



LEXICOGRAPHIC SYSTEM OF AGRICULTURAL TERMS IN LANGUAGES

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Abstract

This article analyses the representation of agricultural terms in lexicographic systems in different languages, their structure, translation and structural features. It also considers modern approaches to compiling specialised dictionaries, the possibilities of selecting and organising terms based on corpus linguistics, and their use in an interdisciplinary context.

Keywords: Agricultural terminology, lexicography, dictionary compilation, translation, multilingualism, term system.

Introduction

In the process of globalisation, the rapid exchange of scientific and technical information, international scientific cooperation and the popularisation of knowledge in the field require the accuracy and standardised use of terminological units. In particular, agricultural terms—those related to sectors such as agriculture, farming, animal husbandry, agrochemistry, land reclamation, plant science, and soil science—are emerging as an essential tool in scientific research, technological innovations, and production processes. An in-depth study of terms in this field, including linguistics and applied lexicography, plays a crucial role in creating a system of agricultural dictionaries and ensuring the accuracy of terminology.

The lexicographical representation of agricultural terms in different languages is one of the current areas of linguistics. In this process, the issues of systematising field terms, determining their semantic properties, overcoming translation problems and using modern approaches in compiling dictionaries are of particular importance. Because in some cases, it is not possible to fully or correctly translate the agrarian concept specific to one language into another. In such cases, analysing

the conceptual differences between terms and identifying equivalents suitable for each language remains an important scientific task.

From this perspective, studying the lexicographic system of agrarian terms necessitates an approach that encompasses not only a linguistic perspective but also subject knowledge, interdisciplinary methodology, and translation studies. When compiling specialised dictionaries, it is necessary to consider the accurate description of terms in terms of structure, form, and content, as well as their synonyms, antonyms, functional properties, and contextual usage. In particular, interactive tools developed based on modern electronic dictionaries and terminological corpora serve to systematically and accurately reflect terms.

This article, which addresses these issues, aims to shed light on the methods for developing a multilingual lexicographic system of agrarian terms, identifying problems in translation processes, and resolving them on a scientific basis.

1. Characteristics and classification of agricultural terms

Agrarian terms are special terms in the fields of agricultural science and practice, which are widely used in such areas as farming, animal husbandry, plant science, agrochemistry, land reclamation, agricultural engineering, agroecology, and food safety. These terms serve as an essential tool for scientific and technical progress, production technologies and information exchange in the agricultural sector.

1.1. Main characteristics of agricultural terms

Agrarian terms, unlike general lexical units, are distinguished by the following features:

- Clarity and unambiguousness - each term denotes only one concept and, regardless of context, maintains its semantic boundaries (for example, “aggregate”, “seed fund”, “hectare”).
- Sectoral limitation - terms are used only in the agricultural sector and are rarely found in general speech.
- Socio-historical and national characteristics - some terms depend on national farming experience, climatic conditions and traditional technologies (for example, in Uzbek: "ariq", "khirmon", "zor").

- Systematicity of terms - agrarian terms exist in a system across sectors, forming hypernymy, hyponymy, and synonymic relationships (for example, "cereal crops" - a general concept, "wheat", "barley", "sorghum" - specific concepts).
- Dynamics - new terms emerge as a result of the development of new technologies, biological innovations, and global agro-market trends (for example, "unconventional irrigation", "organic farming", and "smart technology").

1.2. Classification of agricultural terms

Agrarian terms are classified according to several criteria:

a) Thematic (subject) classification:

In this classification, terms are divided into specific areas of agricultural science and practice:

- Farming terms: “ploughing”, “fertilisation”, “sowing period”.
- Animal husbandry terms: “breed”, “pedigree cow”, “feed mixture”.
- Agrochemical terms: “nitrogen fertiliser”, “phosphorus component”, “agrochemical analysis”.
- Land reclamation terms: “drainage”, “irrigation system”, “salinity level”.

b) According to morphological structure:

- Simple terms: consist of a single lexical unit (for example, “field”, “humidity”).
- Complex terms: consist of two or more word combinations (for example, “biological activity”, “cotton care”).
- Abbreviations: terms expressed in short form (for example, “GMO” - genetically modified organisms, “GMO” - fertilisation agrotechnical system).

c) By source (origin):

- National terms: created from the internal resources of the Uzbek language (for example, “khirmon”, “ariq”).
- Borrowed terms (kalkas): directly adopted from other languages (for example, “kombayn”, “tractor”, “fertiliser”).
- International terms: terms used in the same form in several languages (for example, “biotechnology”, “agroecology”).

d) By the scope and function of the terms:

- Scientific and technical terms: used in scientific articles and textbooks.
- Normative and legal terms: used in agrarian laws, regulations and standard documents.

- Terms related to production practice: used in practice by farmers and peasants.

2. Lexicographic system and reflection in dictionaries of terms

Lexicographical arrangement of terms in the agrarian sphere is carried out through special dictionaries, electronic resources and terminological bases. Several fundamental principles are taken into account when entering terms in the lexicographic system and arranging them:

- Clarity and consistency - each term should denote only one concept, and synonymic confusion should not be allowed. Terminological explanations should be short, precise and specialised.
- Enrichment with contextual examples - the use of terms in authentic texts, especially their role in scientific, technical, and practical speech, should be demonstrated. This will help the user to perceive the term correctly.
- Expression of inter-word relationships – semantic relationships of terms, i.e. synonymy, antonymy, hyperonymy (generalising term), hyponymy (subordinate term), etc., are clearly defined.

Special agrarian terminological dictionaries should contain the following elements:

- Multilingualism – terms are given in at least two or three languages (for example, Uzbek-Russian-English), which is of great importance in international exchange.
- Graphic and phonetic transcription – the pronunciation and spelling of foreign terms are indicated with phonetic symbols to make them understandable.
- Morphological commentary – the features of the term related to the word class, case, number, gender, and verb class (if necessary) are given.
- Practical applications – examples or explanations are provided on the situation and field in which the term can be used.

This approach helps define clear semantic boundaries of terms, reduces the risk of misinterpretation, and provides a systematic approach to linguistics.

3. Problems of translating agricultural terms across languages

Several linguistic and cultural issues arise in the process of translating agricultural terms from one language to another. This is especially evident in comparative translations between Uzbek, Russian and English.



Main problems:

- Lack of equivalents: Some agricultural terms may refer to concepts that do not exist in another language, or their equivalents may be inconsistent. For example, words such as “zor” or “khirmon” do not have a direct English equivalent.
- Differences in cultural connotations: Local terms are deeply embedded in their cultural environment, and their connotative meaning may be lost in translation. For example, the word “mirishkor” does not have an exact equivalent in English; this word is not only associated with farming but is also used as a symbol of hard work and experience.
- Phonetic and morphological changes: Terms adopted from foreign languages are localised phonetically and morphologically. For example, the word "combine" came from Russian, but in Uzbek it has an independent phonetic form.

Therefore, conceptual equivalence (i.e., selecting a term that conveys the same idea) and domain context (considering the specific field and function of the term) are crucial when translating agricultural terms. This methodological approach serves to prevent semantic losses in interlingual translation.

4. Modern dictionary construction approaches

Current modern lexicographic activity requires the active use of digital technologies in working with terms, in addition to traditional dictionary construction. In particular, the following modern approaches play an essential role in the systematisation of agricultural terminology:

- Terminological corpora: Terms are automatically identified based on an electronic text database, and their contexts, collocations and frequency are analysed. This is done, for example, through programs such as Sketch Engine and AntConc.
- Online collocation analysis: Shows how terms are used in conjunction with other words. This enables linguists and translators to examine the natural usage of a term in spoken language.
- Integration with term banks: Dictionaries are being developed in harmony with globally recognised terminology systems (e.g., AGROVOC developed by FAO, EuroVoc platforms of the European Union). These platforms contain multilingual, contextual and graphical representations of agricultural terms.



- Interactive and multimedia dictionaries: Nowadays, dictionaries are being created not only in text form, but also in visual (diagram, photo, and video) form, which helps users understand the term correctly.

These approaches significantly facilitate the frequent updating of terms, their adaptability to user needs, and the study, teaching, and application of terms in practice.

Conclusion

In modern linguistics, the study of terminology, particularly the system of agrarian terms and their lexicographic regulation, is considered one of the most relevant scientific directions. Agrarian terms are critical lexical units that relate not only to linguistics but also to interdisciplinary fields such as agriculture, biology, chemistry, technology, and agro ecology, inextricably linking practical and theoretical knowledge. Their clarity of content, structural consistency, and lexicographic representation are of inestimable importance in the effective transfer of knowledge in the field, overcoming language barriers in international cooperation, and ensuring the circulation of scientific information.

As shown in the article, the lexicographic system of agrarian terms is formed based on several fundamental principles: clarity, consistency, contextual application, semantic relevance, and multilingualism. Special term dictionaries are not only a translation tool, but also serve as a comprehensive scientific information resource that reveals the interdisciplinary relationships of terms, subjects them to semantic analysis, and provides a comprehensive scientific information tool.

Additionally, problems such as the lack of equivalence, cultural connotations, and phonetic-morphological adaptation that arise in the translation of agricultural terms necessitate a solution in a scientifically based, context-dependent manner. The priority of the conceptual approach in translation ensures the correct interpretation of concepts within the field.

Modern dictionary creation activities are based on digital technologies and electronic lexicographic platforms. Terminological corpora, online collocations, integration with international databases such as AGROVOC and EuroVOC, and the use of multilingual and multimedia tools today enable the creation of practical and interactive terminological databases.



Therefore, the systematisation of terminology in the agricultural sector, the organisation of translation processes on a scientific basis, and their reflection in modern lexicographic tools are among the priority areas of today's linguistics, translation studies, and related disciplines. This approach serves to popularise agricultural knowledge, ensure interdisciplinary integration, and effectively participate in the international information space.

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