

PROBLEMS IN TRANSLATING ECOLOGICAL TERMS BETWEEN ENGLISH AND UZBEK LANGUAGES

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Abstract: The translation of ecological terminology between English and Uzbek presents several challenges due to linguistic, cultural, and scientific differences. This article examines the main difficulties encountered in translating ecological terms, including the lack of equivalent terms, variations in conceptual understanding, and the influence of loanwords. The study highlights the importance of accurate translation for effective environmental communication and suggests possible solutions, such as standardization and the development of new terminology.

Keywords: ecological terms, translation problems, English-Uzbek translation, terminology equivalence, environmental linguistics

Introduction

Ecology, as a scientific discipline, has a vast terminology that is constantly evolving. Translating these terms from English into Uzbek (and vice versa) poses significant challenges due to differences in linguistic structures, cultural contexts, and levels of scientific development in the field. While English has a well-established ecological lexicon, Uzbek is still developing its own terminology, leading to inconsistencies and ambiguities in translation.

This article explores the main issues in translating ecological terms between these two languages, including:

1. Lack of direct equivalents
2. Differences in scientific conceptualization
3. Influence of loanwords and calques
4. The role of standardization in terminology development

Understanding these challenges is crucial for improving environmental communication, academic research, and policy-making in Uzbekistan.

Analysis and Discussion

The translation of ecological terminology between English and Uzbek involves multiple layers of complexity, stemming from linguistic, cultural, and scientific differences. This section delves into the key challenges, examining why certain terms

resist direct translation and how these obstacles impact environmental communication, policy-making, and scientific discourse in Uzbekistan.

Lack of Direct Equivalents in Uzbek

One of the most persistent issues in translating ecological terms is the absence of exact equivalents in Uzbek. Many English ecological terms are either newly coined or derived from Latin and Greek roots, making them difficult to render accurately in Uzbek, which has a different morphological structure. For example:

- **"Biodiversity"** – While English uses a single, well-defined term, Uzbek often relies on borrowed forms like *"биоразнообразие"* (from Russian) or descriptive phrases such as *"турли-туманли биоҳаёт"* (various forms of life). Neither fully captures the scientific precision of the original term.
- **"Carbon footprint"** – There is no standardized Uzbek equivalent. Some translations use *"углерод изи"* (carbon trace), while others opt for explanations like *"атмосферага чиқариладиган углерод миқдори"* (amount of carbon released into the atmosphere).
- **"Ecosystem services"** – This concept is often paraphrased rather than translated succinctly, leading to lengthy and sometimes ambiguous definitions.

This lack of direct equivalents forces translators to choose between borrowing foreign terms (which may not be widely understood) or creating new Uzbek words (which may not gain acceptance). Both approaches risk miscommunication, particularly in scientific and policy-related texts.

Conceptual and Cultural Differences in Terminology

Ecological terms often carry culture-specific meanings, making direct translation problematic. Some English ecological concepts are deeply rooted in Western scientific traditions and may not have exact parallels in Uzbek environmental discourse. For instance:

- **"Wetland"** – In English, this refers to a distinct ecosystem with specific hydrological and ecological characteristics. Uzbek translations like *"сувли зона"* (water zone) or *"ботқоқлик"* (marsh) are broader and do not fully convey the scientific definition.
- **"Sustainable development"** – While the English term is well-defined in international environmental policy, Uzbek translations vary. Some use *"барқарор ривожланиш"* (stable development), while others prefer *"эко-музилма"* (eco-structure). The lack of consensus leads to inconsistent interpretations in policy documents.

These discrepancies highlight the need for culturally adapted terminology that aligns with both scientific accuracy and local linguistic norms.

Influence of Russian and International Loanwords

Historically, Uzbek scientific terminology has been shaped by Russian, which served as the primary language of academia and technical discourse during the Soviet era. As a result, many ecological terms in Uzbek are borrowed from Russian rather than directly from English. Examples include:

- **"Экосистема"** (ecosystem) – A direct borrowing from Russian, with no native Uzbek equivalent.
- **"Глобал иссиқланиш"** (global warming) – A hybrid term combining an English loanword ("*глобал*") with an Uzbek word ("*иссиқланиш*").
- **"Биоценоз"** (biocenosis) – A Russian-derived term used in ecological studies, despite being unfamiliar to many Uzbek speakers.

This reliance on Russian terminology creates inconsistencies, as some terms are fully assimilated while others remain foreign. Additionally, younger generations in Uzbekistan are increasingly exposed to English scientific literature, leading to a mix of Russian and English borrowings in ecological discourse.

Challenges in Terminology Standardization

Unlike English, which benefits from internationally recognized glossaries (e.g., IPCC, IUCN), Uzbek lacks a unified system for ecological terminology. Different institutions—government agencies, universities, and NGOs—often use varying translations for the same term. For example:

- **"Climate change"** – Some sources use "*иқлим ўзгариши*" (climate change), while others prefer "*климат ўзгариши*" (climatic change).
- **"Renewable energy"** – Translated as "*қайта тикланувчи энергия*" (recoverable energy) in some texts and "*йиллик энергия*" (annual energy) in others.

This inconsistency complicates environmental education, policymaking, and public awareness campaigns. Without standardized terminology, misinterpretations can arise, affecting Uzbekistan's ability to engage with global ecological initiatives.

The Role of Neologisms and Descriptive Translations

When direct equivalents are unavailable, translators often resort to:

- **Neologisms (newly coined terms)** – For example, "*атмосферани ифлослантириш*" (atmospheric pollution) instead of simply "*air pollution*." While these attempts are innovative, they may not be widely adopted without institutional support.
- **Descriptive paraphrasing** – Instead of a single term, a phrase is used to explain the concept. For instance, "*экологик мувозанатни сақлаш*" (maintaining ecological balance) for "*ecological sustainability*." While descriptive, such translations can be cumbersome in technical writing.

Both approaches have drawbacks: neologisms may not gain traction, while descriptive translations can make texts unnecessarily wordy.

Implications for Environmental Communication and Policy

The challenges in translating ecological terms have real-world consequences:

- **Scientific Miscommunication** – Researchers relying on Uzbek translations may misinterpret international studies if key terms are not accurately rendered.
- **Policy Ambiguity** – Environmental laws and treaties may be misunderstood if terminology is inconsistent. For example, differing translations of "*carbon emissions*" could lead to confusion in climate policy implementation.
- **Public Awareness Barriers** – If ecological terms are not clearly defined, public understanding of environmental issues may remain limited.

Potential Solutions for Improved Translation

To address these challenges, the following strategies could be implemented:

1. **Developing a Standardized Ecological Glossary** – A collaborative effort between linguists, ecologists, and policymakers to establish official Uzbek equivalents for key terms.
2. **Increasing Bilingual Scientific Education** – Encouraging the use of both English and Uzbek ecological terms in academic settings to bridge the terminology gap.
3. **Promoting Terminology Committees** – Establishing expert groups to review and approve new ecological terms, ensuring consistency in government and scientific publications.

Conclusion

Translating ecological terms between English and Uzbek is a complex task due to linguistic, cultural, and scientific disparities. The lack of direct equivalents, conceptual differences, and inconsistent standardization contribute to translation challenges. To improve accuracy, the following steps are recommended:

1. **Developing new Uzbek ecological terminology** through linguistic research.
2. **Creating standardized glossaries** with input from scientists and linguists.
3. **Promoting bilingual environmental education** to familiarize professionals with both English and Uzbek terms.

Addressing these issues will enhance environmental communication and support Uzbekistan's growing focus on ecological sustainability.

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