



8.3.3 Sindhi Design Guide

General Information

Introduction

This document provides general information about the Sindhi language and some conventions of its usage in India.

The information presented in this document is intended to assist in understanding the nature and problems of Sindhi implementation in the digital medium. It contains the generic description of Sindhi.

Language Description

Sindhi occupies a prominent place among the languages of South Asia. It is spoken by approximately 20 million people in the Indian subcontinent. Over eighty percent of them are in the Sindh and Lasa B'elo (Baluchistan) regions of Pakistan. Nearly three million Sindhi speakers are in India; about one third of them are from the Kutch – Saurashtra region in Gujarat and the Jaisalmer district in Rajasthan. The rest are associated with the post partition-migration from Sindh; they are now spread throughout the urban and semi-urban centres in the country with concentrations in the states of Maharashtra, Gujarat, Rajasthan, Madhya Pradesh and the Union Territory of Delhi. Many Sindhi speakers engaged them overseas trade called 'Sindhwork', are also scattered in important trade centres throughout the Southeast Asia region, Hongkong, Japan, the Gulf, the African west coast, Spain and Gibraltar.

Sindhi speech is generally classified into six major dialects:

- i. Siraiki, spoken in Siro, i.e. Upper Sindh
- ii. Vicholi, in Vicholo, Central Sindh
- iii. Lari, in Laru, i.e. Lower Sindh
- iv. Lasi, in Lasa B'elo, a part of Kohistan in Baluchistan on the western side of Sindh
- v. Thari or Thareli, in Tharu, the desert region on the southeast border of Sindh and a part of the Jaisalmer district in Rajasthan

- vi. Kachhi, in the Kutch region and in a part of Kathiawar in Gujarat, on the southern side of Sindh

Vicholi is considered as the standard dialect by all Sindhi speakers. It is commonly used among the educated class and is accepted as the language of literature and education (also for administration in Sindh, Pakistan). The largest Sindhi-speaking city is Hyderabad, Pakistan.

Sindhi is an Indo-Aryan language of the Indo-European family, related to Hindi, Urdu and the languages of northwest Indian subcontinent. In Pakistan it is written in Perso-Arabic script with several additional letters to accommodate Sindhi implosive, retroflex and nasal sounds.

History of Sindhi language

Sindhi language has evolved over a period of two millennia; with many waves of migration from Iran and central Asia; it has been known as a 'gateway' to immigrants from the northwest: Aryans, Greeks, Seythians, Arabs, Turks, and so on. The language of the people of Sindh has a solid base of Prakrit and Sanskrit, showing great susceptibility towards borrowings from Arabic, Persian, and Dravidian (such as Brahui in Baluchistan).

Sindh was the seat of the ancient Indus valley civilization during the third millennium BC as discovered from the *Moen-jo-Daro* excavation. The pictographic seals and clay tablets obtained from these excavations still await proper decipherment by epigraphists. However most scholars hold the common ground that the script is to be read from right to left.

The present script predominantly used in Sindh as well as in many states in India and elsewhere where migrant Sindhis have settled, is Arabic in *Naskh* styles having fifty two alphabets. However, in some circles in India, *Devanagari* is used for writing Sindhi.

Population using the Sindhi Language

- i. 2,812,000 in India (1997 IMA).
- ii. 16,992,000 in Pakistan (1993 Johnstone), including 1,200,000 Hindu Sindhis (1986).



Technical Characteristics

Sindhi Alphabet

HINDI	ENGLISH	SINDHI	HINDI	ENGLISH	SINDHI	HINDI	ENGLISH	SINDHI
ज	J	ع	ग	G	گ	अ	A	ا
जु	J	ع	ङ	G	گ	ब	B	ب
ञ	J	ع	घ	Gh	گھ	बु	B	بھ
च	Ch	چ	फ	F	ف	प	P	پ
छ	Chh	چھ	फ	Ph	فھ	भ	Bh	بھ
म	M	م	र	R	ر	त	T	ت
न	N	ن	ज	Z	ز	ठ	T	ٹ
ण	N	ڻ	इ	R	ر	ट	T	ٽ
ल	L	ل	ड	D	د	स	S	س
श	Sh	ش	ध	Dh	دھ	थ	Th	ٿ
व	V	و	ड	D	د	ख	Kh	ک
क्क	K	ڪ	ड	D	د	ख	Kh	ک
झ	Jh	جھ	ड	D	د	ग	G	گ
य	Y	ي	ह	H	ھ	ग	G	گ

The graphic representation of each alphabet has more than one form depending on its position. In general each letter has four forms: beginning, middle, final and standalone.

Phonology

The phonological system of Sindhi in most respects resembles that of other Indo-Aryan languages. Sindhi has 53 distinct sound-units: 39 consonants, 3 semivowels, 10 vowels, and a unit of nasalization.

Segmental phonemes

The Sindhi consonant system consists of 25 stops (including 4 palatal-affricates), 5 nasals, 6 fricatives and 3 liquids. Consonantal sounds show five-fold contrast in the place of articulation: labial, dental, retroflex, palatal and velar.

Sindhi has the fullest stop system of any of the Indo-Aryan languages. The stop series shows contrast between voicing and unvoicing, aspiration and pressure and suction.

A series of four implosive stops – (*bbe, DDe, jje, gge*) : in sounding them breath is drawn in instead

of being expelled as in *be, De, je, ge*) is a striking characteristic of Sindhi phonology.

In Sindhi *vao, ye, he* function similarly to consonants in initial and certain medial positions. But in final position and also medially when preceding or following a consonant, these occur as vocalic glides; thus forming diphthongs with preceding or following vowels; these are classified as semivowels.

Sindhi has a ten-vowel system, showing three-fold contrast in the tongue-position: front, central and back; and five-fold contrast in the tongue-height: high, lower-high, lower-mid and low. Every vowel has a nasalized counterpart in the language.

Syllables

Syllable division in a word is predictable in Sindhi. Word stress is also predicted on the strength of the syllable structure. Sindhi is primarily an open-syllable language, i.e. syllables mostly end with a vowel or semivowel. Words in Sindhi mostly have vocalic ending and the occurrence of consonant cluster is also sporadic in the language. Close syllables are very infrequent in the language.

A syllable in Sindhi consists of at least one vowel or at most five sound units, in which one is a vowel and others are non-vocalic sounds (consonants or semivowels preceding or following the vowel). Open syllable with a single consonant (CV) are most frequent in the language.

Stress

In Sindhi, stress has only a limited use of demarcating words and putting emphasis on a particular word in an utterance. There are three main stresses: word stress, emphatic stress and drawled stress.

Writing Systems

Sindhi-Arabic Script

The Sindhi-Arabic script is adapted from the Persian system of writing, which itself is an adaptation of the Arabic system. Arabic characters are written from right to left. The script comprises of fifty-two characters and seven diacritic signs.

i. Twenty-nine characters of the Arabic script.



ii. Three modified characters adopted from the Persian script : p (پ), c (چ), g (گ)

iii. Twenty modified characters to represent Sindhi sounds:

Retroflex sounds :

ت	ث	د	ڍ	ڏ	ن	ر
<i>t</i>	<i>th</i>	<i>d</i>	<i>dh</i>	<i>dd</i>	<i>n</i>	<i>r</i>

Rest: Voiceless Aspirates :

ف	ت	چ	ک
<i>ph</i>	<i>th</i>	<i>ch</i>	<i>kh</i>

Voiced Aspirates :

پ	ڌ	جھ	گھ
<i>bh</i>	<i>dh</i>	<i>jh</i>	<i>gh</i>

Implosive:

ب	ڄ	ڳ
<i>bb</i>	<i>jj</i>	<i>gg</i>

Nasal:

ڇ	ڱ
<i>ñ</i>	<i>n</i>

Sindhi-Devanagri Script

The Sindhi-Devanagari script is adapted from the Sanskrit system of writing. Each character in the Devanagari system represents a syllable. It consists of either a vowel or a consonant followed by the vowel. Devanagari characters are written from left to right.

Character Set Considerations

Characteristics

The alphabet of Sindhi is a super set of Arabic, Persian and Urdu languages, and contains 52 basic characters. Additionally there are a few diacritic marks, numerals, and punctuations. Special characters : Letters 'and' and 'in' are also used in text.

Numerals

Sindhi numerals are similar to Urdu. Numerals are written left to right. The decimal separator in Urdu numerals is called "ASHARYA" (U+066B) and is

similar to "HAMZA" in shape. A dot may also be used in place of "ASHARYA".

۰ ۱ ۲ ۳ ۴ ۵ ۶ ۷ ۸ ۹
0 1 2 3 4 5 6 7 8 9

Sindhi Numerals

Fonts

Considering the Arabic script, as mentioned earlier, that it being used for writing Sindhi, calligraphic shapes, multiple alternate shapes are possible for a single letter. The shape is determined by the position of the character in a word and/or character next to it.

Character Cell Size

The characters cell height is fixed and can be controlled. The script is a linear script and line height of text can be fixed.

Glyphs to be supported in Sindhi

Fonts All the basic shapes plus alternate shapes required for a character have to be provided. A single character thus would have at least four or more glyphs for it. The diacritic marks along with special symbols used are provided. The numerals, and punctuations are also provided.

Keyboard

Following keyboard is proposed by C-DAC for Sindhi language:

Sindhi Keyboard Layout (Inscript)

۰	۱	۲	۳	۴	۵	۶	۷	۸	۹	۰	۰	۰	۰	۰	۰	←
TAB	"	"	ع	و	خ	پ	ا	آ	آ	آ	آ	آ	آ	آ	ENTER	
CAPS	:	:	ق	ح	ق	ي	ا	آ	آ	آ	آ	آ	آ	آ	ENTER	
SHIFT	۹	۰	ظ	ز	ظ	ز	ظ	ز	ظ	ز	ظ	ز	ظ	ز	SHIFT	
CTRL	ALT	SPACE BAR										ALT	CTRL			

Shifted

۰	۱	۲	۳	۴	۵	۶	۷	۸	۹	۰	۰	۰	۰	۰	۰	←
TAB	ک	ک	ع	و	ر	و	ج	ت	ي	ت	ت	ت	ت	ت	ENTER	
CAPS	گ	گ	ا	ش	م	ج	س	ج	س	ج	س	ج	س	ج	ENTER	
SHIFT	ن	ن	ن	ل	ن	ن	ن	ن	ن	ن	ن	ن	ن	ن	SHIFT	
CTRL	ALT	SPACE BAR										ALT	CTRL			

Unshifted



Presentation and Storage Considerations

C-DAC has designed a storage standard PASCII that takes care of the Urdu, Sindhi and Kashmiri languages.

Composing

Unlike English script, the characters in Sindhi have different shapes depending on their position in the constituent word i.e. starting, medial, and final. The fourth being standalone or isolated.

سنڌي
A sample Sindhi text

Formats of Units and Localization

Calendar

Sindhi uses Gregorian, Hijri & Samvat calendars.

Week

Sindhi weekday names are: *Soomaru* (Monday), *Mangalu* (Tuesday), *Buddharu* (Wednesday), *Vispati* or *Arbaa* (Thursday), *Jumo* or *Shukur* (Friday), *Chhanchharu* (Saturday), and *Aartvaaru* (Sunday).

Date

Dates in Sindhi are written like numbers.

Time

There is no abbreviation (like AM or PM in English) used for time in Sindhi. The English style may also be used. The time whether morning or evening is written in text. Following is an example of time in Sindhi.

صبح جا ۱۰ لڳي ۱۰ منٽ

10:10 am

A Sample time in Sindhi

Numbers

Numerals in Sindhi are written left to right just like they are written in English. Sindhi however has its own shapes for numerals:

۱۰۰۰۰ ۲۰۰ ۱۴۵۰
10,000 200 1450

Sample numbers in Sindhi

8.3.4 Typical Colloquial Sentences in Sindhi

GREETING

▶ Hello!

نمستي / آداب

आदाब । / नमस्ते ।

Aadaab / Namaste

▶ Good Bye

سداڻين گڏ / خدا حافظ

खुदा हाफिज़ । / सदाई गडु ।

Khuda Haafiz / Saddaaiin Gaddu

▶ Thanks.

مهرباني

महिरबानी ।

Mehirbaani

▶ How are you?

اوهين چاق چٽا پلا؟

अर्ही चाक़ चगा भला?

Avhiin chaaq changaa bhalaa?

▶ I am fine, thank you

مان نيڪم آهيان، مهرباني

मानं ठीक आहियां, महिरबानी ।

Maan Thiik aahiyaan, mehirbaani.

▶ Sorry!

معاف ڪجو!

माफ़ कजो !

Maaf kajo!

WEATHER

▶ It is cold

اڄ ڏيهن ٿڌو آهي -

अज्जु ड्डीहुं थधो आहे ।

Ajju DDinhun thadho aahe.