

## TERMINOLOGICAL DATABANK CREATION ON MONGOLIAN HYDRAULIC STRUCTURES TERMS

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*В статье рассматриваются лингвистические особенности создания терминологической базы данных монгольских гидравлических объектов.*

**Ключевые слова:** терминологическая база данных, гидравлические объекты, лингвистические особенности, монгольская терминология.

*The changes which terminology study has gone through in the last few years in Mongolia, have increased the importance of a close collaboration between corpus and linguistics. Likewise, researchers and institutes are dealing with the termbase studies at national level has been raised to the surface, some efforts made by professionals at given sectors should be mentioned.*

*We are currently conducting linguistic research on Mongolian hydraulic structures terms regarding standardization of terminology in commercial, national, and international organizations, the results of which are stored in the data bank which is intended to serve as a useful reference for those who work on this sector, researchers and translators as well. We started the study with a field research determining the actual need for terminological study for water sector in Mongolia. The responses were very positive and demonstrated the usefulness of a terminological research within the sector*

*This paper discusses the terminology databank interface and its function as well as some retrieval aspects.*

**Keywords:** termbase, terminological data bank, hydraulic structures, mongolian terminology.

The study showed that the computer-supported tools will help dissemination and upkeep the terminology resources and terminology banks. On the other hand, terminology research outcomes the specialized knowledge and the standardization of terminological usage which means that linguists must have wide range of knowledge on the field which is being researched. To facilitate acquisition of this knowledge within the research, we are collaborating close with specialists, attending subject-field conferences and trainings that surely help for the research progress.

The terminology database that we are currently developing is a terminological knowledge base on the water sector. The data bank is being initially imple-

mented in Mongolian, two more languages including English and Russian as an equivalent term entry. So far it has over 6000 terms which targets water sector specialists, and different groups such as translators and researchers.

The terminology databank entry is divided into 6 sub-sectors covering flood control terms, power generation terms, navigation terms, melioration and irrigation system terms, and municipal and industrial water supply terms. The whole structure is mainly based on discipline classification system.

As of the study of mongolian hydraulic structures, we generally divide its formulation to three phases as follows: a. Before 1921 where dominates mongol originated terminologies or terms domiciled., (*bukh suvag* ‘giant channel’, *musun bukh* ‘ice canal’, *arig* ‘furrow’, *tsuurum* ‘pond’ and from Chinese: *lantuu* ‘läntou’, *jootuu* ‘juě tou’, *shuuduu* ‘shuidào’, *guu* ‘gòu’, for example, *guu* named after Galdan boshigt khan, *gan* ‘gǎng’) [1] b. 1921-1990 where Mongolian education system was modernized and strongly influenced by the former Soviet Union system (*nasos stants-nacoc cmanц* ‘pump station’, *gidrotehnikyn barilga-гидротехникийн барилга* ‘hydraulic structures’, *kollektor-коллектор* ‘collector’, *vantuz-вантуз* ‘air valve’) [2] and etc. After 1990 the terminology is being translated from different languages. These stages prove that “In reality, “concepts” have their dynamic nature; they in fact develop with the time [3]. That means terminology that designates concept is a dynamic study while some terms are outdated, new terms are being processed.

While we study hydraulic structures terms linguistically, our primary purpose is to concentrate on creating our terminology data bank on online platform. Since the linguistic study applies software, database itself is best place to capture and analyse the data for interaction with end users.

Over the past twenty years, computer has become main tool for accessing specialized knowledge and the favoured means of transmitting scientific, technical, literary, and artistic information [4]. With the terminology databank compiled from terminological dictionaries, glossaries, and wide range of sources, each terminological entry in the broad sense, has supplementary information, a reliability indicator can be given for the databank and values can be attached to individual language entries by marking and coding source data. It is a basic rule that every term to be stored in the data bank should be complemented by details identifying the source or the person who supplied the term.

For constant improvement, we created a feedback section, by means of it, the terminology databank can be expanded. Moreover, it can surely be improved.

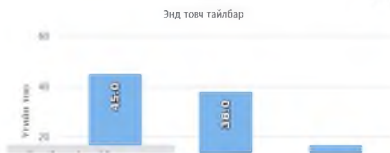
As an interface of the online databank, when the user opens it, alphabetical list is shown that contains list of terms and term/concept search or changing the language of the interface on top bar.

Central area has a wide range of information including last entries of terms, some graphs such as terms percentage divided as sub-sectors, translation study of terms and percentage and morphology study information that shows percentage of single words and compound words and most frequent suffix information and its percentages etc.

### Сүүлд нэмэгдсэн

- түшиц хана
- шингээх худаг
- захын тулгуур
- ус ашиглах эрх
- лагийн хүчиллэг эсэлт
- усны орчин
- дуу авиан хэмжигч

### Нэр томьёоны орчуулгын судалгаа



### Усны барилга байгууламжийн нэр томьёоны судалгаа



### Хэл зүйн судалгаа

As the terminology work must be focused on concepts and the terms to denote them, rather than on words or phrases in general, for meaningful and lasting value to users, [5] each term entry contains equivalent terms in English and Russian, definition and associated resources as follows:

## боомт

дам

плотина

Дэлгэрэнгүй ▾

Усны түвшин өргөж түрэлт буй болгохын тулд голын хөндий, урсгалыг хөндлөн хааж барьдаг усны барилга байгууламжийн төрөл.

Эх сурвалж: Монгол улсын стандарт: Усны нөөц, ус ашиглалт, хамгаалалт 2016 албан хэвлэл 4.2.1.7

Any artificial barrier which impounds or diverts water. The dam is generally hydrologically significant if it is:  
 1. 25 feet or more in height from the natural bed of the stream and has a storage of at least 15 acre-feet.  
 2. Or has an impounding capacity of 50 acre-feet or more and is at least six feet above the natural bed of the stream.

*Нэмэлт тайлбар*

Тайлбар: боомтыг далантай хутган хольж бичдэгээс мэргэжлийн ажил төрөл ойлгогдохгүй болсон байна

*Example sentence*

Dams generally serve the primary purpose of retaining water, while other structures such as floodgates or levees (also known as dikes) are used to manage or prevent water flow into specific land regions.

Нүүр Туслах Холбоо барих

А Б В Г Д Е Ж

# БООМТ

barrage

плотина

Дэлгэрвэл



Close

Terms are done by asking a “keyword” question the expected answer being not an entry with the required translations but rather a list of all stored expressions beginning with the given keyword. You can see as follows:

water

- actual renewable water resources
- adsorbed water
- advanced wastewater treatment
- adverse effects of water
- after-purification of sewage water
- artificially treated water

Search

As we see during the study, there were two main factors we need to focus on. One is that the field specialists mostly prefer to use terms in languages that they were professionalized as influenced by Soviet Union as an easy reference and understanding. Second, since 1990, Mongolia is preparing this field specialists in local as they acquire knowledge in their native language using translated sources from Russian, English and other languages. So that there is shown a gap in terminology translation and its usage. Thus we concluded the quick and interactive platform for developing the terms on this sector is the terminology databank creation. However, this type of study is quite new, and we have less experience in Mongolia, we created our draft database which means under progress. This start has already laid a good foundation for unifying and developing water terms especially commercial, national, and international organizations. But we still need professional support to develop it in higher level.

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