



# FORUM ON THE NATIONAL ENVIRONMENTAL SCIENCE RESEARCH AGENDA: AN OVERVIEW

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The background of the slide is a close-up, slightly blurred image of water ripples. The water is dark blue, and the ripples create a pattern of lighter blue and white highlights, giving it a textured, dynamic appearance.

Environmental Science defined

Nature of Environmental Science

Why Environmental Science in a changing world

Process of developing the draft Env Sci Research Agenda

# WHAT ENCOMPASSES THE WORD “ENVIRONMENT”?



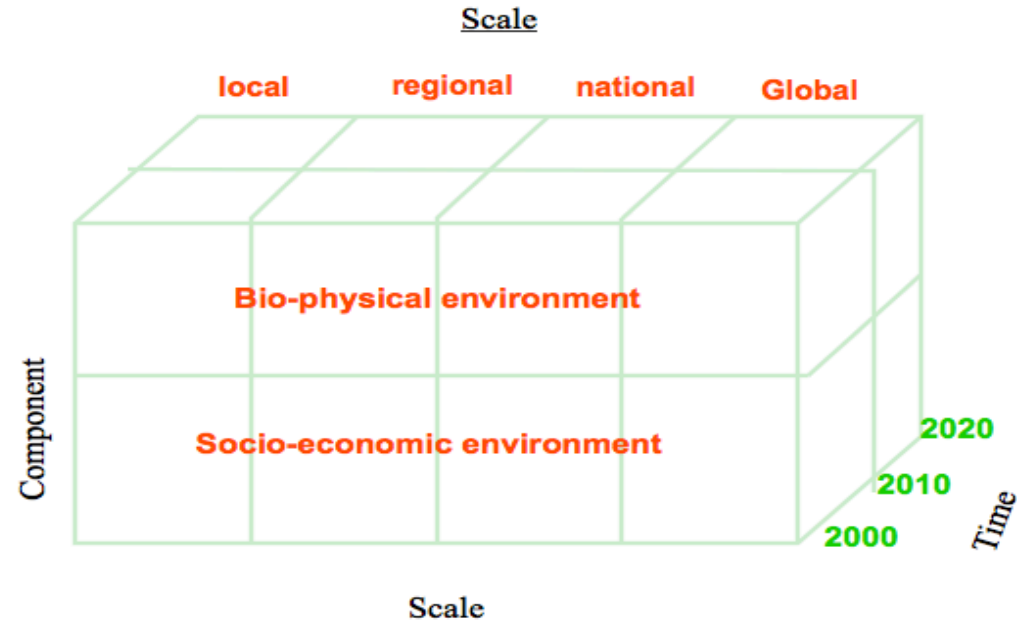


## FOCUS OF ENVIRONMENTAL SCIENCE

Atmosphere  
Lithosphere  
Hydrosphere  
Biosphere and the  
Human sphere.

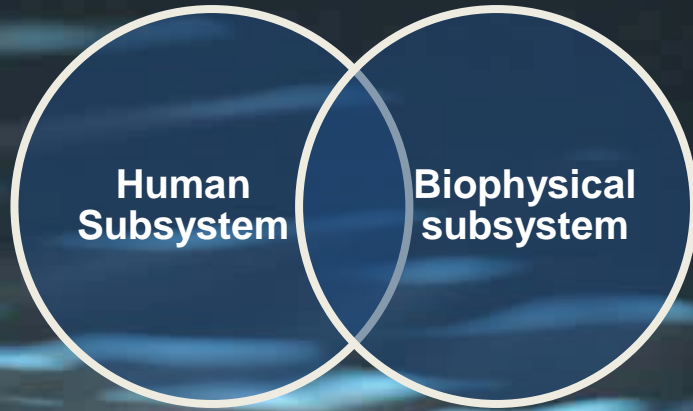
“A science that examines the interactions of different components of the environment, specifically the interconnectivity of humans with the biogeophysical environment.”





**Multidimensional environment: components, scale and time dimensions.**

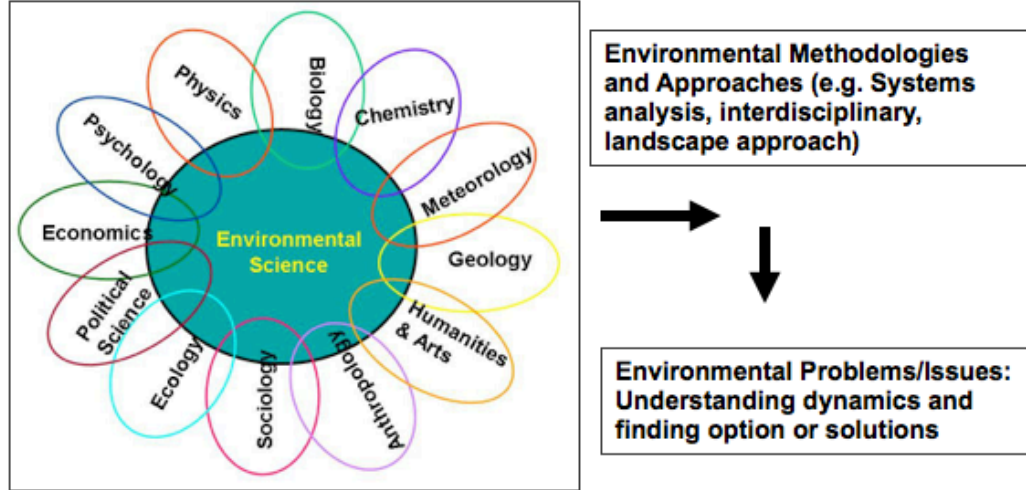
## SYSTEMS ANALYSIS AS A METHODOLOGICAL FRAMEWORK IN ENVIRONMENTAL SCIENCE



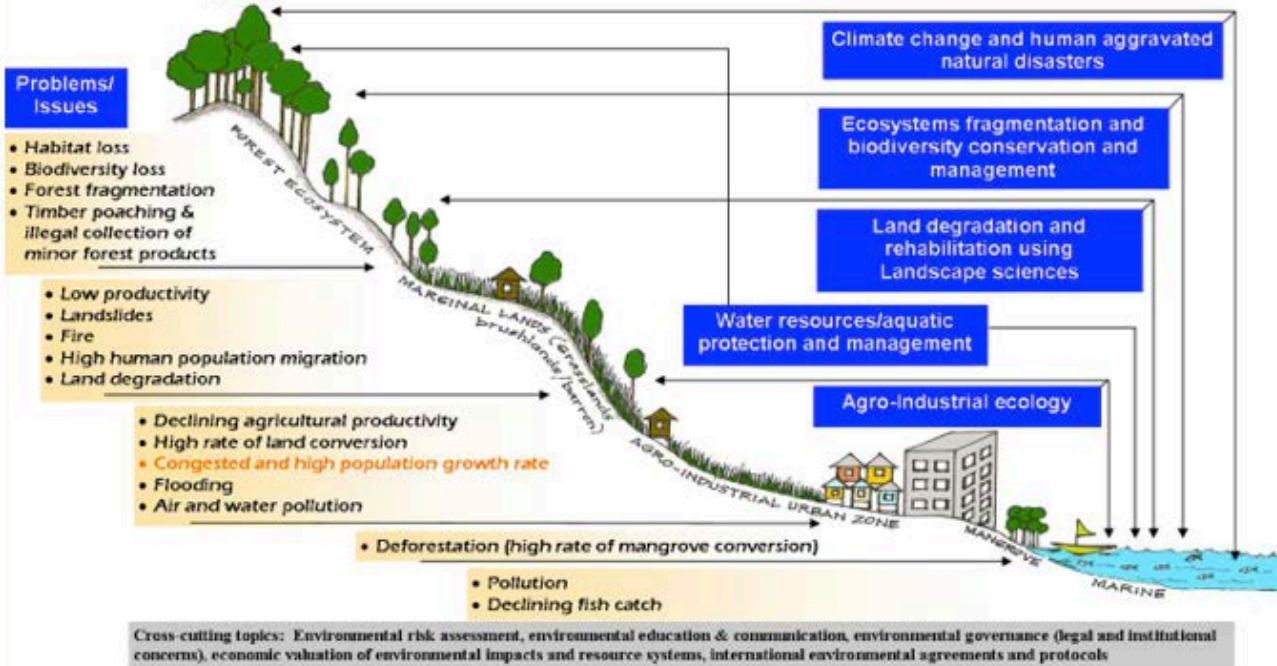
Environmental system  
(Rambo and Sajise, 1986)

- System is an interrelated set of components, with an identifiable boundary, that are interacting regularly to perform a purpose.
- A system is composed of many smaller systems, known as subsystems.
- Systems range from simple to complex.

***Environmental Science as an interdisciplinary science and moving towards transdisciplinary science***



## Ridge-River-Reef (Landscape) approach to study environment and environmental issues



(SESAM, 2007)



# THE NATIONAL ENVIRONMENTAL SCIENCE AGENDA

- 1<sup>st</sup> National Symposium and Workshop on Environmental Science, 7-8 May 2012, organized by UPD, UPLB and ADMU
- Formation of the Technical Working Group  
UPD, UPLB, ADMU, UPV, UCebu, MSU, Tawi Tawi College of Technology and Oceanography (TCTO), XU Cagayan de Oro as a prelude to organizing a professional society
- Presentation of draft to Forum on Environmental Science at CHED, 28 June 2012, organized by the CHED Technical Panel on Environmental Science



# DELVING INTO THE NATIONAL ENVIRONMENTAL SCIENCE RESEARCH AGENDA

- Atmosphere— Dr. Tolentino Moya, UPD IESM
- Lithosphere— Dr. Rene Claveria, ADMU and  
Dr. Decibel Eslava, UPLB SESAM
- Biosphere— Dr. Lem Aragones, UPD IESM
- Hydrosphere— Dr. CP David UPD NIGS
- Humanosphere — Dr. Rene Rollon, UPD IESM  
Dr. Rico Ancog, UPLB SESAM

# WHEN WE WORK SMART

We collaborate, build partnerships, increase productivity and deliver quality knowledge products.

Our main objective in this forum is to bring forward our agenda so that this can be a shared undertaking among government, private and international organizations to address the persisting environmental problems and confront emerging environmental challenges, most specifically, climate change.

# OUR EXPECTED OUTPUTS IN THIS FORUM

When our team works together we glide forward easily

- *Integrating/Mainstreaming research needs and priorities of NGAs*
- *Discuss data sharing protocols among different agencies*
- *Priority sites/ fields as an area of collaboration*
- *Optimization of research budgets from NGAs and HEIs*
- *Sharing expertise/ database of experts*
- *Downloading of research output to NGAs*

WE ARE DEDICATED TO MAINTAINING A NATURAL,  
SAFE AND **GREEN** ENVIRONMENT...



so that our children can enjoy the same resources  
and beauty that we have for generations.