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National and international standardization of geographical names: names collection, office treatment, national authorities, features beyond a single sovereignty and international cooperation

Strengthening relationships in geographical names standardization through collaboration with mapping communities and non-governmental organizations in Indonesia

Submitted by Indonesia^{2**}

Summary

In government regulation No. 2 of 2021 on the standardization of geographical names, it was mandated that the Geospatial Information Agency (Badan Informasi Geospasial) should enable and strengthen relationships with mapping communities and non-governmental organizations (NGOs) related to toponyms. Moreover, the regulation allows citizens, mapping communities and NGOs to participate in geographical names standardization by recognizing participatory mapping and crowdsourcing as approaches to toponym data collection.

Since the enactment of the regulation, the Agency has communicated intensively with various relevant mapping communities and NGOs. It was realized that the current status of geographical names collected by the Agency barely covers 5 per cent of the estimated 8 million items of data. Therefore, accelerating participatory toponym data collection has become a challenge that needs to be properly addressed by the Agency.

The intention of including participatory mapping and crowdsourcing in the regulation was to gather information about the history and meanings of place names in a particular region and to expand them with additional details in order for the complete toponymic information to be included in the national gazetteer.

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^{1*} GEGN.2/2023/1

^{2**} Prepared by Nafisa Andika Putri, Faqih Rohmatulloh, Andreas Kelvin Pujianto, and Aji Putra Perdana of the Geospatial Information Agency.

Furthermore, implementing participatory mapping and crowdsourcing to create maps or other resources would help people to learn about place names.

The Agency has conducted focus group discussions and meetings with mapping communities and NGOs, resulting in a collaborative action plan, datasharing, utilization and the sharing of knowledge and experiences. The Agency's efforts to enable and strengthen collaborative action with mapping communities and NGOs in geographical names standardization activities are described in the report.

Strengthening relationships in geographical names standardization through collaboration with mapping communities and non-governmental organizations in Indonesia Introduction

Indonesia, as one of the vast archipelagic countries in the world, undoubtedly has an abundance of geographical features. This becomes a challenge for the Indonesian government in order to collect geographical names across the country. To accelarate the number of data collected, the Indonesian government acknowledges participatory mapping and crowdsourcing as part of approaches in toponym data collection and further encourages citizens, mapping communities, and NGOs to participate.

In January 2021, the Government Regulation Number 2 of 2021 (hereinafter referred as GR 2/2021) was enacted as one of the legal bases for Geographical Names Standardization. The regulation opened the opportunities for all citizens to contribute in every stage of geographical names standardization (especially data collection stage) through *Sistem Informasi Nama Rupabumi* (SINAR). The full stages of GR 2/2021, in summary, are shown in Figure 1.

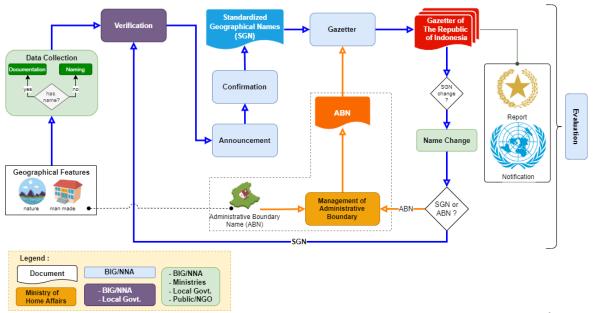


Figure 1. The flowchart of geographical name standardization according to GR 2/2021³

Geographical names collection is crucial as the initial step, however, it is inevitable that the field

³ Pujianto, A.K., Saputri, T. D., Rohmatulloh, F., & Ferdiansyah, H. (2022) Embracing Participatory Geographical Names Collection and Standardization in Indonesia

data collection typically featured lengthy and costly processing, moreover required a lot of human resources.⁴ The GR 2/2021 article 11 accommodates existing methods to be used, namely participatory mapping and crowdsourcing. According to Pujianto et al. (2022), the notion of participatory mapping in GR 2/2021 corresponds to the one in BIG Regulation No. 18 of 2021, which is a data collection and processing activity that involves mapping communities as well as NGOs. The processed data is then compiled and this activity is referred to as crowdsourcing. To enhance the efficiency of participatory mapping and crowdsourcing, Geospatial Information Agency (*Badan Informasi Geospasial* - BIG) undertakes collaboration, cooperation as well as data and knowledge sharing with related parties. Figure 2 illustrates the flowchart of participatory mapping and crowdsourcing in geographical names collection in Indonesia.

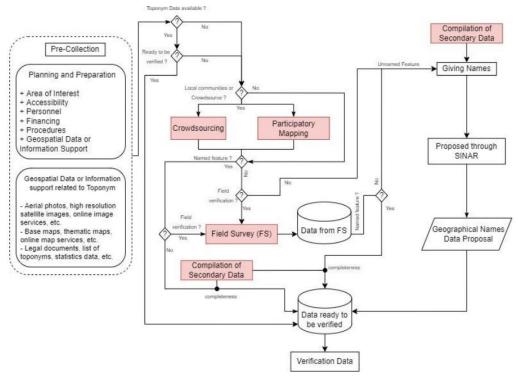


Figure 2. The flowchart of participatory mapping and crowdsourcing in geographical names collection⁵

Activities of collaboration

Participatory mapping and crowdsourcing are currently being employed by a number of actors in Indonesia, including Participatory Mapping Network (*Jaringan Kerja Pemetaan Partisipatif* - JKPP) and OpenStreetMap Indonesia Association (*Perkumpulan Openstreetmap Indonesia* - POI), to collect and distribute geospatial data and information. In addition, BIG has also collaborated with educational institutions by conducting workshops with Geomatics Engineering students from Bandung Institute of Technology (*Institut Teknologi Bandung* - ITB) and National Institute of Technology (*Institut Teknologi Nasional* - ITENAS). These activities are described as follows:

1. Jaringan Kerja Pemetaan Partisipatif (JKPP)

⁴ Perdana, A.P. & Ostermann, F.O. (2018) A Citizen Science Approach for Collecting Toponyms

⁵ Pujianto et al., 2022 "Embracing Participatory Geographical Names Collection and Standardization in Indonesia"

JKPP is an NGO that specializes in participatory mapping, with a history dating back to 1996. Their mapping products include various thematic geospatial information, including valuable data on geographical names. Collaborations with BIG have been done in the past few years, one of them is their participation in the formulation of the participatory mapping mechanism during the development of GR 2/2021 and BIG regulations. More recently, in meetings held in January and June 2022, JKPP and BIG discussed future plans regarding standardization of geographical names.

2. Perkumpulan Openstreetmap Indonesia (POI)

Humanitarian Openstreetmap Team (HOT) is a global organization that uses open mapping for humanitarian and community development. In 2017, HOT Indonesia established POI to promote the use of free and open geospatial data. POI uses OpenStreetMap to create a free and open map where everyone can freely map, modify and use the spatial data. As of May 2022, a total of 4,265 geographical names from POI were uploaded into SINAR. Furthermore, to achieve a sophisticated participatory mapping and crowdsourcing, the idea of implementing data sharing via API has been raised at recent meetings.

3. Institut Teknologi Bandung & Institut Teknologi Nasional

Strengthening relationships with academics by conducting workshops will educate, brainstorm and hopefully inspire the undergraduate students as the new generation of spatial minded in the future. The workshop was initiated by a discussion between BIG and the dean and lecturers from *Institut Teknologi Bandung & Institut Teknologi Nasional*. Both universities then expressed their interest to hold a workshop to teach students about the geographical names standardization. In response, BIG agreed to become the guest lecturer and share their expertise and knowledge. The workshop was held on 10th-12th December 2022 with more than 30 students from both institutes participating in the event. During the workshop, BIG collaborated with POI to organize and facilitate the event. BIG sought out POI's expertise in organizing workshops for students. BIG also intended to strengthen their relationship with POI.

Output: standardized geographical names

The collaboration between BIG and NGOs has shown positive results for the geographical names standardization. This is represented from the geographical names data gained from mapping activities that are carried out by POI and its contributors are stored in SINAR. The data is then verified by the local government, ministries, and agencies. A total of 79 data has become the standardized geographical names in 2021 (registered in the 2021 Gazetteer of the Republic of Indonesia). These data are constituted from 11 toponym classes such as: Toponyms of Reign; Education, Science and Technology; Waters; Economy and Trade; Religious Places; Defense and Security; Relief; Health Facility; Transport; Utility; Tourism, Arts and Culture. In 2022, the number of data from POI in the gazetteer had increased significantly to 218, constituting data from 6 toponym classes. This increase of data from POI is a testament to the hard work and dedication of the POI team and their commitment in the standardization of geographical names.

The outcomes

In order to strengthen relationships in Geographical Names Standardization in Indonesia, BIG as the National Names Authority of Indonesia has carried out several supplementary actions. BIG has involved academicians, varying agencies/ministries, local governments, experts, activists, mapping communities and Non-Governmental Organization (NGOs) to collaborate in succeeding the Geographical Names Standardization. The actions taken by BIG have produced good results such as enhanced awareness of academia regarding geographical names standardization in Indonesia and the preservation of valuable insights and local knowledge related to river naming in Papua region.

1. Enhanced awareness

The toponymy workshops organized by BIG in collaboration with ITB and ITENAS have given students new knowledge about geographical names standardization and how to use SINAR as a platform data collection tool. This workshop also enabled students to explore toponymy studies and apply the knowledge gained in their academic pursuits, including for their thesis or final project. BIG is committed to supporting students and campuses that hold lectures related to toponymy, and they are ready to provide support to students who are interested in further studies. One of the future agendas is to hold toponym data collection competitions to empower students and educate the general public about toponymy.

The involvement of the academic community, including lecturers and students, and the collaboration with researchers and experts in the field of toponymy coordinated by BIG is expected to increase the number of scientific studies related to toponymy in Indonesia. This includes studies in the form of thesis or final project, popular writing, social media content, and scientific writing in national and international journals. The escalation of focus on toponymy studies will help to enhance awareness about the importance of toponymy in various fields, including geography, history, culture, and tourism.

2. Expanded perspective

Another result of the collaboration is the enrichment of information on Indonesia's diverse geography and communities. For example, some valuable insights and local knowledge that had been able to be gathered from JKPP are the nomenclature for places and rivers in Papua region. There is a nomenclature for places (local names) that are different and smaller than villages and drawn as points. The named points are widely known by the local communities. Moreover, rivers in Papua have a unique local naming scheme. Mostly, river segments have just one local name, however in Papua the same segment may have several local names. On the other hand, JKPP also receives insight from BIG regarding feature type as JKPP focuses more on administrative boundaries.

Appreciation through the award

Moreover, in order to appreciate the involvement of these parties, BIG in November 2022 held an award for those who persistently contributed to the Standardization of Geographical Names in Indonesia. BIG launched a new category on the *Bhumandala* Awards namely *Nama Rupabumi* (Geographical Names) completing the *Bhumandala* Awards that BIG has held in recent years for other categories. This new category of *Bhumandala Nama Rupabumi* Awards is divided into following subcategories: ministries/agencies, local governments at the provincial and regency/city levels, community/non-governmental organizations and individual toponym experts.

POI was the winner in the community/non-governmental organizations sub-category. This result was determined through assessment regarding activities of geographical names standardization that POI has done until 2022. More detailed explanation can be found in GEGN.2/2023/47/CRP.47.

Future plans

It is essential for BIG to continue the collaboration that has been started in the preceding years. The kick-start of this continuation could be in the form of Memorandum of Understanding outlining the goals, objectives, roles and responsibilities of each institution. Later on, specific activities regarding the standardization of geographical names such as data sharing and technical guidance would be included in the cooperation agreement. The technical guidance will be provided by BIG to support each institution on participatory mapping, drawing on their extensive experience in this area. In addition, data sharing will also be carried out to enrich the database for both BIG and each institution involved.

Points for discussion

The Group of Experts is invited to:

1. Express its views on the report and discuss whether other countries have the better practice on their own in order to strengthen relationships in Geographical Names Standardization.