



Youth – Led Development of Tanzania`s Moringa Value Chain Project in Iringa and Mbeya regions

Mapping and assessment report of the Moringa value chain in Tanzania

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Preface

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Within the activity, Intermediate Result #1 has been to increase expertise and improved coordination among Moringa stakeholders through assessment and mapping the existing business models in Tanzania. The result of this exercise will inform future interventions within the value chain. In addition, this report is intended to investigate the characteristics of MSMEs in Moringa and to suggest ways of improving their performance, particularly tackling constraints faced by youth entrepreneurs.

This report is a result of different collaborations created during the implementation of the project so a variety of methods were employed. Some of the information presented herein came from reviewing other documents (mentioned in reference chapter), but most of the information and photos presented in this report were collected during different stages of the project ie: meeting notes with 5 local government authorities, survey data from +160 producers (farmers), 10 processors, 1 aggregator and 2 traders in 5 regions using a structured questionnaire. These interviews and surveys were conducted between the end of October and beginning of December 2019.

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- » USAID Feed-The-Future Tanzania
- » SUGECO
- » PO-RALG
- » RAS Offices (Iringa and Mbeya regions)
- » DEDs, DAICO and DYOs
 - (i) Iringa DC
 - (ii) Kilolo DC
 - (iii) Rungwe DC – Busokelo Council
 - (iv) Kyela DC
- » Targeted beneficiaries ie: +160 producers and 13 MSMEs

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Acronyms

<i>DAICO</i>	<i>District Agricultural Irrigation & Cooperative Office</i>
<i>DC</i>	<i>District Council</i>
<i>DED</i>	<i>District Executive Director</i>
<i>DYO</i>	<i>District Youth Office</i>
<i>gms</i>	<i>Grams</i>
<i>Kgs</i>	<i>Kilograms</i>
<i>MT</i>	<i>Metric Tonnes</i>
<i>MSMEs</i>	<i>Micro, Small and Medium Enterprise</i>
<i>NGOs</i>	<i>Non-Governmental Organizations</i>
<i>PO-RALG</i>	<i>President's Office – Regional Administration and Local Government</i>
<i>RAS</i>	<i>Regional Administrative Assistant</i>
<i>SUGECO</i>	<i>Sokoine University Graduates Entrepreneurship Cooperative</i>
<i>Tshs</i>	<i>Tanzania Shillings</i>

Chapter One

Existing production sites and high-potential regions in Tanzania

(a) Geographical distribution of producers

Recently Moringa has become a powerful tool for improving nutrition around the world due to its nutrient density and resistance to drought. A good source of vitamins, protein, iron, beta-carotene, potassium and calcium, Moringa leaves can be eaten fresh, dried, or cooked.



Figure 1: Moringa olifera tree, leaves and pods (with seeds)

Moringa is a fast growing leafy tree that thrives in hot, arid climates. Moringa grows better in well drained (sandy) soils and warmer atmospheric temperatures, conditions which are found mostly along water bodies ie: ocean, lake, river etc. The findings of this mapping exercise and confirmation by the local government in the project area are not different from the quoted study.

According to interviewed MSMEs, most raw materials come from semi-arid-lowland areas such as:

- > Coastal region
 - » Kibaha Town
 - » Mkuranga
- > Dodoma region
 - » Dodoma City Council
 - » Mpwapwa District
- > Rukwa region
 - » Nkasi District along shores of Rukwa and Tanganyika lake
- > Kilimanjaro region
 - » Moshi Municipal Council
- > Songwe region
 - » Momba District

» Mbozi District

A great number of Moringa trees have been observed to grow along Morogoro road all the way from Dar es Salaam, from the coast to Morogoro region itself.

For those few that are in this project and already are growing Moringa in Iringa and Mbeya, the area under production was determined to be 1 acre or less and average of 2 and 15 trees. Youths and Local Government Authorities ie: district offices in these areas were more concerned over the market and believed that in order for the value chain to be revived the market needs to be stimulated. Most of these trees were the residual of past projects/businesses to buy Moringa from their areas including:

- > Iringa region
 - » Iringa Town Council
 - » Iringa DC
 - Ismani
 - Kising`a ward
 - » Kllolo DC
 - Mahenge ward
- > Mbeya
 - » Kyela Town Council
 - » Kyela DC
 - Ipinda ward
 - Ngonga ward
 - Busale ward – Lema village
 - Matema ward

(b) Average size of farms and production

Most producers visited don't grow Moringa seriously, either as fence or individual trees used for fresh leaves. Due to this, the capacity of processing Moringa for MSMEs was on average 19 Kg/month, with a range from 2 Kg/month to 80 Kg/month. We were also informed of few high-capacity MSMEs who have invested in bigger farms (plantations of between 3 to 50 acres). One example is TEJO Natural Honey who has recently invested in 3 acres in Iringa region and expects to harvest more than 3 MT/year of leaves.

Chapter Two

Existing MSMEs and their business models

(a) Ownership of Moringa enterprises

Disaggregating collected data by gender, it was observed that more MSMEs were women owned than men owned (out of which 85% were under sole proprietorship). In terms of age, data showed that 47% of MSMEs were youth owned. There was significant correlation between gender, age and scale of MSMEs, with increasing revenue towards men owned enterprises. Most young people (47%) and women (53%) who dominated the processing sector were constrained with many challenges as described in chapter 3.

Gender of the MSME owner	MSMEs		Average monthly revenue
	#	%	
Female	10	53%	TSh239,630
Male	9	47%	TSh610,833
	19	100%	TSh425,231

Table 1: Ownership of MSMEs - segregated by gender and monthly revenue (Source: Iringa and Mbeya visit)

(b) Geographical distribution of MSMEs versus producers

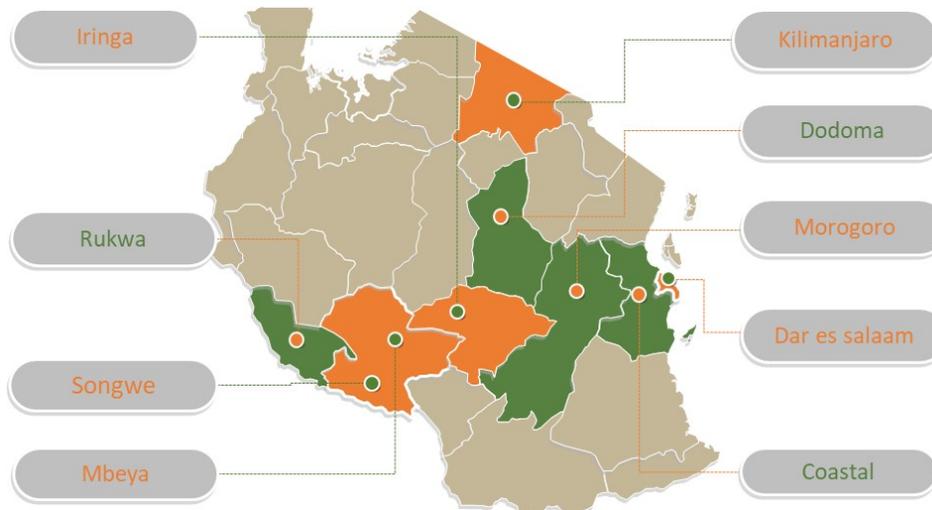


Figure 2: Map of Tanzania showing production sites (in Green) versus visited MSMEs (in Orange) [Source: Iringa and Mbeya visit]

(c) Market data on price, volume and trading channels

(i) Farm gate price

Although the selling price was observed to be uneven, the average price offered by MSMEs to farmers was between Tshs 3,000 and Tshs 8,000 per 1 Kg of fresh leaves and raw seeds respectively depending on scarcity between dry seasons and distance from the MSMEs (closer proximity might mean higher price).

Type of raw material	Average price offered to farmers/Kg	
	2018	2019
Fresh leaves	TSh4,400	TSh4,638
Raw seeds	TSh9,750	TSh10,500

Table 2: Gate price data (Source: Iringa and Mbeya visit)

The price of raw Moringa leaves was observed to be slightly higher this year (in some areas) compared to last. As expected, the most valued raw material are seeds at between Tshs 3,500 and Tshs 16,000 per 1 Kg. However, as mentioned previously few MSMEs purchase it from smallholder producers and instead they acquire from their own farms.

(ii) Products

All 13 MSMEs interviewed sold their products as either a single product or mixed with other ingredients (up to 40 other ingredients). These products were fresh leaves, dried powdered seeds, soap or Moringa honey. Average monthly volume of pure Moringa (before mixed – for those who do mix) was determined to be 14.75 Kg or L.

Purpose	Product	
Medicinal	 <p>Powdered leaves Tshs 20,000/1 Kg</p>	 <p>Powdered leaves Tshs 5,000 – 8,000/180 gms</p>
Nutritional	 <p>Raw seeds Tshs 5,000/180 gms</p>	 <p>Powdered roots Tshs 5,000/250 gms</p>
Cosmetic	 <p>Soap Tshs 3,000/200 gms</p>	 <p>Oil Tshs 5,000/180 gms</p>

Table 3: Type of Moringa products available in the market
[Source: Iringa and Mbeya visit]

These products were sold through retail either for medicinal (dried leaves), nutritional (seeds or honey) or cosmetic (soap or oil) purposes fetching average revenue of Tshs 425,231 per month (Tshs 5,102,777.78 annually).

(iii) Trading roots

10 out of 13 MSMEs interviewed sold their products directly to consumers, however they had a good number of sales at exhibition events. The single enterprise that sells wholesale was “buying” leaves from a supplier then making soap products and returning manufactured goods back to the supplier at a higher price which included their margin.



*Figure 3: An example of exhibiting table at the heart of Iringa town
[Source: Iringa and Mbeya visit]*

Chapter Three

Challenges facing the value chain

- > Absence of government institutions to spearhead the link for producers to meet with MSMEs within the value chain. In fact, there was a debate within local government over which department should be responsible for promotion of Moringa – Is it DAICO or the Forest Department?
- > Sadly, the local governments, especially DAICO, aren't very fond of the introduction of new crops in their areas:
 - » In Kyela, they claim that in 2017 there was a company which bought a lot of Moringa seeds but has never returned
 - » In Iringa rural, they confirmed that there has been a tendency of companies to introduce new crops eg: castrol oil without establishing reliable markets for the produce
- > In the visited areas, it was observed that most youth don't own land. In the few cases where youth would own land, it was around 0.5 acre and where all crops (food and cash) are grown so Moringa wouldn't be competitive. However, it was seen fit to promote the growing of Moringa as a fence, rather than as a crop for intensive farming.
- > For MSME
 - » Lack of capital or soft affordable loans.
 - » Unreliable markets or lack of good marketing strategies for the Moringa products has obligated MSME processors to produce more than one type of product. MSMEs visited claim that there is a large group of consumers but there is no a reliable source of constant and adequate raw materials. However, it was realized the marketing strategies employed by the majority of MSMEs were limited and mostly within their locality of business operations.
 - » Aging equipment eg: solar dyers, due to lack of finance. For example, in Iringa a new solar dryer with a capacity of between 80 and 100 Kg costs not less than 1 million Tshs, which is expensive for an average MSME.
 - » Packaging materials have been inadequate and only available in Dar es Salaam or Arusha where they are also very expensive.

Recommendation

As mentioned previously, one big challenge in the Moringa value chain is the absence of links between the actors. For example, producers want a good price while there is a processor somewhere who needs quality raw material in high volumes who is also ready to pay more. But these two might not be well informed to realize the demand of the other actor. Stimulating the market can be done if there is a pulling force or guarantee for actors to be involved. The study therefore recommends market information to be available to all market actors in order to bridge this gap and to the government and other partners avail accessible, sizeable business credit with flexible payment plans from financial institutions so as they can offer quality and well-packaged products to the market.

References

Publications

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www.tanzania.tradekey.com/moringa.htm

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Suggested further reading

Exporting moringa to Europe <https://www.cbi.eu/market-information/natural-ingredients-health-products/moringa>