



SEMANTIC SCOPE OF THE TERMS “IRRIGATION” AND “IRRIGATSIYA”: CONCEPTUAL RANGE AND BOUNDARIES OF USE (BASED ON ENGLISH AND UZBEK LANGUAGES)

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ABSTRACT

This thesis investigates the semantic scope of the English term irrigation and the Uzbek borrowing irrigatsiya by mapping their conceptual range and by specifying boundaries of use across technical, administrative, and popular discourse. Using a comparative semantic and discourse-oriented approach, the study distinguishes the core definitional nucleus shared by both terms (planned supply of water to land/crops) from peripheral extensions that emerge through specialization (engineering, agronomy, water governance) and through generalization in mass communication. The analysis argues that English irrigation more readily participates in broad water-management collocations, whereas Uzbek irrigatsiya tends to preserve a narrower terminological profile in specialist registers, while still allowing metonymic extensions in policy and media contexts. The paper concludes with criteria for delimiting use in bilingual terminology work and in academic writing.

KEYWORDS: Irrigation; irrigatsiya; semantic scope; conceptual domain; terminological boundary; English–Uzbek comparison; discourse variation.

INTRODUCTION

Terminological precision is crucial in fields where language directly shapes policy, engineering decisions, and educational standards. In water-related domains, the pair irrigation (English) and irrigatsiya (Uzbek) appears, at first glance, to represent a straightforward equivalent relationship. Yet, equivalence becomes less stable when these units are placed in different registers and genres: scientific papers, technical standards, development projects, and media narratives. Even within English, irrigation interacts with a broad network of terms such as drainage, water management, and modernization, which may broaden or blur the term's boundaries. In Uzbek, irrigatsiya is a learned borrowing that competes and coexists with descriptive paraphrases (for example, “yerlarni sug'orish”) and with the adjacent term melioratsiya, which in local practice often forms a stable conceptual pair with irrigation. The problem, therefore, is not whether the two units can be translated, but how far their meanings extend in actual use and where the boundaries should be drawn for academic and terminological reliability.

The study applies comparative semantic analysis combined with discourse analysis. The semantic component isolates a “core” meaning and tracks peripheral extensions through collocations, definitional contexts, and adjacent concept fields. The discourse component examines how the terms behave across genres: technical-scientific texts, institutional glossaries, and policy-oriented communication. Definitions and terminological frames are

aligned with authoritative reference sources in irrigation and drainage terminology and water-related documentation.

At the core level, both irrigation and irrigatsiya encode an intentional, organized action: supplying water to land—typically agricultural land—to support plant growth and to manage soil–water conditions. This nucleus is stable and is reinforced by technical dictionaries and handbooks that treat irrigation as a specialized domain intertwined with drainage and salinity control. In Uzbek, the borrowing irrigatsiya functions as a term of science and administration, often signaling that the writer is operating within institutional or engineering discourse rather than everyday description.

Beyond the nucleus, semantic divergence emerges in the periphery. English irrigation more easily participates in broad, governance-oriented frames such as “irrigation development,” “irrigation sector,” or “irrigation management,” where the term can stand for a whole socio-technical system (infrastructure, institutions, financing, and operational rules). This metonymic widening is typical for English policy and development writing, where a single domain term often labels an entire sector. In contrast, Uzbek irrigatsiya typically retains a stronger link to the technical process and the engineered infrastructure, while system-level meanings are more frequently expressed through expanded noun phrases or paired constructions (e.g., irrigatsiya va melioratsiya), which distribute the conceptual load across two terms and reduce ambiguity.

A second peripheral zone concerns the boundary between irrigation and adjacent operations. In English, the term can be used narrowly (as water application) or as part of a bundled phrase implying combined interventions, especially when irrigation is discussed together with drainage and salinity management. Classic reference works treat irrigation and drainage as coupled systems in arid-land contexts, which encourages usage where irrigation co-indexes broader land–water engineering. Uzbek professional discourse shows a comparable coupling, but often externalizes it lexically by explicitly naming the pair “irrigatsiya” and “melioratsiya,” thereby keeping irrigatsiya itself closer to the “water-supply” component.

A third boundary appears when the term is pulled into general language. English allows figurative or transferred uses more freely (for instance, describing “irrigation” of areas outside agriculture in historical or technical metaphors), while Uzbek irrigatsiya is less likely to be used figuratively in mainstream writing because it carries a marked “bookish/technical” profile. In Uzbek public communication, widening occurs not through figurative meaning but through institutional shorthand: irrigatsiya can denote agencies, projects, or the development sphere associated with irrigation works, which is a pragmatic, discourse-driven extension rather than a stable dictionary meaning.

The observed pattern can be explained through terminological status and lexical ecology. English irrigation is an inherited and highly productive domain noun, readily forming compounds and participating in broad collocational networks. Uzbek irrigatsiya, as a borrowing, is comparatively less morphologically integrated into everyday derivational patterns and competes with native descriptive expressions that remain transparent to non-specialists. This competition encourages a functional split: irrigatsiya indexes expertise and institutional discourse, while native paraphrases carry the everyday meaning of “watering/irrigating.” The split creates a practical boundary: in academic Uzbek writing, irrigatsiya should be preferred when the referent is the engineered, planned system or the

scientific domain; when the referent is merely the act of watering in a non-technical description, a native expression may be semantically clearer.

For bilingual terminology work, these findings imply that equivalence between irrigation and irrigatsiya is best treated as “core-equivalence with peripheral asymmetry.” In translation, English system-level uses (“irrigation sector,” “irrigation governance”) may require Uzbek expansions to avoid collapsing multiple concepts into a single borrowed noun. Conversely, Uzbek texts where irrigatsiya is used narrowly may be translated into English not only as irrigation but sometimes as more specific phrases (e.g., “irrigation works” or “irrigation infrastructure”) depending on context.

The semantic nucleus of irrigation and irrigatsiya is shared and stable: planned supply of water to land/crops. Divergence arises in the periphery: English more readily allows sector-wide and governance-oriented metonymic expansion, while Uzbek tends to preserve a narrower technical profile for irrigatsiya, often distributing broader meanings via paired terms and expanded constructions. For academic writing and terminology standardization, delimiting criteria should be context-based: the more the referent involves engineered systems, institutional arrangements, and integrated land–water interventions, the more justified the technical term irrigatsiya becomes in Uzbek; the more the referent is a simple act of watering, the more appropriate transparent native expressions become.

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