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Seed Security for Food Security: A Situation Analysis from the Rural Home Gardens

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Abstract

Seeds being a primary agricultural input, its availability, access, and affordability is directly linked to the agricultural production. Traditional home gardens, backyards, Kandyan forest gardens, and micro-agricultural systems rich in biodiversity and species, mix with the knowledge and skills of the community to manage sustainable food production systems. Therefore, the study targeted to identify the types of seed production and preservation systems available among the farming community, and to identify the impact of seed ownership on household resilience to food insecurity. Data were gathered using an initial transaction walk, and a series of focus group discussions with rural households of Imbulpe and Boralanda GN divisions of Rathnapura and Badulla districts, respectively. The study areas were selected given the diversity of the crops in the area. Sample profile included 30 farmers who were purposively selected from each GN division. Results were analyzed using descriptive statistics and it revealed the existence of two seed production and preservation systems: formal and informal. Formal seed systems included both private and public stakeholders in seed and planting material business. Farmers used these formal seed systems for commercial level cultivation of both up-country and low-country vegetables. Informal seed systems were characterized with the own production, selection, storage, and maintenance of seed banks, barter system, and community seed gifting/sharing, and purchasing locally produced seeds from the locality. Informal seed systems were identified mainly for cereals (traditional rice varieties), pulses, fruits, vegetables, and spices at home gardening level. This resulted in seed and planting material ownership retaining among the local farmers. Seed ownership is an intangible asset which empowers social and human capital status of the households. Locally bred varieties proved to be resilient to climate change and maintain the crop diversity in home gardens. Informally sourced seeds recorded comparatively low yield than the hybrid/improved seed varieties that are sourced from formal seed systems. In conclusion own seed supplies ensured food availability, minimized seasonal yield variations, and enhanced meal diversity.

Keywords: Food security, Household resilience, Seed system