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### CONTENT

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## IMPLEMENTATION OF THE SUSTAINABLE DEVELOPMENT GOALS IN THE ONE BELT ONE ROAD INITIATIVE

#### Beisenov Adilet <sup>a</sup>, Kopisheva Aigerim<sup>b</sup>

- <sup>a</sup> Higher school of art and humanities, acting associate professor, Astana International University, 010000, Astana, Kazakhstan,
- <sup>b</sup> Higher school of art and humanities, 4th grade student 6B03101 «International relations», Astana International University, 010000,Astana, Kazakhstan

**Abstract.** This article delves into the multifaceted dimensions of the One Belt, One Road initiative, exploring its journey over a decade. Focusing on the pivotal roles of youth engagement, environmental stewardship, and water security, the article examines how these factors contribute to the initiative's sustainability and success.

Through innovations led by the younger generation, ecological strategies, and proactive water resource management, the OBOR initiative emerges as a transformative force shaping economic cooperation across Asia, Europe, and Africa.

The paper describes the environmental problems of countries participating in the initiative and the measures taken to reduce them.

The article used research on the development of the initiative during its entire existence for a period of 10 years.

**Keywords:** One Belt, One Road, OBOR initiative, youth engagement, environmental responsibility, water security, sustainability, innovation, economic cooperation, ecological stewardship.

#### Introduction

The One Belt, One Road (OBOR) initiative, also known as the Belt and Road Initiative (BRI), represents a groundbreaking strategy envisioned by the Chinese government. Launched in 2013 by President Xi Jinping, this initiative seeks to foster economic cooperation across Asia, Europe, and Africa. It comprises two vital components: the Silk Road Economic Belt and the 21st Century Maritime Silk Road[3].

#### Materials and research methods YOUTH'S ROLE IN OBOR

As of August 2023, 215 documents on cooperation with 155 countries and 32 international organizations have been signed. In the development of this initiative, one of the main contributions was made by young scientists, researchers and specialists, and Monjo assure that the contribution of young people in this initiative plays an important role [3]. Youth are often at the forefront of technological advancements and innovation. In the context of the BRI, they can contribute by developing and applying new technologies in infrastructure projects, logistics, and digital connectivity. Their fresh perspective and familiarity with emerging technologies can drive efficiency and sustainable solutions. Young entrepreneurs can play a vital role in the BRI by starting businesses that capitalize on the increased connectivity and trade opportunities it provides. They can create new trade corridors, develop cross-border e-commerce platforms, and establish innovative ventures that cater to the needs of the diverse markets along the BRI route. The BRI promotes cultural exchange and people-to-people connectivity alongside its infrastructure projects. Youth can serve as cultural ambassadors, promoting understanding and collaboration between different countries and cultures. Through educational exchanges, travel, and digital communication, young people can build lasting relationships that contribute to

peaceful international relations. The BRI requires skilled workforce to design. а construct, and manage its infrastructure projects. Youth can benefit from training programs and educational initiatives related to the BRI, which can equip them with valuable skills for careers in various sectors, including construction, engineering, logistics, and international business. Many BRI projects involve significant environmental considerations. Young people can advocate for environmentally friendly practices, renewable energy solutions, and sustainable development within the framework of the initiative. Their concern for the planet's influence decision-makers future can to prioritize ecological responsibility. Youth engagement in the BRI can foster diplomatic ties and enhance international relations. By Participating in youth forums, conferences, and dialogues related to the initiative, young people can contribute to policy discussions and advocate for equitable development, human rights, and social responsibility. Youth can advocate for projects that prioritize inclusive development, addressing social and economic disparities within and among countries along the BRI route [2].

#### Findings and discussion

#### IMPACTS OF CLIMATE CHANGE ON WATER RESOURCES IN BRI

The world's water resources per capita have declined significantly due to population growth and economic activity. Climate change may exacerbate water scarcity by reducing precipitation in many regions. Global warming may increase water demand by increasing evaporation and transpiration by plants. The focus is on the impact of climate change on water resources in the main countries along the Belt and Road. The necessity of understanding and solving problems related to climate change is emphasized in order to ensure water security in the region. Studies have shown that climate change can affect water availability and increase water stress worldwide. However, the specific impacts on water resources in B&R countries have not been thoroughly studied. The researchers developed a global runoff dataset by combining the results of ten global climate

models (GCMS) and scaling down the data to a higher resolution. They used the CMIP5 dataset, which provides consistent output data for current and future climate conditions based on different emission scenarios. To study the impact of climate change on water resources in the B&R countries, three representative concentration pathways (RCP) were selected. The study showed that climate change is projected to lead to an increase in water supply by 4.85-8.16% and water demand by 1.45-2.36% in B&R countries by the 2050s. In general, climate change is expected to have a limited impact on water scarcity in the B&R countries as a whole. However, some countries, especially in Central and Western Asia, may experience acute water shortages. The impact of climate change on water scarcity was similar in different emission scenarios, with a slightly larger number of countries experiencing higher water scarcity in accordance with the highemission scenario (RCP 8.5) [4][5].

#### WATER CHALLENGES IN OBOR

Water issues play a significant role in the context of the One Belt, One Road Initiative, particularly in relation to water resources, environmental sustainability, and geopolitical considerations.

Many countries along the OBOR route face water scarcity issues due to factors such as rapid population growth, urbanization, and climate change. Water scarcity can impact agriculture, industry, and overall development. The BRI projects often involve the construction of dams, irrigation systems, and other water infrastructure to address these challenges. Several of the countries involved in the OBOR Initiative share transboundary rivers and water bodies. Development projects like dams and diversions can have significant impacts on downstream countries, potentially leading to conflicts over water rights and usage. The construction of large-scale infrastructure projects, such as dams and transportation networks, can have negative environmental impacts. These include disruption of aquatic ecosystems, loss of biodiversity, and alteration of natural flow regimes of rivers. Proper environmental impact assessments and

mitigation measures are crucial to ensure sustainable development. As economic development accelerates along the OBOR route, there is a risk of increased pollution of water bodies due to industrial activities, mining, and urbanization. Proper waste management and pollution control are essential to prevent degradation of water quality. The "One Road" component of the initiative involves developing port infrastructure. maritime routes and Ensuring the security of maritime trade routes is vital, given the importance of these routes for global trade. Piracy, territorial disputes, and geopolitical tensions can impact maritime security and stability. Many OBOR countries are investing in hydropower projects to meet growing energy demands. their While hydropower is a renewable energy source, it can also have significant ecological and social impacts, particularly when large dams are constructed. Balancing energy needs with environmental and social considerations is a challenge. The BRI's scale and scope have led to concerns about its geopolitical implications. Critics argue that the initiative could lead to debt dependency for some countries, giving China increased influence in their internal affairs. This, in turn, could affect how water resources are managed and shared. The waterrelated challenges and opportunities presented by the OBOR Initiative call for increased international cooperation. Countries need to collaborate on sustainable water resource management, environmental protection, and conflict resolution to ensure the long-term success of the initiative[1][6].

#### WATER SECURITY ASSESSMENT OF CHINA'S ONE BELT AND ONE ROAD REGION

sustainable development of The socioeconomic and environmental systems are highly dependent on water capital and water utilization efficiency. Nowadays, a significant portion of the world is facing water security issues due to a combination of various factors. As a result, socioeconomic and environmental systems are threatened. China is also currently experiencing problems. Water security assessment helps to identify key determining

factors for optimal water utilization, so the authors present the Driving Forces-Pressures-Carrying Capacity-State-Impacts Responses (DPSCIR) water security assessment framework. Unlike previous methods, the proposed framework incorporates the carrying capacity of the environment, and as a result, yields assessment results that are more realistic.

As a case study, the proposed framework coupled with the entropy method is applied to assess the water security status of the One Belt and One Road (B) region in China. In addition, the water security levels of the provinces and municipalities in this region are simulated for the time period from 2017 to 2022 using the Grey Prediction Model. The results show that Responses, State, Pressures, and Carrying Capacity Subsystems greatly influence water security of the region. According to the assessment, water security of the area improved from 2011 to 2016. The results portray the following trend among the three subregions of the study area: the water security of the 21st Maritime Silk Road (One Road) area is better off than those of the Silk Road Economic Belt (One Belt) and the Strategy Support and Pivotal Gateway (SSPG) of B areas. Generally, from the evaluation results it can be concluded that only focusing on the subsystem of Responses cannot entirely address the water security problems within the B area. Therefore, to ensure sustainable water security in the region and in the country, the government needs to design water resource management mechanisms that take all the subsystems into account[1][6].

#### Conclusion

In conclusion, the engagement of youth, ecological responsibility, and water security collectively shape the success of the One Belt, One Road initiative. By harnessing their enthusiasm and innovation, addressing environmental concerns, and ensuring water sustainability, the OBOR initiative can achieve lasting impact and shared prosperity across Water participating nations. issues are intricately linked with the One Belt, One Road Initiative due to the extensive infrastructure projects and development activities taking place along the route. Addressing these challenges requires a multidimensional approach that balances economic growth with environmental sustainability, social equity, and international cooperation.

#### References

- [1] Zhang Z. Water Security Assessment of China's One Belt and One Road Region [Электронный ресурс] / Z. Zhang // ResearchGate. — 2019. — No 607. — C. 1–23. — Режим доступа: https://www.researchgate.net/publication/331974808\_Water\_Security\_Assessment\_of\_China's\_One\_Bel t\_and\_One\_Road\_Region
- [2] Деловой Р. Молодёжный взгляд на проект «Один пояс, один путь»: перспективы Казахстана и Китая [Электронный ресурс] / Р. Деловой // myseldon news. 2023. No 4. С. 1–3. Режим доступа: https://news.myseldon.com/ru/news/index/281867074
- [3] Chinese Government. Belt and Road Portal [Электронный ресурс]. Режим доступа: https://eng.yidaiyilu.gov.cn/
- [4] Акматалиева А.М. Инициатива «Один пояс-один путь» в Центральной Азии [Электронный ресурс] / А.М. Акматалиева // Cyberleninka. 2018. No 10009. С. 1–8. Режим доступа: https://cyberleninka.ru/article/n/initsiativa-odin-poyas-odin-put-v-tsentralnoy-azii
- [5] Panpan D. Impacts of climate change on water resources in the major countries along the Belt and Road [Электронный ресурс] / D. Panpan // ResearchGate. 2021. No 12201. С. 1–21. Режим доступа: https://peerj.com/articles/12201.pdf
- [6] Martens P. The political economy of water insecurity in Central Asia given the Belt and Road initiative [Электронный ресурс] / P. Martens // Central Asian Journal of Water Research. 2018. No 4. С. 1–16. Режим доступа: https://drive.google.com/file/d/1hQTVAO1CvQaTra4UhPA8ZAHxKtC-plDr/view

#### "БІР БЕЛДЕУ-БІР ЖОЛ" БАСТАМАСЫ ШЕҢБЕРІНДЕ ТҰРАҚТЫ ДАМУ МАҚСАТТАРЫН ІСКЕ АСЫРУ

#### Бейсенов Әділет<sup>а</sup>, Копишева Айгерим<sup>b</sup>

- <sup>а</sup> Өнер және гуманитарлық ғылымдар жоғары мектебі, оқытушы, Астана халықаралық университеті, 010000, Астана, Қазақстан
- <sup>b</sup> Өнер және гуманитарлық ғылымдар жоғары мектебі, 6В03101 «Халықаралық қатынастар» мамандығының 4 курс студенті, Астана халықаралық университеті, kopishevaaigerim03@mail.ru, 010000, Астана, Қазақстан

**Аңдатпа.** Мақалада "Бір белдеу, бір жол" бастамасының көп қырлы аспектілері және оның он жылдық тарихы қарастырылады. Қоршаған ортаны қорғау мен су қауіпсіздігін қадағалауда жас ұрпақтың рөліне рөліне назарға алынды, мақалада осы факторлардың бастаманың тұрақтылығы мен сәттілігіне қалай ықпал ететіні қарастырылады. Жас ұрпақ басқарған инновациялар, экологиялық стратегиялар және суды белсенді басқару арқылы ББББ бастамасы Азия, Еуропа және Африкадағы экономикалық ынтымақтастықты қалыптастыруы күшейеді.

ББББ аумағындағы экологиялық проблемалар мен оларды азайту үшін қандай шаралар қабылданғаны сипатталды.

Мақалада 10 жыл ішіндегі бастаманың дамуы бойынша зерттеулер қолданылған.

**Түйін сөздер:** «Бір белдеу, Бір жол», бастамасы, жас ұрпақ, экологиялық мәселелер, су қауіпсіздігі, тұрақты даму мақсаттары, инновация, экологиялық ынтымақтастық, қоршаған ортаны қорғау.

#### РЕАЛИЗАЦИЯ ЦЕЛЕЙ УСТОЙЧИВОГО РАЗВИТИЯ В РАМКАХ ИНИЦИАТИВЫ "ОДИН ПОЯС, ОДИН ПУТЬ"

#### Бейсенов Адилет<sup>а</sup>, Копишева Айгерим<sup>b</sup>

- <sup>а</sup> Высшая школа искусств и гуманитарных наук, преподаватель, Международного университет Астана, 010000, Астана, Казахстан
- <sup>b</sup> Высшая школа искусств и гуманитарных наук, преподаватель, студентка 4 курса ОП 6В03101 «Международные отношения», Международного университет Астана, kopishevaaigerim03@mail.ru, 010000, Астана, Казахстан

Аннотация. В этой статье рассматриваются многогранные аспекты инициативы "Один пояс, один путь", описывается ее десятилетний путь. Уделяя особое внимание ключевой роли вовлечения молодежи, охраны окружающей среды и водной безопасности, в статье рассматривается, как эти факторы способствуют устойчивости и успеху инициативы. Благодаря инновациям под руководством молодого поколения, экологическим стратегиям и активному управлению водными ресурсами инициатива ОПОП становится преобразующей силой, формирующей экономическое сотрудничество в Азии, Европе и Африке.

Будут описаны экологические проблемы на территории стран, участвующих в инициативе, и какие меры были приняты для их уменьшения.

В статье использованы исследования по развитию инициативы за все время ее существования в течение 10 лет.

**Ключевые слова:** Инициатива "Один пояс, один путь", молодежь, экологическая ответственность, водная безопасность, устойчивое развитие, инновации, экономическое сотрудничество, бережное отношение к окружающей среде.