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**Reports: Governments on the situation in their countries and on the progress made in the  
standardization of geographical names**

**Report of Sri Lanka**

Submitted by Sri Lanka\*\*

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# Standardization of Geographical Names of Sri Lanka

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## 1. Introduction

Geographical Names are used in official, administrative, scientific, legal, educational and digital and printed media activities as well as in national and international affairs. In all these instances, problems can be minimized and reliability can be improved while searching for information, by using officially accepted geographical names. As a consequence, the majority of countries have already taken measures to officially use standardized Geographical Names. Also, Sri Lanka commenced standardization of her Geographical Names using set-out principles and guidelines formulated by a National Committee for Standardization of Geographical Names (CSGN) appointed by the cabinet of ministers of Sri Lanka in the year 2014 and existed until the year 2018. The standardization process was able to be successfully completed and published online using a Geographical Names Web portal with further refinement based on views of the local authorities obtained using the same portal in the year 2018. From 2019, a new entity called Geographical Names Regulatory Board (GNRB) has been set up for maintenance and regularizing of Geographical Names of Sri Lanka.

## 2. Methodology adopted

Figure 2.1 depicts the methodology adopted in a workflow for standardization and publishing of Geographical Names of Sri Lanka with a view of getting views on Geographical Names online.

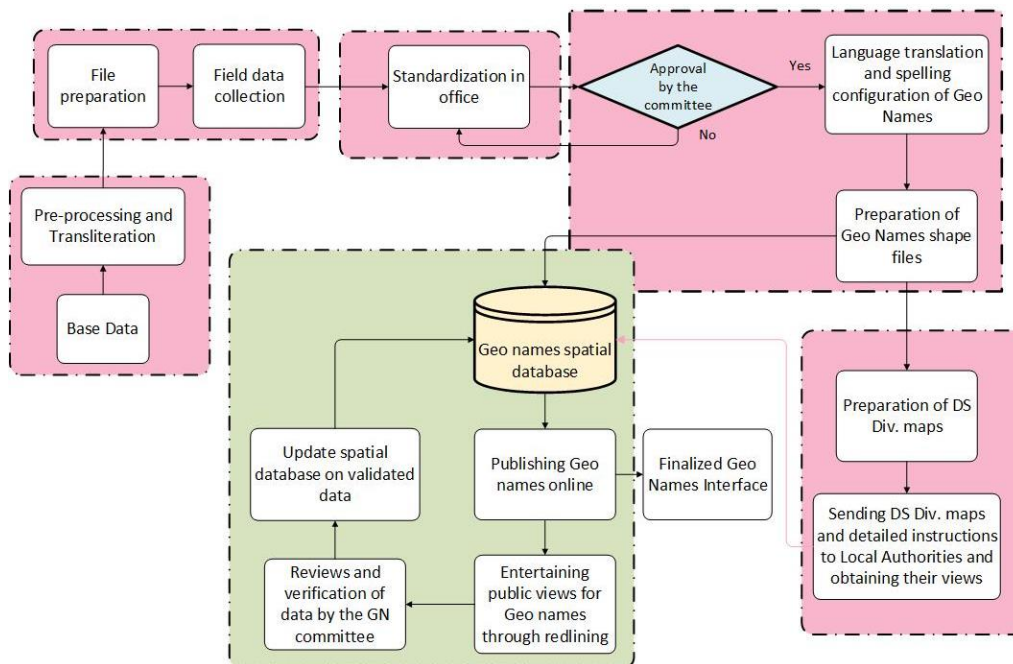


Figure 2.1: Workflow of Geographical Names activities

## **2.1 File preparation**

Based on the pilot study on data collection carried out in Beruwala Divisional Secretariat Division (DSD) in Kalutara District in 2015, It was decided to collect all Geographical Names in use of the entire country based on an administrative hierarchy of Sri Lanka. Having got nine (9) provinces, twenty five (25) districts and three hundred and thirteen (313) DSDs with 14,022 Grama Niladhari Divisions (GNDs) being at the bottom level, a GND based topographic sketch map showing place names (toponyms), roads and water bodies were compiled for each GND within a DSD of a district, using digital data of existing topographic map series at the scales of 1: 10K, 1: 50K and One Inch to One Mile (1: 63, 360) in Sri Lanka. In addition, a list of geographical names for each GND was prepared with a unique identifier for each existing name on these map series in Sinhala and Tamil languages with the place names either extracted directly or transliterated from English to Sinhala language from these map series, and documents available in Divisional Secretaries, Election Department, Agrarian Department, Census and Statistics Department and Archeological Department of Sri Lanka.

## **2.2 Data collection**

These sketch maps along with a list of relevant geographical names in each Grama Niladhari Division were sent in the form of a bound document to Grama Niladhari (GN) officials and asked them to ascertain Geographical Names on the list with those of existing features on ground and to sketch features on sketch map and write down relevant names on the list, which are not on the topographic sketch map but exist on ground in the area.

In this activity, names used to recognize the following geographical features were considered as Geographical Names.

- a. Village names, names of administrative units, place names etc.
- b. Names of archeological sites, temples, churches, other religious places etc.
- c. Names of water bodies such as channels, canals, rivers, lagoons, reservoirs, islands, dams, etc.
- d. Names of roads and junctions
- e. Names of natural places such as mountains, caves, planes, and valleys
- f. Names of other special entities like schools (names of government offices are not included).

## **2.3 Standardization of Geographical Names**

Based on the comments of GN officials for the names of existing features that are depicted on the sketch map and new features that do not represent on sketch map but are sketched and incorporated thereon by GN officials, a Geographical Name of each feature was standardized based on a set of principles and guidelines by the officers in the Geographical Names Section of the Survey Department of Sri Lanka. These standardized names of each GND were presented to the CSGN and its approval was obtained after reviving and making subsequent revisions if necessary.

## 2.4 Creation of Geographical Names Database

Each standardized Geographical Name in Sinhala was transliterated into Tamil and vice versa on the list and its character configuration was further checked and corrected by sending a list of each GND to officials in the Language Department and outsourced qualified language translators. Upon the receipt of transliterated and character configured standardized Geographical Names, sketched features on base maps were on-screen digitized and linked with relevant standardized Geographical Names on the list in order to create the Geographical Names Database (GNDB) at DSD level in each district.

## 2.5. Getting views for the standardized Geographical Names

In order to get an insight into views on the standardized Geographical Names, Divisional Secretariat (DS) topographic base maps depicting standardized Geographical Names of places, roads, and water bodies were prepared for Kalutara and Kandy districts. These maps were disseminated to local authorities with a feedback form (See Figure 2.2) for further verification of standardized Geographical Names. Local authorities were given a period of one month to provide views. Upon reception of views, GNDB maintained in open source PostGIS database (<http://www.postgis.org/>) was further refined verifying this information with online map services such as Open Street Map, Google Earth and Google Street Map using frontend of open source QGIS software (<https://www.qgis.org>).

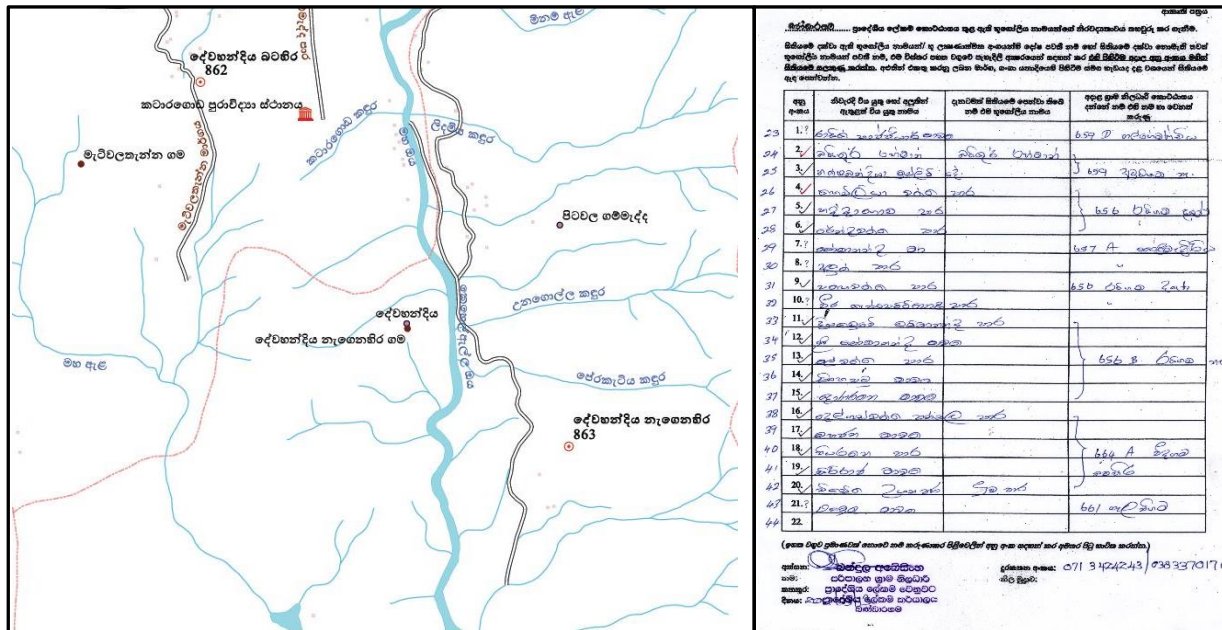


Figure 2.2: DS topographic base map (part of Kandy District) on left and views in part of Kalutara District on right in Sinhala Language

Table 2.1 presents a summary of views received in these two districts. Each of the fourteen (14) DSDs in Kalutara provided views on Geographical Names while only nine (09) out of twenty (20) DSDs in Kandy provided such views. While analyzing, most of the views on Geographical Names were names

for existing roads on DS topographic base maps. Though this method of getting views and updating Geographical Names of features was contributory, there was a significant delay in receiving the views since maps and feedback forms had to be dispatched and received upon completion by post. Further, it was observed that officials who were involved in providing views took a longer time to read the information of relevant base maps to gain a contextual awareness of the names of geographical features within the area of interest.

Table 2.1: Local authority views on collected Geographical Names

District	No. of DSDs involved in providing views	No. of views by Local Authorities			
		Urban Council	Pradeshiya Sabha	Divisional Secretariat Office	District Survey Office
Kalutara	14	109	120	431	1708
Kandy	9	28	29	287	0

In order to expedite getting views from the local authorities more efficiently, a Geographical Names Web Portal (GNWP) (<http://www.geonames.gov.lk>) was developed and implemented at the beginning of the year 2018. It was possible to publish around three hundred thousand standardized Geographical Names of entire Sri Lanka mainly for getting views from local authorities in this portal.

Web maps services such as Open Street Map, Topo Map, World Imagery and Bing Aerial Imagery are provided as background maps on geographical features displayed in three layers; Places, Roads and Water features on the portal (Figure 2.3) to have contextual awareness of locations of these features. The GNWP up and running is a complete online crowdsourcing platform through which users are able to provide views online in Sinhala and Tamil languages with red lining facilities. Also, users have the facility to query and retrieve views already given with timestamp for a particular feature with a single mouse click on a feature.

Upon the publication of standardized geographical features, users from local authorities as mentioned in Table 2.1 in each district were instructed in writing with a set of guidelines to provide views online through the GNWP within a period of nearly two months. The red lining facilities of the portal replaced providing views in the form of paper feedback. These views could be categorized into fourfold; i. making a comment to revise the existing name of a feature, ii. Assigning a new name to an existing feature, iii. Inserting a new feature with name, and iv. Modifying the existing shape and/or location of a feature.

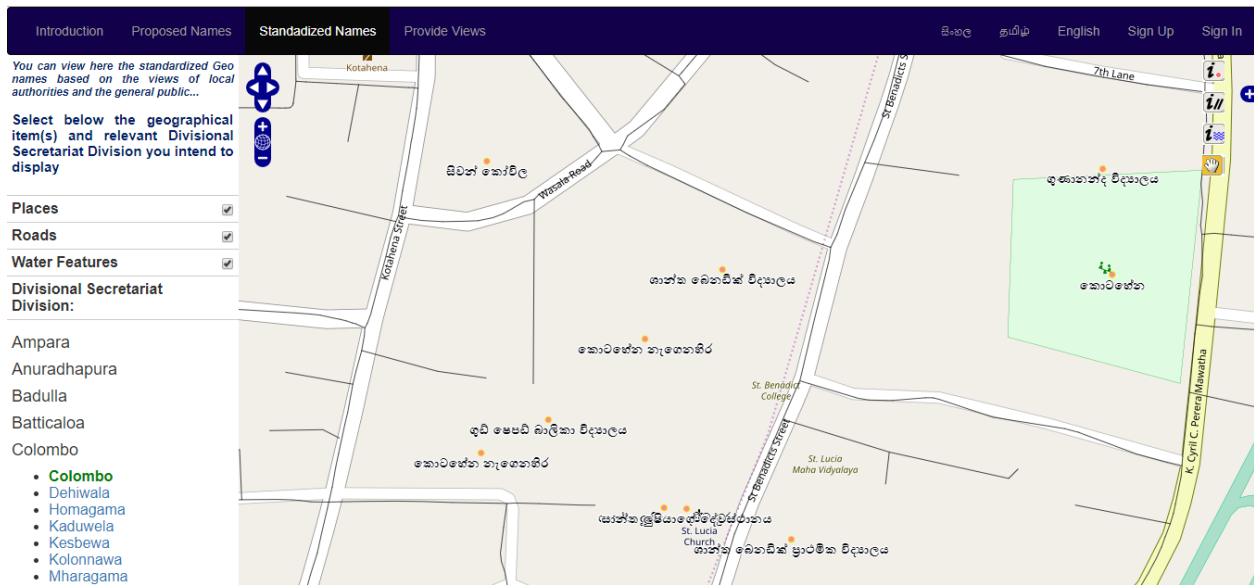


Figure 2.3: Interface of Geographical Names Web Portal depicting places, roads and waterbodies on the background of Open Street Map Service

Once views were provided, those were reviewed by the administrator and only those views that underwent review process were published for further public views as proposed Geographical Names.

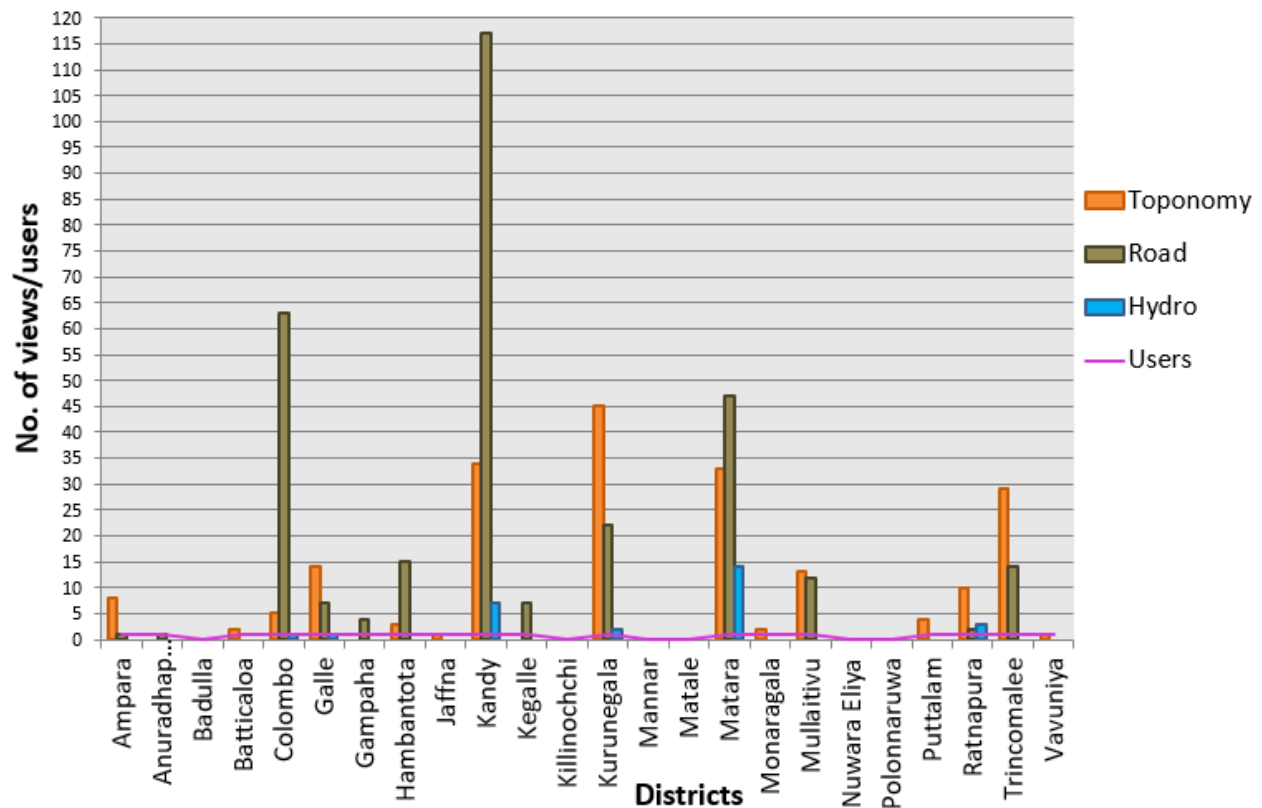


Figure 2.4: Views from government stakeholders for existing features

Upon completion of getting public views, those were verified with one or more of the methods; (a) overlaying with web map services as mentioned above (b) visualizing with Open Street View, and (c) by directly contacting the officer who provided views. Then such views were published in the Web Portal as finalized Geographical Names upon the revival by the SCGN. Figure 2.4 depicts a number of views received along with the number of users in each of the twenty-five (25) districts for existing features. In most of the districts at least three government stakeholders had provided views. It was further observed that these users suggested names for roads that did not have names assigned for these entities during the standardization stage of Geographical Names.

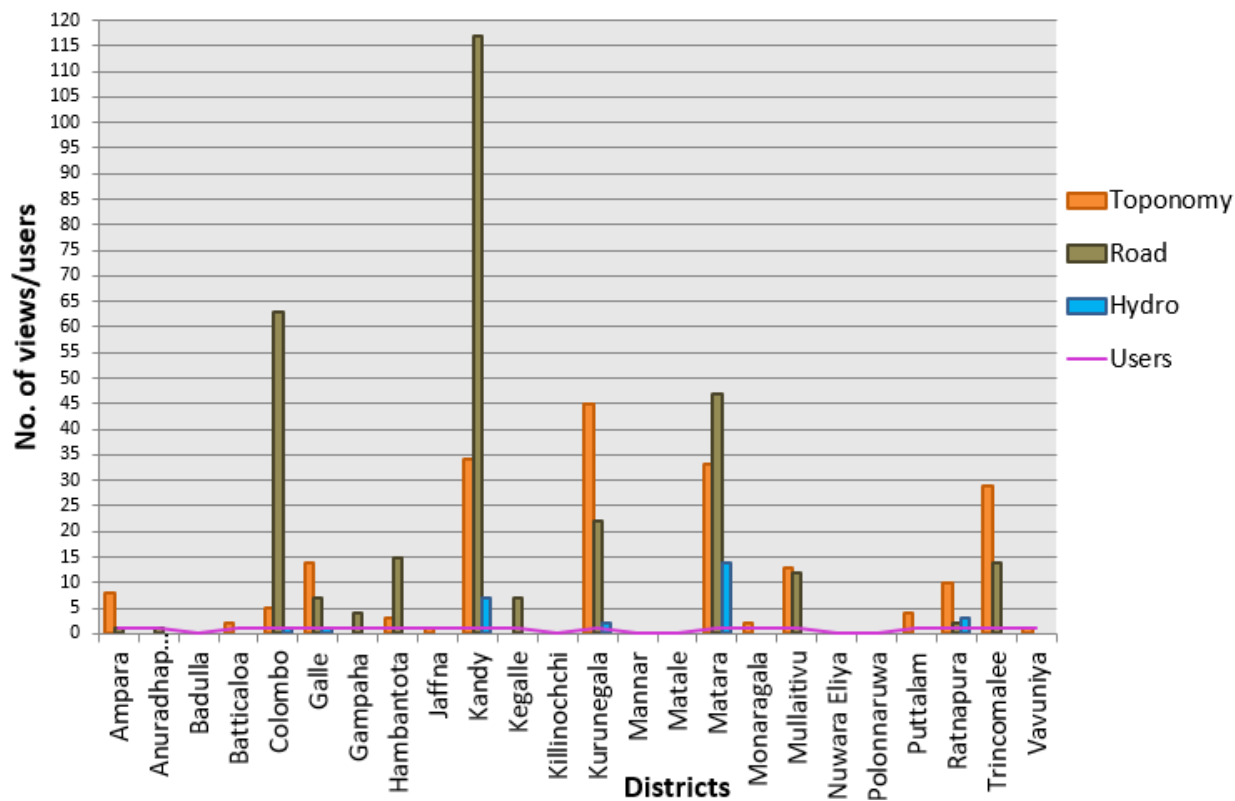


Figure 2.5: Views from government stake holders for inclusion of features, which do not exist in the database of standardized geographical names

Figure 2.5 depicts the views given for non-existent features or place names in the GNDB but exist in reality. It is observed that most of the views are for roads and place names. About two thousand views of all categories were received as a whole and the process of getting views, updating the GNDB and publishing final names on the GNWP was completed by the end of the year 2018.

### 3. Achievements

Although getting views online, incorporating changes and publishing standardized Geographical Names as finalized names was a kind of inquisitive and verification process, there were no standard policies which would help assign Geographical Names to features nor was there any legal framework through which CSGN was empowered to legally name and publish geographical features with authority. As a result, at the end of the year 2018, CSGN was able to take initiatives to form a cabinet

approved entity called GNRB from the beginning of the year 2019 to the effect of maintaining and naming geographical features officially.

It should also be emphasized that along with the standardization process, one of the achievements of the CSGN is the formulation of a Romanization system for the Sinhala Language and getting Cabinet approval for the same adopting ISO 15919 as the Sri Lanka standard for Romanization of Geographical Names with a few exceptions, considering local applications, and views of the United Nations Group of Experts on Geographical Names (UNGEGN) Working Group on Romanization Systems. There is already an ISO standard Romanization system for the Tamil Language. These two Romanization systems will have to be introduced in producing topographic maps in Sri Lanka in the very near future.

The main responsibilities of GNRB is to (a) maintain the standardized GNDB, (b) making policies to revision of standardized Geographical Names when necessary, (c) making provisions to government stakeholders and other relevant institutions to utilize the standardized Geographical Names already available online, (d) regularize naming process of existing and new Geographical Names by formulating appropriate policies, a legal framework and regulations in coordination with organizations, which are involved and authorized in assigning geographical features and locations, (e) establishing a systematic way of populating and updating the GNDB with Geographical Names assigned by various institutions in accordance with the authority vested to them, (f) Helping institutions which are in need of instructions to matters arising relevant to Geographical Names, and (g) attending to matters related to Romanization of Geographical Names. Presently GNRB works on the development of aforesaid policies for the sustainability of Geographical Names management of Sri Lanka.

#### **4. Conclusion**

It has been able to collect and standardize Geographical Names of Sri Lanka systematically, initially obtained from different sources and further verified and enhanced with the help of GN officials working at the village level. The standardization process of around three hundred thousand names in 14022 GNDs was performed in the Geographical Names Section of the Survey Department of Sri Lanka for four years from 2015 to 2018. All these standardized Geographical Names in Sinhala and Tamil Languages underwent a review by CSGN, which was comprised of senior government officials, language experts, and academics. It was possible to host the standardized Geographical Names online in the year 2018 using a crowdsource Web-based system referred to as GNWP for publishing the standardized Geographical Names and getting further views on these names. The GNWP is capable of providing suggestions to existing names, assigning names to features which do not have names, modifying locations of existing features, and creating new features and assigning names. Around two thousand views were able to be obtained from the local authorities online dealing with Geographical Names in the Year 2018. The successful term of CSGN ended in 2018 and a new entity called GNRB has been operational since the beginning of the year 2019 to deal with tempting relevant institutions to use the standardized Geographical Names published online, work with matters related to the revision of standardized Geographical Names and assigning new names, and Romanization of Geographical Names.