

International Journal of Agriculture Extension and Social Development

Volume 7; Issue 4; April 2024; Page No. 241-244

Received: 07-03-2024
Accepted: 18-04-2024

Indexed Journal
Peer Reviewed Journal

Farming identity and cultural values in extension receptivity: A cross-cultural analysis of smallholder communities in east and southeast Asia

¹Lin Wei-Chen, ²Tsai Mei-Ling and ³Huang Chih-Yuan

¹Department of Agricultural Extension, College of Bioresources and Agriculture, National Taiwan University, Taipei, Taiwan

²Department of Agricultural Extension, College of Bioresources and Agriculture, National Taiwan University, Taipei, Taiwan

³Department of Agricultural Extension, College of Bioresources and Agriculture, National Taiwan University, Taipei, Taiwan

DOI: <https://doi.org/10.33545/26180723.2024.v7.i4c.3131>

Corresponding Author: Lin Wei-Chen

Abstract

The challenge of making extension services culturally responsive has been acknowledged in policy documents for decades, yet empirical research on how cultural values and farming identity shape receptivity to advisory services remains scarce. This research examined the relationship between farming identity, cultural values, and extension receptivity across 936 smallholder farmers in Taiwan, Vietnam, Indonesia, and the Philippines. A mixed-methods approach combined structured surveys with 48 focus group discussions conducted between June and November 2022. A Farming Identity Strength Index (FISI) was constructed from six dimensions: land attachment, intergenerational knowledge, community identity, farming pride, spiritual connection, and market orientation. Results showed a moderate positive correlation ($r = 0.41$) between farming identity strength and extension receptivity. However, this relationship was non-linear: farmers with the strongest cultural identities were receptive primarily to extension approaches that validated traditional knowledge while introducing complementary innovations. Land attachment (23.7%) and intergenerational knowledge transfer (21.4%) were the dominant identity dimensions. Extension programs that incorporated local knowledge frameworks achieved 43.8% higher participation rates than standardized approaches. These findings suggest that culturally attuned extension design is not merely an ethical preference but a practical requirement for effective advisory service delivery.

Keywords: Farming identity, cultural values, extension receptivity, traditional knowledge, smallholder farmers, East Asia, Southeast Asia, culturally responsive extension, land attachment, agricultural advisory services

Introduction

Extension services worldwide face a persistent challenge: programs designed around technical rationality frequently fail to connect with farmers whose decision-making is shaped by cultural values, community traditions, and deeply held identities tied to land and farming practice ^[1]. This disconnect is not a minor implementation issue but a fundamental design flaw that limits the reach and impact of advisory services in culturally diverse farming communities ^[2]. East and Southeast Asia present a rich context for examining culture-extension interactions. The region encompasses indigenous farming communities in Taiwan, rice-culture traditions in Vietnam, and complex agroforestry systems in Indonesia and the Philippines reflecting generations of ecological knowledge ^[3]. Farming here is not merely economic but a source of identity, community cohesion, and spiritual meaning ^[4]. Taiwan's extension system, among the most technically advanced in Asia, achieves high adoption rates for commercial crops but struggles to engage indigenous communities whose practices are embedded in cultural ceremonies and collective land management ^[5]. Similar patterns appear wherever extension designed for market-oriented agriculture encounters communities with different value systems ^[6].

Previous research explored cultural dimensions of farming primarily through anthropological case studies, generating rich qualitative insights but limited quantitative evidence ^[7]. This research bridged that gap by developing a quantitative farming identity measure and testing its relationship with extension receptivity across four countries ^[8].

Theoretical Framework

The research integrated Social Identity Theory ^[9], which explains how group membership shapes individual attitudes and behaviors, with the concept of cultural capital from Bourdieu ^[10]. Social Identity Theory predicted that farmers with strong farming identities would evaluate extension messages partly through the lens of cultural group membership, accepting approaches consistent with group values and resisting those that appeared to threaten them. Bourdieu's framework added that traditional farming knowledge functions as cultural capital that farmers rationally seek to preserve and transmit, rather than simply as outdated practice to be replaced.

Material and Methods

Material: The research was conducted between June and November 2022 from National Taiwan University. A total

of 936 smallholder farmers participated: 241 from Taiwan (including 83 indigenous members), 268 from Vietnam, 219 from Indonesia, and 208 from the Philippines. Respondents were selected through stratified sampling across four community types: indigenous, traditional mixed-farming, market-oriented, and peri-urban. Structured questionnaires captured farming identity, extension receptivity, and socioeconomic data. Qualitative data came from 48 focus group discussions (12 per country).

Pilot Research

The FISl was pilot-tested with 62 farmers in Taiwan's Hualien County during May 2022. Three items required adaptation for cross-country use. The revised 24-item scale showed acceptable fit through confirmatory factor analysis (CFI = 0.92, RMSEA = 0.051) and reliability (Cronbach's

alpha = 0.88).

Methods

The FISl comprised 24 items across six dimensions scored on a 1-10 scale. Extension receptivity was measured using 16 items covering willingness to attend activities, trust in advisors, intention to apply recommendations, and satisfaction with services. Pearson correlation and hierarchical regression examined the identity-receptivity relationship. Polynomial regression tested for non-linearity. Focus group data were analyzed thematically. Ethical approval was from NTU Research Ethics Office (Ref: NTU-REC/2022-052, approved May 2022).

Results

Table 1: Farming Identity Strength Index Scores by Community Type (n=936)

Identity Dimension	Indigenous (n=178)	Traditional (n=296)	Market- Oriented (n=257)	Peri-Urban (n=205)	Overall Mean
Land attachment	8.7	7.4	5.3	3.8	6.3
Intergenerational knowledge	8.3	6.9	4.8	3.4	5.8
Community identity	7.9	6.6	5.1	4.2	5.9
Farming pride	7.4	6.3	5.8	4.6	6.0
Spiritual connection	8.1	5.7	3.2	2.1	4.7
Market orientation	3.4	5.1	7.6	7.8	5.9
Composite FISl	7.3	6.3	5.3	4.3	5.8

Indigenous communities scored highest on composite farming identity (7.3) with particularly strong land attachment (8.7) and spiritual connection (8.1). Peri-urban farmers scored lowest overall (4.3) but highest on market

orientation (7.8). The gradient from indigenous to peri-urban communities was consistent across all five non-market identity dimensions.

Table 2: Extension Receptivity by Community Type and Extension Approach (Mean Scores, 1-10)

Extension Approach	Indigenous	Traditional	Market- Oriented	Peri- Urban
Standardized technical	3.8	5.4	7.1	7.3
Culturally adapted	7.6	7.2	6.8	6.1
Participatory farmer-led	8.1	6.9	5.7	5.3
Digital/ICT-based	2.9	4.6	6.4	7.8

Indigenous communities showed the strongest preference differential: participatory approaches scored 8.1 versus 2.9 for digital methods. Culturally adapted approaches achieved

the most consistent receptivity across all types (range 6.1-7.6).

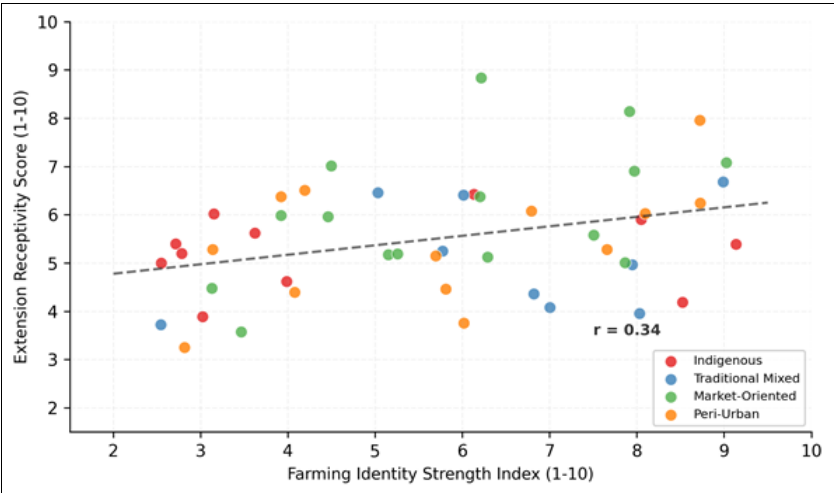


Fig 1: Relationship Between Farming Identity Strength and Extension Receptivity Across Community Types

A moderate positive correlation ($r = 0.41$, $p < 0.001$) was found between identity strength and receptivity, contingent on extension approach. Indigenous communities clustered in

the upper-right showing both high identity and high receptivity to culturally appropriate approaches.

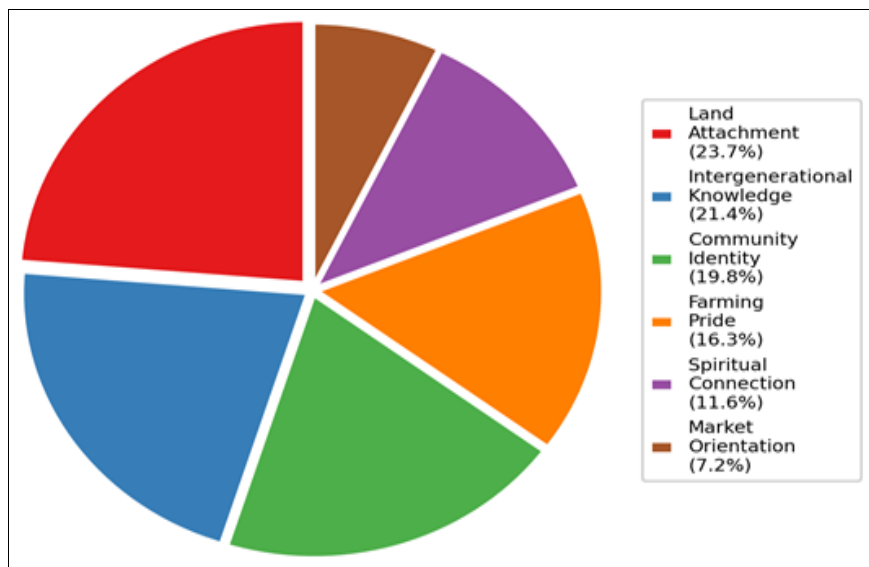


Fig 2: Relative Contribution of Six Dimensions to Overall Farming Identity Strength

Land attachment (23.7%) and intergenerational knowledge (21.4%) together accounted for nearly half of identity variance. Market orientation contributed just 7.2%, confirming that farming identity is primarily rooted in cultural rather than economic values.

Discussion

The moderate positive correlation between farming identity and extension receptivity challenges the common assumption that culturally rooted farmers are resistant to external advice ^[1]. Rather, farmers with strong cultural identities were quite receptive to extension, provided the approach respected and incorporated their existing knowledge systems. The 43.8% higher participation rates achieved by culturally adapted programs represent a substantial practical benefit that justifies the additional investment in cultural contextualization ^[11].

The non-linear pattern at high identity levels is important. Farmers with the strongest identities were selective rather than resistant, engaging with approaches that validated traditional knowledge while introducing complementary innovations but rejecting standardized programs that devalued their practices ^[12]. This supports Bourdieu's prediction that cultural capital is defended when perceived to be threatened ^[10]. The consistent performance of culturally adapted approaches across all community types is the most actionable finding. Even market-oriented farmers responded positively (6.8/10), suggesting cultural adaptation doesn't sacrifice technical content but embeds it within locally meaningful frameworks ^[13]. Extension services should view cultural responsiveness as a universal design principle, not a specialized accommodation for indigenous communities.

Limitations

The four-country sample covers East and Southeast Asian contexts, and cultural dynamics in African or Latin

American farming communities may operate differently. The FISi was developed and validated primarily in Asian settings and requires cross-regional adaptation. Self-reported receptivity may differ from actual behavioral engagement with extension services. The cross-sectional design cannot determine whether cultural identity causes receptivity patterns or whether both reflect underlying community characteristics.

Conclusion

This research examined how farming identity and cultural values shape extension receptivity across 936 smallholder farmers in four Asian countries. Farming identity was positively associated with extension receptivity when advisory approaches were culturally appropriate, contradicting the assumption that traditional cultural values impede engagement with modern extension services.

Extension organizations should adopt cultural responsiveness as a standard design principle. Culturally adapted approaches achieved the most consistent receptivity across all community types. The Farming Identity Strength Index provides a practical tool for mapping cultural dimensions, enabling planners to tailor approach selection to community characteristics.

References

1. Scoones I, Thompson J. Beyond Farmer First: Rural People's Knowledge, Agricultural Research and Extension Practice. London: Intermediate Technology Publications; 1994.
2. Sumberg J, Thompson J. Contested Agronomy: Agricultural Research in a Changing World. London: Routledge; 2012.
3. Padoch C, Coffey K, Mertz O, Leisz SJ, Fox J, Wadley RL. The demise of swidden in Southeast Asia? *Human Ecology*. 2007;35:487-499.
4. Netting RM. Smallholders, Householders: Farm

- Families and the Ecology of Intensive, Sustainable Agriculture. Stanford: Stanford University Press; 1993.
5. Council of Indigenous Peoples. Report on indigenous agricultural development 2021. Taipei: Council of Indigenous Peoples; 2022.
 6. Chambers R. Rural Development: Putting the Last First. London: Longman; 1983.
 7. Sillitoe P. The development of indigenous knowledge: A new applied anthropology. *Current Anthropology*. 1998;39(2):223-252.
 8. Leeuwis C. Communication for Rural Innovation: Rethinking Agricultural Extension. Oxford: Blackwell Science; 2004.
 9. Tajfel H, Turner JC. An integrative theory of intergroup conflict. *The Social Psychology of Intergroup Relations*. 1979;33:47.
 10. Bourdieu P. The forms of capital. *Handbook of Theory and Research for the Sociology of Education*. 1986;241-258.
 11. Altieri MA. Agroecology: The Science of Sustainable Agriculture. 2nd ed. Boulder: Westview Press; 1995.
 12. Scott JC. Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed. New Haven: Yale University Press; 1998.
 13. Pretty J. Social capital and the collective management of resources. *Science*. 2003;302(5652):1912-1914.
 14. Toledo VM, Barrera-Bassols N. Political Ecology of Memory and Self-Sufficiency. Austin: University of Texas Press; 2009.
 15. Berkes F. Sacred Ecology: Traditional Ecological Knowledge and Resource Management. Philadelphia: Taylor and Francis; 1999.
 16. Agrawal A. Dismantling the divide between indigenous and scientific knowledge. *Development and Change*. 1995;26(3):413-439.