

INGSA Asia Capacity Building Workshop Report

“Biodiversity and Its Research Management”

22nd & 23rd September 2019

On the 22nd and 23rd of September 2019, the International Network for Government Science Advice (INGSA) Asia Chapter organized the INGSA Asia Capacity Building Workshop themed “Biodiversity and Its Research Management” in Jakarta, Indonesia in collaboration with the Indonesian Young Academy of Sciences (ALMI), Indonesian Society of Microbial Ecology (InSME), International University Liaison Indonesia (IULI), Knowledge Sector Initiatives (KSI) and the Global Development Network. The two-day workshop was attended by 25 participants from Malaysia, Pakistan, Bangladesh, India, Nepal, Indonesia and Singapore.



Participants and committee members of the INGSA East Asia Capacity Building Workshop in Jakarta, September 2019

Day 1: 22nd of September 2019

Registration and welcoming remarks: Registration for the workshop began at 8.30am, followed by welcoming remarks from Dr Tatas H.P. Brotosudarmo, Co-Chair of ALMI and Director of Research Centre, Ma Chung Research Centre for Photosynthetic Pigments. Dr Tatas introduced a book titled “SAINS”, essentially a consensus report on the biodiversity of Indonesia written by 267 young scientists and 50 ALMI members, which he further shared about during his plenary session. This was followed by a welcome address by Prof. Kavita Shah, member of the INGSA Asia Steering Committee, who introduced INGSA and its importance as a platform to enhance scientific evidence in informing policy at all levels of government. Farah Ismail, Regional Programme Officer of INGSA Asia, then gave the participants an overview of the role and function of INGSA Asia as well as the objectives of the workshop. She also encouraged all the participants to stay connected with INGSA Asia through social media platforms such as Instagram, Facebook and Twitter. Finally, Dr Chairil Abdini, General Secretary of the Indonesia National Academy of Sciences, gave all the participants a warm welcome and wished everyone a fruitful time at the workshop.



Welcome address by Prof. Kavita Shah, member of the INGSA Asia Steering Committee

Keynote address: Tan Sri Zakri Abdul Hamid, former Science Advisor to the Prime Minister of Malaysia, INGSA Asia Advisor and Founding Chair of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), gave a presentation on “Personal Journey: Science Advice in the Region”. He informed participants that up to one million plant and animal species are at risk of extinction within the next decade due to human activity. Tan Sri also spoke about the importance of INGSA as a platform for science-policy exchange in order to align the goals of environmental protection together with human development.

Plenary session 1: Asian research landscape, Biodiversity and its challenges.

The panel of speakers who shared their experience in the field of biodiversity research included:

- Dr. Tatas Brotosudarmo on “Science for Indonesia Biodiversity”. Dr. Tatas described the need to transform Indonesia from a resource-based economy to one that is knowledge-based. Using the book “SAINS”, he spoke about how knowledge on the rich biodiversity of a country can be documented and compiled to promote evidence-based policy to wisely use the natural resources that are available in the country. Dr. Tatas also stressed on the need to maintain and/or curate a comprehensive database of the biodiversity in a country, which can be accessible to the public and also to policymakers.
- Associate Professor Reuben Clements, Co-founder of the NGO Rimba, on “How can researchers catalyse the development and implementation of environmental policies and legislation?” Assoc. Prof. Reuben used his own NGO as an example of how his team’s research on the Malayan tiger, and many other endangered species in the state of Terengganu in Malaysia resonated with the state ruler and the public which played a crucial role in the development of the first ever ‘fatwa’ or Islamic law against wildlife poaching, recognizing wildlife poaching as ‘haram’ (forbidden). Participants were then asked to give examples of scientific policies that they have contributed in and towards their development and implementation.



Plenary session 1 featuring Dr. Tatas Brotosudarmo (Left) and Associate Professor Reuben Clements (Right)

Plenary session 2: The importance of communicating science effectively to decision makers.

- Assoc. Prof. Reuben Clements gave a talk titled “Using the CARING approach to influence decision makers to adopt pro-sustainability behaviours” using the 6 Principles of Persuasion by behavioral scientist Robert Cialdini, namely :

1) Reciprocity	4) Authority
2) Commitment/Consistency	5) Liking
3) Social Proof	6) Scarcity

Assoc. Prof. Reuben then gave tips on how these principles can be used when pitching research ideas and how they can also be applied in various scenarios. Using the list of policies contributed in the first plenary session, participants were then asked to list the Principles of Persuasion that they have used in order to ensure the development and implementation of those policies.

Dr. Roby Muhamad, ALMI member and Secretariat Office of President of Republic Indonesia, gave a talk on “Science Matters”. He emphasized on building and improving the ability of scientist to communicate effectively and ethically with policy makers. Talking from his experience policy practitioners need fast, direct and compact input as well as information which are easy to understand. Scientist need to learn how to inform policy practitioners in such manners without compromising ethics and truth.

In addition, communication skills will also lead to deeper interactions and discussions between scientists and policy makers. This is very important in the context of evidence-based policy making.



Dr. Roby Muhamad speaking during the second plenary session

Case study 1: A fictional case study titled “Coralesia” was presented. The case study addresses the issue of balancing biodiversity sustainability and indigenous population interests. Participants debated and took on various roles of stakeholders involved in the case, and were asked to reflect on several areas, including:

- How should traditional ecological knowledge (TEK) be treated in this context?
- What is the distinction between TEK and indigenous beliefs/worldview?
- Can and should TEK be held to the standards of science?
- How can it contribute knowledge that science cannot?



Participants hard at work on the first case study

Day 2: 23rd September 2019

Plenary session 3:

- Dr. Haris Gunawan, Deputy of Research & Development, Peat Restoration Agency (BRG) Indonesia gave a presentation on his work that raises the awareness of local communities on peat fires and how they contribute towards haze and smog. Since the establishment of BRG in 2016, the agency has been working continuously to restore peatland in Indonesia. Dried peatland is the main reason for peat fire and one of many factors contributing to dried peatland is the building of large canals for agriculture and logging. BRG in their Peatland Restoration plan decided to focus their restoration project in 7 provinces in Indonesia, namely Riau, Jambi, South Sumatera, West Kalimantan, Central Kalimantan, South Kalimantan and Papua.

To achieve the restoration target BRG is involving the participation of related institutions, experts, universities and is working in coordination with foreign donors and philanthropic institutions. They have also worked with local governments and approached local communities to take part in this project.

The involvement of local administration and communities also creates a stronger sense of belonging, including maintaining and safeguarding what had been achieved. On the technical front, these involvements are also important in making sure that equipment, such as water

pumps, are always kept in good running conditions to be able to maintain a stable degree of wetness of the peat soil.

By end of 2018, BRG had managed to restore more than 679,901 hectares of peatland in the seven provinces. Part of this restoration process, covering 268,472 hectares, was conducted with various partners under the direct supervision of BRG.



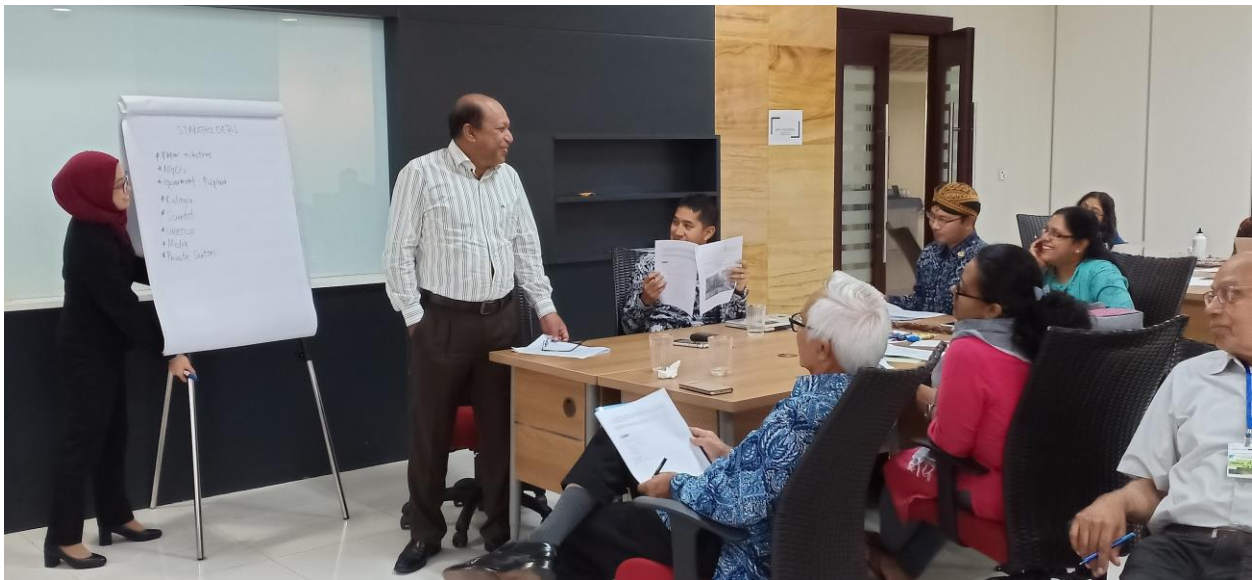
Dr. Haris Gunawan speaking during the third plenary session

- Dr. Lukas Laksono Adhyakso, Program Director of World Wildlife Fund (WWF) Indonesia on “Sharing experience: Building network with the scientist to manage biodiversity in Indonesia”. Dr. Lukas shared his experience working with policymakers to protect the wildlife in the country, and shared the strategic plans and programmatic outcomes of the WWF by the year 2023, which are:
 1. To reduce the trade and poaching of iconic and threatened terrestrial and marine species by at least 50%.
 2. To secure the quality of critical habitat and wildlife pathways to ensure that priority species are thriving.
 3. To reduce human-wildlife conflict by at least 50% in their habitats.
 4. To develop scientific and innovative approaches to support wildlife population recovery and survival.



Dr. Lukas Laksono Adhyakso presenting during the third plenary session

Case study 2: A fictional case study titled “Pulpinea” was presented. The case study addresses a pulpwood crisis featuring a potential trade-off between biodiversity and the economy. After debating and assuming various roles of stakeholders involved in the case, participants were also asked to reflect on other issues such as dealing with media and international pressure.



Participants discussing the issues presented in the second case study

Oral Highlights Presentations

- Tan Jaymi, postgraduate student from Sunway University Malaysia gave a presentation on the “INGSA Postgraduate Student Network”, describing networks of postgraduate students in the United States, Canada and Europe who are working on promoting science advice for policy making, and the need for similar networks to be set up in Asia.
- Chitra Pokharia, postgraduate student from Banaras Hindu University, Varanasi, India gave a presentation on “Cultural and Religious Beliefs Affecting the River Ganga Water Quality at Varanasi”. Chitra described the various sources of water pollution at the Ganges river, the impact of its pollution on the livelihood of the Indian communities, as well as the importance of the cleanliness of the Ganges river.

Final Discussions: Future Strategies and Concluding Remarks

Participants formed groups and discussed strategies to build capacity for science advice in their respective regions. Prof. Kavita Shah then gave her concluding remarks.





Participants discussing ideas and collaborative opportunities to build capacity for science advice in the region.

Talk show

A talk show titled “Doing Research: Assessing the Social Sciences Research System in Indonesia” was hosted by Gita Putri Damayana, Executive Director, Centre for Indonesian Law and Policy Studies in collaboration with the Indonesian Young Academy of Sciences (ALMI) together with Knowledge Sector Initiatives (KSI) and the Global Development Network. Speakers included Dr Inaya Rakhmani, Assistant Professor, Faculty of Social and Political Sciences, Universitas Indonesia, and Dr. Zulfa Sakhiya, Assistant Professor, Faculty of Languages and Arts, University of Universitas Negeri Semarang, Indonesia. The talk show was streamed live on the KSI website.

Closing ceremony and presentation of certificates

The INGSA Asia Advisor Tan Sri Zakri Abdul Hamid invited Dr Chairil Abdini, General Secretary of the Indonesia National Academy of Sciences and Dr Teguh Rahardjo, Executive Director of the Indonesian Science Fund (DIPI) onstage to deliver a few words of wisdom and thanked them for gracing the workshop. Dr. Tatas Brotosudarmo presented Tan Sri Zakri Abdul Hamid with the book SAINS as a token of appreciation. Tan Sri Zakri Abdul Hamid ended the workshop by presenting certificates to all participants.



(Top) Dr. Tatas Brotosudarmo presenting Tan Sri Zakri Abdul Hamid, INGSA Asia Advisor with the book SAINS, accompanied by Dr Chairil Abdini, General Secretary of the Indonesia National Academy of Sciences (Left) and Dr Teguh Rahardjo, Executive Director of the Indonesian Science Fund (DIPI) (Right). (Bottom) Tan Sri Zakri Abdul Hamid presenting a certificate to one of the participants.