

# Promoting Social Inclusion through Sustainability Science: Initiatives of UNESCO Jakarta Office

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## Social and Human Sciences

### **A Sustainable Future: Supporting Indonesia's Strategies to Address the Social Implications of Climate Change**

- Deforestation, forest fires, and degradation of peat land have placed Indonesia as the world's third largest emitter of greenhouse gases.
- Vulnerability to the impacts of climate change due to geography, topography and socio-economic factors.
- Project applies the knowledge on the interlinked social dimensions of climate change to adaptation and mitigation strategies.
- The use of interdisciplinary research as a tool to obtain this knowledge and apply it when developing national and sub-national policies and plans on climate change adaptation and mitigation.



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## Social and Human Sciences

### **A Sustainable Future: Supporting Indonesia's Strategies to Address the Social Implications of Climate Change**

Assessment of Indonesia's challenges to address the social impact of deforestation and land degradation on local communities:

Systematic research during a three month period in their respective communities.

- **University Andalas → Solok**
- **University Mataram → West Lombok**
- **University Gadjah Mada → Bantul**

**A National Workshop (Jakarta, 12 May 2016) to demonstrate and discuss the findings and the results of the project.**



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## Sustainability Science Demonstration Sites:

### **Siem Reap, Cambodia: Restoring and Enhancing Angkor World Heritage Site and Siem Reap City Water Systems**

Demonstration of the link between sustainability of natural heritage and a biosphere reserve connected with social system, taking into account hydrology, natural environment and cultural aspects of Angkor World Heritage Site.





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## Sustainability Science Demonstration Sites:

### **Langkawi, Malaysia: Framework For Action “Water and Environmental Sustainability in Langkawi”**

The study to analyse and understand the current water, environmental, economic and social shocks towards the development sustainability plan.

### **Langat River Basin, Malaysia: Establishment of Sustainable Science Demonstration Project on Restoring and Managing Langat River**

The study aims at collecting information in hydrology, hydrogeology, pollution sources, ecosystems and cultural preservation, as well as their interaction and balance, to analyse the degraded urban waters on Langat river basin and related impacts on local stakeholders, and formulate recommendations for the rehabilitation and restoration plan.



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## Sustainability Science Demonstration Sites:

### **Davao, Philippines: Enhancing Resilience to Disasters of Urban Water Systems of Mindanao.**

The study provides an understanding of water sustainability and community resilience towards natural disaster management and mitigation of the impacts of climate change.

### **Ifugao Rice Terraces, Philippines: Establishment of Sustainable Science Demonstration Project on Rice Terraces of the Cordilleras**

The study will help to understand community based traditional terraces management and the tools of maintaining agro-ecosystem equilibrium using the sustainable science framework, and sheds light on the dangers of deforestation and climate change, as well as migration which has implications on sustaining farming traditions across generations.

# Normative Question

**How would the human-environmental systems function and look like in compliance with a variety value-laden goals?**

## Bringing the Ethics Mandate of UNESCO into the Picture

**World Commission on the Ethics of Scientific Knowledge and Technology (COMEST):**

- *“Ethical Perspective of Science, Technology and Society: A Contribution to the Post-2015 Agenda” (2015)*
- *“Ethical Principles for Climate Change: Adaptation and Mitigation” (ongoing)*

**International Bioethics Committee (IBC):**

- *Report of the IBC on the Principle of the Sharing of Benefits (2015)*

# Normative Question

## Bringing the Ethics Mandate of UNESCO into the Picture

### **Revision of the UNESCO Recommendation on the Status of Scientific Researchers:**

- Recognized globally in the 195 Member States of UNESCO since its adoption in 1974.
- Created to help Member States formulate and execute adequate policy frameworks for science and technology production.

# Normative Question

## Bringing the Ethics Mandate of UNESCO into the Picture

### ***Universal Declaration on Bioethics and Human Rights***

#### **Article 14: Social responsibility and health**

1. The promotion of health and social development for their people is a central purpose of governments that all sectors of society share.
2. Taking into account that the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition, progress in science and technology should advance:
  - a. access to quality health care and essential medicines, especially for the health of women and children, because health is essential to life itself and must be considered to be a social and human good;
  - b. access to adequate nutrition and water;
  - c. improvement of living conditions and the environment;
  - d. elimination of the marginalization and the exclusion of persons on the basis of any grounds;
  - e. reduction of poverty and illiteracy.

# Normative Question

## Bringing the Ethics Mandate of UNESCO into the Picture *Universal Declaration on Bioethics and Human Rights*

- **Article 16: Protecting future generations**

The impact of life sciences on future generations, including on their genetic constitution, should be given due regard.

- **Article 17: Protection of the environment, the biosphere and biodiversity**

Due regard is to be given to the interconnection between human beings and other forms of life, to the importance of appropriate access and utilization of biological and genetic resources, to respect for traditional knowledge and to the role of human beings in the protection of the environment, the biosphere and biodiversity.

# Normative Question

## Bringing the Ethics Mandate of UNESCO into the Picture

### **Addressing environmental, social and ethical challenges of the annual haze in South East Asia: Bioethics and Sustainability Science in action**

To tackle the complex issue of haze, the project consolidates the experiences and knowledge derived from bioethics and sustainability science – two areas of UNESCO’s Social and Human Sciences mandate, and applies it to help the affected countries address the issue of haze.



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## Social and Human Sciences



A burning peatland in Palangkaraya, Central Kalimantan. Peat fires can spread for kilometers underground and by air.

(Photo courtesy of Bjorn Vaughn)



Bambang stands in front of a pile of oil palm kernels on the side of the road during one of the most polluted days on record in Palangkaraya, Central Kalimantan. The orange color is not enhanced or manipulated.



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## Social and Human Sciences



Haze shrouds buildings in Malaysia's largest city, Kuala Lumpur, on 14 September 2015. Joshua Paul / AP Photo



Workers install spectators seats for the Formula One street circuit in Singapore on September 14, 2015. Roslan Rahman | AFP | Getty Images

# Emerging Model of Applied Sustainability Science Project

## Preliminary Criteria (Informed by project implementation experiences and literature review)

- Engagement with Stakeholders
- Drawing from community knowledge
- Promoting equitability and inclusion and reduction in poverty
- Utilising all available data sets
- Links with an appropriate conceptual Framework
- Developing Indicator sets
- Building on the past project and program activities
- Evidence Bases
- Integrated design
- Developing scenarios
- Policy relevant/problem focused/solution orientated
- Effectively disseminated
- Exchanging Capacity
- Project legacy
- Link to conventions