

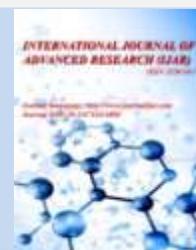


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### RESEARCH ARTICLE

## DIRECTIONS FOR USING ADVANCED FOREIGN EXPERIENCE IN THE PRACTICE OF TAXATION FOR THE USE OF SUBSOIL RESOURCES BY ENTERPRISES

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### Abstract

The article analyzes the normative and legal foundations, economic significance, and methodological principles of taxation on enterprises for the use of subsoil resources. Tax policy serves as an important tool in the process of utilizing underground resources, playing a crucial role in forming state budget revenues, ensuring the efficient use of natural resources, and maintaining environmental sustainability. In addition, international experience is examined, and effective models applicable to Uzbekistan are proposed.

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### Introduction:-

Taxation for the use of subsoil resources is one of the key economic instruments of the state, playing a significant role in the effective management of natural resources, increasing budget revenues, and ensuring environmental sustainability<sup>1</sup>. Since mineral resources are limited and non-renewable sources, promoting their rational use while protecting the interests of society is considered one of the priority directions of state policy. Payments for the use of subsoil resources not only contribute to the replenishment of the state budget but also encourage resource conservation and the introduction of high-tech production processes. Revenues derived from underground resources occupy an important place in the national economy. This type of tax serves to ensure the fair distribution of income obtained from the use of natural resources and contributes to socio-economic development. Particularly in resource-rich countries, the efficient management of revenues from natural wealth, their allocation to various economic sectors, and the financing of infrastructure projects remain crucial tasks for achieving sustainable economic growth. The relevance of this issue is associated with the need to improve the processes of using natural resources and to enhance economic efficiency. Developing effective models based on the analysis of existing systems of subsoil taxation, their advantages and disadvantages, as well as international experience, is of great importance. This article analyzes the economic and methodological foundations of subsoil resource taxation and proposes the most appropriate approaches for Uzbekistan.

<sup>1</sup>Djulibekov N. The Objective Necessity, Importance, and Methodological Foundations of Taxation for the Use of Subsoil Resources by Enterprises. *Advanced Economics and Pedagogical Technologies*. UDC: 336.221

### **Literature Review:-**

The issue of taxation for the use of subsoil resources has been widely studied by scholars in the fields of economics and finance<sup>2</sup>. Economists such as John Stuart Mill (1848), Arthur Laffer, and Henry George emphasized the role of tax policy in regulating the management and utilization of land and natural resources. The distribution of the tax burden and its impact on the state budget were also examined by Karl Marx, Adam Smith, and David Ricard. International organizations such as the World Bank (2017) and the International Monetary Fund (IMF) (2019) have conducted studies on the significance of revenues from natural resources in national economies. Their reports provide analyses of the impact of subsoil use taxation on economic growth, the financing of infrastructure projects, and the promotion of social stability. In economic theory, various models of taxation related to the use of natural resources have been proposed. Henry George (1879), in his work “The Theory of the Single Tax,” emphasized the necessity of directing a major portion of income derived from land and natural resources to the state budget. According to him, land resources constitute common wealth, and their use should serve the interests of society rather than the private benefit of individual owners.

Arthur Laffer (2004) developed the Laffer Curve, which illustrates the relationship between tax rates and economic activity, showing that excessively high tax rates can lead to a decline in production and investment. This approach implies that taxes on subsoil use should be balanced and efficient to maintain both economic growth and fiscal stability. Jean-Baptiste Say studied the impact of taxation on entrepreneurial activity and emphasized the importance of implementing taxes in a balanced manner. According to him, revenues generated from land resources should be distributed fairly and utilized in accordance with the state’s economic development strategy.

### **Research Methodology:-**

The study examined methods for assessing and improving the efficiency of the subsoil use taxation system. First, the normative and legal foundations of subsoil taxation were analyzed, and the existing legislative documents were reviewed. In addition, drawing on international experience, various tax models applied in different countries and their economic outcomes were studied. In the study, economic and comparative analysis methods were used to understand tax policy and its impact on production processes. The strengths and weaknesses of the existing tax system in Uzbekistan were also examined, and proposals for its improvement were developed. As a result, one of the main objectives of the research was to establish an effective system of subsoil taxation, assess its impact on the economy, and propose new approaches for its optimization.

### **Analysis and Discussion of Results:-**

The system of taxation for subsoil use occupies an important place in the economic policy of every country. Therefore, when determining tax rates, governments take into account factors such as supporting economic growth, managing natural resources efficiently, and maintaining stable budget revenues. In Uzbekistan, the taxation system for subsoil use plays a significant role in the national economy<sup>3</sup>. Various types of taxes have been introduced for enterprises engaged in the extraction of mineral resources, serving to ensure the rational use of natural resources, reduce environmental impact, and increase state budget revenues. Moreover, these taxes play an important role in attracting both foreign and domestic investors and influence the investment climate in the country’s mineral resources sector. In Uzbekistan, the taxation system for subsoil use is an important source of state budget revenues. According to Presidential Decree No. PF-6319 adopted on October 6, 2021, tax rates for subsoil use were reduced to up to 10% for oil and natural gas, up to 7% for gold, silver, and copper, up to 2.7% for tungsten, and up to 8% for uranium<sup>4</sup>. These measures aim to ease the tax burden on enterprises engaged in subsoil use and to enhance their investment attractiveness. It is well known that large-scale reforms are being implemented in Uzbekistan to ensure the efficient use of natural resources, expand geological exploration, and increase production capacities. Between

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<sup>2</sup>Djulibekov N. The Objective Necessity, Importance, and Methodological Foundations of Taxation of Enterprises for the Use of Subsoil Resources. *Advanced Economics and Pedagogical Technologies*. UDC: 336.221

<sup>3</sup>Djulibekov N. (2024). Taxation of Subsoil Users: Domestic Practice and International Experience. // *Economic Development and Analysis*, Vol. 2, No. 11, pp. 453–460.

<sup>4</sup>Decree of the President of the Republic of Uzbekistan. (2021, October 6). On measures to further stimulate geological exploration and improve the taxation procedure for subsoil users (No. PF-6319). Retrieved from <https://lex.uz/docs/5670088>

2022 and 2026, geological exploration is planned to be carried out at 189 base metal sites<sup>5</sup>. The volume of drilling operations, surface mining exploration, and 2D and 3D seismic surveys will be significantly increased.

**As a result of these processes:**

Gold reserves are expected to increase by 732 tons, silver reserves by 1,100 tons, copper reserves by 1.31 million tons, uranium reserves by 28,150 tons, and hydrocarbon raw materials by 303 million tons. Currently, intensive work is being carried out in the field of technological metals and raw materials, focusing on the development of lithium, graphite, aluminum, magnesium, and rare metals. In cooperation with leading international consulting companies, activities are underway to manage reserves and prepare feasibility studies in accordance with the JORC standard. The analysis shows that the number of taxpayers for subsoil use has steadily increased during the period from 2020 to 2024. Specifically, the number of taxpayers amounted to 1,787 in 2020, while by 2024 it had risen to 2,129. An analysis of budget revenues from subsoil use taxation during this period shows a steady increase. In 2020, budget revenues from this tax amounted to 16,565.2 billion soums, while in 2024 this figure reached 20,169.6 billion soums— an increase of nearly 22% compared to 2020. Such a high rate of growth is associated with several positive factors: the improvement of regulatory mechanisms in the field of subsoil use, the simplification of licensing procedures, the increase in the number of taxpayers, the expansion of digitalization processes, and the growth in the production of precious and non-ferrous metals.

In global practice, the taxable object for subsoil use is generally determined based on the actual volume of extracted minerals. However, in Uzbekistan, Article 451-1 of the Tax Code establishes specific rules for determining the tax base for certain types of metals. According to this article, during the extraction of gold and copper, the taxable value is calculated based on the actual sales value of the extracted metal. This value is determined using the higher of two figures: the arithmetic average exchange price or the average actual sale price during the tax period, applied to the quantity of metal contained in the ore, concentrate, or final processed product. Moreover, expenses related to further processing (smelting, refining) and transportation of the metal are not deductible. However, due to the increase in global market prices for gold and fluctuations in exchange rates, the total tax amount (or tax burden) for enterprises has also been rising<sup>6</sup>. It is also important to highlight another aspect of subsoil user taxation<sup>7</sup>. In global practice, special tax rates on natural resources are often directly linked to production profitability or depend on the productivity level of the deposit, production volume, and stages of development. The mining and geological conditions of deposits and the quality of reserves vary significantly between sites. When a uniform tax rate is applied, companies operating in highly productive deposits find themselves in more favorable conditions and gain excessive profits, while those working with less productive deposits become inefficient or low-profit. Clearly, such an approach does not encourage the complete extraction of underground resources and, therefore, does not contribute to the efficient use of subsoil wealth.

Mineral deposits differ significantly from one another<sup>8</sup>. The natural characteristics of minerals in a given deposit, the depth at which they are found, the difficulty of extraction, the richness or poverty of the ore, the presence of off-balance ores, as well as factors such as the deposit's proximity to populated areas, transport routes, and other conditions — all of these together determine the need for a differentiated taxation mechanism to ensure fair and efficient regulation. In taxing mineral extractors, it is necessary to draw on the proven advanced international practices mentioned above. In particular, when determining the tax on subsoil use, a differentiated approach should be applied. Under this approach, higher tax rates would be set for highly profitable mineral deposits, while lower rates would be applied to processed ores of lower grade and off-balance ores. This would ensure fairness, stimulate efficient resource use, and support sustainable sectoral development. The taxation system for subsoil use plays a crucial role in shaping the economic policy of every country. Resource-rich nations employ various approaches to efficiently direct revenues from oil, gas, gold, copper, and other mineral resources into the state budget. Some

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<sup>5</sup>Features of taxation of the mining and metallurgical industry enterprises and their role in the economy. "Digital Economy" Scientific-Electronic Journal, Issue 10. Retrieved from <https://www.infocom.uz> (<https://www.infocom.uz/>)

<sup>6</sup>Republic of Uzbekistan.(2019). Tax Code of the Republic of Uzbekistan (new edition).Retrieved from <https://lex.uz/acts/4674902>

<sup>7</sup>Djulibekov.N. (2023).Improving the mechanisms of taxation of mining and metallurgical industry enterprises. T. SAHHOF. ISBN: 978-9943-9437-6-6.

<sup>8</sup> Proceedings of the international conference on integrated innovative development of Zarafshan region: achievements, challenges and prospects. Volume II 24-25 September, 2025. Navoi, Uzbekistan

countries channel these revenues directly into the budget, while others establish special funds to ensure long-term economic stability. Uzbekistan, being one of the resource-rich countries, also considers the subsoil use taxation system an important source of state budget revenues. Therefore, analyzing international experience and adapting the most effective models to market mechanisms is a pressing task. Below is an analysis of the taxation systems of countries such as Australia, Canada, Chile, Brazil, and Kazakhstan<sup>9</sup>: Australia is one of the world's largest producers of gold and copper. In 2024, Australia's gold production amounted to approximately 284 tons<sup>10</sup>, accounting for about 8% of the global market share. The country also ranks among the leaders in copper production, with an annual output of nearly 900 thousand tons, while silver extraction reaches around 1,200 tons per year. In Australia, the taxation system for the extraction of precious and non-ferrous metals consists of the following main components:

**Corporate Income Tax:**

All companies are subject to a corporate income tax rate ranging from 25% to 30%.

**Royalty Payments:**

Royalties are calculated as a fixed percentage of the volume or value of extracted minerals. The rates depend on the location of extraction, the calculation methodology, and the availability of deductions for processing costs. Each state and territory sets its own royalty rates. Typically, gold royalties range from 2.5% to 5%, and copper royalties range from 2.5% to 7.5%. Canada is also one of the world's largest producers of non-ferrous metals. The western part of the country, where the Cordillera Mountains are located, is rich in valuable and industrial metals such as uranium, iron, nickel, copper, zinc, lead, gold, and silver.

**In Canada, the taxation system for the extraction of precious and non-ferrous metals operates at both the federal and provincial levels:**

**1. Federal Corporate Income Tax:**

A unified tax rate of 15% is applied to all companies at the federal level.

2. Provincial Corporate Income Tax: Each province has its own rate, which ranges from 8% to 16%.

3. Royalties: Royalty payments are set individually by each province and vary depending on the type of resource being extracted, the volume of production, and market prices. For copper and gold, rates range from 1% to 17%.

4. Mining Taxes: In some provinces, additional mineral taxes apply to extracting companies, based on profit or production volume. If we analyze the non-ferrous metals mining industry in Chile, this country is the world's largest copper producer, supplying 23% of global copper production<sup>11</sup>. It also holds an important position in gold and silver mining.

**The taxation system in Chile's non-ferrous metals mining sector consists of the following components:**

1. Corporate Income Tax: There is a single rate of 27% applicable to all companies.

2. Specific Mining Tax: This tax, levied on mining activities, varies depending on the volume of production, ranging from 5% to 14%.

3. Royalties: Royalties also exist in Chile and are determined based on production volume and market prices.

In Brazil, the taxation system for mineral extraction is as follows: the corporate income tax is set at 34%. The high corporate tax rate is offset by the relatively low royalty rates. Financial compensation for the exploration of mineral resources (mining royalties) is established relative to the tax base, with a rate of 1.5% for gold and 2% for copper. A brief analysis of Kazakhstan's taxation system for the use of subsoil resources shows that this country, rich in natural resources, has a well-established system for taxing the extraction of minerals. The corporate income tax rate for oil and gas producers is set at 20%. In addition, there are additional payments such as royalties and bonuses for the use of mineral resources. For example, the royalty rate for mineral extraction is 7.5% for gold and 8.55% for copper, depending on the volume of production and the remaining economically recoverable reserves. In most

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<sup>9</sup>Djulibekov N. The Objective Necessity, Significance, and Methodological Foundations of Taxation for the Use of Subsoil Resources by Enterprises. Advanced Economics and Pedagogical Technologies. UDC: 336.221

<sup>10</sup>World Gold Council, Global mine production - Data as of 31/12/2024) <https://www.gold.org/g-oldhub/data/gold-production-by-country>

<sup>11</sup> Based on the data provided by the U.S. Geological Survey (USGS) <https://www.usgs.gov/centers/national-minerals-information-center/copper-statistics-and-information> Nasdaq, Inc. Written by Dean Belder for Investing News Network "Top 10 Copper Producers by Country"

foreign countries engaged in mining, to encourage the financing of exploration projects, the costs of conducting geological exploration are accounted for as operating expenses. If mining companies generate sufficient profit to cover these costs, they are allowed to fully deduct these expenses from the taxable base in the year they are incurred. In our country, according to Article 311 of the current Tax Code, the expenses incurred by a subsoil user for geological study and exploration prior to the commencement of mining are recognized as operating expenses up to 15% of the total accumulated costs in the amortizable asset group. Therefore, it would be appropriate to introduce the practice of fully accounting for geological exploration expenses as operating costs in our country as well<sup>12</sup>. The above analyses indicate that, in Uzbekistan, the taxation system for the use of subsoil resources is not only an important source of revenue for the state budget but also a factor influencing entrepreneurial activity and the attraction of foreign investment. High tax burdens, the complexity of administrative procedures, and frequent changes in tax legislation create certain barriers for entrepreneurs and investors. Moreover, an analysis of international experience shows that countries such as Brazil, Canada, Australia, and Chile have achieved economic efficiency by dynamically adjusting their tax policies and harmonizing royalties, corporate income tax, and special payments for mining activities.

### **Conclusion and Recommendations:-**

Considering Uzbekistan's rich natural resources, it is necessary to align the existing tax system with international standards, create a favorable environment for entrepreneurs and investors, and optimize the tax burden. This will ensure sustainable growth in the country's mining industry and have a positive impact on overall economic development.

### **Based on the conducted analysis and research, it is advisable to propose the following measures to address existing problems:**

1. Optimization of Tax Rates: It is necessary to review the tax rates for mineral resources, taking into account market conditions, production volumes, and the composition of the ore (its richness or depletion), as well as the processing of off-balance ores.
2. Simplification of Tax Administration: The procedures for calculating and paying taxes should be simplified, and the system of electronic reporting should be aligned with international standards in order to reduce the administrative burden.
3. Expansion of Tax Incentives: It is possible to attract new investments by expanding tax benefits and incentive measures for investors. This, in turn, will contribute to the growth of the national economy.
4. Improvement of the Investment Climate for Foreign Investors: It is necessary to further improve the investment environment, minimize risks, and provide long-term legal guarantees in legislation for foreign investors.
5. Compliance with Environmental Standards: Strict adherence to environmental standards in extraction and processing activities should be ensured, along with the expansion of the use of recyclable resources.

By implementing the above recommendations, it will be possible to improve Uzbekistan's taxation system for subsoil resource use and create favorable conditions for entrepreneurs and investors.

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