

## 4.4 Baraha

### Introduction

Baraha is a word processing application for creating documents in Indian languages. At present it supports Kannada, Sanskrit, Hindi and Marathi languages. Baraha is developed with an intention to provide free software to enable Indians use their native languages on the computers. Baraha can be effectively used for sending emails and create web pages in the above languages.

Baraha works on Microsoft Windows operating systems only. An earlier version Baraha 1.1 is still available for working on Windows 3.1 systems. The latest version Baraha 5.0 supports saving the documents in Unicode format which means you can transfer documents to other operating systems that support Unicode, such as Linux.

Baraha uses the standards proposed by the Karnataka Government for the ANSI Kannada fonts and the keyboard.

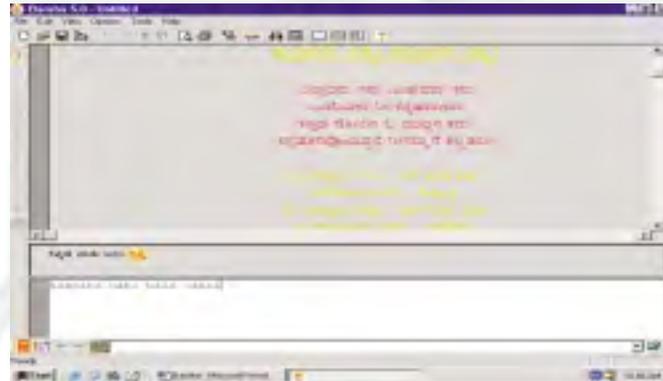
### Products

#### Baraha

**Baraha** (means 'writing' in Kannada) is a multilingual application. It is a transliteration software which converts 'Kannada, Hindi, Sanskrit, Marathi text written in English' to their own respective scripts. With this basic functionality, it can be used any time & any place you want to employ these Indian language scripts in Windows operating systems.

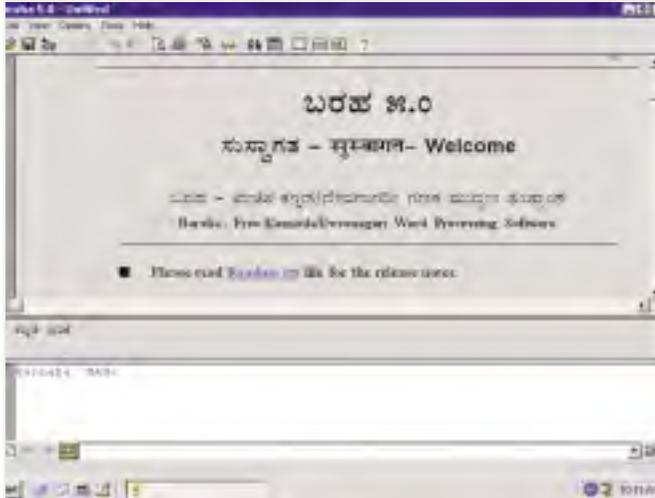
The first public release of Baraha software was made on January 1st of 1998. This initial release was developed with an intention to provide a free, easy to use Kannada language software to enable even non-computer professionals to use Kannada in computers thereby promoting Kannada language in the cyber world. This objective has been accomplished to some extent during these past five years. Today hundreds of thousands of kannadigas are sending e-mails using Baraha to

friends & relatives across the world in their mother tongue. In the recent past, many Kannada websites have been created using Baraha. Various Kannada organizations around the world are publishing their newsletters using Baraha. Government & private offices, schools, litterateurs, journalists are among those who have been using Baraha for documentation & reporting purposes. We would like to share this happy news with everyone and also we are thankful to all those users for their valuable suggestions towards the improvement of the Baraha software.



Everybody agrees that the usage of English language & English keyboard in computers is inevitable. It is difficult for a common user to use separate keyboard logic for typing English & Indian languages at the same time. On that account, Indian languages can be effortlessly written in English itself. At present there are several software available in the market for Desk Top Publishing in Indian languages. However, most of them have their own specific keyboard design. Though such a design is easy to follow for those who are proficient in those languages, this is not a light job for people who use the English keyboard in their everyday life. The Baraha software comes handy in this circumstance, by providing what is known as "Transliteration Scheme" where any Indian language can be written first in English script and then be converted into their respective languages. To use Baraha one needs to know only the 26 letter English keyboard. In Baraha, writing Kannada/Devanagari words is as simple as writing your

names in English. Kannada and Hindi words such as “cheluva kannada nADu”, “merA bhArat mahAn” can be typed as shown above.



The following are some specific instances where Baraha is useful.

- Kannada/Devanagari Desk Top Publishing (D.T.P).
- Sending E-MAILs in Indian Languages.
- Publishing Kannada, Sanskrit, Hindi, Marathi WEB pages on Internet.
- Spreadsheets. Database applications. Graphics.

#### BARAHA.Com:

#### Baraha Software: Version 5.0 (Build-6)

The main objective of this release is the “portability of data”. In the earlier releases, Kannada/Devanagari text could be transferred from Baraha and to other applications in the ANSI format only. With Baraha 5.0, you can transfer the data between Baraha and other applications in ANSI and Unicode formats, in either direction. With Baraha 5.0, you can convert Kannada/Devanagari documents to Unicode format any time you want. Since, Unicode is the international standard, your data will always be relevant in the future.

The transliteration scheme of Baraha 5.0 is slightly different from that of Baraha 4.0, especially in

the usage of *anuswara*, and *visraga*. Since Baraha v1.0, the transliteration scheme has gone through several changes in the releases that followed. This was done after considering the suggestions from the users and also based on the experience acquired over the period of time. We hope that the transliteration scheme of Baraha 5.0 will become the final version and continues to hold good for the future releases.

This release consist of the following executables.

- The Baraha 5.0 program
- The BarahaDirect utility for typing Kannada/Devanagari text directly into MS Word and other applications.
- BarahaSort utility for sorting Kannada/Devanagari text in their respective alphabetical order.
- BarahaConvert utility for converting Kannada/Devanagari text between various data formats.

#### Features

- Supports the Kannada and Devanagari scripts. Baraha can be used to create documents, web pages, send e-mails in Kannada, Tulu, Konkani, Hindi, Sanskrit and Marathi languages.
- Implements Kannada software standards directed by the Karnataka Government.
- BarahaDirect which is available as a separate utility supports both ANSI and UNICODE output. It also supports sorting in Kannada/Devanagari alphabetical order, while you are typing in other applications.
- Supports sorting of Kannada/Devanagari words in their own alphabetical order.
- Supports conversion of Kannada/Devanagari text between various data formats including Unicode.
- Export feature allows exporting MS Word, Unicode, UTF-8 and HTML documents and BMP, GIF, JPG, PNG, PCX picture files.



- **DEVTRANS1:** Devanagari text written in Baraha 5.0 transliteration scheme. (Sanskrit)
- **DEVTRANS2:** Devanagari text written in Baraha 5.0 transliteration scheme. (Hindi/Marathi)
- **ANSI:** Kannada text in glyph codes. This text data when rendered using “BRH Kannada” font will show the readable Kannada text. If you are copying Kannada text from MS Word and pasting into the input window, you have to select this format.

**Output:**

The window in the output section is where the sorted words are displayed. You can save the output by clicking the “Save” button. You can copy the output text by clicking the “Copy” button.

“Output Format” combobox specifies the format of the output data. It can be one of the formats described above.

**Memcmp:**

If this box is checked, then the strings are compared based on their binary values.

If this box is not checked, then a special comparison algorithm is used. In the special comparison, the *vedic*, *music*, *laghu*, & *guru* symbols are ignored, and ‘ra’ kaara & ‘repha’ are matched. Ex: the KANTRANS strings “karma” & “kaRma” are evaluated as equal. When this option is used the sorting operation is comparatively slower.

**Sort Order:**

If “Ascending” box is checked, the words are sorted in the ascending order. Otherwise, they are sorted in the descending order.

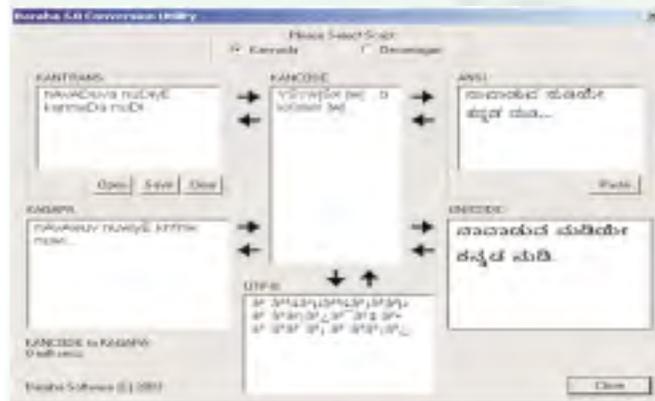
**Sort Button:**

Clicking this button will sort the Kannada text in the input window and displays in the output window.

**Baraha Data Conversion Utility:**

This utility (**BarahaConvert.exe**) can be used to convert the Kannada data between the various formats.

First, you have to select either Kannada or Devanagari script before doing any data conversion.



You can open an existing file containing data in Kantrans/Devtrans1 format by clicking the “Open” button. You can save the contents of the Kantrans/Devtrans1 field by clicking the “Save” button. You can convert the data from one format to other format by clicking the corresponding arrow buttons, which indicate the conversion path.

You can cut/copy/paste/delete/select text using the pop-up menu that shows up when you right-click on the edit control windows. But a special “Paste” button is provided under the ANSI window for pasting Kannada text into the ANSI window. This button uses a special paste technique which ensures that the Kannada text is properly pasted.

If you are running this program under Windows 95/98 then, the Unicode window won’t be displayed at all.

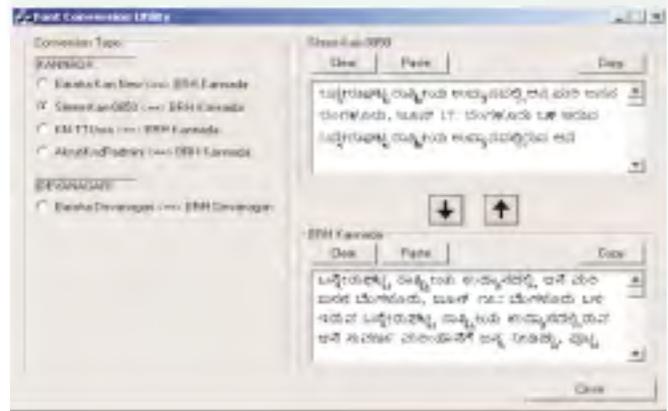
**Baraha Font Converter Utility:**

**FontConvert** utility allows the user to convert the Kannada/Devanagari text from one font to another. The Kannada/Devanagari fonts supplied with Baraha 5.0 software have an encoding different from the fonts shipped with earlier versions of Baraha, such as Baraha 2.0/Baraha

2000/Baraha 2000a. The FontConvert enables user to convert .doc, .html files that use Baraha Kan New / Baraha Devanagari fonts, to the new Kannada/Devanagari font encoding used in Baraha 5.0.

Also, Kannada websites such as <http://www.thatskannada.com>, <http://www.kannadaratna.com>, <http://www.kannadaprabha.com> e.t.c. are using commercial software/fonts from other vendors such as ShreeLipi, AkruTi and CDAC fonts. Kannada magazines - both online and offline need a good interaction from its readers. Readers should be able to send their comments, suggestions and articles to the online magazines in Kannada via email for quick and easy publication, which will result in better service and quality content of the magazine. Baraha has been popular among Kannada software users. Everyday, thousands of users are using Baraha for sending emails. Many professional and amateur writers are using Baraha to send articles to magazines and newspapers. At present, when readers send email articles to the above websites using Baraha fonts, first they have to be retyped using the other software before they can be published. This is causing delay in publishing and also waste of manpower. Since the above websites use dynamic fonts and don't provide downloadable fonts, readers face difficulties when printing an article from the website. The readers are not able to copy the news/articles from the above websites and edit/save into their personal archive, unless they buy the respective commercial software/fonts.

FontConvert utility allows users to convert Kannada text between Baraha and other vendors such as ShreeLipi, AkruTi and CDAC. It serves as a bridge to enable easy exchange of information between the Baraha users, and websites that use other fonts. Now, readers can send articles to above websites as Baraha documents. The websites can convert the articles to their fonts and publish. The readers can copy an article from the above websites, convert to Baraha fonts and print it. They can edit and save the article to their personal folders as a Baraha document.



(Source Website/Courtesy :  
**K.T.Chandrasekharan**  
 57, ITI Layout, BSK 3rd Stage,  
 Bangalore - 560085  
 Tel : 6692694  
 E-mail : [baraha@hotmail.com](mailto:baraha@hotmail.com)  
 Website : <http://www.baraha.com/>)