

Revised Proposal to Encode the Kurukh Banna in UCS

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29 Feb, 2024

1. Introduction

This is a proposal to encode the Kurukh Banna script in the Universal Character Set. Kurukh Banna is used Odisha and Jharkhand, India for writing the Kurukh (Oraon) language. It supersedes the following document:

- ‘L2/23-223’ Preliminary proposal to Encode the Kurux Banna in UCS

2. Background

Kurukh Banna (also called ‘*Kūṛux Bannā Siki/Lipi*’ ଚିଲିକା ଖଣ୍ଡିଆ ଲିପି/ଲିପି or ‘*Kūṛux Tor*’ ଚିଲିକା ଚିଲିକା) is an alphasyllabary based upon the Brahmi model. Kurukh Banna (ଚିଲିକା ଖଣ୍ଡିଆ) is a script used for writing Kurukh (ISO 639:krx and ISO 639:xis; Tolong Siki: ଚିଲିକା, Kurukh Banna: ଚିଲିକା, Devanagari: कुड़ुख, Odia: କୁଡୁଖ and Bengali: কুড়ুখ). Kurukh language is used by Oraon and Kisan people. It is a Northern Dravidian language of 2.28 million people (census 2011) primarily spoken in Odisha, Jharkhand, West Bengal, Chhattisgarh, Assam, etc. of India.

Kurukh Banna is developed by Basudeo Ram Khalkho in Odisha during the 1990-91. The first book written by him is found in ‘*Kūṛux Bannā Lipi Arā Bakka Garhan Part-1*’. This script is revised twice in 1995 and 1998. Very limited materials have been found of the initial stages of this script [see fig 15(a) & (b)]. This script is mostly use by the Oraon people, concentrated in northern Odisha. A number people of Kisan people are using this script also. Most of the users are from Odisha, some number of users is also from other states like Jharkhand and West Bengal. More than 50,000 people are using this script in their daily life constantly. Another script developed by Dr. Narayan Oraon (L2/23-024) in 1999 for Kurukh is ‘Tolong Siki’ (ଚିଲିକା ଖଣ୍ଡିଆ), which is widely used in West Bengal and Jharkhand. Both the scripts are being used. Both the scripts are developed differently and they are not related to each other.

Kurukh Banna has been accepted as the official script by the *Kurux Bhasha Sahitya Vikas Parishad*. Most of the books are published by this organization. Apart from this *All Odisha Kurukh Parha Yubak Sangh* (ସମସ୍ତ ଓଡ଼ିଶା ଚିଲିକା ଲିପି ଉପାଦାନ ସଂଘ) and *All India Kurukh Parha Yubak Sangh* (ସମସ୍ତ ଭାରତ ଚିଲିକା ଲିପି ଉପାଦାନ ସଂଘ) are organizing various workshops all over the Odisha. *Raji Parha Bharat* (ରାଜି ପାର୍ହା ଭାରତ) is organizing various workshop classes in Jashpur (Chhattisgarh). *Kūṛux Bhāṣā Sāhitya Vikās Pariṣad, Jharkhand* (ଚିଲିକା ଶାସ୍ତ୍ର ଉପାଦାନ ସଂଘ, ଉତ୍ତରାଖଣ୍ଡ) is operating Kurukh schools in the state. Local organizations also use this script in their social gatherings or programs like: *Kurukh Jette Jatra* (ଚିଲିକା ଯେତେ ଯାତ୍ରା), *Summer Vocation Student Meet* (ସମ୍ଭାଷଣ ଶିକ୍ଷା ଉପାଦାନ ସମ୍ମିଳନୀ), *Daara Parha Barhabas* (ଦାଋ ପାର୍ହା ବାରହାସ), etc.

There are 330+ digitized font (both in True Type and Open Type) designed by Basudeo Ram Khalkho himself. Some fonts are listed in table 1 and ‘*Kurux Banna Tirkey*’ font used in this proposal.

3. Usage

The first school ‘*Parha Adivasi Bal Vikash Loorkuriya*’ was established in 1999 at Mudma, Jharkhand. There Kurukh language and Kurukh Banna are the medium of instruction. Another school ‘*Utkramit Prāthamik Vidhyālay Śaharberā*’ established in 2018-19 at Saharbera, Jharkhand [see fig.29]. The first school ‘*Addiyar’s Kurukh Loorkuriya*’ in Odisha opened in Kalma of Rayagada district [see fig.30]. Along with this, Kurukh Banna is being taught like Karanjia Primary School in many Government schools of Odisha. Many social institutions also run classes for adults such as: Kurukh Dara Parha, Addi Dharma Parha Manda and Raji Parha Sarna Prathna Sabha Bharat, Ranchi, etc. [see fig.33]

Kurukh Banna is currently used in writing and print for various purposes, as described below:

- **Educational Materials:** the first primer ‘*Kūṛux Bannā Lipi Arā Bakka Garhan Part-1*’ was published in 1991 by Basudeo Khalkho [see fig.10, 11, 12]. Another primer ‘*Kūṛux Lipi Ṭuranā Parhanā*’ was published in 1995 by the same author. These books are in handwritten form [see fig.13, 14, 15]. First digitized primer ‘*Kūṛux Lipi Ṭuranā-Bācanā*’ (ଚିଲିକା ଖଣ୍ଡିଆ ଉପାଦାନ-ଖଣ୍ଡିଆ) is written by Basudeo Khalkho in 2012 [see fig.1, 2]. One more primer ‘*Kūṛux Bannā Axaā*’ (ଚିଲିକା ଖଣ୍ଡିଆ ଉପାଦାନ) is compiled by Ramchandra Xalxo in 2018. [see fig.7, 8, 9]
- **Newspaper:** ‘*Pārḥā Rājī*’ (ଚିଲିକା ରାଜି) is a Kurukh weekly newspaper runs by *All India Kurukh Parha Yubak Sangh* used Kurukh Banna.[see fig.23]
- **Magazine:** first Kurukh magazine ‘*Kūṛux Bijo Binako*’ (ଚିଲିକା ବିଜୋ ବିନାକୋ) published in 2016 written in both Odia and Kurukh Banna script. Another magazine ‘*Kūṛux Cambī Ataxā*’ (ଚିଲିକା ଚମ୍ବି ଆତାଖା) published in 2018. [see fig.22(a), 22(b)]

- **Ethnological works:** one book ‘*Mukkā Sendrā*’ (ଘନିମା ଶ୍ରୀକେତା) was published in 2013 about historical background of Kurukh people. Karamdev Kujur’s ‘*Karmā-Vrat Gahī Mahimā*’ (କର୍ମା-ବ୍ରତ ଗହୀ ମହିମା/ତଥା-ପଥ୍ୟ ଗଣି ଯାହା) is a book based on Kurukh culture and folklore published in 2009. [see fig.24 (a)]
- **Literary works:** one prose ‘*Kūṛux Khīrī Arā Katthūṛ*’ (କୂରୁଖ ଖିରୀ ଅରା କାତ୍ତହୁର) published in 2017. [see fig.25]
- **Linguistic works:** a linguistic book ‘*Kūṛux (Orāō) Bhāṣā Śikṣaṇ Pustikā*’ (କୂରୁଖ (ଓରାଓ) ଭାଷା ଶିକ୍ଷଣ ପୁସ୍ତିକା) is published by Academy of Tribal Languages & Culture, government of Odisha in 2015. It is written in Odia script, compiled by Dhaneswar Kerketta and Ramchandra Khalkho.
- **Digital Resources:** An Android Application ‘*Kurukh Keyboard*’ is available in Google Playstore. [see fig.47]
- **Workshops:** Many workshops still conducting by the various Kurukh associations throughout the years in Odisha, in India and in other countries states also. [see fig.46]
- **Other usage:** People are using the Kurukh Banna in their rituals, walls, visiting card, invitation card, pamphlets, idol descriptions, posters, banner, book covers and sign boards. etc. [see fig.26, 28, 34, 35]

4. Writing System

4.1 Script Name

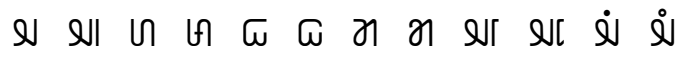
There are two main scripts for Kurukh: Kurukh Banna and Tolong Siki. Both the scripts are also known as Kurukh Lipi. But the original name of this script is *Kūṛux Bannā*. The word *Bannā* refers to the traditional signs that are used by the Kurukh community to decorate their homes and perform rituals. According to Basudeo Ram Khalkho, all the letters are made from the symbol called ‘*Ḍaṇḍā Kaṭṇā*’.

4.2 Structure

Kurukh Banna is an alpha syllabic writing system based on simplified Brahmi model. It is written from left to right. Consonants may have an inherent vowel; typically is pronounced /ə/, normally never occurs in final position. The script has conjunctions but *virama* also use to mute the inherent vowel. There is a font has a cursive form (ୱ, ୱି, ୱି, ୱି), some books call it a small casing letter. But this is nothing more than a glyphic variation. [see fig. 7]

4.3 Scripts

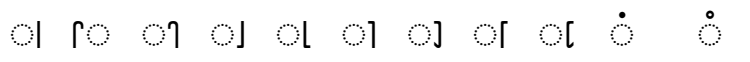
There are 12 vowel letters ‘*Sarah Tor*’ ଧରଣ ନିମ୍ନ:



 a ā i ī u ū e ai o au aṁ aṁ

- Letter 𑌒 *a* having vowel carrier property.

There are 11 vowel signs ‘*Sarah Cinhā*’ ଧରଣ ନିମ୍ନ:



 -ā -i -ī -u -ū -e -ai -o -au tippā candotippā

There are 39 consonants ‘*Harah Toṛ*’ ଉପରେ ନିମ୍ନ:

କ	ଖ	ଗ	ଘ	ଙ
ka	kha	ga	gha	ṅa
ଚ	ଛ	ଜ	ଝ	ଞ
ca	cha	ja	jha	ña
ଟ	ଠ	ଡ	ଢ	ଣ
ṭa	ṭha	ḍa	ḍha	ṇa
ତ	ଥ	ଦ	ଧ	ନ
ta	tha	da	dha	na
ପ	ଫ	ବ	ଭ	ମ
pa	pha	ba	bha	ma
ୟ	ର	ଲ	ୱ	ଷ
ya	ra	la	va	ṣa
ଶ	ସ	ହ	କ୍ଷ	ତ୍ର
ṣa	sa	ha	kṣa	tra
ଞ୍	ଠ୍	ଡ୍	ଢ୍	
jña	ṛa	ṛha	xa	

- Letters: ଣ *ṅa*, ଶ *ṣa*, ଷ *ṣa*, କ୍ଷ *kṣa*, ତ୍ର *tra*, ଞ୍ *jña* are for loanwords.
- Letters: କ୍ଷ *kṣa* (क्ष), ତ୍ର *tra* (त्र) and ଞ୍ *jña* (ज्ञ) are ligatures.

There are 05 various signs ‘*Cinhā*’ ିଂହାରୀ:

◌̄	◌̚	◌̣	◌̣̣	◌̣̣̣
selā	hecakā	halant	ghetalā	evā
Vowel length sign	Glottal stop	Virama	Syllable separator	Foreign sound sign

There are no script-specific signs of punctuation; conventional Latin signs are commonly used. [see fig.3]

.	;	,	-	?	:-	!
gahlā ṭurā	miclā	ucrī ṭurā	pacā	paīkā	posā	iṣgā
Full Stop	Semi Colon	Comma	Hyphen	Question Mark	Colon-Hyphen	Exclamation
‘ ’	“ ”	()	{ }	[]	/ \	
kaṭi ḍelā	laṭi ḍelā	kaṭi jalā	caṭi jalā	laṭi jalā	aṛā-naṛā	
Single Quotes	Double Quotes	Parenthese	Braces	Brackets	Slashes	

There is a full set of decimal digits ‘*Ganaṭī*’ ଗଣତୀ: [see fig.4]

୦	୧	୨	୩	୪	୫	୬	୭	୮	୯
nidī	ond	ēṛ	mūnd	nāx	pance	soy	say	ax	nay
0	1	2	3	4	5	6	7	8	9

4.4 Punctuation

There are no script-specific punctuation marks; full stop used by Kurukh Banna to end a sentence. Western-style punctuation is also used. Evidence shows the usage of comma, question mark, dashes, colon, semi-colon, quotation marks, double quotation marks, parenthesis, brackets, slashes, backslashes, percent sign and mathematical operators.[see fig. 19]

Figure 20 shows Devanagari-like *danda* and *double danda* uses instead of full stop, it is misuses by the writer himself.

Figure 24(a) & (b) shows the usage of an abbreviation sign used in Kurukh Banna text. While this orthographic tradition also comes from the Nagari family of scripts, historically in Unicode each script has its own dedicated abbreviation sign. Since disunifying the character later to ambiguous texts, the sign is proposed separately as U+1617F KURUKH BANNA ABBREVIATION SIGN. Figure 24 (a) shows 0 DIGIT ZERO uses as abbreviation sign, it is due to misprint.

Some evidence uses backslash in Kurukh Banna equivalent to Latin or Devanagari (e.g. as a date separator in Fig. 23).

4.5 Word Breaking

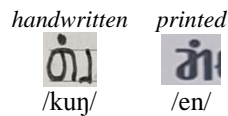
Words written in Kurukh Banna can be broken across lines. Evidence shows western-like hyphenation in such cases, see fig.19 & fig. 22 (b). No rules of where a word can be broken have been formalized. In some cases conjuncts split across the lines. It is different from the word breaking but it makes confusion among the non-Kurukh readers. [See fig. 22 (b)]

5. Orthography

5.1 Sign ◌̣ *tippā* is an ANUSVARA sign of this script. Its value are /-ŋ,-ɲ,-ŋ,-n,-m/. It sits only on top of the base letter.

ᱠᱤᱨ /mentʃ/, ᱚᱠᱟ /ʃenʃ/, ᱦᱚᱱᱚᱛ /pəŋʃ/, ᱦᱚᱱᱚᱛ /kəŋk/, ᱠᱚᱢᱚᱱᱚᱛ /dʒʱumməpə/

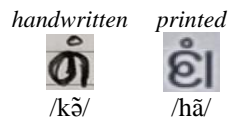
Evidences:



5.2 Sign ◌̣̣ *candoṭippā* is another nasalization mark /̣̣/ akin to Devanagari *anunāsika*. Its position is same like sign *tippā*.

ᱠᱚᱢᱚᱱᱚᱛ /əʃəna/, ᱠᱚᱢᱚᱱᱚᱛ /ʃə:p/, ᱠᱚᱢᱚᱱᱚᱛ /gūʃəxi/

Evidences:



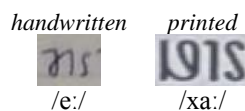
5.3 Sign ◌̣̣̣ *selā* is the prolongation /̣̣̣/ sign of this script. It comes after the vowels, consonants and vowel signs but comes before *tippā* and *candoṭippā* :

ᱠᱚᱱᱚᱛ /kə:/, ᱠᱚᱱᱚᱛ /ka:/, ᱠᱚᱱᱚᱛ /ki:/, ᱠᱚᱱᱚᱛ /kí:/, ᱠᱚᱱᱚᱛ /ku:/, ᱠᱚᱱᱚᱛ /kú:/, ᱠᱚᱱᱚᱛ /ke:/, ᱠᱚᱱᱚᱛ /kai:/, ᱠᱚᱱᱚᱛ /ko:/, ᱠᱚᱱᱚᱛ /kau:/,
 ᱠᱚᱱᱚᱛ /kə̣:/, ᱠᱚᱱᱚᱛ /kạ̄:/, ᱠᱚᱱᱚᱛ /kị̄:/, ᱠᱚᱱᱚᱛ /kị̃:/, ᱠᱚᱱᱚᱛ /kụ̄:/, ᱠᱚᱱᱚᱛ /kẹ̄:/, ᱠᱚᱱᱚᱛ /kaị̄:/, ᱠᱚᱱᱚᱛ /kọ̄:/, ᱠᱚᱱᱚᱛ /kaụ̄:/,
 ᱠᱚᱱᱚᱛ /kə:ŋ/, ᱠᱚᱱᱚᱛ /ka:ŋ/, ᱠᱚᱱᱚᱛ /ki:ŋ/, ᱠᱚᱱᱚᱛ /kí:ŋ/, ᱠᱚᱱᱚᱛ /ku:ŋ/, ᱠᱚᱱᱚᱛ /kú:ŋ/, ᱠᱚᱱᱚᱛ /ke:ŋ/, ᱠᱚᱱᱚᱛ /kai:ŋ/, ᱠᱚᱱᱚᱛ /ko:ŋ/, ᱠᱚᱱᱚᱛ /kau:ŋ/

Examples:

ᱠᱚᱱᱚᱛ /a:li/, ᱠᱚᱱᱚᱛ /e:ʃa/, ᱠᱚᱱᱚᱛ /xē:s/, ᱠᱚᱱᱚᱛ /bí:ŋʃi/

Evidences:

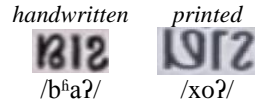


5.4 *hecakā* is the glottal stop /ʔ/ of this script. It comes after the vowels, consonants and signs:

ᱠᱚ /kaʔ/, ᱠᱚᱛᱚ /kaʔ/, ᱦᱚᱛᱚ /kiʔ/, ᱦᱚᱛᱚ /kíʔ/, ᱦᱚᱛᱚ /kuʔ/, ᱦᱚᱛᱚ /kúʔ/, ᱦᱚᱛᱚ /keʔ/, ᱦᱚᱛᱚ /kaiʔ/, ᱦᱚᱛᱚ /koʔ/, ᱦᱚᱛᱚ /kauʔ/, ᱠᱚᱸᱰ /kəʔ/, ᱠᱚᱸᱰ /kaʔ/, ᱦᱚᱸᱰ /kiʔ/, ᱦᱚᱸᱰ /kíʔ/, ᱦᱚᱸᱰ /kuʔ/, ᱦᱚᱸᱰ /kúʔ/, ᱦᱚᱸᱰ /keʔ/, ᱦᱚᱸᱰ /kaiʔ/, ᱦᱚᱸᱰ /koʔ/, ᱦᱚᱸᱰ /kauʔ/

Examples: ᱠᱚᱛᱚᱰ /neʔna/, ᱢᱚᱰᱚᱨᱚᱛᱚᱰ /ələkhtaʔna/, ᱪᱚᱛᱚᱰ /bəʔna/

Evidences:



5.5 Sign ◌-*halant* is a VIRAMA sign of this script. It is used to make ligature and conjunctions. It never comes with a letter, always brings two letters together and sits in the middle of them.(see fig. 9 and fig. 21)

Ligatures:

ᱠᱚᱸᱰ *kṣa* <ᱠ KA ◌-VIRAMA ᱠᱚᱸᱰ SSA>,
 ᱢᱚᱸᱰ *jña* <ᱢ JA ◌-VIRAMA ᱢᱚᱸᱰ NYA>,
 ᱦᱚᱸᱰ *tra* <ᱦ TA ◌-VIRAMA ᱦᱚᱸᱰ RA>

Conjunctions:

ᱠᱚᱛᱚᱰ *kka* <ᱠ KA ◌-VIRAMA ᱠ KA>,
 ᱢᱚᱛᱚᱰ *cca* <ᱢ CA ◌-VIRAMA ᱢ CA>,
 ᱦᱚᱛᱚᱰ *tta* <ᱦ TA ◌-VIRAMA ᱦ TA>

Evidences:



It looks like Hyphen but its function is different. Hyphen is separately used in orthography.

In Kurukh Banna orthography, consonants have an inherent vowel /ə/, normally never occurs in the final position of the word like Hindi; therefore ◌-VIRAMA never occurs in the final letter of the word.

ᱦᱚᱛᱚᱰ ᱠᱚᱛᱚᱰ /b^haraʔ/

5.6 Sign ◌' *ghetalā* is a syllable boundary within a word. It may be unified with APOSTROPHE U+0027. [see fig. 21]

ᱦᱚᱛᱚᱰ /pərdo/	ᱦᱚᱛᱚᱰ'ᱛᱚᱰ /pərd-o/,
ᱪᱚᱛᱚᱰ /bəṇna/	ᱪᱚᱛᱚᱰ'ᱛᱚᱰ /bəṇ-na/

5.7 Sign ◌̣ *evā* is a NUKTA sign of this script. It is used for writing sounds that are not presented by a unique character, such as specific sounds and sounds that occur in Hindi-Urdu loanwords. This sign shown as ◌̣ in Fig.3, due to printed issue.

Examples:

ᱠᱚᱰ *qa* <ᱠ KA ◌̣ NUKTA>,
 ᱢᱚᱰ *ya* <ᱢ GA ◌̣ NUKTA>,
 ᱢᱚᱰ *za* <ᱢ JA ◌̣ NUKTA>,
 ᱢᱚᱰ *fa* <ᱢ PHA ◌̣ NUKTA>

5.8 Letter ᱠ ᱚᱰ and ᱢ ᱚᱰ does not occur inherent vowel /ə/ in the non-initial position of the word. (see fig. 4)

ᱠᱚᱛᱚᱰ /naxᱠiʔ/ ᱢᱚᱛᱚᱰ /sojᱠiʔ/

6. Historical Forms

Kurukh Banna was revised in 1995 and 1998. Initially (in 1991) it did not have ञ NGA, ञ NYA, ञ NNA, ञ SSA, ञ XA and ञ CANDOTIPPA. Which were included in 1995. There was some change in the signs of 1991; the positions of ञ *virama* and ञ *anusvara* were different, see fig 11. An additional symbol was ञ: *visarga* which was removed in 1995. The appearance of many letters and signs has been changed. Digits also changed the shapes in 1998; see fig. 13 (old form). Below is a comparison of the present letters with the letters of 1991 and 1995:

	Current	1991	1995
A	𑂀	𑂀	𑂀
I	𑂁	𑂁	𑂁
II	𑂂	𑂂	𑂂
U	𑂃	𑂃	𑂃
UU	𑂄	𑂄	𑂄
E	𑂅	𑂅	𑂅
AI	𑂆	𑂆	𑂆

- Vowels : I, II U, UU were reshaped in 1998:

	Current	1991	1995
-AA	𑂇	𑂇	𑂇
-I	𑂈	𑂈	𑂈
-II	𑂉	𑂉	𑂉
-U	𑂊	𑂊	𑂊
-UU	𑂋	𑂋	𑂋
-E	𑂌	𑂌	𑂌
-AI	𑂍	𑂍	𑂍
-O	𑂎	𑂎	𑂎
-AU	𑂏	𑂏	𑂏
SELA	𑂐	𑂐	𑂐
ANUSVARA	𑂑	𑂑	𑂑
CANDOTIPPA	𑂒	-	𑂒
NUKTA	𑂓	-	-
VIRAMA	𑂔	𑂔	𑂔
VISARGA	-	𑂕:	𑂕:

- Vowel signs: -E, AI, -O, -AU and SELA were reshaped in 1995,
- ANUSVARA and VIRAMA were changed their position in 1998,
- CANDOTIPPA and VIRAMA were added in 1995 and 1998,
- *Visarga* was removed in 1998.

	<i>Current</i>	<i>1991</i>	<i>1995</i>
KA	୩	୩	୩
KHA	୧	୧	୧
GA	୨	୨	୨
GHA	୩	୩	୩
NGA	୪	-	୫
CA	୬	୬	୬
CHA	୭	୭	୭
JA	୧୧	୧୧	୧୧
JHA	୧୨	୧୨	୧୨
NYA	୧୩	-	୧୪
TTA	୧୫	୧୫	୧୫
TTHA	୧୬	୧୬	୧୬
DDA	୧୭	୧୭	୧୭
DDHA	୧୮	୧୯	୧୮
NNA	୨୦	-	୨୧
TA	୨୨	୨୩	୨୨
THA	୨୪	୨୪	୨୪
DA	୨୫	୨୫	୨୫
DHA	୨୬	୨୬	୨୬
NA	୨୭	୨୭	୨୭
PA	୨୮	୨୯	୨୮
PHA	୨୯	୩୦	୩୦
BA	୩୧	୩୧	୩୧
BHA	୩୨	୩୨	୩୨
MA	୩୩	୩୩	୩୩
YA	୩୪	୩୪	୩୪
RA	୩୫	୩୫	୩୫
LA	୩୬	୩୬	୩୬
VA	୩୭	୩୮	୩୮
SHA	୩୯	୩୯	୩୯
SSA	୪୦	-	୪୧
SA	୪୧	୪୨	୪୨
HA	୪୨	୪୨	୪୨
RRA	୪୩	୪୩	୪୩
RHA	୪୪	୪୫	୪୫
XA	୪୫	-	୪୬
HECHKA	୪୬	୪୭	୪୭

- Letter NGA, NYA, NNA, SSA and XA were added in 1995,
- Letter KA, GA, NGA, JA, JHA, NYA, DHA, NA, PHA, BHA, VA, SA, RHA and HECHKA were reshaped in 1998,
- Letter DDHA, TA, PA were reshaped in 1995.

7. Proposed Unicode Repertoire

The proposed Unicode repertoire for ‘Kurukh Banna’ contains of 69 characters: 7 vowels, 37 consonants, 9 vowel signs, 6 various signs and 10 digits.

7.1 Vowel

<i>Glyph</i>	<i>Unicode Character name</i>	<i>Dev</i>	<i>Odia</i>	<i>Ben</i>	<i>IPA</i>
𑂀	KURUKH BANNA LETTER A	अ	ଅ	অ	/ə/
𑂁	KURUKH BANNA LETTER I	इ	ଇ	ই	/i/
𑂂	KURUKH BANNA LETTER II	ई	ଈ	ঈ	/i/
𑂃	KURUKH BANNA LETTER U	उ	ଉ	অ	/u/
𑂄	KURUKH BANNA LETTER UU	ऊ	ଊ	ঊ	/ú/
𑂅	KURUKH BANNA LETTER E	ए	ଏ	এ	/e/
𑂆	KURUKH BANNA LETTER AI	ऐ	ଐ	ঐ	/ai/

7.2 Consonants

<i>Glyph</i>	<i>Unicode Character name</i>	<i>Dev</i>	<i>Odia</i>	<i>Ben</i>	<i>IPA</i>
𑂇	KURUKH BANNA LETTER KA	क	କ	ক	/kə/
𑂈	KURUKH BANNA LETTER KHA	ख	ଖ	খ	/k ^h ə/
𑂉	KURUKH BANNA LETTER GA	ग	ଗ	গ	/gə/
𑂊	KURUKH BANNA LETTER GHHA	घ	ଘ	ঘ	/g ^h ə/
𑂋	KURUKH BANNA LETTER NGA	ङ	ଙ	ঙ	/ŋə/
𑂌	KURUKH BANNA LETTER CA	च	ଚ	চ	/tʃə/
𑂍	KURUKH BANNA LETTER CHA	छ	ଛ	ছ	/tʃ ^h ə/
𑂎	KURUKH BANNA LETTER JA	ज	ଜ	জ	/dʒə/
𑂏	KURUKH BANNA LETTER JHA	झ	ଝ	ঝ	/dʒ ^h ə/
𑂐	KURUKH BANNA LETTER NYA	ञ	ଞ	ঞ	/ɲə/
𑂑	KURUKH BANNA LETTER TTA	ट	ଟ	ট	/t̪ə/
𑂒	KURUKH BANNA LETTER TTHA	ठ	ଠ	ঠ	/t̪ ^h ə/
𑂓	KURUKH BANNA LETTER DDA	ड	ଡ	ড	/d̪ə/
𑂔	KURUKH BANNA LETTER DDHA	ढ	ଢ	ঢ	/d̪ ^h ə/
𑂕	KURUKH BANNA LETTER NNA	ण	ଣ	ণ	/ɳə/
𑂖	KURUKH BANNA LETTER TA	त	ତ	ত	/t̪ə/
𑂗	KURUKH BANNA LETTER THA	थ	ଥ	থ	/t̪ ^h ə/
𑂘	KURUKH BANNA LETTER DA	द	ଦ	দ	/d̪ə/
𑂙	KURUKH BANNA LETTER DHA	ध	ଧ	ধ	/d̪ ^h ə/
𑂚	KURUKH BANNA LETTER NA	न	ନ	ন	/nə/

୩	KURUKH BANNA LETTER PA	ପ	ପ	ପ	/pə/
୩	KURUKH BANNA LETTER PHA	ଫ	ଫ	ଫ	/pʰə/
୩	KURUKH BANNA LETTER BA	ବ	ବ	ବ	/bə/
୩	KURUKH BANNA LETTER BHA	ଭ	ଭ	ଭ	/bʰə/
୩	KURUKH BANNA LETTER MA	ମ	ମ	ମ	/mə/
୩	KURUKH BANNA LETTER YA	ଯ	ୟ	ୟ	/jə/
୩	KURUKH BANNA LETTER RA	ର	ର	ର	/rə/
୩	KURUKH BANNA LETTER LA	ଲ	ଲ	ଲ	/lə/
୩	KURUKH BANNA LETTER VA	ବ	ବ	ବ	/wə/
୩	KURUKH BANNA LETTER SHA	ଶ	ଶ	ଶ	/ʃə/
୩	KURUKH BANNA LETTER SSA	ଷ	ଷ	ଷ	/ʂə/
୩	KURUKH BANNA LETTER SA	ସ	ସ	ସ	/sə/
୩	KURUKH BANNA LETTER HA	ହ	ହ	ହ	/hə/
୩	KURUKH BANNA LETTER RRA	ଢ	ଢ	ଢ	/ɽə/
୩	KURUKH BANNA LETTER RHA	ଢ	ଢ	ଢ	/ɽʰə/
୩	KURUKH BANNA LETTER XA	ଝ	ଝ	ଝ	/xə/
୩	KURUKH BANNA LETTER HECHKA	?	-	-	/ʔ/

7.3 Vowel Signs

Glyph	Unicode Character name	Dev	Odia	Ben	IPA
।	KURUKH BANNA VOWEL SIGN AA	ା	ା	ା	/-a/
ି	KURUKH BANNA VOWEL SIGN I	ି	ି	ି	/-i/
ୀ	KURUKH BANNA VOWEL SIGN II	ୀ	ୀ	ୀ	/-iː/
ୁ	KURUKH BANNA VOWEL SIGN U	ୁ	ୁ	ୁ	/-u/
ୂ	KURUKH BANNA VOWEL SIGN UU	ୂ	ୂ	ୂ	/-uː/
େ	KURUKH BANNA VOWEL SIGN E	େ	େ	େ	/-e/
ୈ	KURUKH BANNA VOWEL SIGN AI	ୈ	ୈ	ୈ	/-ai/
ୋ	KURUKH BANNA VOWEL SIGN O	ୋ	ୋ	ୋ	/-o/
ୌ	KURUKH BANNA VOWEL SIGN AU	ୌ	ୌ	ୌ	/-au/

7.4 Various Signs

Glyph	Unicode Character name	Dev	Odia	Ben	IPA
◌̣	KURUKH BANNA SIGN SELA	-	-	-	/ɔ:/
◌̣̣	KURUKH BANNA SIGN ANUSVARA	◌̣̣	◌̣̣	◌̣̣	/ŋ, ɲ, ŋ, n, m/
◌̣̣̣	KURUKH BANNA SIGN CANDOTIPPA	◌̣̣̣	◌̣̣̣	◌̣̣̣	/õ/
◌̣̣̣̣	KURUKH BANNA SIGN NUKTA	◌̣̣̣̣	◌̣̣̣̣	◌̣̣̣̣	-
◌̣̣̣̣̣	KURUKH BANNA SIGN VIRAMA	◌̣̣̣̣̣	◌̣̣̣̣̣	◌̣̣̣̣̣	-
◌̣̣̣̣̣̣	KURUKH BANNA ABBREVIATION SIGN	◌̣̣̣̣̣̣	-	◌̣̣̣̣̣̣	-

7.5 Digits

Glyph	Unicode Character name	Dev	Odia	Ben
୦	KURUKH BANNA DIGIT ZERO	୦	୦	୦
୧	KURUKH BANNA DIGIT ONE	୧	୧	୧
୨	KURUKH BANNA DIGIT TWO	୨	୨	୨
୩	KURUKH BANNA DIGIT THREE	୩	୩	୩
୪	KURUKH BANNA DIGIT FOUR	୪	୪	୪
୫	KURUKH BANNA DIGIT FIVE	୫	୫	୫
୬	KURUKH BANNA DIGIT SIX	୬	୬	୬
୭	KURUKH BANNA DIGIT SEVEN	୭	୭	୭
୮	KURUKH BANNA DIGIT EIGHT	୮	୮	୮
୯	KURUKH BANNA DIGIT NINE	୯	୯	୯

8 Collation

The collation order is as follows:

< ଯ A < ଳ I < ଳ II < ଳ U < ଳ UU < ଳ E < ଳ AI < ଳ KA < ଳ KHA < ଳ GA < ଳ GHA < ଳ NGA < ଳ CA < ଳ CHA < ଳ JA < ଳ JHA < ଳ NYA < ଳ TTA < ଳ TTHA < ଳ DDA < ଳ DDHA < ଳ NNA < ଳ TA < ଳ THA < ଳ DA < ଳ DHA < ଳ NA < ଳ PA < ଳ PHA < ଳ BA < ଳ BHA < ଳ MA < ଳ YA < ଳ RA < ଳ LA < ଳ VA < ଳ SHA < ଳ SSA < ଳ SA < ଳ HA < ଳ RRA < ଳ RHA < ଳ XA < ଳ HECHKA < ଳ SIGN AA < ଳ SIGN I < ଳ SIGN II < ଳ SIGN U < ଳ SIGN UU < ଳ SIGN E < ଳ SIGN AI < ଳ SIGN O < ଳ SIGN AU < ଳ SIGN SELA < ଳ SIGN ANUSVARA < ଳ SIGN CANDOTIPPA < ଳ SIGN NUKTA < ଳ SIGN VIRAMA < ଳ ABBREVIATION SIGN < ୦ DIGIT ZERO < ୧ DIGIT ONE < ୨ DIGIT TWO < ୩ DIGIT THREE < ୪ DIGIT FOUR < ୫ DIGIT FIVE < ୬ DIGIT SIX < ୭ DIGIT SEVEN < ୮ DIGIT EIGHT < ୯ DIGIT NINE

9 Acknowledgements

I would like to thank those people who helped me a lot in making this proposal a success.

- Basudeo Ram Khalkho
- Shyam Murmu
- Mangla Xalxo
- Ramchandra Xalxo
- Roshan Toppo
- Sankar Oraon Tirkey
- Prof. Anup Kumar Kujur

10 Character Data

10.1 Character Properties

In the format of UnicodeData.txt:

```
16140;KURUKH BANNA LETTER A;Lo;0;L;;;;N;;;;;
16141;KURUKH BANNA LETTER I;Lo;0;L;;;;N;;;;;
16142;KURUKH BANNA LETTER II;Lo;0;L;;;;N;;;;;
16143;KURUKH BANNA LETTER U;Lo;0;L;;;;N;;;;;
16144;KURUKH BANNA LETTER UU;Lo;0;L;;;;N;;;;;
16145;KURUKH BANNA LETTER E;Lo;0;L;;;;N;;;;;
16146;KURUKH BANNA LETTER AI;Lo;0;L;;;;N;;;;;
16147;KURUKH BANNA LETTER KA;Lo;0;L;;;;N;;;;;
16148;KURUKH BANNA LETTER KHA;Lo;0;L;;;;N;;;;;
16149;KURUKH BANNA LETTER GA;Lo;0;L;;;;N;;;;;
1614A;KURUKH BANNA LETTER GHA;Lo;0;L;;;;N;;;;;
1614B;KURUKH BANNA LETTER NGA;Lo;0;L;;;;N;;;;;
1614C;KURUKH BANNA LETTER CA;Lo;0;L;;;;N;;;;;
1614D;KURUKH BANNA LETTER CHA;Lo;0;L;;;;N;;;;;
1614E;KURUKH BANNA LETTER JA;Lo;0;L;;;;N;;;;;
1614F;KURUKH BANNA LETTER JHA;Lo;0;L;;;;N;;;;;
16150;KURUKH BANNA LETTER NYA;Lo;0;L;;;;N;;;;;
16151;KURUKH BANNA LETTER TTA;Lo;0;L;;;;N;;;;;
16152;KURUKH BANNA LETTER TTHA;Lo;0;L;;;;N;;;;;
16153;KURUKH BANNA LETTER DDA;Lo;0;L;;;;N;;;;;
16154;KURUKH BANNA LETTER DDHA;Lo;0;L;;;;N;;;;;
16155;KURUKH BANNA LETTER NNA;Lo;0;L;;;;N;;;;;
16156;KURUKH BANNA LETTER TA;Lo;0;L;;;;N;;;;;
16157;KURUKH BANNA LETTER THA;Lo;0;L;;;;N;;;;;
16158;KURUKH BANNA LETTER DA;Lo;0;L;;;;N;;;;;
16159;KURUKH BANNA LETTER DHA;Lo;0;L;;;;N;;;;;
1615A;KURUKH BANNA LETTER NA;Lo;0;L;;;;N;;;;;
1615B;KURUKH BANNA LETTER PA;Lo;0;L;;;;N;;;;;
1615C;KURUKH BANNA LETTER PHA;Lo;0;L;;;;N;;;;;
1615D;KURUKH BANNA LETTER BA;Lo;0;L;;;;N;;;;;
1615E;KURUKH BANNA LETTER BHA;Lo;0;L;;;;N;;;;;
1615F;KURUKH BANNA LETTER MA;Lo;0;L;;;;N;;;;;
16160;KURUKH BANNA LETTER YA;Lo;0;L;;;;N;;;;;
16161;KURUKH BANNA LETTER RA;Lo;0;L;;;;N;;;;;
16162;KURUKH BANNA LETTER LA;Lo;0;L;;;;N;;;;;
16163;KURUKH BANNA LETTER VA;Lo;0;L;;;;N;;;;;
16164;KURUKH BANNA LETTER SHA;Lo;0;L;;;;N;;;;;
16165;KURUKH BANNA LETTER SSA;Lo;0;L;;;;N;;;;;
16166;KURUKH BANNA LETTER SA;Lo;0;L;;;;N;;;;;
16167;KURUKH BANNA LETTER HA;Lo;0;L;;;;N;;;;;
16168;KURUKH BANNA LETTER RRA;Lo;0;L;;;;N;;;;;
16169;KURUKH BANNA LETTER RHA;Lo;0;L;;;;N;;;;;
1616A;KURUKH BANNA LETTER XA;Lo;0;L;;;;N;;;;;
1616B;KURUKH BANNA LETTER HECHKA;Lo;0;L;;;;N;;;;;
1616C;KURUKH BANNA VOWEL SIGN AA;Mc;0;L;;;;N;;;;;
1616D;KURUKH BANNA VOWEL SIGN I;Mc;0;L;;;;N;;;;;
1616E;KURUKH BANNA VOWEL SIGN II;Mc;0;L;;;;N;;;;;
1616F;KURUKH BANNA VOWEL SIGN U;Mc;0;L;;;;N;;;;;
16170;KURUKH BANNA VOWEL SIGN UU;Mc;0;L;;;;N;;;;;
16171;KURUKH BANNA VOWEL SIGN E;Mc;0;L;;;;N;;;;;
16172;KURUKH BANNA VOWEL SIGN AI;Mc;0;L;;;;N;;;;;
16173;KURUKH BANNA VOWEL SIGN O;Mc;0;L;;;;N;;;;;
16174;KURUKH BANNA VOWEL SIGN AU;Mc;0;L;;;;N;;;;;
16175;KURUKH BANNA SIGN SELA;Mc;0;NSM;;;;N;;;;;
16176;KURUKH BANNA SIGN ANUSVARA;Mn;0;NSM;;;;N;;;;;
```

16177;KURUKH BANNA SIGN CANDOTIPPA;Mn;0;NSM; ; ; ; ;N; ; ; ; ;
 16178;KURUKH BANNA SIGN NUKTA;Mn;7;NSM; ; ; ; ;N; ; ; ; ;
 16179;KURUKH BANNA SIGN VIRAMA;Mn;9;NSM; ; ; ; ;N; ; ; ; ;
 1617F;KURUKH BANNA ABBREVIATION SIGN;Po;0;L; ; ; ; ;N; ; ; ; ;
 16180;KURUKH BANNA DIGIT ZERO;Nd;0;L; ; ; ; ;0; ; ; ; ;N; ; ; ; ;
 16181;KURUKH BANNA DIGIT ONE;Nd;0;L; ; ; ; ;1; ; ; ; ;N; ; ; ; ;
 16182;KURUKH BANNA DIGIT TWO;Nd;0;L; ; ; ; ;2; ; ; ; ;N; ; ; ; ;
 16183;KURUKH BANNA DIGIT THREE;Nd;0;L; ; ; ; ;3; ; ; ; ;N; ; ; ; ;
 16184;KURUKH BANNA DIGIT FOUR;Nd;0;L; ; ; ; ;4; ; ; ; ;N; ; ; ; ;
 16185;KURUKH BANNA DIGIT FIVE;Nd;0;L; ; ; ; ;5; ; ; ; ;N; ; ; ; ;
 16186;KURUKH BANNA DIGIT SIX;Nd;0;L; ; ; ; ;6; ; ; ; ;N; ; ; ; ;
 16187;KURUKH BANNA DIGIT SEVEN;Nd;0;L; ; ; ; ;7; ; ; ; ;N; ; ; ; ;
 16188;KURUKH BANNA DIGIT EIGHT;Nd;0;L; ; ; ; ;8; ; ; ; ;N; ; ; ; ;
 16189;KURUKH BANNA DIGIT NINE;Nd;0;L; ; ; ; ;9; ; ; ; ;N; ; ; ; ;

10.2 Linebreaking

In the format of LineBreak.txt:

16140..1616B ; AL # [44] KURUKH BANNA LETTER A .. KURUKH BANNA LETTER HECHKA
 1616C..16174 ; CM # [09] KURUKH BANNA VOWEL SIGN AA .. KURUKH BANNA VOWEL SIGN AU
 16175..16179 ; CM # [05] KURUKH BANNA SIGN SELA .. KURUKH BANNA SIGN VIRAMA
 1617F ; AL # [01] KURUKH BANNA ABBREVIATION SIGN
 16180..16189 ; NU # [10] KURUKH BANNA DIGIT ZERO .. KURUKH BANNA DIGIT NINE

10.3 Syllabic Categories

In the format of IndicSyllabicCategory.txt:

Indic_Syllabic_Category=Bindu
 16176..16177 ; Bindu # Mc [02] KURUKH BANNA SIGN ANUSVARA .. KURUKH BANNA SIGN CANDOTIPPA
 # Indic_Syllabic_Category=Nukta
 16178 ; Nukta # Mn KURUKH BANNA SIGN NUKTA
 # Indic_Syllabic_Category=Virama
 16179 ; Virama # Mn KURUKH BANNA SIGN VIRAMA
 # Indic_Syllabic_Category=Vowel_Independent
 16140..16146 ; Vowel_Independent # Lo [07] KURUKH BANNA LETTER A .. KURUKH BANNA LETTER AI
 # Indic_Syllabic_Category=Vowel_Dependent
 1616C..16175 ; Vowel_Dependent # Mc [10] KURUKH BANNA VOWEL SIGN AA .. KURUKH BANNA SIGN SELA
 # Indic_Syllabic_Category=Consonant
 16147..1616B ; Consonant # Lo [37] KURUKH BANNA LETTER KA .. KURUKH BANNA LETTER HECHKA
 # Indic_Syllabic_Category=Number
 16180..16189 ; Number # Nd [10] KURUKH BANNA DIGIT ZERO .. KURUKH BANNA DIGIT NINE

10.4 Positional Categories

In the format of IndicPositionalCategory.txt:

Indic_Positional_Category=Right
 1616C ; Right # Mc KURUKH BANNA VOWEL SIGN AA
 1616E..16174 ; Right # Mc [07] KURUKH BANNA VOWEL SIGN II .. KURUKH BANNA VOWEL SIGN AU
 16175 ; Right # Mc KURUKH BANNA SIGN SELA
 16179 ; Right # Mn KURUKH BANNA SIGN VIRAMA
 # Indic_Positional_Category=Left
 1616D ; Left # Mc KURUKH BANNA VOWEL SIGN I
 # Indic_Positional_Category=Top
 16176..16177 ; Top # Mn [02] KURUKH BANNA SIGN ANUSVARA .. KURUKH BANNA SIGN CANDOTIPPA
 # Indic_Positional_Category=Bottom
 16178 ; Bottom # Mn KURUKH BANNA SIGN NUKTA

	1614	1615	1616	1617	1618
0	𑂔 16140	𑂕 16150	𑂖 16160	𑂗 16170	𑂘 16180
1	𑂙 16141	𑂚 16151	𑂛 16161	𑂜 16171	𑂝 16181
2	𑂞 16142	𑂟 16152	𑂠 16162	𑂡 16172	𑂢 16182
3	𑂣 16143	𑂤 16153	𑂥 16163	𑂦 16173	𑂧 16183
4	𑂨 16144	𑂩 16154	𑂪 16164	𑂫 16174	𑂬 16184
5	𑂭 16145	𑂮 16155	𑂯 16165	𑂰 16175	𑂱 16185
6	𑂲 16146	𑂳 16156	𑂴 16166	𑂵 16176	𑂶 16186
7	𑂷 16147	𑂸 16157	𑂹 16167	𑂺 16177	𑂻 16187
8	𑂼 16148	𑂽 16158	𑂾 16168	𑂿 16178	𑃀 16188
9	𑃁 16149	𑃂 16159	𑃃 16169	𑃄 16179	𑃅 16189
A	𑃆 1614A	𑃇 1615A	𑃈 1616A		
B	𑃉 1614B	𑃊 1615B	𑃋 1616B		
C	𑃌 1614C	𑃍 1615C	𑃎 1616C		
D	𑃏 1614D	𑃐 1615D	𑃑 1616D		
E	𑃒 1614E	𑃓 1615E	𑃔 1616E		
F	𑃕 1614F	𑃖 1615F	𑃗 1616F	𑃘 1618F	

Independent Vowels

16140	ᱠ	KURUKH BANNA LETTER A	<ul style="list-style-type: none">• Also used as a vowel carrier
16141	ᱡ	KURUKH BANNA LETTER I	
16142	ᱢ	KURUKH BANNA LETTER II	
16143	ᱣ	KURUKH BANNA LETTER U	
16144	ᱤ	KURUKH BANNA LETTER UU	
16145	ᱥ	KURUKH BANNA LETTER E	
16146	ᱦ	KURUKH BANNA LETTER AI	

Consonants

16147	ᱧ	KURUKH BANNA LETTER KA	
16148	ᱨ	KURUKH BANNA LETTER KHA	
16149	ᱩ	KURUKH BANNA LETTER GA	
1614A	ᱪ	KURUKH BANNA LETTER GHA	
1614B	ᱫ	KURUKH BANNA LETTER NGA	
1614C	ᱬ	KURUKH BANNA LETTER CA	
1614D	ᱭ	KURUKH BANNA LETTER CHA	
1614E	ᱮ	KURUKH BANNA LETTER JA	
1614F	ᱯ	KURUKH BANNA LETTER JHA	
16150	ᱰ	KURUKH BANNA LETTER NYA	
16151	ᱱ	KURUKH BANNA LETTER TTA	
16152	ᱲ	KURUKH BANNA LETTER TTHA	
16153	ᱳ	KURUKH BANNA LETTER DDA	
16154	ᱴ	KURUKH BANNA LETTER DDHA	
16155	ᱵ	KURUKH BANNA LETTER NNA	
16156	ᱶ	KURUKH BANNA LETTER TA	
16157	ᱷ	KURUKH BANNA LETTER THA	
16158	ᱸ	KURUKH BANNA LETTER DA	
16159	ᱹ	KURUKH BANNA LETTER DHA	
1615A	ᱺ	KURUKH BANNA LETTER NA	
1615B	ᱻ	KURUKH BANNA LETTER PA	
1615C	ᱼ	KURUKH BANNA LETTER PHA	
1615D	ᱽ	KURUKH BANNA LETTER BA	
1615E	᱾	KURUKH BANNA LETTER BHA	
1615F	᱿	KURUKH BANNA LETTER MA	
16160	᱀	KURUKH BANNA LETTER YA	
16161	᱁	KURUKH BANNA LETTER RA	
16162	᱂	KURUKH BANNA LETTER LA	
16163	᱃	KURUKH BANNA LETTER VA	
16164	᱄	KURUKH BANNA LETTER SHA	
16165	᱅	KURUKH BANNA LETTER SSA	
16166	᱆	KURUKH BANNA LETTER SA	
16167	᱇	KURUKH BANNA LETTER HA	
16168	᱈	KURUKH BANNA LETTER RRA	
16169	᱉	KURUKH BANNA LETTER RHA	
1616A	᱊	KURUKH BANNA LETTER XA	
1616B	᱋	KURUKH BANNA LETTER HECHKA	<ul style="list-style-type: none">• Glottal Stop

Dependent Vowel Signs

1616C	◌	KURUKH BANNA VOWEL SIGN AA
1616D	◌◌	KURUKH BANNA VOWEL SIGN I
1616E	◌	KURUKH BANNA VOWEL SIGN II
1616F	◌	KURUKH BANNA VOWEL SIGN U
16170	◌L	KURUKH BANNA VOWEL SIGN UU
16171	◌	KURUKH BANNA VOWEL SIGN E
16172	◌	KURUKH BANNA VOWEL SIGN AI
16173	◌	KURUKH BANNA VOWEL SIGN O
16174	◌	KURUKH BANNA VOWEL SIGN AU

Various Signs

16175	◌S	KURUKH BANNA SIGN SELA
16176	◌◌	KURUKH BANNA SIGN ANUSVARA
16177	◌◌	KURUKH BANNA SIGN CANDOTIPPA
16178	◌◌	KURUKH BANNA SIGN NUKTA
16179	◌-	KURUKH BANNA SIGN VIRAMA

Additional Sign

1617F	◌◌	KURUKH BANNA ABBREVIATION SIGN
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Digits

16180	0	KURUKH BANNA DIGIT ZERO
16181	1	KURUKH BANNA DIGIT ONE
16182	2	KURUKH BANNA DIGIT TWO
16183	3	KURUKH BANNA DIGIT THREE
16184	4	KURUKH BANNA DIGIT FOUR
16185	5	KURUKH BANNA DIGIT FIVE
16186	6	KURUKH BANNA DIGIT SIX
16187	7	KURUKH BANNA DIGIT SEVEN
16188	8	KURUKH BANNA DIGIT EIGHT
16189	9	KURUKH BANNA DIGIT NINE

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(a)	(b)	(c)	(d)	(e)	(f)	(g)							
ଅ	ଧ	ଉ	ଋ	ୟ	ଋ	ୟ	(a)	(b)	(c)	(d)	(e)	(f)	(g)
୩	୩	୭	୩	୩	୩	୩	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୩	୩	୭	୩	୩	୩	୩	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ଘ	ଘ	ଘ	ଘ	ଘ	ଘ	ଘ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ଘ	ଘ	ଘ	ଘ	ଘ	ଘ	ଘ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ଝ	ଝ	ଞ	ଞ	ଞ	ଞ	ଞ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ଞ	ଞ	ଞ	ଞ	ଞ	ଞ	ଞ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ଟ	ଟ	ଟ	ଟ	ଟ	ଟ	ଟ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ଠ	ଠ	ଠ	ଠ	ଠ	ଠ	ଠ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ଡ	ଡ	ଡ	ଡ	ଡ	ଡ	ଡ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ଢ	ଢ	ଢ	ଢ	ଢ	ଢ	ଢ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ଣ	ଣ	ଣ	ଣ	ଣ	ଣ	ଣ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ତ	ତ	ତ	ତ	ତ	ତ	ତ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ଥ	ଥ	ଥ	ଥ	ଥ	ଥ	ଥ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ଦ	ଦ	ଦ	ଦ	ଦ	ଦ	ଦ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ଧ	ଧ	ଧ	ଧ	ଧ	ଧ	ଧ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ନ	ନ	ନ	ନ	ନ	ନ	ନ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ପ	ପ	ପ	ପ	ପ	ପ	ପ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ଫ	ଫ	ଫ	ଫ	ଫ	ଫ	ଫ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ଓ	ଓ	ଓ	ଓ	ଓ	ଓ	ଓ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ଓ	ଓ	ଓ	ଓ	ଓ	ଓ	ଓ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ଌ	ଌ	ଌ	ଌ	ଌ	ଌ	ଌ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ୠ	ୠ	ୠ	ୠ	ୠ	ୠ	ୠ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ୡ	ୡ	ୡ	ୡ	ୡ	ୡ	ୡ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ୢ	ୢ	ୢ	ୢ	ୢ	ୢ	ୢ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
ୣ	ୣ	ୣ	ୣ	ୣ	ୣ	ୣ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୤	୤	୤	୤	୤	୤	୤	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୥	୥	୥	୥	୥	୥	୥	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୦	୦	୦	୦	୦	୦	୦	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୧	୧	୧	୧	୧	୧	୧	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୨	୨	୨	୨	୨	୨	୨	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୩	୩	୩	୩	୩	୩	୩	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୪	୪	୪	୪	୪	୪	୪	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୫	୫	୫	୫	୫	୫	୫	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୬	୬	୬	୬	୬	୬	୬	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୭	୭	୭	୭	୭	୭	୭	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୮	୮	୮	୮	୮	୮	୮	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୯	୯	୯	୯	୯	୯	୯	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୧୦	୧୦	୧୦	୧୦	୧୦	୧୦	୧୦	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୧୧	୧୧	୧୧	୧୧	୧୧	୧୧	୧୧	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୧୨	୧୨	୧୨	୧୨	୧୨	୧୨	୧୨	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୧୩	୧୩	୧୩	୧୩	୧୩	୧୩	୧୩	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୧୪	୧୪	୧୪	୧୪	୧୪	୧୪	୧୪	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୧୫	୧୫	୧୫	୧୫	୧୫	୧୫	୧୫	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୧୬	୧୬	୧୬	୧୬	୧୬	୧୬	୧୬	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୧୭	୧୭	୧୭	୧୭	୧୭	୧୭	୧୭	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୧୮	୧୮	୧୮	୧୮	୧୮	୧୮	୧୮	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୧୯	୧୯	୧୯	୧୯	୧୯	୧୯	୧୯	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ
୨୦	୨୦	୨୦	୨୦	୨୦	୨୦	୨୦	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ	ଃ

Table 1: Side-by-side comparison of some commonly used fonts of Kurukh Banna out of 330+ fonts. Columns: (a) KuruxBanna Tirkey, (b) KuruxBanna Kujur Coursive, (c) KURUKH BANNA MINJ, (d) KURUKH BANNA KOKO, (e) KURUKH BANNA BAGHWAR, (f) KURUKH BANNA BANDO and (g) KuruxBanna Xalxo.

New Primers:

Kūrux Lipi Ṭurnā Bācnā (2012):

कुरुख बना दूडना बाचना

कुरुख बना दूडना बाचना KURUX BANNA (SIKI/LIPI)

सरह तोड़ (Vowels)

अ	आ	इ	ई	उ	ऊ	ए	ऐ	ओ	औ	अं	अँ
a	aa	i	ee	u	oo	e	ay	o	aw	an	an
										°	°
§											§

§ (सेला) - लम्बी ध्वनि (Long Phonetic Symbol) § (हेचका) - विकारी 'अ' (Glotal Stop)

हरह तोड़ (Consonant)

क	ख	ग	घ	ङ	०	=	०	=	0
ka	kha	ga	gha	nga	१	=	१	=	1
च	छ	ज	झ	ञ	२	=	२	=	2
cha	chha	ja	jha	nja	३	=	३	=	3
ट	ठ	ड	ढ	ण	४	=	४	=	4
Ta	Tha	Da	Dha	Na	५	=	५	=	5
त	थ	द	ध	न	६	=	६	=	6
ta	tha	da	dha	na	७	=	७	=	7
प	फ	ब	भ	म	८	=	८	=	8
pa	pha	ba	bha	ma	९	=	९	=	9
य	र	ल	व	श	१०	=	१०	=	10
ya	ra	la	wa	sha					
ष	स	ह	क्ष	त्र					
Sha	sa	ha	kSha	tra					
घ्न	र	ध	ख						
gnya	Ra	Dhha	X						

मंगखय कुरुख भक्खा एउन्दा दौले र्दौरे ! मेरा भारत महान.
ENGHAY KURUX BHAKHA EUNDA DAWLE RAE ! MERA BHARAT MAHAN.

Fig 1: Kurukh Banna script table with Latin translation. (Khalkho, 7: 2012)

'ଋ' ଗଣା ଗଣ୍ୟା 'ଅଁ' ଗଣି ଚାଲୋ 'ଅ' ଗହା ଚାଲେ 'ଅଃ' ଗଣି ଚାଲୋ

ଢ଼ଠା	ଓକ	= (ଧାନ ଭୂସା)	ଊକ	ଊକ	UNKU
ଢ଼ିଠା	ଢ଼ିକି	= (ଢ଼ିକି)	ଢ଼ିକି	ଢ଼ିକି	DHINKI
ଢ଼ିଠା	ଚୌଖନା	= (ଚୁମନା)	ଚୌଖନା	ଚୌଖନା	CHONKHNA
ଢ଼ିଠା	କଙ୍କ	= (ଲକଡ଼ି)	କଙ୍କ	କଙ୍କ	KANK
ଢ଼ିଠା	ପଞ୍ଜକା	= (ପକାହୁଆ)	ପଞ୍ଜକା	ପଞ୍ଜକା	PANJJKA

'ଋ' ଗଣା ଗଣ୍ୟା 'ଅଁ' ଗଣି ଚାଲୋ 'ଅଁ' ଗହା ଚାଲେ 'ଅଁ' ଗଣି ଚାଲୋ

ଢ଼ିଠା	ଓଂଗୁଡ଼	= (ପଲଭର)	ଓଂଗୁଡ଼	ଓଂଗୁଡ଼	UNGUR
ଢ଼ିଠା	ରାଂଚି	= (ରାଂଚି)	ରାଂଚି	ରାଂଚି	RACHI
ଢ଼ିଠା	କୁଂଡୁଖ	= (ଓରାଂବ)	କୁଂଡୁଖ	କୁଂଡୁଖ	KUNRUX
ଢ଼ିଠା	ଚିଂହୁଟ	= (କୋଶିସ)	ଚିଂହୁଟ	ଚିଂହୁଟ	CHIHUNT
ଢ଼ିଠା	ଚାଂଡ଼େ	= (ଜଲ୍ଦି)	ଚାଂଡ଼େ	ଚାଂଡ଼େ	CHANRE

'ଠ' (କାଠ) ଗଣା ଗଣ୍ୟା 'ଠ' ଗଣି ଚାଲୋ 'ଠ' ଗହା ଚାଲେ 'ଠ' ଗଣି ଚାଲୋ

ଠାଠା	ଖେଠା	= (ଦିନା)	ଖେଠା	ଖେଠା	KHESTA
ଠାଠା	ଓଠା	= (ଚିଢ଼ିଆ)	ଓଠା	ଓଠା	OSRA
ଠାଠା	ମୋଠା	= (ପୁଢ଼ା)	ମୋଠା	ମୋଠା	MOSRA
ଠାଠା	କୀଠା	= (ଭୂଖ)	କୀଠା	କୀଠା	KEESRA

'ଠ' (କାଠ) ଗଣା ଗଣ୍ୟା 'ଅଠ' ଗଣି ଚାଲୋ 'ଅଠ' ଗହା ଚାଲେ 'ଅଠ' ଗଣି ଚାଲୋ

ଠାଠା	ବାଠା	= (ବିଲନା)	ବାଠା	ବାଠା	BAZNA
ଠାଠା	ଖେଠା	= (ମରନା)	ଖେଠା	ଖେଠା	KHEZNA
ଠାଠା	ହେଠା	= (ବାଘନା)	ହେଠା	ହେଠା	HEZNA
ଠାଠା	ହୋଠା	= (ଲେଜାନା)	ହୋଠା	ହୋଠା	HOZNA

Fig 2: It shows the usage of Anusvara, Candotippa, Sela and hechka. (Khalkho, 37:2012)

सूचक चिन्ह- (Punctuation Marks)

चिन्ह	कुँडुख	हिन्दी	ଓଡ଼ିଆ	अंग्रेजी
ऌ	- सेला	- लम्बी ध्वनि	- ଲମ୍ବା ଧ୍ୱନି	- (Long Phone)
ᳵ	- हेचका	- विकारी 'अ'	- ବିକାରୀ 'ଅ'	- (Glotal Stop)
◌̣	- चन्दोटिप्पा	- चन्द्र विन्दु	- ଚନ୍ଦ୍ର ବିନ୍ଦୁ	- (Nasal Vowel Index)
◌̇	- टिप्पा	- नासिक्य स्वर सूचक	- ନାସିକ୍ୟ ସ୍ୱର ସୂଚକ	- (Nasal Vowel Index)
◌̆	- घेतला	- शब्द खण्ड सूचक	- ଶବ୍ଦ ଖଣ୍ଡ ସୂଚକ	- (Syllable Index)
-	- पचा	- संयोजक चिन्ह	- ସଂଯୋଜକ ଚିହ୍ନ	- (Hyphen)
;	- मिचला	- सेमीकॉलन	- ସେମିକୋଲନ	- (Semi Colon)
,	- उचरी टुड़ा	- अर्द्ध विराम	- ଅର୍ଦ୍ଧ ବିରାମ	- (Comma)
.	- गहला टुड़ा	- पूर्ण विराम	- ପୂର୍ଣ୍ଣ ବିରାମ	- (Full Stop)
?	- पईका	- प्रश्न चिन्ह	- ପ୍ରଶ୍ନ ଚିହ୍ନ	- (Question Mark)
!	- इसगा	- विस्मय सूचक चिन्ह	- ବିସ୍ମୟ ସୂଚକ ଚିହ୍ନ	- (Exclamation)
'	- कटि डेला	- लघु उद्धरण चिन्ह	- ଲଘୁ ଉଦ୍ଧୃତ ଚିହ୍ନ	- (Single Quotes)
“”	- लटि डेला	- दीर्घ उद्धरण चिन्ह	- ଦୀର୍ଘ ଉଦ୍ଧୃତ ଚିହ୍ନ	- (Double Quotes)
()	- कटि जला	- छोटा कोष्ठ	- ଚୋଟା ବନ୍ଧନୀ	- (Small Bracket)
{ }	- चटि जला	- मझला कोष्ठ	- ମଞ୍ଜଳା ବନ୍ଧନୀ	- (Middle Bracket)
[]	- लटि जला	- बड़ा कोष्ठ	- ବଡ଼ା ବନ୍ଧନୀ	- (Large Bracket)
◌̣	- एवाँ	- विदेशज ध्वनि सूचक	- ବିଦେଶଜ ଧ୍ୱନି ସୂଚକ	- (Foreign sound indicator)

गणितिक चिन्ह - (Mathematical symbol)

+	- जोड़	- जोड़ चिन्ह	- ଯୋଗ ଚିହ୍ନ	- (Addition)
-	- घटाव	- घटाव चिन्ह	- ବିଯୋଗ ଚିହ୍ନ	- (Substraction)
x	- गुणा	- गुणा चिन्ह	- ଗୁଣନ ଚିହ୍ନ	- (Multiplication)
÷	- भाग	- भाग चिन्ह	- ବିଭକ୍ତ ଚିହ୍ନ	- (Division)
=	- बराबरी	- बराबर चिन्ह	- ସମାନ ଚିହ୍ନ	- (Equator)

Fig 3: list of punctuation marks used in Kurukh Banna script. (Khalkho, 21:2012)

୦୧୧୨ ୨୦୦୩ କୁଁଡୁଖ୍ ଗନତୀ କୁଁଡୁଖ୍ ଗନତୀ କୁଁଡୁଖ୍ ଗନତୀ

Digital

୧	୧	୧୧	୧୨	୧୩	୧୪	୧୫	୧୬	୧୭	୧୮	୧୯
୨	୧୨	୧୩	୧୪	୧୫	୧୬	୧୭	୧୮	୧୯	୨୦	୨୧
୩	୧୩	୧୪	୧୫	୧୬	୧୭	୧୮	୧୯	୨୦	୨୧	୨୨
୪	୧୪	୧୫	୧୬	୧୭	୧୮	୧୯	୨୦	୨୧	୨୨	୨୩
୫	୧୫	୧୬	୧୭	୧୮	୧୯	୨୦	୨୧	୨୨	୨୩	୨୪
୬	୧୬	୧୭	୧୮	୧୯	୨୦	୨୧	୨୨	୨୩	୨୪	୨୫
୭	୧୭	୧୮	୧୯	୨୦	୨୧	୨୨	୨୩	୨୪	୨୫	୨୬
୮	୧୮	୧୯	୨୦	୨୧	୨୨	୨୩	୨୪	୨୫	୨୬	୨୭
୯	୧୯	୨୦	୨୧	୨୨	୨୩	୨୪	୨୫	୨୬	୨୭	୨୮
୧୦	୨୦	୨୧	୨୨	୨୩	୨୪	୨୫	୨୬	୨୭	୨୮	୨୯

୦ ୧ ୨ ୩ ୪ ୫ ୬ ୭ ୮ ୯ ୧୦
 ନିଦି ଓନ୍ଦି ଐନ୍ଦି ମୁନ୍ଦି ନାଖି ପନ୍ଦି ସୋୟି ସୟି ଅଖି ନୟି ଦୋୟି
 ନିଦା ଓନ୍ଦା ଐନ୍ଦା ମୁନ୍ଦା ନାଖା ପନ୍ଦା ସୋୟା ସୟା ଅଖା ନୟା ଦୋୟା
 ନିଦି ଓନ୍ଦି ଐନ୍ଦି ମୁନ୍ଦି ନାଖି ପନ୍ଦି ସୋୟି ସୟି ଅଖି ନୟି ଦୋୟି
 NIDI OND ENR MUND NAX PANCHE SOY SAY AX NAY DOY

୧୦ ୨୦ ୩୦ ୪୦ ୫୦ ୬୦ ୭୦ ୮୦ ୯୦ ୧୦୦
 ଦୋୟି, ଏନ୍ଦି, ମୁନ୍ଦି, ନାଖିଦି, ପନ୍ଦି, ସୋୟିଦି, ସୟିଦି, ଅଖିଦି, ନୟିଦି, ସୁଡୁଡି
 ଦୋୟା, ଏନ୍ଦା, ମୁନ୍ଦା, ନାଖାଦା, ପନ୍ଦା, ସୋୟାଦା, ସୟାଦା, ଅଖାଦା, ନୟାଦା, ସୁଡୁଡା
 ଦୋୟ, ଏନ୍ଦି, ମୁନ୍ଦି, ନାଖିଦି, ପନ୍ଦି, ସୋୟିଦି, ସୋୟିଦି, ଅଖିଦି, ନୟିଦି, ସୁଡୁଡି
 DOY ENDI MUNDI NAXDI PANDI SOYDI SAYDI AXDI NAYDI SUDDI

Fig 4: Kurukh Banna digits. (Khalkho, 55:2012)

गणहण (नलहण) ककहरा (पड़हरा)


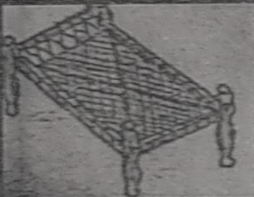



क का कि की कु कू के कै को कौ कं कँ

क	क	का	कि	की	कु	कू	के	कै	को	कौ	कं	कँ
ख	ख	खा	खि	खी	खु	खू	खे	खै	खो	खौ	खं	खँ
ग	ग	गा	गि	गी	गु	गू	गे	गै	गो	गौ	गं	गँ
घ	घ	घा	घि	घी	घु	घू	घे	घै	घो	घौ	घं	घँ
ङ	ङ	ङा	ङि	ङी	ङु	ङू	ङे	ङै	ङो	ङौ	ङं	ङँ
च	च	चा	चि	ची	चु	चू	चे	चै	चो	चौ	चं	चँ
छ	छ	छा	छि	छी	छु	छू	छे	छै	छो	छौ	छं	छँ
ज	ज	जा	जि	जी	जु	जू	जे	जै	जो	जौ	जं	जँ
झ	झ	झा	झि	झी	झु	झू	झे	झै	झो	झौ	झं	झँ
ञ	ञ	ञा	ञि	ञी	ञु	ञू	ञे	ञै	ञो	ञौ	ञं	ञँ
ट	ट	टा	टि	टी	टु	टू	टे	टै	टो	टौ	टं	टँ
ठ	ठ	ठा	ठि	ठी	ठु	ठू	ठे	ठै	ठो	ठौ	ठं	ठँ
ड	ड	डा	डि	डी	डु	डू	डे	डै	डो	डौ	डं	डँ
ढ	ढ	ढा	ढि	ढी	ढु	ढू	ढे	ढै	ढो	ढौ	ढं	ढँ
ण	ण	णा	णि	णी	णु	णू	णे	णै	णो	णौ	णं	णँ
त	त	ता	ति	ती	तु	तू	ते	तै	तो	तौ	तं	तँ
थ	थ	था	थि	थी	थु	थू	थे	थै	थो	थौ	थं	थँ
द	द	दा	दि	दी	दु	दू	दे	दै	दो	दौ	दं	दँ
ध	ध	धा	धि	धी	धु	धू	धे	धै	धो	धौ	धं	धँ






गणहण (नलहण) ककहरा (पड़हरा)

न	न	ना	नि	नी	नु	नू	ने	नै	नो	नौ	नं	नँ
प	प	पा	पि	पी	पु	पू	पे	पै	पो	पौ	पं	पँ
फ	फ	फा	फि	फी	फु	फू	फे	फै	फो	फौ	फं	फँ
ब	ब	बा	बि	बी	बु	बू	बे	बै	बो	बौ	बं	बँ
भ	भ	भा	भि	भी	भु	भू	भे	भै	भो	भौ	भं	भँ
म	म	मा	मि	मी	मु	मू	मे	मै	मो	मौ	मं	मँ
य	य	या	यि	यी	यु	यू	ये	यै	यो	यौ	यं	यँ
र	र	रा	रि	री	रु	रू	रे	रै	रो	रौ	रं	रँ
ल	ल	ला	लि	ली	लु	लू	ले	लै	लो	लौ	लं	लँ
व	व	वा	वि	वी	वु	वू	वे	वै	वो	वौ	वं	वं
श	श	शा	शि	शी	शु	शू	शे	शै	शो	शौ	शं	शँ
ष	ष	षा	षि	षी	षु	षू	षे	षै	षो	षौ	षं	षँ
स	स	सा	सि	सी	सु	सू	से	सै	सो	सौ	सं	सँ
ह	ह	हा	हि	ही	हु	हू	हे	है	हो	हौ	हं	हँ
क्ष	क्ष	क्षा	क्षि	क्षी	क्षु	क्षू	क्षे	क्षै	क्षो	क्षौ	क्षं	क्षँ
त्र	त्र	त्रा	त्रि	त्री	त्रु	त्रू	त्रे	त्रै	त्रो	त्रौ	त्रं	त्रँ
ज्ञ	ज्ञ	ज्ञा	ज्ञि	ज्ञी	ज्ञु	ज्ञू	ज्ञे	ज्ञै	ज्ञो	ज्ञौ	ज्ञं	ज्ञँ
ड़	ड़	ड़ा	ड़ि	ड़ी	ड़ु	ड़ू	ड़े	ड़ै	ड़ो	ड़ौ	ड़ं	ड़ँ
ढ़	ढ़	ढ़ा	ढ़ि	ढ़ी	ढ़ु	ढ़ू	ढ़े	ढ़ै	ढ़ो	ढ़ौ	ढ़ं	ढ़ँ
ख़	ख़	ख़ा	ख़ि	ख़ी	ख़ु	ख़ू	ख़े	ख़ै	ख़ो	ख़ौ	ख़ं	ख़ँ

Fig 5: shows consonant-vowel ligatures. (Khalkho, 30-31:2012)

	ଠ କ କ କ	ଠଠଠଠ କଢ଼ଆ କଢ଼ୁଆ କଢ଼ୁଆ
	ଫ ଖ ଖ ଧ	ଫଫଫଫ ଖଟି ଖଟି ଧଟି
	ଘ ଗ ଗ ଗ	ଘଘଘଘ ଗଦହା ଗଦହା ଗଦହା
	ଘ ଘ ଘ ଘ	ଘଘଘଘ ଘଢ଼ି ଘଢ଼ି ଘଢ଼ି
	ଠ ଠ ଠ ଠ	ଠଠଠଠ ଅୟଠ ଅୟଠ ଅୟଠ

14

	ଢ ଚ ଚ ଚ	ଢଢଢଢ ଚମ୍ବି ଚମ୍ବି ଚମ୍ବି
	ଢ ଛ ଛ ଛ	ଢଢଢଢ ଛକନି ଛକନି ଛକନି
	ଝ ଜ ଜ ଜ	ଝଝଝଝ ଜଲ୍ଲି ଜଲ୍ଲି ଜଲ୍ଲି
	ଞ ଞ ଞ ଞ	ଞଞଞଞ ଞଞଞଞ ଞଞଞଞ ଞଞଞଞ
	ଟ ଟ ଟ ଟ	ଟଢ଼ଢ଼ ଢ଼ିଆ ଢ଼ିଆ ଢ଼ିଆ

15

Fig 6: Extracted from Kūṛux Lipi Ṭuṛṇā Bācnā . (Khalkho, 14-15:2012)

कुँडुख उराँव भाषा की लिपि “कुँडुख बन्ना”

𑂀𑂁𑂂𑂃𑂄𑂅𑂆𑂇𑂈𑂉𑂊𑂋𑂌𑂍𑂎𑂏𑂐𑂑𑂒𑂓𑂔𑂕𑂖𑂗𑂘𑂙𑂚𑂛𑂜𑂝𑂞𑂟𑂠𑂡𑂢𑂣𑂤𑂥𑂦𑂧𑂨𑂩𑂪𑂫𑂬𑂭𑂮𑂯𑂰𑂱𑂲𑂳𑂴𑂵𑂶𑂷𑂸𑂺𑂹𑂻𑂼𑂽𑂾𑂿𑂀𑂁𑂂𑂃𑂄𑂅𑂆𑂇𑂈𑂉𑂊𑂋𑂌𑂍𑂎𑂏𑂐𑂑𑂒𑂓𑂔𑂕𑂖𑂗𑂘𑂙𑂚𑂛𑂜𑂝𑂞𑂟𑂠𑂡𑂢𑂣𑂤𑂥𑂦𑂧𑂨𑂩𑂪𑂫𑂬𑂭𑂮𑂯𑂰𑂱𑂲𑂳𑂴𑂵𑂶𑂷𑂸𑂺𑂹𑂻𑂼𑂽𑂾𑂿

𑂀𑂁𑂂𑂃𑂄𑂅𑂆𑂇𑂈𑂉𑂊𑂋𑂌𑂍𑂎𑂏𑂐𑂑𑂒𑂓𑂔𑂕𑂖𑂗𑂘𑂙𑂚𑂛𑂜𑂝𑂞𑂟𑂠𑂡𑂢𑂣𑂤𑂥𑂦𑂧𑂨𑂩𑂪𑂫𑂬𑂭𑂮𑂯𑂰𑂱𑂲𑂳𑂴𑂵𑂶𑂷𑂸𑂺𑂹𑂻𑂼𑂽𑂾𑂿 Vowels

𑂀 𑂁 𑂂 𑂃 𑂄 𑂅 𑂆 𑂇 𑂈 𑂉 𑂊 𑂋 𑂌 𑂍 𑂎 𑂏 𑂐 𑂑 𑂒 𑂓 𑂔 𑂕 𑂖 𑂗 𑂘 𑂙 𑂚 𑂛 𑂜 𑂝 𑂞 𑂟 𑂠 𑂡 𑂢 𑂣 𑂤 𑂥 𑂦 𑂧 𑂨 𑂩 𑂪 𑂫 𑂬 𑂭 𑂮 𑂯 𑂰 𑂱 𑂲 𑂳 𑂴 𑂵 𑂶 𑂷 𑂸 𑂹 𑂺 𑂻 𑂼 𑂽 𑂾 𑂿

𑂀 𑂁 𑂂 𑂃 𑂄 𑂅 𑂆 𑂇 𑂈 𑂉 𑂊 𑂋 𑂌 𑂍 𑂎 𑂏 𑂐 𑂑 𑂒 𑂓 𑂔 𑂕 𑂖 𑂗 𑂘 𑂙 𑂚 𑂛 𑂜 𑂝 𑂞 𑂟 𑂠 𑂡 𑂢 𑂣 𑂤 𑂥 𑂦 𑂧 𑂨 𑂩 𑂪 𑂫 𑂬 𑂭 𑂮 𑂯 𑂰 𑂱 𑂲 𑂳 𑂴 𑂵 𑂶 𑂷 𑂸 𑂹 𑂺 𑂻 𑂼 𑂽 𑂾 𑂿

𑂀 (सेला) – लम्बी ध्वनी”
(Long Phonetic Symbol)

𑂁 (हेचक) – विकरी “अ”
(Glotal Stop)

𑂀𑂁𑂂𑂃𑂄𑂅𑂆𑂇𑂈𑂉𑂊𑂋𑂌𑂍𑂎𑂏𑂐𑂑𑂒𑂓𑂔𑂕𑂖𑂗𑂘𑂙𑂚𑂛𑂜𑂝𑂞𑂟𑂠𑂡𑂢𑂣𑂤𑂥𑂦𑂧𑂨𑂩𑂪𑂫𑂬𑂭𑂮𑂯𑂰𑂱𑂲𑂳𑂴𑂵𑂶𑂷𑂸𑂺𑂹𑂻𑂼𑂽𑂾𑂿 Consonants

𑂀𑂁	𑂂𑂃	𑂄𑂅	𑂆𑂇	𑂈𑂉	𑂊𑂋	Kurukh Numerals 0 = 0 1 = 1 𑂀 = 2 𑂁 = 3 𑂂 = 4 𑂃 = 5 𑂄 = 6 𑂅 = 7 𑂆 = 8 𑂇 = 9
𑂈𑂉	𑂊𑂋	𑂌𑂍	𑂎𑂏	𑂐𑂑	𑂒𑂓	
𑂔𑂕	𑂖𑂗	𑂘𑂙	𑂚𑂛	𑂜𑂝	𑂞𑂟	
𑂠𑂡	𑂢𑂣	𑂤𑂥	𑂦𑂧	𑂨𑂩	𑂪𑂫	
𑂬𑂭	𑂮𑂯	𑂰𑂱	𑂲𑂳	𑂴𑂵	𑂶𑂷	
𑂸𑂹	𑂺𑂻	𑂼𑂽	𑂾𑂿	𑂀𑂁	𑂂𑂃	
𑂄𑂅	𑂆𑂇	𑂈𑂉	𑂊𑂋	𑂌𑂍	𑂎𑂏	
𑂐𑂑	𑂒𑂓	𑂔𑂕	𑂖𑂗	𑂘𑂙	𑂚𑂛	
𑂜𑂝	𑂞𑂟	𑂠𑂡	𑂢𑂣	𑂤𑂥	𑂦𑂧	
𑂨𑂩	𑂪𑂫	𑂬𑂭	𑂮𑂯	𑂰𑂱	𑂲𑂳	

“𑂀𑂁𑂂𑂃𑂄𑂅𑂆𑂇𑂈𑂉𑂊𑂋𑂌𑂍𑂎𑂏𑂐𑂑𑂒𑂓𑂔𑂕𑂖𑂗𑂘𑂙𑂚𑂛𑂜𑂝𑂞𑂟𑂠𑂡𑂢𑂣𑂤𑂥𑂦𑂧𑂨𑂩𑂪𑂫𑂬𑂭𑂮𑂯𑂰𑂱𑂲𑂳𑂴𑂵𑂶𑂷𑂸𑂺𑂹𑂻𑂼𑂽𑂾𑂿”
“दवल नंगहै कुँडुख भाखा, क च्छनखर’ओत नाम उल्ला माखा ।”

01

Fig 7: Kurukh Banna script table with cursive form. (Xalxo, 01: 2018)



Fig 8: Extracted from *Kūṛux Bannā Axaā*. (Xalxo, 03: 2018)



Fig 9: It shows the usage of ligatures. (Xalxo, 18: 2018)

Old Primers: (these are in handwritten and having initial forms of Kurukh Banna letters)
 Kūṛux Bannā Lipi Arā Bakka Garhan Part-1 (1991):

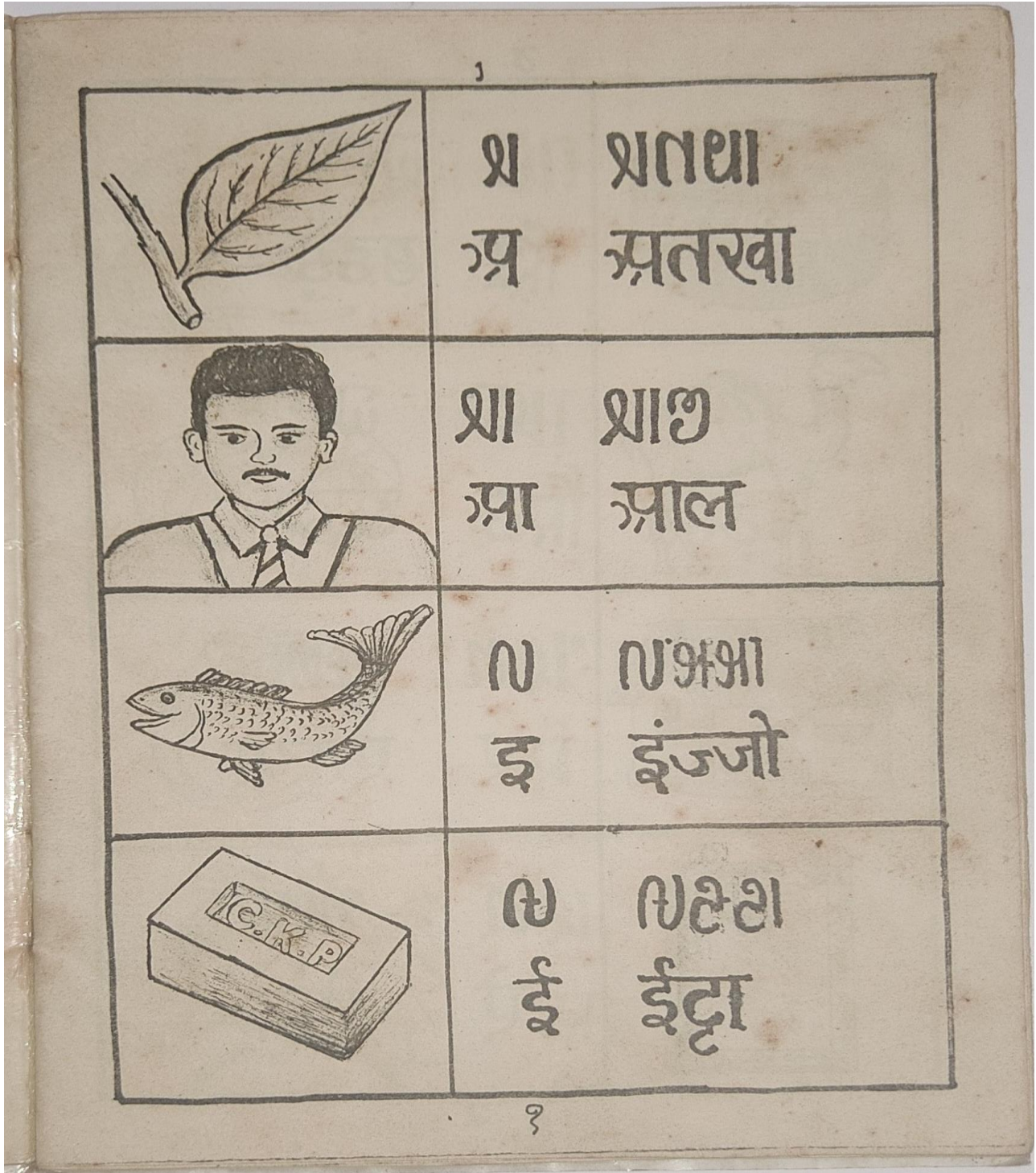






Fig 10: Extracted from Kūṛux Bannā Lipi Arā Bakka Garhan Part-1. (Khalkho, 1: 1991)

४

	<p> व व॒ उ उ॒डु </p>
	<p> घ घ॒ ऊ ऊ॒ट </p>
	<p> म म॒ ए ए॒ड॒पा </p>
	<p> न न॒ ऐ ऐ॒ना </p>

२

Fig 11: It shows the initial forms and position of virama(red) and anusvara(blue). (Khalkho, 2: 1991)

𑌕𑌖𑌗 = वर्ण माला

𑌕𑌖𑌗 𑌕𑌖𑌗 = स्वर वर्ण

𑌖 𑌗 𑌘 𑌙 𑌚 𑌛 𑌜 𑌝 𑌞 𑌟 𑌠 𑌡 :
 - | | | | | | | | | :
 𑌢 𑌣 𑌤 𑌥 𑌦 𑌧 𑌨 𑌩 𑌪 𑌫 𑌬 𑌭 :
 ! (सेला) = प्लुत स्वर, ! (तला) = विकारी 𑌮

𑌯𑌰𑌱 = व्यञ्जन वर्ण

𑌲	𑌳	𑌴	𑌵	𑌶	𑌷	𑌸	𑌹
क	ख	ग	घ	च	छ	ज	झ
ट	ठ	ड	ढ	ण	त	थ	द
ध	न	प	फ	ब	भ	म	य
र	ल	व	श	स	ह	ड	ढ

Fig 12: Shows old form letters from Kūruḥ Bannā Lipi Arā Bakka Garhan Part-1. (Khalkho, 14: 1991)

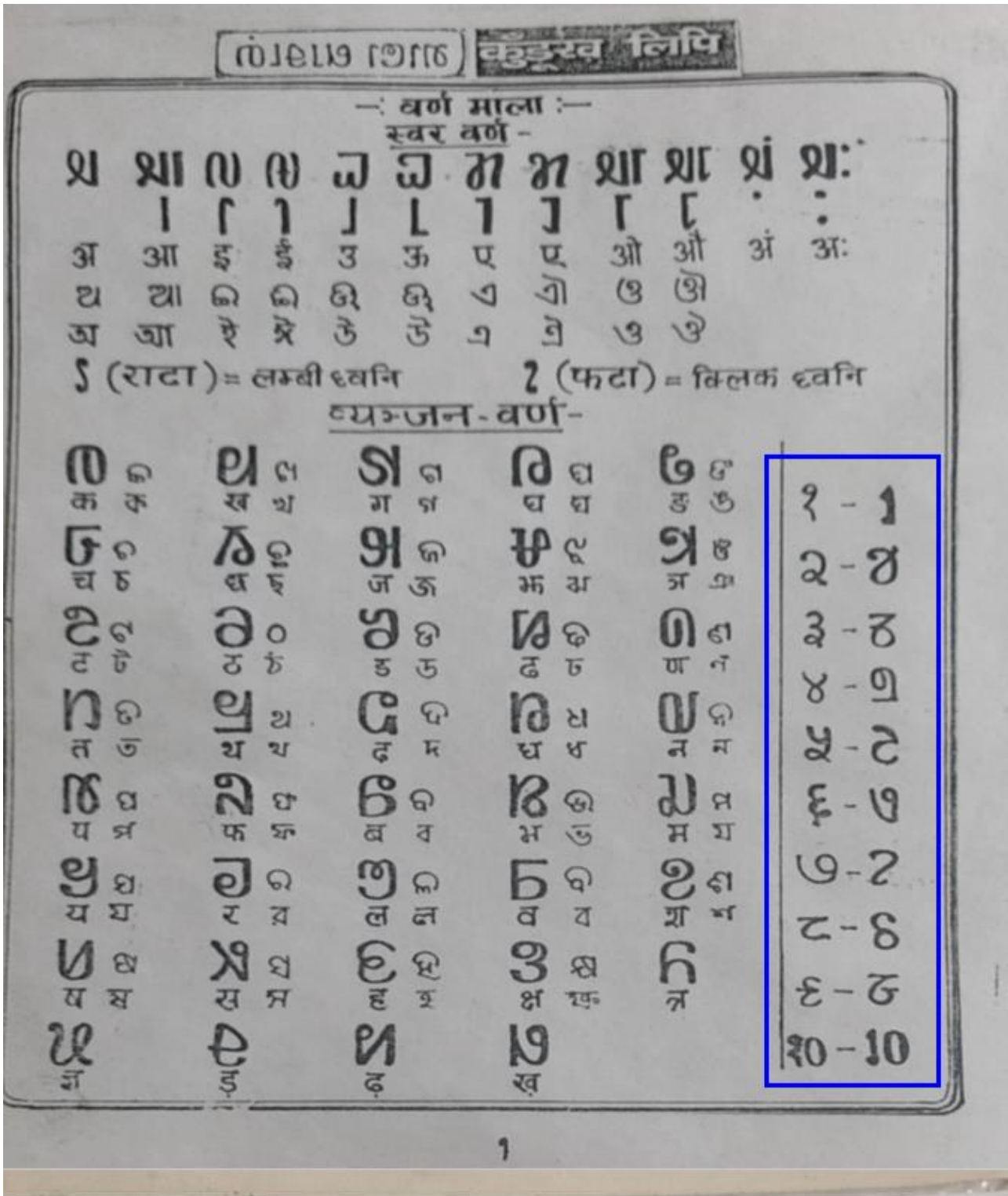

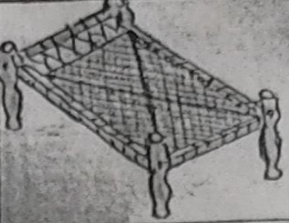

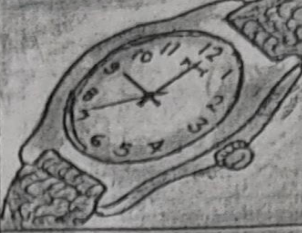

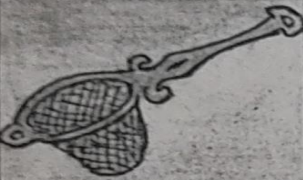
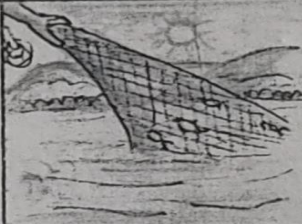
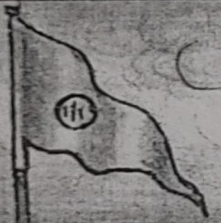
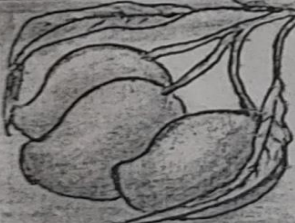



Fig 13: shows old forms of letters after revision in 1995 and old forms of digits (blue). (Khalkho, 1: 1995)

	ଠ - ଠାକିଆ क - कछुआ K - KACHHUA		ଥ - ଥଣୀ ख - खटी KH - KHATI
	ଣ - ଣାଢ଼ା ग - गदहा G - GADHA		ଠ - ଠଣୀ घ - घड़ी GH - GHADI
	ଙ - ଙା ड - ड NG - NG		ଡ - ଡାଣୀ च - चम्बी CHAMBI
	ଛ - ଛାକି छ - छकनी CHH - CHHANKI		ଞ - ଞାଣୀ ज - ज J - JALLI
	ଝ - ଝାଣୀ झ - झण्डा JH - JHANDA		ଞ - ଞାଣୀ ञ - ञ YN -
	ଡ - ଡାକିଆ ट - टखा T - TATKHA		ଠ - ଠାକି ठ - ठंकू TH - THANKU

୪

Fig 14: Extracted from Kūṛux Lipi Ṭurnā Paṛhnā . (Khalkho, 3: 1995)

Old Evidences:

ਮਾਤਰਿਹਾਸੀ

ਮਾਤਰਿਹਾਸੀ ਆਲੋਚਨਾ ਆਦਿ ਪੁਸਤਕਾਂ ਦੇ ਅਠੱਖ਼ਰੀ ਪਾਠ ਪ੍ਰਣਾਲੀ ਦੁਆਰਾ ਲਿਖਿਆ ਗਿਆ। ਇਹ ਪੁਸਤਕਾਂ ਪੰਜਾਬੀ ਅਤੇ ਸ਼ਿਵਾਲਿਕ ਮੰਡਲ ਦੇ ਖੇਤਰਾਂ ਵਿੱਚ ਪੜ੍ਹੀਆਂ ਗਈਆਂ ਹਨ। ਇਹ ਪੁਸਤਕਾਂ ਪੰਜਾਬੀ ਅਤੇ ਸ਼ਿਵਾਲਿਕ ਮੰਡਲ ਦੇ ਖੇਤਰਾਂ ਵਿੱਚ ਪੜ੍ਹੀਆਂ ਗਈਆਂ ਹਨ।

ਮਾਤਰਿਹਾਸੀ ਆਲੋਚਨਾ ਆਦਿ ਪੁਸਤਕਾਂ ਦੇ ਅਠੱਖ਼ਰੀ ਪਾਠ ਪ੍ਰਣਾਲੀ ਦੁਆਰਾ ਲਿਖਿਆ ਗਿਆ। ਇਹ ਪੁਸਤਕਾਂ ਪੰਜਾਬੀ ਅਤੇ ਸ਼ਿਵਾਲਿਕ ਮੰਡਲ ਦੇ ਖੇਤਰਾਂ ਵਿੱਚ ਪੜ੍ਹੀਆਂ ਗਈਆਂ ਹਨ। ਇਹ ਪੁਸਤਕਾਂ ਪੰਜਾਬੀ ਅਤੇ ਸ਼ਿਵਾਲਿਕ ਮੰਡਲ ਦੇ ਖੇਤਰਾਂ ਵਿੱਚ ਪੜ੍ਹੀਆਂ ਗਈਆਂ ਹਨ।

— ਸ਼ਿਵਾਲਿਕ ਮੰਡਲ ਪ੍ਰਣਾਲੀ, (ਫਰਵਰੀ 1992)

Fig 15(a): A text Mātribhāṣā 'Mother tongue' written in the initial form of script. (1992)



Fig 16: shows the Kurukh Banna alphabet chart. (2022)

Handwritten texts:

Author's text

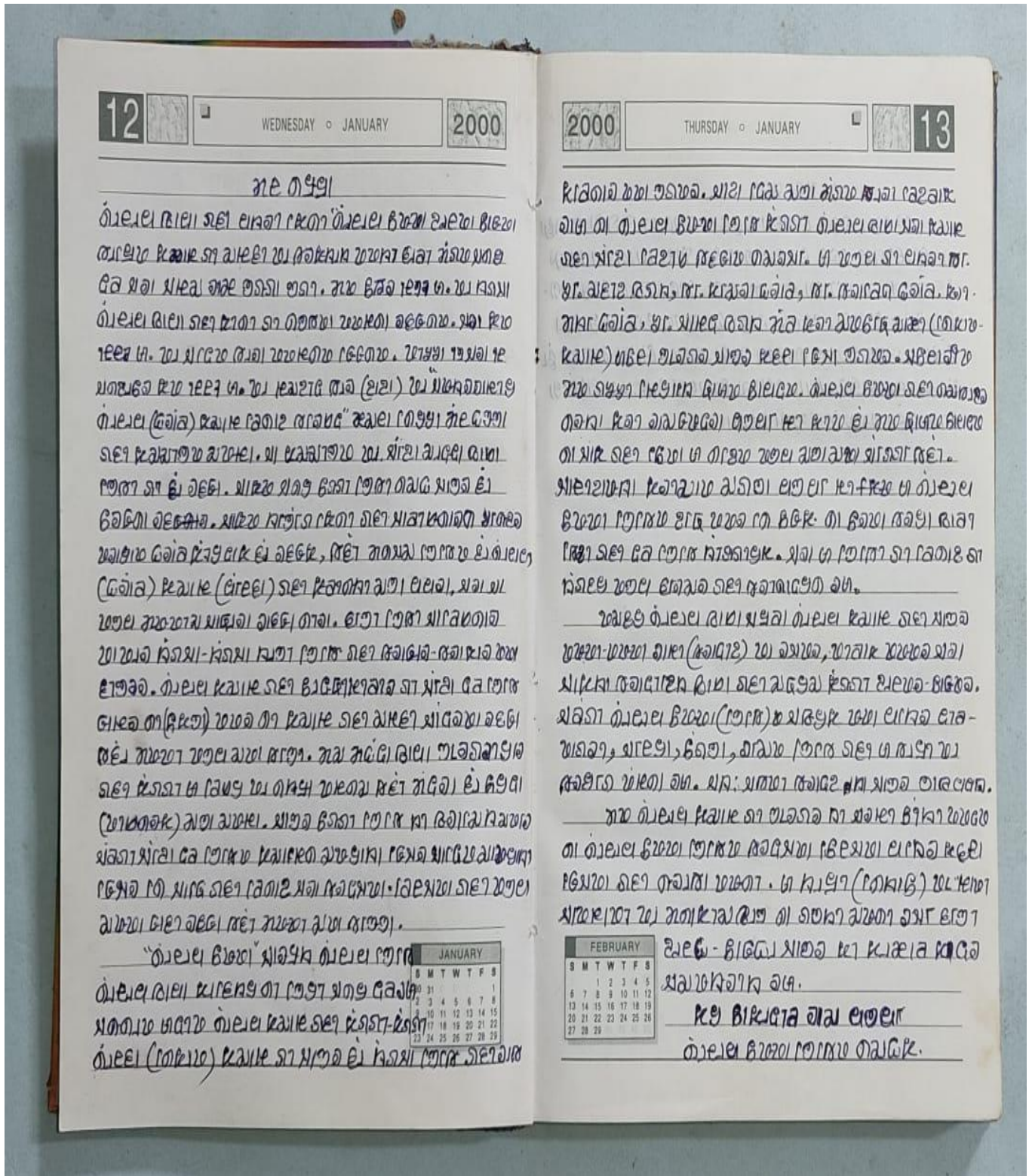


Fig 17: Shows author's diary. (2000)

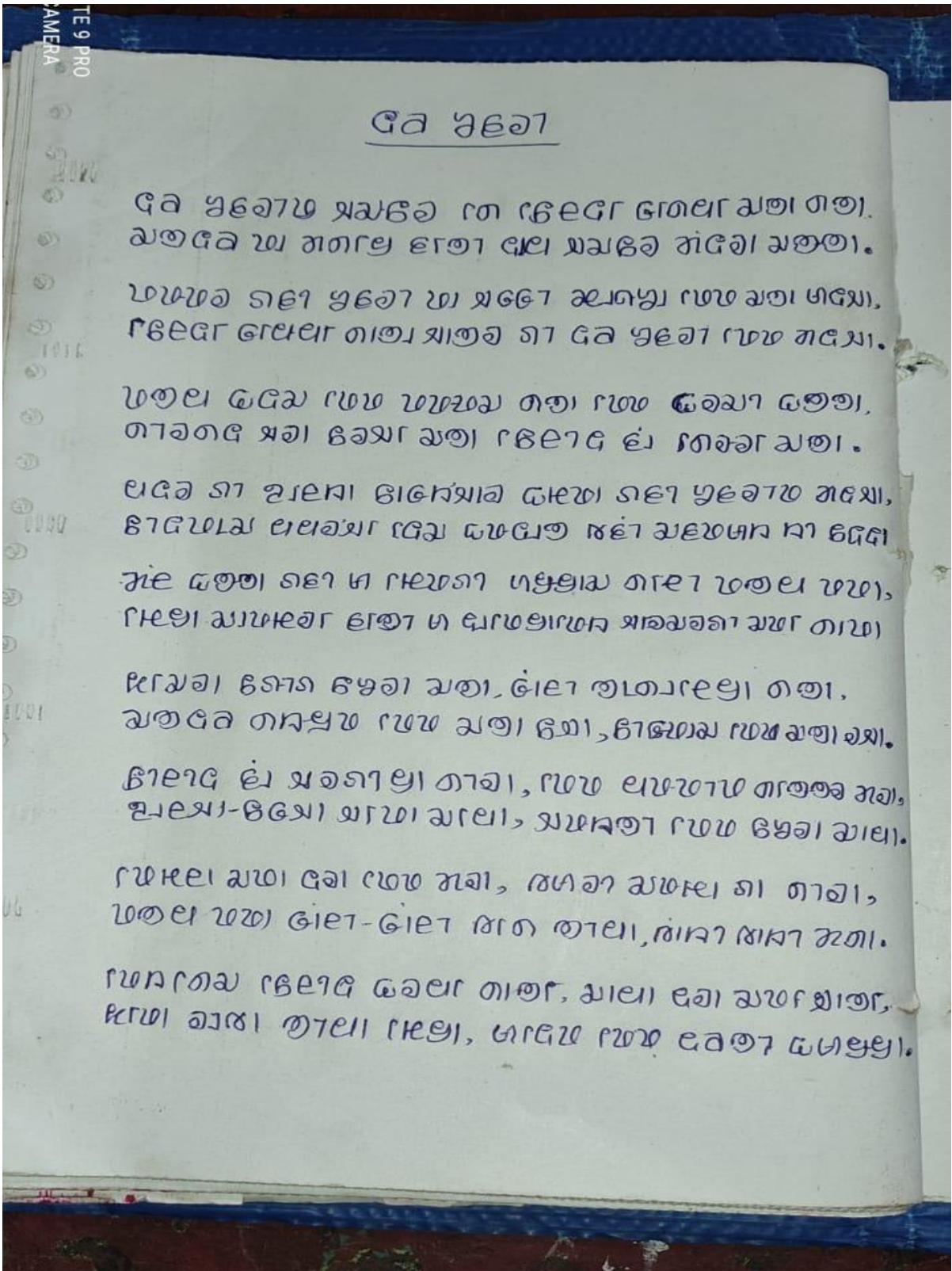


Fig 18: Handwritten text of a student on topic 'Dava Dāharā'.

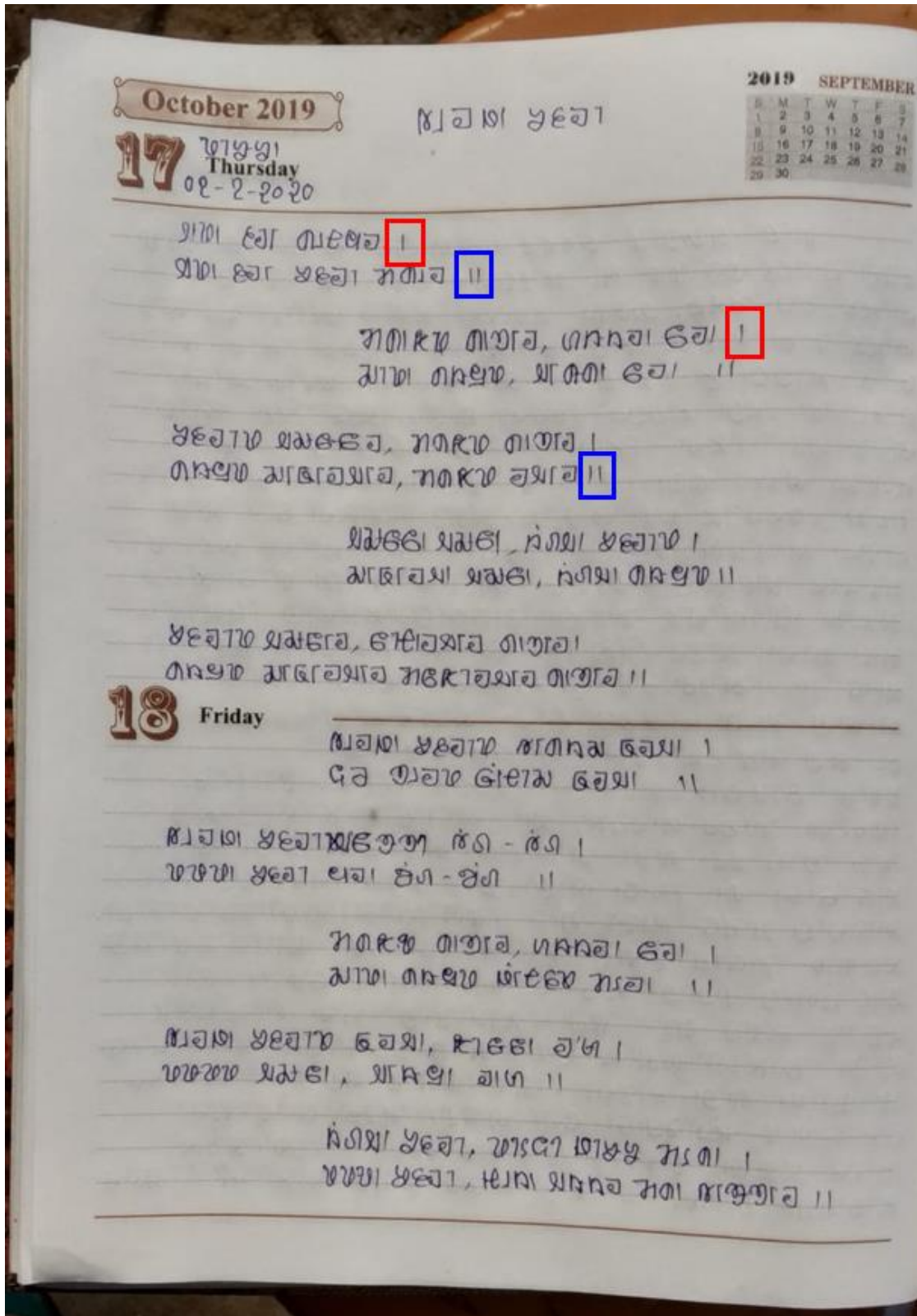


Fig 20: It shows the usage of danda (red) and double danda (blue) instead of full stop. (2019)

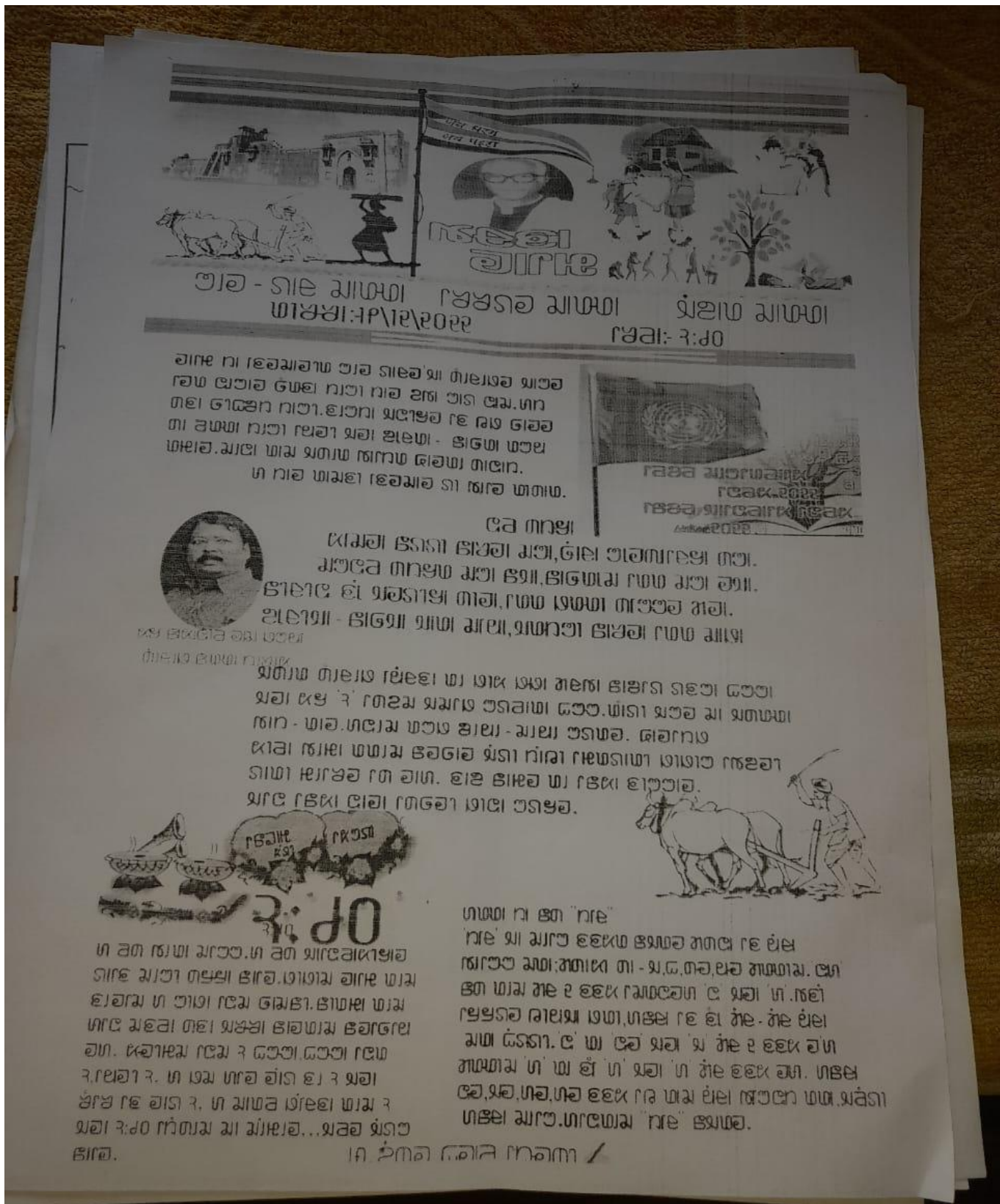


Fig 23: Shows the front page of 'Pārḥā Rājī' newspaper. (2022)

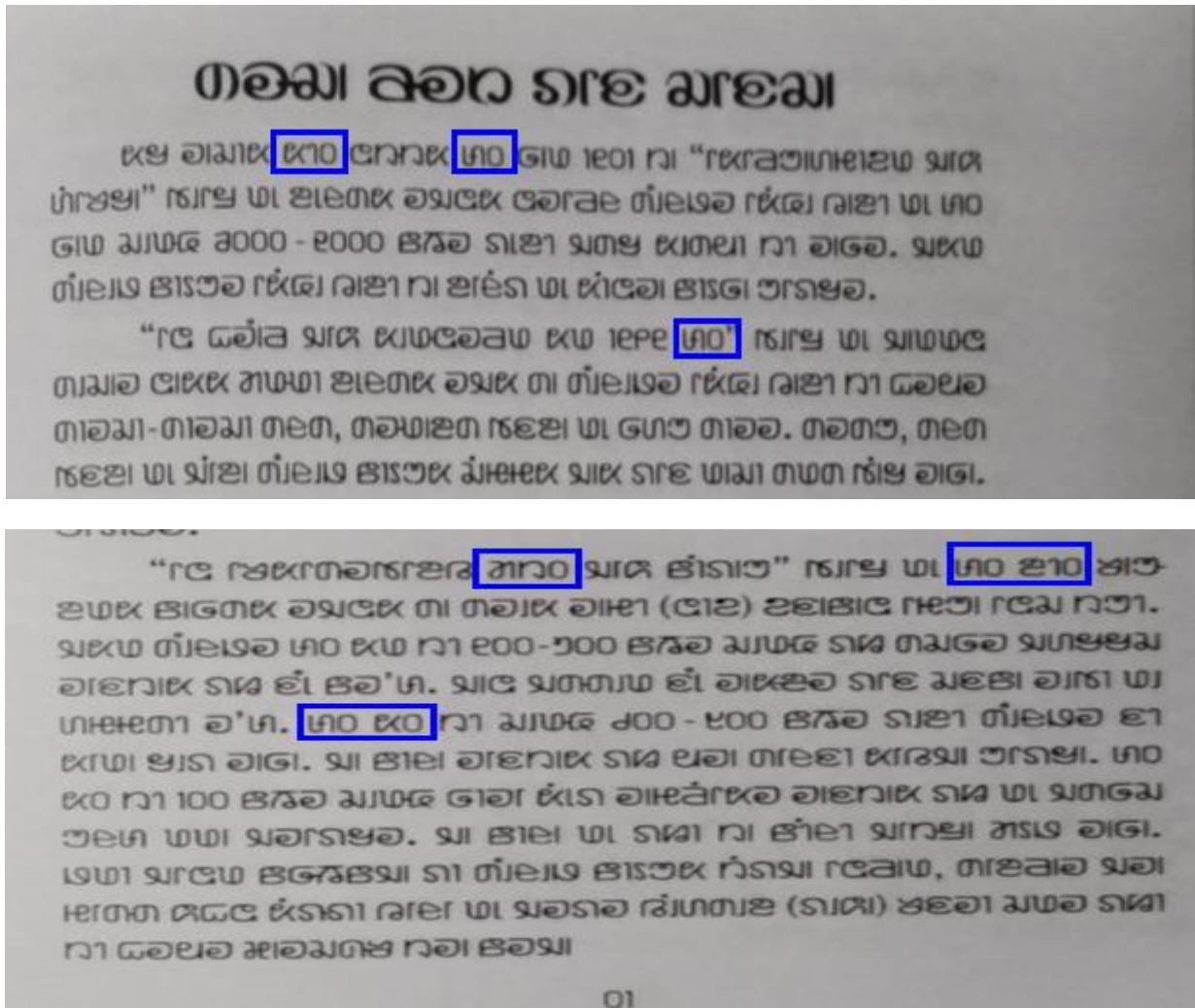


Fig 24(a): It shows the usage of abbreviation sign but used digit zero due to font issue from book *Karmā-Vrat Gahī Mahimā* (Kujur, 01:2009)

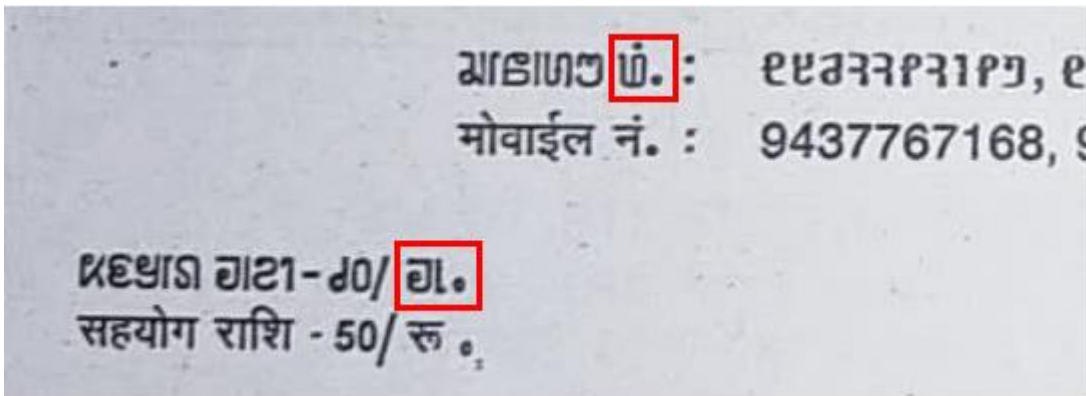


Fig 24(b): It shows the usage of Devanagari abbreviation sign in *Kūrux Lipi Ṭurṇā Bācnā* (Khalkho:2023)

Banners:



Fig 26: Kurukh Banna used in various banners.

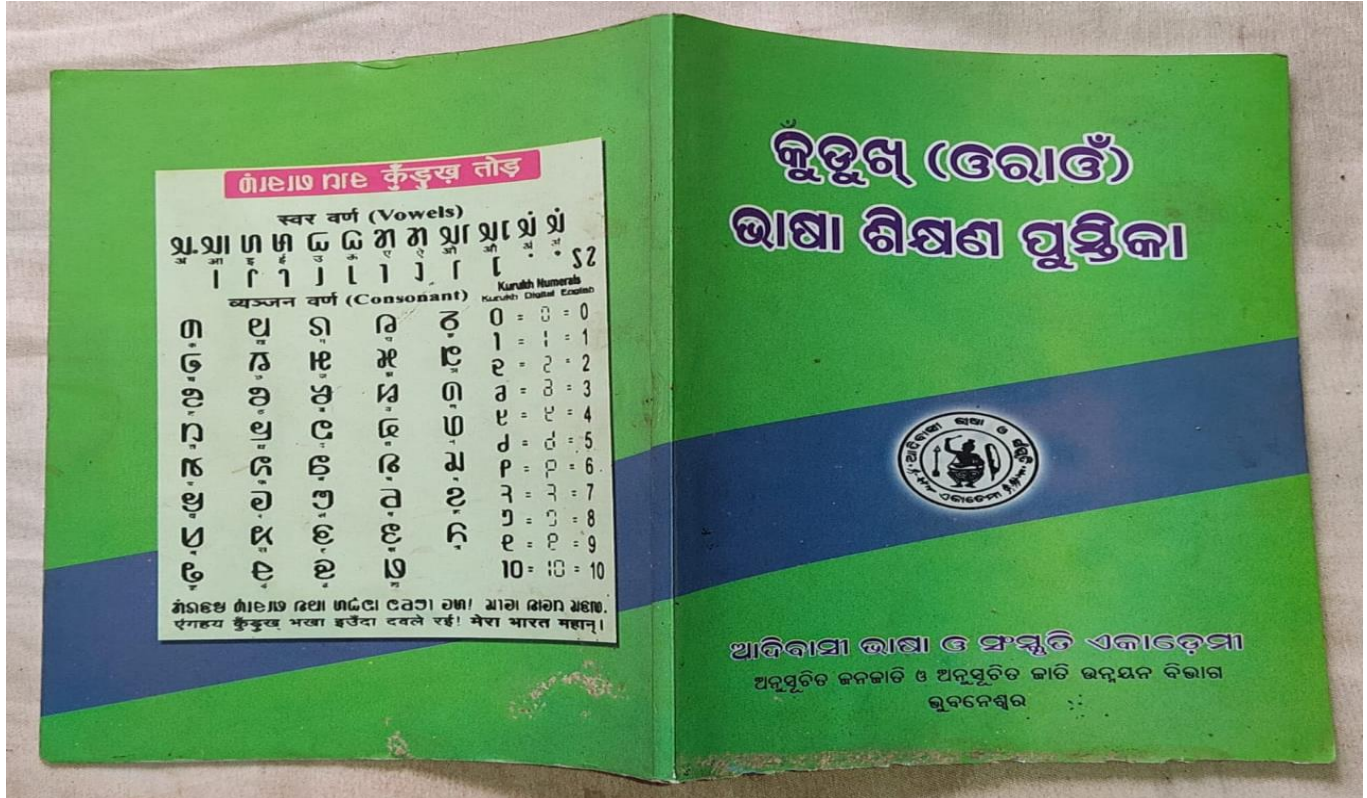


Fig 27: Kurukh banna used in cover pages of various books.

କୁଞ୍ଜୁର ଖାସା ଏବଂ କୁଞ୍ଜୁର-ବନ୍ନା ଲିପି କୋ ସାଂସଦାନିକ ମାନ୍ୟତା କି ମାଂଗ

ପିଛଲେ ଦିନାଂକ: 01 ଦିସଂବର 2018 (ଶନିବାର) କୋ କୁଞ୍ଜୁର-ଖାସା ଏବଂ କୁଞ୍ଜୁର-ବନ୍ନା ଲିପି କୋ ସାଂସଦାନିକ ମାନ୍ୟତା କି ମାଂଗ କୋ ଲେକର ଏକ ବିଶାଳ ଜନମହାରେଲି ନିକାଳ କର 5-ସୂତ୍ରିୟ ମାଂଗ କୋ ଲେକର ଗଞ୍ଜକେଲା ଏ.ଡି.ଏମ. କେ ଜାରିଏ ଗଢ଼ପତି ତଥା ଗଞ୍ଜପାଳ ଏବଂ ମୁଖ୍ୟାଳୟ, କେନ୍ଦ୍ରିୟ ଖାସା ବିଭାଗ, ଭାରତ ସରକାର କୋ ଜାପନ ସୌପା ଗୟା ।

ଯହ ସୂଚନା ଯୋଗ୍ୟ ହେଁ କି, ଅଲ ଓଡ଼ିଶା କୁଞ୍ଜୁର ପାଢ଼ହା ଯୁବକ ସଂଘ ଏବଂ କୁଞ୍ଜୁର ଖାସା ସାହିତ୍ୟ ବିକାସ ପରିଷଦ, ଓଡ଼ିଶା, ଛତିସଗଡ଼, ଜ୍ଞାନଖଣ୍ଡ ତଥା ପ. ବଙ୍ଗାଳ କେ ଓର ସେ କୁଞ୍ଜୁର-ଖାସା ଏବଂ କୁଞ୍ଜୁର-ବନ୍ନା ଲିପି କୋ ସାଂସଦାନିକ ମାନ୍ୟତା କି ମାଂଗ କୋ ଲେକର ଏକ ବିଶାଳ ଜନମହାରେଲି ନିକାଳ କର 5-ସୂତ୍ରିୟ ମାଂଗ କୋ ଲେକର ଗଞ୍ଜକେଲା ଏ.ଡି.ଏମ. କେ ଜାରିଏ ମହାମହିମ ଗଢ଼ପତି, ଭାରତ ସରକାର ତଥା ଓଡ଼ିଶା ଗଞ୍ଜପାଳ ଏବଂ ମୁଖ୍ୟାଳୟ, କେନ୍ଦ୍ରିୟ ଖାସା ବିଭାଗ, ଭାରତ ସରକାର କୋ ଜାପନ ସୌପା ଗୟା ।

ଯହ ରେ଼ୀ ଗଞ୍ଜକେଲା ବିରସା ମୁଞ୍ଡା ଚୌକ ସେ ମୁଖ୍ୟ ସହର କେ ବିଚୋବିଚ ଆବେଦକ ଚୌକ ହୋକର ଏ.ଡି.ଏମ. ଅଫିସ ତରଫ୍ ପହଂଚା । କୁଞ୍ଜୁର-ଖାସା କୋ ଭାରତୀୟ ସଂସଦାନିକ କି 8-ନିଂ ଅନୁସୂଚି ମେଂ ସାମିଲ କରନେ, କୁଞ୍ଜୁର-ବନ୍ନା ଲିପି କେ ଘ୍ରାମ କୁଞ୍ଜୁର-ଖାସା କୋ ଲିଖନେ-ପଢ଼ନେ କି ମୁଖ୍ୟ-ମାଧ୍ୟମ କେ ରୂପ ସେ ସାଂସଦାନିକ ମାନ୍ୟତା, ଦେଶଭର କେ କୁଞ୍ଜୁର(ଉରବ) ଜନଅବାଦି କ୍ଷେତ୍ର ମେଂ କୁଞ୍ଜୁର ଶିକ୍ଷକ କୋ କି ନିଯୋଜନ, ଦେଶ କେ ବିଶ୍ୱବିଦ୍ୟାଳୟ ମେଂ ସ୍ୱତନ୍ତ୍ର କୁଞ୍ଜୁର ବିଭାଗ କି ମାଂଗ ଓର ଜ୍ଞାନଖଣ୍ଡ ରାଜ୍ୟ କେ କୁଞ୍ଜୁର-ପାଠ୍ୟକ୍ରମ କୋ ଦେଶଭର ମେଂ ଲାଗୁ କରନେ କି ମାଂଗ ଆଦି ସାମିଲ ଥି । ଦେଶଭର ସେ ଜନମହାରେଲି ମେଂ ହଜାର କୋ ସଂଖ୍ୟା ମେଂ କୁଞ୍ଜୁର ଖାସା ପାଠ୍ୟକ୍ରମ କି ମାଂଗ ।



ଜନମହାରେଲି କେ ଘ୍ରାମ କେନ୍ଦ୍ର ତଥା ରାଜ୍ୟ ସରକାର ସେ ପଂଚ-ସୂତ୍ରିୟ ମାଂଗ କି ଗ଼ି :

- 1- କୁଞ୍ଜୁର-ଖାସା କୋ ଭାରତୀୟ ସଂସଦାନିକ କି 8-ନିଂ ଅନୁସୂଚି ମେଂ ସାମିଲ କରନେ କି ମାଂଗ,
- 2- କୁଞ୍ଜୁର-ବନ୍ନା ଲିପି କେ ଘ୍ରାମ କୁଞ୍ଜୁର-ଖାସା କୋ ଲିଖନେ-ପଢ଼ନେ କି ମୁଖ୍ୟ-ମାଧ୍ୟମ କେ ରୂପ ସେ ସାଂସଦାନିକ ମାନ୍ୟତା,
- 3- ଦେଶଭର କେ କୁଞ୍ଜୁର(ଉରବ) ଜନଅବାଦି କ୍ଷେତ୍ର ମେଂ କୁଞ୍ଜୁର ଶିକ୍ଷକ କୋ କି ନିଯୋଜନ କି ମାଂଗ,
- 4- ଦେଶଭର କେ ବିଶ୍ୱବିଦ୍ୟାଳୟ ମେଂ ସ୍ୱତନ୍ତ୍ର କୁଞ୍ଜୁର ବିଭାଗ କି ମାଂଗ
- 4- ଓର ଜ୍ଞାନଖଣ୍ଡ ରାଜ୍ୟ କେ କୁଞ୍ଜୁର-ପାଠ୍ୟକ୍ରମ କୋ ଦେଶଭର ମେଂ ଲାଗୁ କରନେ କି ମାଂଗ କି ଗ଼ି ।

ଝସ ଅବସର ପର ବାସୁଦେବରାମ ଧାଲଖୋ, କୁଞ୍ଜୁର-ବନ୍ନା ଲିପି କେ ଆବିଷ୍କାରକ, ଜ୍ଞାନଖଣ୍ଡ ପ. ସିଂଗଭୂମ, ଚକ୍ରଧର-ପୁର ନେ କୁଞ୍ଜୁର-ବନ୍ନା ଲିପି ଓର କୁଞ୍ଜୁର-ଖାସା କି ମହତ୍ୱ ସମଜାୟା । ମନବୋଧ ମାଞ୍ଜି, ରାଜ୍ୟ-କୋଷାଧ୍ୟକ୍ଷ ତଥା ସୁନ୍ଦରଗଞ୍ଜ ଜିଲା କାର୍ଯ୍ୟ-ସମାପତି ନେ କୁଞ୍ଜୁର-ବନ୍ନା ଲିପି କୋ ଏକ ପ୍ରଭାବଶାଳୀ ଲିପି ବତାୟେ ହୁଏ ଯହ ଲିପି କୋ କୁଞ୍ଜୁର (କିସାନ) ସମାଜ ମେଂ ଧି ଲାଗୁ କରନେ କି ବାତ କହା ।

ଗମଚନ୍ଦ୍ର ଧାଲଖୋ ମହା ସଚିବ ଅଲ ଓଡ଼ିଶା କୁଞ୍ଜୁର-ପାଢ଼ହା ଯୁବକ ସଂଘ ନେ ରେ଼ୀ କି ଉଦ୍ଦେଶ୍ୟ ତଥା ସରକାର ସେ ସମୁଦ୍ଧ-ମାଂଗ କେ ବାରେ ମେଂ ଉପସ୍ଥାନୀୟ କିୟା । ବାଲେଶ୍ୱର ମୟୂର୍ଜନ ଜିଲା କେ ଯୁବାଧ୍ୟକ୍ଷ, ଶଙ୍କର ତିର୍କୀ ନେ କହା କି ଖାସା ବଚେକି ଗୋ ହମ ବଚେଗେ । ଉମାକାନ୍ତ ଗମ, ସଲହାକାର, ମୂଳୀ-ପାଢ଼ହା, ବାଲେଶ୍ୱର-ମୟୂର୍ଜନ ନେ କହା କି କୁଞ୍ଜୁର-ଖାସା ସେ ପଢ଼ନେ-ଲିଖନେ ପର ହମାରି ବାସ୍ତବିକ ଉନ୍ନତି ହୋ ସକ୍ତି ହେ । ଚନ୍ଦ୍ରକାନ୍ତ ଓରବ, ଦେବାନ, ମୂଳୀ-ପାଢ଼ହା, ସଂବଲପୁର ଖାସା ହମାରି ପଢ଼ଚାନ ହେ, ଖାସା ସେ ହି ହମାରି ସଂସ୍କୃତି କି ରକ୍ଷା ହୋ ସକ୍ତି ହେ ।

ସାଥ ମେଂ ରଜନୀ ଗମ, ମୂଳୀ ବେଲ, ମୂଳୀ-ପାଢ଼ହା, ବାଲେଶ୍ୱର-ମୟୂର୍ଜନ, ଯୋଧୀତ ଭଗତ, ଜ୍ଞାନଖଣ୍ଡ, ଝ୍ୟାମ ଧାଲଖୋ, ଜ୍ଞାନଖଣ୍ଡ, ଚେଗା ଓରବ, ଓଡ଼ିଶା, ଜ୍ଞାନାଗା ତିର୍କୀ, ଉପ-ସମାପତି, ବୃନ୍ଦା ବର୍ଲା ସଚିବ; ସୁନିତ ସୋହନ ତିର୍କୀ ଏବଂ ମାଝିକେଲ ଲକଡ଼ା, କୋଷାଧ୍ୟକ୍ଷ; କିଶନ କେକେଟ୍ର, ସାଂସଦାନିକ ସମ୍ପାଦକ, ଅର୍ଜୁନ ତିର୍କୀ ଏବଂ ସୁଦାମ ବର୍ଲା ଏଡିଟର; ଅଡିଟର, ଦିଲିପ ଥପ୍ପୋ, ଅଲ ଓଡ଼ିଶା କୁଞ୍ଜୁର ପାଢ଼ହା ଯୁବକ ସଂଘ କେ ପ୍ରମୁଖ ଲୋଗ ଉପସ୍ଥିତ ଥେ ।

ଧ୍ରୁବେ ସିଦ୍ଧେଂ
ଗମଚନ୍ଦ୍ର ଧାଲଖୋ
ମହା ସଚିବ,
ଅଲ ଓଡ଼ିଶା କୁଞ୍ଜୁର ପାଢ଼ହା ଯୁବକ ସଂଘ
(ଖୋଞ-ପଢ଼ହା ଝସ ପେଲେ-ପଢ଼ହା)
(କୁଞ୍ଜୁର ଯୁବାଞ୍ଝ କା ପ୍ରାଧିକାର, ପରମ୍ପରା, ଶୈକ୍ଷଣିକ, ସଂସ୍କାର)

କୁଞ୍ଜୁର-ଭାଷା ଏବଂ କୁଞ୍ଜୁର ବାନ୍ନା ଲିପିକୁ ସାଂସଦାନିକ ମାନ୍ୟତା ଦିଅନ୍ତେ ଦାବି

ବିଶର ଚାରିଖ: 01 ଦିସେମ୍ବର 2018 (ଶନିବାର) ଦିନ କୁଞ୍ଜୁର-ଭାଷା ଏବଂ କୁଞ୍ଜୁର-ବାନ୍ନା ଲିପିକୁ ସାଂସଦାନିକ ମାନ୍ୟତା ଦିଅନ୍ତେ ଏକ ବିଶାଳ ଜନମହାରେଲି ପଞ୍ଚସପ୍ତାୟ ଦାବିକୁ ନେଇ ଅନୁଷ୍ଠିତ ହୋଇଥିଲା । ଭାରତର କୋ ଏ.ଡି.ଏମ.ଏ. କେ ଦିଆଯାଇ ଶାନ୍ତପତି ତଥା ରାଜ୍ୟପାଳ ଏବଂ ମୁଖ୍ୟାଳୟ, କେନ୍ଦ୍ରିୟ ଖାସା ବିଭାଗ, ଭାରତ ସରକାର କୋ ଜାପନ ସୌପା ଗୟା ।

ସୁବନାୟୋଗ ଯେ, ଅଲ ଓଡ଼ିଶା କୁଞ୍ଜୁର ପାଢ଼ହା ଯୁବକ ସଂଘ ଏବଂ କୁଞ୍ଜୁର ଖାସା-ସାହିତ୍ୟ ବିଭାଗ ପରିଷଦ ଓଡ଼ିଶା, ଛତିସଗଡ଼, ଜ୍ଞାନଖଣ୍ଡ ତଥା ପ. ବଙ୍ଗାଳ କେ ଓର ସେ କୁଞ୍ଜୁର-ଖାସା ଏବଂ କୁଞ୍ଜୁର-ବନ୍ନା ଲିପି କୋ ସାଂସଦାନିକ ମାନ୍ୟତା ଦାବି ଏକ ବିଶାଳ ଜନମହାରେଲି ନିକାଳ କର 5-ସୂତ୍ରିୟ ମାଂଗ କୋ ଲେକର ଗଞ୍ଜକେଲା ଏ.ଡି.ଏମ. କେ ଜାରିଏ ମହାମହିମ ଗଢ଼ପତି, ଭାରତ ସରକାର ତଥା ଓଡ଼ିଶା ଗଞ୍ଜପାଳ ଏବଂ ମୁଖ୍ୟାଳୟ, କେନ୍ଦ୍ରିୟ ଖାସା ବିଭାଗ, ଭାରତ ସରକାର କୋ ଜାପନ ସୌପା ଗୟା ।

ଯହ ସୂଚନା ଯୋଗ୍ୟ ହେଁ କି, ଅଲ ଓଡ଼ିଶା କୁଞ୍ଜୁର ପାଢ଼ହା ଯୁବକ ସଂଘ ଏବଂ କୁଞ୍ଜୁର ଖାସା ସାହିତ୍ୟ ବିକାସ ପରିଷଦ, ଓଡ଼ିଶା, ଛତିସଗଡ଼, ଜ୍ଞାନଖଣ୍ଡ ତଥା ପ. ବଙ୍ଗାଳ କେ ଓର ସେ କୁଞ୍ଜୁର-ଖାସା ଏବଂ କୁଞ୍ଜୁର-ବନ୍ନା ଲିପି କୋ ସାଂସଦାନିକ ମାନ୍ୟତା ଦାବି ଏକ ବିଶାଳ ଜନମହାରେଲି ନିକାଳ କର 5-ସୂତ୍ରିୟ ମାଂଗ କୋ ଲେକର ଗଞ୍ଜକେଲା ଏ.ଡି.ଏମ. କେ ଜାରିଏ ମହାମହିମ ଗଢ଼ପତି, ଭାରତ ସରକାର ତଥା ଓଡ଼ିଶା ଗଞ୍ଜପାଳ ଏବଂ ମୁଖ୍ୟାଳୟ, କେନ୍ଦ୍ରିୟ ଖାସା ବିଭାଗ, ଭାରତ ସରକାର କୋ ଜାପନ ସୌପା ଗୟା ।

ଯହ ରେ଼ୀ ଗଞ୍ଜକେଲା ବିରସା ମୁଞ୍ଡା ଚୌକ ସେ ମୁଖ୍ୟ ସହର କେ ବିଚୋବିଚ ଆବେଦକ ଚୌକ ହୋକର ଏ.ଡି.ଏମ. ଅଫିସ ତରଫ୍ ପହଂଚା । କୁଞ୍ଜୁର-ଖାସା କୋ ଭାରତୀୟ ସଂସଦାନିକ କି 8-ନିଂ ଅନୁସୂଚି ମେଂ ସାମିଲ କରନେ, କୁଞ୍ଜୁର-ବନ୍ନା ଲିପି କେ ଘ୍ରାମ କୁଞ୍ଜୁର-ଖାସା କୋ ଲିଖନେ-ପଢ଼ନେ କି ମୁଖ୍ୟ-ମାଧ୍ୟମ କେ ରୂପ ସେ ସାଂସଦାନିକ ମାନ୍ୟତା, ଦେଶଭର କେ କୁଞ୍ଜୁର(ଉରବ) ଜନଅବାଦି କ୍ଷେତ୍ର ମେଂ କୁଞ୍ଜୁର ଶିକ୍ଷକ କୋ କି ନିଯୋଜନ, ଦେଶ କେ ବିଶ୍ୱବିଦ୍ୟାଳୟ ମେଂ ସ୍ୱତନ୍ତ୍ର କୁଞ୍ଜୁର ବିଭାଗ କି ମାଂଗ ଓର ଜ୍ଞାନଖଣ୍ଡ ରାଜ୍ୟ କେ କୁଞ୍ଜୁର-ପାଠ୍ୟକ୍ରମ କୋ ଦେଶଭର ମେଂ ଲାଗୁ କରନେ କି ମାଂଗ ଆଦି ସାମିଲ ଥି । ଦେଶଭର ସେ ଜନମହାରେଲି ମେଂ ହଜାର କୋ ସଂଖ୍ୟା ମେଂ କୁଞ୍ଜୁର ଖାସା ପାଠ୍ୟକ୍ରମ କି ମାଂଗ ।

ଝସ ଅବସର ପର ବାସୁଦେବରାମ ଧାଲଖୋ, କୁଞ୍ଜୁର-ବନ୍ନା ଲିପି କେ ଆବିଷ୍କାରକ, ଜ୍ଞାନଖଣ୍ଡ ପ. ସିଂଗଭୂମ, ଚକ୍ରଧର-ପୁର ନେ କୁଞ୍ଜୁର-ବନ୍ନା ଲିପି ଓର କୁଞ୍ଜୁର-ଖାସା କି ମହତ୍ୱ ସମଜାୟା । ମନବୋଧ ମାଞ୍ଜି, ରାଜ୍ୟ-କୋଷାଧ୍ୟକ୍ଷ ତଥା ସୁନ୍ଦରଗଞ୍ଜ ଜିଲା କାର୍ଯ୍ୟ-ସମାପତି ନେ କୁଞ୍ଜୁର-ବନ୍ନା ଲିପି କୋ ଏକ ପ୍ରଭାବଶାଳୀ ଲିପି ବତାୟେ ହୁଏ ଯହ ଲିପି କୋ କୁଞ୍ଜୁର (କିସାନ) ସମାଜ ମେଂ ଧି ଲାଗୁ କରନେ କି ବାତ କହା ।

ଗମଚନ୍ଦ୍ର ଧାଲଖୋ ମହା ସଚିବ ଅଲ ଓଡ଼ିଶା କୁଞ୍ଜୁର-ପାଢ଼ହା ଯୁବକ ସଂଘ ନେ ରେ଼ୀ କି ଉଦ୍ଦେଶ୍ୟ ତଥା ସରକାର ସେ ସମୁଦ୍ଧ-ମାଂଗ କେ ବାରେ ମେଂ ଉପସ୍ଥାନୀୟ କିୟା । ବାଲେଶ୍ୱର ମୟୂର୍ଜନ ଜିଲା କେ ଯୁବାଧ୍ୟକ୍ଷ, ଶଙ୍କର ତିର୍କୀ ନେ କହା କି ଖାସା ବଚେକି ଗୋ ହମ ବଚେଗେ । ଉମାକାନ୍ତ ଗମ, ସଲହାକାର, ମୂଳୀ-ପାଢ଼ହା, ବାଲେଶ୍ୱର-ମୟୂର୍ଜନ ନେ କହା କି କୁଞ୍ଜୁର-ଖାସା ସେ ପଢ଼ନେ-ଲିଖନେ ପର ହମାରି ବାସ୍ତବିକ ଉନ୍ନତି ହୋ ସକ୍ତି ହେ । ଚନ୍ଦ୍ରକାନ୍ତ ଓରବ, ଦେବାନ, ମୂଳୀ-ପାଢ଼ହା, ସଂବଲପୁର ଖାସା ହମାରି ପଢ଼ଚାନ ହେ, ଖାସା ସେ ହି ହମାରି ସଂସ୍କୃତି କି ରକ୍ଷା ହୋ ସକ୍ତି ହେ ।

ସାଥ ମେଂ ରଜନୀ ଗମ, ମୂଳୀ ବେଲ, ମୂଳୀ-ପାଢ଼ହା, ବାଲେଶ୍ୱର-ମୟୂର୍ଜନ, ଯୋଧୀତ ଭଗତ, ଜ୍ଞାନଖଣ୍ଡ, ଝ୍ୟାମ ଧାଲଖୋ, ଜ୍ଞାନଖଣ୍ଡ, ଚେଗା ଓରବ, ଓଡ଼ିଶା, ଜ୍ଞାନାଗା ତିର୍କୀ, ଉପ-ସମାପତି, ବୃନ୍ଦା ବର୍ଲା ସଚିବ; ସୁନିତ ସୋହନ ତିର୍କୀ ଏବଂ ମାଝିକେଲ ଲକଡ଼ା, କୋଷାଧ୍ୟକ୍ଷ; କିଶନ କେକେଟ୍ର, ସାଂସଦାନିକ ସମ୍ପାଦକ, ଅର୍ଜୁନ ତିର୍କୀ ଏବଂ ସୁଦାମ ବର୍ଲା ଏଡିଟର; ଅଡିଟର, ଦିଲିପ ଥପ୍ପୋ, ଅଲ ଓଡ଼ିଶା କୁଞ୍ଜୁର ପାଢ଼ହା ଯୁବକ ସଂଘ କେ ପ୍ରମୁଖ ଲୋଗ ଉପସ୍ଥିତ ଥେ ।

ଧ୍ରୁବେ ସିଦ୍ଧେଂ
ଗମଚନ୍ଦ୍ର ଧାଲଖୋ
ମହା ସଚିବ,
ଅଲ ଓଡ଼ିଶା କୁଞ୍ଜୁର ପାଢ଼ହା ଯୁବକ ସଂଘ
(ଖୋଞ-ପଢ଼ହା ଝସ ପେଲେ-ପଢ଼ହା)
(କୁଞ୍ଜୁର ଯୁବାଞ୍ଝ କା ପ୍ରାଧିକାର, ପରମ୍ପରା, ଶୈକ୍ଷଣିକ, ସଂସ୍କାର)



ଜନମହାରେଲି କେ ଘ୍ରାମ କେନ୍ଦ୍ର ତଥା ରାଜ୍ୟ ସରକାର ସେ ପଂଚ-ସୂତ୍ରିୟ ମାଂଗ କି ଗ଼ି :

- 1- କୁଞ୍ଜୁର-ଖାସା କୋ ଭାରତୀୟ ସଂସଦାନିକ କି 8-ନିଂ ଅନୁସୂଚି ମେଂ ସାମିଲ କରନେ କି ମାଂଗ,
- 2- କୁଞ୍ଜୁର-ବନ୍ନା ଲିପି କେ ଘ୍ରାମ କୁଞ୍ଜୁର-ଖାସା କୋ ଲିଖନେ-ପଢ଼ନେ କି ମୁଖ୍ୟ-ମାଧ୍ୟମ କେ ରୂପ ସେ ସାଂସଦାନିକ ମାନ୍ୟତା,
- 3- ଦେଶଭର କେ କୁଞ୍ଜୁର(ଉରବ) ଜନଅବାଦି କ୍ଷେତ୍ର ମେଂ କୁଞ୍ଜୁର ଶିକ୍ଷକ କୋ କି ନିଯୋଜନ କି ମାଂଗ,
- 4- ଦେଶଭର କେ ବିଶ୍ୱବିଦ୍ୟାଳୟ ମେଂ ସ୍ୱତନ୍ତ୍ର କୁଞ୍ଜୁର ବିଭାଗ କି ମାଂଗ
- 4- ଓର ଜ୍ଞାନଖଣ୍ଡ ରାଜ୍ୟ କେ କୁଞ୍ଜୁର-ପାଠ୍ୟକ୍ରମ କୋ ଦେଶଭର ମେଂ ଲାଗୁ କରନେ କି ମାଂଗ କି ଗ଼ି ।

Fig 28: Kurukh Banna used in heading of 'News Parha Rajee' newspapers (Hindi & Odia edition). (2018)

School and Learning Institutions:



Fig 29: Pictures of Kurukh schools at Mudma (top) and Shaharbeda (bottom). (Jharkhand)



Fig 30: Picture of Kurukh school at Kalma.(Odisha)



Fig 31: Pictures of Kurukh learning Centre at Panposh.(Odisha)



Fig 32: shows other community center cum learning institution.



Fig 33: pictures of a Kurukh teaching class. (Odisha, 2023)

Public spaces:

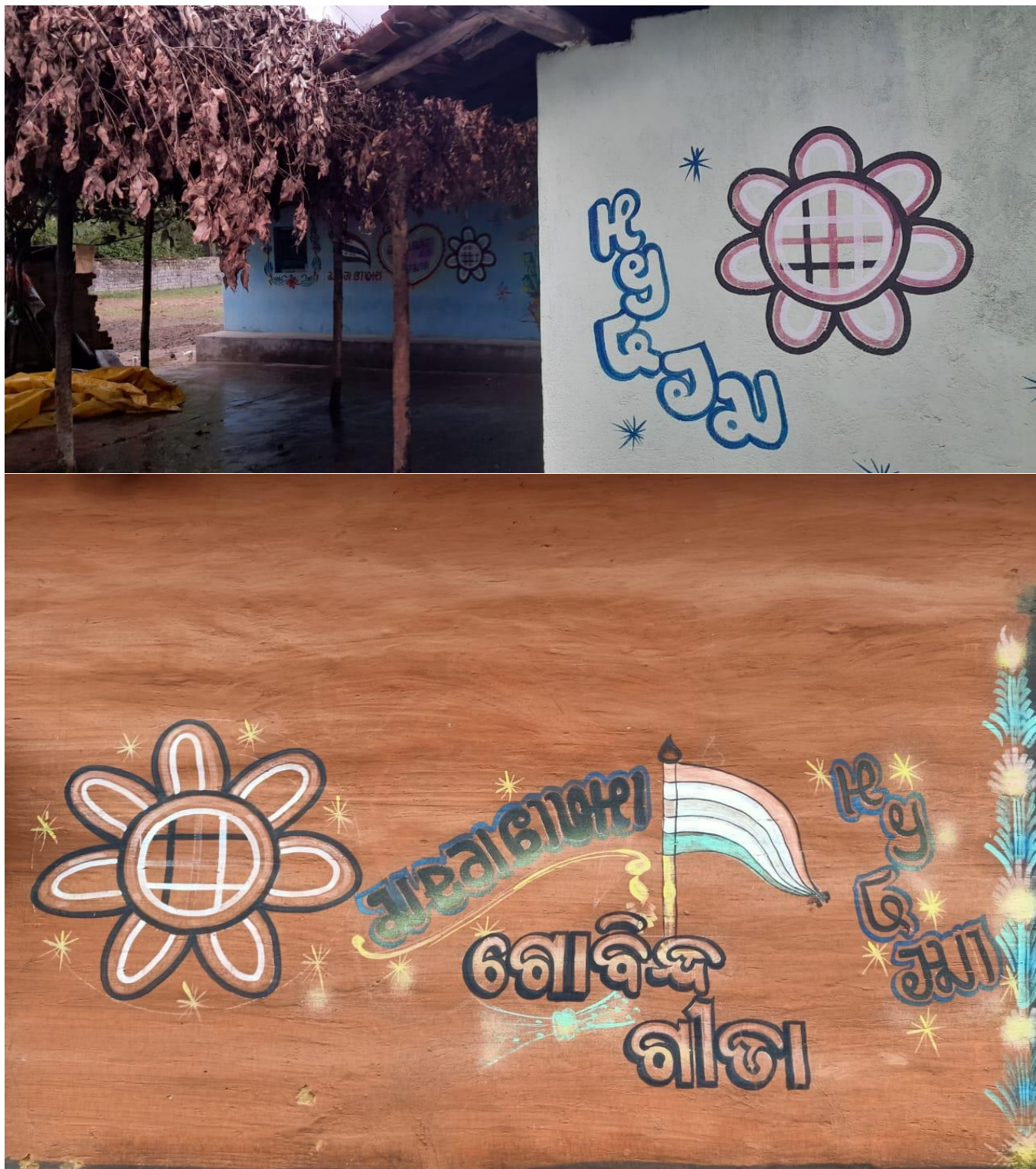


Fig 34: shows traditional wall paintings/decorations. (Odisha)



REDMI NOTE 8 PRO
AI QUAD CAMERA



Fig 35: shows some Bride name boards.



Fig 36: Kurukh Banna used in ornaments.

ଝେ ଭୋଗା ! Mob: [REDACTED] ଝେ ଭୋଗା !!
 Email: [REDACTED]@gmail.com

ମଙ୍ଗଳା ପଞ୍ଚାଳ
 ଡାଞ୍ଚ, ଧାରି ଭୋଗା, ଡାଞ୍ଚାଞ୍ଚା
MANGLA KHALKHO
 Bel, Dara Parha Balijuri
 Oram Toli, Rourkela Pin: 769016
 Dist: Sundargarh, Odisha



ଝେ ଭୋଗା ଭୋଗା
JAY DHARMESH PRODUCTION
 Mandal Sai, Chakradharpur
 West Singhbhum, Jharkhand
 pin: -833102

BASUDEO RAM KHALKHO
 Mob: [REDACTED]

ଝେ ଭୋଗା ! Mob: [REDACTED]
 Email: [REDACTED]@gmail.com

ମନମୋହନ ଓରାମ
 ଭୋଗା, ଠାଣା ଡାଞ୍ଚା ଡାଞ୍ଚାଭୋଗା ଭୋଗା, ଡାଞ୍ଚା
MANMOHAN ORAM
 president: Kurukh Bhasha Sahitya Vikash Parisad, Odisha
 DURGAPUR, ORAMPARA, UDITNAGAR, ROURKELA
 DIST ; SUNDARGARH ODISHA PIN; 769012

Fig 37: Kurukh Banna used in visiting cards. (Odisha)



Fig 38: Kurukh Banna used in idol of Martyr Birsa Munda. (Odisha)



Fig 39: Kurukh Banna used in sign board. (Chhattisgarh)



Fig 40: Kurukh Banna used in worship places.(Balimorh, Odisha)



Fig 41: Kurukh Banna used in Religious community place (Mudma, Jharkhand).



Fig 42: Kurukh Banna used in wedding invitation cards.



Fig 43: Kurukh Banna used in community member badge. (2020)

ଠୀ ବ୍ରାହ୍ମ ଧାର୍ମିକ ଜଗତ ମଧ୍ୟରୁ ବସନ୍ତ (୧୯୮୯) ମସିହା ଗ୍ରହଣ
 KEY BOARD MAPPING FOR KURUKH BANNA (LIPi) BIG LETTAR

Full Copyright: Kurukh Font (Design by) Basudeo Ram Khalkho
 Free Download From <http://www.kurukhkhota.com>



Fig 44: Kurukh Banna keyboard layout.



Fig 45: A Kurukh Banna typeface dices.



Fig 46: A Kurukh Banna workshop on the occasion of Sarhul puja.

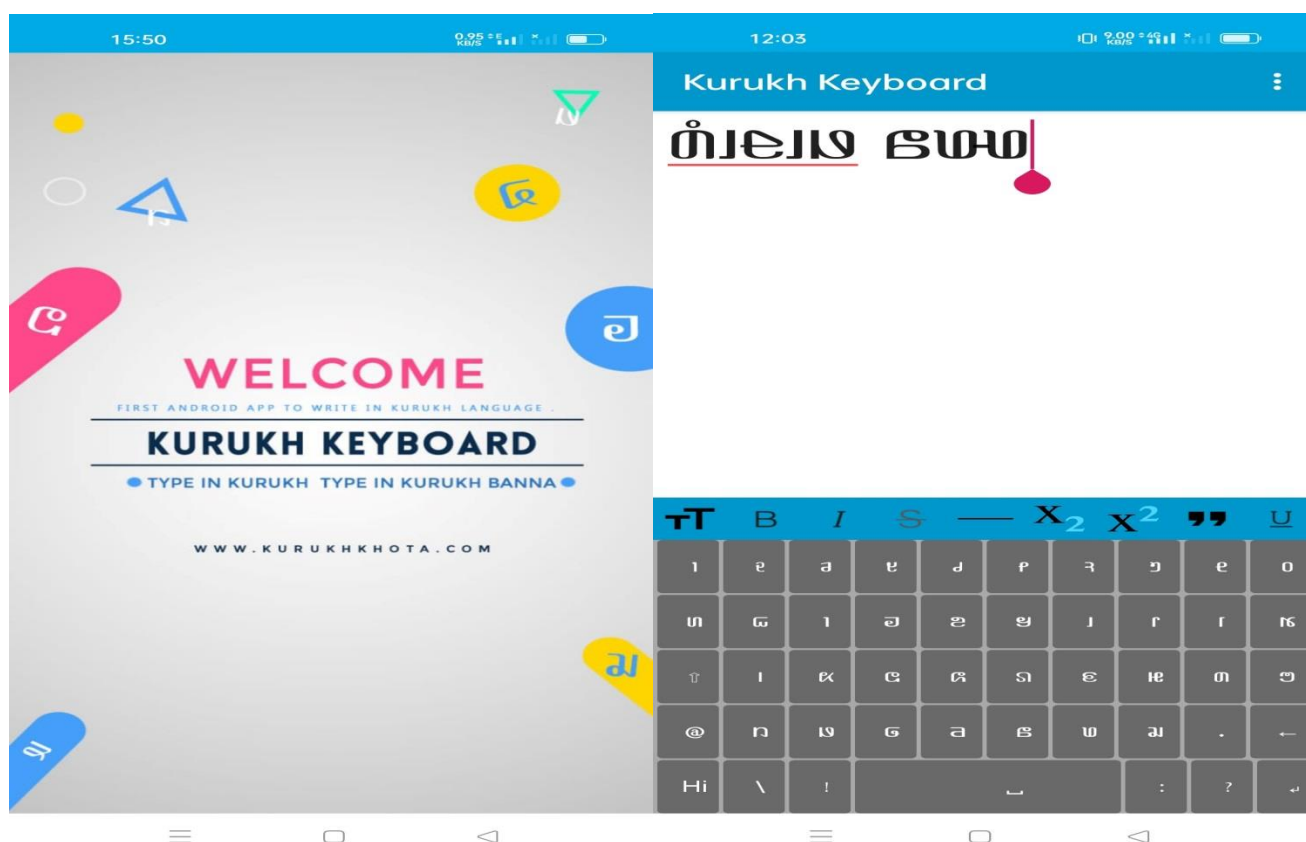


Fig 47: A Kurukh Keyboard Application.



ଠୁଠୁଠୁ ଗାଠିଠି କୁଠୁଠୁ
KUDUKH VIKASH PARISHAD
Nuagaon, Kuarmunda & Bisra, Dist. Sundargarh (Odisha)
Regd. No. SGD/2058/162/97
Head Office: KARTIK ORAON FIELD FULJHAR, MOB.9437479206

Ref. No. K.V.P.07/23.....



Date 30/04/2023.....

To,
Dr. Deborah Anderson
Technical Director
Unicode technical committee
U.S.A.

From :-
Kurukh Vikash Parishad
Nuagaon, Kuarmunda & Bisra
Dist: Sundargarh (Odisha)
Regd. No. SGD/2058/162/97
Head Office: Kartik Oraon Field, Fuljhar

Sub: Supporting letter for "Kurukh Banna" script Proposal Reg.

Dear Sir / Madam,

We on behalf of our organization Kurukh Vikash Parishad, Nuagaon, Kuarmunda, Bisra Sundargarh, Odisha, ested on 1997. Kurukh Vikash Parishad is socio cultural and educational organization of oraon society. Our organization has been working to preserve the kurukh language and culture of the oraon community by imparting cultural knowlege and training in kurukh language and Kurukh Banna (Script) to our oraon people.

We Would like to express our sincere appreciation to Linguist Biswajit Mandal for the effort he put into encoding the Kurukh Banna Script in Unicode the developement in this regard is an essential step toward preserving the cuturar heritage and language of the oraon community enlight of this. We respectfully request the Unicode committee.

Thanking you,

Moram
Secretary
KUDUKH VIKASH PARISHAD
Nuagaon, At-Kartik Oraon
Padia Fuljhar, P.O.-Khuntagaon
Via-Bisra, Dist. Sundargarh

Your's faithfully
1621 e10er
Bkhalkho
President
KUDUKH VIKASH PARISAD
Nuagaon, At-Kartik Oraon Field
P.O.-Khuntagaon, Via-Bisra



ଓଡ଼ିଆ ଭାଷା ବିକାଶ ପରିଷଦ, ରାଉରକେଲା
KURUKH BHASHA SAHITYA VIKASH PARISHAD, ODISHA
BALIJODI ORAON TOLI PARHA CAMPUS, SONA PARBAT, ROURKELA-16, DIST: SUNDARGARH ODISHA
Phone: 9938446269, 9668339974, 7978120028. Email: kbsvp12@gmail.com

Ref. No. *KBP.03/23*

Date. *27.10.23*

To,
Dr. Deborah Anderson
Unicode Technical Director
Unicode Technical Committee, U.S.A.



From:
Sri Mangla Xalxo, Secretary
Kurukh Bhasha Sahitya Vikash Parishad
Balijodi, Oraon Toli Parha Manda, Rourkela-16,
Dist: Sundargarh, (Odisha) Pin-769016

Sub: Supporting letter for Kurukh Banna script proposal Reg.

Sir/Madam,

We, on behalf of Kurukh Bhasha Sahitya Vikash Parishad is wings of the kurukh parha on organization Teachers, intellectual, and cultural workers of the oraon community, formed in 2012 at Rourkela, Odisha. the organization's primary objective is to preserve the Kurukh language, promote the Kurukh Banna (Script), and develop Kurukh literature. Since its formation, the organization has been continuously working towards achieving these goal.

In 2012, Second edition the organization published 2nd book, Kurukh Banna Turna Bachna, Which is the primary book for learning Kurukh Banna Script. This book has been published in about eight edition to this, the organization has published the works of many Oraon community writers and also released a megazin named Kurukh chambi in 2018, written in the Kurukh Banna (script). The organization promotes kurukh literature by setting up book stalls at various cultural event, making the books available to kurukh speakers in Chattisgarh, Jharkhand, West Bengal, and Assam.

The organization also organizes seminars, webinar, and discussions from time to time to raise awareness about the current challenges faced by the kurukh language and culture and to find solutions to those challenges. As the kurukh language is written in different state e.g Devanagiri, Roman, Odiya, Bengali (Script) thus it becomes difficult to pronounce it correctly, also such presence poses a challenge to achieving consistency in the literature of the language.

Therefore, the organization is trying to preserve the Kurukh language through the Kurukh Banna (Script) and promote uniformity in linguistic conservation and development in the community.

The organization is very delighted to know about the ongoing efforts of linguist Biswajit Mandal on unicode encoding for "Kurukh Banna Script". UNESCO has included the kurukh language in the list of endangered languages, and the language and culture are struggling for their existence. Therefore, our organization on behalf of kurukh speaking people urges to unicode committee to encode Kurukh Banna (Script) in unicode. This will help Kurukh language to get benefit of technological advancement and sustain its existence to future generation.

Thankyou.

Yours faithfully.

ମନମୋହନ ଓରାମ
(MANMOHAN ORAM)
President
Kurukh Bhasha Sahitya
Vikash Parishad, Odisha

ମଙ୍ଗଳା ଧର୍ମ
(MANGLA XALXO)
Genl. Secretary
Kurukh Bhasha Sahitya
Vikash Parishad, Odisha

Letter of Support from All India Kurukh Parha Yubak Sangh.

ଓଡ଼ିଆ ଭାଷା...!! ଓଡ଼ିଆ ଭାଷା...!! ଓଡ଼ିଆ ଭାଷା...!! ଓଡ଼ିଆ ଭାଷା...!! ଓଡ଼ିଆ ଭାଷା...!!

ଓଡ଼ିଆ ଭାଷା...!!
ALL INDIA KURUKH PARHA YUBAK SANGH
Jonkh-Erpa Ara Pello-Erpa
(An Ancient, Traditional, Educational, Institution of Adivasi Kurukh Parha Youths.)
Head Office: Addi-Dharam Parha Manda, Youth Centre, Deogaon, Jalda-'A' Block, Rourkela- 43, Dist: Sundargarh, Odisha, India.
Mobile: 8763903014, 9348332091, 7008559265, 7653885722, 8102423220, 9937458781. E-mail ID: aikpys@gmail.com

Ref. No.: 008/ AIKPYS/ 2023

Dated: 01/05/ 2023

To,
The Dr. Deborah Anderson,
Unicode Technical Director,
Unicode Technical Comittee, USA.



From,
Mr. Ramchandra Xalxo, President,
ALL INDIA KURUKH PARHA YUBAK SANGH- (Jonkh-Erpa Ara Pello-Erpa)
An Ancient, Traditional, Educational, Institution Of Adivasi Kurukh Parha Youths.
Head Office: Addi-Dharam Parha Manda, Youth Centre, Deogaon, Jalda-'A' Block, Rourkela- 43, Dist: Sundargarh, Odisha, India.

Sub: **Supporting Letter for Encoding KURUKH BANNA Script Proposal Regarding.**

Honorable Sir/Madam,

With reference to the subject cited above, we the Kurukh Youths of India seeking to encode Kurukh-Banna Script to enhance its writing & reading skills in the Technical World. We would like to draw your kind attention to the following few lines for your kind consideration.

1. AIKPYS- (Jonkh-Erpa Ara Pello-Erpa) is an Ancient, Traditional, Educational, Institution of Tribal Kurukh Parha Youths. The organization stands for the purely educational purpose to make kurukh youths aware towards their real Education-System, Socio-Cultural life and all that related with our life style. The organization organizes many Career-Guidance training programs & motivational programs on Kurukh-Language & Culture since last 2004 year. Also we are demanding constitutional rights of Kurukh-Language & Culture and its script KURUKH BANNA.
2. Kurukh is an ancient language belong to Dravidian family spoken by an Oraon Tribe (Kurukh or an Oraon Tribe has been identified under Article- 342 of Indian Constitution) of India and abroad. But it is going to meet it's own death by some reasons. In the current scenario it needs preservation & protection from the elements that caused death of Kurukh Language. More than 19 Million Kurukh (Oraon) People exist in Indian territory. Mr. Basudeoram Khalkho has created KURUKH BANNA Script is easy to write & read. Also it is acceptable by tha ORAON (KURUKH) community throughout the nation and abroad as per its scientific design.
3. We are glad to inform you that, Mr. Bishwajit Mandal, a dedicated activist on Kurukh language & script. We are very much elevated with knowing his effort & hard working for encoding KURUKH-BANNA Script in the UNICODE. We expect that, his effort may bring significant result to preserve Kurukh Language & It's Cultural Heritage at global level. Therefore, we specially request to UNICODE Committee to Encode KURUKH-BANNA Script as soon as possible.

Thanking you,

Your's trustworthy

ଶ୍ରୀରାମଚନ୍ଦ୍ର ଖାଲ୍‌ଖୋ
Mr. BURUNGA BARLA
Chief Genl. Secretary
AIKPYS, Jalda-'A' Block,
RKL-43, Dist.: SNG, Odisha

ରାମଚନ୍ଦ୍ର ଖାଲ୍‌ଖୋ
Mr. RAMCHANDRA XALXO
President
AIKPYS, Jalda-'A' Block,
RKL-43, Dist.: SNG, Odisha

Letter of Support from Aadiwasi Mahasabha.

आदिवासी महासभा

प्रधान कार्यालय :- टेण्डर, रातु, रांची-835222
देवकुमार धान (संयोजक) मो० - 7761844150, 8235931389

पत्रांक 19/2023 दिनांक 03/05/2023

To,
Dr. Deborah Anderson Unicode Technical Director,
Unicode Technical committee U.S.A.
From - Aadiwasi Mahasabha Ranchi Jharkhand Narayan Oraon, Charu Oraon, Budhwa Oraon, Pawan Oraon, Mahadeo Oraon

Sub - Supporting letter for Kurukh Banna Proposal Reg.

Dear Sir/Madam,

We on behalf of our organization Aadiwasi Mahasabha Ranchi Jharkhand easted on 30/04/2014 Aadiwasi Mahasabha Ranchi Jharkhand is socio Cultural and educational organization of Oraon Society. Our organization has been working to preserve the language and culture of the oraon community by imparting cultural knowledge and Training in Kurukh language and Kurukh Banna Script to our Oraon people.

We would like to express our sincere appreciation to Linguist Biswajit Mandal for the effort he put into encoding the Kurukh Banna Script in Unicode. The development in the regard is an essential step towards preserving the cultural heritage and language of the Oraon Community in light of this. We respectfully request the Unicode committee to prioritize the encoding of the Kurukh Banna script in Unicode.

Thanking you

Your Faithfully

ଝାର ଉପାଦେଶ ଦାଠ, ଗାଆଁଧୁମି ଜଠି
ଘିଢ଼େନା ଜଠିର, ଧଢ଼େନା ଜଠିର
ଝରଠ ଜଠିର, ତାବା ଜଠିର



**DURGAPUR KURUKH PARHA
&
ORAON CULTURAL TRUST**

Durgapur Orampara, Uditnagar, Rourkela – 769012
Distt. – Sundargarh, Odisha

Regd. no. 1711502054

Contact no. 9668339974 (M)

E-mail: oraonculturaltrust@gmail.com

Ref. No.: DKPOCT/02/23

Date: 03/05/2023

To,

Dr. Deborah Anderson Unicode Technical Director,
Unicode Technical Committee, U.S.A

From,

Manmohan Oram
Durgapur, Orampara,
Rourkela-12, Sundargarh

Subject: Supporting letter for Kurukh Banna Proposal Reg.

Dear Sir/ Madam,

With reference to the above subject, We on behalf of our institution wants to inform you that Durgapur Kurukh Parha & Oraon Cultural Trust traditional, socio-cultural and educational institution of the Oraon community located in Udit Nagar, Rourkela. As we know, UNESCO lists Kurukh language as an endangered language and our language and culture are struggling to survive. Many young people are moving away from their language and culture.

In such situation, as a custodian of community, organization working to preserve the language and culture of the Oraon Community by imparting cultural knowledge and training in Kurukh Banna script to the youth member of Oraon Community.

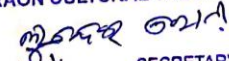
We are very delighted to teach that, linguist Biswajit Mandal is working towards Unicode Encoding for Kurukh Banna Script. We humbly request the Unicode Committee to encode the “Kurukh Banna Script” in Unicode. It will revive and promote our cultural heritage and ensure the survival of the Kurukh language for future generations. With access to online resources and digital content creation in our own Kurukh Banna Script, Kurukh speakers will be encouraged to use and promote the language, contributing to its preservation and revitalization.

With thanks and regards.

DURGAPUR KURUKH PARHA &
ORAON CULTURAL TRUST


Manmohan Oram
PRESIDENT

DURGAPUR KURUKH PARHA &
ORAON CULTURAL TRUST


LUNDEI ORAM
SECRETARY

DURGAPUR KURUKH PARHA &
ORAON CULTURAL TRUST
Regd No.- 1711502054
Durgapur, Orampara, Rourkela
Distt. Sundargarh, Odisha Pin- 769012



ଓଡ଼ିଆ ଶବ୍ଦର ଉଦ୍ଧାରଣ

UDAAN SARNA SAMITI

Mandal Sai, Chakradharpur, Dist: West Singhbhum (Jharkhand)
Mobile: 8340299426, 7488141794

Ref.No. USS 09/23.....



Date. 01/05/2023.....

To,
Dr. Deborah Anderson
Unicode Technical Director
Unicode Technical Committee USA

Sub: Supporting letter for Kuruk Banna proposal reg.

Dear Sir,

We, on behalf of our organization, Udaan Sarna Samiti, Chakradharpur, Jharkhand would like to express our sincere appreciation to linguistic Biswajit Mandal for the effort he put into encoding the Kuruk Banna script in Unicode. The development in this regard is an essential step towards preserving the cultural heritage and language of the oraon community.

Udaan Sarna Samiti is a socio-cultural platform of our oraon society. Our organization has been working to preserve the language and culture of the oraon society by imparting knowledge and training in Kuruk language and Kuruk Banna script to our oraon community.

Inlight of the above, we respectfully request the Unicode committee to prioritize the encoding of the Kuruk Banna script in Unicode.

Thanking you

Yours faithfully

Sidam Sirney
Secretary
Udaan Sarna Samiti
CKP, Jharkhand

୧୩୦୧ ୧୩୧୮
(Udaan Sarna Samiti)
President
Udaan Sarna Samiti
CKP, Jharkhand

Letter of Support from Rajee Parha.



राजी पड़हा

उराँव आदिवासियों का पारम्परिक सामाजिक, सांस्कृतिक, धार्मिक एवं न्यायिक संगठन
(रूढ़ि प्रथा, संवत्सरात्मक व्यवस्था)



श्री. जगज्वर उरांग

श्री. बिजयित मण्डल

मुख्यालय : नई रोहतासगढ़, सरना शक्ति पाठ, परसापानी, पो.अ. सेवारी, जहरी - राजपुर, जिला - बलरामपुर, छत्तीसगढ़ (भारत), पिन 497118

क्रमांक ...13... /रा.प.भा./2023

दिनांक 28/4/23.....



To
Dr. Deborah Anderson Unicode Technical Director,
Unicode Technical Committee U.S.A.

From,
Jugeswar Urang
At/PO- Banipur
Dist- Debrugarh, Assam
Pin- 786003

Sub: Supporting letter for Kuruk Banna Proposal Reg.

Dear Sir/ Madam,

In reference to the above subject we on behalf of our organisation wants to inform you that Kurukh Rajeepadha Bharat is an ancient traditional, socio-cultural, and educational institution of the Oraon community located in at Pharsapani, PO- Sabari, Dist-Balrampur, Chhatisgarh. It is National level organization the Oraon People. As we know Kurukh language is listed as an Endangered language by UNESCO and our language and culture are struggling to survive.

In such situation, as a custodian of community, Kurukh Rajee Padha Bharat has been working to preserve the language and culture of the Oraon Community by imparting cultural knowledge and training in Kurukh language and Kurukh Banna script to the youth member of Oraon community.

It brings us great joy to learn to linguist Biswajit Mandal's efforts to encode the Kurukh Banna script in Unicode this achievement is sure to have a positive impact on the Oraon Community by allowing them to safeguard their cultural heritage and language. We humbly urge the Unicode committee to take swift action to encode the Kurukh Banna script in Unicode.

Thanking you,

Yours faithfully,

Dhiraj Bhagat
DEWAN
KURUX RAJEE PARHA
BHARAT

Dhiraj Bhagat
Nagra Kata
PO- New Mal Bazar
Dist- Siliguri, W.B.

Edwad Tirkey
KAHTO
KURUX RAJEE PARHA
BHARAT

Edwad Tirkey
At- Patelpara
Ambicapur, C.G.

Jugeswar Urang
BEL
KURUX RAJEE PARHA
BHARAT

Jugeswar Urang
Banipur, Dist- Debrugarh
Assam

बंशीधर उराँव
BEL
KURUKH PADA PARHA
CHHATISHGARH

बिजयित मण्डल
BEL
KURUKH PADA PARHA
JHARKHAND



କୂରୁକ୍ ହରା ପରା ବିଜୱିତ KURUKH DARA PARHA BALIJODI

(Gram Paramparik Gram Sabha)

ROURKELA - 769016, DIST. SUNDARGARH, ODISHA



Ref No. KDPB.05/23.....

Date: 01/05/2023.....

To
Dr. Deborah Anderson Unicode Technical Director,
Unicode Technical Committee U.S.A.

Sub: Supporting letter for Kuruk Banna Proposal Reg.

Dear Sir/ Madam,

In reference to the above subject we on behalf of our institution wants to inform you that Kurukh Dara Parha is an ancient traditional, socio-cultural, and educational institution of the Oraon community located in Balijodi, Rourkela, Odisha. As we know, Kurukh language is listed as an endangered language by UNESCO, and our language and culture are struggling to survive. Many young people are moving away from their language and culture.

In such situation, as a custodian of community, Kurukh Dada Parha has been working to preserve the language and culture of the Oraon Community by imparting cultural knowledge and training in Kurukh language and Kurukh Banna script to the youth member of Oraon community.

To further these efforts, we received a grant from the Government of Odisha in 1995. As a result, Kurukh Dada Parha now organize residential training camps on a large scale, making many young people aware of Kurukh language and Kurukh Banna script.

In 2018, Kurukh Dada Parha, in association with E-Disom Technology, launched the 'Kurukh Keyboard' Android App to learn and type in Kurukh Banna script on mobile devices. This initiative grabbed the attention of young member of community towards language and its script, also it inspired other traditional and customary Parha institutions in states like Chhattisgarh, Jharkhand, Bengal and Assam to make the Oraon community members revive their language, culture and script.

We are very delighted to learn that linguist Biswajit Mandal is working towards Unicode encoding for Kurukh Banna script. We humbly request the Unicode Committee to encode the 'Kurukh Banna Script' in Unicode. It will revive and promote our cultural heritage and ensure the survival of the Kurukh language for future generations. With access to online resources and digital content creation in our own Kurukh banna script, Kurukh speakers will be encouraged to use and promote the language, contributing to its preservation and revitalization.

Thanking you,

Yours faithfully,

ଅକ୍ଷୟ ମାଧବ

କୂରୁକ୍ ହରା ପରା
ବିଜୱିତ

କୂରୁକ୍ ହରା ପରା
ବିଜୱିତ

ଚନ୍ଦ୍ରାକାନ୍ତ ମାଧବ
Chandra Kant Oram

Bel

Kurukh Muli Padha,
Sambalpur

ପଦ୍ମା ରାମ

ପଦ୍ମା ରାମ
ବିଜୱିତ

କୂରୁକ୍ ହରା ପରା
ବିଜୱିତ

ପଦ୍ମା ରାମ

Padma Ram
ବିଜୱିତ

କୂରୁକ୍ ହରା ପରା
ବିଜୱିତ

ମଙ୍ଗଳା ଧରଣ
Mangala xalxo

BEL
KURUKH DADA PARHA
Balijodi, Rourkela-16

Letter of Support from Kukuda Kurukh Parha.



କାନ୍ଦେ ଧାମେ !

କାନ୍ଦେ ବାଅଲ !!

କାନ୍ଦେ ପାଡ଼ୁହା !!!

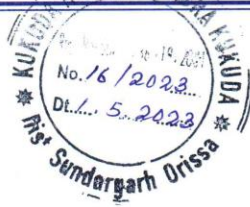
KUKUDA KUDUKH PADHA

KUKUDA, BISRA BLOCK, DIST.-SUNDARGARH (ODISHA)

Regd. No. / S.G.D. - 4236-119/2001



Ref. No. 16/2023.....



Date: 5.20.23.

To

**Sr. Deborah Andersonn Unicode Technical Director
Unicode Technical Committee USA**

From:

**Duda Tirkey Bel
Kukuda Kuudukh Padha
Vill. Kukuda, Po. Bisra Berkera
Dist: Sundargarh Odisha**

SUB:- Supporting letter for Kurukh Banna proposal Reg.

Dear Sir/Madam,

On behalf of our organization Kurukh Dara Parha in reference to the above subject once to inform you that Kurukh Dara Parha Kukuda is an ancient traditional, social cultural and educational institute of the our locality, which is at Kukuda Po. Bisra, Birkera, Dist. Sundargarh, Odisha. As we know Kurukh language is listed as an endangered language by UNESCO our language and culture are struttling to survive. Many young people are moving away from their language and cultural.

In such situation as constudian of community Kurukh Dara Parh Kukuda has been working to preserve the language and culture of the Oraon community by imparting cultural knowledge and training in Kurukh language Kurukh Banna script to the youth member of Oraon community.

We are grateful for the hard and dedication shown by linguist Biswajit Mandal to encode the Kurukh Banna script in Unicode. This achievement will be significant milestone in the preservation of Oraon community's cultural heritage and language. As such as we humbly request the Unicode committee to encode the Kuruk Banna script in Unicode as soon as possible.

Thanking you,

Yours faithfully,

DUDA TIRKEY
I adha Raja (ଅଧିକାରୀ)
Kukuda Kundukh Padha
Kukuda

ISO/IEC JTC 1/SC 2/WG 2

PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646-1^{PT}

Please fill all the sections A, B and C below.

Please read Principles and Procedures Document (P & P) from <http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html> for guidelines and details before filling this form.

Please ensure you are using the latest Form from <http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html>.

See also <http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html> for latest Roadmaps.

A. Administrative

1. Title: **Revised Proposal to Encode the Kurukh Banna in UCS**

2. Requester's name: **Biswajit Mandal (biswajitmandal.bm90@gmail.com)**

3. Requester type (Member body/Liaison/Individual contribution): **Individual Member**

4. Submission date: **29/02/2024**

5. Requester's reference (if applicable):

6. Choose one of the following:

This is a complete proposal: **Yes**

(or) More information will be provided later: **No**

B. Technical – General

1. Choose one of the following:

a. This proposal is for a new script (set of characters): **Yes**
Proposed name of script: **Kurukh Banna**

b. The proposal is for addition of character(s) to an existing block:
Name of the existing block:

2. Number of characters in proposal: **69**

3. Proposed category (select one from below - see section 2.2 of P&P document):

A-Contemporary B.1-Specialized (small collection) B.2-Specialized (large collection)

C-Major extinct D-Attested extinct E-Minor extinct

F-Archaic Hieroglyphic or Ideographic G-Obscure or questionable usage symbols

4. Is a repertoire including character names provided? **Yes**

a. If YES, are the names in accordance with the “character naming guidelines” in Annex L of P&P document? **Yes**

b. Are the character shapes attached in a legible form suitable for review? **Yes**

5. Fonts related:

a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?
Biswajit Mandal (biswajitmandal.bm90@gmail.com)

b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):
Basudeo Ram Khalkho (basudeokhalkho1996@gmail.com)

6. References:

a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? **Yes**

b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached? **Yes**

7. Special encoding issues:

Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)? **Yes**
See proposal for additional details

8. Additional Information:

Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at <http://www.unicode.org> for such information on other scripts. Also see Unicode Character Database (<http://www.unicode.org/reports/tr44/>) and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before? If YES explain	No
2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)? If YES, with whom? If YES, available relevant documents:	Yes <i>Basudeo Ram Khalkho, Mangla Xalxo, Manmohan Oram, Ramchandra Xalxo, Burunda Barla, Lundeï Oram, etc</i> <i>See citations in text proposal</i>
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? Reference:	Yes <i>See text of proposal</i>
4. The context of use for the proposed characters (type of use; common or rare) Reference:	Common <i>See text of proposal</i>
5. Are the proposed characters in current use by the user community? If YES, where? Reference:	Yes <i>See text of proposal</i>
6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP? If YES, is a rationale provided? If YES, reference:	No
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	Yes
8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence? If YES, is a rationale for its inclusion provided? If YES, reference:	No
9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters? If YES, is a rationale for its inclusion provided? If YES, reference:	No
10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to, or could be confused with, an existing character? If YES, is a rationale for its inclusion provided? If YES, reference:	No
11. Does the proposal include use of combining characters and/or use of composite sequences? If YES, is a rationale for such use provided? If YES, reference: Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided? If YES, reference:	No
12. Does the proposal contain characters with any special properties such as control function or similar semantics? If YES, describe in detail (include attachment if necessary)	No
13. Does the proposal contain any Ideographic compatibility characters? If YES, are the equivalent corresponding unified ideographic characters identified? If YES, reference:	No