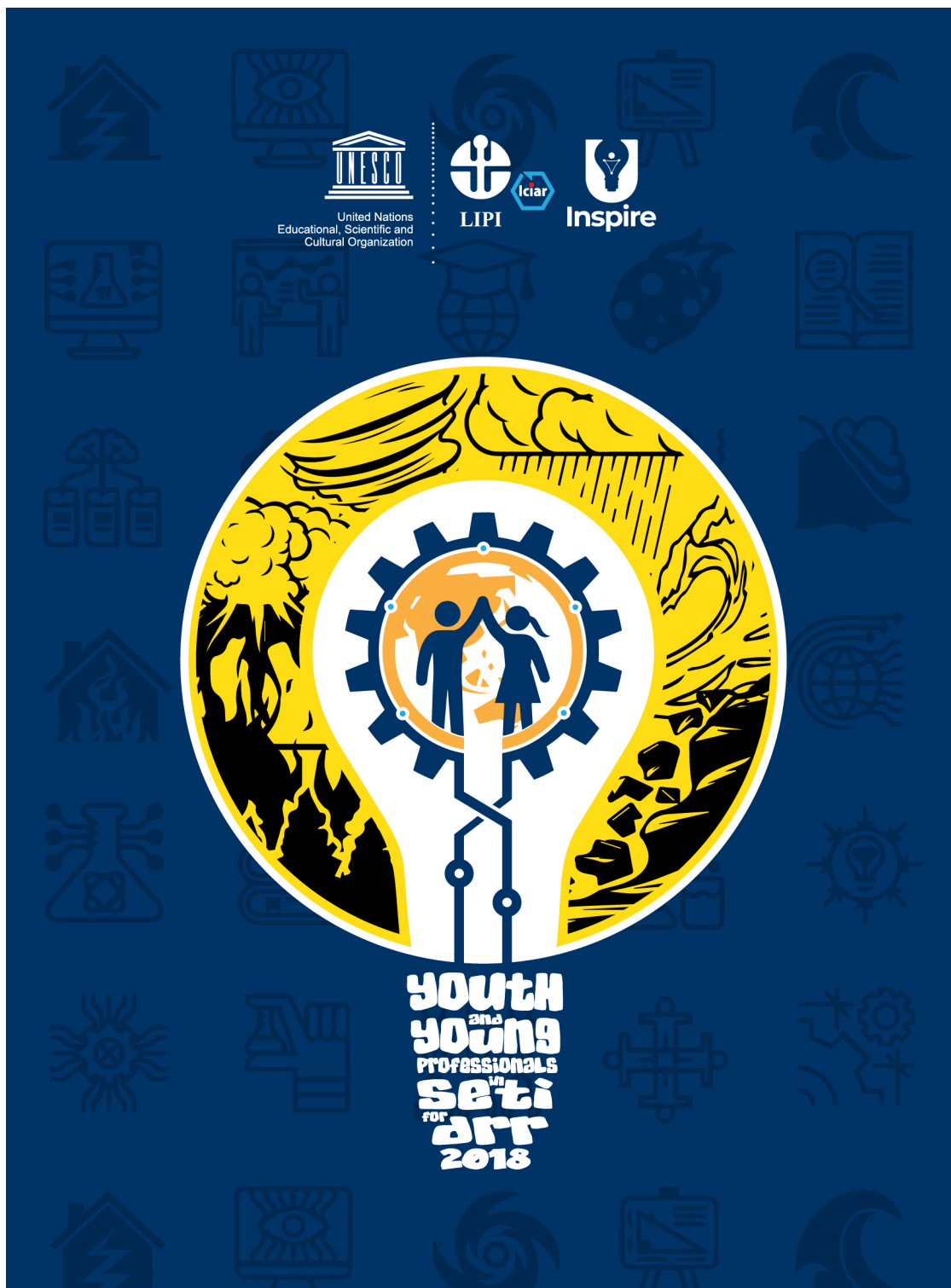


ACTIVITY REPORT



Regional Workshop on Strengthening, Empowering, and Mobilizing Youth and Young Professionals in Science, Engineering, Technology and Innovation for Disaster Risk Reduction in Asia and the Pacific

BSD CITY, INDONESIA | 1-4 NOVEMBER 2018



Contributor

Writers:

Shahasrakiranna

Sachi Suzuki

Risye Dwiyani

Meliza Rafdiana

Giovanni Cynthia Pradipta

Enos Ndapareda

Devita Marwana

Annisa Triyanti

Photo Contributors:

Fajar Shidiq

Ganni Ramadian Mulya

Hilman Arioaji

Editor:

Risye Dwiyani

Nuraini Rahma Hanifa

Irina Rafliana

Ardito Kodijat

Layouter:

Tasril Mulyadi



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Foreword



We, U-INSPIRE, feel honored to be part of the organizing committee of The Regional Workshop on Strengthening, Empowering, and Mobilizing Youth and Young Professionals in Science, Engineering, Technology and Innovation for Disaster Risk Reduction in Asia and the Pacific, together with UNESCO and ICIAR LIPI. This regional workshop is U-INSPIRE's first international event and it also marks the birth of the launching of U-INSPIRE Indonesia.

We are delighted to have met 20 speakers from 10 countries and 53 participants from 27 countries, therefore speakers and participants combined were from 32 countries, who enriched the knowledge and drove fruitful discussion in the workshop. We deeply acknowledge all speakers and participants, as well as all our wonderful partners; UNISDR, UNMGCY, Institut Teknologi Bandung, Sichuan University, SEADPRI, University Kebangsaan Malaysia, Charles Darwin University, BPPT, University of Indonesia, Institute of Advanced Study of Sustainability – UNU, Indonesia Science Expo, USAID Tatts Program, National Science Challenges, and Samsung.

We also spread our deep thanks to all the organizers for their dedicated time, energy and idea for the success of this workshop. "Give me 10 young people, and I will surely shake the world" was the quote by our first President of Indonesia, Soekarno. We believe that this regional workshop has brought us, youth and young Professional, together, and carry seeds to a powerful potential towards fostering disaster risk reduction by generating innovation in science, engineering, and technology for disaster resilience at national and global level.

Nuraini Rahma Hanifa

Lead, U-INSPIRE Indonesia

Youth & Young Professionals on INnovation, Science and Technology
Platform for REsilienCy

Acknowledgments

This regional workshop was hosted by UNESCO Office Jakarta, ICIAR LIPI, and U-INSPIRE, in partnership with United Nations International Strategy for Disaster Reduction (UNISDR), UN Major Group for Children and Youth (UNMGCY), UNESCO Field Offices, USAID, TATTs Programme, SEADPRI, Universiti Kebangsaan Malaysia, Charles Darwin University, Institute for Disaster Management and Reconstruction, Sichuan University - Hong Kong Polytechnic University, Institut Teknologi Bandung (ITB), Badan Pengkajian dan Penerapan Teknologi (BPPT), Universitas Indonesia, National Science Challenges, Indonesia Science Expo 2018, USAID TATTs Program, and Samsung.

The committee would like to extend highest appreciation to our partners and:

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2. Prof. Shahbaz Khan, Director, Regional Science Bureau for Asia and the Pacific and UNESCO Representative for Brunei Darussalam, Indonesia, Malaysia, the Philippines, and Timor-Leste
3. Ardito Kodijat, UNESCO Office Jakarta, IOTIC IOC UNESCO
4. Prof. Gadis Sri Haryani, Research Center for Limnology/International Center for Interdisciplinary and Advanced Research, Indonesian Institute of Science (ICIAR LIPI)
5. Dr. Laksana Tri Handoko, Indonesian Institute of Sciences (LIPI)
6. Prof. Robert Delinom, Research Center for Geotechnology, ICIAR LIPI
7. Irina Rafliana, Research Center for Oceanography, ICIAR LIPI/ Global STAG – UNISDR
8. Dr. Hidayat, Research Center for Limnology, ICIAR LIPI
9. Ester Rosita, Research Center for Limnology/ International Center for Interdisciplinary and Advanced Research, Indonesian Institute of Science (ICIAR LIPI)
10. Prof. Rajib Shaw, Keio University, Japan, UNISDR STAG Chair, Science Committee Members, Integrated Research on Disaster Risk (IRDR),
11. Animesh Kumar, Deputy Chief, United Nations Office for Disaster Risk Reduction (UNISDR) Regional Office for Asia and the Pacific, Bangkok
12. Dr. Ailsa Holloway, Chair Working Group on Capacity Building (and Higher Education) STAG - UNISDR/ Director of the Research Alliance for Disaster and Risk Reduction, Stellenbosch University South Africa
13. Dr. Sugeng Triutomo, AASTAG – UNISDR
14. Irina Zodrow, UNISDR
15. Shoko Arakaki, UNISDR
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20. Dr. Udrek, The Agency for the Assessment and Application of Technology (BPPT), Indonesia
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25. Glenn Fernandez, Institute for Disaster Management and Reconstruction Sichuan University- Hong Kong Polytechnic University
26. Dr. Riyanti Djalante, Institute of Advanced Study of Sustainability, UNU
27. Prof. Dr. Jan Sopaheluwakan, Institute for Sustainable Earth and Resources, University of Indonesia
28. Engr. H. F. Gabriel, National University of Pakistan
29. Prof. Syamsul Maarif, Indonesia Defense University
30. Prof. Krishna S. Pribadi, University Forum for Disaster Risk Reduction
31. Aruminingsih, Indonesia National Development Planning Agency
32. Ninil Miftahul Jannah, Indonesia National Platform for Disaster Risk Reduction
33. Ahmad Arief, Kompas
34. Research Center for Disaster Mitigation, Institut Teknologi Bandung

Executive Summary

The workshop on the Asia and the Pacific Regional Workshop on Strengthening, Empowering, and Mobilizing Youth and Young Professionals in Science, Engineering, Technology, and Innovation (SETI) for Disaster Risk Reduction (DRR), held on the 1st to the 4th of November 2018 in Serpong – Indonesia, was conducted to address some of the youth and young professionals' challenges and potentials in contributing to disaster risk reduction. The challenges include, inter alia, limited opportunities and platform for young independent researchers to develop and contribute in SETI for DRR – to those who work in government, universities and research agencies, early career scientist also have limited opportunity to develop, grow and involve in national and international environment. They also have limited or no platform to have transdisciplinary interaction and communication, to voice their ideas, thoughts and inspirations. On the other hand, youth and young professionals are actually living in a technologically savvy world and have the advantage to communicate fluidly and openly.

As an initiative, Indonesia has established U-Inspire, a youth and young scientist platform to accelerate DRR efforts, to address the abovementioned challenges and potentials. The vision and spirit of this platform were shared throughout the regional workshop.

Objectives of this workshop were mainly to build understanding among youth and professionals on their role in SETI for DRR as well as various important topics to leverage their roles, to develop joint activities/projects/programs/research to support the implementation of SFDRR, and to share lessons learned from the establishment of U-Inspire Indonesia.

This workshop involved 98 persons from 32 countries in Asia and the Pacific as well as regions of Africa, Europe and America, as participants, observer, speakers as well as organizer -- 72 of them were youth and young professionals. Background and field of expertise of the youth and young professionals vary from natural scientists, engineer, social scientists, science communication, and innovators, working as researchers, lecturer, students and practitioners from the government, non-government organizations, private sector, and media.

It was carried out in five consecutive days, consisted of five panel sessions on (1) Mainstreaming DRR in Higher Education, (2) Global Settings, Platforms, and Networks on Youth and Young Professionals in DRR, (3) Youth and Young professionals in SETI for DRR: Challenges, Gaps, Needs, Expectations, and Initiatives, (4) Introduction to Integrated and Transdisciplinary Research in DRR, and (5) Introduction to Science Communication for DRR. Besides panel session, an introductory session about (1) Science and Technology Roadmap for SFDRR, (2) Young Scientist Roadmap, and (3) U-Inspire as a national platform for youth and young professionals in SETI for DRR was also conducted. Those sessions were followed by breakout session to review and provide inputs on the roadmaps and potential collaboration among youth and young scientists in Asia and the Pacific as well as other regions.

To provide room to understand the current state of each country in terms of SETI for DRR, in the Country Presentation Session, participants from each country shared about initiatives and challenges of youth and young professionals in contributing through SETI for DRR in their respective countries.

On the third day of the workshop, participants visited the Agency for the Assessment and Application of Technology (BPPT) in Serpong. Highlights of this visit were a thought-provoking presentation by BPPT on the role of scientist and science communication, learning from the recent 2018 Sulawesi Earthquake and Tsunami, and observation of various Early Warning System (EWS) in the facility.

As this workshop was conducted in collaboration with the Indonesia Science Expo (ISE) 2018, the launching of U-Inspire took place at the main stage of the Expo, as one way to disseminate the initiatives to a larger audience, i.e. 280 attendees, including representatives from UNESCO, STAG-UNISDR, ASTAAG-UNISDR, BNPB, BPPT, Bappenas, TATTS-USAID, ICIAR LIPI, National Platform for DRR (Planas PRB), University Forum for DRR (FPT PRB), Kompas TV, the workshop participants and visitors of ISE. The host also took part at the exhibition hall, promoting the platform as well as innovation of U-Inspire members.

In the final session, Moa Herrgard from the UN MGCY explained about the Global Platform 2019 and discuss with participants on what to bring there. The participants also brainstormed ideas of activities and form of the upcoming regional workshop in Chengdu.

Expected results of this workshop were: increased motivation to contribute through SETI for DRR as well as the initiation of multidisciplinary collaboration among youth and young professionals from different countries in Asia and the Pacific through U-Inspire-like national platforms. In order to measure the effectiveness of this workshop and to obtain feedback from participants, an evaluation form was distributed to be filled by participants (N=38, organizer excluded). Overall, the workshop was successfully conducted. Based on the evaluation results, more than 90% of participants think that this workshop was useful (good and excellent). Almost all participants think that this workshop met their expectation, some even stated that it exceeded their expectation. Within a week after the workshop, some participants have already initiated a number of collaborative activities, among others, the DRR Global South Young Scientist Platform and invitation to participate in Workshop in Morocco.

A. Background

1. Initiatives to Engage Children and Youth in DRR at the Global Level

The Sendai Framework for Action (SFDRR) 2015-2030, adopted at the UN Third World Conference on Disaster Risk Reduction Sendai, Japan in March 2015, iterated that youth are agents of change and should be given the space and modalities to contribute to disaster risk reduction (DRR), based on legislation, national practice and educational curricula. The Children and Youth Forum in DRR at the conference highlighted the importance of DRR and marked the starting point to enhance the participation of youth in setting the global DRR. Following the Children and Youth forum, there is an increasing awareness that young scientists and practitioners also play a crucial role in strengthening the evidence-based implementation, monitoring and evaluation of the SFDRR. In January 2016, the UN Major Group for Children and Youth (UN MGCY) coordinated the launching of the Young Scientist Platform on DRR at the United Nations International Strategy for Disaster Risk Reduction (UNISDR) Science and Technology Conference's side event on The Role of Youth in the Application of Science for DRR held in Geneva. The Young Scientists Platform on DRR has been set up to provide a space for young experts from different scientific fields and regions to connect with their colleagues, to widen their knowledge, and to share their expertise. This platform aims to help narrow the gap between DRR-related science and policy, to promote capacity building, as well as providing opportunities for young experts to showcase their research and valuable contributions to reducing risk. Since then, youth and young scientist have been engaging in some global events, including the Global Platform on DRR 2017, Science, Technology and Innovation Forum (STI forum), and various important regional engagement on DRR.

The Global Science and Technology Advisory Group for the United Nations International Strategy for Disaster Risk Reduction (STAG – UNISDR) announced the 2nd term of services from 2017-2019. The advisory group had in particular ensured representatives of young scientists are present as members. Further, the STAG UNISDR also formed dedicated working groups that are considered pivotal to the role of science and technology in DRR in implementing the SFDRR. One of the working groups is Capacity Building (and Higher Education), which also includes capacity strengthening for young scientists in DRR and resilience. It has become among the most highlighted agenda within the working group to support initiatives of youth and young scientist platform at national and regional level, as part of the realization of the Science and Technology Roadmap on DRR. The collaborative initiative to support capacities of youth at national, regional and global level with UNESCO, ICIAR LIPI and STAG UNISDR was shared during the Global Consultation Meeting in Capacity Development Strategy on 14-15 March in Geneva, and also at the Asia's Science and Technology Conference on Disaster Risk Reduction in Beijing 17-18 April 2018.

2. UNESCO and ICIAR in Youth and DRR

UNESCO, along with its centers and national commission across countries, has encouraged the engagement of Youth in DRR through its cross-sectoral programs on science, education, and culture, among others: (a) the establishment of youth forums, such as the Youth Xchange (YXC) Initiative in 2001 in Paris, the Asian Youth Forum for Disaster Education (AYF) 2006 in Wakayama, Japan, Looking Beyond Disaster (LBD) Youth Forum in Christchurch, New Zealand in 2014 and in Vanuatu on 2015; (b) implementation of Youth Forum: Engineering in Action for Youth: Hands-on Experiments in Engineering in 2013 by UNESCO Engineering Initiative (UEI) in Paris, young scientists

Event on DRR in 2016 in Netherland by UNESCO IHE and Deltares, the Youth Engagement for Community Based Disaster Risk Management (CBDRM) in three regions by UNESCO Guyana in 2018; and (c) the mobilization of youth group represented by the university and vocational school students as the school surveyors and facilitators in VISUS (Visual Inspection in defining Safety Upgrading Strategies) program from 2014 until now in various countries, includes: El Salvador, Haiti, Indonesia, Lao PDR, Mozambique, and Peru.

ICIAR LIPI (International Center for Interdisciplinary and Advanced Research, Indonesian Institute of Sciences) is established to support breakthrough research in Indonesia, with emphasize on improving capacities of human capital in the area of science and technology, including young scientists through interdisciplinary approach.

3. U-Inspire Initiative, A Youth and Young Professional Platform for DRR

On the 29th of March 2018, UNESCO Office Jakarta jointly with the ICIAR LIPI, and STAG UNISDR (Working Group on Capacity Building and Higher Education) initiated a Consolidation Meeting on Youth and Young Professionals in Science, Engineering, Technology and Innovation (SETI) for DRR. The objective of this meeting was to initiate a core of youth and young professionals interested in initiating and leading activity to strengthen Indonesia's SETI for disaster risk reduction. Attended by thirty-one youth and young professionals from six cities across Indonesia with various background, experiences and interests. They agreed to establish a platform to strengthen youth and young professionals' role in DRR through science, engineering, technology and innovation. They further organized several follow up meetings facilitated by the National Agency for Disaster Management - BNPB (April 2018) and the Agency for Meteorology, Climatology, and Geophysics-BMKG (April 2018), as well as several informal meetings through social media (i.e. WhatsApp Meetings and WhatsApp Groups, Slack Workspace). The Agency for the Assessment and Application of Technology (BPPT) also provided advices through these meetings with youth.

On May 2018, ICIAR LIPI and UNESCO followed up this initiative through a side event workshop at the Annual DRR Science Conference organized by the Indonesian Disaster Experts Association (IABI) in Padang, Indonesia. The workshop was titled Intergenerational and Interdisciplinary Dialogue to Strengthen Role of Youth in Science and Technology in Disaster Risk Reduction. More than 60 youth, university students, and young professionals attended the workshop and discussed on the gap and opportunities for them to play active role to contribute to DRR through science, engineering, technology and innovation.

As a follow up action, on the 20th of May 2018, under UNESCO, ICIAR LIPI and BPPT's advocacy and guidance, the youth and young professionals in Indonesia agreed to formalize its initiative by establishing a platform named U-INSPIRE (Youth and Young Professionals on Innovation, Science, and Technology Platform for Resiliency). U-INSPIRE is defined as a platform of youth and young professionals in science, engineering, technology and innovation to accelerate the implementation of disaster risk reduction (DRR) in line with the Sendai framework to support DRR policy and action at the local, national, and international level. Their vision is "Indonesian youth and young professionals as the generator of innovation in science, engineering, and technology for disaster resilience at national and global level". UNESCO Office Jakarta and ICIAR LIPI will continue to support to strengthen, empower, and mobilize youth and young professionals in SETI for DRR through U-INSPIRE.

4. The Context of SDGs and SFDRR

This activity was expected to directly contribute to SDG 11 (Make cities and human settlements inclusive, safe, resilient and sustainable) and SDG 17 (Strengthen the means of implementation and revitalize the global partnership for sustainable development). Additionally, this activity would also contribute indirectly to SDG 4 (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all); SDG 8 (Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all) and SDG 9 (Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation).

This activity also responds to Sendai Framework for Disaster Risk Reduction Priority No 3: Strengthening disaster risk governance to manage disaster risk, in specific to target 6: Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030.

5. Bringing U-Inspire to the Asia-Pacific Community

Moving forward, in order to strengthen and share the lessons learned of this important evolutionary platform of youth and young professionals in SETI for DRR to countries in Asia and the Pacific, UNESCO Office Jakarta and ICIAR LIPI invite partners in organizing Asia-Pacific Regional Workshop on Youth and Young Professionals in SETI for DRR on 1-4 November 2018 in Serpong, Indonesia. It responds directly to the Action for Science and Technology for DRR in Asia, as agreed during the 1st Asian Science and Technology Conference in DRR held in Bangkok in 2016, and underlined its action under Priority 3: Develop young professionals in the field of multi-disciplinary disaster risk reduction. The workshop, titled Strengthening, Empowering, and Mobilizing Youth and Young Professionals in Science, Engineering, Technology and Innovation (SETI) for Disaster Risk Reduction (DRR), aims to stimulate and inspire youth and young professionals in Asia and the Pacific countries to use their science, engineering, technology, and innovation capacity to contribute to disaster risk reduction in their respective country.

The workshop will also officially launch the U-INSPIRE Indonesia as national platform for youth and young professionals in SETI for DRR with the expectation to motivate and encourage the establishment of U-INSPIRE national platform in other Asia and the Pacific countries.

B. Objectives

Objectives of this workshop are:

1. To build understanding among youth and young professionals on:
 - a. Their role in SETI for DRR;
 - b. Roadmap for the implementation of SFDRR;
 - c. Integrated and/or multidisciplinary approach in SETI for DRR;
 - d. The importance of science communication in DRR;
2. To develop joint activities, projects, and programs to:
 - a. Support the implementation of SFDRR at the national and regional level;
 - b. Support joint research to accelerate the implementation of SFDRR in the region;
3. To share lessons learned U-Inspire Indonesia, to discuss on model of U-Inspire and to encourage/initiate U-Inspire as national youth and professionals in SETI for DRR platform in the Asia and the Pacific Region;
4. Develop concept and ideas for session at the DRR Global Forum in 2019 in Geneva on Youth and Young Professionals in SETI for DRR.

C. Participants Speakers Organizers

This workshop involved 98 persons from 32 countries as participants, observer, speakers as well as organizer. National and international participants were recruited through different schemes. About 72 youth and young professionals (female:44, male:28) participated in this regional workshop: 38 international participants and 34 national participants, some of whom were involved as organizer, observer, and speakers as well. Participants came from countries in Asia and the Pacific and representative observer from regions of Africa, Europe, and America. Background and field of expertise of the youth and young professionals vary from natural scientists, social scientists, science communication, and practitioners from the government, non-government organizations, private sector, creative sector and media.

General criteria for youth and young professional participants were as follows:

1. Youth (between the age of 15-24) or young professionals (in the age below 40);
2. Have knowledge of Sendai Framework for Disaster Risk Reduction;
3. Able to communicate in good English;
4. Have leadership characters/ personalities;
5. Have experience in activities involving SETI in DRR;
6. To fully participate in the workshop (1-4 November 2018);

The national committee provided an application form for both national and international participants with a number of essays relating to knowledge and vision on SETI for DRR. The form was to be adopted by the partner organization who conducted a selection independently.

D. Opening Session

1. Welcome Dinner

On the 31st of October 2018, participants were welcomed informally and were given an orientation about the workshop agenda. Mr. Ardito Kodijat (UNESCO Office Jakarta), Professor Gadis Sri Haryani (ICIAR LIPI), and Dr. Rahma (U-Inspire) delivered welcoming remarks as the host of this event. They also introduced the organizing team members. Ms. Irina further explained about the concept of this workshop, expectation from this workshop, and the agenda. It was followed by an ice-breaking game in the form of speed-dating, led by Septian (U-Inspire), for the participants, speakers and organizers to get to know each other. The session ended by an announcement for logistics by Renza (U-Inspire) and dinner.

2. Opening & Keynote Speech



Shahbaz Khan (UNESCO)

Taking example from his early carrier, he explained that it often happens that older generation did not provide proper opportunity, space, and credit to youth. He emphasized young people with great idea have to be given chances. He mentioned more focus should be put on youth and LIPI, UNESCO, and other organizations have been working on youth mobilization.

To support youth, UNESCO has regular activities in communication and information unit as well as social science unit, UNESCO Chairs and Schools, and various youth programs. That includes Asian Youth Forum on Education in Japan, Youth Forum in Engineering, VISUS, Post cyclone psychosocial programs in the Philippines, and assistance for carrier path supported by Korea.

He added that all have to work together on SDGs and Sendai Framework, through the roadmap that has been formulated. In order to implement the roadmap and hand over power to youth and young professionals, the key will be continuous help from UNISDR, LIPI, and UNESCO, regular support for this kind of event, and develop MoU to support youth and young professionals on SETI for DRR.



Dr. Laksana Tri Handoko (LIPI)

Addressing various hazard and current disasters in Indonesia, he emphasized the importance of increasing preparedness and capacity, stronger collaboration, ensuring sustainability, wise investment, and synergy among generations. He expressed his appreciation to UNESCO, U-inspire for the initiative to organize workshop, and congratulated the launch of U-Inspire.



Animesh Kumar (UNISDR)

Drawing on analysis of DRR landscape published by CRED, current trend includes 1) huge loss caused by disaster, 2) decreased number of human loss and but remained high economic loss, 3) inefficiency in development investment and disaster loss. Animesh Kumar highlighted that Sendai Framework brought key paradigms, investment is not sufficient with only early warning and whole society approach to cope with disaster. As a focal point and custodian for SFDRR, UNISDR has supported series of groups, regional conferences became self-sustaining, revision of terminology and series of guidelines came out. He mentioned Disaster Risk Management in Indonesia as challenging and unique. Success was seen in the recovery from Central Java Earthquake in 2006, however, series of disaster in recent years had different character dependent on socio cultural, political, and environmental situation.

For DRM, he mentioned that it has multi-disciplinary and cross-sectoral nature, requires view of not only human to human but human as part of nature, and needs awareness and preparedness in community. He raised four strategies 1) keep community away from disaster 2) Keep disaster away from disaster 3) Keep harmony 4) community management. As a role of government, scientist, university in assisting community DRM, he raised 1) logical thinking 2) education resource 3) spread out in Indonesia 4) linking education-research-community service.

He underlined focus on innovation, inter-generational transfer, better engagement with children and youth, and raised U-inspire as a key. He mentioned advisory group are very strong on education as well



Dr. Muhammad Dimiyati (RISTEK-DIKTI)

Among others, he mentioned university has responsibility on educating community, producing a leader, carrying out new findings, and increasing people's welfare. He anticipated that advanced disaster study, available disaster programs, and disaster institutions could provide solution, which can be further applied by BNPB and BPBD. He recommended further establishment of program in higher education, increasing number of experts, producing research, serving for community, and finally providing benefit to citizen's life.

E. Setting Up the Scene



Topic 1.1. Mainstreaming DRR in Higher Education

<p><i>Objective</i></p> <p>To discuss on the concern of mainstreaming DRR in higher education as well as learning from good practices on how to mainstream DRR in university programs</p>	<p>Moderator:</p> <p>Prof. Shahbaz Khan Director, Representatives of UNESCO Office Jakarta programs</p>
<p>Panelists:</p> <ol style="list-style-type: none"> 1. Prof. Dr. Hamza Farooq Gabriel National University of Sciences and Technology (NUST), Islamabad, Pakistan 2. Prof. Gretchen Kalonji Institute for Disaster Management and Reconstruction, Sichuan University-Hong Kong Polytechnic University 3. Dr. Ailsa Holloway Chair Working Group on Capacity Building (and Higher Education) STAG – UNISDR / Director of the Research Alliance for Disaster and Risk Reduction, Stellenbosch University South Africa 4. Dr. Rahma Hanifa U-INSPIRE - Youth Representative 	

In this session, each panelist shared how DRR has been mainstreamed in higher education in their respective institution or countries where they engage with and their views about how it should be enhanced. Prof. Dr. Hamza Farooq Gabriel argued that in generating higher interests on DRR, rather than confining DRR into text books and reference materials of the studies, it is better to sponsor innovative applied research on the subjects. He also suggested that the feasibility of diploma or degree course on DRR should be explored and interdisciplinary research studies should be encouraged for cross-cutting issues.

Prof. Gretchen Kalonji shared the key to mainstreaming DRR in higher education, which is reflected by the establishment of Sichuan University-Hong Kong Polytechnic University Institute for Disaster Management and Reconstruction (IDMR) after Wenchuan Earthquake 2008, i.e. moving from a very didactic to a highly collaborative, interdisciplinary, and multinational institute, as well as pioneering new approaches to integrating disaster research and education into curricular pathways of students across a wide range of disciplines.

Dr. Ailsa Holloway recommended for a greater global and regional policy advocacy for integration of DRR with higher education, critical re-examination of disaster research funding instruments, better engagement of education foundations, as well as the importance of having systematic research on the value and gaps of skilled human capital.

In the context of Indonesia' higher education system, Dr. Rahma Hanifa introduced the Tridharma Principles that became obligations for universities to conduct, i.e. research, education and outreach. Youth and young professionals, such as students, research assistants, young lecturers, place important role as the engine of this Tridharma. For example, more PhD students contributed to the identification of 295 active faults (previously only 81 identified), and the results and recommended preparedness actions were disseminated to the communities as part of the ASEAN Youth Volunteer Program in Bandung. She also introduced the University Forum for DRR, where 100 universities involved. Indonesia has high death toll from natural disaster but low number of publication, part of which is due to lack of research funding. During her talk, she emphasized the importance of strengthening disaster governance -- universities included.

Twelve participants provided comments and questions in respond to the panel sessions. Interestingly, the discussion lead to quite common challenges in regards to mainstreaming DRR in higher education, i.e. job market related to DRR is lacking, and graduates in DRR have lack of working experience and therefore unable to fit the job market. Dr. Ailsa suggested the need to promote legal change – job descriptions should include DRR skills/knowledge.

To conclude, participants and speakers of this session proposed further works on:

- Enabling environment to link supply and demand of DRR expertise
- How DRR can be part of social Entrepreneurship and how to link graduates with companies
- Enhancing public-university partnership

Topic 1.2. Global Settings, Platforms, and Networks on Youth and Young Professionals in DRR

Objective

To share information and update on the status of global settings, mechanism, platform and network on DRR that have effect to youth and young professionals.

To discuss on why youth and young professionals should have concerns on DRR global settings, platforms and networks as well as how they could contribute in SETI.

Moderator:

**Dr. Andi Eka Sakya
The Agency for the
Assessment and Application
Technology (BPPT)**

Panelists:

1. Prof. Rajib Shaw
Professor, Keio University, Japan Chair, UN ISDR STAG (Science Technology Advisory Group) Science Committee Members, IRDR (Integrated Research on Disaster Risk)
2. Irina Rafliana
ICIAR LIPI/ STAG - UNISDR, Working Group on Capacity Building and Higher Education
3. Soichiro Yosukawa, **Programme Specialist Earth Science and Geo Hazard, UNESCO**
4. Moa Herrgård
Coordinator of UN MGCY

The expected output of this session was for the participants to understand opportunities, enabling environments, and platforms that are available for youth and young professionals to empower and mobilize their capacities in SETI for DRR. As a kickoff background of this session, Prof. Rajib Shaw provided the case of Japanese youth, between the age of 15-25, facing huge blackbox after entering university and professional life. The blackbox refers to disengagement to the communities and homes are only for sleeping. Meanwhile, the second highest number of disaster casualties in Japan in terms of group age, is mid 20s. Therefore, how to involve young people into community works is a challenge. The involvement should move beyond just activism and declaration into professionalism, and the root is in higher education. IRDR is an example of global young scientist program to yield strong professional background of youth in DRR.

Aligned with Prof. Shaw's arguments, Irina Rafliana showed the map of diverse investment of science in different countries and regions, where Indonesia is right at the one of the corner: only 7 PhD per 1000 – huge gap (check). Publication in the field of science communication in Indonesia is very weak. She also explained the history of processes until current stage that the voices of youth and young professionals in science and technology forum is appreciated and taken up seriously.

Mr. Soichiro Yosukawa echoed Prof. Rajib Shaw regarding the blackbox phase of Japanese youth. Based on his observation, the issues on empowering young scientists for DRR are (1) investment on science and technology; (2) DRR science program at higher education, both in terms of quality and quantity; (3) regional differences, collaboration and mobility, (4) generation and gender gap; and (5) job opportunity of DRR scientists. He further explained about the role of UNESCO in DRR and Youth, as well as the highlights and findings from UNESCO's recent works related to youth

and young scientist, i.e. the UNESCO Science Report 2015 and UNESCO's Operational Strategy on Youth (2014-2021).

Moa Herrgård introduced the history, framework, working structure, and areas of work of UNMGCY. UNMGCY facilitates and conducts a number of online and offline activities, including policy and advocacy, capacity building, youth action (encouraging youth to lead, join, and showcase), and knowledge. She also emphasized the principles of meaningful engagement held by the organization.

Interesting comments and questions were raised by the participants, as summarized here:

1. In developing countries, as raised by participant from Nepal, Sri Lanka, and Indonesia, graduates do research with limited resources and at times doing research just to graduate. They have restricted period to complete their study, therefore there are not many researchers. Many research studies ended up in the bookshelf. Policy should be changed in order to increase the quantity and quality of researchers/scientists.
2. There should be a platform that can bridge the missing link and answer the demand of the global future development, that includes policy makers and private sector. It is important to involve scientist in the government. Engineers and scientist can provide option for policy making. The platform should be able to reach potential scientists, and communicate about this opportunities for them. How to reach them is a constant challenge we need to work on.
3. Youth and young professionals can also create jobs. In DRR, the concept of social entrepreneurship is relevant. The whole ecosystem is needed to facilitate this, e.g. start-up grants to create business and bring the money back to the community or to the university.
4. It is interesting how we can link the youth with policy, but most of youth think DRR don't benefit economically: how to 'compete' with economic development? In disaster, there is direct loss and loss of GDP, as well as indirect impact, such as losing jobs. Some people are working on calculating this indirect impact. It is easier to show the loss and impact (to economy), and saying if we don't invest this much we will lose this much. Another point made is that it is about time to see social-environmental above the economics, on how we measure development.
5. An example of open mapping platform: OSM and Know Your Hazards, a humanitarian data exchange which will be useful for policy makers and other stakeholders that need to access the data, and it is a practical thing to do for youth.

Topic 1.3. Youth and young professionals in SETI for DRR: Challenges, Gaps, Needs, Expectations, and Initiatives

<p><i>Objective</i></p> <p>To discuss and have common understanding on issues related to youth and young professionals in SETI with a specific context on DRR.</p>	<p>Moderator:</p> <p>Moa Herrgård Coordinator of UN MGCY</p>
<p>Panelists:</p> <ol style="list-style-type: none"> 1. Dr. Animesh Kumar Deputy Chief, UNISDR Regional Asia Pacific 2. Dr. Riyanti Djalante Institute of Advanced Study of Sustainability, UNU (via Skype) 3. Dr. Glenn Fernandez Institute for Disaster Management and Reconstruction (IDMR), Sichuan University 4. Rae Sita Pratiwi Millennial Research Centre 	

As the first panelist, Dr. Animesh Kumar remarked the Sendai Framework as an opportunity to apply and turn knowledge into action. While preparedness mechanisms are already well-established, a better science-policy interface for prevention and risk-informed development needs to be enforced. Currently, the coordination mechanism (G-STAG and ASTAAG), S&T Partnership, and Global and Regional Platforms were already established. He stated that key challenges of young scientists are limited research funding as well as issues on job opportunities such as gap between demand and supply because of the difference in understanding what is needed and what is being taught. Therefore, he suggested the need of assessment on marketability of DRR, structural and non-structural mentoring and support, university networks, internships-industry linkages, and rostering system with potential deployment mechanism.

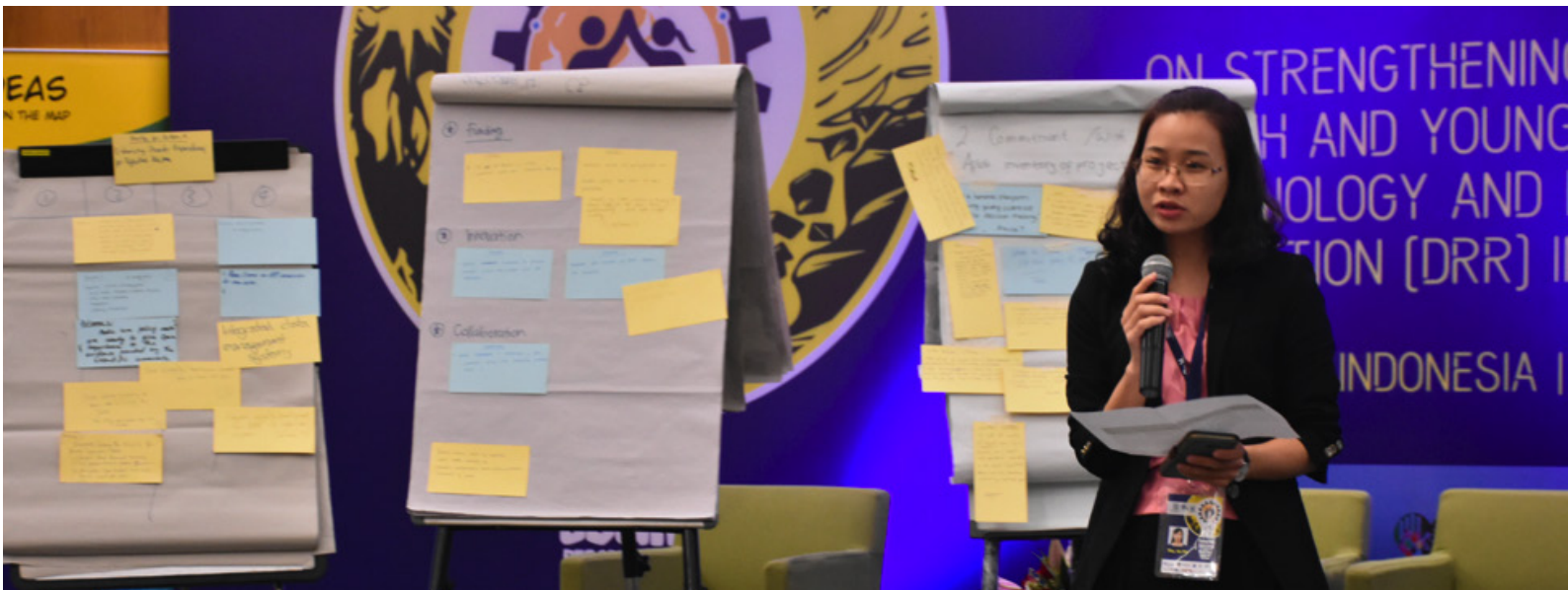
Dr. Riyanti Djalante introduced the United Nations University mission and its distribution worldwide. She expressed that sustainability is youth and young professionals' passport for the future. Expertise in sustainability and complex system approaches are expected to be developed. More opportunities are given along with transformation of the UN system.

Learning from the case of youth participation in DRR in the Philippines, Dr. Glenn Fernandez advised to strive for fairness and make programs on youth participation in DRR inclusive and universal, e.g. so youth in rural or peripheral areas are not left out, and to promote the human rights-based approach to children and youth's participation in DRR. The Philippines has a remarkable structure of governance that enable youth to determine investments in their own village based on their needs. It is a good opportunity to invest in DRR, should the youth have awareness and capacity to do so. He added comments to the previous day's discussion on higher education, that open universities and distance education can help to increase the number of DRR graduate students and researchers.

Ms. Rae Sita Pratiwi shared her research on the role of youth and young professionals in DRR in Indonesia, where she had conducted a baseline survey in March-July 2018. In the beginning, she highlighted a Nielsen's Total Audience Report that more than 90% of millennials are engaged with online content more than 5 hours per week. She argued that in order to outreach millennials about risks, strategy and a tailor-made communication should be built. And based on her research, informal education is a promising media as millennials are getting more and more interested in informal education.

Through the discussion of this session, participants understood the state of role of youth and young professionals in SETI for DRR in Asia and the Pacific.

F. Introduction on SFDRR and Roadmap for Its Implementation



Topic 2.1. Science and Technology in Sendai Framework for Disaster Risk Reduction and Breakout Session

Objective

To make sure all participants are on same page and have good understanding about Science and Technology in SFDRR.

To gain understanding of the Science and Technology Roadmap to support the implementation of SFDRR and to review the contents and use of the roadmap for guiding scientists/practitioner's activities on DRR from the perspective of the young scientists and harness specific commitments.

Lead Facilitator of Breakout Session:

Annisa Triyanti

UN MGCY/ STAG - UNISDR

Moderator of Group Presentation:

Dr. Hidayat

ICIAR LIPI

Presenter:

Prof. Rajib Shaw

Professor, Keio University, Japan Chair, UN ISDR STAG (Science Technology Advisory Group) Science Committee Members, IRDR (Integrated Research on Disaster Risk)

As an introductory remark before the participants reviewed the S & T Roadmap, Prof. Rajib Shaw showed a of an IRDR publication on various gaps of integration of science and technology in DRR in Asian Countries, i.e. China, Indonesia, Bangladesh, India, Iran, Japan, Malaysia, Myanmar, Pakistan, Philippines and Vietnam, which employed the parameter of S&T in decision making, investment in S&T, and link of S&T to people. For example, one country shows strong investment and integration into decision making but weak in science communication with citizens. He also shows a global outlook on the very small share of recent global scholarly output belonging to disaster science, only 0.22%. He then explained the updates of the Science and Technology Roadmap 2016 (S & T Roadmap 2016) according to the four Priority for Actions. The roadmap aims to guide how scientist and engineer could contribute to SFDRR, so that decision will be all scientific-based and evidence-based.

At the breakout session, participants were grouped into four and reviewed the S & T Roadmap Outcome matrix which was just updated during Chengdu Conference a month prior to this workshop. During the orientation of breakout session, Annisa Triyanti introduced the structure of the roadmap and underlined its importance as having high profile in global level.

Each group of participants reviewed actions under one out of four Priority of Actions. Participants were to add, improve, or comment on the matrix. Results and discussions of the four groups are provided in Annex 1.

Topic 2.2. Young Scientist Roadmap for Implementation of SFDRR and Breakout Session

<p><i>Objective</i></p> <p>To make sure all participants are on same page and have good understanding about the Young Scientists Roadmap for the Implementation of the SFDRR</p> <p>To share ideas and commitments of participants on activities to implement Young Scientist Roadmap</p>	<p>Lead Facilitator of Breakout Session: Annisa Triyanti UN MGCY/ STAG - UNISDR</p> <p>Moderator of Group Presentation: Ardito M. Kodijat UNESCO Office Jakarta</p>
<p>Presenter: Annisa Triyanti UN MGCY/ STAG - UNISDR</p>	

Ms. Annisa Triyanti introduced the Young Scientist Roadmap, a map of contributions and commitment of young scientists/practitioners which strengthens young policy priorities and practice in sustainable development by equipping them with tools to drive science-based, empirically-informed, context-specific, fit for purpose and fruitful change through science, technology, and innovation. The Roadmap, developed by the UN MGCY Young Scientists Platform on DRR, was launched in 2016 together with the UNISDR S & T Roadmap.

The session was followed up by another breakout session on what activities have the participants done in their respective hometowns and ideas on how this roadmap could be translated into subnational, national and/or regional activities that are implementable by the participants. The group discussion focused on Objective 1 of the Roadmap, i.e. Establish and Maintain a Young Scientists in DRR Platform. Participants were divided into six groups to discuss actions to be made at different level: subnational, national, and regional level, based on the seven sub-objectives under Objective 1 of the roadmap. Results of the discussion are presented in Annex 2.

G. Introduction to Concerns in DRR Research



Topic 3.1. Introduction to Integrated and Transdisciplinary Research in DRR

Objective

To discuss and have common understanding on the need and importance of integrated and multidisciplinary research in DRR

To illustrate of youth and young professionals can participate and contribute to this integrated and multidisciplinary research in DRR.

Moderator:

**Dr. Glenn Fernandez
Institute for Disaster
Management and
Reconstruction (IDMR),
Sichuan University**

Panelists:

- 1. Dr. Jonatan Lassa
Charles Darwin University**
- 2. Prof. Joy Jacqueline Pereira
Universiti Kebangsaan Institute of Advanced Study of Sustainability,
Malaysia**
- 3. Dr. Jan Sopaheluwakan
ISER-UI**

The panelists of this session delivered their research and thoughts about integrated and/or transdisciplinary research in disaster risk reduction and knowledge how to develop and implement integrated and/or transdisciplinary research for disaster risk reduction.

Dr. Jonatan Lassa shared his experience of studying different disciplines and pointed out that each discipline has different discourse on same topic. He mentioned that knowledge in academia is often delayed to be used in practice and social change. Mono-discipline research is weak in understanding complex reality. He took example from a network analysis and indicated that there should be somebody to connect. He then introduced example of using participatory approach as transdisciplinary exercise for youth.

Prof. Joy Jacqueline explained the difference between intra-disciplinary (Dr. Lassa referred to as mono-discipline), multidisciplinary, interdisciplinary and transdisciplinary research. She argued that DRR cannot be addressed through a single research discipline; a new way of thinking and making changes to solve real world problems require integration among various discipline. She introduced a project called “Disaster Resilient Cities” in which multiple universities, private sector, and various government agencies were involved, led by Prof. Lord Julian Hunt from Cambridge University and herself. It required much capacity for coordination, outreach and custodian of data, but the process could also build capacity.

Prof. Jan Sopaheluwakan mentioned that disasters and crisis in a cluster of misfortune can be managed in the same way. Chaos happens when people do not understand the interaction between different factors. He used a number of interesting illustration regarding transdisciplinary research. For example, he pictured multidisciplinary research as cut-fruits plate, interdisciplinary research as sushi – a new product as a result of different ingredient but each component can still be distinguished, and transdisciplinary as Indonesian or Indian food – where each component is mixed can cannot divide. He also illustrated T, I, Y, Phi, J, and E-shaped types of person according to the way they conduct research and works. T-shaped type of person is a combination of generalist and specialist. As a final remark, he introduced keys to transformational leadership needed for DRR.

Topic 3.2. Introduction to Science Communication for DRR

Objective

To discuss and build awareness on the importance of Science Communication in DRR

To illustrate of youth and young professionals can strengthen knowledge and skill in science communication for DRR

Moderator:

Dr. Ailsa Holloway

Chair Working Group on Capacity Building and Higher Education, STAG - UNISDR/ Director of the Research Alliance for Disaster and Risk Reduction, Stellenbosch University South Africa

Panelists:

- 1. Prof. Joy Jacqueline Pereira
Universiti Kebangsaan Institute of Advanced Study of Sustainability,
Malaysia**
- 2. Ahmad Arief
Journalist of Kompas Newspaper**
- 3. Aruminingsih
Associate Planner, Bappenas**

In this session, Dr. Ailsa steered the discussion towards understanding the framework of science communication in DRR and integration of science communication in DRR Research activities.

Prof. Joy Jacqueline Pereira introduced outreach activities of SEADPRI-UKM, i.e. the ANCST STG on Young Professionals in DRR. At this point she showed her interest to connect this organization with U-Inspire. She highlighted the importance of producing scientific publication and shared some tips for science communication: know the audience, avoid jargons, get to the point, only three key messages, use analogies and metaphors and relate. Finally, she showed updates based on the latest IPCC report, which urgently suggested that national pledges are not enough to limit warming to 1.5OC and therefore requires CO2 emissions to decline substantially before 2030. As a journalist, Ahmad Arief has been working with scientists to introduce about disaster history and risks to public. He pointed out one of the biggest problem in Indonesia as disaster literacy, including communication and risk perception. He mentioned about challenge of mass media – the coverage is limited to post-disaster and dramatic pictures and stories tend to be highlighted.

Aruminingsih presented the vision of Indonesia 2015-2085, which is going to be realized through two phases: 2045 and 2085. Recognizing DRR as investment to develop Indonesia, within that vision, Bappenas is trying to link the vision, plan and DRR. Bappenas is currently preparing a blue print for DRR plan, integrating it with scientific evidence. She suggested that in science communication the following should be done: (1) stakeholder analysis – key players to be involved from the beginning, (2) making DRR as part of their interest and agenda, (3) use the language they use, and (4) walk the talk – involve people from the very beginning.

Irina added that scientist often exclude themselves from science communication-- also currently there is no incentive for scientists in science communication.



H. Institutional Visit: Agency for the Assessment and Application of Technology (BPPT)



Objective

To learn about technology and scientific research for disaster risk reduction by the Indonesia Agency for the Assessment and Application of Technology (BPPT)

Moderator:

Ardito Kodijat

UNESCO Jakarta Office

Presenter:

- 1. Mr. Nur Hidayat, S.T., M.Si.**
Head of Program and Financing at the Disaster Risk Reduction Technology Center, Agency for the Assessment and Application of Technology (BPPT)
- 2. Dr. Udrek**
Senior Engineer, Agency for the Assessment and Application of Technology (BPPT)
- 3. Dr. Rahma Hanifa**
Researcher at Institute of Technology Bandung (ITB) & U-Inspire Lead

Participants were welcomed by Mr. Nur Hidayat. He introduced about BPPT's role in disaster risk reduction and its facilities that could be observed in the building. Dr. Udrek continued the session by presenting "Do we need tsunami detection?", lessons learned based on BPPT's recent research about Sulawesi Earthquake and Tsunami. He started by sharing that Palu Earthquake is unique, since the epicenter is far from the ocean, but it generated tsunami, with a very short lead time – demanding an earlier early warning. It also generated liquefaction. Dr. Rahma added that the events and research revealed that scientists still have lack of knowledge on earth dynamics and

tsunami may be generated from the earthquake on land.

Until the end of 2015, Indonesia used tsunami buoy to detect the tsunami. However, due to problems of coordination (difficulties to sustain), regulation (it required budget, but not prioritized), and vandalism. In the future, tsunami radar and cable might be used for tsunami early warning system.

During the discussion Mr. Ardito added that just like in disaster movies – there is always scientist being ignored at first, but at time of disaster, scientists were blamed. The tsunami buoy was established by huge support from many, even from outside of Indonesia. But after some time, there were only two organizations left who support. So, the disaster was not only because we are not ready or the science problems, but it's also about lack of coordination and the fact that scientist does not do political communication.

After the session, participants were taken to see a number of facilities in BPPT, such as the tsunami buoy, Flood Early Warning Systems (FEWS), Landslide Early Warning Systems (LEWS), as well as Automatic Weather Station (AWS) and Soil Moisture and Temperature Station (SMTS) for peat-fire early warning called WiNNS Peat-FireS.



I. U-INSPIRE Launching



U-Inspire was initiated on the 20th of May 2018, under UNESCO, ICIAR LIPI and BPPT's advocacy and guidance. Taking the opportunity of this Regional Workshop and the Indonesian Science Expo (ISE), U-Inspire was officially launched on the 3rd of November 2018 in ICE-BSD, Serpong, Indonesia.

The launching event was a good moment to show spirit and commitments of youth and young professionals to contribute in DRR through science, engineering, technology, and innovation, as well as to gain acknowledgment and support from various stakeholders and public. It was attended by 280 persons from UNESCO, STAG-UNISDR, ASTAAG-UNISDR, BNPB, BPPT, BAPPENAS, TATTS-USAID, ICIAR LIPI, National Platform for DRR (Planas PRB), University Forum for DRR (FPT-PRB), Institute of Technology Bandung Technology (ITB), University of Indonesia (UI), Indonesia Defense University (UNHAN), Atmajaya University, Sichuan University (China), Charles Darwin University (Australia), Universiti Kebangsaan Malaysia, Kompas TV, regional workshop participant representatives from 32 countries, and visitors of the Indonesian Science Expo.





U-INSPIRE DECLARATION

We, youth and young professionals in Indonesia have a strategic role in utilizing Science, Engineering, Technology and Innovation (SETI) for Disaster Risk Reduction (DRR). Realizing that disaster is a global concern and Indonesia is one of the disaster-prone country, guided by the Sendai Framework for Disaster Risk Reduction, we, on behalf of youth and young professionals, are committed to:

1. Create space for data and resources management as well as utilization for interdisciplinary and transdisciplinary research. Enabling the platform to respond to issues relates to Science, Engineering, Technology and Innovation.
2. Empower and strengthen capacities and substance of Science, Engineering, Technology and Innovation in DRR, and act as catalysts transdisciplinary research.
3. Strengthen network and collaboration on research and innovation at the global, regional, national and local level.
4. Engagements in science-based DRR policy developments and actions at the global, regional, national and local level.
5. Translation of scientific knowledge and its utilization to improve resilience through Science, Engineering, Technology and Innovation in DRR.

In order to realize these commitments, we, youth and young professionals agreed to form **U-Inspire** (Youth and Young Professionals on Innovation, Science and Technology Platform for Resiliency) with a vision to foster Indonesian youth and young professionals as the generator of innovation in science, engineering, technology, and innovation for disaster knowledge at local to global levels.

Thus we declare this declaration as a form of commitment and responsibility of youth and young professionals for disaster risk reduction in Indonesia.

Indonesia, 3rd of November 2018

On behalf of U-Inspire

Nuraini Rahma Hanifa	(.....)
Risye Dwiyani	(.....)
Tasril Mulyadi	(.....)
Enos Ndapareda	(.....)

Witnessed by

- | | |
|---|---------|
| 1. Prof. Shahbaz Khan (UNESCO) | (.....) |
| 2. Prof. Dr. Gadis Sri Haryani (ICIAR-LIPI) | (.....) |
| 3. Dr. Ailsa Holloway (STAG-UNISDR) | (.....) |
| 4. Dr. Andi Eka Sakya (BPPT) | (.....) |
| 5. Liliek Kurniawan (BNPb) | (.....) |
| 6. Nihil Miftahul Jannah (Ketua Planas) | (.....) |
| 7. Harkunti P. Rahayu, Ph.D (Ketua IABI) | (.....) |
| 8. Moa Herrgard (UNMGCY) | (.....) |
| 9. Prof. Dr. Syamsul Maarif, M.Si (UNHAN) | (.....) |
| 10. Dr. Daryono (BMKG) | (.....) |

J. Country Presentations



Country Presentations: Youth and Young Professionals in (SETI for) DRR in the Region

Objective

To learn about technology and scientific research for disaster risk reduction by the Indonesia Agency for the Assessment and Application of Technology (BPPT)

Moderator:

Ardito Kodijat

UNESCO Jakarta Office

Presenter:

- 1. Mr. Nur Hidayat, S.T., M.Si.**
Head of Program and Financing at the Disaster Risk Reduction Technology Center, Agency for the Assessment and Application of Technology (BPPT)
- 2. Dr. Udrek**
Senior Engineer, Agency for the Assessment and Application of Technology (BPPT)
- 3. Dr. Rahma Hanifa**
Researcher at Institute of Technology Bandung (ITB) & U-Inspire Lead

Each country participant delivered a 5-minutes presentation to introduce young and young professionals' activity in DRR in their respective country (26 countries). Senior researchers and practitioners provide feedbacks and comments in respond to the presentation session, they are Dr. Sugeng Triutomo (ASTAAG UNISDR), Prof. Heny Warsilah (LIPI), Prof. Syamsul Maarif (Defense

University), Prof. Robert Delinom (ICIAR LIPI), Prof. Jan Sopaheluwakan (ISER-UI) and Dr. Jonatan Lassa (Charles Darwin University).

Some of the participants argued why youth matters in their countries. In terms of number, for example, in Bangladesh, youth make up a large part of population (28.2%). Youth can give better ideas and efforts using their fresh minds and innovate according to future challenges, future disaster risks, and local context. Their understanding and use of the latest technologies may help take evidence-based decisions in DRR. Participants have proven great initiatives and involvement in SETI for DRR, such as Saintif, an online media focuses on dissemination of science, bridging the gap between experts and society in Indonesia; coordinating a joint initiative of Government of Nepal, National Planning Commission and Himalayan Climate Initiatives called the National Volunteering Program – mobilizing 8000 national volunteers and built 700 resilient homes and relief materials to more than 15,000 people after 2015 earthquake in Nepal, Deep Report Foundation in Kazakhstan, helping young people to deliver scalable impact through social entrepreneurship and technology by accelerating novel ideas that can make big impact, and research that fosters children participation in DRR with LEGO in New Zealand.

Challenges of youth and young professionals in the countries of Asia and the Pacific are quite similar according to the participants, to mention a few:

1. Minimum knowledge, skills and experience on DRR, yet inadequate academic and vocational opportunities, lack of proper guidance, lack of platform to share knowledge and skill in DRR, and limited funding mechanism to support their initiatives.
2. Lack of young professional participation in the mainstream DRR mechanism, i.e. lack of youth involvement in formal reconstruction planning process (case of Japan)
3. Scattered social movement and initiative are unable to create larger impact and recognition
4. Young people's contribution to society often unrecognized and no platform to showcase their ideas

Some of the participants also presented their views about problems regarding DRR that occur in their country, where youth and young professionals, with all their potentials, could have been contributed more. For example, in Nepal, 80% of total population are at risk of natural hazards (Nepal Disaster Report, 2017) with challenging geographical features – mountainous and landlocked. Uzbekistan faces desiccation of the Aral Sea, a source of water for the country that also used to provide important ecosystem services to the community. Maldives which consists of islands, many remoted and below sea level made it hard to reach, requiring hi-technological device. Himalaya and Mekong River, with all their resources and hazards, are bordering to a number of countries, requiring good diplomacy and fluid collaborations. And finally, the need of bridging between research and practices as well as between agencies, DRR data at all levels, which are lacking in some countries might be solved with the characters of youth and young professionals.

Participants think that in the future, youth and young professionals shall drive more effective collaboration with the establishment of multidiscipline platform – between GOs and NGOs, local to regional to global, and with the industries to invent advance technology for DRR. They also wish to better assist science communication to the public and incorporate SETI for DRR into popular culture, as well as establish a knowledge and network hub for private sector, policy makers, research entities and academia for DRR.

K. Exhibition



As a part of Indonesia Science Expo ISE 2018 in ICE BSD City, Tangerang Banten, hosted by LIPI, U-Inspire participated in the exhibition for Science, Technology and Innovation aspect in DRR. In four days, the booth was visited by approximately 500 visitors per day, which included students, academia and families. In the booth, visitors could watch DRR-related movies from the plasma TV, play games, read books, learn about liquefaction by using an easy-to-understand model, try the InaRISK Apps, and buy merchandise. After the experience in the booth, U-Inspire team handed free giveaways to the visitors. The team also explained about U-Inspire Platform to the visitors, and for the visitors who were youth and young professionals may register as member of the platform.

The booth exhibited posters and standing banner from ICIAR LIPI, board games from PREDIKT and COREMAP, educational pop-up books from Box Breaker, Repdeman Movie, Lombok Youngs and UAV plane from Sky Volunteer, liquefaction props from ITB, 2 x 1,2 meters Indonesian Earthquake Map from PusGen, InaRISK Apps from BNPB, books and flyers from FTP-PRB, Unesco, LIPI, and U-Inspire merchandise.



L. Moving Forward



Breakout Session 4: Brainstorm for potential collaborations among Youth and Young Scientist in Asia and the Pacific

Objective

To brainstorm and develop a concrete concept/idea/ initiative for collaborative activity on youth and young professional in SETI for DRR in Asia and the Pacific

Facilitators:

Irina Rafliana

ICIAR LIPI/ STAG - UNISDR

Annisa Triyanti

UN MGCY/ STAG - UNISDR

Moderator of Presentation:
Jonatan Lassa

Charles Darwin University

Participants were divided into groups based on region/group of countries and discuss concrete ideas to initiate collaborative activities among them.

A group which consisted of New Zealand, Papua New Guinea, Solomon Island, and Timor Leste identified that they have similar challenges. They felt the need to unite initiatives to advocate, to pull resources and knowledge for young professionals including scientists that are currently lack in access and to engage with Pacific STAG as well as to invite neighboring country networks (Vanuatu, Australia, Samoa, Tonga, Tuvalu, Kiribati, etc). They also explored the chance to create publicity

regarding DRR cases and to conduct public lectures for youths. The group of Bangladesh, India, Maldives, Nepal, Pakistan, and Sri Lanka discussed the possibilities of developing a transboundary open data and map regarding disasters that will be opened for public, including scientists.

The group consisted of Brazil, Malawi, and Egypt proposed to build a global south platform for youth and young professionals in SETI for DRR. The groups of participants from China, Japan, Myanmar, Mongolia, Southeast Asian Countries, Afghanistan, Iran, Kazakhstan, and Uzbekistan discussed about various existing organization or movements as potential resources in each of their countries and the possible collaborations among them. To move forward, they proposed to establish mailing list, skype group calls, and blog to keep exchanging ideas and report activities as well as to build connection with UNESCO, UNISDR, research institutions/universities, and youth unions.

Many participants intended to start-up another U-Inspire-like platform in their own countries, by utilizing what they already have in terms of organizations, network, and capacity. They also expect support by UNESCO headquarter or the field offices. All agreed to have at least WhatsApp Group as the main communication means after the workshop.

Ardito challenged the participants – who will be the champion to commit real action? The contribution from U-Inspire to make this event happen could be considered as champions. Each youth organization needs to seek own uniqueness. He mentioned that such national platform has been established in Indonesia (U-Inspire), helping other countries can be one of the next steps. It is better to avoid formality at the beginning and keep communication and activities informal. Even a simple board game has science as the background.

Annisa added, that for collaboration we need wider scope and to influence policy maker, having narrow prioritization and focus has to be avoided. She also advised that youth has to be aware of the environment to strategize their activities, and a strong bottom up movement could support sustainability. Another key is to identify gap in policy advised by science-based evidence. Dissemination and communication are also important to encourage other learners, which this workshop performs.

Further, Ardito facilitated discussion amongst the participants about possible challenge to develop U-Inspire chapter in each country. The following are the challenges:

1. Connection to institution and getting support (Egypt)
2. Secure funding and confidence of existing organization (Nepal)
3. Identification of champions and weak focus on DRR (Pakistan)
4. Lack of government's attention to young and vulnerable people (Brazil)
5. Scientists are not active participant of social activity (Philippines)
6. In keeping up motivation and passion (New Zealand)
7. Practice of SETI is still new, it might be easier to engage with established work – such as education. Small country has challenge to have good number of people to work on (Malawi).

In response to that, Annisa highlighted that U-Inspire started with limited number, and it could be multiplied throughout the process. Rather than number, it is important to have a person with quality, leadership, and influence. She agreed with the importance of education, this could be the focus of U-Inspire or to be further discussed. She also made a point that everyone has fair space and resource – however, we need to avoid inefficient competition and have a coordination mechanism.

Ardito added that UNESCO Jakarta is responsible for science for countries in the region, and they are happy to support as a hub. As a regional office, UNESCO Jakarta may be easier to support collaboration among countries, rather than one country, in terms of facilitation and coordination. Jakarta Office can also provide reports to government through permanent delegation of UNESCO. He mentioned that bottom up is key, rather than trying to apply something that has already been decided in upper level – keep it fun and engaged, do not eliminate scientists.

As the final remarks in this session, Irina advised not to give up communication with the government and use their language.

Topic 4.1. U-INSPIRE as national platform for youth and young professional in SETI for DRR

<i>Objective</i>	Moderator:
Participants will be divided into small groups based on similarities and/or region (i.e. SIDS, ASEAN) for a 60 minutes discussion to discuss the problem, challenge, opportunity and interest to establish U-INSPIRE in the country	Ardito M Kodijat – UNESCO
Presenter:	
Rahma Hanifa, Enos Ndapareda, Risye Dwiyani, Fajar Shidiq – U-INSPIRE	

U-Inspire members introduced the platform’s vision, focus of activities and history on how U-Inspire was established. Challenges faced by the members were mostly on how to manage time and energy between voluntary works, jobs, and personal life, as well as how to maintain communication among more than a hundred members. Prior to its launching today, U-Inspire has triggered: (1) information sharing (useful and shareable data, opportunities to grow), (2) learning (free-style learning, e.g about risk communication, critical reading), (3) friendship and collaborations (this regional workshop, other forums such as FGD KTN, IABI), as well as (4) co-creations (developed FAQ infographics book about Lombok Earthquake, in response to the highly occurring hoaxes in the social media).

Questions raised by the participants were around the legal settings, how to be involved, involvement of U-Inspire at the international policy discussion, and financial support. The presenters explained that legal setting is under arrangement. Advocacy is one of U-Inspire’s activities. There have been initial discussions with national and international key players. As for the funding, up to now, U-Inspire has been relying on collaboration with other organizations, e.g. LIPI, UNESCO, UNISDR, and no regular budget. However, the voluntary works are also acknowledged. To illustrate, in organizing this regional workshop, roughly calculated, the valued works of U-Inspire equals to around USD 5000.

Topic 4.2. Toward Side Event at the Global Platform 2019 and the Upcoming Regional Workshop in Chengdu

<i>Objective</i>	Moderator:
To introduce on the idea to hold side event at the Global Platform 2019	Annisa Triyanti, UN MGCY/STAG - UNISDR
To brainstorm ideas for the upcoming regional workshop in Chengdu, China	Ardito M Kodijat, UNESCO
Irina Rafliana, ICIAR LIPI/STAG - UNISDR	
Presenter:	
Moa Herrgård, UN MGCY	

Ms. Moa explained that GPDRR is held every two years at the international level. Last one in Mexico, youth preparatory meeting included country report, game, and showcase of good cases. Youth representatives participated also to leader forum, co-chaired session, engaged to some sessions, and provided children and youth statements. The meeting outputs were toolkit, publication and policy briefs. As for the GPDRR 2019, some activities are being planned such as hackathon, collection of photos, joining as panelist, introduction of community actions, etc. She called for ideas and contributors.

Ms. Annisa added that there is a dedicated forum to discuss coherence among Agenda 2030, Habitat III, STI Forum, DRR, etc under “Youth Science and Policy Interface”. The planned output includes publication of scientific results. She called for input to this forum.

After following a number of inspiring sessions of the workshop, Professor Gretchen from Sichuan University made an announcement that Sichuan University would be hosting the next regional workshop in Chengdu, China, next year. Glenn promised to have further discussion with Gretchen to specify their support. He suggested the participants to think about concrete ideas on how the workshop should be conducted. Soichiro mentioned the potential to combine the event with UNESCO’s collaboration with Chinese Academy of Science in October 2021. Therefore, in the final workshop session, the participants were invited to brainstorm ideas for the next regional workshop.



Facilitated by Ardito and Irina, their ideas include:

1. Dissemination of report from U-Inspire chapter in Asia and the Pacific
2. Organize separate technical sessions and courses, e.g. to learn how to integrate SETI into DRR, have discussion on how to transform science into policy, multi-disciplinary discussion to come up with action plan, discussion to develop national policy, national version of SFDRR and identify role of young researchers to contribute to this.
3. A One-Day Excursion at the Sichuan Earthquake Museum and learn how China recovered from the Earthquake
4. Market place instead of exhibition
5. All participants make poster to introduce own work, showcase best practice
6. Report follow-up on publication, list of champions, platforms to be made, partners, update on roadmap and initiatives
7. Focus on theme and contents: emerging issues (Natech, biological disaster, slow onset disaster), eco-DRR, human rights, leadership training
8. Screen outside to showcase the best practices to non-participants
9. Bring one younger successor from own country, help them to seek funding, be exposed to international environment.
10. Conduct community service
11. Organize a competition at regional level
12. Peer-to-peer research with local researcher in China
13. Invite high school students
14. Use media

M. Closing Remarks, Feedbacks and Follow Up Initiatives



1. Closing Remarks

As final remarks, Prof. Hamza congratulated for the fruitful discussions and ideas. He expressed his expectation in applying in national level. He also committed to support for all youth and establishment of U-Inspire in Pakistan. Dr. Ailsa thanked for active participation and discussion. Energy, vision, skill-based motivation, and strategic navigation at multiple level. She mentioned with support from UNESCO, youth can go beyond just for secure funding. Dr. Jonatan Lassa put participants' way of seeking possibilities of future in positive way as Utopia. Disaster governance is a key, what government could not cover can be supported by youth and UNESCO.

From the participants, Marwa, a young professional observer, thanked all participants and organizers. She explained her experience as eye opening and will commit to continuously work on this field. She hoped to establish U-Inspire Egypt Chapter. Karla, a participant from the Philippines said that after participation of the workshop, she felt she needs to increase participation of youth to policy discussion. It was an encouraging experience.

Mr. Ardito Kodijat put this workshop as a celebration for new collaboration, and encouraged to keep communication by overcoming long-distance relationship. Mr. Soichiro Yasukawa appreciated passionate engagement of the participants throughout the sessions. He pointed out a very important message, that if we have perfectly identified and understood a complex problem, then at least we already have 60% solve the problem – this applies also in DRR. As he is from the UNESCO Headquarter, he showed his expectation to replicate similar workshop in different regions. Also, he congratulated perfect logistic arrangement.

Ms. Irina thanked to all sponsors, partners, and all organizers. Dr. Rahma, U-Inspire Lead, she thanked all. She appreciated as friendship that supported all the preparation process and organization of the event. Touched by all words of participants and will to bring U-Inspire to other country. She encouraged continuous contribution to SFDRR and next generation.

All participants were handed a certificate and USB Disk containing the copy of presentation materials of the panelists. Participants were also provided a chance to give feedbacks by filling an evaluation form.



2. Feedbacks

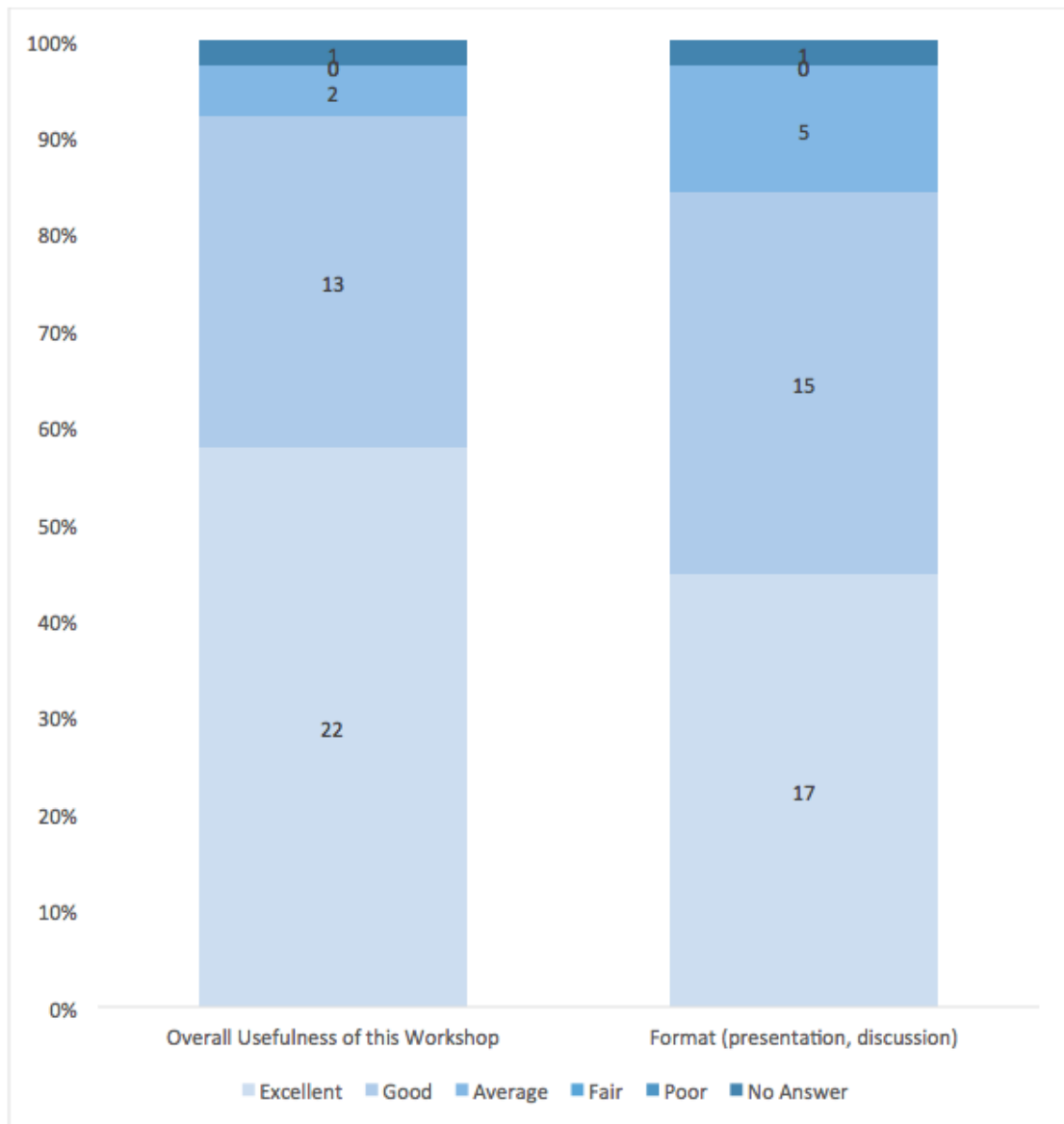
This section presents feedbacks from the workshop participants, which were obtained during the final session of the workshop. The number of participants who returned the questionnaires was 38 persons. Committee members were excluded from the survey. workshop.

A. Overall Impression

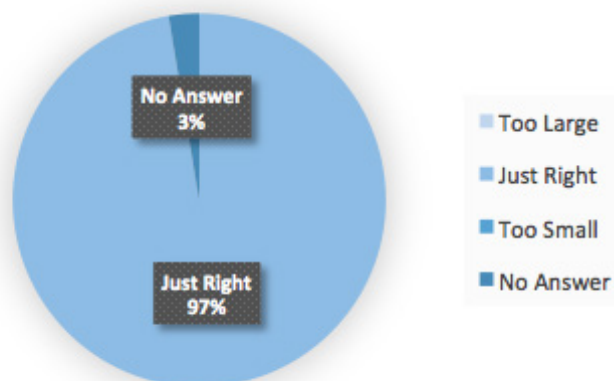
More than 90% participants think that the usefulness of the workshop was good and excellent. Most participants regarded the Topic 3.1 on the Introduction to Integrated and Transdisciplinary Research in DRR as the most useful one. Outside of the panel session, the Country Presentation was observed as useful/very useful by most participants. Most participants think the topics covered were just right (68%), but quite a number of participants think they are too general (21%).

More than 80% of participants think that the workshop format (presentation, discussion) were good/excellent. Although more than half thinks that the workshop length was just right, some participants think that the duration was too short with packed agenda. A number of participants wished there were extra time for some topics. Pre-event such as WEBINARS could be done if the time is limited.

As for the size of the workshop, 72 youth and young professionals (U-Inspire members included) was just right according to all responding participants.



Size of Participant



C. Contents

Besides Session 3.1, other topics that many participants find most useful during the workshop: (1) Science Communication, (2) SFDRR and Young Scientist Roadmap, (3) Global Settings, Platforms, and Networks on Youth and Young Professionals in DRR, (4) Mainstreaming DRR in Higher Education, (5) U-Inspire, and (6) Youth and Young Professionals in SETI for DRR: Challenges, Gaps, Needs, Expectations, and Initiatives.

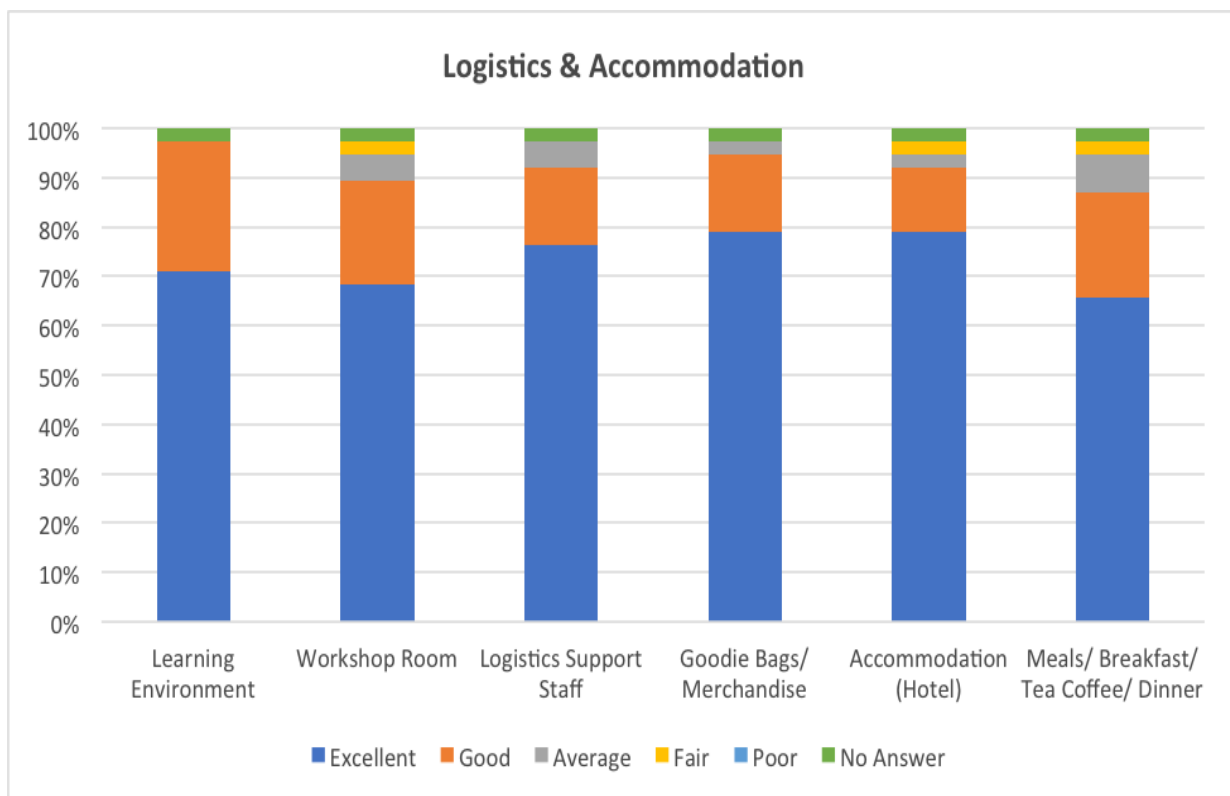
For future workshop, participants suggested for more explorations on the following topics:

1. Climate Change, Displacement, and Relocation
2. Disaster Anthropology, Culture
3. Slow Onset DRR, SETI in Eco-DRR
4. The Sendai Framework “Unpacking” and Role of Young Scientists
5. Coherence between Global Frameworks such as SDGs, SFDRR, COP, Urban Agenda
6. Advocacy with Government on DRR
7. More specific scientific sessions, such as Innovative Technologies for DRR
8. Inspiring Case Studies and Stories, including on YYP Participations in DRR

D. Methods and Logistics

Participants think that the workshop would have been better if:

1. The schedule was not too packed and rushed. It is better to have less topics and more discussion. Pre-event such as webinars could be done if time was limited.
2. There was no evening session and more free time given.
3. More interactive sessions (not too much panel session).
4. More case studies and fieldworks.
5. Food has more vegetarian options.



Logistics-wise, generally the participants were satisfied. Most favorites were the merchandise and the learning environment. Remarkably, more than half of the workshop participants from outside of Indonesia were willing to organize similar workshop in their home country. Almost 100% think this workshop met their expectation, some even said it had exceeded their expectations.

More on what the participants think about the workshop were video-recorded and are available on the U-Inspire Instagram account:

- https://www.instagram.com/p/Bpv9EPdFXSs/?utm_source=ig_web_button_share_sheet
- https://www.instagram.com/p/Bpv8mvEIHDX/?utm_source=ig_web_button_share_sheet
- https://www.instagram.com/p/Bpv7bqNlhtY/?utm_source=ig_web_button_share_sheet
- https://www.instagram.com/p/Bpv3ZdjFikD/?utm_source=ig_web_button_share_sheet
- https://www.instagram.com/p/BpqySMkhUGa/?utm_source=ig_web_button_share_sheet

3. Follow up Global Initiatives After the Workshop

Just after the workshop, there were several initiatives generated among the participants, such as the drafting of Concept Note on DRR Global South Young Scientist Platform and various invitations for youth and young professional to take a role in the regional/global level advocacy through UNMGCY and U-Inspire networks. The first participation of one of the U-Inspire members, Hilman Arioaji, invited by UNMGCY at a global event after this workshop was the Intergovernmental Conference on the Global Compact for Migration on the 10-11 December 2018 in Marrakech, Morocco.

One of the participants from Pakistan, is currently establishing U-Inspire Pakistan. With the support of UNESCO, he and his team will hold U-Inspire Pakistan launching in the coming February 2019, inviting the co-founder of U-Inspire, Irina Rafliana, and U-Inspire Indonesia member. Another movement is being initiated by participant from Malawi, to establish U-Inspire in Malawi.



Annex

Annex 1

Results and Discussions of Breakout Session on Science and Technology Roadmap

Participants were divided into four groups. Each group had its own way to provide inputs for the S & T Roadmap. The followings are point of discussions and feedbacks by the participants in each group:

Group 1

What should be added in the roadmap?

- Organizational level development in the roadmap
- Human resource database of stakeholders in a specific region to work on the roadmap.
- Mapping of what organizations are doing for the Sendai Framework on DRR.
- Standard baseline data must be generated for areas without baseline data.
- Platform that integrates different risk assessment should be made available. (e.g. InaRisk platform in Indonesia)
- Conflicts of data-sharing (inter-sectoral)
- Cascading hazards/complex risks is not clearly defined
- Holistic approach to disaster versus limited resources

YYP Contribution to the Roadmap:

- Exploring alternatives for disaster research (public-private partnership) linked with policy implementation
- Open access to data and information to all stakeholders
- Ensure scientific information reach communities (end users) in an understandable way (science communication) (Outcome1)
- Engagements of more communication practitioners in scientific research/scientific business
- Ensure mechanisms to extend/translate science to public through extension workers and government
- Increase/strengthen relationships with government, corporate, and technocrats and scientists, to understand each perspective
- Need more engagements of mass communication and social scientist, education, economist, and corporation in the partnership
- Mainstream DRR to relevant sectors and issue including climate change to ensure sustainability

Group 2

Overall

- The need of solid assessment and legislation mechanisms.
- Using the outcomes from Priority 1 to put in use in Priority 2 (link between different priorities).

Impression on Each Outcome

Outcome 1

- Some parts (data collection) should be included in priority 1.

- Open-for-public submissions that can be used on a transboundary level (this is a comment by a participant that governments are investing huge amounts of money to produce these papers and they should have the legal right to keep it to themselves), legal use of data and promoting open data access.
- Intergovernmental data sharing between different governments with putting the consequences that may affect other countries into consideration (transboundary data sharing policy for DRR scientists)
- National database for all stakeholders working under the same mandate in a certain country governed by the country
- Balance between government and private sector when it comes to discussion and policy making
- Focus on low-impact frequent disasters
- Flexible definition of hazard
- Geo-referencing data

Outcome 2

- Including big data, improving access to big data
- Including spatial design principles and urban planning in the capacity building, Outcome 4: putting specialized regional based platforms in use by including them in DRR
- Promoting government and volunteer groups in DRR (already exists in Outcome 3)
- Promote dialogue and assess government performance by the civil society to hold the government accountable
- Bringing in more private sector

Outcome 3

- Making sustainable government policies and continuous monitoring efforts
- Investing in developing automated scientific models to assess decision makers using AI (DSS), investing in DSS research to help in decision making

Group 3

What should be added for Priority action 3?

Outcome 1

- Provide funding to promote and enhance, through transfer, access to and the sharing and use of non-sensitive data and information. Investment in communication and geospatial and space-based technologies and related services.
- Data on remittances both economic and social, data on macroeconomic evidence for disaster prone areas to understand and improve resilience strategies.
- Provide space for collaboration between scientist, indigenous practices and local community
- Investment in technology to make schools more resilient
- Data on vulnerabilities and innovative solutions in DRR

Outcome 2

- To make hazard, vulnerability, risk, disaster and loss-disaggregated information freely available and accessible, as appropriate (open access to disaggregated data)
- Develop system for interdepartmental/inter-sectoral data analysis platforms to understand multidimensional impact of disasters.

Outcome 3

- Collaboration between researcher, investor and decision maker to ensure that the research results are used for policy implementation
- Produce data and evidence on the link of disaster and displacement to identify the threshold between resilience and movements

- Assessment of downscaling initiative to understand the situation in practical level
- Increase disaster literacy

Outcome 4

- Benefit-sharing among difference stakeholders in DRR; Provide research / analysis how investment of DRR can benefit all stakeholder
- Encourage and create an enabling environment for media-offline and online to increase investment in DRR science and technology
- Better information for investment opportunities
- Use of advance technologies in planning of normal developmental planning to avoid potential hazards due to ill or unplanned development.

Other Outcomes to be Added

- Funding
- Find all resources for funding (government, private sector, international aids, etc.)
- Manage resources and priority for urgent needs and establish funding data matrix to clear accountability
- Invest in DRR, which is helping to reduce risk at the same time sustainability and also profit making

Innovation

1. Create mechanism to promote innovation research/ideas/models from all stakeholders
2. Consolidate all innovation for better reference and investment
3. Demand based research

Collaboration

1. Widen stakeholders in collaboration in DRR (government, private sector, communities, international media, etc.)
2. Priority actions could be organized under simple reading of economic, environmental, social, cultural governance

Group 4

Outcome 1 - Assess and update the current state of data, scientific and local and indigenous knowledge and technical expertise availability on disaster risks reduction and fill the gaps with new knowledge.	<ol style="list-style-type: none"> 1. Detailed information guideline for the risks 2. Rules on data collection with the use of cutting edge technology 3. Merge data sets and open: recommendation to all actors including Government, and private sector 4. Promoting crowdsourcing information 5. Improve the level of detail in the maps
Outcome 2 - Synthesize, produce and disseminate scientific evidence in a timely and accessible manner that responds to the knowledge needs of policy-makers and practitioners.	<ol style="list-style-type: none"> 1. Visualize the data and use more creative and innovative approaches in data dissemination 2. Data source licensing to track who is using the data: The policy document can be made. 3. Involve policy makers, practitioners, and end-users (e.g. Communities) in the data creation/collection process to ensure knowledge needs are met by aligning data with those needs of the beginning of the process 4. Creative science dissemination: for common people using 1) Social media: Facebook, Instagram, YouTube), 2) Film/video/animation 3) Infographics 4) Celebrity/influencers 5. Make sure policy makers are ready to give space and importance to evidence based scientific community 6. Strengthening contingency plan policy in pre-disaster information/ data (1) Geospatial Hazard Assessment Technology; 2) Early Disaster Education Program/Curriculum; 3) Story-telling about last disaster event for youth
Outcome 3 - Ensure that scientific data and information support are used in monitoring and reviewing progress towards disaster risk reduction and resilience building.	<ol style="list-style-type: none"> 1. Scientists review on the Government report and process for data correction 2. Bringing government on the board while doing scientific research 3. Data Integrity: Maintenance of data over its entire life cycle
Outcome 4 - Build capacity to ensure that all sectors and countries have access to, understand and can use scientific information for better informed decision-making	<ol style="list-style-type: none"> 1. Engage community & young scientist to fill data gaps 2. Integrate capacity development for build back better into higher education system 3. Developing integrated disaster management platform 4. Create an API connection for data bases 5. Training of Trainers

Annex 2

Results and Discussions of Breakout Session on Young Scientist Roadmap

A. Regional-level

1. **Provide repository for showcasing of young scientist contribution on DRR, on:**
 - Knowledge development
 - Analytical works
 - Good practices documents
 - Other SDG-related indicators
2. **Online platform that is crowd-sourcing, user-friendly, and real time.**
3. **1.d.: Facilitate dialogue among young DRR scientists, students and policy makers on identification of gaps of knowledge in DRR, recommendations on good practices and emerging trends to the review of the Sendai Framework implementation**

Activities:

- Continue the Youth Forum in organized by Central Asia Disaster Reduction Center to encourage dialogue among youth and youth scientists (2017-onwards)
- Promote more dialogues among UNESCO Regional Chairs in Asia Pacific for information exchange (2019)
- Hackathon for DRR in Central Asia (2019)
- Decentralized water management system in Thailand (2017-2019)
- Online competition for youth and young professionals for DRR in Asia Pacific (January 2019)
- Organize a policy forum with senior researchers and policy-makers on earthquake research and management in Asia Pacific (within 2 to 3 years)
- Create an online group for youth and young professional participants

4. **1.e.: Facilitate youth-led monitoring, evaluation and reporting on the Sendai Framework**

Activities:

- Create a joint database of youth activities, education and programs related to DRR
- Start mapping vulnerable areas in elementary schools in Asia (2019)

5. **1.f.: Provide a repository for showcasing of young scientists' contribution on DRR knowledge development, analytical works, and good practices documentation, as well as other SDG-related indicators**

Activities:

- Create an online system of scoring in Central Asia of possible disaster damages (2019)
- Include disaster scoring and prediction of floods (online) in Central Asia
- Organize a database/map of landslides (cloud) for regional analysis in seismicity in Himalayan region (1-3 years)
- Organize a big data center (database management) between Indonesia and Singapore accessible to everyone (within a year)
- Collaboration with universities in Indonesia, Singapore and Japan to train students about data processing and modeling

6. **1.g.: Support the development of new research agendas tailored to complement the implementation, monitoring and review of the Sendai Framework for postgraduate research, and where possible, in collaboration with universities, research organizations, NGOs and the**

private sector

Activities:

- Create a consortium of different universities and institutions in the Himalayan region to bring new researches focusing on landslides and slope hazards (unidirectional) and present on conferences (4 to 5 years)
- Conduct a collaborative research on social recovery after major earthquakes in Himalayan region (3 to 5 years)
- Documentation and sharing of research through an online platform in Asia Pacific
- Create a platform for and network of (online group) researchers to translate scientific knowledge into an understandable form for the public (science communication)

B. National-level

1. Organize youth-based “DRR Initiative” competition among young people and young scientist, by collaborating with young groups, universities, and research institute to provide information and organize activities (January 2019 – December 2020).
2. Host workshop at national level on DRR for young scientist and young people by collaborating with young groups, universities, NGOs, and international agencies (January 2019 – June 2019).
3. Establish social website (facebook) on DRR for youth and young scientist by collaborating with media and institutes to have information on DRR (January 2019 – December 2019).
4. Facilitate Dialogue:
 - a. Networking and identification of DRR professionals, stakeholders and government organizations
 - b. Collaboration among different stakeholders
 - c. Replicate good examples and take the lessons learned from an initiative and institutionalize the practice to use it in different geographical region.
 - d. Inclusive student activities as regulations of the educational institutes before graduation to incorporate them in mainstream
 - e. Include child and young in national DRR policies and roadmaps
 - f. Encouraging internship/work placement in SETI for DRR

Deliverables:

- a. Roster and database of DRR stakeholder’s nationally (uploaded annually)
- b. Uploaded report on ongoing collaborations
- c. Lessons learned in DRR documented improved replication of initiatives
- d. Intern programs/work placements
- e. Child/youth roadmap in national DRR policies

5. Provide Repository:

- a. Promote youth to participate in DRR by advertising research opportunities
- b. Integrate SFDRR roadmap in national development plans
- c. Integrate SFDRR roadmap in disaster management plan
- d. Youth forums/conference with media

Deliverables:

- a. Research papers/journal papers
- b. Update national plans by getting update local plan
- c. Disaster management plan and national plan integrated with SFDRR roadmap

6. Facilitate youth-led monitoring, evaluation and reporting on SFDRR:

- a. Educate youth and young professionals on the framework and reporting process
- b. Identify agencies responsible for reporting and initiate discussion
- c. Get youth involved with reporting process
- d. Database of youth-led research, shared with reporting agencies to ensure research/progress is recognized
- e. Separate monitoring, evaluating and reporting process specifically for youth-led research and initiatives to ensure recognition of youth contributions to SFDRR

Deliverables:

- a. Number of educated youth
- b. Number of reporting
- c. Production of reporting process procedure/guidelines document
- d. Number of youth and young professional contributions to research initiative database

7. Support the development of new research:

- a. Improve dialogue and communication between scientist with the private sectors, government, public and NGOs about the Sendai Framework
- b. Collect the point of view from them to get more understanding in practical point
- c. Collaboration for new research of private sectors
- d. Make Sendai Framework more flexible in country's contexts (cultures, economy, etc).

Deliverables:

- a. Number of workshops, seminar, conferences, and all the communication products needed
- b. Number of reports and production/questionnaires of point of view collection
- c. Number of reports in new collaboration research
- d. Number of adapted document of SF in country's context

C. Local-level

1. 1.a: Mobilizing and raising awareness amongst young scientist and intergenerational collaboration in applying their existing research for evidence-based implementation, monitoring Sendai Framework, and encourage diverse regional representative
2. 1.b: Facilitate DRR knowledge transfer among young scientists
3. 1.c: Facilitate inter-professional global dialogue among young scientists, evidence-based good and best practices

Activities:

- Volunteering in federal policy for data collection in Brazil, identifying reasons of migration flows from Venezuela, advocacy movements using these data and then established the humanitarian visa.
- Risk assessment for inaccessible areas due to political reasons, using residents for data collection using questionnaires.
- Creating UNISDR models in universities to transfer knowledge and raise awareness among university and school students with possible partnerships with the UNISDR offices.
- Using university students applying their professional expertise in risk management and disaster response
- Student run magazines related to DRR
- Competitions for resilient designs that can be used for the built environment
- Creation of social media content to share awareness about science and technology in DRR
- Making use of university festivals in DRR

Annex 3

List of Speakers, Organizers, and Participants

Keynote Speakers

1. Prof. Shahbaz Khan
2. Dr. Laksana Tri Handoko,
3. Animesh Kumar
4. Dr. Muhammad Dimiyati

Speakers

(in alphabetical order)

1. Ahmad Arif, M.Si
2. Dr. Ailsa Holloway
3. Dr. Andi Eka Sakya, M.Eng
4. Annisa Triyanti
5. Aruminingsih
6. Glenn Fernandez, PhD
7. Gretchen Kalonji
8. Hamza Farooq Gabriel, PhD
9. Prof. Dr. Jan Sopaheluwakan
10. Dr. Jonatan Lassa
11. Joy Jacqueline Pereira
12. Moa Herrgård
13. Rajib Shaw
14. Rae Sita Pratiwi
15. Dr. Riyanti Djalante
16. Yasukawa Soichiro

Participants

(in alphabetical order)

1. Aziza Akhmedova (Uzbekistan)
2. Abdul Rahim Sya'ban (Indonesia)
3. Aftab Uz Zaman Khan (Bangladesh)
4. Avishek Lamsal (Nepal)
5. Ayu Prestasia (Indonesia)
6. Chimedtseren Purevjav (Mongolia)
7. David Christover (Indonesia)
8. Deasy Arisa, Ph.D (Indonesia)
9. Duong Thi Phuong Thao (Vietnam)
10. Dr. Endra Gunawan, S.T., M.Sc.
(Indonesia)
11. Enos Ndapareda, ST (Indonesia)
12. Ernestina Barros de Andrade (Timor Leste)
13. Faizatuzzahrah Rahmaniah, S.T
(Indonesia)
14. Fajrul Falah (Indonesia)
15. Fan, Li (China)
16. Farman Ullah (Pakistan)

17. Febriani Fitria Rahmawati (Indonesia)
18. Fereshta Noori (Afghanistan)
19. Giulia Manccini Pinheiro (Brazil)
20. Herman Yoseph Ferdy (Indonesia)
21. Hisan Hassan (Maldives)
22. Ivan Taslim, M.T (Indonesia)
23. Jekulin Lipi Saikia (India)
24. Kenny Meesters (Netherlands)
25. Karla Louise P. Ceguerra (The Philippines)
26. Kaushal Raj Gnyawali (Nepal)
27. Lauren Vinnell (New Zealand)
28. Manau P. Renagi (Papua New Guinea)
29. Marwa Mohsen Zaki Elmenshawy (Egypt)
30. Maryam Sedghi (The Islamic Republic of
Iran)
31. Marikris de Guzman (The Philippines)
32. Mohd Haizal Jamaluddin (Malaysia)
33. Nazmul Kabir Al-Mehmud (Bangladesh)
34. Ngu Shwe Zin Htet (Myanmar)
35. Nickola Loodin (New Zealand)
36. Nurul Sri Rahatiningtyas, S.Si, M.Si
(Indonesia)
37. Peruzzo, Raiza Sartori (Brazil)
38. Pradip Khatiwada (Nepal)
39. Qoriatu Zahro (Indonesia)
40. Ramak Heidari (The Islamic Republic of
Iran)
41. Repaul Kanji (India)
42. Septian Firmansyah (Indonesia)
43. Serikzhan Atanov (Kazakhstan)
44. Shoaib Ahmed, M.Engg (Pakistan)
45. Suba Madurangani Hewavidana (Sri
Lanka)
46. Syarifah Aini Dalimunthe, M.Sc (Indonesia)
47. Tamara Faith Kamanga (Malawi)
48. Thu, Vo Thi (Vietnam)
49. Timothy Tadarea (Samoa)
50. Vo Dinh Suc, M.Sc (Vietnam)
51. Witchuda Tassanasuwan (Thailand)

Organizer

(in alphabetical order)

1. Ade Ayu Kurnia
2. Ardito M. Kodijat
3. Ganni Ramadian Mulya
4. Sachi Suzuki, Ph.D
5. Sella Octavia
6. Ester Rosita, SE
7. Prof. Dr. Gadis Sri Haryani
8. Dr. Hidayat, S.Kom., M.Sc
9. Irina Rafliana, M.Si
10. Nurul Wulan Purnama, SE
11. Prof. Dr. Robert M. Delinom
12. Achmad Alfian Syah
13. Devita Marwana
14. Fajar Shidiq
15. Giovanni Cynthia Pradipta, S.T.
16. Hilman Arioaji
17. Meliza Rafdiana
18. Muhammad Reperiza Furqon, S.T, M.T
19. Neneng Susilawati
20. Niswa Nabila Sri Bintang Alam
21. Nuraini Rahma Hanifa, Ph.D
22. Riski Hidayat
23. Risye Dwiyani
24. Saena Sabrina, S.Ikom
25. Shahasrakiranna, M.Si.
26. Tasril Mulyadi
27. Wina Natalia



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YOUTH AND YOUNG PROFESSIONALS IN SCIENCE, ENGINEERING,
TECHNOLOGY AND INNOVATION FOR DISASTER RISK REDUCTION
IN ASIA AND THE PACIFIC

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