The experience of rapid restructuring of the Ulyanovsk region economy for military needs has revealed the problems facing the energy sector and infrastructure, and effective ways of their solution. The relocation of dozens of inland companies with the preserved efficiency and product volumes, which was carried out in the first months of the Great Patriotic War, is invaluable experience for the modern economy and logistics. The transfer of new factories to Ulyanovsk exacerbated the shortage of electricity, fuel, and residential space. The labor shortage was a huge problem. The growing population faced food shortages. The study of these issues showed the significance and importance of creating and maintaining a high level of educational and industrial infrastructure in cities, including in the strategic interests. The study employed historical-genetic, historical-systemic, and comparative-historical methods based on those accepted in modern historical science. The specifics of the Ulyanovsk region economy integration into the structure of military needs were analyzed, and the problems facing Ulyanovsk when expanding its industrial sector were revealed. The development and improvement of work on the production processes in Ulyanovsk were considered. It was concluded that the relocation of industrial enterprises to Ulyanovsk necessitated relocation of some administrative bodies, which positively affected the city development. This had a positive impact on the city development and contributed to its acquisition of the status of a regional center in 1943.
1. Introduction

The transfer of the Ulyanovsk region economy to war needs was strictly controlled by the government under such policy documents as the Decree of the Presidium of the Supreme Soviet of the Union of June 23, 1941 on general mobilization, the Decree of the Central Committee of the Party and the Council of People's Commissars of the USSR of June 23, 1941 on tasks in wartime, Directive (June 29, 1941) of the Council of People's Commissars and the Central Committee of the All-Union Communist Party of Bolsheviks to Soviet and party organizations of the front-line regions, and the Decree of the Presidium of the Supreme Soviet of the Union on working hours at enterprises of June 26, 1941. The ideas specified in these documents in the form of a general thesis program were announced by I.V. Stalin in his speech on the all-Union radio on July 3, 1941 (Vanchinov, 1980). The Directive of June 29, 1941, also contained mobilization plans for the third and fourth quarters of 1941 and for 1942, which outlined specific plans for restructuring in the new military conditions and turning the country into a combat camp. 'Everything for the front, everything for victory!' became the main slogan for every Soviet worker (Sulumov, 2021). The decree of the state and the party authorities stated that the economy of all union republics had to be prepared for the transition to work in wartime. First of all, these changes concerned regions and districts close to the front line. The Ulyanovsk region was one of the rear areas located close to the front.

2. Problem Statement

Specific historical examples of cities, industries or even individual enterprises facing challenges that require systemic changes are most appropriate to comprehensively study a particular problem in the economic development of society. In 1941, the Great Patriotic War revealed such challenges in all spheres of life. Being the nearest rear, Ulyanovsk faced an unprecedented growth of the industrial sector. Attempts to convert existing enterprises from peacetime work to war needs and the transfer of new factories from the occupied areas to the region raised numerous problems, which, however, were successfully resolved.

3. Research Questions

The subject of the study was the specifics of the Ulyanovsk region economy integration into the structure of military needs, the main problems facing Ulyanovsk when expanding its industrial sector, and the adaptation processes of the largest enterprises to new conditions.

4. Purpose of the Study

The conversion of industrial enterprises from peacetime work to war needs and relocation of factories to the Ulyanovsk region were analyzed on the example of the largest enterprises.
5. Research Methods

The research methods included the principles of historicism, scientific objectivity and consistency. The study employed historical-genetic, historical-systemic, and comparative-historical methods based on those accepted in modern historical science.

6. Findings

Once the war was announced, city and district military committees were established in Ulyanovsk. These committees contributed to realization of fortifications, bomb shelters and firing points in order to defend the most strategically important objects, in particular, the bridge across the Volga River, which played a significant role in the delivery of goods and military units from the east to the west of the country and transportation of evacuated inland enterprises. The evacuation council and the labor registration office were also established. By September 15, loudspeakers and electric sirens had been installed throughout the city to promptly alert the population (Gorlacheva et al., 2015).

At the end of June 1941, meetings of workers were held almost everywhere in the country to express indignation at the violation of the non-aggression pact by Nazi Germany, as well as to show the readiness of workers to defeat the enemy. Such meetings were held in Ulyanovsk, mobilization began, and a mass volunteer movement took place in the city. Tens of thousands of the region's residents of all ages and professions wanted to join the army to defend the Motherland with weapons in their hands. This movement showed a high level of awareness of national unity and importance of the idea of patriotism. However, in many respects this movement contributed to the labor shortage in the rear of the country, which became evident in the autumn of 1941. Tens of thousands of workers left the enterprises, and the importance of each worker increased (Khramkov, 1993).

In wartime, the creation of a well-coordinated military economy, mainly the military industry, was a priority, since, as V.I. Lenin said, '...in war, victory belongs to those who have the best technology, organization, discipline and the best machines' (Lenin, 1967).

The task of conversion the industry of the Ulyanovsk region from peaceful work to war needs included not only the production of finished products at all existing enterprises, but also the timely fulfillment of increased production targets. It was necessary to provide the front with everything necessary and any excuses for disrupting the task for the production of military products were not accepted at any level of leadership.

In addition, the economy mobilization implied not only a different range of goods produced. This entailed significant changes in the logistics and production cycles of enterprises and required new technologies, the creation and replacement of equipment, and sometimes even the construction of new workshops and production sites. Yet all these tasks required the retraining of personnel and attraction of huge reserve capacities of the fuel and energy and raw materials sectors. However, the Ulyanovsk region simply did not have such reserves in 1941.

The Ulyanovsk factories that worked in the city and in the region, as well as those evacuated, were in dire need of metallurgy products and electricity. By the end of 1941, when additional enterprises were put into operation, the difference between the capacities of power plants and the required volumes of
electricity supplies amounted to 7 to 10 thousand kilowatts (Khrenov, 1974). Due to this, the secretary of the City Committee of the All-Union Communist Party of Bolsheviks and the chairman of the City Council of Ulyanovsk on March 20, 1942, appealed to the Council of People's Commissars of the USSR: 'The current situation with the power supply to industrial enterprises in Ulyanovsk is so urgent that the executive committee, having exhausted all possibilities, is appealing to you and asking for help' (SAUO, F. 634). All possible support was provided. In the shortest time, reserves were allocated to expand the capacity of existing power plants and build new ones. At the same time, measures were taken at the local level. Quotas were introduced for power supply to enterprises, and restrictions on power supply to population for domestic needs. In 1942, a number of power plants were launched. As a result, the power of generators increased and electricity generation grew quickly. Yet there was not enough electricity due to the insufficient capacity of power plants and interruptions in fuel supply.

The main electricity consumers were military enterprises, and the breakdown of diesel engines and generators, and the lack of diesel fuel caused the unstable operation of power plant. In August–December 1941, for example, power plants were provided with diesel fuel only by 58 %, so they had to use oil, which led to premature wear of diesel engines. For these reasons, electricity generation during this period did not exceed 75–80 % of the expected capacity. Due to the lack of electricity in December 1941, the Gorky factory fulfilled the plan by 37.7 %, and the instrumentation plant showed only 50 % of its capacity (Ulyanovsk and Ulyanovsk residents in the Great Patriotic War, 1965).

The problem of power supply was partially solved by the creation of power plants at enterprises. Many enterprises expected launching of a thermal power plant, which was being built for the Stalin factory evacuated to the city, but the construction of the central plant began only in 1943, and it was launched only after the war in 1947 (Khrenov, 1974).

The production growth was due to the expansion of existing enterprises, the construction of new ones and the commissioning of 13 factories and plants evacuated to the region (mainly to Ulyanovsk). Every year the region increased the production of goods needed by the front. The leading branches of industry in 1943 showed a 46.2% increase compared to that in 1942. In October 1941, the number of heavy trains increased twofold, and wagon unloading increased by 140%.

Industrial enterprises produced a range of products not characteristic of the enterprise profile. It should be noted that the governing bodies took unprecedentedly tough measures to improve the production discipline at all levels. According to the requirements set forth in the Decree of the Presidium of the USSR Armed Forces of June 26, 1940 On the transition to an eight-hour working day, a seven-day working week and on the prohibition of unauthorized quit of workers and employees from enterprises and institutions, workers were not allowed to move to other enterprises and quit (Yumashev & Zhaleiko, 1944). The absence from work for more than 20 minutes was considered absenteeism. Kalinin (1975) in his speech described the requirements of the state to workers: the factory operates at full capacity, and we put the director on trial for poor work; a worker, like a soldier, has no right to quit the factory.

Workers of many enterprises showed heroism and self-sacrifice. In 1942, the Volodarsky Cartridge plant was awarded the Order of the Red Banner of Labor (Khrenov, 1974) for the exemplary fulfillment of government tasks for production and development of new types of weapons. The report of the Ulyanovsk City Committee of March 3, 1945 stated that the plant showed a twofold increase in the
The total amount of ammunition produced during the war compared to that produced over the previous 22 years. The output in 1944 increased 8-fold in comparison with that in 1939. During the war, the plant mastered a wide range of products for the Red Army, widely introduced rationalization proposals and inventions, and systematically increased the operation pace. The plant was the first in the country to use packing of products in containers made of bituminous and tar paper, which saved 5 thousand tons of galvanized iron and 400 tons of lead per year.

Other industries of the region also made a significant contribution to the military economy of the country. Thus, light industry enterprises produced 20,517 thousand meters of overcoat cloth and made 4017 overcoats (Khrenov, 1974).

The region made a significant contribution to the production of military products. The task of the Council of People's Commissars of the USSR and the Central Committee of the All-Union Communist Party of Bolsheviks of January 9, 1941, On measures to increase the production of consumer goods and food from local raw materials was fully performed. This increased the volume of consumer goods in the region's retail trade turnover to 13 percent. But at the first regional party conference, the first secretary of the Ulyanovsk Regional Committee of the All-Union Communist Party of Bolsheviks said: 'Despite the fact that local industry and trade cooperation have fulfilled the annual plan, they are far from meeting the population needs. As for the everyday services of workers, in 1943, 450 thousand pairs of shoes and clothes were repaired for 3 million 800 thousand rubles. Soap produced by the local industry accounted for 23 grams per capita per year. No doubt, if you rely on the leaders of local industry, people will be shoddy, ragged and dirty. Workers of local industry and trade cooperation do not always consider the requests and needs of the population. For example, in 1943, artels produced 25 tons of tooth powder that was good. Yet they did not produce a single toothbrush, which put the powder consumer in a difficult position. In the Leninsky district of Ulyanovsk, there is an artel Red Potter with 6 workers and 10 employees.

The production of shovels was organized in the railway depot. The Voroshilov garment factory mastered the production of parachutes. The light industry of the Ulyanovsk region in wartime occupied the second place in terms of share and worked mainly for the front needs. In general, the light industry output grew, but the plan was not fulfilled. Thus, the garment factories did not give the army 420 thousand overcoats. This was due to the lack of resources, especially electricity, fuel and transport, necessary for the textile industry operation. For example, the cloth factory in Mullowka in 1943 did not have a single truck capable of transporting fuel. As a result, the fuel did not arrive, and the factory did not fulfill the plan for overcoat cloth (Chigrin, 2020). In the food industry, the plan was fulfilled only by those enterprises that actively attracted local resources, Maslopromtrest.

Military conditions had a positive effect on the industrialization of Ulyanovsk. A huge number of enterprises were evacuated to the city, which turned it into an industrial center.

Transport was subjected to severe trials during the war. The heaviest burden for the economy regulation fell on the railway network. This mode of transport needed significant changes to meet the military needs: the volume of traffic grew, but there were not enough steam locomotives. In addition, the railway network were often subject to enemy air raids. However, despite a high production growth in the railway industry, the railway network of Ulyanovsk in the first year of the war worked irregularly. The
main flow of evacuated enterprises and the population fell on July–August 1941. In such conditions, a lot of empty locomotives accumulated at stations like Kazan, Kindyakovka, and Syzran. Preparations for the counter-offensive operation near Moscow required the involvement of a huge amount of railway transport for transportation of Siberian reserve divisions and delivery of weapons and food. Delayed unloading due to a lack of workers led to downtime and massive accumulations of thousands of wagons at the stations. However, transfer of the railway industry to war needs was much slower than that in industry. This was largely due to a slow growth rate of experienced personnel and the lack of transport, since the training of personnel and the manufacture of locomotives and wagons are more time-consuming than similar processes in many other industries (Polyak, 2006).

The population growth was a sudden challenge to urban housing infrastructure and economy. The lack of housing, water and electricity became obvious in July 1941. On July 7, the City Council approved the housing norm of 5 sq. m. per person, but in fact it was even less. For example, in the factory dormitory on 4 Goncharov Street, a total of 51 people lived in 6 rooms with a total area of 86 sq. m. One person accounted for 1.6 sq. m. The evacuated people were settled in apartments of ZhEKs, in private houses by compacting the owners, in school buildings and clubs, and in 'comfortable' basements, for the repair of which 250 thousand rubles were allocated in 1942. In total, more than 87 thousand sq. m. of living space was allocated to evacuated workers in 1941–1945, and 66 dormitories were opened (Khapaev, 2020).

The streets of Mira, Federation, Bebel, Krasnoarmeyskaya, Vodnikov, Radishcheva, and the districts Podgorye, Kulikovka, Tuti, etc. became areas of mass settlement. There was not a single building for evacuated institutions and people on the streets of Goncharov, Marx and Lenin. A number of evacuation centers were launched in the city for temporarily accommodate of arrivals.

Since 1941, the Evacuation Council assessed the influx of population and deliberately resettled the new arrivals in suburban villages. Workers arrived with the ZIS plant in 1941–1943 lived in Laishevka, Barataevka, Arsky, Protopopovka, and Bely Klyuch.

Due to the increased concentration of industrial enterprises in Ulyanovsk, there was a redistribution of living space. Local authorities focused on the accommodation of workers and specialists of plants No. 280 and ZIS. According to GKO resolution No. 932 SS of November 21, 1941 On the accelerated advancement of the echelons of the evacuated factories of the People's Commissariat of the Aviation Industry and on measures to accelerate the construction and launch of aircraft factories in the city, 500 apartments and rooms were provided for these purposes, and the residents were evicted to countryside (Khramkov, 1993).

At the same time, city organizations and institutions were densified, and their staff was reduced. Most organizations coexisted in the same buildings and even rooms.

Since 1942, the Government took measures to allocate preferential loans to workers of military enterprises for individual construction. However, due to the acute shortage of building materials and transport, only dozens of working families were able to build houses and semi-dugouts. ZIS workers built their houses on Transportnaya and Lokomotivnaya streets, in the area of Vinnovskaya grove, and along the road to Kremenki.
During the war, over 37 thousand sq. m. of housing were built for the workers of large factories by construction organizations, including simplified housing, namely barracks. The incessant influx of workers caused dramatic changes in the development of the city and its housing stock. By decree of the Presidium of the Supreme Soviet of the RSFSR of February 25, 1942, there was an administrative division into Leninsky, Stalinsky (at present, it includes part of Zasviyazhsky and Zheleznodorozhny districts), and Volodarsky (Zavolzhsky) districts. The name of the districts was given by the names of factories located there, and the central district was named after V.I. Lenin, who was born in Ulyanovsk (Simbirsk).

7. Conclusion

Despite the difficult situation in the city and in the region, the Ulyanovsk residents were able not only to solve the problems that made evacuation difficult, but also to assist the regions and cities liberated from occupation. Largely due to consolidation of the industrial sector of the city, and, consequently, due to the increased number of problems solved by the city authorities, on January 19, the Ulyanovsk region was formed by the Decree of the Presidium of the Supreme Soviet of the USSR. It included 26 districts that were previously part of the Kuibyshev and Penza regions. The area of the Ulyanovsk region amounted to 36.6 thousand sq. km and the estimated amount of population was 1,158 thousand people. In the new districts, there were 10 workers' settlements and 2,572 settlements.

The industrial potential of the region, including the cities of Ulyanovsk and Melekess, included 69 enterprises of federal significance, 43 enterprises of republican significance, and 45 enterprises of regional significance. In Ulyanovsk, conversion of industrial enterprises from peaceful work to war needs included the following:

- reorganization of resource allocation in favor of the front needs;
- transfer of industrial enterprises to military needs and change in the principle of cooperation;
- wide voluntary involvement of women and adolescents in production and simplification of their training;
- evacuation with resettlement associated with the administrative and political reorganization of the region;
- strengthening defense and consolidation of local authorities.

Some evacuated enterprises merged with others and remained in the city. Due to the fact that far fewer enterprises left the city than arrived, Ulyanovsk became a major industrial center in the Volga region.

References


