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ON THE DEVELOPMENT

OF THE MATERIAL AND TECHNICAL BASE OF AGRICULTURE IN
NAKHCHIVAN AUTONOMOUS REPUBLIC (1991-2018)

**SOBRE EL DESARROLLO DE LA BASE MATERIAL Y TÉCNICA DE LA AGRI-
CULTURA EN LA REPÚBLICA AUTÓNOMA DE NAJCHIVÁN (1991-2018)**

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ABSTRACT

The objective of this research is to analyze the development of the material and technical base of agriculture in the Autonomous Republic of Nakhchivan in the period 1991-2018. After the collapse of the Soviet Union, the revival of the agricultural industry, which is considered one of the main areas of the economy, was an important issue for the independent Republic of Azerbaijan. The Nakhchivan Autonomous Republic, a part of Azerbaijan, was fighting for socio-economic problems in those years under blockade conditions. The complete destruction of the infrastructure in the agricultural industry required socio-economic regulation and reforms. The conducted research confirms that several targeting measures were implemented in the period 1991-2018 for the revival and development of the agricultural industry in the Nakhchivan Autonomous Republic. The work carried out within the framework of state programs, and the funds allocated for the development of agriculture in Nakhchivan have borne fruit and have become important in the transformation of the autonomous republic into an agro-industrial region. The implementation of agrarian reforms in the Nakhchivan Autonomous Republic, the strengthening of the material and technical base of the rural economy, and the development of important areas of agriculture became possible thanks to the services of the great leader Heydar Aliyev. In the studied years, it became known that as a result of the strengthening of the material and technical base of the rural economy in the Autonomous Republic of Nakhchivan, the abundance of agricultural products was achieved, and the demand was fully met through local production.

Keywords: Azerbaijan economy, Agrarian area, Land reform, Material and technical base, Water management, Agro-leasing.

RESUMEN

El objetivo de esta investigación es analizar el desarrollo de la base material y técnica de la agricultura en la República Autónoma de Nakhchivan en el período 1991-2018. Después del colapso de la Unión Soviética, la reactivación de la industria agrícola, considerada una de las principales áreas de la economía, fue una cuestión importante para la República independiente de Azerbaiyán. La República Autónoma de Najicheván, parte de Azerbaiyán, luchaba en aquellos años bajo condiciones de bloqueo por problemas socioeconómicos. La destrucción total de la infraestructura de la industria agrícola requirió regulación y reformas socioeconómicas. La investigación realizada confirma que en el período 1991-2018 se implementaron una serie de medidas específicas para la reactivación y el desarrollo de la industria agrícola en la República Autónoma de Najicheván. El trabajo realizado en el marco de los programas estatales y los fondos destinados al desarrollo de la agricultura en Najicheván han dado sus frutos y han adquirido importancia en la transformación de la república autónoma en una región agroindustrial. La implementación de reformas agrarias en la República Autónoma de Nakhchivan, el fortalecimiento de la base material y técnica de la economía rural y el desarrollo de importantes áreas de la agricultura fueron posibles gracias a los servicios del gran líder Heydar Aliyev. En los años estudiados, se supo que como resultado del fortalecimiento de la base material y técnica de la economía rural en la República Autónoma de Najicheván se logró la abundancia de productos agrícolas y la demanda se satisfizo plenamente mediante la producción local.

Palabras clave: Economía de Azerbaiyán, Zona agraria, Reforma agraria, Base material y técnica, Gestión del agua, Arrendamiento agrícola.

INTRODUCTION

The disintegration of the Soviet Union can be considered one of the important geopolitical events of the 20th century. The collapse of the empire radically changed the military and political landscape of the world, gave impetus to the globalization of the economy, and at the same time to the development of regional cooperation. The collapse of a huge unified state reduced the security and weakened the economies of each of the independent states that emerged (Epstein, 2022; McAuley, 1991). As a consequence, the independent Republic of Azerbaijan, belonging to the former Soviet space, entered a complex and uncertain period, like other republics.

First of all, making the economy competitive and carrying out reforms in all areas was a necessary issue for the newly formed state. Thus, the collapse of stable production-economic relations within the Union, which had existed for many years, required the state to adapt to new conditions (Bolukbasi, 2013). The directions of socio-economic regulation had to be defined, and interstate relations had to be re-established under modern requirements. Not only foreign economic relations but also domestic relations were damaged, the infrastructure was destroyed, several important agricultural regions were invaded by the enemy, and acute socio-political crises caused instability (Cornell, 2015). The current economic and political problems also affected the agricultural sector (Artunov, 2023; Iskenderova et al., 2020); the almost complete collapse of the material and technical base resulted in a sharp decrease in the production of agricultural products. The stoppage of the activities of several agricultural enterprises and the fact that agricultural products fell to a level where they could not compete with foreign products even in the domestic market caused an extremely tense situation (Rustamov et al., 2013, p. 7)

In such a tense period, a genius statesman, Heydar Aliyev, was greatly needed to bring the Nakhchivan Autonomous Republic out of a deep economic crisis. The return of the national leader Heydar Aliyev to Azerbaijan, especially to Nakhchivan, had a strong impact on the comprehensive development of the Nakhchivan Autonomous Republic, which was isolated from other territories of Azerbaijan and was living under a blockade. In 1992, on the initiative of the great leader Heydar Aliyev, who worked as the Chairman of the Supreme Assembly of the Nakhchivan Autonomous Republic, reforms in the public economy were started for the first time in the Julfa region of the autonomous republic, and new private economic institutions were created. On April 6th, 1992, the law "On the privatization of loss-making collective farms and state farms in the Nakhchivan Autonomous Republic" was adopted. This

law once again shows that the Nakhchivan Autonomous Republic was the cradle of economic reforms that began to be implemented in Azerbaijan as a whole in the 90s. It took a leading place in determining the direction of these ideas. The laws "On the Basics of Agrarian Reform" and "On the Reform of State and Collective Farms" (1995), "On Land Reform" were prepared under the direct leadership and participation of the outstanding statesman Heydar Aliyev to develop agriculture in the autonomous republic (1996), "On Leasing Service", "On Land Procedure", "On Land Base" and others have been of great importance. The organization, political, and other measures carried out by the great leader Heydar Aliyev for the implementation of agrarian reforms soon bore fruit, and a turn was made in the agrarian field. As a result of the strengthening of the material and technical base of agriculture in the Nakhchivan Autonomous Republic, the level of production in different areas of agriculture has increased many times (Allahverdiyeva, 2013; Huseynov, 2021).

At the tenth session of the Supreme Assembly of the Nakhchivan Autonomous Republic held on December 27, 2014, the Chairman of the Supreme Assembly of the Nakhchivan Autonomous Republic said: "Today we concluded 2014. In 2015, the historically formed farming traditions in the autonomous republic should be developed, the supply of food products to the population should be sustainable, and the processing plants should be continuously supplied with raw materials" (Cabbarov, 2015). To accelerate the development and modernization of agriculture, to increase the volume of agricultural products, as well as its export opportunities, 2015 was declared the year of "Agriculture" in our country, including the Nakhchivan Autonomous Republic (Cabbarov, 2015, p. 5). This was an indicator of the care for the agrarian field and its development. After Azerbaijan gained state independence, the focus was on the development and strengthening of the material and technical base of agriculture, increasing production, providing the population with food products, and supplying agricultural enterprises with agricultural machinery and tools, energy, mineral fertilizers, and agricultural specialists (Baghirov, 2012). Tractors combined harvesters, several agricultural equipment and tools, irrigation canals, and land were under the special control of the state as they constituted the material and technical base of agriculture. Agrarian reforms divided land into "state, municipal, and private" categories, which paved the way for the emergence of new land-cultivator relations. Given the information provided, this study aims to examine the strengthening and expansion of the resources, infrastructure, and technological capabilities that support the agricultural sector in the Nakhchivan Autonomous Republic over the period from 1991 to 2018.

DEVELOPMENT

After Azerbaijan gained state independence, the development and strengthening of the material and technical base of agriculture in the Nakhchivan Autonomous Republic, the increase of general and commodity products, the provision of food products to the population, and providing it with agricultural machinery and tools, energy, mineral fertilizers, agricultural specialists, etc. has been an important focus of attention (Humbatova & Hajiyev, 2020; Huseyn, 2011; Mustafayeva et al., 2021).

The main means of production involved in the agricultural production of the autonomous republic include tractors, combine harvesters, other complex agricultural machines, and other agricultural tools, as well as state irrigation canals. In addition, land, which is public property, is one of the main elements of the material and technical base of agriculture. The national leader Heydar Aliyev said: "Agriculture cannot be further developed without constant care for the efficient and economic use of land resources. In our country, land is a public property, an inexhaustible resource for increasing the country's wealth" (Aliyev, 1979, p. 61).

As a result of the agrarian reforms carried out in our country, new forms of land use "state, municipal, and private" have emerged. Out of the 536,300 ha of the total land fund in the Nakhchivan Autonomous Republic, 178,011 ha belong to the state, 301,745 ha belong to the municipality, and 56,544 ha belong to private property. In general, 33.2 percent of the land fund in the autonomous republic belongs to the state, 56.3 percent belongs to municipalities, and 10.5 percent belongs to private property. Thus, of the 41,257 ha of cultivated land in the autonomous republic, 1,035 ha belongs to the state, 3,344 ha belongs to the municipality, and 36,878 ha belongs to private property (Hajiyev, 2010, p. 12). State-owned lands include state forest fund lands, water fund lands, state reserve lands, etc. The lands owned by the municipality refer to the lands where settlements are located and around them. Privately owned lands include allotment plots given to peasants as a result of the liquidation of collective farms and state farms.

As is known, land reform was carried out in the republic in 1996. To carry out this reform, a land reform program was prepared again at the initiative of our national leader Heydar Aliyev. Based on this program, the legal basis for land reform was created. Up to 40 adopted laws and other legal-normative acts, including the Land Code, created a solid foundation for land reforms in our republic. On the initiative of our national leader Heydar Aliyev, with the adoption of the Law of the Republic of Azerbaijan "On

Land Reform" on July 16th, 1996, and the Decree of the President of the Republic of Azerbaijan on its implementation on August 13th, 1996, the process of implementing land reforms in the republic began. After that, with the adoption of the laws of the Republic of Azerbaijan "On Land Tax", "On Land Lease", "On Land Market", "On Land Cadastre, Monitoring and Land Development", the "Land Code" of the Republic of Azerbaijan, the Decree of the President of the Republic of Azerbaijan "On Some Measures to Accelerate Agrarian Reforms" and more than 40 other decrees and legal-normative acts, a solid legal basis for land reforms was created (Ahmadov, 2005, p. 88). The reforms carried out in the agrarian field also assisted private farms in producing agricultural products, and decisions were made on financial and technical support for them. The decisions reflected the creation of a special land fund intended to be given to agricultural cooperatives, private farms, and tenants, as well as the prohibition of forced re-formation of collective farms, state farms, and other agricultural associations (Baghirov, 2012).

Legislation on land, which is an important material and technical basis of agriculture, and the process of its implementation are still ongoing. Water management and irrigation are one of the material and technical bases of agriculture. Irrigation in the Nakhchivan Autonomous Republic is one of the main factors in the development of agricultural production. It can be noted that watering is more important than anything else to develop agriculture. It changes the face of our country and revives it.

According to the terrain of the Nakhchivan Autonomous Republic, the water sources that are the important material and technical base of agriculture consist of rivers, lakes, reservoirs, ponds, etc. There are approximately 400 large and small rivers with a total length of 1.8 thousand km in the territory of the autonomous republic. The lengths of 334 of them are up to 5 km, 31 are 6-10 km, 24 are 11-25 km, 7 are 26-50 km, 3 are 51-100 km (Nakhchivanchay, Alincechay, Gilanchay), and 1 (Arpachay) is more than 100 km. Statistical data show that water management is difficult in the autonomous republic. If we do not take the Arpa River into account, the rest of the rivers are less drinkable. For example, the Nakhchivan River irrigated 8,200 dessiatins out of 13,117 dessiatins, the Jahri River irrigated 1,214 dessiatins out of 2,170 dessiatins, the Alinja River irrigated 1,800 dessiatins out of 3,088 dessiatins, the Vanand and Gilan rivers irrigated 5,202 dessiatins out of 6,957 dessiatins, while the Arpa River irrigated 12,943 out of 13,103 dessiatins of usable arable land (Tahmazov & Huseynov, 1984, p. 16).

This is related to the natural climatic conditions of Nakhchivan. Due to its geographical location and natural

conditions, the Nakhchivan Autonomous Republic has limited water resources. In the part of the autonomous republic to the west of the Nakhchivan River, if the Arpachay is excluded, it can be said that positive waters are almost non-existent. Although there are many rivers in the eastern part (Nakhchivanchay, Alincehay, Gilanchay, Duylunchay, Guruchay, Vanandchay, Aylischay, Garadarechay, Ganzachay, Kotemchay, Kildchay, etc.), these rivers do not fully meet the water demand of agriculture due to their low water levels.

Because the bed of the border Araz River, which flows through the southern territory of the autonomous republic, is located at a lower level than the agricultural fields, its water has been used extremely little in irrigation works. In recent years, only 7 percent of cultivated land has been irrigated with water from the Araz River. This was made possible thanks to the construction of 5 sudartan pumps to fertilize the coastal plains of the Araz. The river waters available in the autonomous republic do not meet the requirements of developed agriculture. They do not create an opportunity to use the large land funds of the Nakhchivan Autonomous Republic that are currently unused. Since many rivers are widely used for irrigation and water supply, their water does not reach the estuaries in the lower reaches and dries up completely. This harms irrigation agriculture.

In the development of agriculture in the Nakhchivan Autonomous Republic, lakes and reservoirs have their own place. Since the territory of the autonomous republic has an arid climate, the area and volume of the Goygol, Salvarti, Ganligol, and Batabat lakes located here are small. Tectonic movements and springs have played a role in the formation of most lake basins these lakes are located at heights above sea level. The water of these naturally formed lakes is not fully utilized.

To solve the water problem in the Nakhchivan Autonomous Republic, many water reservoirs have been created in recent times to collect water in the rivers at the time of maximum water flow. From such reservoirs, the following can be mentioned: Arpachay, Uzunoba, Nehram, Gazanchi, Tazakend, Dasta, Ahura, Sirab, Gahab, Chalkhangala, Qivrag, Khok, Karabaglar, Heydar Aliyev Reservoir, etc. After the Heydar Aliyev Reservoir was put into use, 4,364 hectares in the Babek district, 2,311 hectares in the Julfa district, 244 hectares in the Shahbuz district, a total of 6,919 hectares of new land were put into cultivation. The area of lands irrigated through the reservoir has reached 16,830 hectares (Habibbayli et al., 2010, p. 125).

To increase the water resources of the autonomous republic, repair works were carried out on the existing

reservoirs, and appropriate measures were taken to build new ones. In 2007, major repair work was started on the Arpachay reservoir, and at the end of 2008, the reservoir was put into operation, as a result of which the irrigation work in the Sharur, Saderak, and Kangarli districts improved significantly.

In the last 15 years, in the autonomous republic, modern machines and mechanisms of various purposes, which perform reclamation and irrigation works, were purchased. New pumping stations and sub-artesian wells were built or restored and put into use. Currently, 97 pumping stations, 766 sub-artesian wells, and 339 wells are used in the autonomous republic for irrigation measures (I. M. Hajiyeve, 2011, p. 118). The increase of pumping stations and sub-artesian wells in the autonomous republic, and the implementation of these measures, have significantly reduced the cost of agriculture for regulatory works (construction of dams, etc.) and have provided agriculture with the opportunity to receive a lot of additional irrigation water.

The karezes available in the Nakhchivan Autonomous Republic are an auxiliary source of irrigation. In the autonomous republic, the water production of one karez is equal to 8 liters per second on average. In the Ordubad region, there are powerful karezes with a water production of up to 14 liters per second. Taking into account the importance of irrigation in the foothills of the Babek, Ordubad, Julfa, and Sharur regions, irrigation using karezes is necessary. To use the rich underground water for irrigation, it is necessary to restore the old, unused karezes, expand and rebuild the existing ones, and build new karezes. The implementation of these measures will allow for significantly improving the water supply of irrigated lands in the Babek, Ordubad, Julfa, and Sharur regions and, in addition, irrigating crops of valuable agricultural crops.

By the Decree of the President of the Republic of Azerbaijan dated December 25th, 2014, on additional measures to improve the supply of irrigation water to agricultural fields and to meet the population's drinking water needs, the Cabinet of Ministers of the Nakhchivan Autonomous Republic was allocated 2 million manats to dig sub-artesian wells to improve the supply of irrigation water to agricultural fields and yard plots used for cultivation in the territory of the Nakhchivan Autonomous Republic, as well as to meet the population's drinking water needs.

The construction of a pumping station in each of the Babek and Sadarak regions of the autonomous republic, the construction of a water line fed from the Uzunoba Reservoir to provide irrigation water to the Yeni Karki,

Khincab, Tazakend and Buyukduz villages of the Kangarli region, and the reconstruction of the Uzunoba Reservoir in the Babek region have been completed. The construction of the pumping station in the Kangarli district continued. The laying of additional water lines for irrigating land areas of Buyukduz and Khok villages of Kangarli district, drainage lines in Karachug of Nakhchivan city, Kerimbeyli of Sharur district, Jahri and Guznut villages of Babek district, the irrigation water line from Benaniyar lake to Nehram village of Babek district, and the repair of the irrigation canal in Jamaldyn village of Julfa district have been completed. The construction of the irrigation water line around the Alincagala historical monument in Julfa district has been completed, and the reconstruction of the irrigation canal in the Khanliq village of Sharur district has been continued. The construction of irrigation water lines in the villages of Khalkhal of the Babek region, Ashagi Aylis and Nusnus of the Ordubad region, Kolani of the Shahbuz region, and the construction of an irrigation water channel in Dasta village of the Ordubad region has been completed. The restoration of the irrigation network in Bahruz Kangarli village of Sharur region and the relocation of the irrigation water line to a new area in Yukhari Aylis village of Ordubad region have been completed. The construction of a diverting dam on the Badamli River in the Shahbuz region, the restoration of the flood diverter on the Arpachay left bank channel in the Sharur region, embankment works on the Dubendi River passing through the city of Ordubad, and the repair of 9 embankments in the autonomous republic have been completed (Gasimov & Alasgarova, 2015).

In recent years, complex measures have been taken in the field of organizing the normal operation of melioration and irrigation systems, expanding irrigation networks, carrying out repair and restoration works in water systems, and improving the water supply of irrigated lands and their melioration condition. Thus, a 241.5-kilometer closed irrigation network covering an area of 2,220 hectares was built on the Vaykhyr left bank canal starting from the Heydar Aliyev Reservoir, including 1,170 hectares in the village of Nehram of Babek district and 1,050 hectares in the village of Bananiyar of Julfa district. A new drainage line was built covering an area of 2,220 hectares, and a 6.5-kilometer collector was restored. A closed irrigation network covering an area of 400 hectares was restored in the territory of Buyukduz village of Kangarli region, and a new closed irrigation network was built in an area of 117 hectares covering the villages of Buyukduz and Khok. As a result, water loss was prevented, and conditions were created for the efficient use of irrigation water.

In 2017, measures to combat salinization and erosion were strengthened in the autonomous republic, and new

irrigation lines were built to apply progressive methods. As a continuation of such measures, a closed irrigation network was put into operation in the territory of Buyukduz village of Kangarli district, which allowed 407 hectares of land to enter the crop rotation (Gasimov & Alasgarova, 2017, p. 7).

As in all years, on May 16th, 2018, the visit of the country's president, Mr. Ilham Aliyev, to Nakhchivan was very successful for the autonomous republic, and an order was signed to further develop the agricultural sector in the autonomous republic. The decree states: "As a result of the successful reforms in the agricultural sector, important steps have been taken in recent years in the direction of meeting the demand for several strategic products through local production, reducing the country's food security dependence on the foreign market, and increasing the production volume of export-oriented products. The construction of reservoirs, pumping stations, irrigation canals, and other water management facilities that meet modern requirements in the republic, the involvement of tens of thousands of hectares of land in the agricultural cycle created a foundation for the sustainable development of the agricultural sector, and agroparks that serve the development of the production of agricultural crops and livestock products and large agricultural enterprises have been enabled to start operating.

In 2017, as a result of the melioration measures taken with the effective use of the existing potential in the Nakhchivan Autonomous Republic, the installation of modern irrigation systems allowing the economical use of water resources was completed on 407 hectares. Taking into account the importance of continuing work in this direction, I make a decision based on paragraph 32 of Article 109 of the Constitution of the Republic of Azerbaijan: within the framework of the 'Pivot' project, to continue the installation of modern irrigation (rainfall) systems on 1000 hectares of farmland, the Cabinet of Ministers of the Nakhchivan Autonomous Republic is to be allocated 5.0 (five) million manats from the amount specified in subsection 1.31.2 of the 'Distribution of funds intended for state capital investment (investment costs) in the 2018 state budget of the Republic of Azerbaijan' approved by Order No. 3593 dated January 22nd, 2018 of the President of the Republic of Azerbaijan" (Cabbarov, 2018).

Today, under the leadership of Mr. Ilham Aliyev, as a result of the measures implemented for the development of the agricultural sector in the country, the supply of farm fields with irrigation water has improved in the agricultural sector of the Nakhchivan Autonomous Republic.

On the other hand, the development of agriculture in the Nakhchivan Autonomous Republic is based on strong agricultural machinery, the electrification and chemicalization of agricultural production, the widespread application of the achievements of science and technology, and energy supply. Our national leader Heydar Aliyev said:

Increasing, specialization and concentration of energy supply of agricultural production has created conditions for extensive mechanization of the production process. Work in grain farming is almost completely mechanized, mechanization in feed supply, and the level of mechanization of loading and unloading has increased significantly. Certain works have been done to mechanize and electrify labor-intensive processes in animal husbandry (Aliyev, 1979, p. 66).

In our modern era, technical progress is the basis of constant increases in labor productivity. Technical progress includes a complex of measures aimed at further developing the technical base of production. As the equipment of agriculture increases, the level of mechanization of work increases. In this case, the mechanization of individual jobs is gradually moving to complex mechanization, i.e., all interrelated agricultural jobs are performed by machines. During the period of independence, as in all regions of Azerbaijan, serious attention was paid to technical progress in Nakhchivan. The material and technical base of agriculture was significantly strengthened, and providing it with tractors, agricultural machines, and tools, as well as energy, mineral fertilizers, agricultural specialists, soil, water, and other resources has been the focus of attention.

In the agrarian sector, it is considered necessary to improve the supply of producers with the necessary agricultural equipment, to grow quality products, and to ensure their loss-free harvesting. To ensure the flexible regulation of the issues of supplying the agrarian sector with modern equipment and to speed up the implementation of the measures provided for the Nakhchivan economic region in the "State Program for the Socio-Economic Development of the Regions of the Republic of Azerbaijan", on January 28th, 2005, the chairman of the Supreme Assembly of the Nakhchivan Autonomous Republic signed the order "On additional measures in the field of leasing expansion in the agrarian sector in the Nakhchivan Autonomous Republic". In connection with the implementation of this order, during the past period, many agricultural machines and mechanisms were brought to the autonomous republic and involved in the production process. In total, during the years 2000-2005, 227 different types of agricultural machinery, including 54 tractors, 40 cultivators, 24 seed drills, 16 mowers, 10 fertilizer spreaders, 8 soil levelers, 6 grass and stubble presses, 4 cultivators, 3 harrows, 2

potato harvesters, 2 potato crushers, 2 seed cleaners, 1 sprayer, and 1 trowel were brought to the autonomous republic and put into use.

The "Nakhchivan Agroleasing" Open Joint Stock Company and its service bases in the regions were established to improve the supply of agricultural workers with the necessary agricultural equipment. In 2006, 82 units were bought, 180 units in 2007, 84 units in 2008, 108 units in 2009, and 64 units in January-August 2010, totaling 518 units of various purposes were brought to the autonomous republic. 76 different types of agricultural machinery were leased to producers (Hajiyeu, 2011, p. 118).

Taking into account the limited amount of land, which is considered the main natural resource in the autonomous republic, the development of plant breeding with intensive methods based on modern agrochemical and agrotechnical measures is kept in the focus of the autonomous republic's leadership. Accordingly, in 2010, more than 4,033 tons of mineral fertilizers with a total value of 1,554,000 manats were provided as assistance to land owners through the line of the "Nakhchivan Agroleasing" Open Joint Stock Company. In addition, 123 units were purchased in 2010, and 577 agricultural machineries of various purposes were purchased and brought to the autonomous republic over the past 5 years, 298 of which were leased to producers (Gasimov & Alasgarova, 2011).

As in 2010, which was the year of renewal, in 2011, attention was also paid to the provision of equipment to product manufacturers. In 2011, 108 different types of equipment were brought to the autonomous republic and leased. As a whole, since the establishment of the "Nakhchivan Agroleasing" Open Joint Stock Company, the number of agricultural machines brought to the autonomous republic has reached 685. Effective use of organic and mineral fertilizers also plays a role in increasing productivity. In 2011, 3721 tons of nitrogen fertilizers and 108 tons of phosphorus fertilizers were given to wheat producers with concessions, and 4079 tons of fertilizers were given to sugar beet producers, including 250 tons of nitrogen fertilizers (Gasimov & Alasgarova, 2012).

As in this and other years, in 2013, the supply of crop producers with modern equipment and mineral fertilizers also had an impact on the development of agriculture. In 2013, 348 units of agricultural machinery for various purposes were purchased and brought to the autonomous republic through the line of the "Nakhchivan Agroleasing" Open Joint Stock Company. Currently, the number of equipment brought by this organization has reached 1227. In 2013, 253 of the imported machines were leased to product manufacturers. In addition, 4 thousand 124 tons of

mineral fertilizers were given to the farmers engaged in agriculture to increase soil productivity. To expand the activities of the “Nakhchivan Agroleasing” Open Joint Stock Company and to further improve the level of services, its branches continued to be established in all regions of the autonomous republic, and in 2013, the company’s Shahbuz district branch was commissioned, and equipped with the necessary equipment (Cabbarov, 2015).

Compared to the year 2008, when the “State Program on reliable supply of Food Products to the population in the Autonomous Republic of Nakhchivan in 2008-2015” approved by the Decree of the Chairman of the Supreme Assembly of the Autonomous Republic of Nakhchivan dated September 17, 2008, the volume of agricultural products increased 2.4 times to 229 million 646 thousand manats, and the volume of livestock products increased 2.1 times to 125 million 511 thousand manats. The supply of agricultural machinery and equipment to producers is continuously improved. A total of 1,505 agricultural machinery and equipment for various purposes were brought to the autonomous republic through the line of the “Nakhchivan Agroleasing” Open Joint Stock Company, 260 of which were delivered in January-December 2014. In 2014, 276 agricultural machinery and equipment for various purposes were leased to product producers. During the year, producers were provided with 3867.3 tons of mineral fertilizers (Gasimov & Alasgarova, 2015).

In contrast to previous years, the delivery of 1,685 agricultural machinery and technological equipment for various purposes to the autonomous republic, including 180 in 2015, through the line of the “Nakhchivan Agroleasing” Open Joint Stock Company, has had its effect on easing the labor of producers. To increase productivity, landowners were provided with 6,025 tons of mineral fertilizers (Gasimov & Alasgarova, 2015). To alleviate manual labor in the agriculture of the autonomous republic, in 2016, 66 pieces of various agricultural machinery and technological equipment were brought to the autonomous republic through the line of the “Nakhchivan Agroleasing” Open Joint Stock Company and leased to the landowners. In addition, more than 4,923 tons of mineral fertilizers were given to crop producers (Gasimov & Alasgarova, 2016, p. 6). To strengthen the material and technical base of agriculture in the autonomous republic, in 2017, 303 pieces of machinery of various names were brought to the autonomous republic through the line of the “Nakhchivan Agroleasing” Open Joint Stock Company, and more than 5,338 tons of fertilizers were given to the producers of crops (Gasimov & Alasgarova, 2017, p. 7). These works for the development of the agrarian sector were continued in 2018. 321 units of various agricultural machinery were

brought to the autonomous republic through the line of the “Nakhchivan Agro-Leasing” Open Joint-Stock Company, and 5,156 tons of mineral fertilizers were delivered to the producers (Gasimov & Alasgarova, 2018, p. 6). The strengthening of the material and technical base of agriculture in the Autonomous Republic of Nakhchivan has led to the development of agricultural fields in the autonomous republic and increased productivity.

As can be seen, the autonomous republic is mobilizing all its potential to maintain the rapid pace of development of agriculture. It moves confidently towards more successful results. A strong material and technical base have been formed in agriculture, new economic forms have been created, and the level of product production in different areas of agriculture has increased many times. All this indicates the brighter future of the Nakhchivan Autonomous Republic, which is renewed day by day.

The President of the Republic of Azerbaijan, Mr. Ilham Aliyev, said:

Successful development of Nakhchivan means successful development of Azerbaijan.” It means strengthening our independence. “I am very happy with the work going on here. I am sure that these beautiful traditions will be continued in the coming years, and the Nakhchivan Autonomous Republic will be among the leaders not only in this region, but also worldwide, both in terms of the speed of economic development and the level of infrastructure projects. (Habibbayli et al., 2010, p. 3).

To ensure the implementation of the measures specified in the “State Program of Socio-Economic Development of the Regions of the Republic of Azerbaijan in 2014-2018” by the Order of the President of the Republic of Azerbaijan dated April 10th, 2014, 5 million manats have been allocated to the Cabinet of Ministers of the Nakhchivan Autonomous Republic from the reserve fund of the President in the 2014 state budget of the Republic of Azerbaijan. To protect and further strengthen the achieved level of socio-economic development, the “State Program for Socio-Economic Development of the Nakhchivan Autonomous Republic in 2014-2018” was approved by the Decree of the Chairman of the Supreme Assembly of the Nakhchivan Autonomous Republic dated September 1st, 2014 (Gasimov & Alasgarova, 2015).

As an effective result of the implemented agrarian policy, the abundance of agricultural products was achieved in the autonomous republic in 2015, and the demand was fully met by local production. As a result, about 403 million manats worth of products were produced by economic entities operating in the agrarian field, which is 12 percent more than in 2014 (Gasimov & Alasgarova, 2015). In

2016, 61,526 hectares of land were planted in the autonomous republic. 94,117 tons of crops were harvested from 31,579 hectares of grain cultivation areas. As a whole, in 2016, indicators of the development of agriculture in the autonomous republic increased. 429 million 448 thousand manats worth of products were produced, which is 6 percent more than in 2015 (Gasimov & Alasgarova, 2016, p. 6). As in all years, 2017 was successful for the agriculture of the autonomous republic. In 2017, more than 453 million 364 thousand manats worth of agricultural products were produced in the autonomous republic, which is 4 percent more than the previous year (Gasimov & Alasgarova, 2017, p. 8).

CONCLUSIONS

The results of the conducted research and socio-economic processes analyzed confirm that several targeted measures were implemented during the years 1991-2018 for the revival and development of the agricultural industry in the Nakhchivan Autonomous Republic, which is a part of the Republic of Azerbaijan. The works carried out within the framework of state programs, and the funds allocated for the development of agriculture in Nakhchivan, have shown their results and have become important in the transformation of the autonomous republic into an agro-industrial region. As a result of the potential opportunities mobilized to increase the pace of agricultural development, productivity has increased, and the country's dependence on foreign market products has decreased sharply.

Within the framework of reforms, the protection of land resources, the improvement of water management, the provision of the agricultural industry with equipment, and the provision of modern agricultural equipment to producers through leasing laid the foundation for the development of the agricultural industry in the independent republic. Compared to the 90s of the last century, the number of industrial enterprises operating in the autonomous republic increased by 7 times within 15 years, which can be considered a positive result of the measures taken. Thus, the agrarian policy determined by the state administration had an impact on the creation of favorable market conditions and the rise of business activity.

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