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*Review Article*

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# Cultivating Empowerment Through Backyard Gardening Among Women in Low Income Urban Communities

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**ABSTRACT**

Women's empowerment remains a critical concern in low-income urban communities, where limited access to livelihood opportunities and food security challenges persist. This study examines backyard gardening as a community-based strategy for empowering women through sustainable food production, psychosocial well-being, and social engagement. Using a qualitative case study approach, data were drawn from home visitation narratives and field observations of a female beneficiary engaged in backyard vegetable gardening in an urban barangay. The case focused on gardening practices, economic contributions, emotional benefits, and community interactions arising from the initiative. Findings reveal that backyard gardening provided multiple empowerment outcomes. Economically, the activity supplemented household needs through small-scale sales of vegetables. Psychosocially, gardening served as a therapeutic and stress-relieving practice that enhanced emotional well- being. Socially, the deliberate placement of edible plants in accessible spaces encouraged sharing, strengthened community trust, and promoted social responsibility. Environmentally, the practice supported organic food production and local ecological awareness. The study concludes that women-led backyard gardening is an effective, low-cost intervention that promotes holistic empowerment by integrating livelihood support, mental well-being, community cohesion, and environmental sustainability. These findings underscore the relevance of backyard gardening as a gender-responsive social development strategy that can be strengthened and replicated in similar urban communities to enhance women's agency and resilience.

**Keywords:** Women Empowerment, Backyard Gardening, Urban Communities, Food Security, Community Engagement, Sustainable Livelihoods

## Introduction

Backyard gardening is examined in this study as a practical and sustainable strategy for advancing women's empowerment in low-income urban communities. As a women-led, livelihood-based, and environment-sensitive practice, backyard gardening simultaneously addresses economic, psychosocial, environmental, and community engagement dimensions of empowerment. Economically, it contributes to household food security and supplemental income; psychosocially, it supports emotional well-being and stress management; environmentally, it promotes sustainable and pesticide-free food production; and socially, it fosters interaction, trust, and collective responsibility within communities. Rather than relying on short-term assistance, this study positions backyard gardening as a corrective strategy that strengthens women's agency, resilience, and participation in everyday community life.

Women's empowerment remains a central concern in social development and social welfare discourse, particularly in urban and coastal settings where economic precarity and limited access to productive resources disproportionately affect women [1]. While policy frameworks increasingly emphasize gender equality and poverty reduction, many interventions remain externally driven and relief-oriented, with limited attention to

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sustainable, community- rooted practices that integrate economic security, psychosocial well-being, environmental stewardship, and social cohesion. Emerging literature on urban agriculture and home-based food production highlights potential benefits for household food security, supplemental income, environmental sustainability, and mental well-being [2,3]. Gardening activities have also been associated with stress reduction, emotional regulation, and an enhanced sense of purpose, particularly among women managing multiple caregiving and domestic roles [4,5]. However, much of the existing research remains programmatic or outcome-focused, offering limited insight into how women experience empowerment across these interconnected dimensions through every day, self-initiated livelihood practices.

This study addresses this gap by examining backyard gardening as a women-led empowerment strategy in a low-income urban community in Isabela City, Basilan Province, Philippines. The analysis draws on qualitative data generated through routine monitoring and evaluation activities of the Department of Social Welfare and Development, including home visitation records and field narratives documented by social work practitioners. Using a qualitative case study approach, the research explores how backyard gardening contributes to women's economic participation, psychosocial well-being, environmental responsibility, and community engagement. Grounded in Green Social Work principles that link social justice with environmental sustainability, the study demonstrates how everyday livelihood practices can function as integrated pathways to women's empowerment and community resilience in resource-constrained urban and coastal settings [6].

## Review of Related Literature

### Women's Empowerment in Low-Income Urban Contexts

Women's empowerment is broadly recognized as a multidimensional process involving economic participation, decision-making capacity, and psychosocial well-being. In low- income urban contexts, structural constraints such as limited access to resources, employment instability, and social inequalities often hinder women's agency and resilience.

Research indicates that greater empowerment contributes positively to household welfare and community development outcomes. However, traditional empowerment interventions tend to focus on externally designed programs, leaving a gap in understanding how informal, locally rooted practices contribute to sustainable empowerment.

### Urban Gardening and Economic Empowerment

Urban agriculture and backyard gardening have been identified as practical strategies for enhancing food security and livelihood opportunities among low-income populations. Urban gardening plays a crucial role in enhancing household income and food access, particularly in resource-constrained settings. Moreover, gardening activities have been linked to increased food sovereignty and self-reliance, suggesting potential pathways for women's economic empowerment in urban environments. Despite these documented benefits, most studies emphasize program outcomes such as productivity and yield, with limited focus on how everyday gardening practices shape women's perceptions of empowerment and agency.

### Psychosocial Benefits of Gardening

Evidence from recent studies highlights the psychosocial advantages associated with gardening activities, including reduced stress levels, increased sense of belonging, and improved emotional well-being. Experimental research has shown that participation in garden activities significantly enhances psychological resilience and community connectedness among urban gardeners. Additionally, qualitative literature suggests that gardens can foster a sense of accomplishment and social integration, which are important dimensions of psychosocial empowerment. However, the intersection of psychosocial outcomes and empowerment for women specifically remains underexplored in urban contexts.

### Community Engagement and Social Capital

Community gardening and shared green spaces are emerging as platforms for social interaction and collective action. Urban food initiatives often facilitate community engagement, strengthen social networks, and build social capital among participants. These community processes are associated with enhanced social cohesion and collective empowerment (Community Greens, 2025). Nonetheless, research has yet to fully examine how women's leadership and intentional community contributions within gardening spaces translate into broader social empowerment.

### Research Gap and Contribution of the Study

Although significant literature underscores the economic and psychosocial benefits of urban gardening, gaps remain in understanding how women experience empowerment through informal, self-initiated backyard gardening. This study addresses these gaps by integrating economic, psychosocial, and community dimensions from women lived experiences. By focusing on qualitative narratives from a low-income urban community, this research advances knowledge on how everyday livelihood practices can serve as sustainable strategies for women's empowerment.

## Materials and Methods

This study employed a qualitative case study research design to examine women's empowerment through backyard gardening as a sustainable livelihood and coping strategy in a low-income urban community. The study was conducted in an urban barangay of Isabela City, Basilan Province, Philippines, using qualitative data generated during routine monitoring and evaluation activities of the Department of Social Welfare and Development. The research was undertaken to document and analyze how women beneficiaries experience empowerment through every day, self-initiated gardening practices in contexts where economic insecurity, limited arable land, and food access challenges persist. The primary participant was a female social welfare beneficiary actively engaged in backyard vegetable gardening, purposively selected based on sustained gardening practice, visible community interaction, and documented outcomes related to livelihood support, psychosocial well-being, and social contribution. Data collection took place during scheduled home visits conducted by a social work practitioner within the monitoring period, and involved informal interviews, direct field observation, and narrative documentation. The materials included observational notes, participant statements, and descriptive accounts of gardening practices, types of vegetables cultivated, modes of produce distribution, and community interactions. Ethical considerations were observed

by ensuring voluntary participation, confidentiality, and respectful documentation of personal experiences. Thematic analysis was applied to the qualitative data, with transcripts and field notes reviewed iteratively to identify recurring patterns related to economic empowerment, psychosocial well-being, community engagement, and environmental awareness. Codes were clustered into thematic categories and interpreted using women's empowerment and community development frameworks. Findings were organized and presented through descriptive tables and narrative summaries to enhance clarity, while photographic references of the garden served as supplementary observational support. Credibility was strengthened through prolonged engagement during home visits and triangulation of observations, participant narratives, and practitioner documentation, and transferability was supported through thick description of the setting and practices to allow assessment of applicability to similar urban and coastal contexts.

## Results

The qualitative data obtained from home visitation narratives, informal interviews, and field observations were analyzed and organized into measurable categories using descriptive frequency counts and thematic occurrence tables. Although inferential statistics and hypothesis testing were not applicable due to the single-case qualitative design, the use of structured tables enhanced clarity and transparency of the results.

### Economic Contribution Outcomes

The participant's backyard gardening activities yielded observable economic-related outcomes, primarily through household consumption and limited income generation. Table 1 summarizes the economic contributions identified during data collection.

**Table 1: Economic Outcomes of Backyard Gardening**

| Economic Indicator | Observation | Frequency |
|---|---|---|
| **Household vegetable consumption** | Present | 1 |
| **Reduction in food expenses** | Present | 1 |
| **Sale of excess produce** | Occasional | 1 |
| **Income used for basic needs** | Present | 1 |

Table 1 presents the economic outcomes associated with backyard gardening as observed in the study conducted in Isabela City, Basilan Province. The results indicate that household vegetable consumption was present, demonstrating that backyard gardening directly contributed to food availability within the household. In the context of Isabela City—a coastal urban area where arable farmland is limited due to geographic constraints, settlement density, and soil conditions—this finding underscores the viability of backyard gardening as an alternative food production strategy. In many barangays of Basilan Province, traditional farming is either impractical or inaccessible, making small-scale backyard and container gardening a critical adaptation for household food provisioning.

The observed reduction in food expenses is particularly significant in Isabela City, where coastal location and island logistics contribute to fluctuating food prices and dependence on external supply chains. Within Philippine social welfare realities, especially in Basilan where many households rely on informal livelihoods and limited social protection, backyard gardening serves as a practical coping mechanism that enhances household food security. The occasional sale of excess produce reflects the garden's role as a supplementary income source rather than a primary livelihood activity, consistent with the adaptive economic strategies of women in coastal and island communities. Although income generation was modest, proceeds were used to meet basic household needs, demonstrating tangible economic value despite spatial and environmental limitations.

Overall, the results indicate that backyard gardening generates meaningful economic benefits through combined cost savings and modest income supplementation. While the frequency value of one reflects the single-case nature of the study, the consistent presence of all economic indicators suggests a contribution to household economic resilience. These findings support the assertion that backyard gardening is a viable, low-cost economic empowerment strategy for women in Isabela City, Basilan Province, particularly in coastal settings where conventional farming is constrained. When integrated into community-based social welfare and livelihood interventions, backyard gardening offers a context-appropriate approach to strengthening food access, self-reliance, and economic stability among vulnerable urban coastal households.

### Psychosocial Well-Being Outcomes

Psychosocial outcomes were consistently reported and observed throughout the study period. Table 2 presents the frequency of reported psychosocial benefits associated with gardening activities.

**Table 2: Psychosocial Outcomes of Backyard Gardening**

| Psychosocial Indicator | Description | Frequency |
|---|---|---|
| Stress relief | Gardening described as relaxing | 1 |
| Emotional satisfaction | Enjoyment from nurturing plants | 1 |
| Therapeutic effect | Gardening as coping activity | 1 |

The psychosocial outcomes presented in the table indicate that backyard gardening contributed positively to the emotional and psychological well-being of the participant. The presence of stress relief, evidenced by the description of gardening as a relaxing activity, suggests that engagement in gardening served as an effective means of reducing daily stressors associated with household and economic responsibilities. This finding aligns with studies demonstrating that interaction with green spaces and gardening activities can lower stress levels and promote psychological restoration, particularly in urban and low-income settings [7,4]. From a social work perspective, these outcomes reflect early psychosocial principles articulated by Mary Richmond, who emphasized the importance of addressing both individual functioning and environmental conditions in promoting well-being [8]. Emotional satisfaction emerged as another key outcome, with the participant expressing enjoyment derived from nurturing and observing the growth of plants. This

sense of fulfillment reflects increased personal accomplishment and self- worth, which are central components of psychosocial empowerment [1].

Richmond's casework framework highlights that purposeful activity and engagement with one's environment enhance self-respect and adaptive functioning, particularly among individuals managing multiple social roles and responsibilities [9]. In this context, caring for living plants reinforced a sense of control, purpose, and competence, which are critical to psychological resilience. The therapeutic effect of gardening, identified as a coping activity, further reinforces its role as a non-clinical and accessible psychosocial intervention. Gardening functioned not only as a productive task but also as a meaningful leisure activity that supported emotional regulation and psychological resilience, consistent with contemporary evidence linking horticultural activities to improved mood and reduced psychological distress [6]. Although the frequency value reflects a single-case observation, the consistent presence of all psychosocial indicators underscores the holistic mental health benefits of backyard gardening. These findings affirm Richmond's enduring assertion that social interventions rooted in everyday environments can effectively strengthen individual adjustment and psychosocial functioning, particularly for women in vulnerable community settings.

**Community Engagement Outcomes**

Community interaction emerged as a prominent result, particularly through the intentional sharing of garden produce. Table 3 summarizes observed community-related outcomes.

**Table 3: Community Engagement Outcomes**

| Community Indicator | Observation | Frequency |
|---|---|---|
| **Free access to vegetables** | Present | 1 |
| **Neighbor interaction** | Observed | 1 |
| **Trust and reciprocity** | Evident | 1 |
| **Informal community leadership** | Observed | 1 |

The community engagement outcomes presented in the table demonstrate that backyard gardening extended beyond household benefits to generate meaningful social impacts within the neighborhood. The presence of free access to vegetables indicates an intentional practice of resource sharing that reflects values of generosity and collective well-being, a characteristic commonly observed in community-based food initiatives [10,11]. Such practices have been shown to reduce barriers to food access for neighbors and passersby, thereby strengthening informal community support systems and enhancing local food justice. Observed neighbor interaction suggests that the garden functioned as a social space facilitating communication and interpersonal connections, consistent with findings that shared gardening environments promote social cohesion and everyday social encounters. These interactions contribute to strengthened neighborhood ties, which are widely recognized as foundational to community resilience [12].

The evidence of trust and reciprocity, manifested through neighbors requesting permission and offering fair compensation, reflects shared norms of accountability and mutual respect, aligning with social capital theory in urban community contexts [13]. Informal community leadership emerged through the participant's deliberate actions in making food resources publicly accessible and modeling sustainable practices. Although no formal leadership role was assumed, such behaviors have been identified as forms of grassroots leadership that enhance community engagement and collective efficacy. Despite the single-case frequency, the consistent presence of all community indicators suggests that backyard gardening can serve as a platform for women's social empowerment by increasing visibility, influence, and relational capital within urban communities [1].

**Environmental Awareness and Sustainability Outcomes**

The gardening practice demonstrated environmentally responsible behaviors, as summarized in Table 4.

**Table 4: Environmental and Sustainability Outcomes**

| Environmental Indicator | Practice Observed | Frequency |
|---|---|---|
| **Organic cultivation** | Use of pesticide-free methods | 1 |
| **Insect conservation awareness** | Expressed by participant | 1 |
| **Sustainable food sourcing** | Practiced | 1 |

The environmental indicators presented in the table demonstrate that backyard gardening contributed to environmentally responsible practices and enhanced ecological awareness at the household level. The use of organic cultivation methods, characterized by pesticide-free practices, reflects a conscious effort to produce safe and healthy food while minimizing environmental harm.

These practices are consistent with the principles of Green Social Work, which emphasize the interconnection between environmental sustainability, social justice, and human well-being, particularly among marginalized populations [14,6]. Empirical research has shown that small-scale urban and household gardening supports sustainable food production, soil health, and environmentally responsible land use even in resource-constrained and densely populated settings [3]. The participant's awareness of insect conservation further reflects an understanding of ecological balance and biodiversity, which are essential components of sustainable food systems. Studies in urban ecology demonstrate that home and community gardens contribute to biodiversity conservation and environmental learning by fostering everyday interaction with ecological processes [2]. This finding supports the Green Social Work perspective that environmental stewardship can emerge from everyday livelihood practices without reliance on formal or resource-intensive interventions [6].

Sustainable food sourcing, as evidenced by reliance on homegrown vegetables, reinforces the environmental value of backyard gardening by reducing dependence on externally sourced produce. Research indicates that localized food production lowers carbon emissions associated with food

transportation and packaging, contributing to climate change mitigation at the household and community levels [3]. Within the Philippine social welfare context, these environmental benefits help explain why the Pantawid Pamilyang Pilipino Program of the Department of Social Welfare and Development encourages women beneficiaries to engage in backyard gardening, as the practice simultaneously promotes food security, environmental responsibility, and household resilience. Although the frequency reflects a single-case observation, the consistent presence of environmental indicators suggests that women-led backyard gardening initiatives function as effective Green Social Work strategies integrating environmental sustainability with economic and social empowerment.

**Discussion**

The findings of this qualitative case study demonstrate that backyard gardening functions as a multidimensional empowerment mechanism for women in low-income urban and coastal communities, particularly in Isabela City, Basilan Province. Although the data did not permit inferential statistical analysis using formulae or probability testing due to the single-case, narrative-based design, systematic thematic comparison was employed to examine the interrelationships among economic contribution, psychosocial well-being, community engagement, and environmental responsibility. The participant's gardening practice produced tangible economic outcomes through household vegetable consumption, reduced food expenses, and the occasional sale of surplus produce, contributing to minor income supplementation and enhanced household food security. These outcomes are especially significant in the local context, where limited arable land and reliance on external food supply chains constrain conventional farming options.

Psychosocial outcomes were evidenced by repeated expressions of emotional relief, stress reduction, and personal satisfaction derived from cultivating and harvesting vegetables. Gardening functioned as a therapeutic, non-clinical coping mechanism that supported emotional regulation and psychological resilience, consistent with psychosocial and person– in–environment perspectives in social work. Social empowerment emerged through deliberate community-oriented practices, particularly the placement of edible plants in publicly accessible spaces, which fostered trust, reciprocity, neighbor interaction, and informal leadership. Environmental outcomes further reinforced the multidimensional nature of empowerment, as the adoption of organic, pesticide-free cultivation and awareness of insect conservation reflected environmentally responsible behavior aligned with Green Social Work principles. Collectively, these interconnected outcomes support the study's central proposition that backyard gardening, even at a small scale, can yield integrated empowerment benefits when driven by women's initiative, environmental awareness, and community values [15,16].

**Findings**

The investigation established the claim that women-led backyard gardening contributes to empowerment across economic, psychosocial, social, and environmental domains. Comparative thematic analysis revealed consistent patterns linking gardening activities to reduced household food expenditure, supplemental income generation, improved emotional well-being, strengthened social relations, and environmentally responsible practices. The participant's practice of sharing produce with neighbors and passersby demonstrated social responsibility and informal community leadership, reinforcing cohesion and mutual support within the neighborhood. Although hypothesis testing in the statistical sense was not applicable, analytic comparison across empowerment dimensions confirmed that the observed outcomes aligned with the study's proposed empowerment framework, thereby supporting rather than refuting the initial claim.

**Limitations, Conclusions, and Recommendations**

The primary limitation of the study lies in its reliance on a single qualitative case, which restricts generalizability and precludes statistical inference. The absence of longitudinal data also limits the assessment of long-term empowerment and sustainability outcomes. Despite these limitations, the study concludes that backyard gardening is a viable, low-cost, and context-appropriate strategy for women's empowerment in low-income urban and coastal settings such as Isabela City, Basilan Province. The findings highlight the importance of recognizing informal, self-initiated livelihood practices as legitimate empowerment pathways that complement formal social welfare interventions. Consistent with Green Social Work principles and the objectives of the Pantawid Pamilyang Pilipino Program, backyard gardening supports food security, environmental stewardship, psychosocial well-being, and community resilience. Future research is recommended to include multiple participants, comparative barangay-level cases, and mixed-method approaches to quantify empowerment indicators and examine long-term impacts. Policy-oriented studies may further explore how local government units and the Department of Social Welfare and Development can institutionalize support for women-led backyard gardening as part of sustainable livelihood and climate-resilient social protection programs.

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