

REPORT ON THE NAIROBI INTERNATIONAL TRADE FAIR 2018: THEME; PROMOTING INNOVATION AND TECHNOLOGY IN AGRICULTURE AND TRADE

1.0 Background Information

Nairobi International Trade Fair (NITF) is the largest Trade Fair in the East African Region. It is a seven day event that runs from late September to early October every year. This year's event took place from 1st to 7th October 2018. Nairobi International Trade Fair (NITF) became a Trade Fair in 2002 and now offers opportunities for regional, continental and global exhibitors to display and demonstrate their services and products. It also offers show visitors an opportunity to meet people from different countries and backgrounds, hence creating a platform for interaction and exchanging of ideas and experiences. The 2018 theme is: Promoting Innovation and Technology in Agriculture and Trade

A report on the Nairobi International Trade Fair (NITF) theme towards Promoting Innovation and Technology in Agriculture was undertaken at the Kenya Seed Company. The objectives of the Nairobi International Trade Fair (NITF) are:

- a) Establish and find the best array of Agriculture products and services,
- b) The best Emerging Technologies and Innovations,
- c) Advanced Equipment and a Rich Network of Diverse Business Ventures among many others.

2.0 Kenya Seed Company

2.1 Historical Background

In 1958, after its incorporation, the company started an enterprise to produce commercial Sunflower for the European bird feed market to sustain its financial needs. In 1963 the company introduced hybrid seed maize production following the release of the first hybrids by the government Research centre in Kitale. Seed wheat was added to the seed program in 1971 to provide certified seed to farmers who previously depended on low quality farm saved seeds. Later in 1979 the company acquired Simpson and White law, a company trading in horticultural seeds, and introduced the brand name "Simlaw Seeds", which has since distinguished itself as a leading brand in the market. In 2002 Simlaw Seeds was registered as a limited liability company and a subsidiary of Kenya Seed Company Ltd. Its core business is selling and marketing of high quality horticultural seeds, pesticides and fertilizers in the East African region.

2.2 Promoting Innovation & Technology in Agriculture

2.2.1 Seedling Propagation

Introduction

Seedling propagation is the method of plant propagation (multiplying, reproducing, or breeding new plants) that is done through the use of seeds. Plants that produce seeds are called spermatophytes. Seeds are made up of three separate parts, and when a seed matures in an optimal environment like Green House, it will germinate and actively grow. Seed propagation occurs naturally, but can be done intentionally by gardeners and farmers.



Figure 1 & 2: Seed Propagation Innovation & Technology at Kenya Seed Company Stand

In seed propagation, seeds can be germinated and planted in seedling tray using coco peat (as soil) with a mixed ratio of 4:1 for coco peat & phenol until they form seedlings. The seedlings take at least four (4) weeks to fully germinate. These seedlings can then be transferred to larger containers, or planted in beds or fields. In addition, seeds can be sown directly into the ground and allowed to grow. Additionally, seeds can be gathered from parent plants, or they can be purchased at many different retailers.



Figure 2 & 3: The materials used for seed propagation

2.2.2 Importance of Seed propagation

Seed propagation is how many plants naturally reproduce. Additionally, farmers and gardeners can take advantage of seed propagation by obtaining seeds from plants they wish to propagate or grow. Many farmers will often save and grow ornamental plants and crops from seeds, especially if the plant has many desirable characteristics. This is because seeds carry the genetic information of the parent plant, and will therefore retain many of the same characteristics of the parent plant.

As an alternative to seed propagation, farmers can also propagate plants via plant cuttings (taking clones), grafting, or plant tissues, depending in their skillset, range of equipment they have available, and the plants they are wishing to propagate.

2.3 HYDROPOLICS (Cheap & Sustainable farming without soil)

Introduction

Hydroponics is a subset of hydroculture, which is the growing of plants in a soil less medium, or an aquatic based environment. Hydroponic growing uses mineral nutrient solutions to feed the plants in water, without soil.

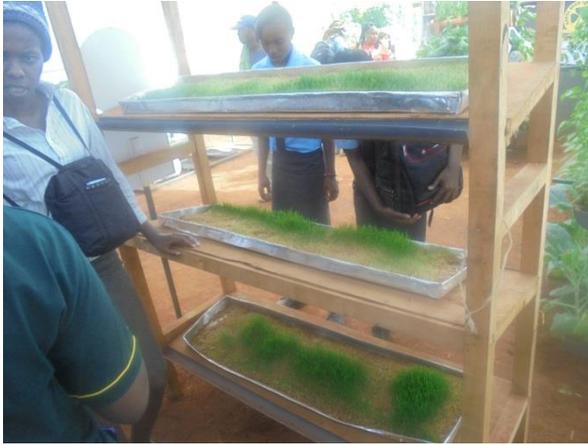


Figure 4 & 5: Hydroponics at the Nairobi International Trade Fair

2.3.2 Importance of Hydroponics

Hydroponics enables farmers to achieve predictable and highly nutritious yields for vegetables and produce their own animal feed at limited cost of input. With hydroponics the farmer is unaffected by seasons and adverse weather conditions, which historically has given rise to severe food insecurity in Africa. Hydroponics is an innovative farming system which is the most sustainable and cost-effective farming methods on the market.

2.4 Other Promoting Innovation & Technology In Agriculture

2.4.1 Chicken & Fish Rearing



Figure 6 & 7: Integrated Farming Technology for Chicken (Top) and Fish (lower) rearing housing at the Nairobi International Trade Fair

3.0 Importance of Promoting Innovation and Technology in Agriculture

- a) Farmers may no longer have to apply water, fertilizers, and pesticides uniformly across entire fields. Instead, they can use the minimum quantities required and target very specific areas, or even treat individual plants differently. Benefits include:
- b) Higher crop productivity
- c) Decreased use of water, fertilizer, and pesticides, which in turn keeps food prices down
- d) Reduced impact on natural ecosystems
- e) Less runoff of chemicals into rivers and groundwater
- f) Increased worker safety
- g) In addition, technologies enable more reliable monitoring and management of natural resources, such as air and water quality. It also gives farmers greater control over plant and animal production, processing, distribution, and storage, which results in: Greater efficiencies and lower prices, Safer growing conditions and safer foods, reduced environmental and ecological impact.