JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

MARKET FEASIBILITY STUDY FOR VALUE ADDITION: A CASE FOR MZIMBA, KASUNGU, DOWA AND RUMPHI DISTRICTS IN MALAWI.

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Abstract: Malawi's economy is purely rests on the agricultural sector as it dictates its impact on the country's ability to create jobs, diversify exports, fight against poverty, and overall economic growth. The sector takes about 80% of foreign earnings, 35% of national gross domestic product (GDP), and commands a labour force of over 80%. In Malawi, poverty has been increasing in rural areas where 85% of the population lives, compared to urban areas where it fell significantly from 25% to 17%. Unemployment was around 5.4% in 2019.

The Agricultural sector if well nurtured especially in value addition, remains a thriving sector on employment provision to most Malawians especially youth and women thereby dealing with the vice of poverty. Historical data from 1961 to 2019 shows that average value for Malawi during that period was 79.52 percent with a minimum of 76.36 percent in 2019 and a maximum of 81.51 percent in 1992. Although the trend is a declining trend, the sector remains the largest employer for Malawians. In fact, the declining trend implies that other sectors of the economy are also taking up more employees.

***Keywords*:** Employment, entrepreneurship, gender, processing, value addition, value chains, youth

I. INTRODUCTION

As in other parts of the world, Malawians, especially rural people in general and smallholder farmers, continue to experience and struggle with the negative impact of climate change, persistent poverty, food and nutrition insecurity; lack of employment and environmental degradation. As of January 2019, Malawi scored on 4.81 out of 10 on the African Agriculture Transformation Scorecard 2 (AATS) against the 2019 benchmark of 6.66 out of 10.

The youth in Malawi are familiar with digital innovations and use of Information and Communication Technologies (ICTs), essential to unlocking agri-business opportunities. Unemployment is widespread because new jobs are not created at nearly the rate at which the population is growing. Both young people and women are in search of employment and making modernized agriculture attractive to both youth and women. Agro-dealerships offer new sources for women and youth employment in rural areas. Youth and women who are village-based entrepreneurs are therefore key to introducing new economic hubs within agro based communities. Agro-processing and farm mechanization have the potential to generate a large number of jobs in relatively high value- added activities. Given the rapidly ageing farmer and the Malawian rural population food system transformation provides a strong motivation and incentives to retain more tech-savvy and entrepreneurial youths to both farming and business in the food and value chain economy in rural communities as agents of sustainable intensification. Malawi's youth and their creativity, have the potential to unleash unprecedented advances in the transformation of Malawi's agricultural ecosystems and value chains. They can help to establish a modern food sector in Malawi that can produce a wide range of food products using a reliable supply of locally available, high quality agricultural products. Women on the other hand are mostly custodians of the targeted value chains (vegetables, spices, livestock/small stocks, legumes and nutrient dense maize), functioning as the gatekeepers of the nutritional benefits of such for local communities, while youth are attracted to their income-earning potential. As such, women and youth have a huge potential to contribute to and benefit from these value chains.

Malawi government and development partners are implementing strategies that promotes access to finance in agriculture for vulnerable groups, including youth, aimed in particular at strengthening farmers' and agro-entrepreneurs' understanding of and adherence to loan and agricultural credit procedures. Transforming the food and agricultural system holistically pauses an

opportunity to address the many challenges that face the agricultural sector in Malawi thus fits into the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods. Additionally, Transform Programme is aligned with the UN's Sustainable Development Goals (goals 1, 2, 3, 4, 6, 7, 8, 13, 15), AU's Comprehensive Africa Agricultural Development Programme (CAADP) and AU Agenda 2063.

The National Agriculture Investment Plan (NAIP), Malawi 2063 Agenda, The Malawi 2063 First 10- year Implementation Plan (MIP-1) 2021-2030, National Resilience Strategy (NRS), National Agriculture Policy (NAP) and the Sustainable Development Goals (SDGs) all drum up the need for food systems overhaul. The central theme involves a new paradigm shift that blends climate change resilience through climate adapted practices, development of sustainable food systems, action research and market-led value chain approach to produce greater and more sustainable impacts on the lives, livelihoods and resilience of smallholder farmers in Malawi. The programme's aim is to build resilience to climate change and transform smallholders to become successful commercial producers.

Agri processing and value addition is instrumental in order to provide more opportunities for farmers to make additional profits against selling of raw unprocessed products. Furthermore, efforts towards access to Agri-Financing and Entrepreneurship Agriculture and food systems presents an important sector for youth who are exploring income and employment opportunities in rural areas. Young smallholders face constraints in accessing markets because of lack of financial resources, opportunities, skills, and capacities.

Methodology and approach

This section describes the approaches and methods employed to achieve the objectives of the study, including general approach; coverage; data collection methods and tools; and analytical approaches and techniques.

Desk review

The study team carried out desk research. This involved a review of various relevant research documents and reports focusing on the targeted commodity value chains. The Team reviewed key documents such as:

- Malawi Agricultural Policy Documents (e.g., the MGDS, National Agriculture Policy etc)
- Other stakeholders project documents and reports
- Integrated Household Survey Reports
- National Agriculture Investment Plan
- Consultancy reports and other documents related to the livestock sector.
- Research and Project reports on various agricultural commodities
- Agricultural Production Estimates from Ministry of Agriculture
- District socio-economic profiles
- National Agriculture Policy 2016
- Cooperative Development Policy
- National Irrigation Policy 2000
- Malawi 2063

The literature reviews also analysed market regulations, laws and policies pertaining to the value chains in question, including any price control policies, value addition activities, production and marketing, consumption patterns.

Quantitative methods

For quantitative data, the Study employed a group questionnaire which targeted the groups.36 groups were reached out during the assessment.

Qualitative methods

The study team also conducted focus group discussions (FDGs). Where possible, depending on the number of beneficiaries in the study area, three separate FGDs were conducted at each selected site comprising of women (≥35 years old), men farmers (≥35 years old), and the youth (18-35 years old). The number of participants for each FGD was at least 8 members. The main purpose of the FGDs was to solicit aggregated and average farm level and marketing information involving costs of production, hectarage, selling prices, access to support services like extension services.

In addition, each group was asked to mention what they thought were the list of key constraints and opportunities in their respective value chains in their areas. Key issues solicited in the FGDs included, markets and marketing of agricultural commodities, sources of inputs, general challenges faced in the value chains, governance structures of the producer organizations

(POs), roles and responsibilities in the POs, membership sizes, gender roles at household and POs levels. The tools used for data collection are in the appendix section of the report.

For the qualitative data, *Focus Group Discussions (FGDs*) and Key Informant Interviews (KII) with Agriculture extension staff and Agribusiness officers was conducted.

The data collection tools used in the Survey are summarized in Table 2 below:

Key informant interviews

Relevant key informants along the targeted commodity value chains were identified and interviewed for each study area and across the nation. These key informants included traders, leaders of producer organizations, local traders and processors, Government officers, NGOs that supported the various value chains, retailers, consumers, lead farmers, traditional leaders, and local microfinance institutions. The main purpose of the key informant interviews was to gain insightful knowledge of the operations of the key stakeholders in the chains, their roles and the respective strengths, weaknesses, opportunities, and threats as perceived by them. The study team consulted 74 key informants across the study areas, targeting value chain actors at every stage of the commodity value chains.

TABLE 1: Summary of data collection methods

METHOD	GENERAL FOCUS AREAS	SOURCE OF DATA
FGDs KII	• Views on the extent and risk perception on value addition • Groups norms and dynamics in the community • Exploring production and productivity of specific value chains	***FGDs and KIIs*** AEDEC, AEDO, Agribusiness officers, Off takers,SMEs,Traders
Quantitative survey	• Value addition Survey	Group Survey

Sampling

For the quantitative survey, the Survey employed *purposive sampling*. This is because this type of sampling allowed the selection of groups that had been earlier engaged by the project activities. For the qualitative component, *convenience* sampling was done.

Sample size

For the quantitative component, consistent with the survey design, the survey captured groups as follows:

TABLE 2: Groups assessed

	DISTRICT	Youth groups	Women Groups	Cooperative/SMEs
	Dowa	**12**	**0**	**3**
	Mzimba North	**3**	**2**	**0**
	Rumphi	**3**	**3**	**0**
	Kasungu	**9**	**4**	**0**
	TOTAL	**27**	**9**	**3**

Data processing and interpretation

The quantitative and qualitative data were processed separately as follows:

Quantitative data from Kobo survey questionnaires were first cleaned and open ended responses were coded. The data were then entered into the computer using the Statistical Package for Social Sciences (SPSS) program. Logical checks and frequency runs were made on all variables to further ensure the accuracy and consistency of the data. Data cleaning was done by first running frequencies in SPPS and checking for obvious errors in the entries and double checking the same with the original questionnaires.

The qualitative data, on the other hand, hinged on categorizing issues basing on themes. The qualitative findings were used to beef up quantitative findings survey

Study limitations

The study had some limitations that should be considered when reading the findings.

- The first biggest limitation is that there were about 15 value chains to be analysed. In a normal context each value chain is supposed to be a study on its own. The study team did its best to look at all the fifteen plus value chains within a very limited period of time. As such, when doing profitability analysis and value-chain mapping, the value chains were grouped into "leafy vegetables", "spices", "legumes" etc.
- The other limitation of the study is that most farmers do not keep proper records. As such most of the data used in this study was recall information as provided by the farmers and in most cases, this type of information is prone to errors.

Results of the survey

Type of group

Consistent with the survey design, overall, the quantitative survey captured 39 groups across the 4 districts as follows Youth groups 27, Women groups 9, Cooperatives 3.

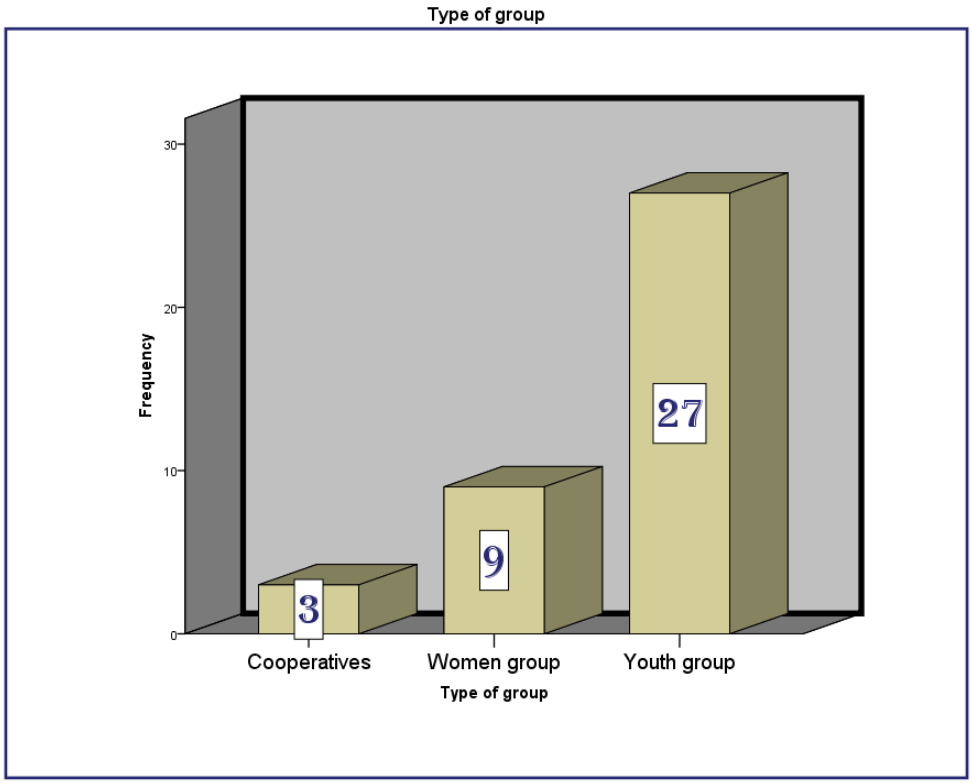

Figure 1: Types of groups reached during the assessment

3 .3 Sex of the chairperson

Majority of the group chairpersons were females. 29 groups are headed by females while 10 groups are headed by males.

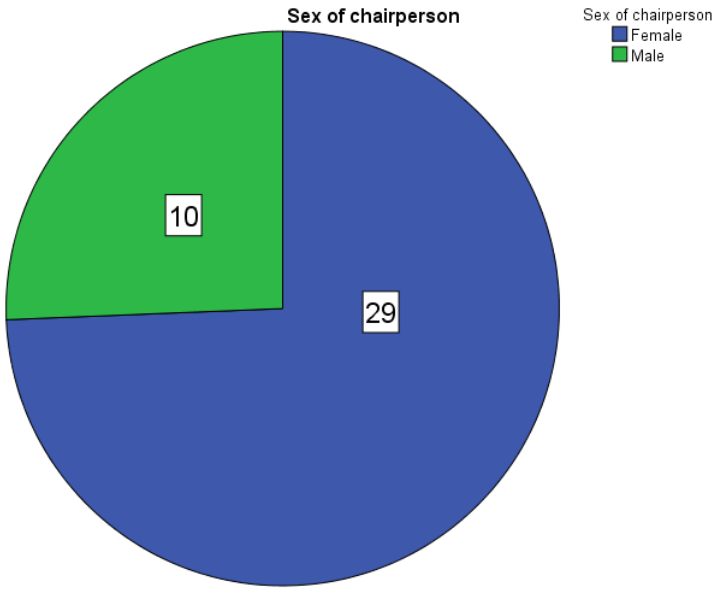

Figure 2: Sex of the chairpersons

Education

In terms of education ,85% of the females in the groups had attended primary school,12 % secondary school and 1 % tertiary education and 2 % had not attended any formal education. Additionally, 69% of the males had attended primary school 27 % secondary school,3% tertiary education and 1% had not attended any formal education

Value chains involved

Most of the groups are engaged in multiple value chains.25 groups are into maize and soya,24 groups into groundnut. The assessment also found out that 11 groups are into other values chains such as beans, honey, chilies, sweet potatoes sunflower, millet and Bambara nut. The figure below gives a picture in terms of the groups' value chains.

Value chain involved in

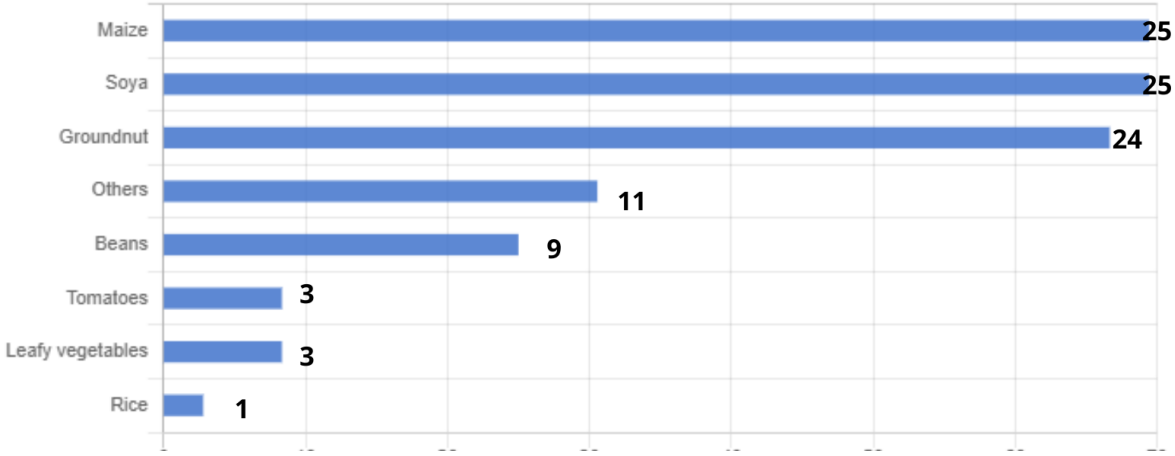

Figure 3 Values chains for the groups

Previous involvement in value addition

N=39; 30) of the assessed groups reported having had no experience in value addition and micro food processing while N=39;9 groups admitted to have been previously involved in value addition but they have not up scaled their efforts. For example, Themba YWCDI club from Dowa was given capacity in soya mild production by Care but it is not practicing in and most of the members that were trained left the club. In addition, Kaluluma, Tiyanjane and Chiyambi groups in Kasungu were trained in soya milk and mango juice production (mango juice was for Kaluluma only) but currently they are into micro food processing such as ground nut flour and roasted ground nuts. The same is the case with Ulunji and Wanangwa groups in Mzimba North and Chikwawa seed bank in Rumphi where trainings on soya milk and peanut butter production were given but they are into *mfutso* (dried vegetables), roasted ground nuts, maize pop and grading and sorting. This is a clear indicator that there is a need to strategise well before rolling out value addition interventions.

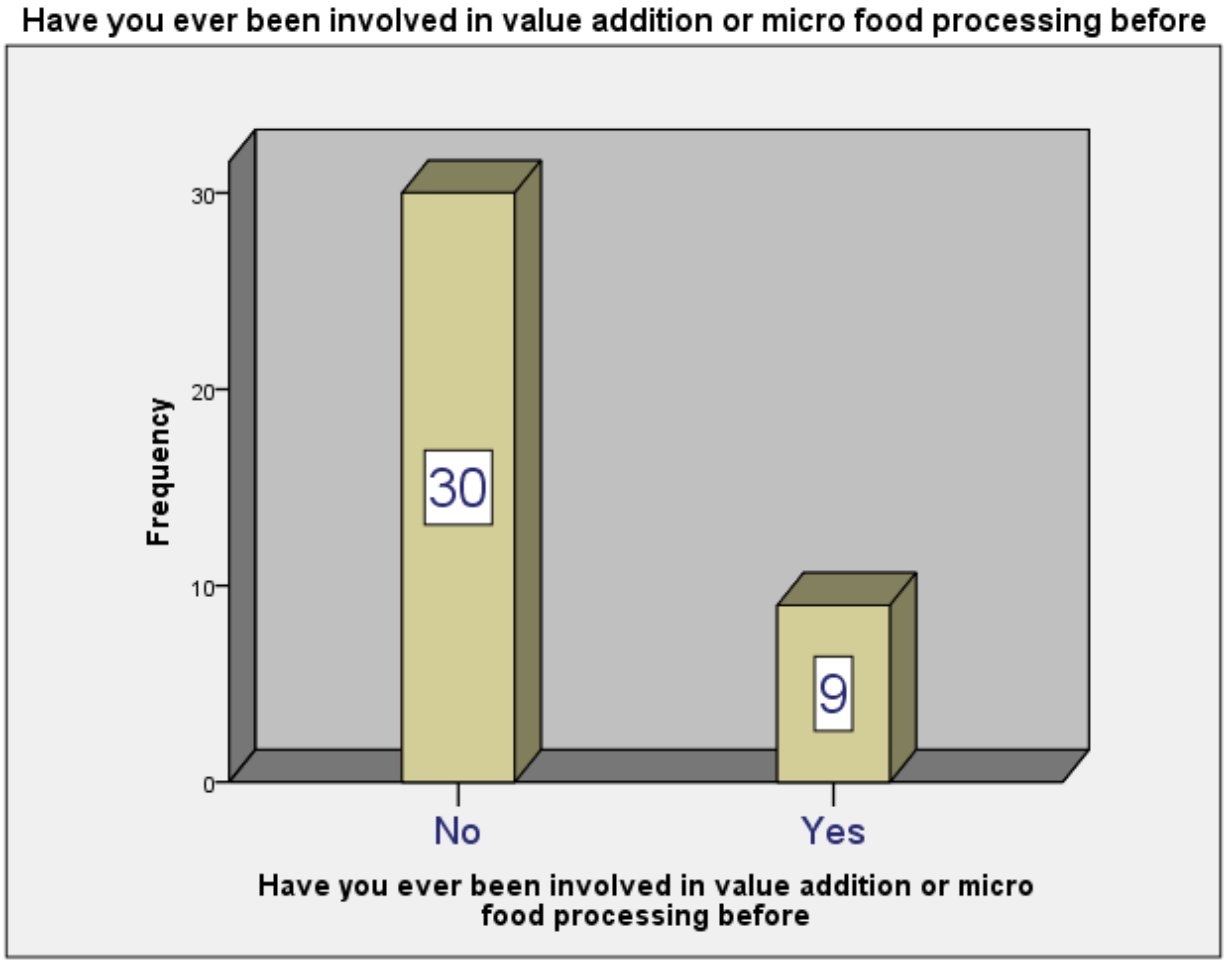

Figure 4; Experience in value addition

3.7 Micro food Processing to be strengthened

52% of the groups cited ground nut flour processing seconded by vegetable drying at 42 % as main areas to be strengthened upon. The groups admitted having done the micro food processing but wanted capacity on packaging, marketing and upscaling their interventions. The figure below gives an account.

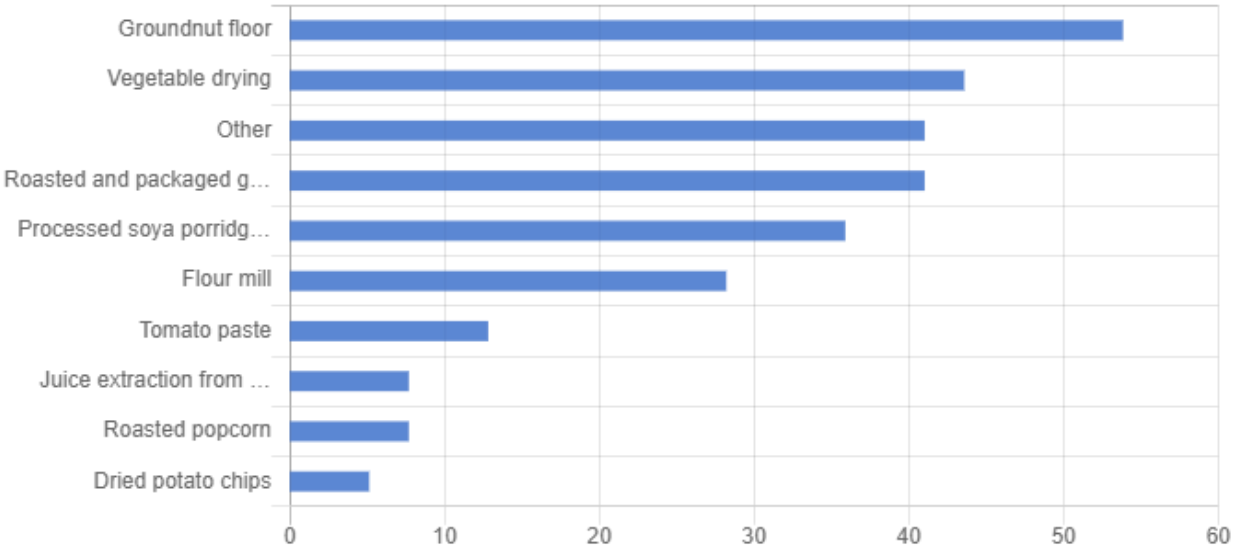

Figure 5; Micro food processing to be strengthened

3.9 Suggested value addition initiative versus viable value addition basing on context

The assessment was interested to explore the type of value addition initiatives suggested by the group against the type of value addition that is viable in the area. Cooking oil was suggested by the groups as the first option (19 groups) seconded by soya milk (15 groups) in terms of their interest. Soya milk (19 groups) came first as to what type of value addition is viable in the area while others (this included honey, archery, fruit juice, tomato paste, vegetable drying, soya flour, maize flour and sweet beer) came second (9 groups). The assessment found out that cooking oil was most preferred by the groups due to the increases in prices of the commodity on the market

> *"Prices of cooking oil in our area have increased significantly. We cannot afford even to buy quarter a liter of cooking oil. We will make money and benefit nutritionally once we produce our own cooking oil through Transform project. "Tufuna mwenye alile chaka chino". (We want to control the oil industry which is dominated by Indians this year)* ***Women Group Members FGD, in Mvera EPA, Dowa***

The figure below accounts for the groups' value addition interested in and value addition viable in the area.

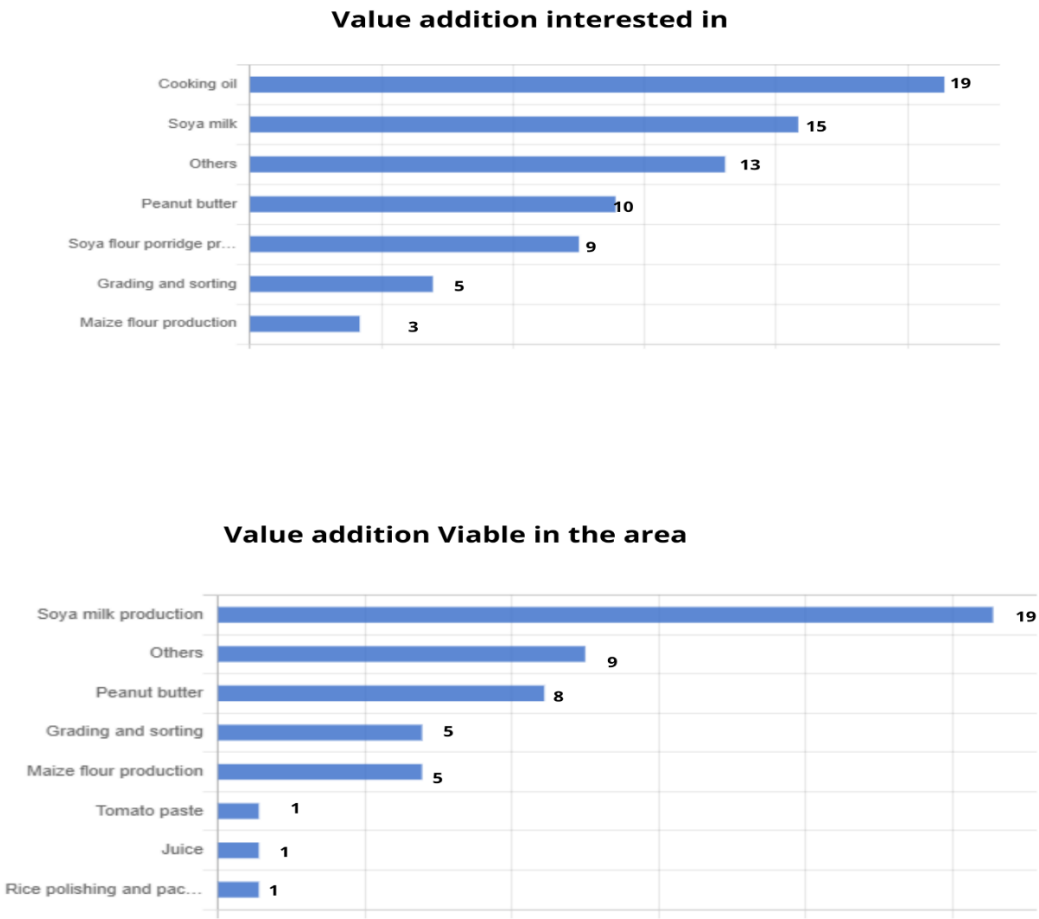

Figure 7 Interested value addition and viable value addition

Conclusion

The Study findings have highlighted a number of issues that need to be prioritized in value addition interventions. The key issues are: strengthening the groups on groups dynamics, record management and actual value addition process, procurement of heavy output machinery, linking the groups to agribusiness officers and officials from ministry of trade, investing more on marketing and branding strategies of the products and explore issues of digitalization on the two components. Grooming the groups on the benefits of contributing to the initiative of values addition (stocks and startup capital) in order for them to own the process thereby achieving sustainability.

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