

Comparison of the Acceptance of Change to “Environmentally Friendly Food” by Farmers and Consumers in South Korea

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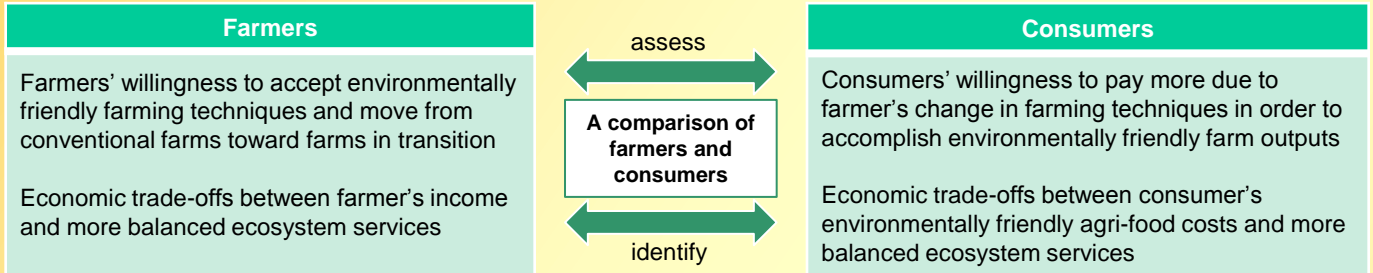


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Background

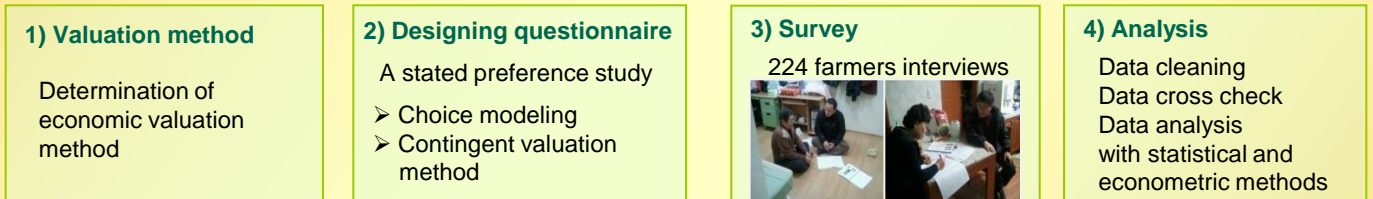
Resource management for sustainable ecosystem services under the influence of global change, and in regional social-ecological-systems is a key concern of decision-makers. It is related to a significant linkage between ecosystem services on which agriculture depends and human well-being which obtains benefits from them. Thus, it is critical 1) to evaluate economic and environmental efficiencies associated with farming techniques and 2) to identify economic trade-offs between farmer’s income/consumer’s food costs and ecosystem services by decision-making of both producers and consumers, especially in the context of sustainable management of ecosystem services in Soyang Watershed.

Objectives



Method:

- ❑ Study area: Yanggu, Inje, and Hongcheon Counties which directly influence Soyang Watershed in Gangwon Province
- ❑ Study method: Economic valuation method based on stated preference techniques
- ❑ Data: Sample size of 224 farmers, face-to-face survey data, interview period (19.03.2012–06.04.2012)

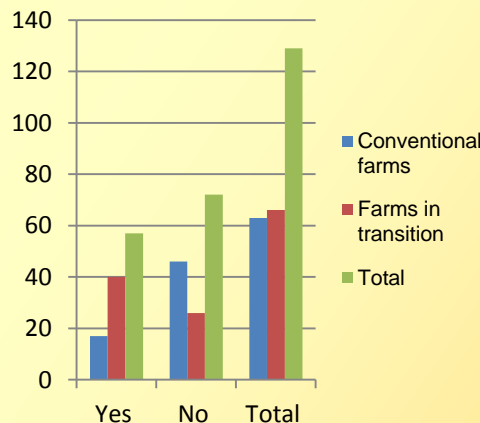


Preliminary Result:

1) Farmers perception of ecosystem services

N=208	Mean	Std. Dev
Crop yield	2.59	0.97
CO2 concentration	3.73	0.72
Pollination	4.08	0.67
Soil conservation	4.46	0.56
Water conservation	4.48	0.55
Biodiversity	4.38	0.57

2) Willingness To Accept (WTA) if compensated for 5 years



3) Economic trade-offs between farmer’s income and ecosystem services

Attributes	Utility Estimate	Std. Error
Profit (unit: Kwon)	13,567,000	2.029
	15,602,050	2.333
	17,637,100	2.637
Water quality (unit: level)	1	-0.757
	2	-1.515
	3	-2.272
Biodiversity (unit: %)	0	0
	5	0.004
	10	0.009
Constant	2.207	0.888

Linkages with other researches:

Our research in the “ENVI-ECON” concept (Figure 17 in TERRECO proposal) is integrated with other research using process models.

As the “Agriculture” cluster, our results will be used in cohort 2 studies to assess scenarios that consider land use change.

