

PARTICIPANTS OF THE SECOND TERRA SCHOOL

# TERRA School 2021 Report: Engaging online

March 2021

ABOUT THE ORGANIZORS

## The 2nd TERRA School

by Yuko Onishi and Rob Kuipers

TERRA School (Transdisciplinarity for Early career Researchers in Asia School) is a short-term intensive course on transdisciplinary research in practice, organized by the Research Institute for Humanity & Nature (RIHN) in collaboration with the Regional Centre for Future Earth in Asia. It aims to build capacity on transdisciplinary research, where researchers and societal stakeholders work together to address challenges facing humanity. It is envisioned to raise awareness of what transdisciplinarity can offer and the challenges involved in its implementation.

Its second training course was held from March 5th to 19th, 2021. Due to the spread of COVID19, this year's school was held entirely online through various platforms such as Zoom, Miro, Slack and SpatialChat. The course featured lectures, workshops and interactive sessions on theories and practice of transdisciplinary research. It included structured learning on tools and methodologies used in TD (e.g. problem framing, stakeholder analysis and integration) and introduction to the various transdisciplinary research conducted at RIHN.

A total of 17 participants coming from different parts of Asia and Pacific attended the course. Participant's ages ranged from 35 to 44 years old (average of 38 years old) with 13 female and 4 males. All of them had a doctorate degree with varying degree of experiences and currently connected with universities in their respective countries. Their fields of expertise were also varied with a good mix of natural and social sciences.



### RIHN

RIHN has conducted inter- and trans-disciplinary research in search of the ideal interaction of humanity and nature since its foundation in 2001, in addition to academic research spanning the natural sciences, humanities, and social sciences, while also considering regional characteristics and historical contexts.

### Future Earth Asia Centre

Future Earth is a new research initiative launched in 2015, which brings together 24 large global environmental change research networks. Interdisciplinarity and Transdisciplinarity are key concepts in Future Earth. RIHN host the Regional Centre for Future Earth in Asia.

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Research. Innovation. Sustainability.

# Summary of the program

## Day 1: introduction

Prof. Hein Mallee welcomed the participants and provided a presentation on transdisciplinarity, Future Earth, and RIHN. Afterward, Dr. Agnes Rampisela gave a plenary lecture on the principles for enabling TD research. Dr. Rampisela worked as a co-leader of RIHN research project on Integrated Water Resources Management, where she was the primary investigator for the Jeneberang watershed project site in Sulawesi Island in Indonesia. The lecture provided tips for practicing TD research, such as encouraging dialogues with residents. Based on her research experience, Dr. Rampisela shared five principles for successful TD research: research should be aimed at solving real-world problems and should combine different types of knowledge by partnering with societal stakeholders; project should promote stakeholder legitimacy and balance, projects should encourage stakeholder participation and benefits (i.e. societal and academic outputs); projects should facilitate collaborative actions; and projects should foster project sustainability (i.e. promote self-initiative activities by stakeholders and sufficient support to ensure that projects activities continue after support from the research project ends).

## Day 2: TD methods

On the second day, Dr. Osamu Kozan presented a case study about the Tropical Peatland Society project at RIHN for which he works as the project leader. This project addresses the problem of frequent and large-scale fires in tropical peatlands in Indonesia. During the presentation he shared why the project decided to adopt a transdisciplinary

approach and how it has benefitted the project. For the Peatland project, there were 5 reasons to adopt a TD approach, which were; to better understand the essence of the problems in collaboration with residents; to carry out long-term grassroots exchange activities; to analyze and understand both the scientific mechanisms and the societal context; to foster and mediate dialogue between residents and the government, local governments, and companies; and to make recommendations for international action based on this experience.

During the workshop part, Dr. Lambino introduced rich pictures as a tool to explore wicked problems. Rich pictures are "a compilation of drawings, pictures, symbols, and text that represent a particular situation or issue from the viewpoints of the person or people who draw them" (Open University). These drawings of detailed representations of problematic situations can help to understand the complexity of the entire situation, encourage people to think deeply about the problem, to organize thoughts, and to analyze interactions. They can be a useful tool in participatory research process to encourage discussions and attain shared understandings among stakeholders. During the workshop, the participants were split into four break-out groups to create their own rich pictures. Each group was asked to decide on a problem to work on and to create a rich picture about this problem in Miro by including relevant stakeholders, key stakes, their relationships and other important elements.

## Day 3: sanitation and co-creation

On the third day, RIHN researchers introduced other TD initiatives at RIHN. Taro

Yamauchi (project leader) and Sikopo Nyambe (researcher) provided a presentation about stakeholder engagement in the Sanitation Value Chain Project at RIHN. They reflected upon their experiences with engaging local children and youth in the project at one of their field sites in Zambia. This was not always an easy process, and they shared that good collaboration in TD research particularly requires clear community benefit, a snowball recruitment process (i.e. stakeholders being involved in identifying other stakeholders), and researcher paying attention to how realities, priorities, skills, and values are different among participants.

During the second workshop, Dr. Lambino introduced stakeholder analysis as a tool to identify relevant stakeholders to address a wicked problem. Stakeholder analysis is an important step in identifying, analyzing and prioritizing who and how to engage stakeholders in a TD process. To try this method, the participants were divided again into break-out groups and were tasked to create their own stakeholder analysis in Miro based on the wicked problem that they worked on in the first workshop.

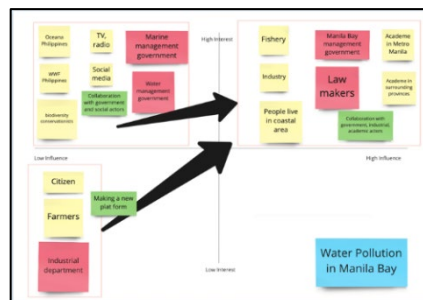
In the following session, Dr. Yuko Onishi introduced the Co-creation project, which aims to compile the lessons learned from the experiences of implementing/participating in TD projects and to find effective methods for sharing these lessons. She introduced some of the findings of the project and tips to improve stakeholder participation.

## Day 4: meeting with stakeholders

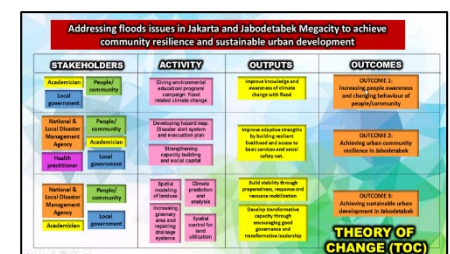
On day 4, TERRA school was joined by researchers and stakeholders from the



Workshop 1: Rich pictures



Workshop 2: Stakeholder analysis



Final group presentation

FEAST project at RIHN. During the first part, Steven Mcgreevy (project leader) and Norie Tamura (senior researcher) talked about the TD approach of the project. Specifically, the project works on 1) food system mapping and assessment; 2) patterns of food consumption and production as well as food and agriculture related social practices and their socio- cultural meanings; and 3) participatory foresight methods, in order to enact social change by partnering with stakeholders to envision plausible and desirable food futures and initiating experiments and actions such as food policy and planning, smartphone apps, and games. The project is active in four countries (Japan, Thailand, China and Bhutan) and works together with an extensive network of stakeholders, including academic institutions, governments, academic networks, private sector, and civil society. Dr. Mcgreevy and Tamura reflected on common challenges for TD research and how they initiated the TD project in several field sites in Japan.

In the second half, the TERRA school participants received the unique opportunity to also talk with some of the stakeholders in the FEAST project and to hear about their experiences and lessons learned. This year's session was joined by Ms. Nishida, Mr. Suzuki and Mr. Yoshida from the field site in Nagano (Japan). Simultaneous translation was provided so that the participants could converse freely using both English and Japanese.

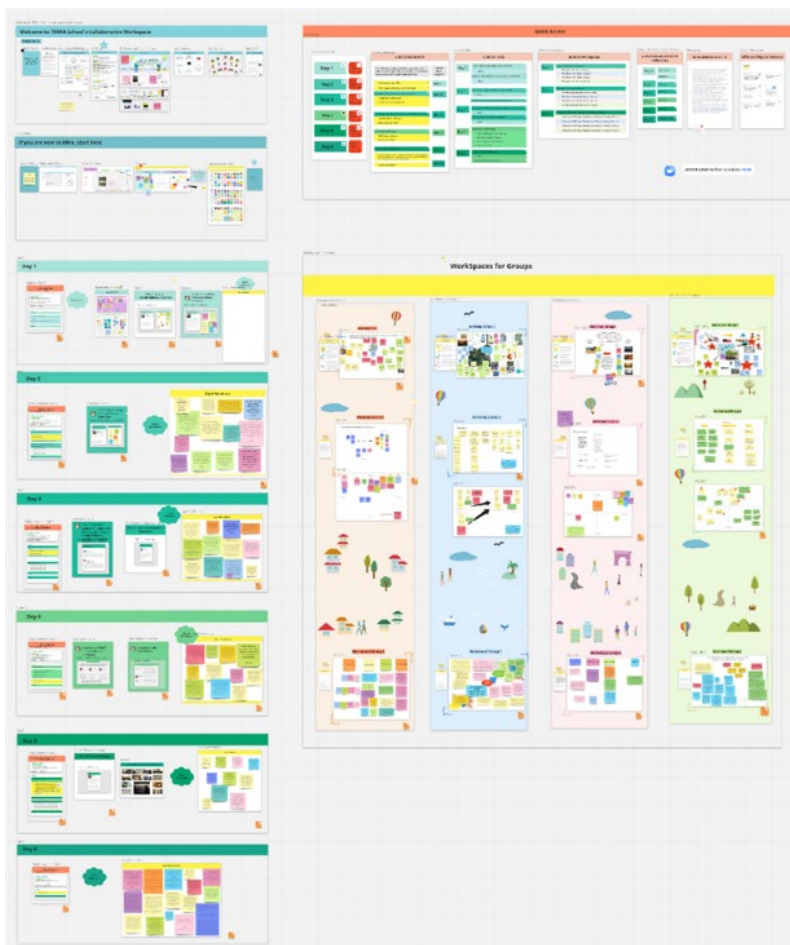
### Day 5: theory of change

On day 5, Dr. Steven Mcgreevy introduced theory of change (TOC) as a tool to identify research objectives and pathways for change in TD research. To demonstrate how a TOC can be developed, he introduced the TOC created in the FEAST project and discussed how it was developed overtime. During the workshop section, the Terra school participants were then divided into break-out groups and were asked to create their own theory of change in Miro based on the

wicked problem that they worked on in the first two workshops. Each group developed 2-3 outcomes, taking into account the different stakeholders they identified during workshop 2, and developed concrete steps for how to achieve these outcomes.

### Day 6: reflection

On the last day, the participants presented their group work. Each group presented for 10 minutes about the wicked problem they chose, their proposed project, identified stakeholders, research objectives and theory of change. The proposals focused on four wicked problems: peatland restoration in Indonesia, improving ocean quality along megacities in the Manila Bay area, creating holistic solutions for the protection and rehabilitation of mangroves in Malaysia, and addressing flood issues in Jakarta and Jabodetabek mega city to achieve community resilience and sustainable urban development.



Online platform for workshops and daily programs

## Program

Day 1: March 5, Friday	
14:00 - 14:40	Terra school kick-off and introductions
14:40 - 15:00	Course overview and expectations check
15:00 - 15:20	Talk 1: Why do transdisciplinary research
15:30 - 16:20	Keynote: Enabling transdisciplinary research
Day 2: March 10, Friday	
14:05 - 14:40	Case study 1: Solving Indonesia's large-scale fires
14:40 - 15:40	Workshop 1: Exploring a wicked problem using rich pictures
15:50 - 16:20	Plenary group presentations 1: Rich pictures
Day 3: March 12, Monday	
14:00 - 14:35	Case study 2: Engaging a youth group in Zambia
14:35 - 15:35	Workshop 2: Stakeholder analysis
15:45 - 16:00	Plenary group presentations 2: Stakeholder analysis
16:00 - 16:25	Talk 2: Lessons Learned from TD projects
Day 4: March 15, Monday	
14:05 - 15:35	Case study 3: FEAST project (lessons from engagement in Nagano, Kameoka, Kyoto)
15:45 - 16:25	Interaction with FEAST project partners
Day 5: March 17, Wednesday	
14:10 - 14:40	Talk 3: Theory of change
14:40 - 15:40	Workshop 3: TD project objectives and theory of change
15:50 - 16:20	Virtual "happy hour" with TERRA school alumni
Day 6: March 19, Friday	
14:10 - 15:10	Plenary presentations 3: Group presentations TD projects
15:20 - 16:00	Final reflection session

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