



京都大学
KYOTO UNIVERSITY

Kyoto University and The Nippon Foundation
Advanced Program for Human Resource Development



Educational Unit for Studies on the Connectivity of
Hills, Humans and Oceans
(CoHHO)



Field Science
Education and Research Center
Kyoto University



Director's message at the establishment of the educational unit CoHHO

Japan is a country of rich forests and surrounded by productive seas. Rains fall on the mountains and flow down to the sea, along the way nurturing forests, enriching people's land and finally supporting marine productivity. This connectivity between forests, lands and seas through water is a two-way interaction between ecosystems and has close interrelationship with the activities and lifestyles of humans.

Human impacts have accumulated in natural systems and have interrupted the connectivity, so that serious environmental problems have arisen locally and throughout the world. However, up to a decade ago, forest scientists focused almost exclusively on forests and marine scientists focused on the seas. In our experience, scientists working within narrow fields, while contributing greatly, cannot solve the whole problem when missing the complexity of the connected ecosystems. Now, we recognize that understanding the ecological connectivity and its linkages with human activities are a key part of the solution to global environmental problems.

We at Kyoto University call this concept the 'Connectivity of Hills, Humans and Oceans (CoHHO)'. Through the education and research of CoHHO, we aim to restore ecosystem health and quality of life for humans. In the study of CoHHO, the understanding of natural ecosystems and the management of social systems are crucial to achieve a sustainable human society. That is, studies of CoHHO involve both natural sciences and social sciences such as economics, law, sociology, etc., We have established the educational unit of CoHHO to implement the education program for graduate school students in Kyoto University. We hope many talents with wide interdisciplinary views and expertise will be produced from this program and play important roles in civil society, policy making and administration.

**Director of the Educational Unit for CoHHO
Yoh Yamashita**

1

Introduction to CoHHO studies

CoHHO is based on the assumption that various global environmental problems resulted from the loss of the connectivity between the ecosystems of forests, rivers, coastal areas and oceans as well as between these ecosystems and human societies. Following from this assumption, studies on the Connectivity of Hills, Humans and Oceans (CoHHO studies) were introduced as a new science that integrates natural and social sciences. CoHHO studies aim to scientifically understand such connectivity, to repair the connectivity between those elements and to reconsider the relationship between nature and humans. This study covers all kind of sciences regarding forests, rivers, coastal areas, oceans and residential areas.

The graduate schools of Agriculture, Human and Environmental Studies, Global Environmental Studies, and the Field Science Education and Research Center of Kyoto University created the educational unit for CoHHO (the CoHHO unit) in the

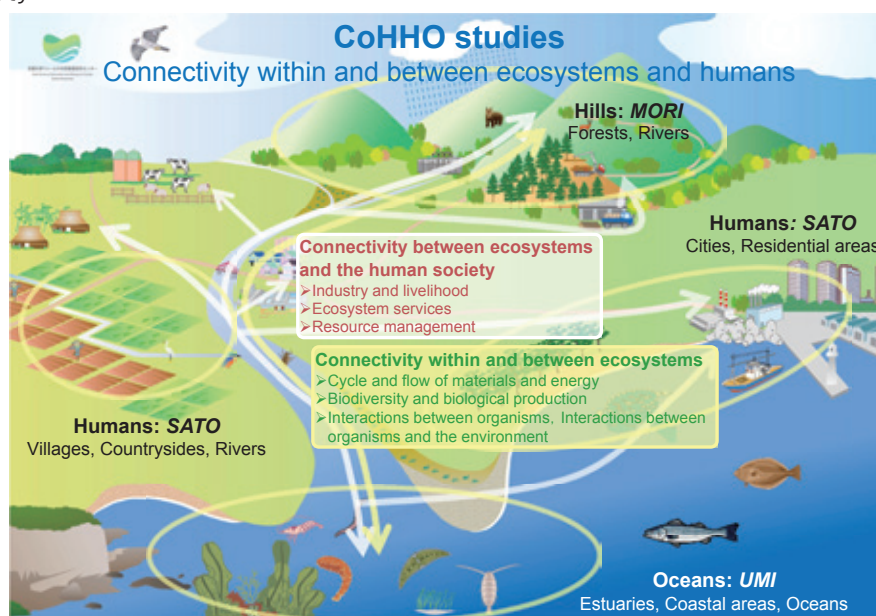
Center for Promotion of Interdisciplinary Education and Research (C-PIER) in April 2012, with financial support from the Nippon Foundation. The CoHHO unit established an educational program (the CoHHO program) which started from April 2013 and is planned to continue for 5 years.

2

Objectives of the CoHHO unit

The CoHHO unit main goal is to educate graduate students of Kyoto University based on the CoHHO studies and to foster individuals who will be able to solve environmental problems both in Japan and internationally. Besides educating graduate students, the CoHHO unit tries to promote the CoHHO studies to civil societies and to contribute to the conservation of watershed and coastal environments.

Graduate students who are concerned and interested in learning about current environmental issues and who are willing to contribute to their solutions will definitely find this program useful. We are hoping that students who have completed this program will greatly contribute to conserve healthy global environments and achieve a sustainable human society.



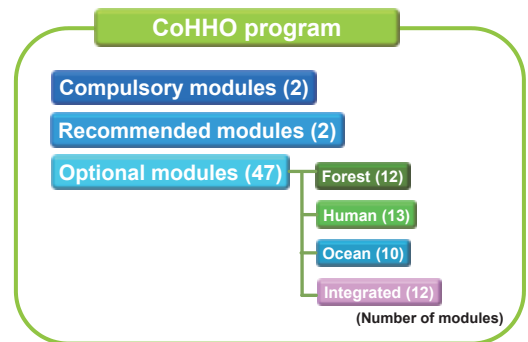
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The CoHHO program

The interdisciplinary CoHHO program includes two compulsory, two recommended and many optional modules with lectures on Hills and forests (Mori), Social science (Sato) and Oceans (Umi). An additional lecture with an integrated perspective of these three subjects is also proposed. The compulsory modules are "Integrated Watershed and Coastal Management", which is offered by first-class international researchers and "International



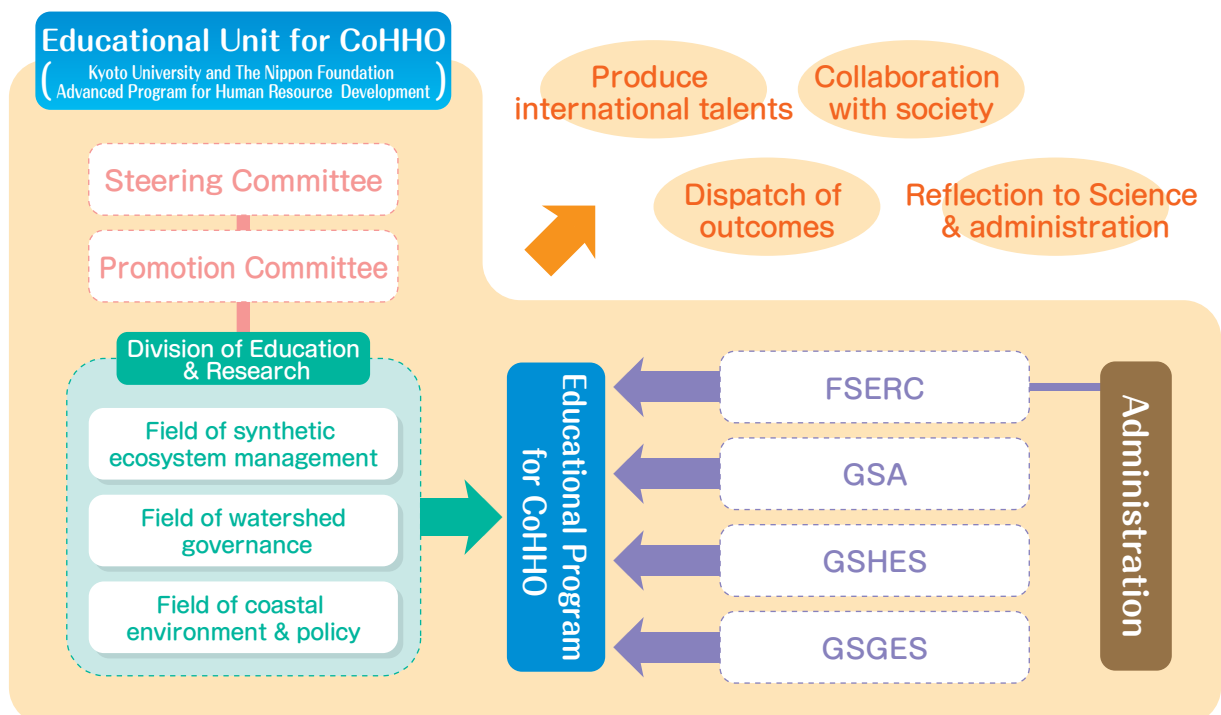
Cooperation through CoHHO”, which allows students to give presentations and discuss in small seminars based on their internship and/or their master or doctoral research. The recommended modules include “Internships”, through which students shall experience an on-site training in international organizations and “CoHHO Special Seminar”, in which students’ master or doctoral theses written in English shall be evaluated in relation to the CoHHO studies.



Lectures are conducted in English and English courses are also provided in order to enhance the ability of our students to work at the international level. In order to enable a smooth participation in this program for our students, we also provide an Internship Subsidy, International Society Presentation Subsidy and a Foreign Student Scholarship (Kyoto University - Nippon Foundation CoHHO Fellowship). The standard enrollment period for the program is two years; however, it is possible to complete the program in one year, if students validate a total of 14 credits or more.

- Students who completed the program in 2013... 26 students
- Enrolled students (as of April, 2014) 99 students belonging to 9 graduate schools

Unit Organization System





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2014.7

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Affiliation of Prof/Associate Prof.

24 from the Graduate School of Agriculture, 4 from the Graduate School of Humanity and Environment Science, and 17 from the Graduate School of Global Environment Science.



Collaborative Research Building in Field Science Education and Research Center, Kyoto Univ., which is made with thinned out timbers from University Forest. This building can be tolerable to strong earthquake. The Educational Unit of CoHHO is using this building for laboratory and meeting room. This is a Japan traditional wooden building with good smell of Japanese cedar.

Access



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