

Bottom-up study contributing to the realization of Sustainable Development

Surabaya Urban Case Study

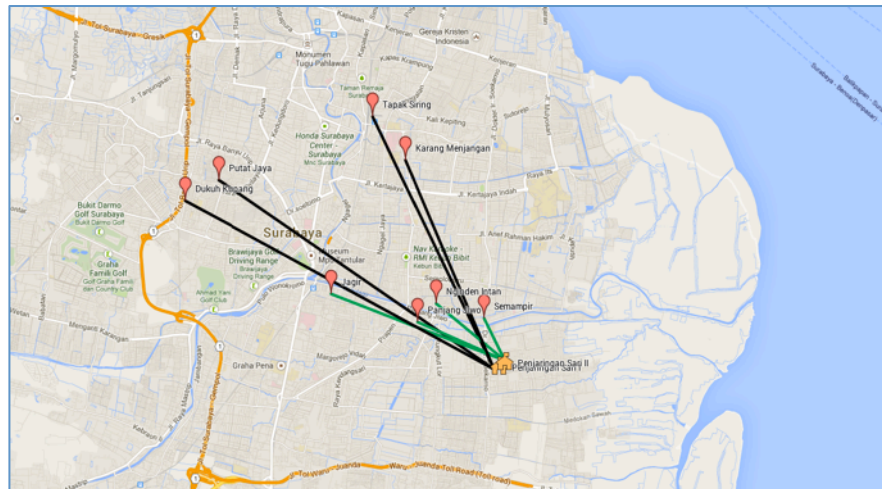
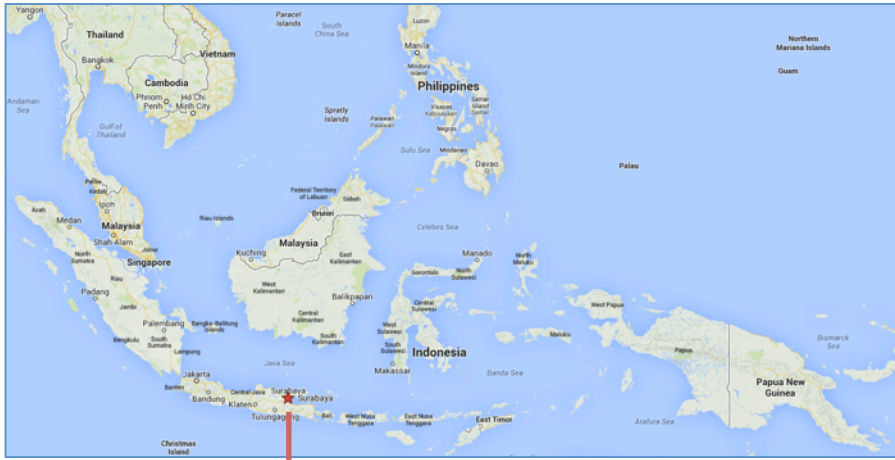


Department of International Development Engineering (IDE)
Tokyo Institute of Technology



UBAYA
UNIVERSITAS SURABAYA

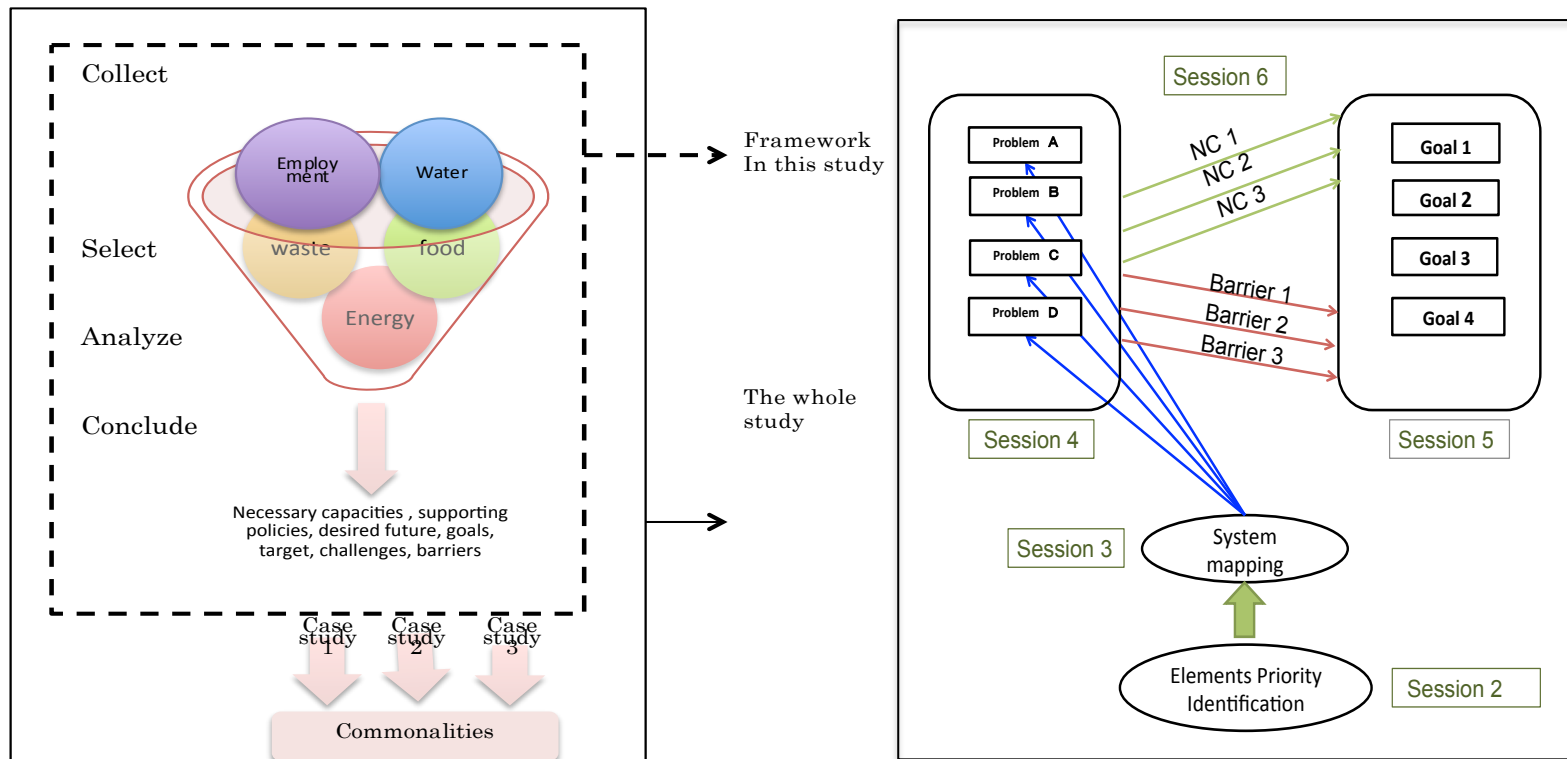
Bottom-up study contributing to the realization of Sustainable Development Goals (Target community)



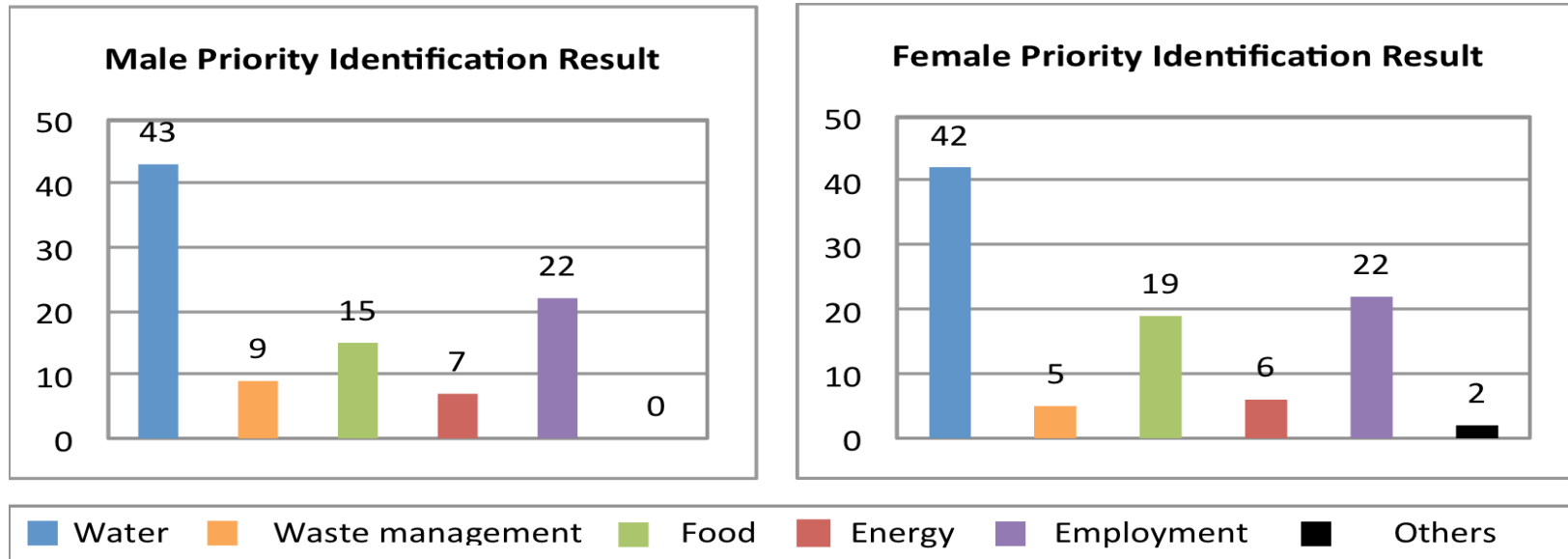
Participants' attributes	Average or %
Gender and age	
Male	50%
Female	50%
Age	40.94
Education level	
Elementary level	12.50%
Junior high level	25.00%
High school level	37.50%
College/vocational level	21.88%
Occupation	
Services (Cleaning services, technical regional office, car parking attendant, construction labor, etc.)	43.75%
Business (Small shop, Photocopy shop, etc.)	26.32%
Housewife	34.38%

Household characteristics	Average or %	Std.	Min	Max
Number of household member	3.90	1.06	2	6
Number of children	1.40	0.95	0	4
Monthly income in Indonesian Rupiah (IDR)	1,413,438	516,281	500,000	2,500,000
Monthly household utility expenses (IDR)				
Rent	48,344	66,337	10,000	400,000
Water bill	29,859	10,729	10,000	50,000
Electricity bill	66,844	27,464	20,000	125,000

Bottom-up study contributing to the realization of Sustainable Development Goals (Methodology)



Bottom-up study contributing to the realization of Sustainable Development Goals (Results)



Male Group MCA Result Summary:

1. Entrepreneurs (such as running a small photocopying shop) put higher Importance in water, energy, and waste.
2. Entrepreneurs are less worried about employment.
3. Those who had the opportunity to have vocational education put more value in employment. This is probably because they have gained very specific skills that may only be applied to a limited range of job opportunities.
4. Those who are working in private companies (mainly as cleaning service) put more concern on waste management.
5. The more number of children or member of household, the higher importance is placed on employment

Bottom-up study contributing to the realization of Sustainable Development Goals (Results)

Male			
<i>Current problems</i>	<i>Future goals</i>	<i>Necessary capacities</i>	<i>Constraints</i>
Low water quality	Better water quality	Providing a efficient (easy and affordable operation and maintenance) technology for wastewater treatment	Low awareness and knowledge on maintaining clean environment and healthy life style
Clogged sewerage gutters	Better wastewater treatment		
Poor waste management	Better waste management		
Unaffordable healthy food	Better affordability of healthy food	Capacity on how to manage clean environment and healthy lifestyle	Lack of access to appropriate technology to maintain healthy environment
Energy price is unaffordable	Better communication and togetherness among residents and with community leaders	Transparent election to have a leader who is fair, has capacity, honest and able to improve harmony in the community	Non transparent community leaders election
Unstable income			
Low involvement and togetherness of the flat community			
Female			
<i>Current problems</i>	<i>Future goals</i>	<i>Necessary capacities</i>	<i>Constraints</i>
Low water quality	Better water quality	Opportunity and capacity for entrepreneurship	Low awareness and skills on healthy food, waste management, and overall neighborhood cleanliness maintenance
Unstable income	Stable income		
Unaffordable healthy food	Better affordability of healthy food	Capacity to afford for children's higher education	Unaffordable higher education
Poor waste management	Better waste management	Capacity to manage waste (separation and recycling)	Lack of organizational skills to hold common activities

Identified Urban and Rural issues

Urban

- Clean water supply quality is contaminated by pollutant
- Wastewater treatment plant maintenance is one of the main concern
- Unstable income / job security (informal sector employment) is one of the main concern
- Individuality and existing conflicts are more apparent

Rural

- Clean water supply quantity is depending on rainfall, availability of storage tank and deep well
- Energy supply for off-grid area
- Health, weather and infrastructure become the main concerns to be able to earn a living
- Kinship and social support system are more apparent

Thank you for your kind attention

Andante Hadi Pandyaswargo (Ph.D)

Assistant Professor

Tokyo Institute of Technology

Department of International Development

2-12-1-I4-13 Ookayama, Meguro-ku, Tokyo

152-8550 Japan

andante.hadi@ide.titech.ac.jp

Naoya Abe

Associate Professor

Tokyo Institute of Technology

Department of International Development

2-12-1-I4-4 Ookayama, Meguro-ku, Tokyo

152-8550 Japan

nabe@ide.titech.ac.jp

Yunus Franciscus (M.Sc.)

Head of Center of Environmental Studies

University of Surabaya

Jalan Ngagel Jaya Selatan 169,

Surabaya, Indonesia

yunus@ubaya.ac.id