
APAN59 Yokohama, Japan, 3-7 March 2025

AgWG, DMWG, & OSDW Common Goals and Activities

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Contents

- 1. Agriculture Working Group (AgWG)**
- 2. Disaster Mitigation Working Group (DMWG)**
- 3. Open and Sharing Data Working Group (OSDWG) toward Open Science**
- 4. Final Words**

Agriculture Working Group (AgWG)

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Agriculture Working Group (AgWG)

The APAN Agriculture Working Group (AgWG) started at the Tsukuba APAN05 meeting held in March 1998 under the Earth Monitoring Group. A sub-group of AgWG became an independent working group at the Seoul APAN06 meeting in July 1998, so the APAN59 is the 27th anniversary. Since its inception, AgWG has been one of the most active working groups in the application area, maintaining close relationships with other working groups of APAN, such as Network Engineering WG (NEWG), Disaster Mitigation WG (DMWG), Open and Sharing Data WG (OSDWG), Cloud WG, IoT WG (Sensor Network WG), Security WG, & e-Culture WG having overlapping membership from those working groups.

Agriculture Working Group (AgWG)

It aims to accelerate state-of-the-art agricultural and rural information research, utilizing the APAN network and technology. It also promotes research, education, and services projects in agricultural fields and rural areas attempts to bridge institutes, agencies, and start up new collaborations.

The economic development and the increase of the population in AP demand expansion of the farmland, which is creating loss of other ecologically viable lands, resource degradation, and desertification. This leads to the importance and growth of cooperative research to develop mutually sustainable agriculture in this region. In addition, changing and inclement climatic conditions in the region are strongly affecting our Agricultural systems.

Agriculture Working Group (AgWG)

Therefore, it is necessary to address and cooperate while we respect diversity in various countries. We, APAN AgWG, believe and are proud that, those issues can be addressed with technology and the applications of the Internet in our region. However, we never forget in our mind the challenges in overcoming the region's digital divides.

As the balance of food supply and demand is now inevitably under the strategy and control power of the world trading mechanism, it is almost meaningless to solve the crisis within a country. Only international sharing and cooperation for sustainable food productivity based on information sharing and mutual understanding can bring the solution.

Agriculture Working Group (AgWG)

We believe information, communication, and dissemination technologies (ICDT) can surely contribute to solving many of the issues we have.

Thus, the importance of the studies on **Agroinformatics** is undoubtedly increasing. The Asian-Pacific countries and regions are keeping the highest growth rate in the world and the requirement for food is abruptly changing from quantity to quality. In addition, the Asia-Pacific countries have agricultural features that are not common in the USA or EU countries.

Agriculture Working Group (AgWG)

Our Objectives:

1. **Promotion & intermediation** of international research and educational projects for agriculture utilizing the APAN infrastructure.
2. **Collaborate with** OSDWG, Cloud WG, IoT WG, e-Culture WG, DMWG, Security WG and others to increase innovations in Agriculture.
3. **Promotion of** international symposia and meetings for Agroinformatics.
4. **Inviting researchers** from other agricultural research fields such as crop breeding, biodiversity, rural hybridization, etc.
5. **Encouragement of** Compliance with international standards of

Disaster Mitigation Working Group (DMWG)

Chairperson: Franz A. De Leon, Advanced Science and Technology Institute (ASTI), Philippines, (franz.deleon@asti.dost.gov.ph)

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Co-Chair: Veerachai Tanpipat, Hydro-Informatics Institute (HII) and ThaiREN, (veerachai@hii.or.th)

Disaster Mitigation Working Group (DMWG)

Federating resources to alleviate the natural disasters impacts and collaborating with broader communities in Asia supported by APAN framework is the long-term goal of APAN Disaster Mitigation Working Group (DMWG). Taking advantage of the APAN, it is a great opportunity for us to outreach to the disaster mitigation communities in APAN member countries.

The APAN Meeting brings together infrastructure and technical providers and user communities through the Disaster Mitigation Working Group activities. **DMWG coordinates experts of various disciplines from around the world (Such as ISGC, NASA, NOAA, ECMWF, ESA, so on) to share their knowledge and experiences.**

Disaster Mitigation Working Group (DMWG)

DMWG is building an open collaboration platform for resource and knowledge sharing. Based on case studies, experiences, and daily operation.

DMWG supports all APAN partners to work with expert groups on risk estimation by innovative numerical simulations over distributed infrastructure and any government's disasters prevention and response.

We are delight to build **a disaster decision support system** in order to support more efficient disaster response and management.

Interactive activities such as training, workshop, case study and Master Class are the primary approaches to enhance the capacity. DMWG also supports the access to knowledge base and simulation portals from the collaboration networks such as UNESCO, EGI (European Grid Infrastructure), and others.

Open and Sharing Data (OSDWG) toward Open Science

Chairperson: Veerachai Tanpipat, HII-ThaiREN, Thailand
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Co-chair: Takafumi Aizawa, NII, Japan (ta-aizawa@nii.ac.jp)

Co-chair: Markus Buchhorn, APAN, Australia
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Open and Sharing Data (OSDWG) toward Open Science

With the fundamental problems of open data and data sharing which are huge handles to many researchers and research communities, it is therefore in need to bring those issues to the table for the APAN community to discuss and find out possible solutions together through APAN connections. In this working group, good practices will be shared, and obstacles/standards will be presented and discussed toward feasible suggestions and solutions. Of course, those issues are not easy to solve, but toward sustainable development, climate change mitigation, adaptation, and resilience, we need to overcome those and find a common ground together to open as possible and to close as necessary.

Open and Sharing Data (OSDWG) toward Open Science

Our Objectives:

1. **To identify** obstacles in open and sharing data
2. **To discuss** ways to overcome obstacles in open and sharing data
3. **To provide** knowledge of and data-sharing platform including good data management and stewardship
4. **To promote** the FAIR (Findability, Accessibility, Interoperability, and Reusability) DATA Principles
5. **To Help** make data policy/rules in each organization/institute or national level.
6. **To help** find data
7. **To help** access data, if data is not opened (sharing data)

Open and Sharing Data (OSDWG) toward Open Science

Current Activities:

1. **Invite** new members
2. **Discussion** using the WG Mailing List, Video Meeting
3. **Have sessions and summarize** WG Activities in each APAN Meeting
4. **Sharing** activities, platforms, and best practices from across Asia Pacific, across disciplines through <https://data.apan.net/>
5. **Collaborate with** other APAN WGs
6. **Collaborate with** National/International Academic Societies.
7. **Make a list or catalog** of free data that can be accessed and create a Data Catalog



Open and Sharing Data (OSDWG) toward Open Science



ABOUT



RESOURCES



CONTACT

APANdata is an initiative by the APAN (Asia Pacific Advanced Network) Open & Sharing Data Working Group to promote and share open data sharing best practices and resources, particularly those from the Asia Pacific region.

Advancing Open Science in Asia Pacific

search

NEED Website Admin to Regularly Update It!!

Open and Sharing Data (OSDWG) toward Open Science



ABOUT



RESOURCES



CONTACT



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ABOUT



RESOURCES



CONTACT

Events
information

Training
materials

Useful links /
tools

Best
practice

Open and Sharing Data (OSDWG) toward Open Science

8. **Raise awareness**, support capability-building, and undertake needs analysis of open data standards and sharing services within the Asia-Pacific, through working with each WG and National Research and Education Networks (NRENs) in the region
9. **Support the provision** of Data Discovery Services, Repositories, and associated services, working with interested disciplines
10. **Establishing a framework** for 'Data Standards, Interoperability and Best practices in Asia-Pacific Region,' including metrics of maturity, and sharing existing international guidelines and standards. This will help provide a forum for stronger regional collaboration around open data across the region.

Open and Sharing Data (OSDWG) toward Open Science

11. Collaborate with similar platforms and groups United Nations Global Geospatial Information Management for Asia and the Pacific (UN-GGIM-AP), UNESCO, Global Open Data for Agriculture and Nutrition (GODAN), and Research Data Alliance (RDA) to ensure global collaboration is fully supported.

12. Identify willing to work and make it happen **contacts** for each country or NREN who know how to access research data locally in different disciplines or communities, or what is happening on the national scene around data-sharing, who are willing to work with APAN-OSDWG and help improve open and sharing data activities.

Open and Sharing Data (OSDWG) toward Open Science

For this APAN59 we agreed that initiatives concerning are: **‘Commonality’** will serve as a primary objective. To achieve the standardization of rules and governance, it is essential to foster a shared understanding and application of concepts like **‘Interoperability’** within the Asia Pacific region. Successful cross-border collaborations, exemplified by fields such as Space and Life Sciences, have already been established, making it vital to identify the elements contributing to the success of such **‘Standardization’** efforts. Discussions will highlight the necessity of adopting **‘a more nuanced approach to each country and region,’** recognizing that a universal standard for Research Data Management (RDM) practices is not feasible.

Open and Sharing Data (OSDWG) toward Open Science

Disseminating practices from regional initiatives that take into account the cultural contexts of each nation would offer valuable case studies for participants to explore this methodology. The concept of **'Cultural Change'** serves as a fundamental component for collective progress. Furthermore, the **'Methodology'** outlines the processes through which theoretical knowledge can be transformed into practical systems that researchers can effectively utilize. It is crucial to evaluate the types of technology that can facilitate the transition from concept to tangible outcomes. **APAN59, we have**

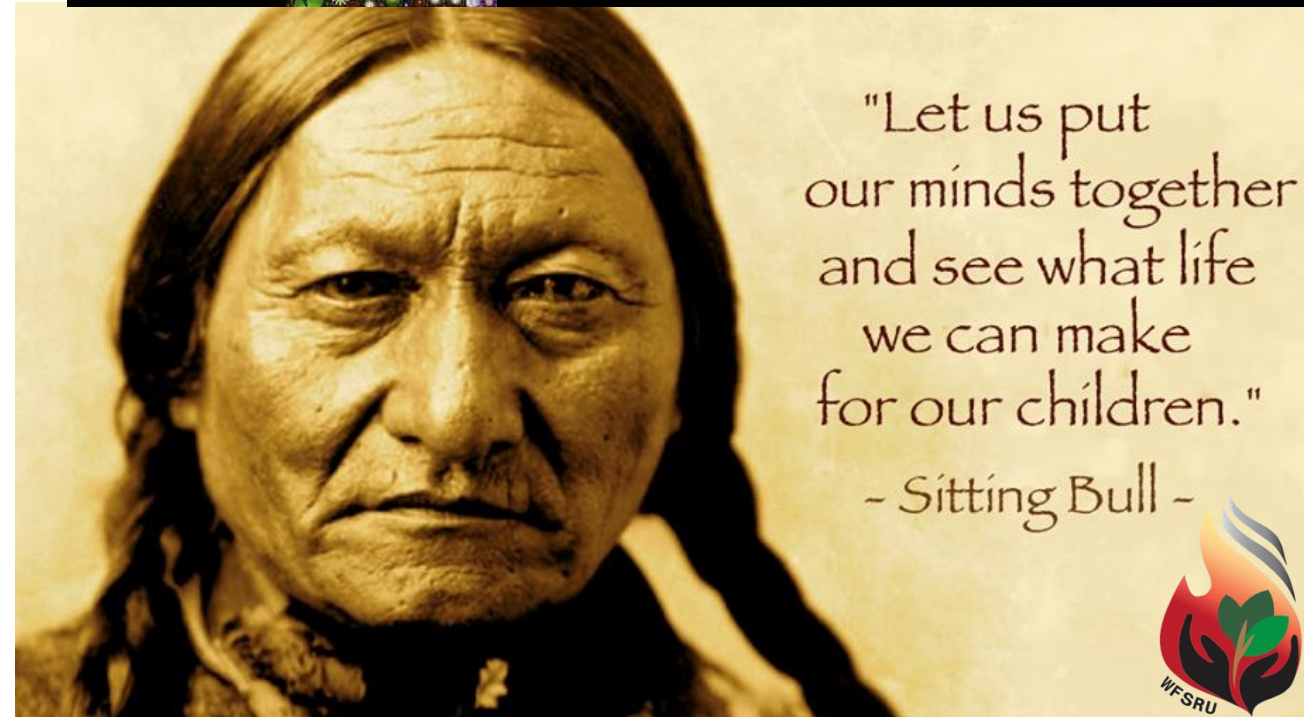
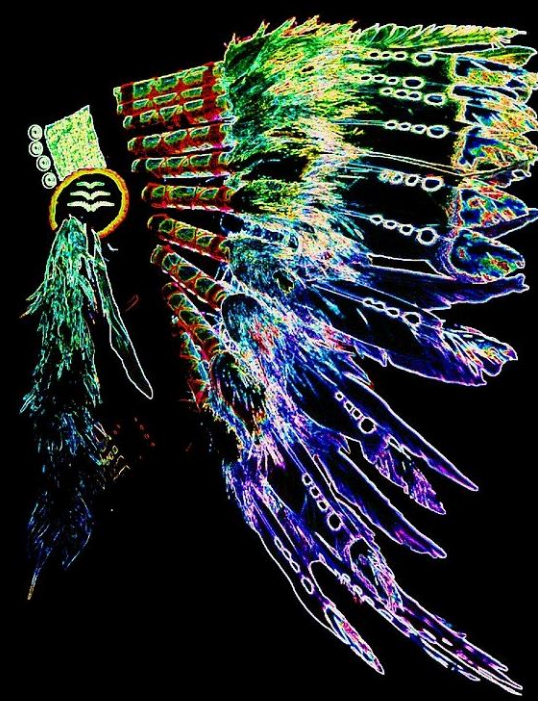
- 1. International Initiatives on rules, recommendations, and standardizations, and Cross-border research initiatives**
- 2. Regional Initiatives**
- 3. Technical Initiatives on Engineering**

Final Words

It is Climate Crisis! Disasters and severe events are inevitable. Building resilience and sustainability among us is our ultimate goal for dealing with future climate uncertainties and extreme events - We are all in different boats, but we are in the same storm!! All hands on deck!!! "Think Globally & Act Locally!! Imagine what we can accomplish when we work together. Stronger Together!! One For All and All For One!!! We need your kind support!



Earth
is my
Church.
Nature
is my
Religion.



"Let us put
our minds together
and see what life
we can make
for our children."
- Sitting Bull -

