Horticulture value chain in Botswana & roles of the various stakeholders involved





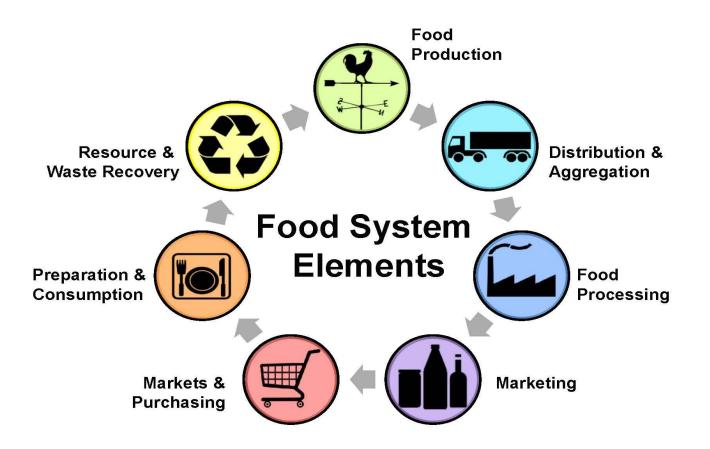
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Food systems & nutrition-sensitive agriculture





nutrition-sensitive agriculture: an approach that seeks to ensure the production of:

- variety
- affordable
- nutritious
- culturally appropriate
- safe
- adequate quantity & quality
 to meet the dietary requirements of populations in a sustainable manner.



Nutrition sensitive food systems: options for interventions



Consumer demand, food preparation and preferences

- Nutrition education and behaviour change communication
- Income generation for nutrition
- Nutrition-sensitive social protection
- School Food and Nutrition
- Nutrition-sensitive humanitarian food assistance

Food trade and marketing

- Trade for nutrition
- Food marketing and advertising practices
- Food price policies for promoting healthy diets
- Food labelling



Food production

- Diversification and sustainable intensification of agricultural production
- Nutrition-sensitive fisheries and livestock
- Biodiversity for food and nutrition
- Biofortification
- Urban and periurban agriculture

Food handling, storage and processing

- Nutrition sensitive post-harvest handling, storage and processing
- Food fortification

Source: https://www.slideshare.net/worldfishcenter/what-is-nutritionsensitive-agriculture-from-concepts-to-practice





Horticulture sector value chain: focus on agroprocessing

Features of the Botswana horticulture value chain

- dominated by small, unprofitable farmers, who lack the resources to invest in modern farming technologies
- Lack of modern technology restricts the opportunity to expand the range and volume of produce
- MOA estimates suggest over 90 % of farms are owned by farmers who are part-time & this reduces farm performance
- Inputs such as seeds, pesticides & fertilizers are almost entirely imported from South Africa
- Seasonality and large fluctuations of supplies leads to large variation in prices and wastage
- Almost 50% of land allocated to horticulture remains unutilized, reducing production potential
- There are significant fluctuations in production volumes & prices of FFV due to accentuated seasons and extreme weather conditions
- There is limited cooperation between farmers to coordinate production or group for marketing or purchasing





Partnerships & Collaborations

Botswana is currently collaborating with partners to collectively step up support to end hunger, achieve food security & improved nutrition and promote sustainable agriculture

- SUN Movement: 5 SUN networks exist even though they have not picked up momentum yet(Government, Civil Societies, Business/Private sector, research & academia, UN agencies)
- IFPRI through Compact 2025 initiative: Scoping study(overview of food security & nutrition) ongoing. Results to be disseminated in June 2021





National Agro-processing(NAPro)

Established in 2016 as a pilot horticultural products processing plant











Objectives

- Main objective: stimulate growth in the value chain of the horticulture sector
- development project to be operated as a commercially sustainable business
- demonstration model of a sustainable agroprocessing enterprise to be replicated in Botswana as espoused by stakeholders
- The established plant & operations infrastructure also serve as an enabler and incentive for potential investment in the company to facilitate growth and expansion
- mitigating postharvest losses in the local horticulture sector
- restructuring & expanding market opportunities for local farmers
- development of internationally competitive agro-processing technology skills among citizens





The Partnership

- UNDP has partnered with the Private Sector and Government of Botswana to implement the Business Supplier Development Programme (SDP)
- The programme aims to create demand-based, market-driven opportunities for small and medium enterprises (SMEs) to increase their competitiveness while connecting them to larger markets locally as well as abroad
- Uses the 6 stage SDP business methodology to ensure they can supply the Buyer with the goods to the standards required by the Buyer for local and regional markets





Food production /farmers

- farmers not being motivated to diversify the agro-produce due to lack of markets
- some farmers not grading their produce
- limitation of technology & not using best farming practices
- produce crops on open field and do not have climate control equipment
- lack access to improved seed varieties, agro-chemicals
- no use efficient harvesting & harvest preservation methods and storage facilities to mitigate against seasonal variability of production
- low production output and perishability of farm produce





Processing / the plant

- Process limitations related to capacity on some of the installed equipment in relation to anticipated product off take
- Inability of the plant to absorb beneficially some of the quality grades/varieties or alternative produce thereby not being able to provide the farmer with a one stop shop for all horticultural produce potentially available
- With current capacity limitations, the plant still does not provide farmers with the optimal access to alternative and competitive markets that can cause them to expand their production
- Challenges with product quality





Market

- Limited resources to implement marketing plan
- Difficulties in penetrating the retail market
- Limited product offering affecting income generated to sustain the plant
- Competition from other brands(established) selling the same products
- Only one promotion strategy
 i.e. use of store merchandisers
- Wholesale Distributor channels too expensive (35% distribution costs on sale price)





Consumers

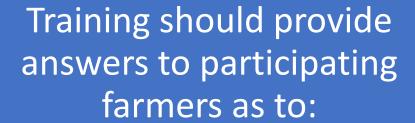
- Lack of information on consumer behaviour in Botswana
- Without such information we have limited understanding of consumer actions that drive them to buy and use certain products
- We also have limited understanding of the expectations of the consumer and what makes the consumer buy the product





Interventions

Farmers (production)



what type of horticulture is feasible within limiting agricultural conditions of sensitivity to erratic & unreliable climatic conditions

cost effective technologies to adopt and best cropping mix to give optimum economic returns under prevailing agro-ecological and market conditions

Quality control hinges on the cooperation of growers and buyers

The plant (processing)

- Productivity improvements that include:
 - Establishment of canning line & dried soups production
 - Establish on-site quality control lab.
 - Improving product availability (product certification, alternative product warehousing, implementing marketing plan)
 - Develop & implement operation systems & procedures
- incorporate an internal quality assurance system in the management structures.



Interventions cont......

Market

- Diversification of market segments (institutional market)
- Funding secured for marketing activities
- Promotional materials



Consumers

- More product promotions in shops
- More consumer acceptance tests of products
- National product promotion i.e.#pushaBW



Finally

- Botswana is committed to improving nutritional status of the population
- strengthening agriculture-nutrition linkages is crucial
- The partnership has contributed to understanding of the issues affecting the horticulture value chains in Botswana
- harnessing the strengths and abilities of others from different corners of your ecosystem is one of the most strategic ways for businesses to scale their innovation and solve complex challenges/multi-sectoral
- Lessons learnt very useful & will be used for the development of future agro-processing facilities
- Investing in agriculture & food systems through public or private investment toward agro-processing can support goals of diversifying livelihoods & the economy



