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Regional histories of climate mobility: Oceania

Abstract. The research relevance is determined by both the growing threats of climate change to Ukraine and russian military aggression against Ukraine, which increase the number of people changing their place of residence due to the deteriorating environmental situation. The experience of countries that have already faced environmental migration predetermined the study's relevance. The research aims to study and summarise the findings of Western researchers on the consequences of climate change for Oceania, which is seen as a threat to stability, security, and peace in the region and as a factor contributing to the spread of violence and conflict in the region, as well as internal and international population movements. The main methods used to study this issue are analysis, induction, deduction, and synthesis, which allow for describing and highlighting the most important aspects of the problem of environmental migration. The study demonstrates the relationship between climate change and environmental migration and considers its types. The study analyses the role of various actors, regional and national initiatives in improving the efficiency of this process, as well as the case of Tuvalu, which is threatened by flooding and the resettlement of all residents and the government to other countries. The author considers the idea of virtualisation of this state – the creation of its twin in the metaverse in the event of this scenario. Ways to improve climate mobility planning and a set of measures that can contribute to better integration of environmental migrants into host societies are proposed. Potential problems that could lead to conflict situations in the case of environmental displacement are identified. It is concluded that the negative effects of climate change make it important to develop changes in international legislation and to study this aspect in depth by scientists and various international, regional, and local organisations. The author outlines the ways of further research on the problem of environmental migration. The results of the study are of theoretical and practical value for ecologists, historians, sociologists, politicians, and those involved in migration issues

Keywords: climate mobility; environmental migration; climate change; conflict; sustainable development

Introduction

The relationship between climate change, mobility, conflict, security, and peace is gaining growing attention from both academics and politicians. The 21st Conference of the Parties to the United Nations Framework Convention on Climate Change, held in Paris in 2015, stated that "climate change... will lead to an increase in forced internal and cross-border displacement of people" and recommended that different types of displacement be considered as one of the strategies for adapting to this phenomenon. Growing flows of people moving for environmental reasons from the global South to the global North are considered

by some scholars as a threat to national and international security (Human mobility..., 2015).

Research in this area is particularly important for the people of Oceania, as the region is severely affected by the negative effects of climate change. In recent years, tropical cyclones have intensified in the region, the amount and intensity of precipitation, floods and droughts have increased, ecosystem degradation (including coral reefs) has increased, and sea levels have risen (Mycoo *et al.*, 2022). This affects the economic, social, and political stability of the region and harms human health, water, and food

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security, as well as livelihoods and habitats. As a result of climate change, many traditional practices of indigenous peoples are declining and even disappearing as cultural diversity has decreased. Therefore, the main challenges facing Pacific Island countries are to revive traditional elements of food security that will allow the population to adapt to the effects of climate change (Campbell, 2022b).

Environmental change is triggering new conflicts or exacerbating existing ones, posing a challenge to security and peace in Oceania. In this context, the multidirectional displacement of people in vulnerable areas is seen as the greatest threat (Bower & Weerasinghe, 2021; Campbell, 2022a). Climate change is an additional driver of urbanisation, as many population movements are occurring from vulnerable areas along the coastline to cities. Increasing population density with limited land resources gives rise to various conflicts, including domestic violence, and insecurity for such migrants. J.R. Campbell (2022a) believes that their number will continue to grow.

Long-term climate change, such as extreme weather events, droughts, floods, etc., can also directly (Kim *et al.*, 2022) or indirectly affect people's mental health by deteriorating their physical condition and livelihoods, including threatening social processes that affect the well-being of citizens (Palinkas & Wong, 2020; Filho *et al.*, 2023). It can be stated that the negative effects of climate change are turning into an existential threat to the residents and communities of this region.

The research novelty is determined by the analysis of the experience of other regions, which is of practical interest to Ukraine, which suffers more from the negative effects of global warming and may also become a recipient of environmental migrants from other countries.

The research relevance is also determined by the negative environmental consequences of the russian war in Ukraine, which increased the number of people changing their place of residence due to environmental degradation. In this study, the authors set out to analyse and summarise the achievements of Western scholars on climate mobility in Oceania and to identify ways to further research this scientific problem, considering the situation in Ukraine.

Collected literature analysis

The issue of environmental migration is the subject of extensive scientific debate, although the conceptualisation of this phenomenon faces several challenges. This refers to the lack of consensus among scholars on the terminology that should be used in the study of this issue (Ferris, 2020). Several experts use the term "environmental migration", which is usually understood as a form of forced migration (Hugo, 1996). It is caused by economic, social, and political factors arising from environmental change (Foresight, 2011). The definition of "climate migration" is narrower and is often used synonymously with others, such as "climate-induced migration", "climate displacement", "climate refugee flows", "climate-related displacement" and "climate mobility" (Stojanov *et al.*, 2021). A. De Sherbinin (2020) points out the problematic use of the term "climate migration" since refugee status is granted based on international law and is limited to people who cross international borders and flee persecution due to clearly defined factors such as race, ethnicity, faith, membership in a particular social group or political opinion. Scholars are increasingly using the term "climate mobility" (Baldwin *et al.*, 2019) to describe the diversity of forms and directions of population movement in the context of climate variability and change (Boas *et al.*, 2019).

In-depth research by Western scholars and some international organisations confirms the interconnectedness of climate change, conflict, and security (Adams *et al.*, 2018; Climate risk profile..., 2021). They focus on studying it in regions such as sub-Saharan Africa and the Sahel (Climate change, conflict..., 2022) and the Middle East (Weather and climate extremes..., 2020; Why climate change hits..., 2020). Oceania draws less attention. Empirical research is conducted by some regional institutions, such as Japan's Toda Institute for Global Peace and Policy Studies (Boege, 2018; Boege, 2022). Some data on the region are included in various international reports, such as the IOM, but there are not enough significant research findings in this area.

The scientific community has generally reached a consensus on the linear relationship between climate change and climate mobility in Oceania and has focused on conceptualising different forms of migration, building local capacity to minimise the negative impacts of climate change on the region or adapt to it, studying the specifics of local policies and approaches and the role of different actors, and developing recommendations for policymakers.

C. Frochlich & S. Klepp (2018) explore the role of climate change on political processes and argue that climate mobility challenges pre-established ideas of citizenship, belonging, and national identity. Using the example of Kiribati, she analyses how the government combines climate change discourses with the struggle for new rights and resources for the country. C. Farbotko *et al.* (2018) argue that governments in countries or regions where Pacific Islanders choose to move should support and enable resettlement, considering the historical development of these territories and the need to promote human rights and socio-political equality.

L. Yamamoto & M. Esteban (2017) describe possible solutions being discussed by governments and civil society in the region's atoll states, which include the development of national policy frameworks, bilateral agreements between different actors, and the development of grassroots initiatives to better integrate climate migrants into local communities. T. Weir et al. (2017) point out that climate change exacerbates social and cultural equality issues and is perceived by many climate migrants as a moral challenge that should be considered by governments when developing strategies and specific mechanisms for displacement and adaptation. Among the main types of conflicts that threaten peace and security in the region are conflicts over land and food resources, those related to cultural differences between different population groups, the high expectations of some climate migrants regarding life in new places, and poor access to basic needs (sanitation, quality drinking water, education, healthcare, etc.). The inability of the governments of the territories facing such challenges to address these issues may affect the political situation, undermining public confidence in local political elites.

Given the particular vulnerability of this region to the conflict-related effects of climate change, it is an urgent task to study this issue in depth, as politicians and decision-makers need a thorough contribution from the academic community to develop sound policies, strategies, management, and adaptation measures. This topic has not yet been studied in Ukrainian historical science and political science.

The role of Oceania's geographical features in exacerbating the negative effects of climate change

The nature of climate impacts in Oceania is determined by the region's geographical features. The sinking islands of Oceania have become a symbol of the severe and unprecedented consequences of anthropogenic impact on global warming, demonstrating trends that other regions of the world may soon face. The region has the world's largest concentration of microstates, i.e., countries with a population of less than half a million people. In addition, many Oceania states are located on the territory of dozens of islands. The population of the 22 countries and self-governing territories totals approximately 10 million people, inhabiting approximately 300 islands (out of approximately 7,500 islands in total). Of the 32 million km² of the region's territory, 98% is covered by water. Out of the region's 2% land area, Papua New Guinea alone covers about 95% (Boege, 2018).

Sea level rise and associated island sinking, storm surges, saltwater intrusion, erosion, and other environmental problems along their coasts are degrading fresh groundwater resources and reducing the area of land available for agriculture, human settlements, and infrastructure. Rising surface temperatures of the surrounding seas are leading to increased coral bleaching and reef degradation, resulting in declining fish stocks and an increased risk of vector-borne diseases such as malaria, dengue fever, and diarrhoea. As a result of coastal erosion and flooding, the area of fertile soil is shrinking, reducing the livelihoods of local people, including food for both consumption and sale. The threat of this situation is that most people in the region depend on traditional subsistence agriculture, supplemented by commercial farming (Roberts & Andrei, 2015).

The particularly high level of vulnerability of many Oceania islands to climate change is explained by its extreme impact and the rather limited capacity of countries to adapt. This applies to a large extent to states located on atolls, which have extremely low altitudes and often a very limited area. The highest point of the Pacific Island state of Tuvalu is 1.5 m above sea level, Kiribati is 3 m, and the average width of the Kiribati islands is less than 1000 m. As noted by L. Yamamoto & E. Esteban (2010), atoll states are particularly vulnerable to sea level rise "due to their high coastline-to-land area ratio, relatively high population density, and low levels of available resources for adaptation measures". Large islands with higher altitudes and volcanic islands are less exposed, but they also face severe environmental degradation caused by climate change, especially along their coastlines. This creates a range of economic and social problems, including employment and healthcare, various conflicts in local communities, and an increase in violence.

Types of climate migration

Clearly, in the context of regional security, the most threatening trend is the growth of environmental migration, including climate migration. Expert J.R. Campbell (2022b) believes that mobility in the form of migration caused by climate change is already a reality in Oceania. Moreover, it will expand in the future, causing conflicts of various types. From the methodological point of view, the author has identified several types of climate mobility, including migration, resettlement, and displacement; forced, induced, and voluntary mobility; internal and international mobility; permanent, temporary, or circular mobility. At the same time, the large number of factors affecting climate mobility leads to the expansion of scientific debate on the development of clearer criteria in the above typology, which should be the basis for developing practical solutions.

For example, individual or family migration within a country (mainly from remote islands or rural areas to urban centres) can be caused by certain environmental impacts of climate change. These include coastal erosion or saltwater intrusion, which in turn affects the security of land and water resources. People who decide to move for these reasons expect the situation to worsen in the future. Therefore, they hope for a better life in the city, which also includes expectations of better access to services such as education or healthcare, or employment opportunities in the formal economy. This migration is not forced, but it is not voluntary, as it is pushed by the effects of climate change.

Another case is international labour migration to countries such as New Zealand or Australia, which is temporary or circular. In theory, it can be considered voluntary. However, the deterioration of living conditions at home due to certain effects of climate change may contribute to this decision to move abroad, and remittances can be used to improve life at home and contribute to local climate change adaptation measures (Kelman & West, 2009).

One form of international mobility is permanent migration to another country. It is mostly caused by a combination of different factors that prompt people to make such decisions, but climate change can also be among them. Displacement as a result of extreme weather events, such as after a devastating tropical cyclone, is a completely different case. It is forced, and the displacement is mostly internal and temporary, as people usually return to their place of residence after repairing or rebuilding their homes and infrastructure.

In the most difficult situations, the relocation of entire communities or significant parts of communities is planned. Planned resettlement can be seen as a form of climate change adaptation (Yamamoto & Esteban, 2010), which is proactive and avoids forced displacement at a later date. In recent years, there has been a growing number of communities in Oceania that have relocated, are relocating, or are planning to relocate. This type of climate mobility is considered internal, mostly over short distances, to the community's land or neighbouring communities' land, government, or church land. Such relocations can be forced if the area has become uninhabitable, but more often

they are caused by the fact that the community has experienced or is experiencing serious negative effects of climate change and expects problems to worsen in the future.

Therefore, a decision to relocate is made after discussing the advantages and disadvantages of a possible move. Of course, potential relocators must have adequate financial and technical means. If they do not, then communities are forced to stay where they are, despite the dangers associated with climate change. In these cases, we are talking about involuntary immobility. However, it should not be forgotten that immobility can also be voluntary: people do not want to leave their homes even in the face of serious and onerous negative effects of climate change.

Experience of communities that have implemented planned resettlement

The researcher of practical cases of such migrations V. Boege (2018) and S. Klepp (2018) stated that the experience of communities regarding planned relocation is mixed. There may be a discrepancy between the promise of improved environmental security and livelihoods in the new locations and the reality faced by the displaced. They face problems of habitability of new places, housing and infrastructure, loss of traditional economic activities (e.g., fishing when moving from the coast to the interior) and, most importantly, loss of connection to ancestral land. Given these factors, the author found it problematic to present displacement as an adaptation to climate change, even though the documents of international climate summits consider it in this context.

Planned resettlement in response to climate emergencies has become a major concern for several Oceania countries. This is particularly the case in Fiji, where the government has identified 48 communities as being in urgent need of relocation, while 830 communities are considered so vulnerable that they will need to move soon. In 2018, the Fijian government issued Guidelines for Planned Resettlement and is currently developing Standard Operating Procedures for Resettlement (Boege, 2018). Several civil society and peacebuilding organisations in Fiji (Transcend Oceania, Pacific Centre for Peacebuilding, Pacific Conference of Churches, etc.) have worked or are working with communities that have been or are planning to be displaced. "Transcend Oceania has supported the Vunidogoloa, Vunisavisavi and Naviavia communities in this area and, based on its experience, has developed recommendations for decision-makers on how to approach resettlement, together with its partner organisation Conciliation Resources. They concluded that resettlement cannot be viewed and implemented as a one-off event; rather, it is a long-term, non-linear, complex process. To have a chance of success, it must be inclusive and holistic, consider different perspectives and experiences based on gender and age, and include not only material, technical, economic, social, and political aspects but also cultural and spiritual ones. In particular, it is recognised that cultural relevance and the use of traditional local knowledge of indigenous people are crucial to the success of planned community resettlement (Peacebuilding approaches..., 2022). In addition, communities should be widely involved in the planning of this process, as it is ineffective for governments to impose it from above, without considering the needs and interests of the local population. Undoubtedly, political elites and local governments in many countries facing the negative effects of climate change, and consequently, environmental migration, are trying to find acceptable solutions.

Tuvalu's ambitious projects to combat the negative effects of climate change

The case of Tuvalu is particularly interesting in this context. In 2022, S. Kofo, the Minister of Justice, Communications and Foreign Affairs of Tuvalu, declared the threatening scale of the emergency for this small island nation and presented several local projects as various models of climate change adaptation (Prime minister of..., 2022). One of the most ambitious is an attempt to physically elevate the islands on which the state is located. This is the socalled "Plan A". However, he also acknowledged the need for a "Plan B" in case Tuvalu is completely submerged or becomes uninhabitable long before complete flooding, for example, due to lack of food and fresh water. This would mean that all residents of the country would need to move to another, safer place. In this case, Tuvalu would become the first country in the world to lose its physical dimension and its territory with its population and government would cease to exist in the natural environment but would continue to exist as a sovereign state.

The Tuvaluan government's "Future Now" examines the implications of this worst-case scenario, raising fundamental – and fundamentally new from today's perspective – legal and policy questions. These include the preservation of the country's statehood, borders, and maritime laws through flooding or relocation; and the re-establishment of Tuvalu as a "digital nation" without physical territory (Project "Future Now", 2021).

In any case, for Tuvalu and countries in a similar situation, "the key question is whether there is sufficient political will in the international community to positively interpret existing and any new perspectives, legal principles and concepts for enduring statehood, or at least legal personality, and incorporate them into existing legal norms and action plans" (An entire Pacific..., 2022). The government proposes two ways to address these issues: 1) reinterpreting existing international law and state practice to consider the fundamental climate change caused by the emergency and thus allow for the preservation of statehood and maritime zones, 2) or changing the framework of international law to consider these changes.

The purpose of Plan B is to make sure that Tuvalu can continue to exist as a state and maintain its sovereignty as well as its maritime rights even if it loses its physical territory. For this case, Minister Kofo developed the concept of Tuvalu as a "digital nation" – Tuvalu 2.0 with a digital government administrative system, with digitised historical documents, records of cultural practices, etc. Simon Kofo presented this plan in an address to the leaders of the Conference of the Parties to the UN Framework Convention on Climate Change COP27 (November 2022) (Prime minister of..., 2022). He emphasised that the plan, which considers the "worst-case scenario", envisages the creation of a digital twin of Tuvalu in the metaverse to recreate

its beautiful islands and preserve its rich culture. This is the story of a small island nation in the Pacific that faces a threat to its existence and seeks to preserve its sovereignty through technology.

Kofo suggests that three aspects of Tuvalu's national identity can be recreated in the metaverse: Firstly, it is a territory that reflects the natural beauty of Tuvalu, which can be interacted with in various ways (both physically and virtually). Secondly, it is a culture that represents the ability of the people of Tuvalu to interact with each other in a way that allows them to preserve their common language, norms and customs, regardless of where they are located. Thirdly, it is sovereignty - the earth's surface over which the government has sovereignty, and which can be transformed into virtual space.

The idea of virtualisation in Tuvalu

In theory, the idea of combining these technological capabilities with governance features for a "digital twin" of Tuvalu is technically feasible. However, there are significant technological and social challenges associated with connecting and digitising the elements that define an entire nation. For example, Tuvalu has only about 12,000 citizens. Real-time interaction between even such a small number of people, both among themselves and with various government institutions, is a rather difficult problem to solve in terms of practical implementation because their entire lives must be transferred to the real world. Currently, there is no positive experience of transferring an entire state into the virtual world.

Tuvalu's proposal to create a digital twin in the metaverse is a message in a bottle carried by the stormy waves of the oceans, a desperate response to a tragic situation. But there is also a coded message here for those who may see the transition to the virtual world as a response to the losses from climate change (An entire Pacific..., 2022). Even if Tuvalu is a special case, the problems associated with the impact of climate change on the future of some states demonstrate the very serious challenges that humanity will face shortly and for which, in the authors' opinion, it is not yet ready.

Another side of the problem should be considered – whether developed countries, in particular the developed countries of the "Pacific family" (Australia and New Zealand, members of the Pacific Islands Forum), are ready to accept climate migrants from Tuvalu and other Pacific microstates (The Pacific Islands..., 2014). The aspects that require in-depth study include the following: readiness to open their borders to environmental migrants, including the creation of special conditions or preferences under existing labour migration schemes, which are mainly based on the economic interests of Australia and New Zealand.

At a seminar at Victoria University of Wellington in New Zealand, representatives of the Australian and New Zealand governments and communities pointed to the lack of reliable data on climate mobility and the need to develop a regional approach to addressing the issue. They argued that enabling people to stay with their families and maintain their lifestyles in the community should be a priority. This idea is also reflected in the documents of many international organisations (Human mobility..., 2015).

However, in the context of the specific regional situation, the answer to the question posed has a different connotation – the developed countries of the Pacific are not ready for a massive influx of environmental migrants from neighbouring islands. Thus, the problem of environmental migration has two dimensions: for countries whose residents are forced to move to new places of residence and for recipient countries. Both sides need to prepare for such a scenario.

The state of regional cooperation in the fight against climate change

At present, it is possible to note certain steps being taken in this area at the regional level. For example, climate mobility is increasingly being considered in the context of sustainable development, peace, and stability, and reducing tensions in the region. Several initiatives have already been launched, led by regional organisations such as the Secretariat of the Pacific Islands Forum (The Pacific Islands..., 2014), the Pacific Climate Change Centre (Pacific climate change..., 1993) and regional offices of the United Nations (UN) agencies, such as the United Nations Development Programme (UNDP Pacific Centre, 2023) or the International Organisation for Migration (IOM) (IOM's regional office..., n.d.). The challenge is to bring together different approaches that address different policy levels, overlapping themes and time horizons, such as the Forum's long-term "Blue Pacific Strategy 2050" (2050 strategy for..., 2022), the medium-term Framework for Sustainable Development in the Pacific (2016) (2017-2030) and the related "Pacific Resilience Partnership" (2016). With the help of the European Union, which supports the capacity-building initiative through the Pacific Climate Change Adaptation and Resilience Project, the Pacific Islands Forum Secretariat launched the Climate Resilience for Sustainable Business training programme (Climate resilience..., 2023). In late February 2023, a Joint Regional Training Workshop for Climate Forecasting Services of the Republic of Korea and the Pacific Islands was held (Remarks: Acting SG..., 2023). Such initiatives are complemented by isolated national-level events. For example, in December 2022, the Government of Solomon Islands set out its climate finance priorities and developed a roadmap to improve the country's ability to access external resources for climate and disaster-related investments (Joint release: Solomon..., 2023).

The development of a "Regional Framework for Climate-Related Mobility" is particularly interesting and promising. Its goal is to guide Pacific governments in planning and managing climate mobility and create a broad platform for dialogue and cooperation. The framework being organised by the Pacific Migration and Human Security Programme (2020) concerning climate change involves not only governments but also academics and a wide range of civil society actors, not least churches as the most influential civil society organisations in the Pacific. The intention is to create a platform that will bring together representatives of Pacific Island countries and other stakeholders from civil society, academia, diplomatic missions and development partners. Countries participating in the regional policy dialogue: Cook Islands, Fiji,

Kiribati, Republic of the Marshall Islands, Federated States of Micronesia, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, and partners: UK High Commission Suva, New Zealand High Commission Fiji, New Zealand Ministry of Foreign Affairs and Trade, UN Resident Coordinator's Office, etc. (Pacific climate change..., 2020).

While the programme tries to be as inclusive as possible, the challenge remains to bring together a wide range of actors from different scales, with different histories, interests, and agendas to plan, decide and implement policies and strategies. There is still an urgent need to improve the understanding of the climate-mobility nexus in the region.

Factors contributing to the transformation of climate conflicts from potential to violent

Based on existing observations in the Oceania region, experts suggest that the possibility of climate change-related conflicts turning from potential to actual and violent depends primarily on the four factors. Among them are the following: the severity and urgency of environmental degradation caused by climate change; Vulnerability and adaptive capacity of affected communities; the ability and willingness to use violence as a means of conflict management and problem-solving; fragility or stability of the social and political context (Campbell, 2022b).

While the first factor is beyond the scope of political intervention (at least in the local context), the impact of the others can be addressed through conflict prevention and sensitive policies. Thus, the adaptive capacity of communities should not be viewed as a technical issue, but in political, cultural, and social terms, and as largely dependent on actors and institutions. Of course, this does not mean that governments and public institutions are not important in climate change governance. They have the power to set the framework conditions for climate mitigation and adaptation at the national level and play a major role in linking the needs and interests of local populations to the international level by representing their people in international climate policy and in mechanisms for obtaining international assistance for climate change adaptation measures or directly (e.g. through the Green Climate Fund), or indirectly through development assistance, which increasingly includes climate change-related programmes and projects (The framework for..., 2016).

It is believed that such cooperation should involve a larger part of civil society, in particular those with the greatest influence, namely churches. According to J. Petzold & M.W.R. Beate (2015), the vast majority of Pacific Islanders are Christians. Regional government institutions may not extend far beyond urban centres, but churches exist in all territories. Churches, as well as other local civil society networks and associations, can play a role as a kind of "bridge" connecting the "local" and "external" worlds of the country and international climate change policy in a hybrid political order.

Much of the academic research on Oceania discusses climate mobility as a top-down process initiated by governments or development agencies and thus refers to planned relocation. Case studies from some countries show that resettlement is more successful when communities are involved in the process (Burton et al., 2002; Veitayaki, 2010). The authors believe that it should be not only about communities that are forced to move to safer areas but also about those who live there. Accordingly, the whole range of issues related to the relocation of climate migrants to new places (social, economic, cultural, land ownership, the capacity of infrastructure, educational and healthcare institutions to serve a larger population) should be discussed in advance with the participation of representatives of both communities. This will allow identifying potential problems and conflicts that may arise after such a move and developing measures to prevent or minimise them in advance. It is appropriate to educate the local population about the reasons for such a move and to form an appropriate perception of outsiders.

The planning, decision-making and implementation of climate policy require the joint efforts of such "connecting links" as churches, non-governmental organisations, business actors, civil society institutions and government agencies. The diaspora can also provide significant assistance. Effective climate change management depends on effective cooperation with these actors.

International donors, international organisations and international non-governmental organisations should support this framework, as integrated and holistic climate change governance based on complementarities and cooperation among all Oceania's actors is essential to prevent violent climate change-induced conflicts and manage climate mobility (Boege, 2022). Accordingly, international institutions wishing to provide financial and technical support should shift from a narrow techno-economic approach to an integrated and holistic approach that pays due attention to governance, culture, and spirituality.

In the case of planned migrations, it is essential to find a suitable location and carefully study the living conditions in the potential destination. In particular, care should be taken to ensure that the community does not end up in an environment with the same or even greater exposure to natural hazards (Stojanov et al., 2021). An environment that contrasts significantly with the previous place of residence can cause problems not only in terms of economic, cultural, and daily life but also in terms of the emotional state of internally displaced persons. In this context, it is worth emphasising the importance of establishing psychological assistance services for such migrants. This issue is especially relevant in cases of unplanned displacement that occur as a result of extreme weather events or natural disasters. In the literature reviewed, the authors did not find any references to the post-traumatic stress disorder of those who faced it and measures of psychological support for environmental refugees.

The authors agree with the statements of scientists and expert opinions on the need to develop national strategies for the development of climate mobility, which should be developed with an integrated approach to many policy sectors and levels of government (Donner & Webber, 2014). The algorithm they contain can be used in cases of threats to environmental problems caused by a wider range of environmental impacts. At the same time, they will be ineffective in the case of spontaneous

environmental migrations caused by unexpected natural disasters. This makes it important to develop models of resettlement in such situations, which requires more research on the affected communities and a thorough study of their experiences. In the context of Russia's war against Ukraine and the growth of its pollution area, this aspect should become relevant in the field of environmental migration research in different regions of the world, including Oceania.

Conclusions

Thus, for several regions of the world, including Oceania, the problem of climate change is existential. It is currently driving the expansion of climate mobility in the region, which is one of the attempts to adapt to the negative effects of climate change. The effectiveness of these attempts depends on various factors and is not always linked to the efforts of governments or local communities. For some Oceania states, such as Tuvalu, the prospects are dramatic, as they threaten their physical disappearance through loss of territory (flooding) and the relocation of the population and government to other locations. Such prospects put on the agenda of the international community the task of revising the existing public law approach to the recognition of states, which is based on such traditional features as permanent population, territory, and government. The project of virtualising the existence of the state, which is being developed by the government of Tuvalu in case of the worst-case scenario due to the negative effects of climate change, is the first, but not the last, case of a new reality that humanity will face shortly. It brings to the fore a broad international debate on how to change international law in response to this trend. An

in-depth study of this aspect is seen as one of the prospects for further research.

Western scholars focused on the practical aspects of climate mobility, in particular planned internal resettlement, which is currently the most common. Based on empirical research, they identified several threats that could potentially provoke conflicts between migrants and the population of the territories where they settle. These include land ownership, access to infrastructure and food, cultural differences and traditions related to food security, the psychological trauma of migrants, and the lack of capacity of governments to cope with these challenges. These issues should be addressed and resolved in advance of planned resettlement, and with the involvement of community representatives from both sides, local authorities, and influential civil society actors. Considering the situation in Ukraine, where both unplanned and planned migration has increased as a result of the war against Russia.

Promising areas of the study include the creation of mechanisms for the psychological rehabilitation of persons and their rapid integration into the communities of their new places of residence. The possibility of creating temporary and permanent jobs for them and involving local business representatives in this process is also highlighted. An important element to study is the ways to modernise and expand the capacity of infrastructure and housing in these areas.

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Conflict of Interest

None.

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Регіональні історії кліматичної мобільності: Океанія

Анотація. Актуальність дослідження зумовлена як зростанням загроз впливу зміни клімату на Україну, так і воєнною агресією росії проти України, унаслідок чого зростає кількість осіб, що змінюють місце проживання унаслідок погіршення екологічної ситуації. Це актуалізує вивчення досвіду країн, що вже зіштовхнулись з екологічною міграцією. Метою статті було вивчення та узагальнення напрацювань західних дослідників щодо наслідків зміни клімату для країн Океанії, які розглядаються як загроза стабільності, безпеці та миру в регіоні та як чинник, що сприяє поширенню насильств і конфліктів у регіоні, а також внутрішнім і міжнародним переміщенням населення. Основними методами дослідження даної проблеми є: аналіз, індукція, дедукція та синтез, які дозволяють описати та висвітлити найважливіші аспекти проблеми екологічної міграції. У статті продемонстровано зв'язок зміни клімату з екологічною міграцією та розглянуто її типи. Проаналізовано роль різних акторів, регіональних та національних ініціатив у підвищенні ефективності цього процесу, а також кейс держави Тувалу, якій загрожує затоплення території й переселення всіх жителів та уряду в інші країни. Розглянуто ідею віртуалізації цієї держави – створення її двійника у метавсесвіті у випадку реалізації цього сценарію. Запропоновано шляхи покращення планування кліматичної мобільності та комплекс заходів, що може сприяти кращій інтеграції екологічних мігрантів до суспільств приймаючих сторін. Виявлено потенційні проблеми, що можуть призвести до конфліктних ситуацій у випадку переміщень з екологічних причин. Зроблено висновок, що негативні наслідки зміни клімату актуалізують розроблення змін у міжнародному законодавстві й глибинне дослідження цього аспекту науковцями та різними міжнародними, регіональними й локальними організаціями. Окреслено шляхи подальших досліджень проблеми екологічної міграції. Результати дослідження мають теоретичну і практичну цінність для екологів, істориків, соціологів, політиків й осіб, що займаються питаннями міграції

Ключові слова: кліматична мобільність; екологічна міграція; зміна клімату; конфлікт; сталий розвиток