

Tackling Technical and Institutional Constraints in the Development of Super Fruits in Africa

By:

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Introduction

- The super fruits deemed super by nutrition scientists are packed with antioxidants, fiber, vitamins, minerals and other nutrients that improve health condition.
- Avocado, banana, cantaloupe, grapefruit, lime, orange, apple, pomegranate, papaya, pumpkin, watermelon, pineapple, grapes and Baobab are considered the most important super fruits in Africa.
- The importance of super fruits as a necessary part of the human diet and as cash crops is well recognized.
- Natural growing conditions in Africa are excellent for diverse super fruits.

Avocado fruit



Banana fruit



Grapefruit



Orange fruit



Papaya fruit



Pineapple fruit



Pomegranate



Watermelon fruit



Melon fruit





Baobab fruit



- The wide range of climate, rainfall, soils and altitude give the different region of Africa a vast potential for growing a wide range of tropical, subtropical and temperate super fruits.
- Some of the super fruits are grown in thirty two countries across Africa and have been cultivated by rural small farmers with slow progress in some areas and developed in another.

- These fruit crops are often grown by smallholder farmers, and rarely under commercial plantation.
- Both research and technical services for fruit trees and the general horticultural areas are lacking financial supports.
- Comparative income economical studies were indicated all the time huge revenue from the super fruits compared to some field crops.

- All these super fruits in Africa are gradually gaining importance for to be improved in term of varieties, cultural practices, environment, post harvest handling and marketing.
- For Africa to realize its full potential to produce super fruits, a fully structured and sustainable infrastructure development is needed.
- Generally, very little efforts have been made by the governments to increase the economic and environmental benefits of growing more super fruits in agricultural managed fields and homesteads.

Tackling Technical constraints

Cultivar and Field Care

- Cultivar choice will be of crucial importance for good start to the fruit tree establishment.
- Due to the effect of climate change it's highly needed to conduct research on cultivars that facing this problem.
- Pruning and plant growth management are very important to gain optimum productivity.
- Irrigation is vital for tree growth and development and it has to be applied well calculated.
- The response to several levels of fertilizers application needs to be ascertained in order to prepare spectrum of recommendations.

Pest and Diseases

- Insect pests and diseases are major factors reducing yields of fruit tree crops quantitatively and qualitatively.
- Insect pests and diseases were surveyed several times at different countries of Africa and have been well defined.
- These surveys indicated that scale insects, mites, termites, fruit flies, leaf miners, mealy bugs, beetles, in addition to some serious fungal, bacterial and nematodes are major pests and diseases inflicting considerable damage to fruit tree.
- No serious attempt has been started in many African countries to combat the major pests and diseases properly because control procedures are very expensive.
- Suggestions to overcome this handicap will be mainly by organizing fruit tree growers in cooperative or unions so that control procedures could easily be secured.

Post harvest and Processing

- Improper harvest methods and handling, lack of post harvest inputs and treatments, absence of packing houses, Insufficient cold stores, lack of refrigerated trucks for distances transportation and weakness scheduling form harvest to final destinations are all considered as the post harvest constraints.
- Yet the proportion of fruits to process and the suitability of the different fruits to processing are relatively unknown in Africa, with exception to South Africa.
- Interventions through successful models of research findings application in the field of post harvest, processing and extension activity will be of crucial importance to overcome all these constraints.

Tackling Institutional constraints

Government attention and supportive policies

- Incentives for investment (credit, taxes, tariffs, infrastructures, training and pre-finance), policies to promote engagement in policy initiation and development by public and private sectors institutions, policies to promote and harmonize the quality standards and requirements and policies to integrate and promote entrepreneurship and other technical skills are all identified as major policy gaps requiring urgent governments attention.
- Governments should consider strategic use of public resources to promote and develop private sector (value chain) capacity.

Partnerships, organization structure and coordination

- Partnerships linkages along the super fruits production-consumption chain involving farmers and their organizations, researchers, processors, retailers and whole-sellers on one hand and the service providers (credit banks, transporters, media and information firms) on the other hand, with public sector facilitating the processes with targeted inputs such as capacity building loan guarantees, and other investment incentives all should be well organized and linked together.
- In this partnership structure, public resources would be focused at strategic intervention inputs such as capacity building, infrastructure development and monitoring and evaluation to identify information and technology gaps that would be addressed by public and private research institutions in the super fruits partnerships chain.

Market Access, structure and function

- Most of the African countries have always been hindered by poor infrastructure. This situation resulted in lack of services, information and technologies which much needed to develop the whole sector.
- The main strategy of market oriented fruit is to start from market feasibility study of each super fruit commodity making the market as an entry point to any fruit tree development activity.
- Build the capacity of individual farmers by commodity will assist in developing marketing cooperatives and private sector partners.
- Establishment of cold stores, small canning and food processing cottage will help to make use of the available raw material for local and export markets.
- The national, regional and international markets requirements (quality standards and certifications) have to be carefully identified for each super fruit.

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