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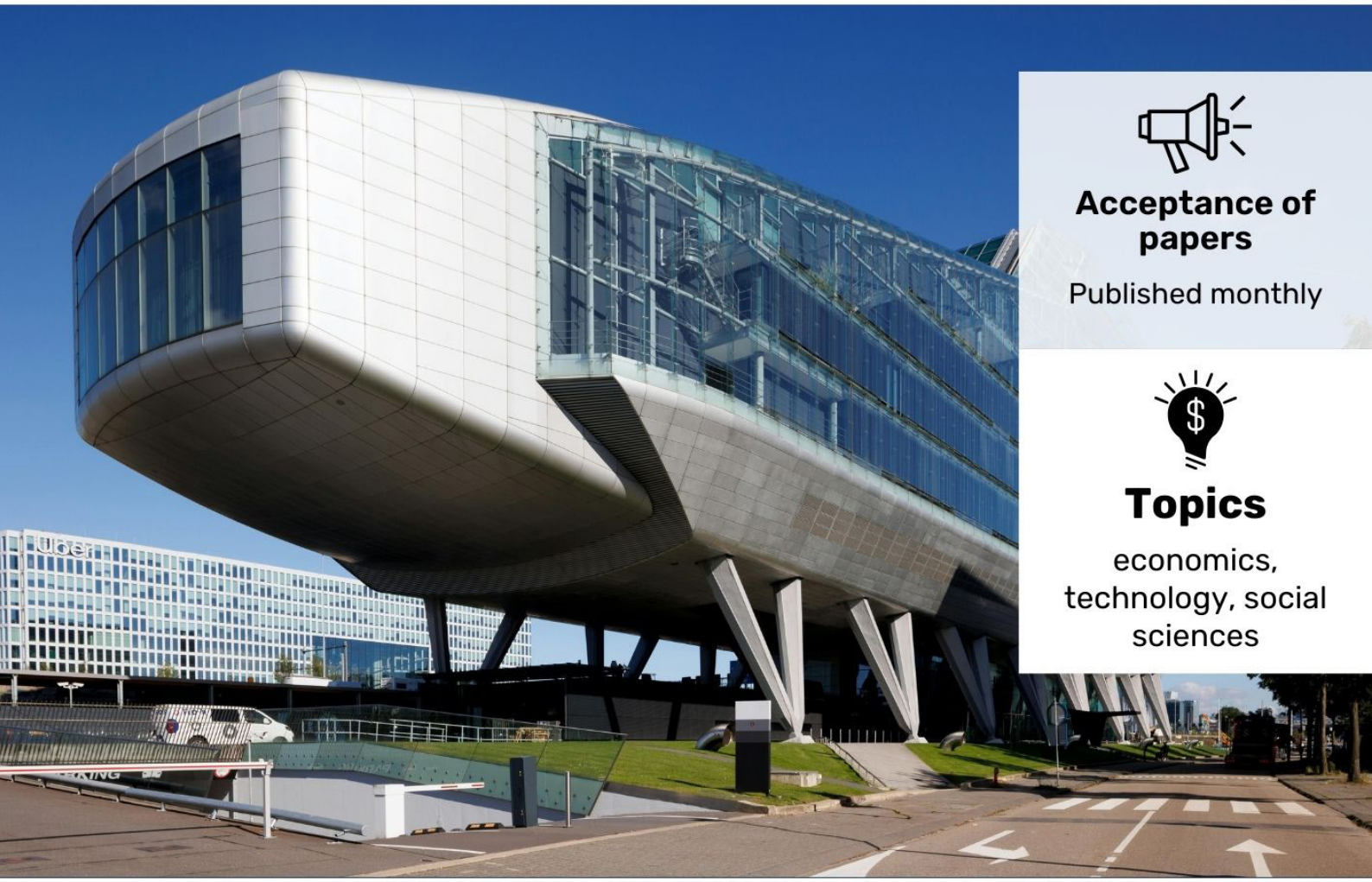

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ENSURING MACROECONOMIC STABILITY THROUGH THE IMPLEMENTATION OF GREEN TRANSFORMATION

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Abstract: In the world, as in many other factors, ensuring macroeconomic stability in the national economic system is a priority area for sustainable development of the green economy. The implementation of this process is also important for the national economy of Uzbekistan, and although much practical work has been done in this direction, there remain a number of problems that require scientific research in this area. This article focuses on these issues.

Key words: green economy, green transformation, green bond, sustainable development goals, strategy, tactical directions, green economy, macroeconomic sustainability, economic rating, macroeconomic policy, state financial policy, economic indicators, economic equilibrium, sustainability, economic factors. economy, macroeconomics, macroeconomic indicators.v

INTRODUCTION

The current development trends and the consistent implementation of reforms in our republic necessitate the harmonious “green transformation” of industries and sectors in fulfilling the country’s commitments to the global community within the framework of the United Nations Framework Convention on Climate Change, the Kyoto Protocol, and the Paris Agreement. This process requires ensuring their competitiveness and resource efficiency, mitigating and adapting to the consequences of climate change, improving the quality of life of the population, and transitioning to a new model of economic growth based on “green development.”

In addition, the ongoing political and economic instability in the world, as well as the implementation of the National Sustainable Development Goals (SDGs) set in our republic, bring forth the urgent need for conducting in-depth scientific research in this direction.

Review of literature on the subject

Research dedicated to increasing the role of green transformation in ensuring macroeconomic stability is being carried out by a number of scholars in our republic. In particular, Professor M. Po‘latov has scientifically substantiated the green economy as an important step toward ecological sustainability, while economist M. Erxanov analyzed the green economy as a factor in ensuring economic growth in the national economy. Sh. Egamnazarov developed recommendations on solutions to the socio-economic issues related to the implementation of the green economy concept in Uzbekistan, and researcher E. Mo‘minova scientifically described the directions of achieving sustainable economic growth through the development of the green economy[1].

In addition, the scientific studies of Professors N. Maxmudov, B. Berkinov, and M. Asqarova also emphasize that the development of the green economy is an important factor in ensuring stability in the national economy.

1 Erxanov Muhammadjon Absayitovich. YASHIL IQTISODIYOT: RIVOJLANTIRISH ZARURIYATI VA ISTIQBOLLARI. .December 2023, Iqtisodiy taraqqiyot va tahlil 1(8):374-380; Muhiddin PO‘LATOV. Yashil iqtisodiyot – ekologik barqarorlik sari muhim odim. https://yuz.uz/news/yashil-iqtisodiyot--ekologik-barqarorlik-sari-muhim-odim; Egamnazarov Shohruxbek Ilxomjon o‘g‘li. .YASHIL IQTISODIYOT KONSEPSIYASI VA UNING SHAKLLANISH XUSUSIYATLARI. CENTRAL ASIAN JOURNAL OF EDUCATION AND INNOVATION Volume 3, Issue 6, Part 2 June 2024; Muminova Elnoraxon Abdukarimovna. YASHIL IQTISODIYOT BARQAROR RIVOJLANISH MEXANIZMI SIFATIDA. IQTISOD VA MOLIYA / EKONOMIKA I FINANSЫ 2023, 1 (161).

However, it should be particularly noted that there remains a constant need for research that deeply substantiates the interrelation between the development of the green economy and the achievement of national macroeconomic stability. A systematic analysis of its various dimensions still constitutes an important scientific necessity today.

RESEARCH METHODOLOGY

The scientific study of ensuring national macroeconomic stability through the development of the green economy requires the effective use of a range of research methods. In these studies, the dialectical method proves effective in analyzing the characteristics of macroeconomic development and the factors influencing it, while the combined application of analysis and synthesis methods is important when examining the impact of green economy development on macroeconomic stability over different periods.

In addition, other methods widely used in scientific methodology are also applied in research on ensuring national macroeconomic stability through the development of the green economy. In particular, deductive or inductive methods are effective in studying macroeconomic stability development trends from general to specific and vice versa, while the abstract-logical reasoning method plays a special role in systematically analyzing the process.

The comprehensive use of these methods in the process of scientific analysis helps to more deeply reveal the intrinsic relationship between the green economy and macroeconomic stability.

ANALYSIS AND RESULTS

Climate change is of critical importance for the future development of Uzbekistan. The changing climate threatens the country's natural capital, agriculture, land and water productivity, and increases the risks of natural disasters. By the end of this century, the average air temperature in Uzbekistan is expected to rise significantly above the global average. By the 2090s, the average temperature could increase by 4.8°C compared to the baseline of 1986–2005. In the near term, the economic cost of the physical impacts of climate change is projected to reach 1% of GDP by 2030. Agriculture will be the most affected sector, followed by negative impacts on water resources, biodiversity, labor productivity, and an increase in weather-related risks.

The country can also play an important role in contributing to global efforts to reduce greenhouse gas emissions. This opens up new opportunities for growth and reduces the risks associated with global actions aimed at achieving net-zero emissions, as set out in the Paris Agreement. Uzbekistan's initial target under its Nationally Determined Contributions (NDCs) was to reduce greenhouse gas emissions per unit of GDP by 10% from 2010 levels by 2030. However, recognizing the importance of emissions reduction, in October 2021 Uzbekistan updated its NDCs to raise this target to 35%. According to Uzbekistan's first Biennial Update Report under the UNFCCC (2021), the country's total greenhouse gas emissions amounted to 189 million tons of CO□ equivalent in 2017.

The priority directions for ensuring national macroeconomic stability through the development of the green economy are reflected in the New Uzbekistan Development Strategy for 2022–2026 and the "Uzbekistan – 2030" Strategy, both of which include major commitments to "green" growth. Issues of climate change mitigation and adaptation are addressed in the energy sector (with particular focus on expanding renewable energy production), in industry (emphasizing the development of "green" industry and improving energy efficiency), and in agriculture (prioritizing water efficiency due to the sector's high sensitivity to climate change). At the same time, there remain several issues related to integrating climate change considerations into national strategies that present additional opportunities for positive change, including:

• developing an integrated and comprehensive strategic approach to climate change, which is currently lacking in the country;

• strengthening the integration of climate change into development planning and budgeting processes, including the use of recently completed climate vulnerability assessments to incorporate resilience into strategic and planning decisions;

• improving data collection and monitoring, reporting, evaluation, and learning processes, including developing a monitoring and evaluation system for climate change adaptation, creating a "green" economy data roadmap, and enhancing greenhouse gas emission monitoring, reporting, and verification.

The Climate Public Expenditure and Institutional Review (CPEIR) is a diagnostic tool that provides a starting point for advancing the integration of climate change issues into budgeting and planning processes. CPEIR assesses the opportunities and constraints for incorporating climate-related issues into national and local budget allocation and expenditure processes through qualitative and quantitative analysis of the climate relevance of public spending, climate-related plans and strategies, institutional system foundations, and public financial architecture.

According to Uzbekistan's first Biennial Update Report under the United Nations Framework Convention on Climate Change (UNFCCC) (2021), the country's total greenhouse gas emissions in 2017 amounted to 189 million tons of CO_2 equivalent (Figure 1.1). The energy sector accounted for 76–80% of total emissions, of which 50% came from fossil fuel combustion and 26–30% from methane leaks in the coal, oil, and gas sectors. Over the past 10 years, emissions in the energy sector have been decreasing. Conversely, greenhouse gas emissions from agriculture have been rising due to the increase in livestock numbers, making up 18% of the total. Industrial processes contributed 5% of emissions, while waste management accounted for only 1%; however, this share has been growing rapidly.

In 2017, Uzbekistan submitted its Intended Nationally Determined Contributions (INDCs) to the UNFCCC Secretariat by signing the Paris Agreement, and after ratifying it in 2018, these INDCs were confirmed as the country's First Nationally Determined Contribution (NDC). In recent years, the government has been paying great attention to creating a regulatory framework, improving planning, setting long-term mitigation targets for the country, mitigating and adapting to climate change impacts, transitioning to a "green" economy, and implementing "green" growth programs. Moreover, Uzbekistan continues efforts to enhance its adaptive capacity in order to reduce the risks of climate change's negative impacts on economic sectors and social areas.

The country is strengthening institutional and technical capacity to integrate climate change into national and local planning and budgeting processes. The National Adaptation Plans for Uzbekistan are aimed at achieving the following outcomes:

• Strengthening mechanisms for planning cross-sectoral climate adaptation measures and coordinating adaptation activities and actions at various levels;

• Enhancing the statistical database and prioritizing climate change adaptation issues in national, sectoral, and regional planning and budgeting;

• Developing a financing and investment strategy for climate adaptation measures in Uzbekistan.

This project focuses on sectors most vulnerable to climate change (agriculture, water management, healthcare, energy-efficient building construction, and emergency management) and on three priority regions (the Republic of Karakalpakstan, Bukhara, and Khorezm). It aims to facilitate the planning of adaptation measures and actions, as well as their integration into relevant budgeting processes. Within the project framework, by November 2023 it was planned to develop adaptation plans across five sectors and three regions.

Uzbekistan's climate change and "green" growth policy is managed within a set of strategies combining long- and medium-term perspectives with more detailed action plans. Conceptual documents adopted by the government in recent years include the Environmental Protection Concept until 2030 and the Strategy for Transition to a "Green" Economy until 2030. Their main objectives are to mitigate and adapt to climate change through reducing emissions and pollution, promoting the rational use of water resources, supporting the introduction of environmentally friendly technologies, expanding renewable energy sources, extending waste collection and removal services to the population, improving energy efficiency, and reducing the use of hydrocarbons.

Climate change affects the sustainability of natural resources such as water use, land degradation, and biodiversity. Water scarcity is manifested by low per capita internal freshwater reserves and high mortality rates. The share of degraded land in Uzbekistan is higher than the average in upper-middle-income countries (UMICs). Furthermore, the country's energy intensity per unit of GDP, including emissions from its energy systems, is significantly higher than in other ECA countries. The share of the population exposed to harmful air pollution is also higher compared to benchmark indicators, while environmental protection expenditures relative to GDP are lower.

Considering the economic impact of climate change on the population, Uzbekistan was found to be more socially vulnerable than other countries in the region. The share of the population affected by geophysical, meteorological, hydrological, or climate-related natural disasters is lower than the averages for UMICs or LMICs. However, drought has a stronger impact on agricultural productivity, significantly affecting rural populations engaged in agriculture in economically disadvantaged regions.

CONCLUSIONS AND SUGGESTIONS

In conclusion, it can be stated that strengthening the role of green transformation in ensuring macroeconomic stability is a pressing issue, and we believe the following measures should be implemented to reinforce this process:

Firstly, Uzbekistan has not yet developed or approved a Climate Change Strategy and a National Adaptation Plan aimed at strengthening institutional and technical capacity for integrating climate change mitigation and adaptation into national and local planning and budgeting processes. Although, after ratifying the Paris Agreement, the government has undertaken consistent efforts to improve national strategies and plans related

to climate change, the country still lacks an integrated strategic structural framework on climate issues. Current activities related to climate change are fragmented, consisting of presidential decrees, laws, government resolutions, sectoral strategies, and plans. To harmonize and improve existing legislation and regulatory documents, the government could consolidate them into a single legal framework, either by introducing new principles or aligning them with international standards. Moreover, in order to identify priority directions and instruments for achieving net-zero carbon emission goals through mitigation and adaptation measures, the government should present a long-term decarbonization strategy (phasing out fossil fuels) with a horizon set for 2050.

Secondly, while the government, together with international partner organizations, has recently conducted a comprehensive assessment of the country's vulnerability to climate change, the integration of its results into key strategic objectives such as poverty reduction, climate adaptation, and gender equality remains at a preparatory stage. In addition, although the government has introduced an obligation for strategy developers to integrate climate change mitigation and adaptation into national, sectoral, and regional development programs, the procedures and mechanisms for implementation have not yet been developed or adopted. Uzbekistan's priority directions for transitioning to a green economy, as well as its emission reduction targets under the Nationally Determined Contributions, currently have only a minimal impact on national development planning and budget allocation. Budget planning processes and budget documents do not designate climate change or greenhouse gas emission reduction policies as a distinct category of state expenditure. To ensure the full and effective integration of climate change issues into development planning, it is necessary, first of all, to establish a regulatory mechanism for the abovementioned obligation. This requires accounting for and mainstreaming mitigation and adaptation measures at all stages of planning—from defining development goals to determining financing and implementation mechanisms.

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