

# REARING TURKEY BIRDS AS AN ALTERNATIVE POULTRY SPECIES TO OPTIMIZE FOOD SECURITY: FUTURE PROSPECTS TO TANK CASCADE SYSTEMS

A.M.J.B. Adikari\*#

*Faculty of Agriculture, Rajarata University of Sri Lanka, Puliyankulama, Anuradhapura, Sri Lanka*

*\*Correspondence E-mail: adikariamjb@agri.rjt.ac.lk, Phone: +94718262001*

*#Presenting Author*

**Abstract:** Food security is a global concern and diversification of poultry farming provides a promising avenue to address the challenge. This desk study aims to explore the potential of rearing turkey birds as an alternative poultry species to enhance food security as well as employment in the rural community. This could be a strategic approach to strengthen the rural food security and economy. Turkey farming is a promising business idea that could be implemented in Tank Cascade Systems (TCS) to empower the rural community. Turkey birds grow faster like broilers and are ready for the table within a short time. Turkey farming is more popular for meat production than egg production. Turkey meat provides valuable proteins and vitamins and is a good source of minerals. However, turkey farming has not been fully exploited to see the production potential in Sri Lanka. They adapt to a wide range of climatic conditions and can be raised successfully with a well-fed system. The combination of basic low input-low output, subsistence level growers, and all combinations up to the large-scale commercial production, provides opportunities to minimize the poverty and malnutrition. Employment, poverty alleviation, and improved nutrition are all potential benefits that support the sustainable development of the rural setup. In that context, turkey farming is an alternative and attractive economic activity, especially for the rural women and poor population in the TCS. Food security could be optimized through increased protein availability and diversification of protein sources by incorporating turkey farming with the existing poultry production systems. Therefore, integrating turkey farming into the agriculture landscape can contribute to resilient and secure food security in the rural community.

**Keywords:** Domestic turkey; Poultry diversification; Subsistence-level growers; Turkey farming