

**Twenty-fifth session
Nairobi, 5 – 12 May 2009**

Item 10 of the provisional agenda

Activities relating to the Working Group on Toponymic Data Files and Gazetteers

Development and Completion Process of the National Iranian Geographical Names Database *

* Prepared by Iranian Committee for Standardization of Geographical Names (ICSGN), National Cartographic Center.

Development and Completion Process of the National Iranian Geographical Names DataBase

Abstract:

The Iranian Expert Committee for Standardization of Geographical Names (ICSGN) vigorously pursues the development and completion process of the Iranian Geographical Names Database (IGNDB) as the best method to organize geographical names. Data on cities and divisions along with some 80 percent of villages across the country has been added to this Database. Keeping an accurate record of particulars of each name including the approved Farsi dictation, phonetic transcriptions, and even the sound files belonging to each name in its local accent, will significantly reduce the discrepancies and inconsistency concerning geographical names. The Committee is on an effort to introduce the ICSGN as a national point of reference to find the Iranian geographical names, and establish a link, upon provision of the required facilities, between this and other databases. This has been a step to standardize and exert a centralized management on the names in the national database, which shall consequently lead to the saving of the expenses imposed by synchronization of the national databases. On the other hand, to promulgate the names registered in the Database, various search methods have been provided and made accessible to the users on the website belonging to the Committee. To become internationally useable, it has been furnished, in certain cases, with the possibility for the users to search the names in their English alphabet; further efforts are to provide, in the near future, English transcriptions for all geographical names to be accessible in the English version of the website. Forward planning has been carried out to publish the Database information in the form of Gazetteers, which is pursued by the working group on "Geographical Names Publications and Gazetteers".

Development and Completion Process of the National Iranian Geographical Names DataBase (IGNDB)

Introduction

While providing the topo base maps 1:25000, a portion of the national geographical names was gathered, commensurate with the maps' scales, and imported into the National Topographical DataBase (NTDB). The DataBase, however, does not observe the goals and principles of standardization of geographical names and draws no distinction between registration of geographical names and other descriptive information on the map. Yet, keeping an accurate record of geographical names, as part of a nation's cultural heritage, is the best and most suitable means to protect this valuable national treasure, which has a close link with its linguistic, religious, political, economic and even topological nature. In the past, man would reflect and promulgate his holy, material or spiritual achievements in geographical names, thus making them a habitual phrase to remain forever. The importance of accuracy in recording geographical names lies in the fact that a name conveys the above mentioned valuable meanings and concepts only in its peculiar dialect and writing (in the local vernacular), which acts as the major incentive to develop the IGNDB.

Background:

Since 2000, as the head of "The Iranian Expert Committee for Standardization of Geographical Names (ICSGN)", the National Cartographic Center has undertaken the role of standardization of geographical names across the nation. The Committee's main task is to gather the geographical names, keep an accurate and carefully documented record of them, and prevent any discrepancies concerning the said names. Presently, there are several sources informing the Iranian national geographical names, which lead to further discrepancies and inconsistency in this regard. It seems impossible to harmonize

bodies and organizations, thus concentrating the related activities, without prior development of a comprehensive database.

Development process of the IGNDB was launched in 2002 by a team of "Geographical Names Web-site and DataBase Development". In the course of two years, the DataBase was designed and developed, and in 2004 the data entry process was initiated. The focus of attention in designing the DataBase was on accurately recording the names of natural (i.e. mountains, forests, rivers, etc.) or man-made features (i.e. cities, villages, dams, factories, etc.). As a result, several filters and tools have been utilized to avoid any lines; each name, with its specific writing and phonetic transcription is imported into the system only once, and it is given a unique code, while it may be used several times in different latitudes all over the country. In designing the data bank, several major criteria have been taken into account, including data classification, data integrity, data security, data accessibility, data sources, and data management.

Data Sources

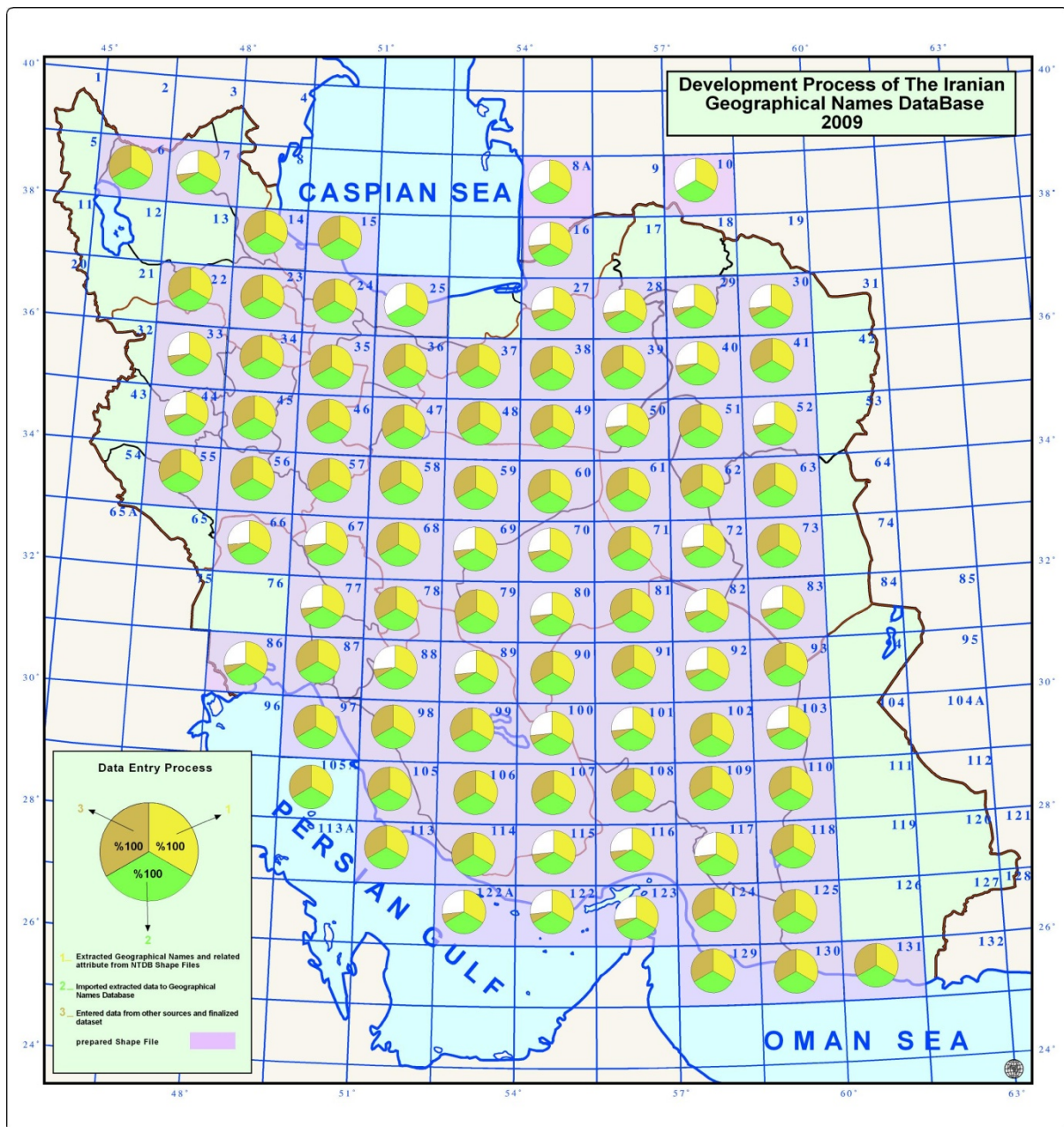
Geographical names available in 1:25000 maps form the major data source for this DataBase. As for population centers, the approved names receive priority; other names are recorded as the second or former name of the feature. Other data sources, including geographical glossaries, gazetteers, encyclopedias, travelogues and itineraries, ratifications by the Council of Ministers, and finally the previous maps and documents are used in the completion process of the IGNDB.

Special Capacities

In their need for a data bank, various bodies and organizations in Iran have developed specific databases in which geographical names have been, unfortunately, recorded inconsistently. One of the aims of the IGNDB is to be linked to other data banks to revise and update the geographical names in this data network. A feature of the IGNDB is its structural capacity to establish a link with any earth-based database, and there is no limitation on this.

Coverage of Imported Data and Data Entry Process

Due to the users' requirement, the names of the man-made features and in particular the names of cities, villages, and national divisions are given priority. The names of all the cities and national divisions along with 80 percent of villages are, therefore, inserted into the DataBase. With regard to other geographical features (except for the population areas) the data relating to 50 percent of the country's area has been inserted in the DataBase. The following index illustrates the progress of the data entry process into the IGNCDB:



Access to the IGNDDB on the Web

The DataBase is accessible to the users via internet, and they can search their specific geographical features in the following four methods:

- Search by the geographical names
- Search by the political area
- Search by the code of the coverage maps
- Search by geographical coordinates

The screenshot displays the IGNDDB Search Window interface. At the top, it shows the title "جستجوی عوارض از طریق مختصات در پایگاه نام های جغرافیایی ایران". Below this, there are input fields for coordinates: $X = \dots$, $Y = \dots$, $\lambda = \dots$, and $\Phi = \dots$. To the right, there are dropdown menus for selecting the province (انتخاب استان: گیلان), city (انتخاب شهرستان: رشت), and district (انتخاب بلوک: بندر جاسک). Below the coordinate fields are navigation icons (search, zoom in, zoom out, home, globe). The main area is a map of Iran with a grid overlay. To the right of the map, there are input fields for "طول جغرافیایی" (Longitude) and "عرض جغرافیایی" (Latitude), with a callout box pointing to them stating "Inserting geographical coordinates". Below these fields is a scale selector set to "15 کیلومتر". At the bottom right, there is a list titled "تمام عارضه ها" (All features) with a callout box stating "Choosing Type of features". The list includes items like "ب. انبار", "آبشار", "آتشکده", "آزاد راه", "اداره", "استخر", "اسکله", "اسامزاده", "انبار نفت و گاز", "ایستگاه آنتنی", "ایستگاه خدمات عمومی", "ایستگاه مترو و راه آهن", "پاتلاقی", "پلزار", and "باغ". At the very bottom right is an "اجرا" (Execute) button.

IGNDB Search Window, by coordinates

Each name is presented with certain data including the geographical coordinates (longitude/ latitude/ altitude), location in the national divisions, the approved writing (dictation), and the phonetic and English transcriptions. Furthermore, the user can find the considered feature on various coverage and thematic maps. History of the feature's name is accessible in the form of a text or multi-media file. In specific attributes section, the particulars defined for that feature are accessible which

include seasonality, desolation, or dereliction of villages, seasonal and permanent nature of river courses, a statistical code which provides a link to its population characteristics, postcode and several other data.