Summary Report APBON 22nd Web Seminar

1. Date: 11th October, 2024

Time: 15:00-17:00 JST

(13:00 in Cambodia, Thailand, Indonesia, Vietnam)

(11:45 in Nepal)

(14:00 in Malaysia, Philippines, China)

2. Location, Participants

· Webex Meeting Room

· 18 participants

· MC: Dr. Muraoka

3. Program

Presentation 1:

"Nature Futures Framework: a flexible tool to support the development of scenarios and models of desirable futures"

[Prof. Dr. Shizuka Hashimoto]

In this presentation, Dr. Hashimoto gave an overview and background of the Nature Futures Framework (NFF), a new tool developed by the IPBES expert groups on scenarios and models to create nature-centered scenarios for desirable futures. Against some limitations of existing global scenarios like SSPs and RCPs, which do not fully reflect the diverse policies and management options related to nature, the NFF was developed with contributions from multiple stakeholders and was officially welcomed by member states at IPBES9 in Bonn, 2022. He explained that the framework has three primary values of nature: "Nature for nature", which represents nature's intrinsic value and right to exist independently from humans; "Nature for society", which represents nature's instrumental value in providing benefits to society such as through ecosystem services; and "Nature as culture / One with nature", which is a relational value and means people are not separate from nature.

Dr. Hashimoto mentioned that in the last few years, the IPBES task force has been working on developing methodological guidance to help people utilize the NFF in creating scenarios and narratives (Japanese version of the guidance will be available soon). He also presented the illustrated narratives and modelling of the framework created by the task force in terms of conceptual level. Additionally, IPBES are currently promoting dialogue between communities and compiling the knowledge gaps in existing scenarios and models so that the scientific community can work on filling these gaps for future use in IPBES assessment.

Q&A:

- **Q.** How could this new concept influence the IPBES assessment or the implementation of the upcoming Montreal...Global Biodiversity Framework in the near future?
- That is a very important point. Since the Nature Features Framework is Α. now recognized as a product of the IPBES future assessment, it is basically encouraging scientific communities conducting the IPBES assessment to refer not only to the existing scenarios but also to those created based on the Nature Features Framework. To my understanding, many existing scenarios focus on analyzing the implication of future and uncertainties, such as how different development pathways impact on nature and nature's contributions to people. However, it is just focusing on the impact. The NFF is taking a bit more target-seeking or backcasting approach when we first define a desirable future, and referring to different value perspectives and then trying to understand what kinds of futures or societies can lead us to such direction. It's a more goal-oriented approach. This is a major difference between the scenarios based on the NFF and existing scenarios like SSP and RCP. Both will be useful information for future IPBES assessment. This year we launched the monitoring assessment, and then we are going to launch the spatial planning assessment soon. Next year we are going to launch the second round...global assessment. The spatial planning assessment and the second global assessment pay specific attention to the role of future scenarios in helping decision-making. At that time, I think many of the new NFF-based scenarios will be reflected on the assessment. With regards to the second point of your question – how the NFF can contribute to achieving the Global Biodiversity Framework—actually this framework clearly mentioned but I don't know how many of us understand that point. One of the targets, Target 14, is integrating biodiversity into decision-making at every level, and refers to the full integration of not only biodiversity but its multiple values into the policy, so it

depends on how we understand the multiple values of biodiversity. But from my understanding, this refers to a different perspective ascribed to nature. According to the value assessment of IPBES, our current society is said to rely too much on the instrumental value of nature. We often refer to the economic evaluation of ecosystem services of nature without understanding the importance of other types of values, so the value assessment suggests we should change the way we value nature, recognizing that there are different types of values. Therefore, recognizing other types of values other than instrumental ones, and then evaluating these values, and incorporating them into our decision-making for the future will improve our conservation effort to the future. This is not a direct answer to your question, but I just wanted to highlight how it is connected to Kunming-Montreal Global Biodiversity Framework.

(Comments)

- The University of Amsterdam was invited by European communities to help plan protected areas across Europe according to the 30by30. They used the NFF to develop scenarios and models. One is concentrating on biodiversity conservation, the second one is more culturally oriented, and the third aims to develop income from tourism. They proposed these to the European community to assist in planning a protected area network across the EU. This is one example. [Dr. Trisurat]
 - You mentioned the 30by30 target. I think the NFF is also useful to understand which values are prioritized when we discuss the policy interventions. On discussing the 30by30, some people say that we should expand protected areas, but to me, it will be prioritizing the intrinsic value of nature. There are also people advocating the effective use of other areabased conservation measures like OECM (Other Effective Area-Based Conservation Measures), and to me, OECM is a sort of the mixture of instrumental and relational values, which allows us to manage land or ocean in a sustainable manner while allowing human use. So, the NFF is not only creating the scenarios, but also helps us understand existing policies and interventions from different perspectives, especially focusing on which value perspectives are prioritized, which is often implicit in policies. By using this NFF lens, we can understand such implicit value assumptions. [Dr. Hashimoto]

Presentation 2:

"Can new cities help build nature-positive futures? A case study of Jakarta Metropolitan Area"

[Dr. Perrine Hamel]

Dr. Hamel presented her lab's research on nature-based solutions in urban areas of Southeast Asia. She pointed out that the rapid urban growth in these cities not only creates challenges within urban areas but also impacts agricultural and forested areas outside the cities.

In her presentation, two projects were shared as case studies. The first is in new towns in Jakarta, where private developers are promoting sustainable urban development. By analyzing policy documents and master plans using the Nature Futures Framework (NFF), the research found that "Nature for society" and "Nature for nature" values are dominant in these towns, suggesting that integrating different nature values doesn't require trade-offs and developers can enhance these values without significant additional costs. Dr. Hamel also emphasized the importance of equity in these urban futures considering the high levels of inequality in Southeast Asian cities. The second project in Bangkok explores how vulnerable communities in informal settlement value urban nature under the Baan Mankong Social Housing program, revealing that urban nature takes various forms in these communities, such as small gardens and termite mounds with high spiritual value. Dr. Hamel also shared findings from field interviews and surveys that showed different stakeholder preferences for nature-based solutions.

She concluded that the NFF is a useful tool to disentangle the complex naturerelated values in urban nature-based solutions, while mentioning some ongoing research challenges and the need for capacity building and education of the framework in Southeast Asia.

Q&A:

- **Q.** You considered several elements of nature, including ones like water, soil, and biodiversity. The first question is what kinds of aspects of nature you are considering? Secondly, as I am studying about biodiversity, I would like to ask what kinds of aspects of biodiversity urban people are interested in?
- **A.** The different types of urban nature we consider are actually quite broad. For the content analysis, we looked at anything environmentally related first

such as different biomes and types of green infrastructure (we call them in cities in particular). This ranges from very natural elements like wetlands or forests —some of the master plans, for example, mention conserving forest in some areas— to very engineered man-made structures like green roofs, green walls, and some of the bioretention systems. It is a very broad concept of nature that includes soil, air, water, and fauna and flora of course.

For the second question, some of the key questions I know are being researched in Singapore and to some extent in Southeast Asia. These are about relevant indicators for biodiversity and urban biodiversity because biodiversity is of course multi-faceted and depends on which species we are talking about, and the simple landscape metrics often used as proxies for urban biodiversity do not necessarily do justice to this complexity. What I mean by this is that if we use habitat size or area as one proxy, this is of course very limited because it does not necessarily take into account connectivity and the use of special resources for some species for example. So, I would say that quite a big research gap is around finding metrics and indicators that people like myself (we are not ecologists by training, but working on bringing nature into cities for instrumental values as well as intrinsic values) use, and developing these metrics would lead to better plan for cities while considering biodiversity values.

- **Q.** How do you treat the invasive species in your city?
- A. I have not worked on invasive species myself, so I might invite Dr. Trisurat and Dr. Hashimoto to contribute as they are more experts on this question. What I will say is that from many "Nature for nature" lens for cities, this consideration of invasive species is of course important. From an instrumental perspective, it does not really matter because invasive species can provide some benefits to people. However, from an ecological integrity value or "Nature for nature" value, this would be an important consideration. I know it is considered in many city biodiversity indices such as the Singapore index for biodiversity. I am 99% sure that invasive species are one of the indicators, and the same goes for the IUCN Urban Nature Indexes. It is a part of the conversation, but often reduced to some simpler indices for practical purposes. (Comments)
 - → I think you nicely addressed the question. It is actually up to the type of stakeholders involved in the process. In some cases, people do not

recognize well about the invasive species, their contributions and influence on nature, and the other type of nature's contributions to people. The choice of stakeholders I think is important, but basic explanations about how invasive species are associated with different body perspectives will be explained by Dr. Hamel. [Dr. Hashimoto]

- → For the case of Thailand, I think we are very concerned about the introduction of invasive species in the natural environment. In urban areas I think it is recognized as an alien species but not very invasive. Sometimes it can attract tourism and recreation. However recently we have a big problem of the invasive species like a fish from Ghana. It caused a lot of problems to the native species along the canal and coastal areas, though a big company would like to bring this species for breeding Terrapin. But these have been released to the environment, and it caused a lot of problems.

 [Dr. Trisurat]
- **Q.** I think you have already explained but I do not clearly understand how you used the NFF for the communication with local people. For me, the concept of NFF itself is good to understand the types of future scenarios, but for the evaluation of the local people's activities I am still not clear about how we can adapt or apply that framework.
- A. For the Jakarta case study, I can share the link to the paper that was published with all the methods in the chat later. Essentially what we have done is establishing a rubric whenever we have a code that is about water pollution for example, we put this as "Nature for nature". As I explained in this context, caring about the water is essentially making sure that we are not polluting the environment, so we consider that as "Nature for nature" and perhaps partly "Nature for society". So, for each category, essentially, we have a clear explanation to be systematic because there can be some interpretation or subjectivity introduced. Similarly, for the content analysis of the interviews, we looked at all the transcripts and did the same work of extracting the different codes so that people say likely that this is expressing a "Nature for nature" type of value. For example, if they say I really care about the trees. I do not want the trees to go away because they were there before us., this would be a "Nature for nature" type of value.
- **Q.** So, each type of ecosystem service or ecosystem function is simply related to the access of the NFF, right?

A. When we talk about ecosystem services, by the definition they are more on "Nature for society". Even in the final tree chart I mentioned, it was heavier on the ecosystem services side "Nature for society", because there were more things that people could probably identify. However, there were also other types of values that are part of the nature's contributions to people to use the best framework, but not necessarily ecosystem services.