.Solou, R. Harrod, E.Kasla, M.Bekker, A.Nelson, U.William Sharp, Gordon

Dj.Aleksander, DjeffryV.Bailey, G.P.Jenkins, L.J.Gitman, M.D.Jonk, S.Fisher, R.Dornbush, R.Shmalenzi, I.N.Buzdalov, V.E.Afonina, K.R.McConnell, Scientific research by S.L.Bryu, E.J.Dolan, D.E.Lindsey, V.Maslova, M.Osmolovskaya, I.N.Voblaya, O.B.Ugurchiev, D.O.Ugurchiev, V.D.Shapiro [1] and others. They highlighted the theory of investment, in particular, the scientific and conceptual basis for investment activity in agriculture.

In regulating the regional development of the economy of Uzbekistan correctly as well as implementing investment policies in various sectors of the economy effectively, scientists, like A.Sh.Bekmurodov, G.K.Saidova, A.M.Sodiqov, D.G. Gozibekov, B.B.Berkinov, L.F.Amirov N.G. Karimov, N.R.Kuziyeva, Sh.R.Rajabbayev, B.Sh.Muminov, Sh.I.Mustafakulov, A.Sabirov, S.A.Abduraximova, B.B.Valiyev, N.R.Rajabov, M.A.Raimjanova, M.X.Eloev, S.A.Nuriddinov, S.R.Umarov, B.Q.Hoshimov, A.X.Hudayberdiyev contributed appropriately [2]. These economists aimed at identifying investment attractiveness, analyzing its contents, evaluating the country's economic well-being and calculating the efficiency of the use of economic resources of regions, modeling socio-economic and regional-industrial complexes, developing a basis and methodology for regional development, activating investment in free economic zones and managing investment activities satisfactorily.

Despite the scope of scientific research carried out in this direction, it is necessary to deepen scientific research based on a systematic approach based on a deeper and more complete description of the nature of investments in the agrarian economy, their role, the identification of sources of formation, and the evaluation of their effectiveness. Accordingly, the importance of developing innovative approaches to theoretical and methodological study of the investment process in agriculture, describing its forms, efficiency, and management mechanisms is increasing.

III. DATA AND METHODOLOGY

Investment policy is one of the most important areas of economic development and expansion of production in any state. Reforms based on market relations in our country's national economy for more than a quarter of a century are aimed at implementing an active modernization policy, ensuring deep structural changes in national socio-economic networks and intensive economic growth in socio-economic networks. These reforms form the fundamental basis for implementing an active investment policy.

In agriculture, like all sectors, 2 approaches can be seen in clarifying the nature and importance of investments: the first is the cost element associated with the targeted formation of the main and circulating production funds. The second is the set of resources necessary for the reproduction of the main and circulating production funds. In the theory of investments, a number of scientific developments related to the effectiveness and necessity of regulation of state and regional investment activities are systematized. However, based on the requirements of today's transformational processes in the economy of Uzbekistan, the formation of a system of effective indicators that represent the factors that positively influence the future trends of economic growth of the regional investment policy is gaining urgent importance.

The financial and economic basis for the socio-economic development of the territories of the Republic of Uzbekistan is a regional investment policy that needs to be systematically carried out. The correct determination of strategic objectives of regional investment policy, the development of an algorithm for tasks aimed at the effective implementation of this goal, and the formation of an

optimal investment management system are key factors in the proper organization of regional socio-economic development.

It should be noted that while the effectiveness of managing regional investment activities is considered an important institutional basis for the effective implementation of regional investment policy, the main determinants of governance efficiency are evaluated through the effectiveness of investments across different criteria.

The effectiveness of investments can be determined by the exact value equivalents or socio-economic self-sufficiency that society can see through the implementation of certain projects.

Table 1 Indicators for assessing the effectiveness of investment projects[1]

Criteria	Formula	Criteria
Dynamic Performance Indicators		
Net Current Value (NPV)		
As an increase in integral results from reduced integral expenses up to the initial year or a sum of current effects for the entire settlement period	$NPV = \sum_{t=0}^{T}(R_t - Z_t)\cdot\frac{1}{(1+i)^t} = \sum_{t=0}^{T}\frac{FCF_t}{(1-E)^t}$ Here: Results achieved at the Rt-t computing stage (revenues); Expenses at the Zt-t computing stage (current minus depreciation and capital investment); Duration of the T-billing period (T=Σtᵢ); *i*-discount rate; *The effect achieved in the t-phase of the* FCFt calculation	Effective if the project is NPV>0
Profitability Indicator (PI)		
Discounted positive cash flow ratio and discounted value of investments for the period	$PI = \frac{1}{K}\sum_{t=0}^{T}\frac{R_t - Z_c^t}{(1+i)^t}$	The project *is valid* > *PI1*
Internal level of yield (IRR)		
Discount rate, where NPV=0, minimum acceptable level of investment for investor	$IRR = \sum_{t=0}^{T}(R_t - Z_c^t)\cdot\frac{1}{(1+i)^{t-}} = \sum_{t=0}^{T}K_t\frac{1}{(1+i)^t}$	IRR should have ≥ average income level in financial markets
Project repayment period (payback period)		
Time from the start of the project, where capital investments are covered by general effects	$\sum_{t=0}^{T}(R_t - Z_c^t)\cdot\frac{1}{(1+i)^t} = \sum_{t=0}^{T}K_t\frac{1}{(1+i)^t}$	

The state investment management system is based on interaction with participants in regional investment activities using management methods and tools. The system of regional investment, on the other hand, serves the real sector of the region's economy, filling it with its own resources. This, in turn, prohibits the system of evaluating the effectiveness of investments in regional development by evaluating the effectiveness of specific projects that are considered an element of the region's investment activities. World practice has developed a system of economic indicators for evaluating specific projects, and Table 1 systematizes the most important of these indicators.

Government measures to encourage investment in agriculture are one of the most effective ways to increase investment in the network. The scope of the state investment support policy depends on the

[1]Developed by the author based on an analysis of scientific literature.

relative advantages of each country inherent in the network and the opportunities to take advantage of agricultural potential. The relative advantages of agriculture are one of the networks with great opportunities to ensure food security in The United States, improve the income of the population, and ensure their employment, as well as improving the export potential of the national economy. This will require a favorable investment environment and an efficient risk management system.

Given the limited opportunities for extensive development, agricultural growth will in many ways depend on the growth of productivity supported by investments in physical, human and intellectual capital.

IV. ANALYSIS AND RESULTS

Due to the attractiveness of the investment environment and the uniqueness of investment insurance in the regions, it is necessary to constantly study its composition and characteristics to ensure the region's high investment position and the level of stability of this figure and to manage effectively. Development of investment policy in the context of innovative development in the agricultural complex in the country trends in its development are a key factor in the economic development of the national economy and the region by increasing its competitiveness.

Because the agro-industrial complex first of all acquires an important social importance related to the production of goods that are of primary importance for human needs. Secondly, it embodies the important factors of realizing the high potential of strengthening competitiveness in agriculture at the global level. Thirdly, investments in the innovative development of these agribusiness networks provide high multiplicative efficiency in economic development through the growth rate in the network, which has a driver's description in the national economy.

In the period of analysis, we will try to analyze investments in core capital per capita by calculating the Regional Index (I_{ippa}) in determining how many times higher or lower the regions are than the national average level. This index is determined by the following formula:

$$I_{ippa} = \frac{\frac{I_{ra}}{\sum P_r}}{\frac{I_{ta}}{\sum P_t}} (1)$$

Here: $I_{ra}/\sum P_r$– the per capita ratio of investments in the main capital of the agricultural network in regions; $I_{ta}/\sum P_t$ *is* the national average of investments in core capital of the agricultural network.

According to Table 2, if we conditionally consider the average level of investment in core capital to be 1 index throughout the country, the above-average rate is strong concentration in the regions of Bukhara (2.53), Tashkent (2.19), Djizzak (1.99) in 2020.

Table 2 Regional Average Index for Investments in Core Capital of Agriculture per Capita[2]

Hududlarnomi	2016	2017	2018	2019	2020
Total throughout the country	1,00	1,00	1,00	1,00	1,00
Republic of Karakalpakstan	2,37	1,30	1,69	1,97	1,80
Andijan region	0,47	0,46	0,45	0,41	0,41
Bukhara region	1,58	2,01	2,81	1,35	2,53
Djizzak region	1,72	1,70	1,61	1,71	1,99
Kashkadarya region	1,38	1,49	1,61	1,38	1,09
Navoi region	0,37	0,97	0,88	1,90	0,86

[2]Developed by the author based on data from the National Statistics Bureau of the Republic of Uzbekistan.

Namangan region	1,60	1,67	2,60	1,79	1,74
Samarkand region	0,64	0,62	1,53	1,50	1,46
Surkhandarya region	0,54	0,55	0,64	0,76	0,78
Syrdarya region	0,97	1,03	0,90	0,87	0,80
Tashkent region	2,11	2,94	1,94	2,03	2,19
Fergana region	1,51	1,46	1,37	1,40	1,40
Khorezm region	0,62	0,55	0,55	0,44	1,47
Tashkent city	0,21	0,39	0,29	0,32	0,36
Variable width, $R= X_{max}- X_{min}$	2,16	2,55	2,52	1,71	2,17

From the point of view of variation, in 2017, a relatively strong difference between the share of investments in the agricultural sector per capita was observed. This difference was 2.17 in 2020.

Based on the above, the following conclusions were systematized as a result of the research:

The change of the strong difference in the variation width according to the indicator of the ratio of investments in the fixed capital of the agricultural sector per capita in the cross-section of the regions depends mainly on the activity of local state authorities in attracting investments to the agricultural sector. First of all, it is desirable to further increase the activity of local state authorities in attracting investments in agriculture in each region, taking into account the existing potential (in agriculture) in the region.

It is intended to attract investment in the implementation of modern projects based on a highly added value chain in improving the activity of local governments in attracting investment in agriculture. Because the results of the analysis confirm that the population of the area is based on work as there is a strong gap between the added value created in the per capita agricultural network.

One of the most widely used methodologies for evaluating the impact of the economy on intensive economic growth in improving investment activity in the agricultural sector in world practice is the Agriculture Orientation Index (AOI).

The Agricultural Orientation Index (*AOI*) is defined as the ratio of the share of agriculture in government spending to the share of agriculture in JIM[3]. This can be calculated by the following formula:

$$AOI = \frac{\frac{Ga}{G}*100}{\frac{VAa}{GDP}*100} \qquad (2)$$

Here: *Ga*- the share of expenses incurred in agriculture in all government expenses; Total government spending at a certain period of G-; *VAa* - gross added value in total agriculture at a certain time; *GDP* is gross domestic product at a certain time. In practice, this index is on the global scale, at the intersection of regions and the national economy.

According to Formula 1, if, in this case, gross domestic product in the economy represents a higher share of government spending than the share of added value in the agricultural sector. $AOI > 1$

[3] Look at: United Nations Statistics Division. *International Standard Industrial Classification Rev. 4.* New York. Available at: https://unstats.un.org/unsd/cr/registry/isic-4.asp

Table 3 Leading countries of Central Asia by agricultural orientation index (Agriculture Orientation Index – AOI)[4]

№	Countries	2015	2016	2017	2018	2019	2020
1.	Kazakhstan	0,92	1,00	0,96	0,97	1,15	1,19
2.	Uzbekistan	0,17	0,14	0,17	0,19	0,18	0,21
3.	Kyrgyzstan	0,10	0,11	0,10	0,14	0,08	0,16
4.	Average	0,35	0,39	0,39	0,44	0,47	0,48

According to Table 3, the agricultural orientation index in Central Asia between 2015 and 2020 was around 0.35-0.48. In particular, the highest rate was observed in Kazakhstan, which was 1.19 in 2020. This situation is explained by the fact that an active public investment policy is being pursued in the development of the network in public spending.

This indicator fluctuated around 0.17-0.21 in the analyzed period in the Republic of Uzbekistan, which confirms that a relatively low level of state policy of supporting the industry through investments is provided. However, in our opinion, agriculture is one of the strategic sectors of the economy of Uzbekistan. This, in turn, confirms the need to turn the industry into one of the driver areas of economic development, thanks to the high labor productivity index, favorable climatic conditions based on the natural geographical location of the country.

V. CONCLUSIONS AND SUGGESTIONS

As a result of this research aimed at attracting investment in the agricultural sector of the economy and improving their efficiency, the following conclusions were systematized:

Investments in modern conditions are not only one of the main conditions for the efficient functioning of the agrarian sector, but also a factor in improving its competitiveness and a vital prerequisite for transitioning to an innovative type of agricultural economy management. In terms of its economic nature, investments in the agricultural sector incorporate total material, money, and labor investments to restore, modernize, and expand reproduction of network manufacturing factors.

Investments in the agrarian sector of the economy have local and multiplicative efficiency, unlike other industries. The analysis has found that when it comes to local effectiveness of investments, their impact on economic, social and ecological efficiency in certain regions is considered. It is necessary to understand the efficiency of the national economy, macro- and microeconomic level expressed in multiplier efficiency - the growth of national income.

Investing in agriculture is the most important and most effective strategy for reducing poverty in rural areas by creating significant amounts of jobs in areas other than agriculture and agriculture, developing rural infrastructure.

Government measures to encourage investment in agriculture are one of the most effective ways to increase investment in the network. The scope of the policy of state investment support depends on the relative advantages of each country inherent in the network and the possibilities of its use of agricultural potential.

[4]Qarang: The Food and Agriculture Organization (FAO). https://www.fao.org/about/en/

Given the limited opportunities for extensive development, agricultural growth will in many ways depend on the growth of productivity supported by investments in physical, human and intellectual capital.

The development of investment attractiveness of agriculture is influenced by such factors as the implementation of the state protectionist policy in the national market for agricultural products, financial support policies, financing the development of engineering and social infrastructure in rural areas, and addressing the monopoly environment.

It is intended to provide equal rights and opportunities for local and foreign investors to address the reasons that hinder investment in the agricultural sector of the economy, and to increase investments in government budgets (subsidy-shaped compensation) based on the development of borrowing.

The state's optimal economic policy in agriculture should help minimize imbalances in existing inter-regional economic development. Therefore, the important circumstances in the field of investment should be based on the work: the harmony of network and territorial approaches to the distribution of budget funds, the constant monitoring of the financial situation of the regions to determine the real possibilities of self-financing, and the implementation of measures to allocate audit funds.

In the direction of creating a favorable agribusiness environment and added value chain, the terms of contracts for the supply of raw cotton grown by farms for cotton-textile clusters based on the analysis of the market situation and the forecast calculation of the costs of carrying out agrotechnical activities in determining, it is necessary to go to the market principles of cotton raw material price formation, purchase and sale by setting the minimum prices.

In order to improve the credit mechanism for increasing investment activity, agricultural business entities prohibit the improvement of the privileged lending and irrigation mechanism in accordance with the strategic priorities and needs of the agricultural and food network.

It is intended to increase their investment attractiveness by introducing digital technologies based on block chain technology for the activities of agricultural enterprises.

REFERENCES

1. Блауг М. Кенэ, Франсуа // 100 великих экономистов до Кейнса = Great Economists before Keynes: An introduction to the lives & works of one hundred great economists of the past. — СПб.: Экономикус, 2008.;
2. Смит А. Исследование о природе и причинах богатства народов. — М.: Эксмо, 2007.; Общая теория занятости, процента и денег / Дж. М. Кейнс. – М. : Прогресс, 1978.;
3. Solow R. M. Technical Change and the Aggregate Production Function // The Review of Economics and Statistics (англ.)русск.. — 1957. — Август (vol. 39, № 3).;
4. Инвестиции / У. Шарп, Г. Александр, Дж. Бели. – М.: Инфра-М, 2001.;
5. Cost benefit Analysis of investment Decisions / G. P. Jenkins, A. C. Harberger. – Canada: Manuel. Queens University, 2001.;
6. Методологические аспекты анализа понятия «инвестиции» / И. Н. Буздалов, В. Е. Афонина // Известия ПГПУ им. В.Г. Белинского. – 2012.;
7. Инвестиции в АПК в условиях импортозамещения / В. Маслова // АПК: экономика, управление. – 2014.;
8. М. Осмоловская Инвестиционный процесс в АПК Краснодарского края: состояние и перспективы / М. Осмоловская // АПК: экономика, управление. – 2015. – № 3.;

9. D.G‘. G‘ozibekov Investitsiyalarni moliyalashtirish muammolari: Iqtisod fanlari doktori ilmiy darajasini olish uchun yozilgan dissertatsiya. – T., 2002.;
10. Б.Б.Беркинов, Л.Ф.Амиров методические аспекты анализа и оценка эффективности финансово-экономических показателей отраслей аграрного сектора узбекистана //Journal of Economics. – 2022. – Т. 12. – №. 2.;
11. N.G.Karimov Iqtisodiy integratsiyalashuv sharoitida investitsiyalarni moliyalashtirishning bozor mexanizmlarini joriy etish muammolari: 08.00.07 – Moliya, pul muomalasi va kredit. Iqtisod fanlari doktori ilmiy darajasini olish uchun yozilgan dissertatsiya. – T., 2007.;
12. B.Sh.Muminov O‘zbekiston iqtisodiyotida markazlashgan investitsiyalarning samaradorligini oshirish yo‘llari. Iqtisod fanlari nomzodi dissertatsiyasi. – T., 2012.;
13. Sh.E.Mustafakulov O‘zbekistonda investitsion muhit jozibadorligini oshirishning ilmiy-uslubiy asoslarini takomillashtirish. Iqtisodiyot fanlari doktori (DSC) dissertatsiyasi avtoreferati. – T.: O‘z.R.Bank moliya akademiyasi. 2017 y.
14. S.R. Umarov Qishloq xo‘jaligiga investitsiyalarni jalb etish va ulardan samarali foydalanish. Iqtisod fanlari nomzodi ilmiy darajasini olish uchun yozilgan dissertatsiyasi. – T., 2008.