

Revitalization of coffee in Kenya: support research development and technology transfer

<u>Mugo Harrison</u>^{*} (mugohmu@yahoo.com), Minai James, Kimeu Emmanuel

Kenya Agricultural and Livestock Research Organization- Coffee Research Institute, Ruiru, Kenya

Introduction

The coffee production in Kenya has been on the decline. In year 1987/88, the production in the Country was highest at 129,637 MT that has declined to an average of 40,000 MT (Coffee Directorate, 2019/2020). Currently the production is 2 Kgs cherry per tree against a potential of 30 Kgs.

To address the experienced coffee decline, the Government of Kenya developed and implemented a coffee revitalization program to increase coffee productivity and profitability of targeted rural coffee smallholder farmers.

Materials/Methods

The coffee revitalization program was piloted in eight (8) main coffee growing counties (Figure 1) in Kenya.

The methodologies included a desktop review of existing technologies, capacity building of extension staff and agronomists, mass propagation of coffee planting materials, soil analysis and mapping, and pests' survey.



Figure 1: The piloted coffee growing Counties in Kenya



Figure 2: Coffee seedlings produced in a nursery at CRI- Ruiru Centre



Figure 3: The prevalence of Coffee insect Pests in the counties



Figure 4: The prevalence of Coffee diseases in the counties

Field survey and mapping of coffee insect pests and diseases:

The insect pests; Green scales, yellow headed and white borers were most prevalent (Figure 3). The Coffee Berry Disease (CBD) and Coffee Leaf Rust (CLR) were the prevalent coffee diseases (Figure 4)





Results/Discussion

Inventorization of Technologies, Innovations and Management Practices (TIMPS):

A total of 108 TIMPs (38 technologies, 11 innovations and 59 management practices) were inventoried under 15 sub-themes.

Capacity building of extension staff and agronomists:

A total of 161 Training of Trainers (ToTs) were trained on coffee TIMPs. The majority of the ToTs (105) representing 65 % were above 35 years. Only 56 (35%) were youth aged below 35 years .

Production of coffee Seeds & seedlings:

A total of 7,653 kgs of Ruiru 11 and Batian seeds were produced and propagated to produce the seedlings. An equivalent to 23 million seedlings were raised from CRI (Figure 2) and private owned coffee nurseries.

Soil analysis and mapping:

Three (3) region-specific fertilizer formulations (NPK22:4:12+6CaO+6S,NPK20:6:15+5CaO+1MgO+6S and NPK 19:5:16+3CaO+1MgO+4S) were developed .

Conclusion/Perspectives

The Coffee Revitalization Project met its objectives of developing and promoting Technologies, Innovations and Management Practices (TIMPS) in coffee production, provision of planting materials and formulation of region-specific fertilizers. Hence an increased national coffee production from 34,000 to 51,000 metric tonnes of clean coffee during the year 2021/2022.

References:

Coffee Directorate (2020): Coffee Year book 2019/2020. 91p

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