



Agroethnography of Greenhouse Farming in the Yazdabad Rural Area of Falavarjan: A Soci-Narrative on the Invention and Evolution of Iran's Traditional Greenhouse Agricultural System

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ABSTRACT

This study seeks to illuminate the historical trajectory of greenhouse agriculture in the Yazdabad region, and by extension, the rural-urban settlement of Abrissham. The research traces the evolution of local farming patterns and techniques alongside the corresponding shifts in the area's agricultural social structures. By focusing intensively on a single village, this work reflects broader socio-economic trends observed across Iran's rural areas over the past six decades. A core premise of this research is that the narratives generated by local practitioners are meaningful and accessible, offering unique insights into place-based identity, greenhouse cultivation, and the associated activities during the critical stages of planting, crop protection, and harvesting-experiences that inherently function as forms of place-based learning. These narratives foster rich learning experiences for the narrator, the compiler, and the reader alike. To this end, semi-structured and unstructured interviews were conducted with 20 key practitioners within the region's greenhouse sector. The collected data, supplemented by documentary studies, were analyzed using textual and document analysis techniques, common approaches in qualitative research. The findings reveal that the studied region pioneered the widespread adoption of greenhouse cultivation in the country. Key drivers for this adoption included the demand for early-season production, escalating market competition, issues of land fragmentation, imperatives of food security, and increasing regional water scarcity. In conclusion, the researchers strongly recommend that the traditional wooden greenhouse structures and cultivation methods employed in this area be formally registered as a protected agricultural heritage system by the relevant authorities.

Keywords: Agroethnography, Greenhouse Farming, History of Agricultural Evolution, Narrative Analysis, Yazdabad Region.

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Introduction

This research aims to explore the historical trajectory of greenhouse agriculture in the Yazdabad region of Falavarjan, Iran, and the broader rural-urban settlement of Abrisham. It examines the evolution of farming patterns, techniques, and social structures in the area, reflecting broader socio-economic trends in rural Iran over the past six decades. The study adopts an agroethnographic approach, focusing on local narratives that reveal unique insights into place-based identity and the development of greenhouse farming.

Materials & Method

This qualitative research employs an agroethnographic framework combined with narrative analysis. The primary data consists of spoken texts (narratives) collected through semi-structured and unstructured interviews with 20 key practitioners in the greenhouse sector of the Yazdabad region, including farmers, cooperative members, merchants, and government officials. Participants were selected via purposive sampling based on their lived experience and historical knowledge. Supplementary data was gathered through documentary studies and field observations. The interview transcripts and documents were analyzed using qualitative textual analysis and coding techniques to identify central themes, patterns, and a coherent narrative of the system's invention, diffusion, and contemporary structure.

Discussion

The findings reveal a multi-stage historical evolution. The innovation originated in the mid-1960s (circa 1346 Persian calendar), initiated by local figures like Haj Seyed Abolfazl Mirlohi, who created the first protected spaces for cucumber cultivation. Key drivers included competition for early-season markets, land fragmentation due to land reform, and the imperative for food security. The initial glasshouse model was quickly adopted by local farmers and transformed into a low-cost, wooden-structured, plastic-covered greenhouse, which became the region's signature technology. The study identifies significant phases of geographic diffusion, including a migration of Yazdabadian farmers to the Garkan region (e.g., Ghal'eh Sorkh) in the 1980s, followed by a retreat due to severe water scarcity. The discussion analyzes the persistent traditional structure of the system, characterized by: 1) The dominance of wooden-frame greenhouses, 2) A deep intertwinement of residential and greenhouse spaces creating a unique rural-urban morphology, 3) Family-based labor and management structures, and 4) Market chains reliant on intermediaries (dalāls). These features underscore its identity as a distinct, place-based socio-technical regime.

Results and Conclusion

The research concludes that the Yazdabad greenhouse system constitutes a Nationally Important Agricultural Heritage System (NIAHS). It embodies both tangible (e.g., specific wooden infrastructure, integrated spatial layout) and intangible (e.g., indigenous knowledge, multi-generational narratives, social identity) heritage values. The system has played a pioneering role in greenhouse cultivation across Iran, making a significant contribution to national food security. The core recommendations are: 1) Formal recognition and registration of the traditional wooden greenhouse cultivation system as a national agricultural heritage by relevant Iranian cultural and agricultural authorities, and 2) The development of targeted policy interventions that support its preservation while addressing its structural vulnerabilities, particularly in marketing and water management. This study demonstrates the utility of narrative and ethnographic methods in reconstructing agricultural history and advocating for the preservation of unique agro-cultural landscapes.

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