

Improving regional energy security assessment criteria in the republic of Uzbekistan

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Abstract. Energy security is a critical aspect of sustainable development and economic stability, particularly in regions undergoing rapid industrialization and modernization. This article aims to address the need for improved regional energy security assessment criteria in the Republic of Uzbekistan, a country experiencing significant economic growth and energy demand. The current framework for energy security in Uzbekistan is evaluated, highlighting key challenges such as energy supply reliability, diversification of energy sources, and infrastructure resilience. Through a comparative analysis of global best practices, the article proposes a set of enhanced criteria tailored to Uzbekistan's unique geographical and economic conditions. These include improving the efficiency of energy distribution, incorporating renewable energy sources, fostering regional cooperation, and strengthening the regulatory framework to ensure long-term sustainability. The recommended criteria provide a more comprehensive approach to assessing and enhancing energy security in Uzbekistan, ensuring that the country can meet its future energy needs while minimizing environmental impact and economic vulnerabilities.

1 Introduction

The security problem arises simultaneously with the formation of an independent state and the settlement of social, political, and economic interests in society. Because since that time, along with stability and development, dangers and various threats have appeared, and taking them into account, developing and implementing state strategy and policy based on them is an important condition for ensuring the country's security. The concept of "region" is applied to a part of the territory of the world or country [1]. Based on a variety of factors and methodologies, including military, political, economic, environmental, and ethnocultural data, the region, as a portion of the global domain, comprises many countries. There are several nations and areas, such as South East Asia, East Asia, Central Asia, Eastern Europe, and Western Europe. A separate country within itself, regions, districts and cities form its regions as an administrative territorial unit on geographical, economic-political, ethno-cultural, ecological, informational and other aspects [2,3].

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1. The motor transport's freight and passenger capacity. Utilize national carriers' current opportunities as best they can for both domestic and international freight and passenger transportation.

2. Stability of finances. The degree of profitability and profitability ultimately decide the outcome of any economic endeavor. Because of this, obtaining a high degree of liquidity and financial stability will be crucial for the road transportation industry.

2 Literature review

According to T. E. Kochergina, "economic security" refers to the condition of the economy that permits self-reproduction in consistent amounts, quantities, and quality. Economic security, according to D. V. Gordienko, is a condition in which the national economy is shielded from threats both internal and foreign, and it guarantees the steady advancement of society as well as social stability even in the face of adverse influences from the outside and inside [4,5]. Three components, as demonstrated by renowned Russian economist L.I. Abalkin [6], capture the heart of this idea:

- economic independence. In the conditions of the current world economy, economic independence does not have an absolute character, because the international division of labor makes national economies interdependent. In such a process, economic independence means the ability of the state to establish control over economic resources, equal participation in world trade, cooperative relations, exchange of scientific and technical achievements, and achieving a level of production, efficiency and quality that ensures competitiveness;
- stability of the national economy. Regardless of its form, the protection of ownership, the creation of reliable conditions and guarantees for entrepreneurial activity, the curbing of factors that lead to the deterioration of the situation in the country, instability (that is, the fight against criminal structures in the economy, serious differences in the distribution of income, the origin of stratification, preventing the exacerbation of social conflicts) punishes;
- the ability to develop and progress independently. This means that the creation of a favorable environment for investment and innovation, the regular modernization, renewal and improvement of production, as well as the growth of the knowledge, professional skills, and general cultural levels of employees become a necessary condition for the existence of national economic stability. According to E. Buchvald, economic security is a qualitative measure of the economy's capacity to sustainably produce normal living circumstances for the populace, supply resources to the economy, and uphold the interests of the federal government [7].

3 Materials and methods

The research employed induction and deduction techniques, statistical observation, comparative analysis, data grouping, abstract-logical thinking, and scientific observation. The Republic of Uzbekistan's criteria for evaluating regional economic security have been improved through the use of these research methodologies, which have led to conclusions and recommendations for strengthening the monitoring system [8]. Administrative techniques also allow for the potential use of coercion against certain businesses that don't follow the rules. Local governing bodies utilize administrative techniques to control the privatization of public property, resolve conflicts pertaining to foreign investment attraction, manage the utilization of local natural resources, and manage social processes (Table 1) [9].

Table 1. Administrative and economic methods of regulating regional (territorial) reproduction processes

Administrative methods	Economic methods
Giving specific assignments aimed at creating conditions for the preparation and implementation of management decisions	It relies on general economic laws and principles
Prioritizing the interest of the governing body in direct impact on managed objects	The managed objects are indirectly affected, and the economic interests of enterprises with different forms of ownership are taken into account.
The main responsibility for the decisions regarding the bidding process rests with the paying authority, the rights of the controlled object are limited.	Business entities are required to have complete independence, to be highly responsible for their activities and their consequences.
Administrative orders, plans are directive in nature, and their implementation is considered mandatory. deviation from it is not allowed	Encourages the economic entity to prepare alternative decisions and provide rational solutions in terms of its economic interest and taking into account economic risk.

Economic methods of regulating regional reproduction processes are used through the economic interests of economic entities, with the help of taxes, incentives, loans and subsidies. Within the framework of the rules and regulations established and approved by the higher management bodies, they indirectly influence the activities of economic entities and local authorities, and they are given wide powers [10].

The following is done in the process of creating the plan to guarantee the region's economic security [11]:

1. Within the context of the national economy and regional economy, key macroeconomic indicators are examined.
2. It is unclear how one region fits into the overall hierarchy of the nation's regions in terms of socioeconomic growth.
3. An analysis of the socioeconomic conditions in the area is conducted.
4. The region's primary economic interests are identified.
5. A scheme for categorizing dangers to the safety of the local economy will be created.
6. There is a lack of identification of current and prospective risks to the region's economic security.
7. Methods and indicators for evaluating regional economic security are established.
8. Static and tense situations in the domains of regional quality of life are evaluated.
9. The region's economic security objectives are established.
10. Regional policy priorities to guarantee economic security will be established
11. Programs for socioeconomic development at the regional level shall be created.
12. A plan of action will be created and decided upon to guarantee the region's economic security.
13. The management bodies' and local authorities' responsibilities and authority to provide economic security are established.
14. A set of metrics for tracking the region's economic security will be created.

The following are included in the evaluation of the region's ecological and economic potential [12]:

1. Both quantitative and qualitative assessments will be made of the region's labor, land, water, and mineral resources.
2. Over the next ten years, the employment status of the populace and the region's demographic conditions will be evaluated.

3. Mineral resource reserves. Their current state of development is examined. The prospects of the region's mining raw material base are assessed while considering the draw of new funding sources. Additionally, the expenses of building mines and the supply of mineral resources to mining companies are examined.
4. The region's water and land resources, as well as their availability, quality, and level of reclamation, are examined, and opportunities for improving land reclamation are created.
5. The production, transport and communication infrastructure potential of the region is studied. The level of provision of industrial infrastructure objects and services of the population is evaluated.
6. Prospective districts, cities, and large population centers are selected for the location of productive forces and new enterprises in the region. Areas of implementation of regional development programs are determined.

The following should be the primary implementation directions for development projects. The program describes the primary trends and metrics of the social and economic development of the area. The efficient use of new jobs, natural, financial, labor, and manufacturing potential are the key areas of concern here [13].

4 Results and discussion

The administrative and financial instruments that really carry out the procedure for guaranteeing the enterprise's financial stability are its most crucial component. There are three distinct levels of administrative and financial measures to manage the enterprise's economic security: macro, meso, and micro [14].

At the macro level, administrative instruments consist of quotas, licensing, legal regulation, regulation, restriction, and inspection. It is important to distinguish between the administrative and financial instruments listed below at the micro level: diagnosis, control, planning, standardization, instruction, collection, material incentives, etc. The creation of a management system that performs the tasks of defining corporate objectives, gathering and analyzing current data for management decision-making, and managing the divergence of real indicators from planned indicators is one of these management techniques [15].

We believe that the establishment of a "Department of Economic Security" inside the management structure is appropriate to guarantee the financial and economic stability of chemical firms [16]. The "Department of Economic Security" in chemical industry businesses is tasked with keeping an eye on the business's economic security metrics and offering an information system that allows decision-makers to select or modify the enterprise's defenses against both external and internal threats. In this instance, this department fulfills a coordinating role and ought to collaborate with the departments of people, production, economics, finance and accounting, transportation, and marketing [17].

Fixed asset obsolescence is still a serious issue for businesses in the chemical sector. The investment process needs to be accelerated in order to solve this issue. Nonetheless, our goal was to provide a scientific justification for the efficacy of keeping the state's stake in the privatization of businesses in this industry [18].

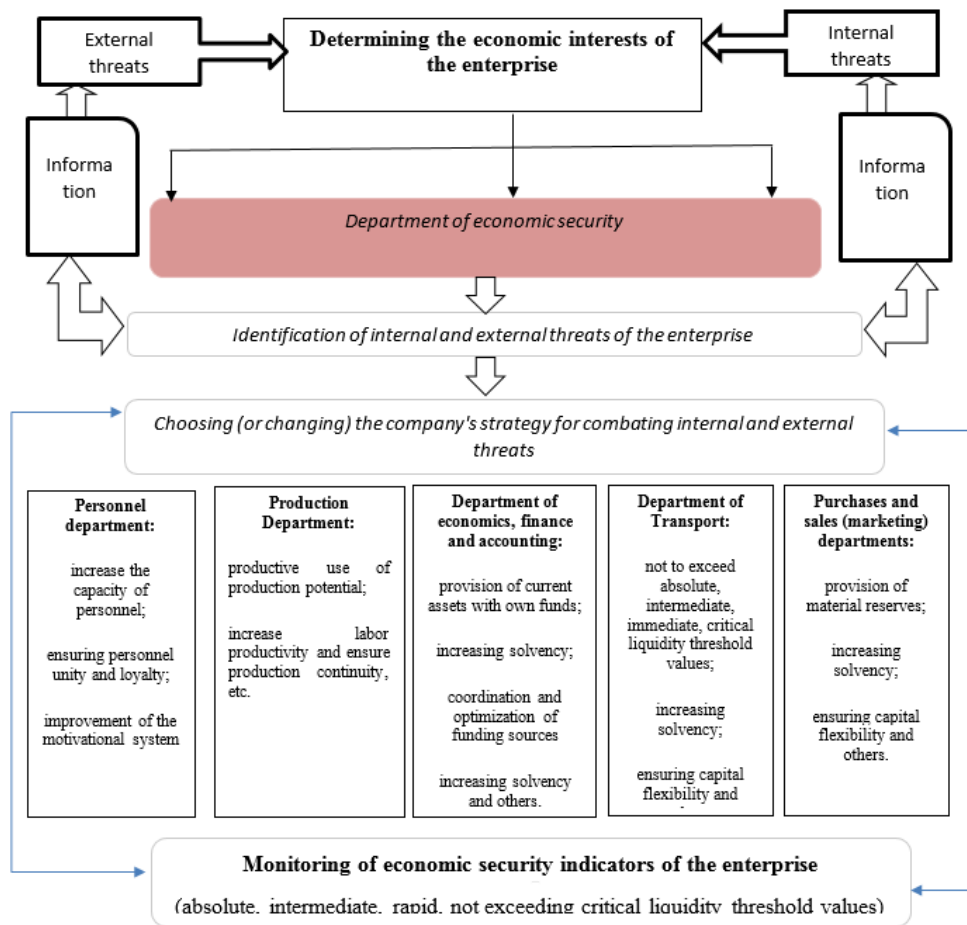


Fig. 1. Organizational-economic mechanism of ensuring economic security in enterprises

Expert evaluation was used to define the weight factors for the Kashkadya region, for example [19]:

- Product production and sales rate: 0.15;
- population social security: 0.25;
- demographic stability: 0.25;
- economic stability of the region: 0.20;

The characteristics of the region in which the resource component is selected determine how well the population's social support and the efficient use of resource potential correspond, since the largest weight coefficients serve as the primary function in the activities of any region and its parts [20]. The region's economic stability was assigned a lower weight coefficient since the list of indicators in this area represents generic processes that are dependent on numerous variables, including those at the national level.

5 Conclusion

In order to guarantee economic security in the region, the Republic of Uzbekistan must consider the following factors:

- The company's divisions in the regions will work with them to protect confidential information;
- they will investigate reports of blackmail, incitement, and other attempts against employees to obtain information about the company's activities ensuring regional economic security;
- they will organize the collection, accumulation, automated accounting, and analysis of information on security issues;
- they will conduct division-level inspections to ensure regional economic security and offer them practical assistance in matters pertaining to the security of their activities;
- they will develop and implement regulations on commercial secrets.
- approving the unified methodology for developing development programs for regions that are insufficiently developed and lagging behind the national level;
- monitoring the economic and social situation in urban and rural districts of the republic, developing their typology according to the level of development;
- organization of examination of regional programs, projects of support programs for developmentally lagging districts and cities.

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