

# Final Proposal to Encode the Khudawadi Script in ISO/IEC 10646

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## 1 Introduction

This is a proposal to encode the Khudawadi script in the Universal Character Set (UCS). The recommendations made here are based upon the following documents:

- N3766 L2/10-011 “A Roadmap for Scripts of the Landa Family”
- N3767 L2/10-012R “Preliminary Proposal to Encode the Sindhi Script in ISO/IEC 10646”
- N3768 L2/10-013R “Preliminary Proposal to Encode the Landa Script in ISO/IEC 10646”
- N3871R L2/10-271R “Proposal to Encode the Sindhi Script in ISO/IEC 10646”
- N3957 L2/10-420 “Request to Rename ‘Sindhi’ to ‘Khudawadi’”

This document replaces N3871R L2/10-271R. The major change is the renaming of the script from ‘Sindhi’ to ‘Khudawadi’, which was proposed in N3957 L2/10-420 and accepted by the UTC. This revision also includes minor editorial changes.

## 2 Overview

Khudawadi is a script used historically for writing the Sindhi language, which is spoken in India and Pakistan. It is a Landa-based script and is related to Sharada. Like other Landa writing systems, Khudawadi is a mercantile script used for routine writing, accounting, and other commercial purposes and was known as the *haṭṭāī* ‘shopkeeper’ and *vāṇīko* ‘merchant’ script etc. It is associated with the merchant communities of Hyderabad, Sindh.

In the 1860s, Khudawadi was chosen as the basis for a written standard for education and administration in Sindh.<sup>1</sup> The official Khudawadi was developed by Narayan Jagannath Vaidya, the Deputy Educational Inspector in Sindh,<sup>2</sup> and published as a standard by the Government of Bombay in 1868.<sup>3</sup> Standard Khu-

<sup>1</sup> Government of Bombay 1869: 213.

<sup>2</sup> Hughes 1876: 373.

<sup>3</sup> Grierson 1919: 18.

dawadi was designed by adding to the basic template some characters from script used in Shikarpur, which was also among the more developed Sindhi scripts.<sup>4</sup> This official Khudawadi possessed unique characters for each vowel and consonant sound of the Sindhi language, as well as vowel signs. A comparison of the original Khudawadi script and its standard form is given in Figure 7. Standard Khudawadi was known as ‘Hindu Sindhi’ and ‘Hindi Sindhi’; the adjectives ‘Hindu’ and ‘Hindi’ refer to the derivation of the script from an ‘Indian’ (ie. Brahmi) model in order to distinguish it from an Arabic-based script for Sindhi that was developed by the Government of Bombay in 1852.

In addition to mercantile records, Khudawadi was used in education, book printing, and for court records. The first books published in Khudawadi were lithographs, such as the Sindhi ballad *Dodo Chanesar* (see Figure 4). By the 1870s, books were being printed in Khudawadi using metal types produced in Bombay.<sup>5</sup> At least two metal fonts were prepared, specimens of which appear in Figure 3 and Figure 11; the fonts used in the latter specimen appear to have been cut in Vienna. In 1899, the script was used for printing *Sukhiri*, the first Sindhi literary journal.<sup>6</sup> After the turn of the 20th century, the British and Foreign Bible Society printed translations of Christian literature into Sindhi using Khudawadi (see Figure 5 and Figure 6). The script was also used in inscriptions, such as a multilingual *ex voto* in a shrine near Hyderabad, Pakistan (see Figure 12).

In the late 19th century, an Arabic-based script became the official writing system for Sindhi in Pakistan and India. Sindhi is also written in the Devanagari script in India. Khudawadi is now obsolete.

### 3 A Unified Encoding for the Landa-Based Scripts of Sindh

Numerous Landa-based scripts were used in Sindh. Several of these are named after the region, community, or commercial activities with which they were associated: Arora, Baniya, Bhatia, Hyderabad (Haidarabadi), Karadi, Khudawadi (Khudabadi), Khwaja (Khojki), Hatai, Hatvanika, Larai, Lohanaki (Lohana), Maimon, Rajai, Sakkar, Shikarpuri, Sewhani Bhabhira, Thatta (Thattai), Vaniya, Wangai, Waniko, etc. The majority of these scripts are insufficiently developed to be encoded independently in the UCS. The exceptions to this are Khudawadi and Khojki.

Therefore, if there is a need to represent these smaller Landa-based Sindhi scripts, the proposed encoding for Khudawadi should be used. Khudawadi is an appropriate representative for a unified Sindhi block because it possesses a complete character repertoire that serves as a superset for all local scripts. The exception to this unification is Khojki, which is the liturgical script of the Nizari Ismaili community of South Asia.<sup>7</sup>

## 4 Proposal Details

### 4.1 Script Name

The name of the script is ‘Khudawadi’. Official forms of Khudawadi are known as ‘Hindi Sindhi’, ‘Hindu Sindhi’, and ‘Standard Sindhi’.

### 4.2 Allocation

Khudawadi is allocated to the Supplementary Multilingual Plane (SMP) at the range U+112B0..112FF.

<sup>4</sup> See N3767 L2/10-012R for details. <sup>5</sup> Government of Bombay 1874: 262. <sup>6</sup> Datta 1987: 1892. <sup>7</sup> See N3978 L2/11-021.

### 4.3 Character Repertoire

The basic character set for Khudawadi consists of 69 characters: 37 consonant letters, 10 vowel letters, 9 vowel signs, 3 various signs, and 10 digits. Character names follow the UCS convention for Indic scripts. A code chart and names list are provided in Table 1 and Table 2.

### 4.4 Encoding Order

Different ordering schemes are attested for Khudawadi consonant letters. In some sequences the implosive consonant letters (GGA, JJA, DDDA, BBA) appear before their unaspirated counterparts (GA, JA, DDA, BA), in others they are placed after. In some orders RRA appears before DDDA and DDA, and in others it is placed after them and before DDHA; some also show SA before SHA. In the encoding proposed here, the implosive consonants appear after their unaspirated counterparts, RRA is placed before DDHA, and SHA before SA.

### 4.5 Font

The font for Khudawadi was developed by the present author. The glyphs are based upon are specimens of Standard Khudawadi published by the Government of Bombay (see Figure 3).

## 5 Implementation Details

### 5.1 Structure

The general structure (phonetic order, *mātrā* reordering, use of *virāma*, etc.) of Khudawadi is similar to that of other Indic scripts based upon the Brahmi model. It is written from left-to-right.

### 5.2 Representation of Vowel Letters

Some independent vowel letters may be represented using a combination of a base vowel letter and a dependent vowel sign. This practice is not recommended. The atomic character for the independent vowel letter should always be used, as shown below:

RECOMMENDED	NOT RECOMMENDED
𑖀 VOWEL LETTER AA	𑖀 VOWEL LETTER A + 𑖡 VOWEL SIGN AA
𑖄 VOWEL LETTER E	𑖀 VOWEL LETTER A + 𑖢 VOWEL SIGN E
𑖆 VOWEL LETTER AI	𑖀 VOWEL LETTER A + 𑖣 VOWEL SIGN AI
𑖈 VOWEL LETTER O	𑖀 VOWEL LETTER A + 𑖤 VOWEL SIGN O
𑖊 VOWEL LETTER AU	𑖀 VOWEL LETTER A + 𑖥 VOWEL SIGN AU

### 5.3 Consonant Conjuncts

Consonant clusters generally consist of two consonants. These are written using a visible 𑖦 VIRAMA. The encoded representation is  $\langle C_1 + \text{VIRAMA} + C_2 \rangle$ . Half-forms and ligatures are not attested.

## 5.4 Nasalization

The ◌̣ ANUSVARA is used for indicating nasalization.

## 5.5 NUKTA

The ◌̣ NUKTA is used for representing sounds not native to Sindhi, such as those that occur in Persian and Arabic loanwords. Attested NUKTA letters are given below along with the Arabic letters they represent:

KHUDAWADI			ARABIC	
<i>kha</i>	ਖ̣	KHA + NUKTA	خ	U+062E ARABIC LETTER KHAH
<i>ga</i>	ڱ	GA + NUKTA	غ	U+063A ARABIC LETTER GHAIN
<i>za</i>	ڙ	JA + NUKTA	ذ	U+0630 ARABIC LETTER THAL
<i>za</i>	ڙ	JA + NUKTA	ز	U+0632 ARABIC LETTER ZAIN
<i>za</i>	ڙ	JA + NUKTA	ض	U+0636 ARABIC LETTER DAD
<i>za</i>	ڙ	JA + NUKTA	ظ	U+0638 ARABIC LETTER ZAH
<i>fa</i>	ڦ	PHA + NUKTA	ف	U+0641 ARABIC LETTER FEH

The NUKTA may be written with any vowel or consonant letter. If other combining marks, such as a vowel sign or ANUSVARA, also appear with the base character, then the NUKTA is written first.

## 5.6 Punctuation

Various punctuation is attested in Khudawadi records, such as *danḍā*-s and Latin marks, such as periods, dashes, colons, and semi-colons. Khudawadi *danḍā*-s may be unified with those of Devanagari.

## 5.7 Digits

Khudawadi a full set of decimal digits: ٠ ١ ٢ ٣ ٤ ٥ ٦ ٧ ٨ ٩.

## 5.8 Number Forms

Fraction signs and currency marks are attested in Khudawadi records. These may be represented using characters in the ‘Common Indic Number Forms’ block (U+A830..U+A83F).

## 5.9 Collation

The collating order is as follows:

𑖀 A > 𑖁 AA > 𑖂 I > 𑖃 II > 𑖄 U > 𑖅 UU > 𑖆 E > 𑖇 AI > 𑖈 O > 𑖉 AU > 𑖊 KA > 𑖋 KHA > 𑖌 GA > 𑖍 GGA > 𑖎 GHA > 𑖏 NGA > 𑖐 CA > 𑖑 CHA > 𑖒 JA > 𑖓 JJA > 𑖔 JHA > 𑖕 NYA > 𑖖 TTA > 𑖗 TTHA > 𑖘 DDA > 𑖙 DDDA > 𑖚 RRA > 𑖛 DDHA > 𑖜 NNA > 𑖝 TA > 𑖞 THA > 𑖟 DA > 𑖠 DHA > 𑖡 NA > 𑖢 PA > 𑖣 PHA > 𑖤 BA > 𑖥 BBA > 𑖦 BHA > 𑖧 MA > 𑖨 YA > 𑖩 RA > 𑖪 LA > 𑖫 VA > 𑖬 SHA > 𑖭 SA > 𑖮 HA > 𑖯 ANUSVARA > 𑖰 SIGN AA > 𑖱 SIGN I > 𑖲 SIGN II > 𑖳 SIGN U > 𑖴 SIGN UU > 𑖵 SIGN E > 𑖶 SIGN AI > 𑖷 SIGN O > 𑖸 SIGN AU > 𑖹 VIRAMA

A combination of a letter + ◌ NUKTA is sorted with the base letter, as in Devanagari.

## 5.10 Linebreaking

Linebreaking for Khudawadi characters follow the rules for Devanagari.

## 5.11 Character Properties

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112B0;KHUDAWADI LETTER A;Lo;0;L;;;;N;;;;;
112B1;KHUDAWADI LETTER AA;Lo;0;L;;;;N;;;;;
112B2;KHUDAWADI LETTER I;Lo;0;L;;;;N;;;;;
112B3;KHUDAWADI LETTER II;Lo;0;L;;;;N;;;;;
112B4;KHUDAWADI LETTER U;Lo;0;L;;;;N;;;;;
112B5;KHUDAWADI LETTER UU;Lo;0;L;;;;N;;;;;
112B6;KHUDAWADI LETTER E;Lo;0;L;;;;N;;;;;
112B7;KHUDAWADI LETTER AI;Lo;0;L;;;;N;;;;;
112B8;KHUDAWADI LETTER O;Lo;0;L;;;;N;;;;;
112B9;KHUDAWADI LETTER AU;Lo;0;L;;;;N;;;;;
112BA;KHUDAWADI LETTER KA;Lo;0;L;;;;N;;;;;
112BB;KHUDAWADI LETTER KHA;Lo;0;L;;;;N;;;;;
112BC;KHUDAWADI LETTER GA;Lo;0;L;;;;N;;;;;
112BD;KHUDAWADI LETTER GGA;Lo;0;L;;;;N;;;;;
112BE;KHUDAWADI LETTER GHA;Lo;0;L;;;;N;;;;;
112BF;KHUDAWADI LETTER NGA;Lo;0;L;;;;N;;;;;
112C0;KHUDAWADI LETTER CA;Lo;0;L;;;;N;;;;;
112C1;KHUDAWADI LETTER CHA;Lo;0;L;;;;N;;;;;
112C2;KHUDAWADI LETTER JA;Lo;0;L;;;;N;;;;;
112C3;KHUDAWADI LETTER JJA;Lo;0;L;;;;N;;;;;
112C4;KHUDAWADI LETTER JHA;Lo;0;L;;;;N;;;;;
112C5;KHUDAWADI LETTER NYA;Lo;0;L;;;;N;;;;;
112C6;KHUDAWADI LETTER TTA;Lo;0;L;;;;N;;;;;
112C7;KHUDAWADI LETTER TTHA;Lo;0;L;;;;N;;;;;
112C8;KHUDAWADI LETTER DDA;Lo;0;L;;;;N;;;;;
112C9;KHUDAWADI LETTER DDDA;Lo;0;L;;;;N;;;;;
112CA;KHUDAWADI LETTER RRA;Lo;0;L;;;;N;;;;;
112CB;KHUDAWADI LETTER DDHA;Lo;0;L;;;;N;;;;;
112CC;KHUDAWADI LETTER NNA;Lo;0;L;;;;N;;;;;
112CD;KHUDAWADI LETTER TA;Lo;0;L;;;;N;;;;;
112CE;KHUDAWADI LETTER THA;Lo;0;L;;;;N;;;;;
112CF;KHUDAWADI LETTER DA;Lo;0;L;;;;N;;;;;
112D0;KHUDAWADI LETTER DHA;Lo;0;L;;;;N;;;;;
112D1;KHUDAWADI LETTER NA;Lo;0;L;;;;N;;;;;
112D2;KHUDAWADI LETTER PA;Lo;0;L;;;;N;;;;;
112D3;KHUDAWADI LETTER PHA;Lo;0;L;;;;N;;;;;
112D4;KHUDAWADI LETTER BA;Lo;0;L;;;;N;;;;;
112D5;KHUDAWADI LETTER BBA;Lo;0;L;;;;N;;;;;
112D6;KHUDAWADI LETTER BHA;Lo;0;L;;;;N;;;;;
112D7;KHUDAWADI LETTER MA;Lo;0;L;;;;N;;;;;
112D8;KHUDAWADI LETTER YA;Lo;0;L;;;;N;;;;;
112D9;KHUDAWADI LETTER RA;Lo;0;L;;;;N;;;;;
112DA;KHUDAWADI LETTER LA;Lo;0;L;;;;N;;;;;
112DB;KHUDAWADI LETTER VA;Lo;0;L;;;;N;;;;;
112DC;KHUDAWADI LETTER SHA;Lo;0;L;;;;N;;;;;
112DD;KHUDAWADI LETTER SA;Lo;0;L;;;;N;;;;;
112DE;KHUDAWADI LETTER HA;Lo;0;L;;;;N;;;;;
112DF;KHUDAWADI SIGN ANUSVARA;Mn;0;NSM;;;;N;;;;;
112E0;KHUDAWADI VOWEL SIGN AA;Mc;0;L;;;;N;;;;;
112E1;KHUDAWADI VOWEL SIGN I;Mc;0;L;;;;N;;;;;

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112E2;KHUAWADI VOWEL SIGN II;Mc;0;L;;;;N;;;;;
112E3;KHUAWADI VOWEL SIGN U;Mn;0;NSM;;;;N;;;;;
112E4;KHUAWADI VOWEL SIGN UU;Mn;0;NSM;;;;N;;;;;
112E5;KHUAWADI VOWEL SIGN E;Mn;0;NSM;;;;N;;;;;
112E6;KHUAWADI VOWEL SIGN AI;Mn;0;NSM;;;;N;;;;;
112E7;KHUAWADI VOWEL SIGN O;Mn;0;NSM;;;;N;;;;;
112E8;KHUAWADI VOWEL SIGN AU;Mn;0;NSM;;;;N;;;;;
112E9;KHUAWADI SIGN NUKTA;Mn;7;NSM;;;;N;;;;;
112EA;KHUAWADI SIGN VIRAMA;Mn;9;NSM;;;;N;;;;;
112F0;KHUAWADI DIGIT ZERO;Nd;0;L;0;0;0;N;;;;;
112F1;KHUAWADI DIGIT ONE;Nd;0;L;1;1;1;N;;;;;
112F2;KHUAWADI DIGIT TWO;Nd;0;L;2;2;2;N;;;;;
112F3;KHUAWADI DIGIT THREE;Nd;0;L;3;3;3;N;;;;;
112F4;KHUAWADI DIGIT FOUR;Nd;0;L;4;4;4;N;;;;;
112F5;KHUAWADI DIGIT FIVE;Nd;0;L;5;5;5;N;;;;;
112F6;KHUAWADI DIGIT SIX;Nd;0;L;6;6;6;N;;;;;
112F7;KHUAWADI DIGIT SEVEN;Nd;0;L;7;7;7;N;;;;;
112F8;KHUAWADI DIGIT EIGHT;Nd;0;L;8;8;8;N;;;;;
112F9;KHUAWADI DIGIT NINE;Nd;0;L;9;9;9;N;;;;;

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## 5.12 ‘Confusable’ Characters

Below is a list of Khudawadi characters that may be ‘confusable’ with others encoded in the UCS:

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112B0 KHUAWADI LETTER A ; 006D LATIN SMALL LETTER M
112C0 KHUAWADI LETTER CA ; 096A DEVANAGARI DIGIT FOUR
112D1 KHUAWADI LETTER NA ; 2713 CHECK MARK
112D4 KHUAWADI LETTER BA ; 0077 LATIN SMALL LETTER W
112DB KHUAWADI LETTER VA ; 0030 DIGIT ZERO

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	112B	112C	112D	112E	112F
0	𑖀 112B0	𑖁 112C0	𑖂 112D0	𑖃 112E0	𑖄 112F0
1	𑖅 112B1	𑖆 112C1	𑖇 112D1	𑖈 112E1	𑖉 112F1
2	𑖊 112B2	𑖋 112C2	𑖌 112D2	𑖍 112E2	𑖎 112F2
3	𑖏 112B3	𑖐 112C3	𑖑 112D3	𑖒 112E3	𑖓 112F3
4	𑖔 112B4	𑖕 112C4	𑖖 112D4	𑖗 112E4	𑖘 112F4
5	𑖙 112B5	𑖚 112C5	𑖛 112D5	𑖜 112E5	𑖝 112F5
6	𑖞 112B6	𑖟 112C6	𑖠 112D6	𑖡 112E6	𑖢 112F6
7	𑖣 112B7	𑖤 112C7	𑖥 112D7	𑖦 112E7	𑖧 112F7
8	𑖨 112B8	𑖩 112C8	𑖪 112D8	𑖫 112E8	𑖬 112F8
9	𑖭 112B9	𑖮 112C9	𑖯 112D9	𑖰 112E9	𑖱 112F9
A	𑖲 112BA	𑖳 112CA	𑖴 112DA	𑖵 112EA	
B	𑖶 112BB	𑖷 112CB	𑖸 112DB		
C	𑖹 112BC	𑖺 112CC	𑖻 112DC		
D	𑖼 112BD	𑖽 112CD	𑖾 112DD		
E	𑖿 112BE	𑗀 112CE	𑗁 112DE		
F	𑗂 112BF	𑗃 112CF	𑗄 112DF		

Figure 1: Proposed code chart for Khudwadi.



**Independent vowels**

112B0	𑍀	KHUDAWADI LETTER A
112B1	𑍁	KHUDAWADI LETTER AA
112B2	𑍂	KHUDAWADI LETTER I
112B3	𑍃	KHUDAWADI LETTER II
112B4	𑍄	KHUDAWADI LETTER U
112B5	𑍅	KHUDAWADI LETTER UU
112B6	𑍆	KHUDAWADI LETTER E
112B7	𑍇	KHUDAWADI LETTER AI
112B8	𑍈	KHUDAWADI LETTER O
112B9	𑍉	KHUDAWADI LETTER AU

**Digits**

112F0	𑍊	KHUDAWADI DIGIT ZERO
112F1	𑍋	KHUDAWADI DIGIT ONE
112F2	𑍌	KHUDAWADI DIGIT TWO
112F3	𑍍	KHUDAWADI DIGIT THREE
112F4	𑍎	KHUDAWADI DIGIT FOUR
112F5	𑍏	KHUDAWADI DIGIT FIVE
112F6	𑍐	KHUDAWADI DIGIT SIX
112F7	𑍑	KHUDAWADI DIGIT SEVEN
112F8	𑍒	KHUDAWADI DIGIT EIGHT
112F9	𑍓	KHUDAWADI DIGIT NINE

**Consonants**

112BA	𑍔	KHUDAWADI LETTER KA
112BB	𑍕	KHUDAWADI LETTER KHA
112BC	𑍖	KHUDAWADI LETTER GA
112BD	𑍗	KHUDAWADI LETTER GGA
112BE	𑍘	KHUDAWADI LETTER GHYA
112BF	𑍙	KHUDAWADI LETTER NYA
112C0	𑍚	KHUDAWADI LETTER CA
112C1	𑍛	KHUDAWADI LETTER CHA
112C2	𑍜	KHUDAWADI LETTER JA
112C3	𑍝	KHUDAWADI LETTER JJA
112C4	𑍞	KHUDAWADI LETTER JHA
112C5	𑍟	KHUDAWADI LETTER NYA
112C6	𑍠	KHUDAWADI LETTER TTA
112C7	𑍡	KHUDAWADI LETTER TTHA
112C8	𑍢	KHUDAWADI LETTER DDA
112C9	𑍣	KHUDAWADI LETTER DDDA
112CA	𑍤	KHUDAWADI LETTER RRA
112CB	𑍥	KHUDAWADI LETTER DDHA
112CC	𑍦	KHUDAWADI LETTER NNA
112CD	𑍧	KHUDAWADI LETTER TA
112CE	𑍨	KHUDAWADI LETTER THA
112CF	𑍩	KHUDAWADI LETTER DA
112D0	𑍪	KHUDAWADI LETTER DHA
112D1	𑍫	KHUDAWADI LETTER NA
112D2	𑍬	KHUDAWADI LETTER PA
112D3	𑍭	KHUDAWADI LETTER PHA
112D4	𑍮	KHUDAWADI LETTER BA
112D5	𑍯	KHUDAWADI LETTER BBA
112D6	𑍰	KHUDAWADI LETTER BHA
112D7	𑍱	KHUDAWADI LETTER MA
112D8	𑍲	KHUDAWADI LETTER YA
112D9	𑍳	KHUDAWADI LETTER RA
112DA	𑍴	KHUDAWADI LETTER LA
112DB	𑍵	KHUDAWADI LETTER VA
112DC	𑍶	KHUDAWADI LETTER SHA
112DD	𑍷	KHUDAWADI LETTER SA
112DE	𑍸	KHUDAWADI LETTER HA

**Various signs**

112DF	𑍹	KHUDAWADI SIGN ANUSVARA
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**Dependent vowel signs**

112E0	𑍺	KHUDAWADI VOWEL SIGN AA
112E1	𑍻	KHUDAWADI VOWEL SIGN I
112E2	𑍼	KHUDAWADI VOWEL SIGN II
112E3	𑍽	KHUDAWADI VOWEL SIGN U
112E4	𑍾	KHUDAWADI VOWEL SIGN UU
112E5	𑍿	KHUDAWADI VOWEL SIGN E
112E6	𑎀	KHUDAWADI VOWEL SIGN AI
112E7	𑎁	KHUDAWADI VOWEL SIGN O
112E8	𑎂	KHUDAWADI VOWEL SIGN AU

**Various signs**

112E9	𑎃	KHUDAWADI SIGN NUKTA
112EA	𑎄	KHUDAWADI SIGN VIRAMA

Figure 2: Proposed names list for Khudawadi.

m	mi	σ	σσ	ε	ϑ	ϙ	ϙ̄	ϙ̅
ونجن								
m	u	di	ḍ	ḍ̄	ḍ̅	ḍ̆	ḍ̇	ḍ̈
ɣ	ɛ	o	no	o	o	o	o	o
c	e	z	z	z	z	z	z	z
o	m	o	o	o	o	o	o	o
ɾ	ɾ	ɾ	w	w	w	w	w	w
z	z	z	o	o	o	o	o	o
o	u	o	o	o	o	o	o	o

۴۴ چڱي هند و سنڌي سُر مٿي ڏنل آهن ۽ سي سڀ ساڳيئي روپ رکندا آهن ۽ جڏهن لفظن جي منڍ ۾ ايندا آهن ۽ پر جڏهن وه يا پڇاڙي ۾ ايندا آهن ۽ تہ m کان سواءِ يا سڀ روپ مٿانيندا آهن ۽ اهي هيٺ لکيل آهن :

اصل روپ m, mi, σ, σσ, ε, ϑ, ϙ, ϙ̄, ϙ̅, ϙ̆, ϙ̇, ϙ̈, -

مٿيل روپ ɣ, ɛ, o, no, o, o, o, o, o, -

۴۵ ونجن سان گڏ لکيل اهي سُر هيٺ ڏنل جن :

m, mi, [m, m], ṁ, ṁ̄, ṁ̅, ṁ̆, ṁ̇, ṁ̈

۴۶ اهڙي فطرت کي ڪڪ يا ڌڪا ڪري چوندا آهن يعني هجي ڪرڻ جي ڌڪ ٿي ۽ ايتري فطرت يا ڌڪا ڪرڻ.

۴۷ سڀني هند و سنڌي سُر کي اصل يا مٿانل روپ ۾ هميشه ساڳيا آواز آهن ۽ ٻين نه آهن جو هڪڙي سُر کي ۾ يا وڌيڪ آواز آهن ۽ انهي ڳالهه کان لکڻ ۾ بلڪل ڪهڙو فائدو آهي ڇو جو هجي ڪرڻ ۾ ڇوڪ يا ڌڪ يا هڪ ڪڏهن نه ٿيندي ۽ مطلب ته جيڪي قدر سنڌي ۾ آواز آهن ۽ اوتري قدر هند و سنڌي سُر جو بند و سٽ بلڪل پورو ۽ بي هيٺ آهي .

Figure 3: Characters of the Standard Sindhi script (from M. K. Jetley 1999: 90).



Figure 4: Cover of a book containing the epic *Dodo Chanesar* written in Khudawadi (photo from Michel Boivin).

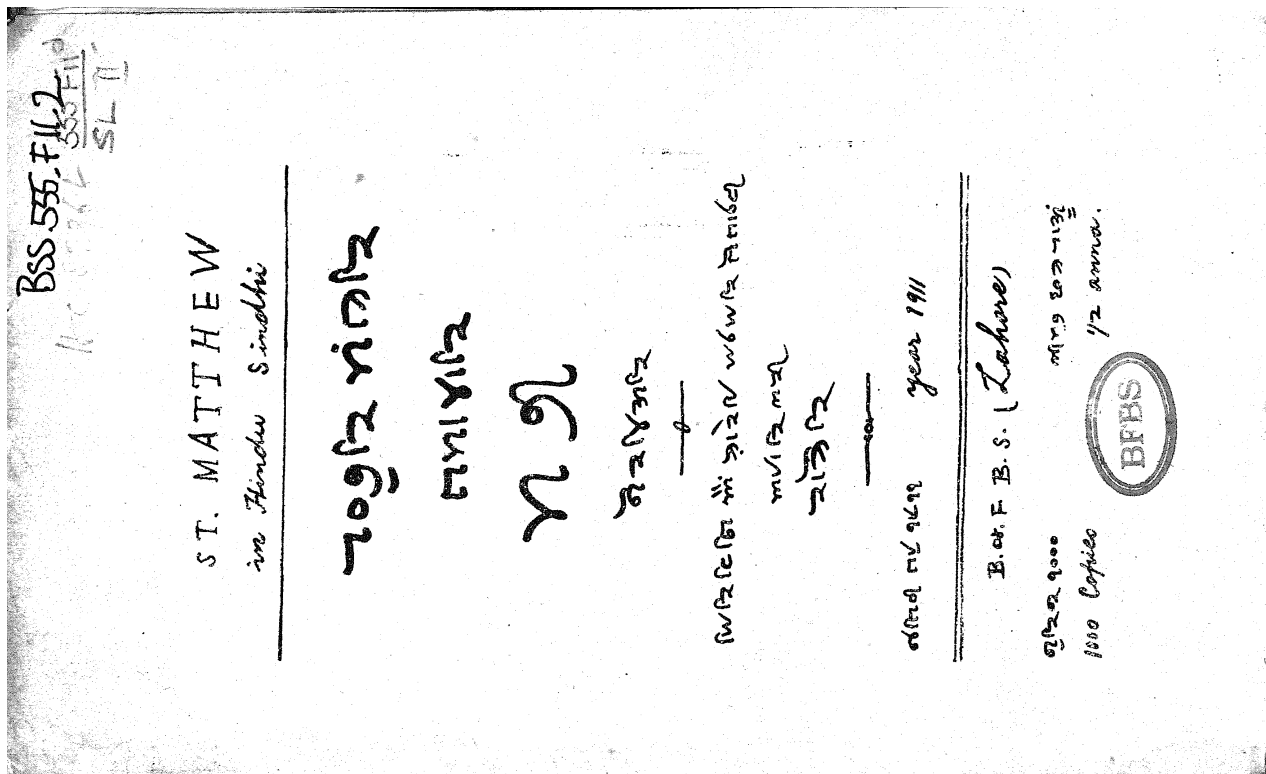


Figure 5: Cover and first page of St. Matthew in Khudawadi (from British and Foreign Bible Society 1911).

## SIHONG

869

(No specimen available.)

Spoken in the Sihong district of southern Borneo, Netherlands East Indies. First publication, Genesis, chapters 1–26:5, in 1858 at Bandermassin, Borneo, by the Rhenish Missionary Society; tr. by E. Denninger.

## SINDHI: Kachchhi dialect

871

Devanagari characters

तुं पिंड के बुदा के बिबो तीवो बुदा आवे नम एं उग  
बीब मंदगी कर ।

Mt. 4.10

Spoken by about 500,000 people in Bombay and Baroda, western India. First publication, St. Matthew's Gospel in 1834 at Bombay by the BFBS; tr. by James Gray, chaplain to the East India Company.

(For No. 872 see next page.)

## SLAVE

873

Syllabic characters

15 གཏུ ཏཱ རྒྱུའི རྒྱུའི རྒྱུའི  
ཏུ, ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ. 16 ཏཱ ཏཱ ཏཱ  
ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ  
ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ  
ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ ཏཱ

Roman characters

15 Eyitta tene oyi yego ye keniethet nite  
tsiedathe ka ile; kulu ithlasi onda ga agonte.  
16 Tta Niotsi otie nun gonieto eyitta te yazi  
inthligi zon nakhe ganiti, tene oyi ye keniethet  
nite tsiedethet ga ile, kulu ithlasi oonda ga  
olili. 17 Tta Niotsi te Yazi nun tsun dea nun

1905

Spoken by Indians living along the Mackenzie River, northwestern Canada, North America. First publication, St. Mark's Gospel (syllabic characters) in 1868 by the BFBS; tr. by W. W. Kirkby of the CMS. St. John's Gospel, 1870; St. Matthew's and St. Mark's Gospels, 1886; tr. by W. C. Bompas, transliterated by William Day Reeve; St. Luke's and St. John's Gospels, 1890. New Testament, 1891. Editions in roman characters: St. Mark's Gospel, 1874; tr. by William Carpenter Bompas of the CMS. The Gospels, 1883; The Acts, 1890; Romans-Revelation, 1891. The Gospels, 1905; revised by W. Spendlove. CP: BFBS.

## SINDHI

870

Devanagari characters

बाँद, वो गुंड वो बुदा, तँहिं के पूबिबे, बाँद हयो उग  
वो हों बंदगी बिज ।

Mt. 4.10; 1850

Arabic characters (for Moslems)

چالاء تہ خدا دنیا کی امر و پیار کیو آہی، جو پنہنحو مکزونی  
نُب دَنو اَس، تہ جیکوک مَس و ساء اُٹی، سو چَٹ نہ ٹی،  
پر همیشه جو جیاپو پاتی ♦

1917

Arabic characters (for Hindus)

चोत्ते अतोर हकत की अम्रो पियार कीओ आही, जो पनहनचो मकरोनी  
नो दनो अस, ते जिकोक मस सरास को सोमन न ठुज्जा  
ब्रत ज्योन पानी ♦

1908

Gurmukhi characters

ਛਾ ਖਾ ਤ ਈਸ਼ਰ ਜਗਤ ਖੇ ਇਹਜੇ ਪਿਆਰੇ ਰਖੇ ਜੇ ਪਰਜੇ  
ਹਿਭਿਜੇ ਈ ਜਲਅਲੁ ਪੁਟੁ ਡਿਨਾਈ ਤ ਜੇਕੇ ਕੇ ਤਹਿ ਤੇ ਫੇਸਾਹੁ  
ਅਲੇ ਮੇ ਨਾਮੁ ਨ ਬਿਏ ਫੇਤਰਿ ਮਰਾ ਜਿਅਲੁ ਲਹੇ ॥

1877

Banya characters

ਏਹ ਰਾਜੇਰ ਨਾਮੁ ਏ ਮਾਤੋਰਿ ਜਾਗੇਰਿ  
ਮਾਤੋਰਿ ਜਿਮਤੋਰ ਤੁਹਰ ਫਿਰ ਮਾਮੁਰ ਏ ਨੇਨਿ ਮ  
ਨ ਮਾਮੁਰ ਏਨਾਮੁ ਰਖੇ ਫੇਤਰਿ ਮਰਾ ਜਿਅਲੁ ਲਹੇ ॥

1926

Spoken by some 3,000,000 people in Sindh and neighboring districts, western India. First publication, St. Matthew's Gospel in 1825 at Serampore by the Mission Press; tr. by the Serampore missionaries (See No. 87). St. Matthew's Gospel (Devanagari characters), BFBS, Bombay, 1850; tr. by G. Stack. St. John's Gospel (Arabic characters), BFBS, Karachi, 1858; tr. by A. Burn of the CMS; reprinted in Gurmukhi characters, 1859. Genesis, 1860; St. Matthew's and St. Mark's Gospels, London, 1868; St. Luke's Gospel, 1869; the Acts, 1870. Mr. Burn's translations were issued both in Arabic and Gurmukhi characters.

New Testament, 1890; tr. by C. W. Isenberg and G. Shirt. The Psalter, BFBS, Ludhiana, 1879; tr. by Mr. Shirt: Proverbs, 1885; Isaiah, 1890. Revised Version: St. Mark's and St. John's Gospels, BFBS, Lahore, 1908; tr. by a committee of missionaries and Sindhi scholars headed by R. Redman, issued in editions prepared for Moslems and for Hindus. St. Matthew's and St. Luke's Gospels, 1911. St. Matthew's Gospel in Banya characters, 1913.

Figure 6: A specimen of the New Testament printed in various scripts used for Sindhi (from The American Bible Society 1938: 297.) The script labeled 'Banya characters' is Khudawadi.

## CONSONANTS.

No.	Roman Character.	Original Khudawadi Character.	Improved Hindi Character.	No.	Roman Character.	Original Khudawadi Character.	Improved Hindi Character.	No.	Roman Character.	Original Khudawadi Character.	Improved Hindi Character.
1	ka	ڪ	क	15	ra	No. 32 used instead.	३	29	bha	No. 28 used instead.	ब
2	kha	ڪھ	ख	16	ḍḍa	ڙ	ڙ	30	ma	م	म
3	gga	گ	ग	17	ḍa	ڙ	ڙ	31	ya	No. 9 used instead.	य
4	ga	گ	ग	18	ḍha	ڙھ	ڙھ	32	ra	ر	र
5	gha	No. 4 used instead.	घ	19	ṇa	ڻ	ڻ	33	la	ل	ल
6	ṇa	ڻ	२.	20	ta	ٽ	ٽ	34	va, wa	و	व
7	cha	ڇ	च	21	tka	ٽڪ	ٽڪ	35	sa	س	स
8	chha	ڇھ	छ	22	da	ڊ	ڊ	36	sha	No. 35 used instead.	श
9	ja	ج	ज	23	dha	No. 22 used instead.	ڊ	37	ha	ھ	ह
10	jja	ڄ	ज	24	na	ڻ	ڻ	38	khē	No. 2 used instead.	ख
11	jha	جھ	ज	25	pa	پ	प	39	zē	No. 9 used instead.	ज
12	ṇa	ڻ	३.	26	pha	ڦ	फ	40	ghain	No. 4 used instead.	घ
13	ṭa	ٽ	ट	27	bba	ب	ब	41	fē	No. 26 used instead.	फ
14	tka	ٽڪ	ट	28	ba	ب	ब				

Figure 7: A comparison of consonant letters of Khudawadi and Standard Sindhi (from Grierson 1919: 20).

**VOWELS.***In improved Hindī Sindhī character.*

a	ā	i	ī	u	ū
ṁ	ṁl	ṁ	ṁ	ṁ	ṁ
ē	ai	ō	au	am	
ṁ	ṁ	ṁ	ṁ	ṁ	ṁ
ka	kā	ki	kī	ku	kū
ṁ	ṁl	ṁ	ṁ	ṁ	ṁ
kō	kai	kō	kau	kam	
ṁ	ṁ	ṁ	ṁ	ṁ	ṁ

The only vowel character in Khudāwāḍī is ṁ

Figure 8: Vowel letters and consonant-vowel combinations in Standard Sindhi (from Grierson 1919: 19).

The first few lines of the preceding specimen in the Khudāwādi character.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840.

The first few lines of the preceding specimen in the improved Hindū Sindhi character.

[illegible]

[No. 1.]

**INDO-ARYAN FAMILY.**  
**NORTH-WESTERN GROUP.**

**SINDHI.**

STANDARD DIALECT.

DISTRICT HYDERABAD.

**SPECIMEN I.**

## NĀGABĪ CHA'R'ACTER.

हिकिड़े माण्डुअ-खे ब पट हुआ । तनि-माँ नंटे पिउ-खे चयो, ए बाबा, माल-माँ जेको भाडो मुँहिं-जे हिसे अचे, सो मूँ-खे खबी डे । जँहिँ-जो ते ते हुन मालु बिन्ही-खे विराहे डिनो । घोरनि डूँहनि-खाँ पोद्द संदसि नंदो पुटु समु-की हथि करे हिकिड़े डूराहें डेह डे उथी हलिओ, जिते पँहिँ-जो मालु अमलाइअ-में विजयाँई । सभि खपाइण-खाँ पोद्द इतिफाकाँ उन्हे डेह-में डोटो डुकुअ अची पिओ, जँहिँ-करे हो परवसि थिअण लगो । (पाण-खे तंगि हाल-में डिमी) उन्हे डेह-जे हिकिड़े रहंदड-खे जीअ-तीअं करे वजी चंबिडिओ, जँहिँ पँहिँ-जे वनिअ-में सुअर चारण-लोइ मोकलिउसि । अइ इएँ ये-भायाँई त जेके छिलूँ सुअर था-खाइनि, से जेकर भाँ खाई पँहिँ-जो जो पेटु भयाँ, पर खेसि काँहिँ बि की-की-न डिनो । इते समुअ-में अची चवण लगो त मुँहिँ जे पिउ-वटि कीतिरनि-ई पोरिहतनि-खे भाभी मानी पेरें-मिले, अइ आऊँ-ई हिति बुख पिओ-मराँ । सो आऊँ उथी पँहिँ-जे पिउ-वटि वजी चवंदोसाति, ए बाबा, मूँ आसिमान-जो अइ तुँहिँ-जो गुनाह कयो-आहे, हाणे इन्हे लाइकु न आहियाँ जो वरी तुँहिँ-जो पुटु चवायाँ, सो मूँ-खे पँहिँ-जे पोरिहतनि-माँ हिकिड़े जहिंडो करे ज्ञापु । (इएँ रिये) उथी पँहिँ-जे पिउ-डे हलिओ । अजा परे-दे हो त उन्हे-खे डिमी पिणसि-खे डाटी ब्राभ आई, जँहिँ डोडी भाकुर पाए खेसि चुमिओ । तँहिँ-ते पुटसि चयुसि, ए बाबा, मूँ आसिमान-जो अइ तुँहिँ-जो गुनाह कयो-आहे, हाणे इन्हे लाइकु न आहियाँ जो वरी तुँहिँ-जो पुटु चवायाँ । पर पिणसि पँहिँ-जे ब्राह्मनि-खे चयो त, उचे-खाँ उचो वगो खबी अची परिथारयोसि; अइ इय-में मुंडी, अइ पेरनि-में जुती पायोसि, त पोद्द खाई खुशी कर्थ; हो-त हिउ मुँहिँ-जो पुटु मुओ हो, सो हाणे जीओ ओहे; अइ गुमु घी विओ-ओ, सो हाणे लओ-आहे । तडहाँ उहे खुशी करण लग्गा ॥

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Figure 9: Text in Devanagari, Khudawadi, and Standard Sindhi (from Grierson 1919: 99, 101).



[No. 4.]

INDO-ARYAN FAMILY. NORTH-WESTERN GROUP.

SINDHI.

STANDARD DIALECT. DISTRICT KARACHI.

SPECIMEN I.

Hekrē māḥhī-khē bba puṭ huā.

Ā: tīn-mā nandhē pāh-jē-piy-khē

chayō, ē bābā māḥ-mā jekō bhāhō

muht-jō thīē, sō mī-khē ddē.

Ā: hun' pāh-jō māl' vīrahāē (for vīrahē)

humā-khē ddinō. Thōrtan' q 2

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ddihān-khā pō nandhō puṭ

sabb' gadḍ' karē hekṛē

ddādhē-ddēhā-ddē haliyō

vīyō, ā' utē pāh-jō māl'

bē-hudī' (for bē-hudī) hālāt-mē vīnāē

chhadḍiyā. Ā' jaddhī sabb'

khapāē rahiyō tāh-khā pō

un-ddēh-mē ddādhō ddukār' achi

Figure 10: Specimen of hand-written Standard Sindhi (from Grierson 1919: 115–116).

## SINDH- UND MULTANSCHRIFT.

| Sindh   |      | Multan  |      | Sindh   |        | Multan  |      | Sindh   |      | Multan  |      |
|---------|------|---------|------|---------|--------|---------|------|---------|------|---------|------|
| Zeichen | Wert | Zeichen | Wert | Zeichen | Wert   | Zeichen | Wert | Zeichen | Wert | Zeichen | Wert |
| ᳵ       | a    | ᳶ       | a    | ᳷       | ña, ña |         |      | ᳸       | pha  | ᳹       | pha  |
| ᳺ       | i    | ᳻       | i    | ᳼       | ṭa     |         |      | ᳽       | ba   | ᳾       | ba   |
| ᳾       | u    | ᳿       | u    | ᳺ       | ṭha    |         |      | ᳼       | bha  |         |      |
| ᳺ       | ka   | ᳻       | ka   | ᳼       | ḍa     | ᳽       | ḍa   | ᳸       | ma   | ᳹       | ma   |
| ᳺ       | kha  | ᳻       | kha  | ᳼       | ṇa     | ᳽       | ṇa   | ᳸       | ya   | ᳹       | ya   |
| ᳺ       | ga   | ᳻       | ga   | ᳼       | ta     | ᳽       | ta   | ᳸       | ra   | ᳹       | ra   |
| ᳺ       | gha  |         |      | ᳼       | tha    | ᳽       | tha  | ᳸       | la   | ᳹       | la   |
| ᳺ       | tṣa  | ᳻       | tṣa  | ᳼       | ḍa     | ᳽       | ḍa   | ᳸       | va   | ᳹       | va   |
| ᳺ       | tṣha | ᳻       | tṣha | ᳼       | dha    | ᳽       | dha  | ᳸       | sa   | ᳹       | sa   |
| ᳺ       | dṣa  | ᳻       | dṣa  | ᳼       | na     | ᳽       | na   | ᳸       | ha   | ᳹       | ha   |
| ᳺ       | dṣha |         |      | ᳼       | pa     | ᳽       | pa   | ᳸       | tra  | ᳹       | tra  |

Die vorstehenden Schriften sind in doppelter Art beachtenswert, erstens weil sie in gleicher Weise wie die semitischen Schriften die Vokale in der Mitte der Wörter nicht schreiben, z. B. Sindhisch  $\text{ᳵᳺ᳾}$  *tuhūḍo*, zweitens weil ihre Zeichen sich an die semitischen Schriften anlehnen, anderseits sich in der Devanagarschrift vorfinden, wenn diese von der Paliform abweicht; so hat  $\text{ᳺ}$  dieselbe Bedeutung auf Pehlewi-Münzen,  $\text{ᳺ}$  entspricht dem  $\text{ᳺ}$  im Aramäischen,  $\text{ᳺ}$  erinnert an die phönikische Form  $\text{ᳺ}$ ,  $\text{ᳺ}$  an das phönikische  $\text{ᳺ}$ . Den von den Inschriftformen abweichenden Devanagarizeichen  $\text{ᳺ}$  *ka* entspricht Multan  $\text{᳻}$ , dem  $\text{ᳺ}$  *kha* (Inschrift  $\text{ᳺ}$ ) entspricht Sindh  $\text{ᳺ}$  *gha*,  $\text{ᳶ}$  kann ebenso von der Inschrift  $\text{ᳶ}$ , wie von Sindh  $\text{ᳺ}$  *ga* abstammen, dem  $\text{᳼}$  *tṣha* entspricht Sindh  $\text{᳼}$  *tṣha*, dagegen Inschrift  $\text{᳼}$  *tṣha* dem Devanagari  $\text{᳼}$  *ṭa*, Devanagari  $\text{᳼}$  hat seine Analogie nur in Sindh  $\text{᳼}$  (dagegen Inschrift  $\text{᳼}$  *ṇa*), ebenso  $\text{᳽}$  Sindh  $\text{᳽}$  (Inschrift  $\text{᳽}$ ),  $\text{᳽}$  *p*, Sindh  $\text{᳽}$  (Inschrift  $\text{᳽}$ ).

Die auffallenden Abweichungen der beiden Schriften von Sindh und Multan beweisen, dass von einer einfachen Entlehnung keine Rede sein kann, denn wir finden Sindh  $\text{᳼}$  *tṣa* als Multan  $\text{᳽}$  *ra*, Sindh  $\text{᳽}$  *tha* als Multan  $\text{᳽}$  *pha*, dagegen befindet sich Multan  $\text{᳽}$  *tṣha* in Übereinstimmung mit Sindh  $\text{᳼}$  *tṣa*.

Mit Rücksicht auf die Einwanderung der arischen Stämme von Norden liegt die Vermuthung nahe, dass die vorstehenden Schriften des nördlichen Indiens den Grundstock der vedischen Schrift abgaben. Durch die Herrschaft der magadhischen Schrift während der Zeit, wo in ganz Vorderindien der Buddhismus herrschte, wurde die heimische Schrift in den Schatten gestellt. Man zog die fremde Schrift wegen ihres Reichthums an Zeichen und wegen ihrer festen Schreibregeln vor. So kam es, dass die heimische Schrift, welche sich trotzdem im Volke erhielt, zu den gelehrten Werken nicht verwendet und diesfalls die Devanagarschrift vorgezogen wurde.

Figure 11: Comparison of metal-font glyphs for Standard Sindhi and Multani (from Faulmann 1880: 121).



**ISO/IEC JTC 1/SC 2/WG 2  
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS  
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646<sup>1</sup>**

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

Please read Principles and Procedures Document (P & P) from <http://www.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://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html>.

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

**A. Administrative**

|  |  |  |
|--|--|--|
| 1. Title:  | <b>Final Proposal to Encode the Khudawadi Script in ISO/IEC 10646</b>              |  |
| 2. Requester's name:   | <i>Script Encoding Initiative (SEI) / Anshuman Pandey &lt;pandey@umich.edu&gt;</i> |  |
| 3. Requester type (Member body/Liaison/Individual contribution): | <i>Liaison contribution</i>  |  |
| 4. Submission date:  | <i>2011-01-28</i>  |  |
| 5. Requester's reference (if applicable):                        |  |  |
| 6. Choose one of the following:                                  |  |  |
| This is a complete proposal:                                     | <i>Yes</i>   |  |
| (or) More information will be provided later:                    |  |  |

**B. Technical – General**

|   |   |          |
|---|---|----------|
| 1. Choose one of the following:   |   |          |
| a. This proposal is for a new script (set of characters):   | <i>Yes</i>                                      |          |
| Proposed name of script:  | <i>Khudawadi</i>                                |          |
| b. The proposal is for addition of character(s) to an existing block:   |   |          |
| Name of the existing block:   |   |          |
| 2. Number of characters in proposal:  | <i>69</i>                                       |          |
| 3. Proposed category (select one from below - see section 2.2 of P&P document):   |   |          |
| A-Contemporary  | B.1-Specialized (small collection)              | <i>X</i> |
| C-Major extinct   | D-Attested extinct                              |          |
| F-Archaic Hieroglyphic or Ideographic   | G-Obscure or questionable usage symbols         |          |
| B.2-Specialized (large collection)  | E-Minor extinct                                 |          |
| 4. Is a repertoire including character names provided?  | <i>Yes</i>                                      |          |
| a. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P&P document?   | <i>Yes</i>                                      |          |
| b. Are the character shapes attached in a legible form suitable for review?   | <i>Yes</i>                                      |          |
| 5. Fonts related:   |   |          |
| a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?   | <i>Anshuman Pandey</i>                          |          |
| b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):  | <i>Anshuman Pandey &lt;pandey@umich.edu&gt;</i> |          |
| 6. References:  |   |          |
| a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?   | <i>Yes</i>                                      |          |
| b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?  | <i>Yes</i>                                      |          |
| 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)? | <i>Yes,</i>                                     |          |
|   | <i>see proposal for additional details</i>      |          |

**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 <http://www.unicode.org/Public/UNIDATA/UCD.html> and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

<sup>1</sup> Form number: N3702-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11)

### C. Technical - Justification

|  |        |
|--|--------|
| 1. Has this proposal for addition of character(s) been submitted before?   | No     |
| If YES explain   |        |
| 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.)?          | Yes    |
| If YES, with whom? <i>Michel Boivin &lt;mboivin@ehess.fr&gt;</i><br><i>Irfan Gowani &lt;irfango@exchange.microsoft.com&gt;</i>                                 |        |
| If YES, available relevant documents: <i>See citations in text of proposal</i>   |        |
| 3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? | Yes    |
| Reference: <i>See text of proposal.</i>  |        |
| 4. The context of use for the proposed characters (type of use; common or rare)  | Common |
| Reference: <i>See text of proposal.</i>  |        |
| 5. Are the proposed characters in current use by the user community?   | Yes    |
| If YES, where? Reference: <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?                                  | No     |
| If YES, is a rationale provided?   |        |
| If YES, reference:   |        |
| 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?  | No     |
| If YES, is a rationale for its inclusion provided?   |        |
| If YES, reference:   |        |
| 9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?               | No     |
| If YES, is a rationale for its inclusion provided?   |        |
| If YES, reference:   |        |
| 10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?                                     | Yes    |
| If YES, is a rationale for its inclusion provided?   |        |
| If YES, reference: <i>See text of proposal.</i>  |        |
| 11. Does the proposal include use of combining characters and/or use of composite sequences?   | Yes    |
| If YES, is a rationale for such use provided?  |        |
| If YES, reference: <i>Combining vowel signs; see text of proposal</i>  |        |
| Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?  |        |
| If YES, reference:   |        |
| 12. Does the proposal contain characters with any special properties such as control function or similar semantics?  | Yes    |
| If YES, describe in detail (include attachment if necessary)   |        |
| <i>see text of proposal</i>  |        |
| 13. Does the proposal contain any Ideographic compatibility character(s)?  | No     |
| If YES, is the equivalent corresponding unified ideographic character(s) identified?   |        |
| If YES, reference:   |        |