UNITED NATIONS UNIVERSITY
UNU-IAS
Institute for the Advanced Study of Sustainability

IPBESを通じた生物多様性の能力形成強化の取組みと展望

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Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)

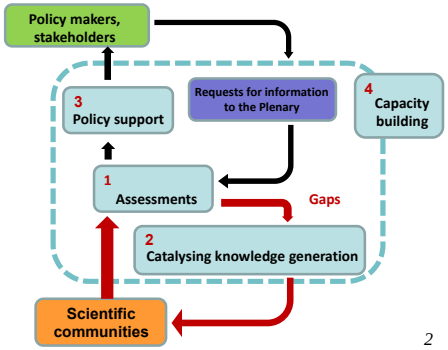
Scientific Background:

- Many ecosystem services related assessments
- But only one focused solely on ecosystem services and human well-being
- Fragmented, multiple frameworks and methodologies
- Scientific credibility varies

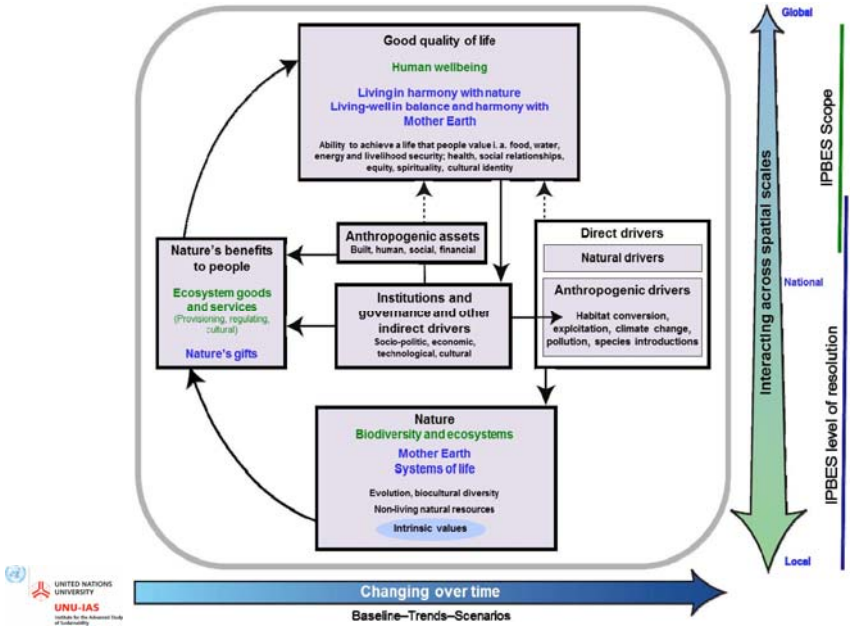
IPBES-2 (Antalya, 9-15 Dec. 2013)

Four key functions of IPBES:

1. Knowledge generation
2. Regular and timely assessments
3. Support policy formulation and implementation
4. Capacity building



IPBES's Analytical conceptual framework



Structure and key elements of the IPBES Work Programme

Platform goal: Strengthen the science-policy interface for biodiversity and ecosystem services for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development

Platform functions, operational principles and procedures

Platform work programme 2014–2018: Objectives and associated deliverables

Objective 1: Strengthen the capacity and knowledge foundations of the science-policy interface to implement key functions of the Platform:

Objective 2: Strengthen the science-policy interface on biodiversity and ecosystem services at and across subregional, regional and global levels:

Objective 3: Strengthen the science-policy interface on biodiversity and ecosystem services with regard to thematic and methodological issues:

Objective 4: Communicate and evaluate Platform activities, deliverables and findings:

Proposed priority capacity-building needs (IPBES/3/3)

Capacity need categories	Needs identified by Governments and other stakeholders
1. Enhance the capacity to participate effectively in implementing the Platform work programme	1.1 Develop the capacity for effective participation in the Platform regional and global assessments
	1.2 Develop the capacity for effective participation in the Platform thematic assessments
	1.3 Develop the capacity for effective participation in the Platform methodological assessments and for the development of policy support tools and methodologies
	1.4 Develop the capacity for monitoring national and regional participation in the implementation of the Platform work programme, and responding to deficiencies identified
2. Develop the capacity to carry out and use national and regional assessments	2.1 Develop the capacity to carry out assessments, including on the lines of the Economics of Ecosystems and Biodiversity (TEEB) initiative
	2.2 Develop the capacity to use assessments to support policy development and decision-making
	2.3 Develop the capacity to develop and use non-market-based methods of valuing biodiversity and ecosystem services
	2.4 Develop the capacity to assess specific priority habitats and ecosystems, including ecosystems that cross ecological and political boundaries
	2.5 Develop the capacity to develop and effectively use indicators in assessments
	2.6 Develop the capacity to value and assess management options and effectiveness
	2.7 Develop the capacity to retrieve and use all relevant data, information and knowledge
3. Develop the capacity to locate and mobilize financial and technical resources	3.1 Develop the institutional capacity to locate and mobilize financial and technical resources
	3.2 Develop the capacity for clearly communicating capacity-building needs to potential providers of financial and technical support

Capacity need categories	Needs identified by Governments and other stakeholders
4. Improve the capacity for access to data, information and knowledge (including the experience of others)	4.1 Develop the capacity for improved access to data, information and knowledge including its capture, generation, management and use (including indigenous and local knowledge)
	4.2 Develop the capacity to gain access to data, information and knowledge managed by internationally active organizations and publishers
	4.3 Develop the capacity for enhancing collaboration among research institutions and policymakers at national and regional levels, in particular for encouraging multidisciplinary and cross-sectoral approaches
	4.4 Develop the capacity for the conversion of scientific and social assessments of biodiversity and ecosystem services into a format easily understood by policymakers
	4.5 Develop the capacity to understand how to combine modern science with local and indigenous knowledge, including facilitating the effective engagement of indigenous and local communities, scientists and policymakers
	4.6 Develop the capacity to gain access to and use technologies and networks that support biodiversity taxonomy, monitoring and research
5. Develop the capacity for enhanced and meaningful multi-stakeholder engagement	5.1 Develop the capacity for effective engagement of stakeholders in assessment and other related activities at the national level, including for understanding who the stakeholders are and how they should be engaged
	5.2 Develop the capacity for effective communication of why biodiversity and ecosystem services are important, and why their many values should be used in decision-making
	5.3 Develop the capacity to effectively use the Platform's deliverables in implementing national obligations under biodiversity-related multilateral environmental agreements

Degree Programmes at UNU-IAS

- **UNU-IAS offers postgraduate programmes** leading to master's or doctoral degrees to strengthen the capacities of academic and scientific communities around the globe.
- **MSc in Sustainability (16)**:

  The Master of Science in Sustainability programme equips students with the knowledge and skills necessary to contribute to solving challenges of sustainability. Drawing on an innovative, interdisciplinary approach, the programme integrates methods and resources from the natural and social sciences, as well as the humanities.
- **PhD in Sustainability Science (8)**:

  The PhD programme in Sustainability Science aims to produce scholars who will become key researchers in the field of sustainability science. The programme takes an innovative approach to sustainability, seeking to promote a better understanding of the issues by incorporating global change perspectives, specifically those related to climate change and biodiversity.

Natural Capital and Biodiversity Course Structure

Week One (8-12 Sept.): Biodiversity in the Context of Global Change (Dr. Osamu Saito)

Lecture 1: Global change and challenges of biodiversity

Lecture 2: Millennium Ecosystem Assessment (MA)

Lecture 3: Convention on Biological Diversity (CBD)

Week Two (15-19 Sept.): Intergovernmental Platform for Biodiversity and Ecosystem Services (IPBES) (Dr. Shizuka Hashimoto, Dr. Ryo Kohsaka and Dr. Osamu Saito)

Lecture 4: Key Functions and Conceptual Framework of IPBES

Lecture 5: Work Programme 2014-2018

Lecture 6: Synergy between indigenous and local knowledge and science

Week Three (22-26 Sept.): Socio-Ecological Production Landscapes and New Commons (Prof. Toshiya Okuro, Dr. Kaoru Ichikawa, and Dr. Anantha Kumar Duraiappah)

Lecture 7: Japan Satoyama and Satoumi Assessment (JSSA)

Lecture 8: SATOYAMA Initiative and Globally Important Agricultural Heritage Systems (GIAHS)

Lecture 9: Wealth accounts

Week Four (29 Sept.-3 Oct.): Valuation and Governance of Ecosystems and Biodiversity (Dr. Anantha Kumar Duraiappah, Prof. Yoshihisa Shirayama, Dr. Suneetha Subramanian)

Lecture 10: Natural Capital and Wealth Accounts

Lecture 11: Marine Biodiversity and Ecosystem Service; Current Status and Future Concern

Lecture 12: Governance of biodiversity and ecosystem services (I)

Week Five (6-10 Oct.): Synergy and trade-off, institution and governance (Dr. Suneetha Subramanian, Prof. Kazuhiko Takeuchi and Dr. Saito)

Lecture 13: Governance of biodiversity and ecosystem services (II)

Lecture 14: Group work – interactive assessment session

Lecture 15: Wrap-up session

INTERACTIVE SESSIONS & ASSESSMENTS

- Group works
- Debate session
- Feedbacks to student work
- Assignment (reports/essays)
- Excursions (field trips)

Group work on building NCB future scenarios

1. Each group (4-5 members) needs to discuss target country or region, and prepare relevant information (statistics, literature, photos, etc.) to build potential future scenarios
2. Scenario planning and approaches will be explained during early part of the course (Lecture 2).
3. **Listen to each other, and try to encourage every group member to speak during group work and group presentation.**

Steps to building scenarios:

1. Time frame is 2030
2. Identify target country, region or community for scenario planning
3. Identify important drivers for the target area
4. Narrow down key drivers to separate different scenarios
5. Develop at least 2 different future scenarios with story lines (population, economic growth, land use, industrial structure, market, politics, governance, technology, ecosystem management, etc.)
6. Discuss and identify what will happen to various ecosystem services, biodiversity and human well-being under each scenario (any tradeoffs or synergies across different ecosystem services of different stakeholders?)
7. Discuss and identify key policy interventions under each scenario

What should be included in group presentation:

1. Why did your group select the target area (country, region, etc)?
2. What are current and future challenges and opportunities for the target area?
3. Among those challenges and opportunities, what are important drivers for the target area to project its future path, and why?
4. What are future scenarios for the target area?
5. What will happen to various ecosystem services, biodiversity, and human well-being under each scenario?
6. Are there any tradeoffs or synergies across different ecosystem services, and across scales (upstream area and downstream area)?
7. What might be effective policy interventions to mitigate negative impacts and tradeoffs under each scenarios?

Interactive Session/Mid-Course Assessment:
DEBATE SESSION

17 Oct., from 16:00-17:30 hours/ 21 Oct., from 17:00-20:00 hours

- Group debate on one of the following topics:
  - A. Our society should adopt adaptation measures that move us towards a technology-driven future (future society relying strongly on technology and highly managed, often engineered ecosystems).
  - B. Traditional knowledge is relevant for adapting to climate change.
- Allocation of debate topics:
  - Groups 1 (positive) and 2 (negative) discuss topic A, Groups 3 and 4 respond
  - Groups 3 (positive) and 4 (negative) discuss topic B, Groups 1 and 2 respond

Time	Topic	Debate	Responding
16:00-17:00	A	Group 1 (affirmative) vs. Group 2 (negative)	Group 3&4
17:00-17:30		Discussion, feedbacks, and wrap-up	
17:30-18:00	Break		
18:00-19:00	B	Group 3 (affirmative) vs. Group 4 (negative)	Group 1&2
19:30-20:00		Discussion, feedbacks, and wrap-up	

※ Make comments on the good points and the weak points for improvement

Time Table for each debate topic (50 min for each topic debate):

10 min	Affirmative Group	Statement with evidence
10 min	Negative Group	Statement with evidence
5 min	Affirmative Group	1st Counterargument (rebuttal)
5 min	Negative Group	1st Counterargument
10 min	Questions and comments from responding groups	5 min/responding group
5 min	Affirmative Group	2nd Counterargument
5 min	Negative Group	2nd Counterargument

How to prepare for debate exercise:

- Gather evidence that will be used to support your group's position.
- Using this evidence as an aid, prepare a set of persuasive arguments.
- Consider what the opposition will say.
- Think through all the possible arguments your opponents will make.
- Be creative!

Field Excursion to Hanno, SBEM

Date: 17 December 2014, 11:30am to 16:00
Time Table:

11:30: Hanno Station (Seibu-Ikebukuro Line) around ticket gate
12:00: Hanno Kyodo-kan
12:00-15:00: Walking Satoyama Ecotour
15:00-16:00: Q&A session on Hanno's ecotourism

佐渡エクスカーション＆現地ワークショップ

- 2015年3月19-21日：国連大の大学院生5名が佐渡のエコツアー参加・民泊体験
  - 事前学習（佐渡の自然，社会，歴史等）
  - 中心テーマ：佐渡の自然を活用した新たなエコツーリズムのあり方を検討
  - エコツーリズムの定義，原則，他の地域の事例調査
- 2015年3月22日：佐渡の自然資本を活用した新たな（エコ）ツーリズムについて共に考える現地ワークショップ
  - 地元研究者，観光協会，観光や農林水産業の佐渡市行政担当者，NPO関係者等，佐渡市の主要な関係主体を集めて上記課題について検討
  - 大学院生チームも事前学習と現地での体験を踏まえて，自分達の提案を発表（英語）

International Workshop on Developing Training Programmes for Biodiversity and Ecosystem Services Scenarios

- Date: 17-19 June 2015
- Venue: United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS)
  5-53-70 Jingumae, Shibuya, Tokyo 150-8925, JAPAN
- Language: English
- Organizers:UNU-IAS, ScenNet
- Funders: Belmont Forum, Japan Science Technology Agency, and Ministry of the Environment, Japan

This workshop is designed to develop training programmes with specific focus on biodiversity and ecosystem services scenarios and modeling, in collaboration with IPBES capacity building task force.

Objective:

1. Review and share best practices and lessons on utilization of findings from biodiversity and ecosystem service scenario and modeling studies, and capacity building activities on biodiversity and ecosystem scenarios and modeling.
2. Co-design a pilot training programme(s) on biodiversity and ecosystem service scenarios and modeling by identifying the target, duration, required knowledge and skills, course outline, module components, training materials, list of instructors, etc.
3. Discuss implementation plan of the training programme(s) and future work plan.

まとめと結論

- **国際的な動向**： 多様な国，地域に適用可能な生物多様性と生態系サービスに関連した多様な能力形成プログラムに関する知識・経験の集約，新たなプログラム形成が進む
- **教育と研究の連携**： 教育プログラムと生態系サービス関連研究プロジェクトの連携：研究プロジェクトへの参加を通して実践的な調査のスキルやコミュニケーションスキルを身につける
- **教育と実践の連携**： 調査対象地域へのフィードバックと対話・・・「やりっぱなしにしない」，アカデミックな視点からのフィードバックだけでなく，社会実装を見据えたフィードバック，地域の人々も一緒に学んで元気になる

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ご清聴ありがとうございました