

REPORT of the Regional Committee of United Nations Global Geospatial Information Management for Asia and the Pacific (UN-GGIM-AP)

Secretariat of UN-GGIM-AP ESCAP

July 2024



1. Reporting Period

This report highlights the activities carried out by the Regional Committee of United Nations Global Geospatial Information Management for Asia and the Pacific (UN-GGIM-AP), herein "the Regional Committee", since the Thirteenth Plenary Session of the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) held from 2-4 August 2023 at the United Nations Headquarters in New York.

2. Activities and Achievements

2.1. Contribution to UN-GGIM

UN-GGIM-AP has operated effectively in line with its mandate and guidance given by the Committee of Experts and contributing to its activities. The Regional Committee has closely cooperated with UN-GGIM as well as the other regional committees, to ensure that Member States are well informed of and involved in the work of the Committee of Experts such as:

- a. The Regional Committee held the "First UN-GGIM Inter-Regional Committee Meeting" with other four regional committees of UN-GGIM (representatives from UN-GGIM Americas and UN-GGIM Arab State attended in-person, representatives from UN-GGIM Africa and UN-GGIM Europe attended online) on 7 November 2023 in Bali, Indonesia.
- b. The Regional Committee supported and contributed to the "Expert consultation to enhance national geospatial information management arrangements and accelerate the achievement of the SDGs meeting" held by UN Statistics Division (UNSD) with expert representatives of Member States from UN-GGIM-AP on 10 November 2023 in Bali, Indonesia.
- c. The President of the Regional Committee attended plenary meetings of UN-GGIM regional committees in the Americas, Arab States and Europe for in-depth cooperation and communication. He also attended the High-Level Group of the Integrated Geospatial Information Framework (HLG-IGIF) third plenary meeting, in person,
- d. The Regional Committee actively engaged and supported the "High-level Seminar on the Integration of Geospatial and Statistical Information" held by UNSD, together with ESCAP and Statistics Norway from 28 to 30 November 2023 in Bangkok, Thailand.
- e. The Regional Committee assisted the "Listening Tour meeting in Asia and the Pacific region" held by the United Nations Global Geodetic Centre of Excellence (UN-GGCE) on 31 Jan 2024.
- f. The Regional Committee coordinated with the United Nations Global Geospatial Knowledge and Innovation Centre (UNGGKIC) to support regional capacity development for the Integrated Geospatial Information Framework (IGIF) and technical support to pilot countries.

- g. The Regional Committee regularly attended and contributed to monthly virtual meetings of the UN-GGIM Geospatial Network, UN Open GIS, and GeoAI & Analytics Working Group.
- h. The Regional Committee will continue its efforts to identify and report regional issues to the upcoming fourteenth session of the UN-GGIM.

2.2. Plenary Meeting

On 6 to 10 November 2023 the twelfth plenary meeting of the UN-GGIM-AP was convened in Bali, Indonesia, in hybrid format (mostly in-person) and hosted by the Geospatial Information Agency of Indonesia (BIG) as a significant adjoining event to the Asia-Pacific Geospatial Forum (APGF 2023).

It was the fifth plenary meeting under the secretariat services of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) and the second hybrid plenary meeting after the COVID-19 pandemic. Approximately 80 participants from 19 member countries, including Uzbekistan, Fiji and Tonga, UNSD, UN-GGIM Americas and UN-GGIM Arab States, and 10 participants from geospatial related communities attended in person. The UN-GGIM Europe and Un-GGIM Africa joined online.

The resolution of the twelfth plenary meeting reemphasized commitments to further advance international and regional agendas in support of the sustainable development goals, such as Asia-Pacific Plan of Action on Space Applications for Sustainable Development, the Integrated Geospatial Information Framework (IGIF), and the Global Statistical Geospatial Framework (GSGF), strengthen geospatial information management capacities and utilization in developing countries in Asia and the Pacific. As well as enhance effective communication and collaboration with other regional committees, increase awareness and share knowledge, experiences, and good practices to improve the abilities of Member States to leverage the benefits of geospatial information, technology, and innovation. In addition, it included the nomination and endorsement of three new UN-GGIM-AP Executive Board members, China, Fiji and Nepal, to fill the vacancies in the Executive Board in line with the number of Executive Board members shown in the Statutes, encouraging more experts to support the work of UN-GGIM-AP, and establishment of the UN-GGIM-AP Private Sector Network and UN-GGIM-AP Academic Network.

2.3. Other Meetings

Due to the tight budget after the COVID-19 pandemic, reluctance to travel for in-person meetings remains. Meetings have been successfully held in hybrid format (in-person and virtual) with the effort of Member States and the secretariat of the UN-GGIM-AP. The

Executive Board meeting took place on 6 May 2024 in Sydney, Australia, hosted by the Geoscience Australia.

The workplan of UN-GGIM-AP for 2024 includes organizing the thirteenth plenary meeting in Delhi, India on 27 to 28 November (to be confirmed) as well as continuously supporting Member States through organizing/facilitating various workshops and seminars for exchanging perspectives, use cases, and practices on geospatial information sharing.

2.4. Working Group Activities

A. Working Group 1 on Geodetic Reference Framework

Working Group (WG) 1 on Geodetic Reference Framework aims to improve access to the Global Geodetic Reference Frame (GGRF) through development and maintenance of the regional geodetic reference frame, which supports regional geodetic cooperation, enhances regional Global Navigation Satellite System (GNSS) cooperation, and develops geodetic capacity through workshops and seminars in the region.

The WG has four main activities in the term 2022-2025: (1) cooperation and contribution to the UN global geodesy initiative, the UN-GGIM Subcommittee on Geodesy and the UN Global Geodetic Centre of Excellence (UN-GGCE); (2) densification of the International Terrestrial Reference Frame (ITRF) in the region (the Asia-Pacific Reference Frame (APREF) project and the Asia Pacific Regional Geodetic Project (APRGP)); (3) support to sustainable realization and maintenance of height systems in the region; and (4) geodetic capacity development and networking in the region (the Asia-Pacific Geodetic Capacity Building (APGCB) project).

The chair and vice chairs of the WG participated in second meeting of the UN-GGCE International Advisory Committee and fourth plenary meeting of the Subcommittee on Geodesy at the UN Campus Bonn in March 2024 and participated in the development of the first joint Global Geodesy Development Plan by sharing unique geodetic needs, challenges and issues in the region. The chair also participated in the UN-GGCE second consultative meeting for the Global Geodesy Development Plan at the UN Campus Bonn in November 2023.

During the intersessional period, the APREF project welcome new CORS stations in the network and the whole network are routinely processed to generate APREF solutions of the over 700 stations which are consistent with the ITRF. Since 27 November 2022 (GPS week 2238), the APREF weekly solutions have been transitioned to the latest version of ITRF, ITRF2020/IGS20. All Coordinate time series are openly accessible via the APREF website. The APRGP project conducted its annual GNSS campaign observation in 2023. 116 stations from nine Member States participated in the 2023 campaign, and all data are

under processing by the Geoscience Australia. The report of APRGP2023 will be published at the UN-GGIM-AP website in the middle of 2024.

In the year 2023, the working group held a Geodetic Reference Frames and Applications for Disasters Workshop during the period of the twelfth plenary meeting of the UN-GGIM-AP on 7 November. The workshop focused on the modernization of geodetic reference frame especially in the countries on the dynamic plate boundaries, geodesy contribution to disaster risk reduction, particularly GNSS enhanced Tsunami Early Warning Systems, and geodesy needs assessment in the region, as inputs to the Global Geodesy Needs Assessment by the UN-GGCE. The workshop was co-organized by the WG, the International Association of Geodesy (IAG), the International Federation of Surveyors (FIG), and the Geospatial Information Agency of Indonesia (BIG) as an opportunity to provide capacity development in geodesy and enhance networking among related stakeholders in the region.

The presentations on the working group's activities were made during the <u>twelfth plenary</u> and <u>Executive Board</u> meetings of the UN-GGIM-AP.

B. Working Group 2 on Cadastre and Land Management

Working Group 2 on Cadastre and Land Management aims to identify and determine the key regional issues for the management of land and cadastre, and take necessary measures to secure the social, economic and environmental benefits. The working group focuses on advocating the importance and pertinence of land and its administration and management at the global, regional and national levels for the implementation of the Sustainable Development Goals.

Recognising the importance of the strategic plan of the UN Expert Group on Land Administration and Management (EG-LAM) for 2023-2025, WG 2 updated and aligned its resolution with the strategic plan during the twelfth UN-GGIM-AP plenary meeting in Bali from 6-10 November 2023. The aim is to support the implementation of the Framework for Effective Land Administration (FELA) at the national and sub-national levels.

To strengthen its partnership beyond Asia and the Pacific region, together with UN-GGIM-Americas, WG 2 updated and shared its activities with the members of EG-LAM at the fifth meeting of EG-LAM in Aguascalientes, Mexico from 8-11 April 2024.

The presentations on the working group's activities were made during the <u>twelfth plenary</u> and <u>Executive Board</u> meetings of the UN-GGIM-AP.

C. Working Group 3 on Integrating Geospatial Information and Statistics

Working Group 3 on Integrating Geospatial Information and Statistics aims to integrate statistic and spatial data to monitor targets and indicators of Sustainable Development Goals (SDGs).

In 2023, a 3-year plan of action with time budgeting is being discussed, with the deliberation and consideration of priorities in the region and sharing ideas with vice chairs. There are plans to hold webinars to discuss the feasibility of the plan and convene opinions to strengthen and implement stages.

The presentations on the working group's activities were made during the <u>twelfth plenary</u> meetings of the UN-GGIM-AP.

D. Working Group 4 on Integrated Geospatial Information Framework

Working Group 4 on Integrated Geospatial Information Framework aims to support, coordinate, plan and extend the necessary facilitation for developing the awareness and capacity through collaboration and sharing in the Asia-Pacific member countries for implementation of the IGIF.

The working group held an <u>UN-IGIF</u> workshop during the UN-GGIM-AP twelfth plenary meeting in November 2023 at Bali, Indonesia. All regional committees (Americas, Arab States, Europe, and Africa) participated and shared their experiences and practices in implementing the UN-IGIF in their region. During the workshop, 18 member countries from Asia-Pacific region presented their country report covering various activities, actions, plans and status of existing geoinformation management structure, including implementation of the UN-IGIF.

The presentations on the working group's activities were made during the <u>Twelfth Plenary</u> and <u>Executive Board</u> meetings of the UN-GGIM-AP.

2.5.Inter-Regional Committee collaboration

The Regional Committees of UN-GGIM: Arab States and UN-GGIM-AP committed to developing a shared understanding and solutions addressing regional challenges. The collaboration aims to utilize regional solutions to effectively address unique challenges of the two regions. A workplan covering four areas of collaboration has been developed and the first scope of collaboration was executed during the eleventh plenary meeting of UN-GGIM: Arab States.

2.6. Publications

This year, ESCAP plans to publish the third publication of the compendium series 'Geospatial Practices for Sustainable Development in Asia and the Pacific'. The

compendiums focus on the practical uses of geospatial information to support sustainable development, across six different fields: (1) Disaster risk Reduction and Resilience; (2) Natural Resource Management; (3) Connectivity; (4) Social Development; (5) Energy; and (6) Climate Change. The third publication of the series "Geospatial Practices for Sustainable Development in East and North-East Asia 2024: A Compendium" focuses on the East and North-East subregion and contains more than 100 good practices to demonstrate the achievements of utilization of geospatial information for bridging gaps and improving resilience.

2.7.Other projects and activities

In the past year, ESCAP organized a free online course on "Introduction to Geospatial Data Analysis with ChatGPT and Google Earth Engine" with the United Nations University and held a series of webinars on Disaster Hotspot Mapping and Risk Assessment levering geospatial information and innovative tools, contributing to long-term capacity building and developing in the Asia and the Pacific region.

In addition, the secretariat is devoted to the UN-GGIM-AP network maintenance and information sharing to foster stronger ties and collaborations in the region, for better achievement of the Sustainable Development Goals (SDGs), including providing information on free and online geospatial information related courses and webinars, Global Statistical and Geospatial Framework (GSGF) e-Learning course, virtual training programmes, funded scholarship programs and engaging UN-IGIF survey, etc.

3. Regional Priority Issues

Financial and budgetary constraints are challenges for Member States in the region. The UN-GGIM-AP is continuously supporting Member States on advancing the operationalization of the GSGF and the UN-IGIF. The UN-GGIM-AP terms of reference (TOR) has been reviewed and revised with an updated contact list of focal points and activities to identify regional issues relevant to geospatial information management and actions. Activities include further implementation of the UN-IGIF through raising awareness and preparing plans in relation to the framework, developing the Regional Geodetic Reference Frame, advocating for efficient and effective land administration, and promoting use of standards and common literatures for the integration of geospatial information and statistics. The sharing of UN-IGIF implementation in UN-GGIM regional committees (Americas, Arab States, Europe, Africa) and the current status of the UN-IGIF implementation (strategic pathways) in UN-GGIM-AP Member States (18 country reports) as a parallel meeting during the twelfth plenary meeting serves as one example for Member States to learn implementation progresses as well as their outcomes from one another.

In the region, strong motivations are found in the fields of disaster risk reduction, and geospatial information sharing through both bilateral inter-agency and international

cooperation and making full use of technologies and innovations such as 3D data applications, remote sensed imagery and generative AI tools.

4. Future Meetings

The Regional Committee is cooperating with the Survey of India and Department of Science and Technology of the Government of India to organize the thirteenth plenary meeting in Delhi, India on 27 to 28 November 2024 (To Be Confirmed).

The Regional Committee is encouraging Member States to consider hosting the Executive Board Meeting in 2025.

The Regional Committee is also encouraging Member States to consider hosting the fourteenth plenary meeting of UN-GGIM-AP in 2025.