

MULTILINGUAL ELECTRONIC DICTIONARY FOR TAMIL, HINDI, ENGLISH LANGUAGES



UGC MAJOR RESEARCH PROJECT

F. No: 5-175/2014 (HRP) dated 7.12.15

FINAL REPORT

SUBMITTED BY

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**UNIVERSITY GRANTS COMMISSION
BAHADUR SHAH ZAFAR MARG
NEW DELHI – 110 002**

**PERFORMA FOR SUBMISSION OF INFORMATION AT THE TIME OF SENDING THE FINAL
REPORT OF THE WORK DONE ON THE MAJOR RESEARCH PROJECT**

1	Title of the project	:	Multilingual Electronic Dictionary for Tamil-Hindi- English languages
2	Name and Address of the Principal Investigator	:	Dr. B.KAMAKOTI Department of Hindi, Annamalai University Annamalai Nagar-608 002. Mobile: 9444712010 E-mail: kamakotikrish@gmail.com
3.	Name and Address of the Institution		Annamalai University Annamalai Nagar-608 002.
4	UGC approval No. and Date	:	F.No: 5-175/2014 (HRP) dated 7.12.15
5.	Date of implementation		30.06.2018
6.	Tenure of the project		1.6.2015 to 30.6.2018
7.	Total Grant Allocated		8,78,600/-
8.	Total Grant Received		Ist Instalment : Rs. 5,65,600/- 2 nd Instalement : Rs, 1,47,161/- Total :Rs. 7,12,761/-
9.	Final Expenditure		Rs.7,09,913/-

OBJECTIVES

1. To create and design a Multilingual Electronic Dictionary for Tamil – Hindi – English Languages
2. To examine the feasibility of knowing Hindi equivalent to Tamil word quickly
3. To provide machine tractable dictionary to establish natural language processing

WHETHER OBJECTIVES WERE ACHIEVED (GIVE DETAILS)

The investigator have collected various Tamil words from several books and journals - by visiting several libraries. The equivalent Hindi and English words are identified from various sources. The collected words are entered in Microsoft Excel sheet and converted by using Unicode to make them available to the electronic version.

ACHIEVEMENTS FROM THE PROJECT

The user interface is very well designed and easy to use. The words of the selected category are listed and the meaning can be directly verified by clicking on the word. The multilingual electronic dictionary will be very much useful for the learners , research scholars and professionals. The multilingual electronic dictionary is very handy tool for translators.

SUMMARY OF THE FINDINGS

A Multilingual Dictionary for **Tamil-Hindi-English** Languages is an attempt to bridge the gap between the wealth of knowledge on the one hand and the aspiring students and researchers on the other hand. The multilingual electronic dictionary will help the students and researchers in the field of translation to overcome the difficulty posed by the language. Also it will be helpful for the public as an aid for communication. At present, the technical terms in Hindi jargons are mostly in English. Though there are equivalent terms in Tamil, the Tamil terms for Hindi are not systematically arranged and

compiled into a dictionary. If the terms are translated into the vernacular, it might be of immense use for them. Their understanding of the terms and the concepts behind them will be better. This will also lead to the better understanding of the subject. The list of terms along with their Hindi equivalent has to be compiled into a dictionary. The dictionary has been planned to be available in electronic form. So the compiled dictionary has to be digitized. The electronic version of the dictionary facilitates easy access to meaning of a given term in one language to the meaning in other two target languages.

This multilingual dictionary has been developed to help the users to access the Hindi and English meanings of the given Tamil term. This dictionary has entries for more than 10000 Tamil keywords with their meaning in Hindi and English. The Tamil words are categorized into four major grammatical categories, so that the meaning can be easily understood by the users. The dictionary has been provided as an installable package which can be used on Graphical User environment. The user interface for the dictionary has been designed to access it easily.

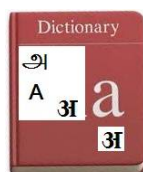
The words are entered in the dictionary in Unicode encoding format. So the words and the meanings can be displayed on any system without any need for conversion.

Installation of the Dictionary

The dictionary is provided as a pre-compiled, easily installable package. The package contains a SETUP file which can be executed on any computer and installed on the user's computer. To facilitate entering input, it is required to download and keep the NHM writer open.

Starting/Opening Multilingual Dictionary

The dictionary can be opened from the desktop shortcut by double clicking on the dictionary icon, or the



dictionary can be opened from the Start menu by selecting the Multilingual Dictionary program.

The Sections of the Dictionary Screen

When opening the dictionary a window with the title “Multilingual Electronics Dictionary for Tamil-Hindi-English” appears as shown in the following fig.1.



This window is user interface window with different controls on it. This window has the following sections:

1. Language Selection
2. Category Selection
3. Input Area

Language



Category



Meaning

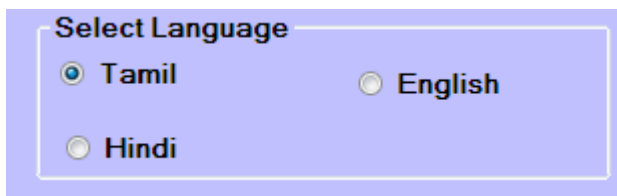


Input



Word list

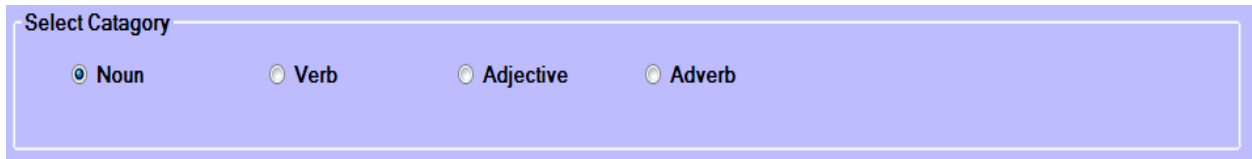
Language Selection



Tamil is selected as default (initial) language. This option is used to select the source language. The input word can be entered in this language. When selecting a particular language the word list area is automatically loaded with the words of this language.

Category selection

The words listed on the input area are filtered to the selected category. The entire word list is divided into four categories Noun, Verb, Adjective and Adverb. This option is used to select the particular type of word quickly. In Tamil, a word can be either a verb or a noun. So, the meaning of a particular word as noun and verb can be checked. The selected category name is displayed in the meaning area.

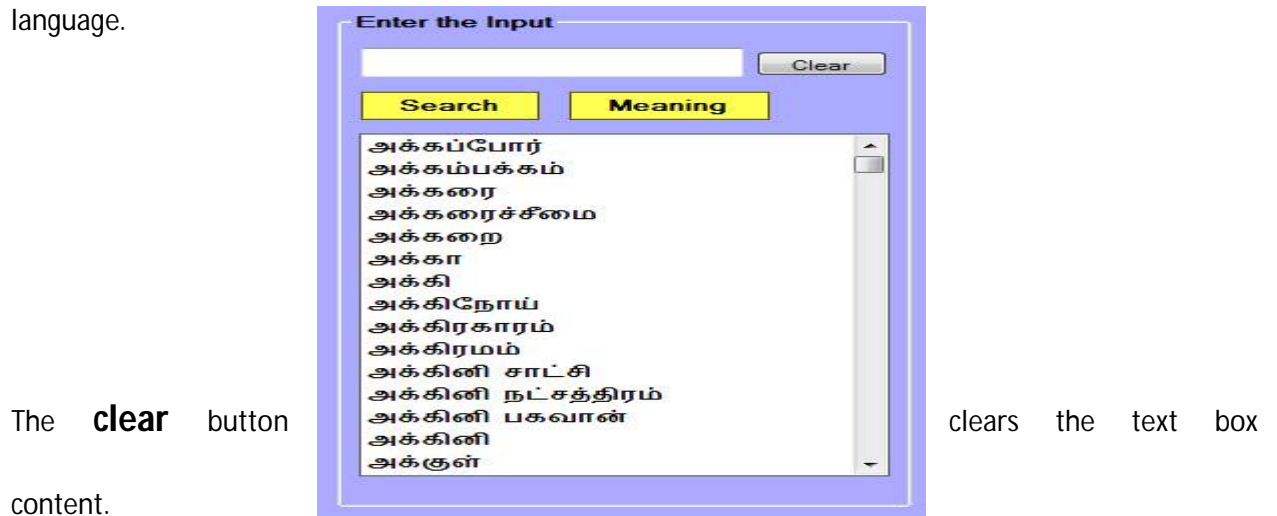


Select Category

Noun Verb Adjective Adverb

Input Area

The word to be referred in the dictionary can be entered in the Input text area. The word can be typed directly in the text box or pasted. For simplicity, the word can be selected from the list of words shown below the text area. The word list is shown in the alphabetical order of Tamil words. When Hindi or English language is selected, the word list will show the entries from the dictionary (meaning) in that language.



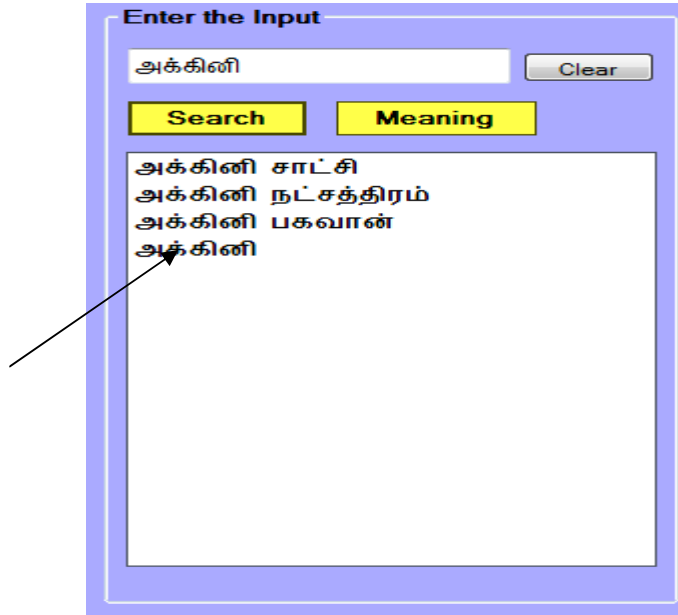
Enter the Input

அக்கப்போர்
அக்கம்பக்கம்
அக்கரை
அக்கரைச்சீமை
அக்கறை
அக்கா
அக்கி
அக்கிநோய்
அக்கிரகாரம்
அக்கிரமம்
அக்கினி சாட்சி
அக்கினி நட்சத்திரம்
அக்கினி பகவான்
அக்கினி
அக்குள்

The **clear** button clears the text box content.

There are two other buttons below the input text box. The **search** button and **meaning** button.

The word pattern can be entered in the text box and searched in the dictionary. So the words having that pattern or sub-word are listed in the list box. The user can select from the list and check the meaning.

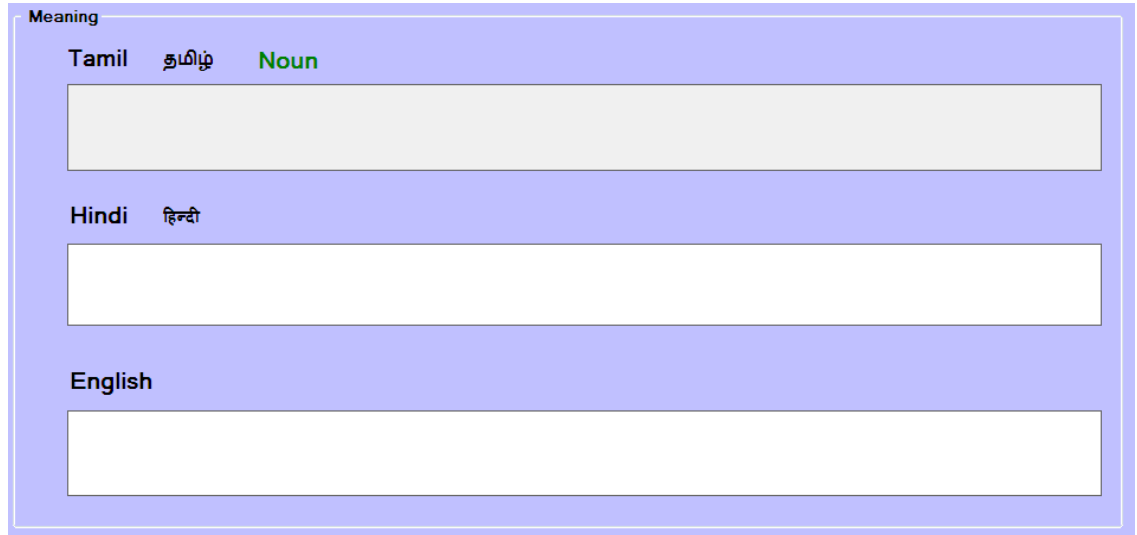


Enter the Input

அக்கினி

அக்கினி சாட்சி
அக்கினி நட்சத்திரம்
அக்கினி பகவான்
அக்கினி

The Meaning area



Meaning

Tamil தமிழ் Noun

Hindi हिन्दी

English

The meaning area has three text areas, where the meanings of the selected word are displayed.

The following two screens show the meaning the Tamil word தழை as noun and as verb.

Multilingual Electronic Dictionary for Tamil-Hindi-English Languages

MULTILINGUAL ELECTRONIC DICTIONARY

தமிழ் - ஹிந்தி - ENGLISH

Select Language: Tamil English Hindi

Select Category:

Enter the Input: தளழ்

அக்கம்பக்கம்
அக்கரை
அக்கரைச்சீமம்
அக்கறை
அக்கா
அக்கி
அக்கிநோய்
அக்கிரகாரம்
அக்கிரமம்
அக்கினி சாட்சி
அக்கினி நட்சத்திரம்
அக்கினி பகவான்
அக்கினி
அக்குள்
அக்ரகாரம்

Tamil தமிழ் Noun
இலைக் கொத்து (சிறு குச்சியோடு கூடிய)

Hindi हिन्दी
रुनियाँ

English
sprigs (as a fodder, etc)

Developed under the UGC Major Research Project, by Dr.B.Kamakoti, Department of Hindi, Annamalai University, Annamalinagar-608002

Multilingual Electronic Dictionary for Tamil-Hindi-English Languages

MULTILINGUAL ELECTRONIC DICTIONARY

தமிழ் - ஹிந்தி - ENGLISH

Select Language: Tamil English Hindi

Select Category:

Enter the Input: தளழ்

அக்கறைப்படு
அகங்கரி
அகட்டு
அகப்படு
அகல்
அகவு
அகழ்
அகற்று
அங்கலாய்
அங்கீகரி
அச்சடி
அச்சாகு
அச்சிடு
அச்சுவார்
அச்சுறுத்து

Tamil தமிழ் Verb
செழித்தல், விருத்தியடைதல், செடி முளையிடுதல்

Hindi हिन्दी
विलासितापूर्वक बढी,पनपने,अंकुर

English
grow luxuriantly, flourish; sprout

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Searching for English words

Select Language

- Tamil English Hindi

Enter the Input

Search

Meaning

inject, force in with a syringe
become stale (of food stuffs)
move to and fro
leave to feed, leave to teach
feed, give, insert the thing or knowledge
vacillate, move freely
sulk, be silent or angry (of love)
penetrate, to spread through, infiltrate
blow, breathe quickly, become large in
move slowly along a surface pulling the
go gallivanting
howl, noise produced by wolves
pour, make liquid flow, come out excessively
well up (of water, tears)
soak, soak in the water for sometime

Searching for Hindi Words

Select Language

Tamil English

Hindi

Enter the Input

चिंतित,ध्यान करो
अभिमानि
हटाना
पकड़ा
अकाल
अस्तर
खुदाई
हटाना
ईश्या, का दुः ख
अधिकृत करें
छाप
कागज पर प्रभावित हो (टाइप की गई सामग्री, लिखित साम
छाप
आदर्श
धमकाना

Meaning

Tamil தமிழ் Noun

Hindi हिन्दी

English

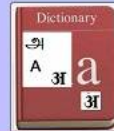
MULTILINGUAL ELECTRONIC DICTIONARY

Multilingual Electronic Dictionary for Tamil-Hindi-English Languages



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Developed under UGC Major research
project by: Dr.B.Kamakoti, Asst. Professor,
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Conclusion

The Multilingual Electronic Dictionary for Tamil-Hindi-English languages enables students, faculties and translators to get quick access to the Hindi meaning of Tamil word. It helps the users to get proficiency in the language. It also helps to overcome the delay in searching the Hindi meaning for the Tamil word. It may also help the Hindi knowing person to understand the Tamil and English languages.

CONTRIBUTION TO THE SOCIETY

In Tamil Nadu most of the students perusing their regular studies by having Tamil as their first language and English as second language. They learn Hindi mostly out of their school curricular activity. Hence they learn and understand Hindi through Tamil only. The Multilingual electronic Dictionary for Tamil-Hindi-English is more useful for the students. The outcome of the study will be helpful to the students to lean Hindi properly. Those persons who is interested to learn Hindi can also use the Multilingual Electronic Dictionary for Tamil-Hindi-English effectively.

WHETHER ANY PH.D ENROLLED/PRODUCED OUT OF THE PROJECT, NO

LIST OF PUBLICATIONS OUT OF THE PROJECT

1. **Dr.B.KAMAKOTI** Paper published in the International Multidisciplinary Quarterly Research Journal, AJANTA, Peer reviewed referred and UGC listed journal(Journal No.40776), Volume-VII, Issue-IV, October – December 2018, ISSN 2277-5730, entitled “Bahsa sikne mem shaptha kosh ki poomika” – written by Dr.B.Kamakoti, Page No.20-23
2. **Dr.B.KAMAKOTI** presented a paper in the International Conference on The self role of Language and the Mastery in Dictionary, title of the paper “Need of Multilingual E-Dictionary for Tamil –Hindi _ English at thanjavur ORGANIZED BY Department of Lexicography, Tamil University, Thanjavur. Paper published in the Journal page No 206-212.ISBN NO 978-81-929257-5-2

International Conference

1. International Conference on "Need of Multilingual E-Dictionary organized by Department of Lexicography, Tamil University, Thanjavur.

Principal Investigator

REGISTRAR