

# SUSTAINABLE DEVELOPMENT WITH SOCIAL INNOVATION AND COMMUNITY

**Dr. Naori Miyazawa**  
Global Asia Research Center  
Waseda University

## 1. INTRODUCTION

Field Work: BALI Indonesia since 2019

International collaboration research for 3 years

Research on the resource management and governance



Figure 1. Field Research



Figure 2. Research on role of local organization (Desa adat) in combating covid-19



Figure 3. Research on traditional society and impact on *Quality of life*

## 2. RESULTS AND DISCUSSION

### Impact of COVID-19 on livelihood

- Coronavirus pandemic has had a negative impact on income of local people, of whom 44% have either permanently or temporarily lost their jobs.
- Their monthly income has been decreased by 61 %.

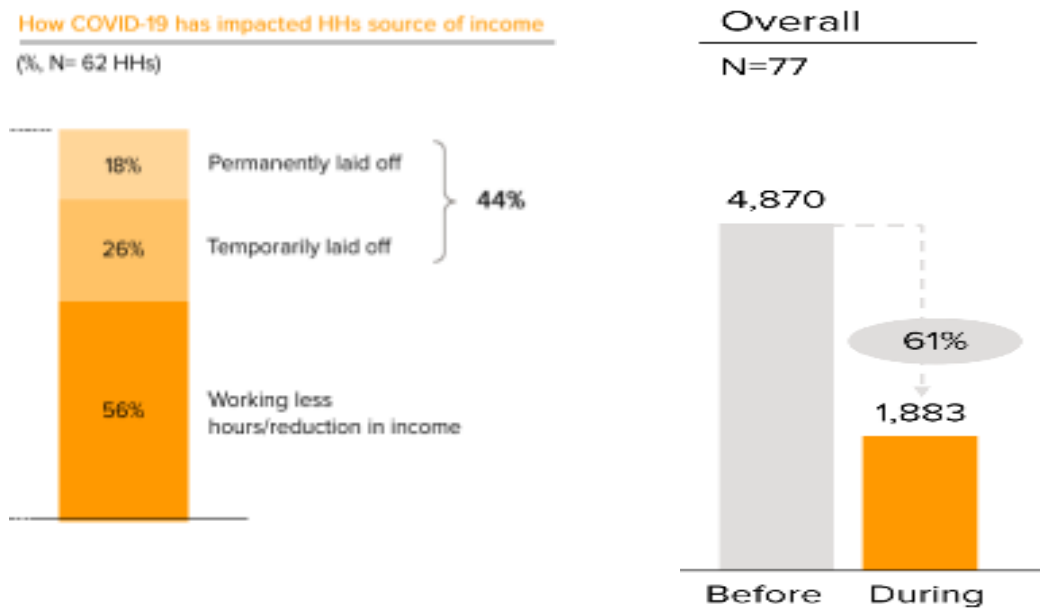


Figure. 4 Average monthly income comparison before and after the pandemic (in Rp. Thousand)  
 Source : Kopernik 2020



Figure 5. How have people reacted to cope with covid-19?  
 Source : Kopernik 2020

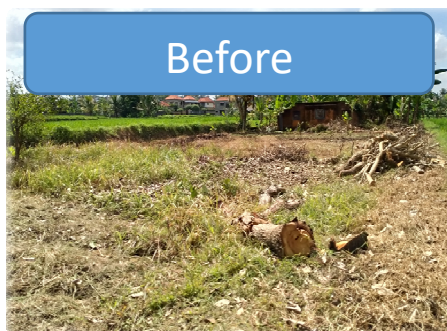
Re-Activating agriculture after the influence of COVID-19 in Bali

- Starting agricultural work while no/less job in tourism sector to safeguard food security

- Started to recognize the risk of high dependency on tourism sector.



Re-activating Agriculture: as a strategy for local people after the influence of CoVID-19 in Bali



Many lands have been cultivated after the coronavirus outbreak



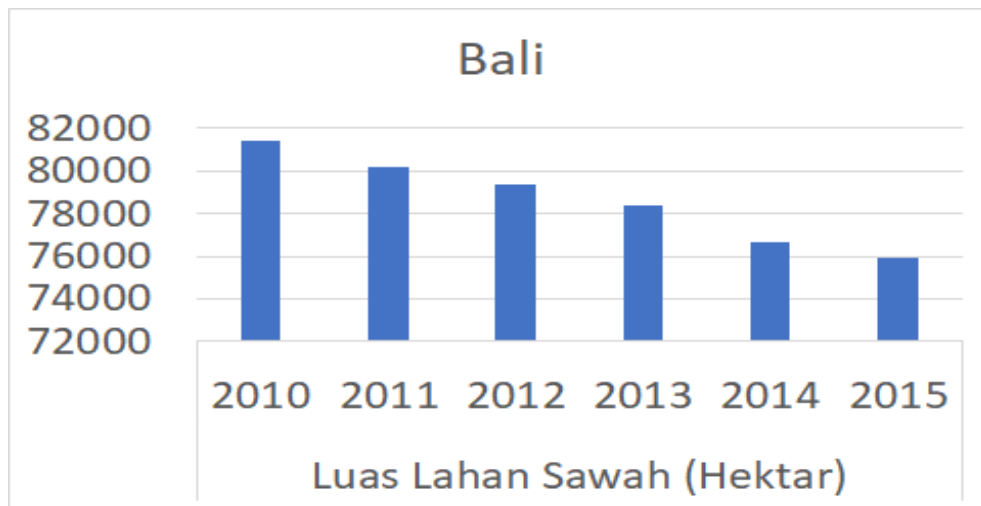
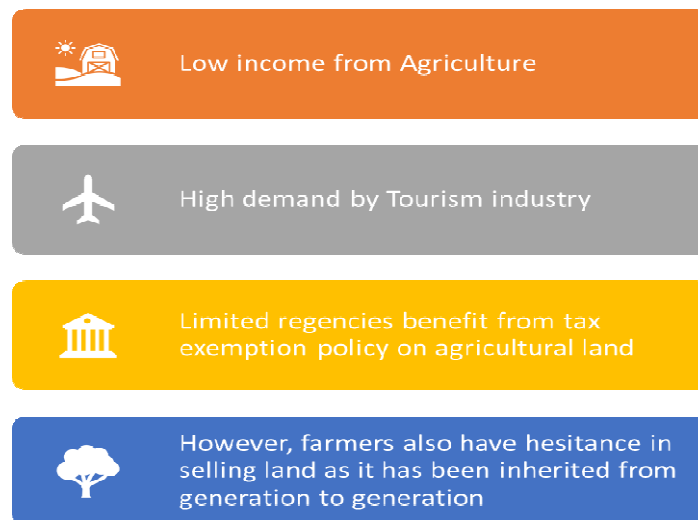


Figure 6. Recent Trend: Change of Paddy field areas in Bali  
Source : Statistics Indonesia

#### Background of Agricultural land conversion



#### Water Irrigation System in Bali: Subak

- The paddy field managed by Subak, registered as **world cultural heritage** in 2012 UNESCO
- Practice dating back to the 11<sup>th</sup> century
- There are about 1200 Subak, 81,428 hectares paddy field.

#### Features of Subak

- Community based organizations that manage irrigation and its facilities (jointly managed by the members of the organization)
- Main purpose: Provide a stable supply of water for Agriculture
- The philosophy, called "Tri-Rita-Karana" based on Bali Hindu
- Subak-Awig Awig: Customary Rules

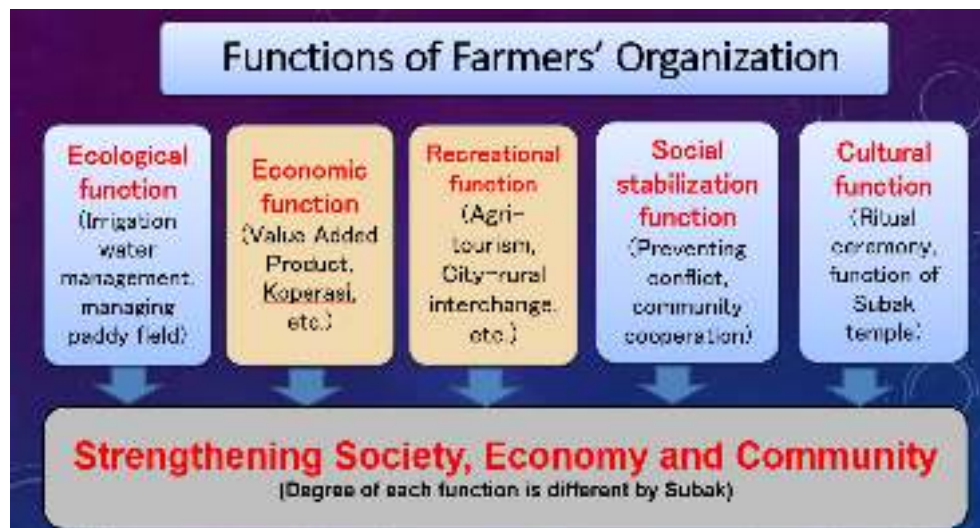


Figure 7. Functions of Farmers Organization

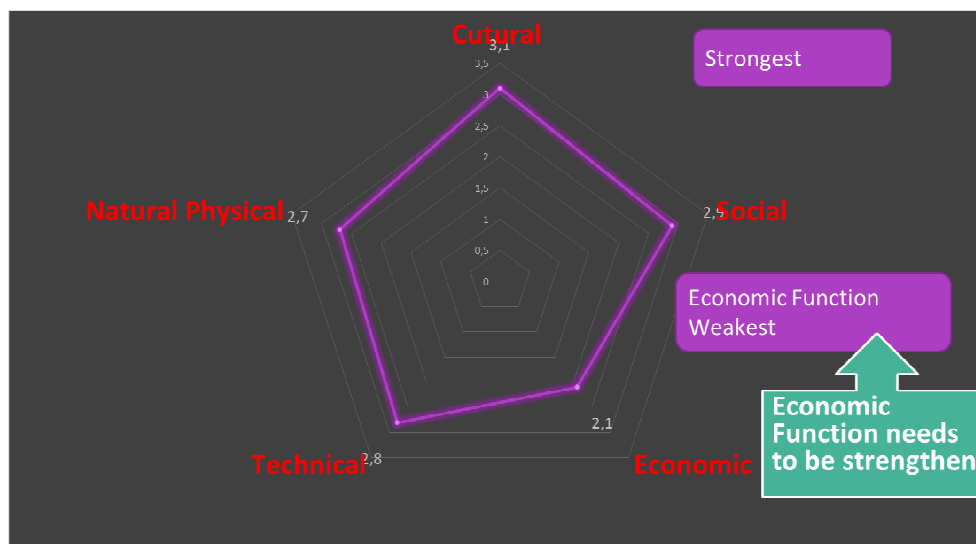


Figure 8. Farmers Organization (Subak) Sustainability Level  
 Prepared By Presenter Based On Research By Sriartha And Giyarsih, 2015

Social Experiment Project : "Improving Access To The Market By Subak Farmers"

- Initiated In January 2021, In Gianyar, Bali, Indonesia
- Aim To Strengthen Economic Function Of Subak
- Concept:

*"Let's Eat Pesticide-Free Rice And Support Farmers"*

*"Mari Makan Nasi Dari Beras Organik Dan Bantu Para Petani"*



Figure 9. Support Food Value Chain  
Source : Taproot Foundation





Figur 10. Supporting Participatory Value Chain "Win-Win" Solution

### Project Objective

- **Nurture resilience of the agricultural communities** that are suffering the adverse effects of socio-economic changes triggered by rapid growth of other industries including tourism. Impact of which were amplified by the impact of covid-19 pandemic.
- **Develop the capacity of the communities in sustainable agriculture and environmental protection**, which will result in creating opportunities for self-sufficiency, and thus facilitating the community to become less dependent on a particular industrial sector.

### Support Packaging And Creating Brand



### Project Presentation At Market : Targeting Potential Markets/Consumer Groups

- Promote "pesticide-free rice" at markets
- Connect local farmers and potential consumers (including local Japanese market)
- Free tasting
- Survey with consumers



E-Commerce: Online Market To Connect Small Farmers With Urban Consumers.

- Deliver Pesticide-Free Rice To Houses In Cities (Denpasar, Canggu, Sanur, Ubud, Etc)
- Collaboration With Online Company “Delibali”
- Using Free Application In Smart Phone, Hp



Develop Added Value Products

- Identify consumer's specific needs
- Promote rice related products
- Ex) Support for Processing to brown rice



### Promoting Agri-Tourism Visit Subak And Join Subak Activities (E.G. Planting Seedling, Harvesting Rice)



Figure 11. Planting Seedling, Harvesting Rice

#### Social Media

- Facebook: Bali Organic Farmers
- Instagram: bali\_organic\_farmers



Figure 12. Facebook and Instagram Bali Organic Farmer

#### **Quality Control** Based On The Consumer Research:

Ex) rice cleaning and color selection (removing micro organism, stones, crushed rice)



Figure 13. Rice cleaning and color selection

#### Research On The Market Information

- Price Information
- Conducted Surveys With Consumers
- Needs Assessment
- Reflect On Production

#### Impact Of Social Experiment (Interim Result)

- Income of the participated farmers:  
⇒ increased by 11% - 50% (varies by products)
- Participation :  
⇒ increased from 1 farmers group (subak) to 3 farmers group
- Expanding the shops which sell the project “pesticide-free rice”  
Before 0 ⇒ 3 shops/markets and 1 online shop (e-commerce)

#### Develop Strategic Partnership

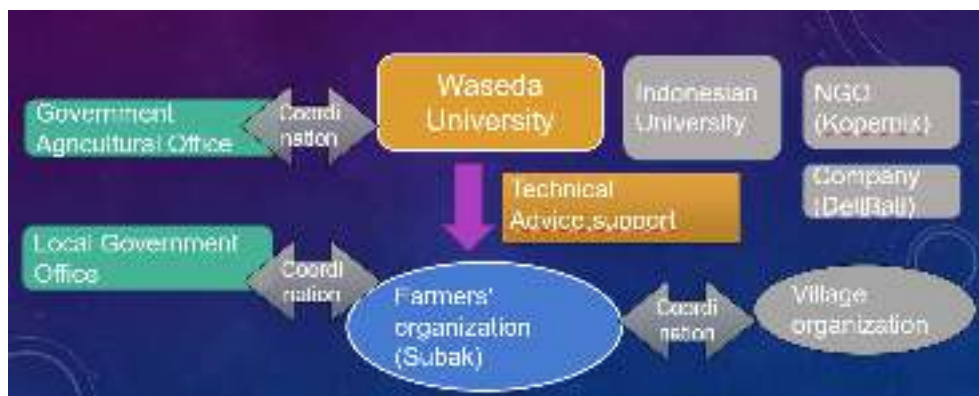


Figure 14. Develop Strategic Partnership

#### Project Management

- Implementing the project on a non-profit basis; is a form of empirical research project.
- Emphasizing its ecological aspects on environment
- Creating financially self-sustainable system
- Having positive social-economic impacts on the local community
- Operationally self-sustainable system:
- Build good human resources so that project can continue for longer time.

#### Develop Strategic Management

- Identification of potential markets/consumer groups
- Collaboration with company (online, network)
- Quality control based on the market needs assessment
- Networking: meeting with key business persons
- Presentation about non-profit project
- Customer relations: communication with customers, responding to claims
- Feedbacks sessions with key business persons
- Produce package design and promotional photos (taking good photos for social media in collaboration with a photographer)

#### Strategy For Sustainable Development

- Activating economy by agriculture
- Strategic product (farmer's brand)
- Involve community organizations in balancing environment, economy and development
- Promote value added products (e.g. Organic rice)
- Agri-tourism (e.g. agri-tourism)
- "beyond" tourism (e.g. rural-urban interchange)