## 人間環境設計論分野 Laboratory of Global Environmental Architecture

The Global Environmental Architecture explores "sustainable human living environment" by understanding local culture and local environment in the rapidly changing modern societies.

Professor Hirohide KOBAYAHI Associate Professor Chiho OCHIAI







#### Research Method 1 : Design

### **Environmental design and planning integrating local contexts(Design work)**

The research explores "the environmental architecture" and "the social design" for rebuilding and sustaining current human living condition. Findings and experiences contribute to practical applications for local communities.



Bamboo green house project



Rebuilding a community house



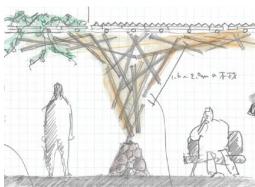
Taneya 農藝Project



Renovation of vacant house project "Satellite Koza"



Yangon social housing project



Design by using local material



#### Research Method 2: Field work

#### Human settlement integrating local contexts (Field work)

The research explores "knowledge and practices for sustainable harmonious human living", through knowledge gained from local settlement that coexisted with nature and historical towns that encompasses cultural diversity.



Vernacular architecture and cyclone disaster in Fiji



Village revitalization of Oisako area in Natasho



Evacuation shelter called "Agariya"



Interview survey of indigenous construction technology



Windbreaks stone wall village



Interview survey of traditional knowledge on disaster

## **Environmental design and planning integrating local contexts(Design work)**

- Revitalization of town planning for comfortable, safety and co-existance (Kushimoto-cho, Wakayama)
- Social design project of recycle plastic / carbonized plastic (Saijo city, Ehime)
- Design project of the locally-based timber and bamboo (Minamiawaji city, Hyogo)
- A Bamboo Green-House Project (many areas in Japan)
- Social housing improvement project (Yangon, Myanmar)

#### Human settlement integrating local contexts (Field work)

- A field study on living environment in the cyclone prone area (South pacific islands)
- A field study on the living conditions in Tonami traditional houses (Tonami city, Toyama)
- An ethnological field study on stone mason culture and their settlement (Hira area, Shiga)
- A field study on disaster preparedness and response in the flood prone (Hongu-cho, Wakayama)
- Post-disaster housing reconstruction of indigenous community(Taiwan)



#### Laboratory's information of FY2021

- Professors Prof. Hirohide KOBAYAHI, Asso. Prof. Chiho OCHIAI
- **Students** 21(9international students)

Graduate School of Global Environmental Studies: Doctoral program (4), Master's program (8)

Graduate School of Engineering and Faculty of Engineering/Undergraduate school of architecture:

Master's program (6), Undergraduate (3)

# Research fields of student (related to Global Environmental Architecture)

Architecture, Environmental design, Sociology, Development study, Disaster management, etc.

#### **■** Research methods

Field study (Measurement, Interview, Questionnaire, Participatory observation)

#### ■ Past internship program

Universities: Taiwan University(Taiwan), ITB(Indonesia), Sichuan University (China), BRAK University(Bangladesh), Hue University (Vietnam), University of the South Pacific(Fiji)

NGO: APCAS (Sri Lanka), NSET (Nepal), CODI (Thailand), SEEDS Asia (Myanmar), Habitat for Humanity(Tokyo), MIT (Tsushima city), MIYAMA SATOYAMASYA(Nantan city)

**Companies**: Shigenori Uoya Architects and Associates(Kyoto), NII-ARCHITECTS(Tokushima), Matsui kensetsu(Shiga)

Public administration office: Tsushima city, Tanabe city, Saijyo city, etc.