

The Effect of the Sustainability of Seribu Galon Program on Household Food Security of Women Farmers in Condongcatur, Sleman Regency

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ABSTRACT

Indonesia's population has consistently increased annually, reaching 281.6 million in 2024. This demographic growth is closely impacted to rising food demand and land degradation, which may intensify food security challenges. These changes heighten the risk of food insecurity, particularly in urban and semi-urban areas. An instance of food insecurity was observed in the central region of Sleman Regency, Yogyakarta.

The Seribu Galon Program is an initiative introduced by the local government to support women farmer groups in enhancing household food security within Sleman Regency. The program employs three key conceptual approaches to home yard utilization. First, it incorporates local wisdom by collecting used water gallons within the community to be repurposed as planting containers. Second, it promotes sustainable agriculture through the adoption of organic farming practices during seed preparation, planting, maintenance, and harvesting. Third, it emphasizes community engagement by encouraging collaboration among women farmer groups, community-based women organizations (PKK), and local waste bank institutions in the program's implementation. This study aims to evaluate the factors influencing the sustainability of the Seribu Galon Program, to measure its level of sustainability, and assess its effects on household food security among respondents.

The sustainability of the Seribu Galon Program was evaluated based on three key dimensions: ecological, economic, and social. Household food security was assessed using four aspects, namely food availability, utilization, accessibility, and stability. The data were collected by questionnaires, conducting direct observations, and performing interview with five women farmer groups in Condongcatur Village, Sleman Regency. A total of 60 respondents were selected randomly. The collected data were analyzed using proportion tests, ANOVA, and multiple linear regression. Findings were further supported by a review of relevant literature and regional statistical data.

The analysis of sustainability across social, economic, and environmental dimensions was conducted by considering regional characteristics to identify emerging phenomena. The results indicate that the overall sustainability of the program is categorized as high, with a score of 75.72%. This high level of sustainability was positively influenced by internal factors such as age and motivation, as well as external including the roles of farmer groups and agricultural extension agents. These findings suggest that increased program sustainability is associated with a greater influence of these four factors in promoting sustainability. A similar pattern was observed regarding the impact of sustainability on the food security of members women farmer groups households. The sustainability of the Seribu Galon Program is relevant not only for farming activities within the program but also ensuring household food needs in terms of availability, accessibility, stability, and utilization.

This study highlights that small-scale community-based agricultural initiatives, such as the Seribu Galon Program, play an important role in promoting sustainable agriculture and household food security. Their sustainability and effective implementation depend on collaboration among stakeholders and the strengthening of individual capacities and characteristics. The findings of the study provide a basis for recommendations to government and community stakeholders in supporting similar initiatives that address ecological, social, and economic challenges, particularly for sustainable agriculture and food security in Indonesia.

Keywords: *Sustainability of the Program, Food Security, Women Farmer Group, Seribu Galon Program*