Pre-Event for 2025 GPDRR & 2025 IRDR Young Scientists Lumos (1st)

UTC 8:00-9:30 (16:00-17:30 Beijing time), 26 April, Online

From Data to Action: DRR solutions from young professionals

Concept Note and Agenda

Registration Link: https://zoom.us/meeting/register/mmcu76IsT9GZf5MXjCt9Fg

1. Rationale

To enhance the connection and promote the innovations and actions of IRDR young scientists, IRDR IPO designs a mechanism of "IRDR Young Scientists Lumos[1]", which will be webinars, sessions, meetings or discussions mainly organised and participated by young scientists and young professionals in global disaster risk reduction (DRR) community.

In order to contribute to 2025 Global Platform on Disaster Risk Reduction, IRDR will co-organize several online workshops with DRR partners to present the innovations of the young professionals from multi-stakeholders.

The topic of this Lumos is "From Data to Action: DRR solutions from young professionals". The topic underscores the critical need to transform vast and growing disaster risk data into tangible, equitable, and scalable solutions. Young professionals, often at the forefront of emerging technologies and interdisciplinary approaches, possess unique insights into leveraging tools such as AI, remote sensing, and crowdsourced data to address systemic gaps in DRR. By spotlighting their work, this Lumos aims to bridge the divide between theoretical data analysis and practical implementation, ensuring innovations are context-sensitive and aligned with local and global resilience agendas. This topic aligns with the

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[1] Lumos: a wand-light charm in Harry Potter series. This charm is used to create light and reveal hidden things. Lumos here means that the young scientists create innovations and generate the impacts to the world.

cross-cutting theme of 2025 GPDRR "**Accelerate action for our collective sustainable future**" and priority of [global risk science research framework](#) "**Harness technologies, innovations, data and knowledge for risk reduction**".

It is expected that through the discussion, the innovation cases from young professionals will be visualized and acknowledged by the global DRR community.

2. Agenda

Moderate: Hanif Ibadurrahman Sulaeman, Fang Lian

Commentator: Nuraini Rahma Hanifa

Item 1: IRDR and U-INSPIRE welcome the participants and introduce this Lumos. (5 min)

Item 2: Presentations from young professionals

- Suraj Gautam (Mr.), Institute of Himalayan Risk Reduction, case "From Preparedness to Early Action: The Role of DASTAA in Nepal's 2024 Cloudburst event"

- Sonny Aribowo (Mr.), National Research and Innovation Agency (BRIN), case "From Fault Lines to Front Lines: Bridging Research, Policy, and Action for Earthquake Resilience in Java's Urban Centres"

- Gouvidé Jean Gbaguidi (Mr.), West African Science Service Centre on Climate Change and Adapted Land Use (WASCAL), case "Unleashing the Power of Intelligence: Revolutionising Malaria Outbreak Preparedness with an Advanced Warning System in Benin, West Africa"

- Adnan Arshad (Mr.), Lanzhou University, China, case "Quantification of extreme climate and weather events risks to agricultural production and livelihoods in South Asia"

- Nijun Jiang (Mr.), International Research Centre of Big Data for Sustainable Development Goals (CBAS), case "Applications of SDGSAT-1 in Disaster Response and Management"

Item 3: Q&A and discussions (30 minutes)

Item 4: Wrap-up and announcement of next Lumos.

3. Profiles of Speakers

Suraj Gautam

A Youth Activist, Researcher, and an Entrepreneur, Mr. Suraj Gautam is a Civil Engineer and a DRR Professional with a healthy experience in leading DRR-related projects, Trans boundary research, conducting risk assessments, using frontier technologies like Drones for DRR planning and urban development. He has been leading citizen science initiatives and piloting low-cost technologies for the Early Warning System in the Nepal Himalayas. His key research interests include the study of Geo-Hazards, Multi-Hazard Risk Assessment, Modelling, and Anticipatory Action. Currently, he is working as an Executive Director at the Institute of Himalayan Risk Reduction. He is also serving as a General Secretary at DPNet Nepal, a network of NGOs, INGOs, Academia, CBOs and actors in DRRM. He is also enrolled in a Young Scientist Program of Integrated Research on Disaster Risk (IRDR). He also served as an ACECC FLF Chair for the term 2023-2024.

Sonny Aribowo

Sonny is a geologist specializing in structural geology and tectonics, with a strong focus on active fault systems in Indonesia. He earned his doctoral degree from Université Grenoble Alpes, France, where his research explored neotectonic activity in the Indonesian arc, particularly back-arc thrust faults. He also holds a Master's and Bachelor's degree in Geological Engineering from Universitas Padjadjaran, Indonesia.

Sonny has authored and co-authored numerous peer-reviewed publications on tectonics, neotectonics, and seismic hazards in Southeast Asia. His technical skillset includes advanced GIS and geological software, and he has received several academic grants, including funding from LPDP, the Embassy of France, and IRD France. He speaks Indonesian, English, and a bit of French

Gouvidé Jean Gbaguidi

Holder of a PhD in Climate Change and Disaster Risk Management from the West African Science Service Centre on Climate Change and Adapted Land Use (WASCAL), in collaboration with the Hamburg University of Applied Sciences. Additionally, he possesses a Professional Master's degree in Hydrology, specialising in Ecohydrology, as well as a Master of Science in Biology. He is a Young Integrated Researcher on Disaster and an Expert in infectious diseases modelling, Climate Change and public health, Disaster Risk Management and climate change and malaria many papers. He developed an intelligent malaria early warning application to predict the monthly malaria incidence to support decision-making and local community preparedness actions.

Adnan Arshad

Dr. Adnan Arshad is a Pakistani agronomist and agro-meteorologist specializing in climate-smart agriculture and digital farming. With a PhD from China Agricultural University (2022) and a postdoc from Lanzhou University (2024), he has over 10 years of research experience in sustainable crop production, GHG emissions, and climate resilience. He has collaborated with FAO-UN, USAID, and other international institutions on funded projects. Based in Lanzhou, China, he is skilled in research innovation and holds a positive Vetassess migration assessment.

Nijun Jiang

Jiang Nijun has been a member of the SDG Satellite and Data Processing Department at the International Research Centre of Big Data for Sustainable Development (CBAS) since April 2023, where he is responsible for SDGSAT-1 satellite data processing, tracking and facilitating the international applications of SDGSAT-1 data. With remote sensing data analysis, geospatial analysis, and thematic mapping skills, he contributes to sustainable development monitoring and public outreach about space technology applications. His contributions include co-authoring several disaster monitoring reports, peer-reviewed publications, and SDGSAT-1 image atlases that demonstrate operational uses of SDGSAT-1 data across SDG targets.

4. Organizers

This Lumos will be organized by IRDR and U-INSPIRE with the support of ISC, UNDRR, BRIN and other partners.

Contact: connect@irdrinternational.org, uinspire.alliance@gmail.com