## **ABSTRACT**

## Milk production in Tanzania Henry Clement Mokiwa

Course, level of education: Bachelor of Agriculture Engineering

Host Department/Institute: Institute of Animal Sciences,

Department of Animal Husbandry and Animal Welfare

Thesis advisor: Dr. Ferenc Pajor, Associate professor

Independent consultant: (Name, position, institute/department)

This abstract explores an overview of a thesis study on milk production in Tanzania on how the potential for increasing milk production in Tanzania, focusing on enhancing both the quality and quantity of dairy output to improve the livelihoods of livestock keepers and contribute to the nation's economy, Despite having a significant cattle population, Tanzania ranks low in global milk production, primarily due to challenges such as seasonal variability, disease prevalence, and inadequate management practices. The study aims to identify low-cost strategies that can be implemented in the short to medium term to boost productivity within the dairy sector. By analysing current trends and historical data, it is projected that Tanzania could produce approximately 3.38 million metric tonnes of milk by 2031, reflecting an annual growth rate of 3.44%. The research highlights the importance of improved breeding techniques, better feed quality, and enhanced management practices for increasing milk yields. Furthermore, it stresses the role of smallholder farmers in the dairy value chain and advocates for cooperative structures to enhance market access and bargaining power. The findings suggest that with targeted interventions—such as promoting artificial insemination services, improving animal health care, and fostering consumer awareness about the nutritional benefits of milk—Tanzania can position itself as a competitive player in the global dairy market while simultaneously addressing food security and economic development goals. This study uses secondary data from various sources, including FAOSTAT, Tanzania dairy reports, and global milk production data, and other data was collected from Rungwe District, Tanzania as primary data, the study assesses the effectiveness of improved feeding practices, including hydroponic fodder systems and pasture management, as well as health and hygiene practices to identify areas for improvement.