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Backyard poultry for food security: smallholder women farmers in promoting multifunctional agro-ecosystems in punjab, Pakistan

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Abstract

Women in Pakistan face severe malnutrition and food insecurity. Rural women in Pakistan keep backyard poultry as it is a low-cost investment that is easily manageable and culturally acceptable. They actively participate in the care, handling, and management of their birds and poultry products. Previous studies have reported that backyard poultry not only enhances soil fertility and nutrient biodiversity but also increases crop productivity. Unfortunately, the role of smallholder women in keeping backyard poultry is poorly documented. Thus, this study evaluated the role and documented the indigenous knowledge of smallholder women regarding backyard poultry practices and their contribution to multifunctional agro-ecosystems that sustain the livelihoods of this vulnerable group.

The study was conducted in Tehsil Jalalpur Pirwala, South Punjab, Pakistan, a region with a high proportion of smallholder farmers. The study used a mixed-method approach combining household surveys and focus group discussions with smallholder female farmers. For this, approximately 100 women farmers in Jalalpur Pirwala were interviewed using survey-based questionnaires and focus group discussions. The research investigated the gendered perspectives on the use of backyard poultry to increase food security, improve livelihoods, and promote agro-ecosystems. The study also focused on the efficient use of kitchen waste and other residues for feeding backyard poultry. Data collected through surveys and focus group discussions were analysed statistically using stratified random sampling with multivariate regression models. The research results demonstrated the significant role of smallholder women farmers in promoting the agro ecosystem. The findings show that backyard poultry not only provides nutrition but also helps recycle organic matter, efficiently utilise crop residues, and support biodiversity. These findings underscore the need to recognise and integrate the knowledge of smallholder women farmers into broader agro-ecosystem management and food security policies.

Keywords: Agro-ecosystems, backyard Poultry, Food Security, Local Knowledge , Smallholder Women Farmers