

# **Assessment of Farmworkers Level of Knowledge in Banana Cultivation and its Implication on Productivity Improvement in the Lower Shabelle Region of Somalia**

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## **Abstract**

Somalia was the largest banana producer and exporter in Africa in early 1990, but both production and export collapsed due to improper use of good agricultural practices and post-harvesting constraints. The government and its partners tried to recover the banana sector, but nothing changed. Researchers hypothesized that studying and improving farmworkers' knowledge of banana cultivation could contribute to recovering the country's banana sector. Therefore, the study objective is to study the current knowledge level of banana farm workers on banana cultivation and contributing factors influencing farm workers' knowledge of banana cultivation in the Lower Shabelle region of Somalia.

A cross-sectional study participating 400 farmworkers was implemented in the selected six large-scale banana farms which are the largest production area of the Lower Shabelle region of Somalia by using a well-structured questionnaire. Bloom's cut-of-point classification was used to categorize knowledge scores and data were analyzed using descriptive statistics, Chi-square test, and Multiple linear regression at a p-value of <0.05, <0.10, and <0.01. Most of the farm workers (80.2%) were male with 31.57 mean age (SD=8.53) and 167.48 mean income age (SD=81.27).

This study reported that 194 (48.5%) farm workers have low knowledge of banana cultivation, 127 (31.8%) have moderate knowledge, and only 79 (19.8%) have good knowledge. The Mean knowledge was 18.54 (SD=6.51) out of 30 maximum expected scores. The weakest knowledge section is pesticide management while the strongest is harvesting. The coefficient of farmworkers' age, education, training participation, and banana farming experience are significantly associated with their knowledge of banana cultivation activities at p-value <0.05 while the total land size they cultivate has a significant association at p-value <0.10. This study reported almost half of the banana farm workers have a low level of knowledge of banana cultivation. To enhance farmworkers' cultivation knowledge, agricultural extension and education programs must enhance pesticide management relating knowledge by specifically focusing on older and low-experience farmworkers, rural farmworkers that are far away from training centers, and those who do not have large land sizes. In addition, improving training quality by providing advanced training materials and mentors, increasing training frequency, and improving training effectiveness is highly recommended.