



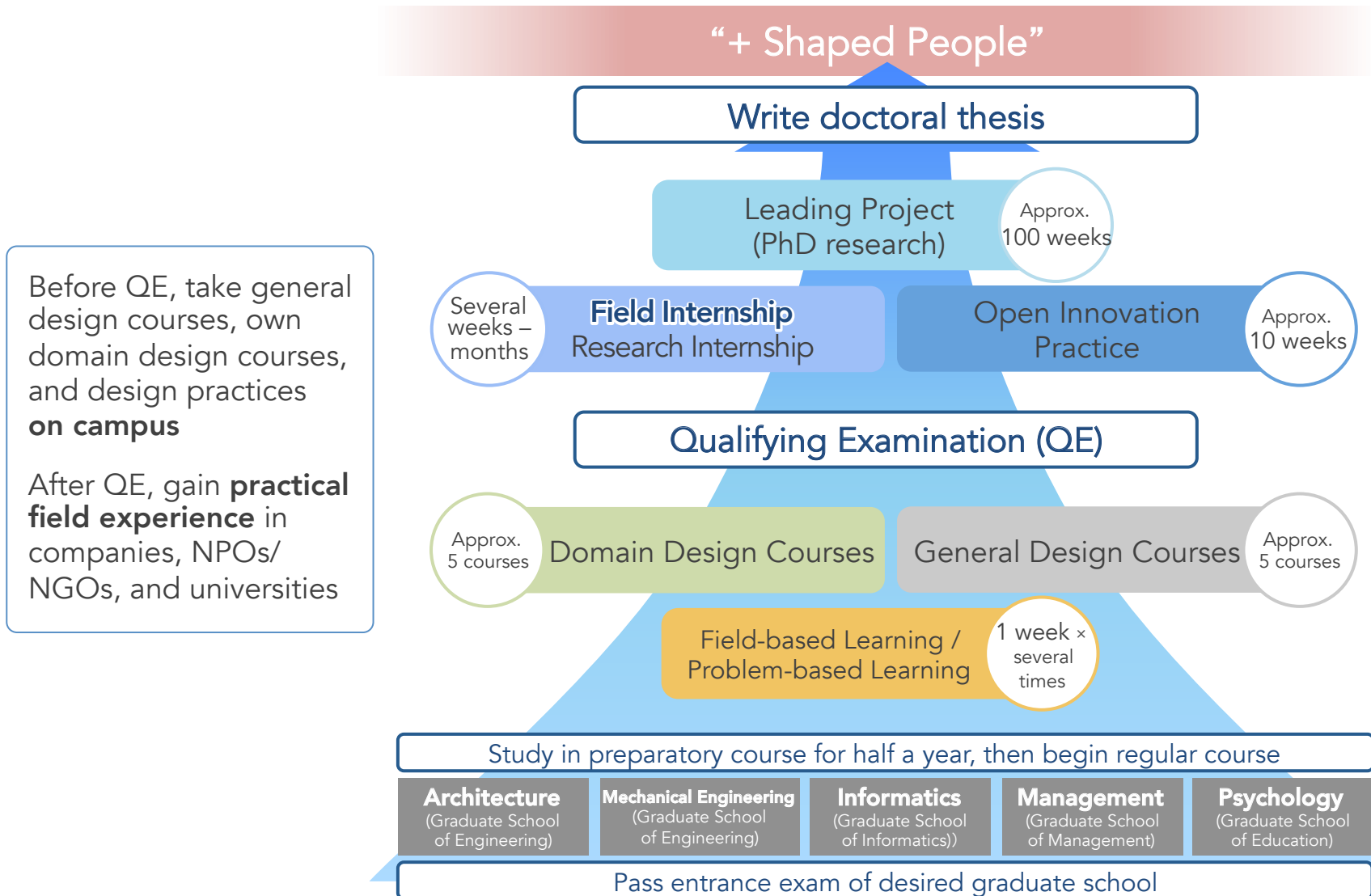
Field Internship: Exploiting the Educational Power of Fields

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Design School Curriculum

Cultivating outstanding professionals who can design **social systems and architectures** in collaboration with experts from diverse domains



Before QE, take general design courses, own domain design courses, and design practices **on campus**

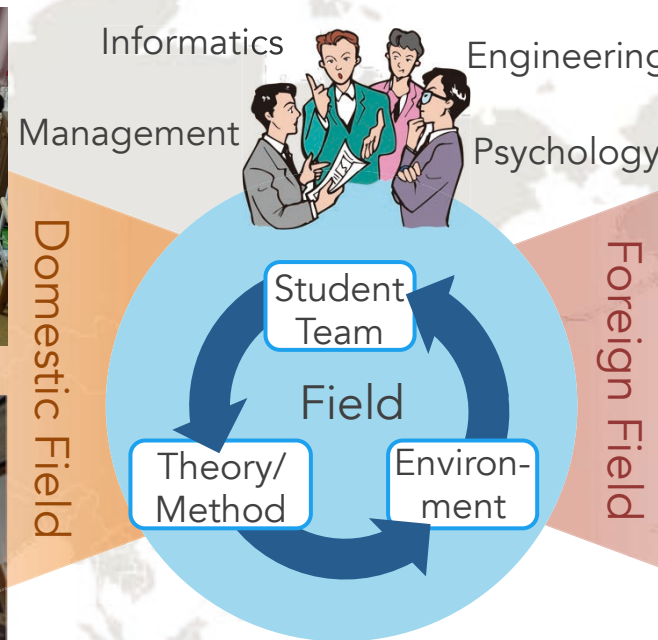
After QE, gain **practical field experience** in companies, NPOs/NGOs, and universities

Field Internship

Internship exploiting the educational power of fields. Students form an interdisciplinary group and tackle a field problem as professionals

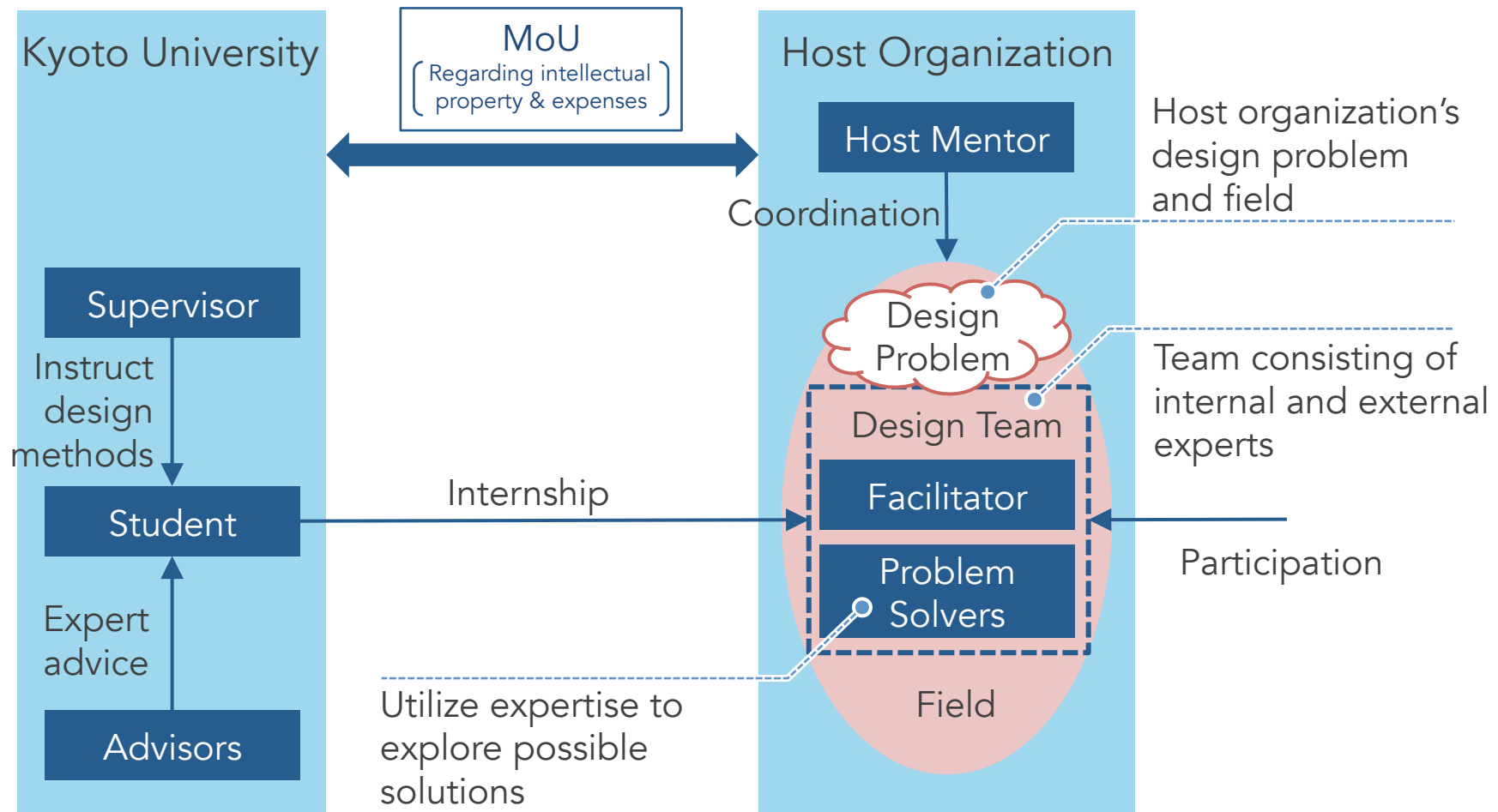
Goals

- Identify the field problem and define it as a solvable challenge
- Practically apply design theories/methods to the field
- Propose solutions through communication with local stakeholders



Implementation Structure

Interns form a team to solve a design problem in a field where a host organization is working



Schedule (30 course-hours)

2 hours Explanation & Internship Preparation

Introduction to Internship by the supervisor. Comprehension by the students through online surveys. Lectures and interviews with the Host Mentor if possible

15 hours Field Practice 1

Students start internship under the guidance of the Host Mentor. Mainly focus on problem-finding by field analysis

2 hours On-Campus Activity

Brush-up solutions that was examined in the field under guidance of the Supervisor and Advisors. Make an activity plan for the latter field practice

10 hours Field Practice 2

Crystallize the solutions and prepare presentations under guidance of the Host Mentor. Explain the solutions to local stakeholders on the final day

1 hour Final Presentation

Explain design process, theories, and methods to be applied, and own role and contributions. Report additional surveys after the field practices

Case | Conserving Rice Terraces in Bali



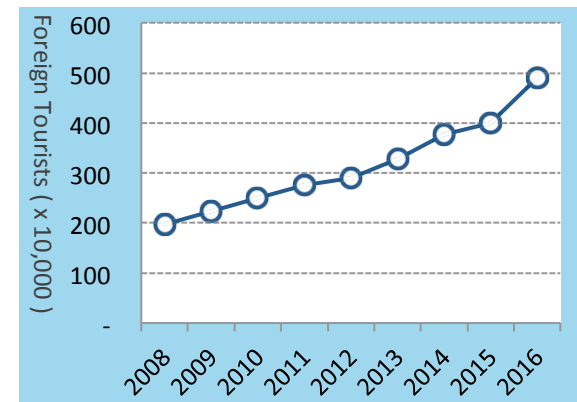
THEME Sustainable Tourism around Rice Terraces

HOST Indonesia Heritage Trust (NGO)

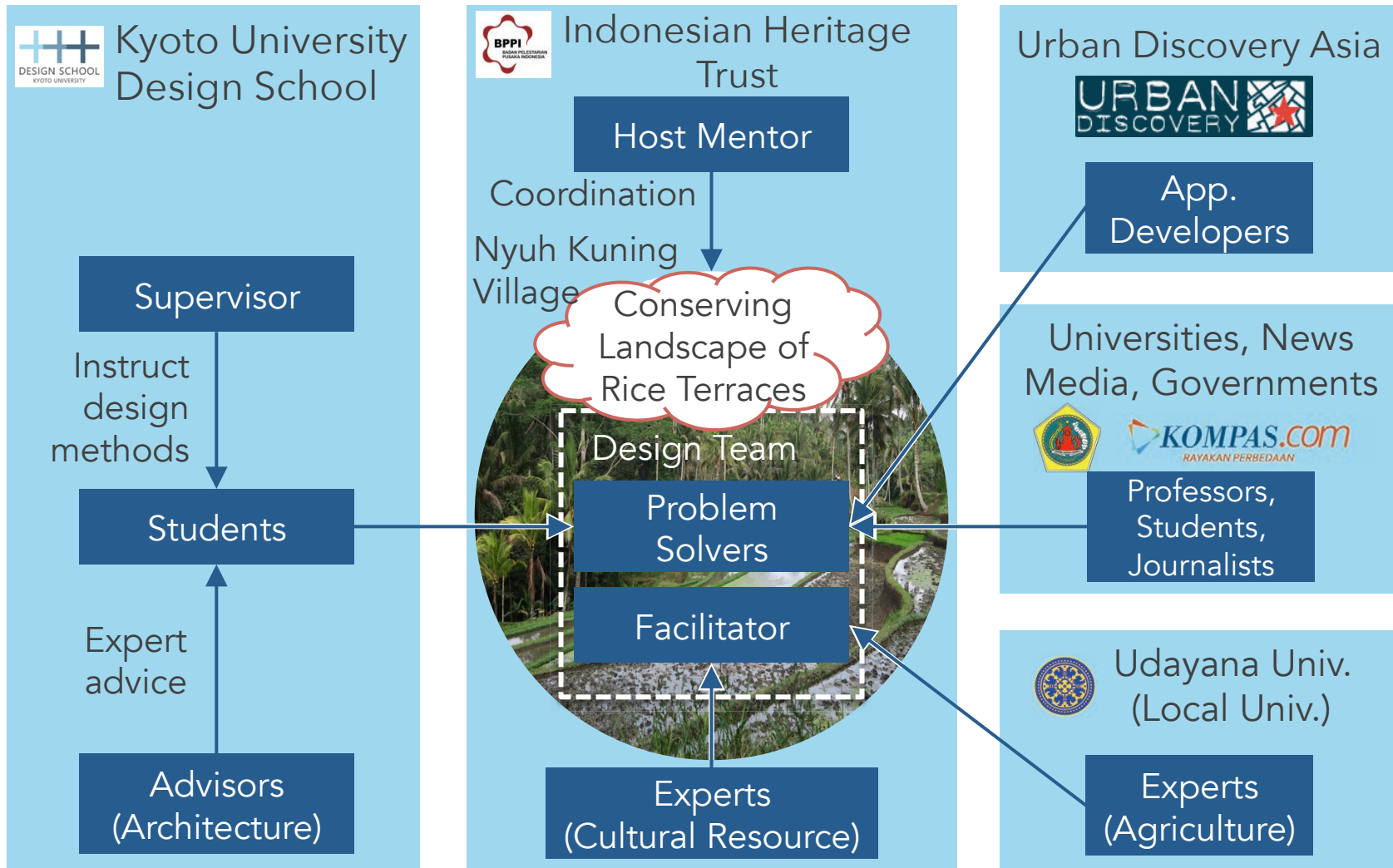
DURATION 2015/8/3-7, 2016/8/18-22

CONTENT Create solutions to improve QoL in a rural community while maintaining rice terraces

- After recognized as a world heritage in 2012, Bali attracts more foreign tourists rapidly
 - cf. 3 million foreign tourists in Kyoto
- Many villas and cafés for foreigners are being constructed near rice terraces
 - Areas for Gods are invaded by tourists
- Many high-class hotels are built along a river
 - Decrease in quantity and quality of water
- Weaken irrigation associations
 - Increase in maintenance cost of irrigation



Implementation Structure



Design Process

DAY 0 Literature Research

Internet and paper survey on campus

DAY 1 Lecture from Experts & Field Visit

Receive a lecture from local experts about rice cultivation, irrigation associations, and religious rituals



DAY 2 Field Survey & Interview

Trace irrigation and interview stakeholders like a leader of the association, chief priest, travel agency, local government etc.



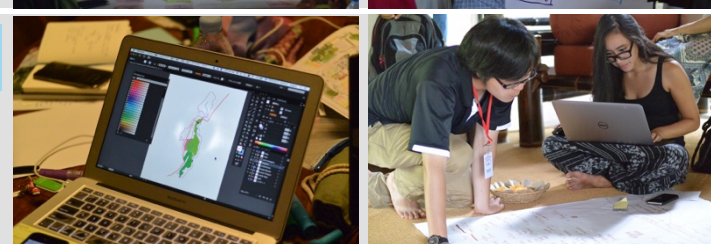
DAY 3 Group Discussion

Organize insights obtained from the lectures and field survey. Do ideation like brainstorming



DAY 4 Prototyping & Preparation

Make a sketch and mockup of ideas as a prototype, and prepare slides for the presentation



DAY 5 Presentation

Explain the ideas to local stakeholders like local governments, irrigation associations, travel agencies, temples, farmers, etc.



Problem Finding and Solving

Culture

Interview with irrigation associations



Problem

Potential decrease in farmers caused by low interest in religious rituals

Solution

Agriculture education to young people by active learning

Economy

Interview with tourist agencies



Problem

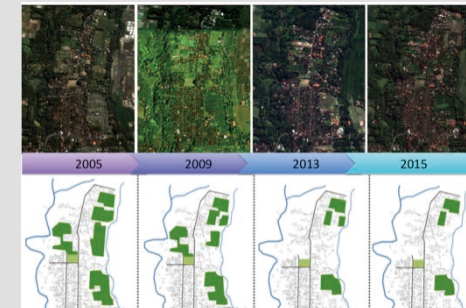
Decrease in tourism resources caused by retirement of craftsmen

Solution

Rural camp to experience local life related to Subak

Environment

Analysis of transition of land use by GIS



Problem

Buyout of rice fields by foreign investors. Farmers sell them due to high-tax

Solution

Tax exemptions according to the purpose of land use

Action plan recommended to local government (Gianyar Regency)

GIANYAR RECOMMENDATIONS ON THE SUSTAINABILITY OF SUBAK

In 2012 UNESCO has admitted the *subak* system in Bali as a World Heritage of Cultural Landscape. The world admittance towards *subak*, is something to be proud of, as it is our traditional inheritance. It was established since the 11th century and pioneered by Rsi Markandya-the ancestor of Balinese people, had finally received the international recognition.

Although the world has admitted the existence of *subak* in Bali, however, in reality the *subak* system still undergo the marginalization. There have been already several actions from the government, however, it is not strong enough to stop the marginalization of *subak* system in Bali. The total number of rice fields continuously diminish in Bali, because there was significant change in the spatial function, in average 750 hectares every year. This indicates that the *subak* in Bali will continue to degrade in numbers.

If one day, the rice fields and *subak* in Bali shall extinct, then the world will lose an important heritage in land cultivation specifically the heritage of cultural landscape. That is why we need to perform several other actions to ensure the continuous existence of the *subak* in Bali.

The Bali Internship Field School for Subak (BIFSS) which was held in the Nyuh Kuning village, Ubud, Gianyar, from August 17 until August 22, 2016, had gathered great attention to the existence of *subak* in Bali. BIFSS was held by the Indonesian Heritage Trust (BPP) and in partnership with the Gianyar Regency, the Design School Kyoto University-Japan, the Subak Research Center of the University of Udayana-Bali, the Bali Kuna Heritage Society, the Arsari Djojohadikusumo Foundation and the Urban Discovery - iDiscover City Walks. The participants diverse in the spectrum of passionate people interested in heritage preservations. They came from America, Germany, Japan, the Netherlands, Hongkong and Indonesia. BIFSS 2016 had concluded and put together some recommendations for sustainable *subak*, as follows:

1. Provide a property tax exemption for the *Subak* system in Bali, and the first to be awarded to a pre-determined *subak* designated by UNESCO as a World Cultural Heritage.
2. Involve the *Subak* management system in the process of land conversion.
3. Reward any company that has given devotion to the *Subak*, in the form of a "*Subak* Friendly Company Award".
4. Host *Subak* tourist-related activities in the region to raise awareness about the *Subak* system.
5. Include the *Subak* system in the curriculum of school education.
6. Provide scholarships in priority of the children of the *subak* farmers.
7. Conduct reforestation activities in the upstream area
8. Revise agricultural insurance policy on the base of agricultural production value.
9. Develop future detailed spatial plan for *Subak*.
10. Enforce the law in support of the farmers and the *Subak* system.

Thus the Gianyar recommendations have been agreed upon by all parties involved in the BIFSS. The recommendations are expected to be the reference to the action program in governing the *Subak* conservation area particularly in Bali, and at the national level in general.

Declared on October 10, 2016 in the occasion of World Culture Forum (WCF) 2016 at Rumah Topeng, Gianyar, Bali. Introduced by H.E. Anak Agung Gde Agung Bharata, Regent of Gianyar; read by Catrini Pratihari Kubontubuh, Chairperson of the Indonesian Heritage Trust (BPP); and received by H.E. Hilmar Farid, the Director General of Culture, Ministry of Education and Culture of Republic of Indonesia.

REKOMENDASI GIANYAR UNTUK KEBERLANJUTAN SUBAK

Pada tahun 2012 UNESCO mengakui sistem subak di Bali sebagai World Heritage of Cultural Landscape (Warisan Budaya Dunia untuk Pusaka Saujana). Pengakuan dunia terhadap Subak, adalah sesuatu yang membanggakan. Karena sebuah warisan tradisional, dalam bentuk organisasi subak yang telah dibangun mulai Abad ke-11 oleh leluhur masyarakat Bali di bawah pimpinan Rsi Markandya, akhirnya mendapat pengakuan dunia.

Meskipun dunia mengakui eksistensi Subak di Bali, namun dalam kenyataannya sistem irigasi Subak terus mengalami proses marjinalisasi. Sudah ada berbagai upaya yang dilakukan oleh pemerintah, namun tidak cukup kuat untuk membendung proses marjinalisasi sistem Subak di Bali. Jumlah sawah yang terus berkurang di Bali karena terjadi alih fungsi, rata-rata seluas 750 ha/tahun. Hal ini mengindikasikan bahwa Subak di Bali akan terus mengalami proses degradasi.

Kalau pada suatu saat, sawah dan Subak di Bali habis, maka dunia akan kehilangan sebuah warisan budaya dalam bidang pertanian yang sangat penting bagi umat manusia. Oleh karenanya diperlukan berbagai upaya yang lain, agar sistem Subak di Bali tetap lestari.

Bali Internship Field School for Subak (BIFSS) yang diselenggarakan di Desa Nyuh Kuning, Kecamatan Ubud, Kabupaten Gianyar pada tanggal 17 Agustus sampai dengan 22 Agustus 2016, menaruh perhatian yang besar terhadap eksistensi Subak di Bali. BIFSS diselenggarakan oleh Badan Pelestarian Pusaka Indonesia (BPP) bekerjasama dengan Pemerintah Kabupaten Gianyar, Design School Kyoto University-Jepang, Pusat Penelitian Subak Universitas Udayana-Bali, Bali Kuna Heritage Society, Yayasan Arsari Djojohadikusumo, dan Urban Discovery - iDiscover City Walks. Peserta BIFSS terdiri dari kalangan masyarakat yang menaruh perhatian terhadap kelestarian pusaka. Mereka datang dari Amerika Serikat, Jerman, Jepang, Belanda, Hongkong, dan Indonesia. Keluaran dari BIFSS 2016 dirangkum dalam rekomendasi untuk kelestarian subak sebagai berikut.

1. Pembebasan Pajak Bumi dan Bangunan (PBB) bagi Subak di Bali, dan untuk pertama kali agar diberikan kepada Subak yang telah ditetapkan UNESCO sebagai Warisan Budaya Dunia.
2. Pelibatan organisasi Subak dalam proses alih fungsi lahan sawah di kawasannya.
3. Penghargaan kepada perusahaan yang telah memberikan perhatian pada Subak, dalam bentuk "*Subak* Friendly Company Award".
4. Penyelenggaraan wisata budaya dan wisata peduli lingkungan di kawasan Subak.
5. Penyertaan Subak dalam kurikulum pendidikan.
6. Penyediaan beasiswa untuk anak-anak petani yang cerdas.
7. Penghijauan di kawasan hulu untuk memastikan ketersediaan sumber air.
8. Penyediaan asuransi pertanian berbasis nilai produksi.
9. Penyusunan rencana detail tata ruang untuk menyelamatkan Subak.
10. Penegakan hukum bagi yang melanggar aturan yang merugikan petani dan Subak.

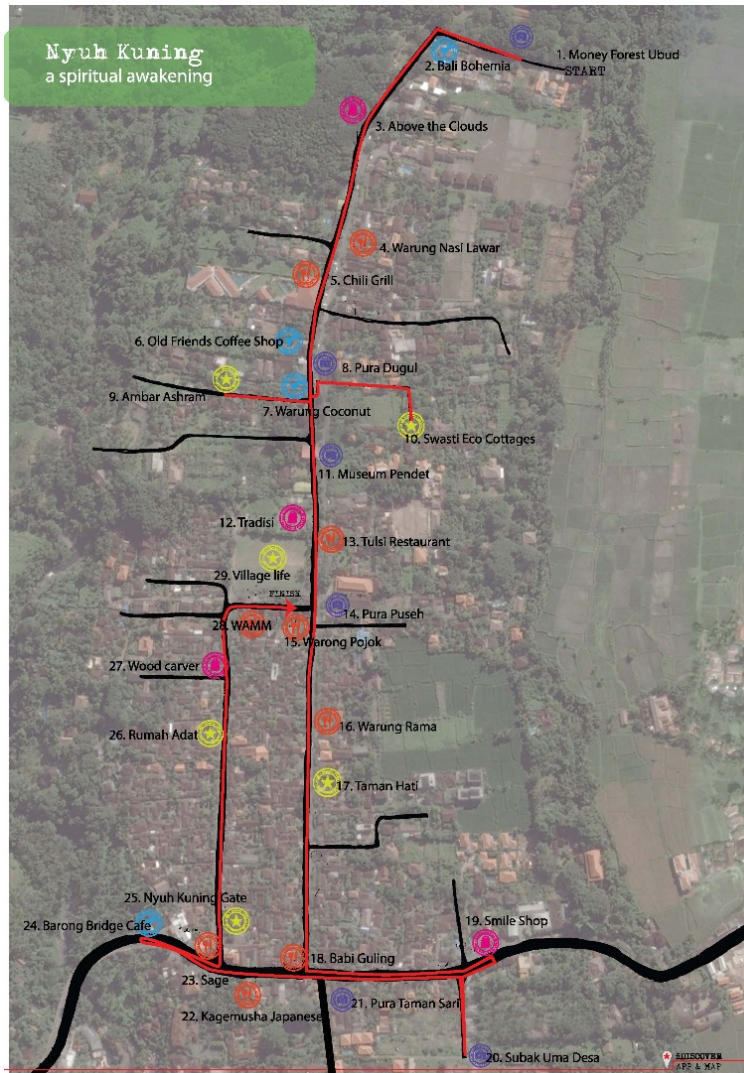
Demikian Rekomendasi Gianyar ini disepakati oleh semua komponen BIFSS. Diharapkan dapat menjadi acuan untuk program aksi pelestarian Subak bagi Pemerintah Kabupaten Gianyar pada khususnya, dan Pemerintah Daerah di Bali pada umumnya, serta kegiatan pelestarian lingkungan secara global.

Dideklarasikan pada 10 Oktober 2016 dalam rangkaian World Culture Forum (WCF) 2016 di Rumah Topeng, Gianyar, Bali. Rekomendasi diperkenalkan oleh Anak Agung Gde Agung Bharata, Bupati Gianyar; dibacakan oleh Catrini Pratihari Kubontubuh, Ketua Badan Pelestarian Pusaka Indonesia (BPP); dan diserahterimakan kepada Hilmar Farid, Direktur Jenderal Kebudayaan, Kementerian Pendidikan dan Kebudayaan Republik Indonesia.



Deliverables 2

Mobile APP to support sightseeing by Urban Discovery Asia



Nyuh Kuning, a spiritual awakening



iSee

1. Money Forest
Monkey around in the sacred forest
Jl. Monkey Forest
8. Pura Dugul
Temple of the Subak
Jl. Nyuh Bojog
11. Museum Pendet
Discover Nyuh Kuning's woodcarving history
Jl. Nyuh Bojog No. 6
14. Pura Puseh
The main village temple for honouring ancestors
Jl. Nyuh Bojog
21. Taman Sari
Temple for Dewi Danu- goddess of lakes and rivers
Jl. Raya Nyuh Kuning
20. Subak Uma Desa
Wander the lush rice fields and feel the harmony
Jl. Raya Nyuh Kuning



iDrink

2. Bali Bohemia
A funky café among the monkeys
Jl. Nyuh Bojog
6. Old Friends
A crop-to-cup coffee experience
Jl. Nyuh Bojog No.5
7. Warung Coconut
Enjoy a fresh coconut at this local café
Jl. Nyuh Bojog No.5
24. Barong Bridge
A café with vintage style
Jl. Raya Nyuh Kuning No.14
29. WAMM
Stylish restaurant serving organic and local food
Jl. Nyuh Bulan No. 24



iShop

3. Above Clouds
A divine men's clothing boutique
Jl. Nyuh Bojog No.11
12. Tradisi
Textiles & Batik for a good cause
Jl. Nyuh Bojog No. 4
19. Smile Shop
A charity shop supporting the Smile Foundation
Jl. Raya Nyuh Kuning



iSurprise

9. Ambar Ashram
Laughing yoga & spiritual healing
Jl. Nyuh Bojog No. 5
10. Swasti
A slice of eco-paradise: café, spa, yoga, & rooms
Jl. Nyuh Bojog No. 2-4
17. Taman Hati
A humble yoga and meditation ashram
Jl. Nyuh Gading No.7
25. Village Gate
Stone sculptures welcoming visitors
Jl. Nyuh Bulan
26. Rumah Adat
How the Balinese live
Jl. Nyuh Bulan
27. Woodcarver
Meet a local woodcarver
Jl. Nyuh Bulan No.21
28. Village Life
Learn about what makes Nyuh Kuning so special
Jl. Nyuh Bulan

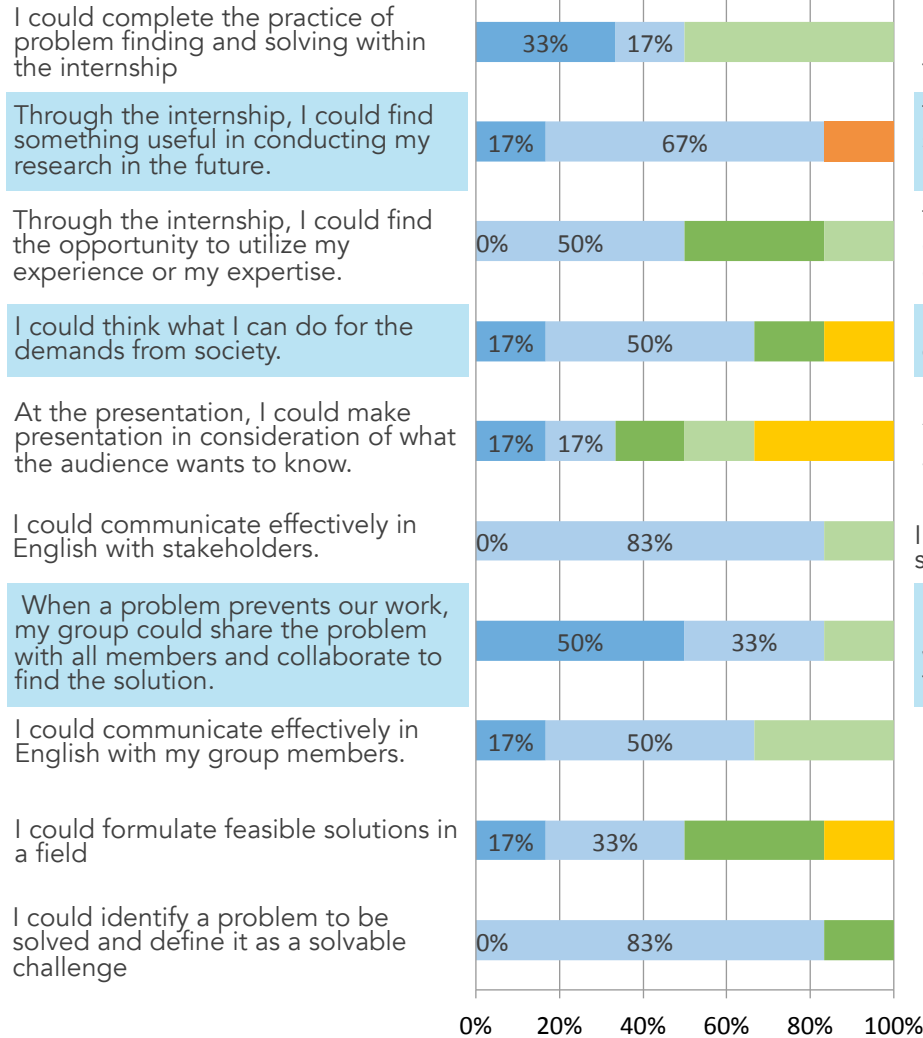


iEat

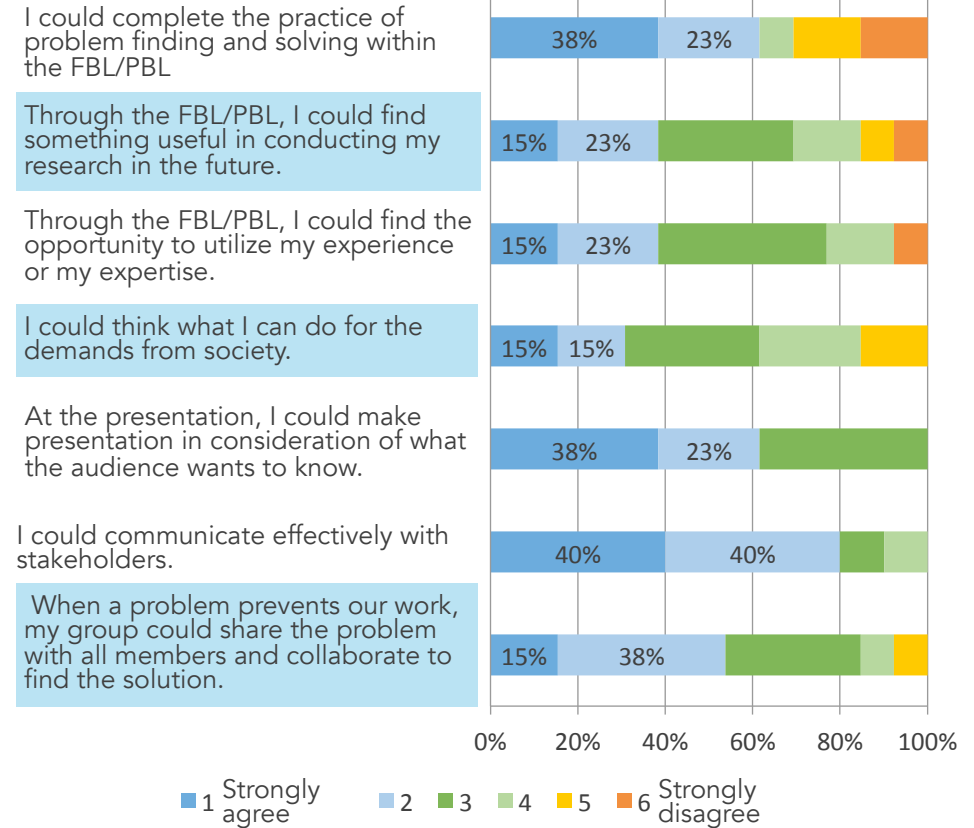
4. Nasi Lawar
Traditional warung serving up Nasi Lawar
Jl. Nyuh Bojog No.22
13. Tulusi
Aryuvedic eats at this Indian restaurant
Jl. Nyuh Bojog
15. Warung Pojok
Popular warung serving traditional Balinese food
Jl. Nyuh Bulan No.24
16. Warung Rama
Charming café serving up delicious nasi campur
Jl. Nyuh Gading No. 3
18. Babi Guling
Eat the ever popular suckling pig among locals
Jl. Nyuh Gading No.18-20
22. Kagemusha
Japanese home cooking in an idyllic setting
Jl. Raya Nyuh Kuning
23. Sage
A vegan's culinary dream come true
Jl. Nyuh Bulan No.1

Questionnaire Results

Field Internship (N=6)



H26 FBL/PBL2 (N=13)



Questionnaire Results

Practice of facilitation and management skills

- I learned how to manage an international team by carefully confirming mutual understanding in English step by step
- I tried controlling our discussion to be balanced among diverse domains

Utilization of experience and expertise

- I could discuss effectively with other experts in English because I had experienced facilitation and English discussion in design school in Okinawa and Hong Kong
- I could observe the field from perspective of biology and fisheries while understanding information provided by local experts

Feedback to research

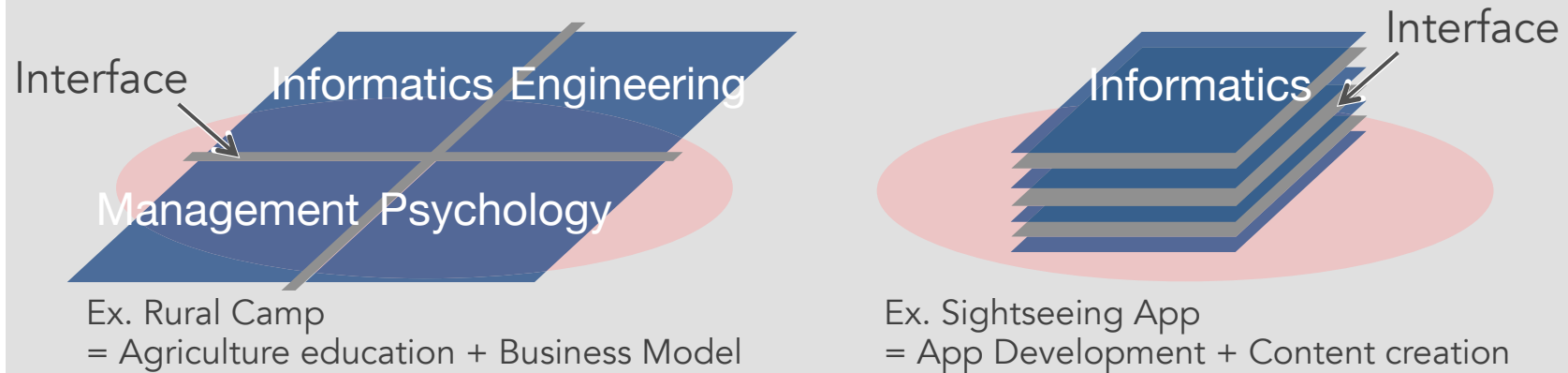
- It's helpful for my research involving local government and inhabitants to know a problem-solving process in collaboration with industry-government

Interdisciplinary collaboration

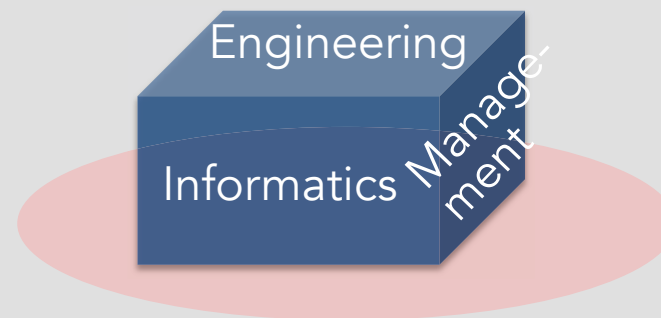
- I acquired a behavior that always thinks not only how to maximize my presence in my team, but also how to utilize strengths and weaknesses of other members to maximize the performance of the whole team

Interdisciplinary Collaboration

Division Decompose a field problem into sub-problems of each discipline or hierarchically separate implementation of solutions



Fusion Utilize other discipline's perspectives, findings, and knowledge each other



Evaluation by host organization

- I was grateful that the students had made a more systematic summary and detailed solutions than the previous interns from other universities
 - The students were really active, and naturally compared information obtained from our field with one from other field they had known
-
- An idea is **implemented by** the host organization
 - Should ask students to consider feasibility of the idea by the host organization as well as social acceptability of the idea
 - **Continuous participation** in the field
 - Need to continuously participate in the field but not once to establish a relationship of mutual trust
 - Information **synchronization**
 - Need to share information because the host organization has progress and field situation changes after one year passes

Thank you! Terima kasih!



INDONESIAN HERITAGE TRUST



REGENCY OF GIANYAR



DESIGN SCHOOL
KYOTO UNIVERSITY



BALI KUNA
HERITAGE SOCIETY



Urban and Regional Planning
University of Hindu Indonesia



University of Udayana



YAYASAN
ARSARI
djojonadikusumo



iDISCOVER
CITY WALKS