Value Addition in Zimbabwe's Agro-Ecological Region 2: Nature of Farmers 'activities, Preparedness and Their Constraints.

Authors' Details: Divaries C. Jaravaza[1], Mabhungu Isaac[2]
[1]Department of Marketing, Bindura University of Science Education P Bag 1020 Bindura, Zimbabwe. [2]Department of Accountancy, Bindura University of Science Education P Bag 1020 Bindura, Zimbabwe.

Abstract
Zimbabwean farmers and the Government are frantically exploring strategies to ensure sustainability and viability of farming activities. This research was an exploratory study of value addition in Zimbabwe's agro-ecological region 2.A descriptive survey of farmers in region 2 was done. Data was collected from 390 farmers using a questionnaire that had 13 open and closed questions. Descriptive statistics were presented in graphs and tables. The most prevalent value addition activity was bagging of mainly maize and ground nuts. Other activities were bottling of peanut butter after processing, chilling of milk, drying of excess vegetables, curing of tobacco and grinding of maize all done on a small scale. Most value adding activities are done on an ad-hoc basis and there was no proper planning. Major constraints faced by farmers were lack of capital and technical knowhow. It was recommended that farmers should be provided with training to facilitate their evolution from production and sales orientation to marketing orientation. The pooling of resources and risks through co-operative value addition initiatives need to be explored, inter alia.

Key words: *value addition, farmers, agro-ecological region 2, marketing orientation, constraints*

INTRODUCTION

Fleming (2005:1) takes a simple definition of value addition which is taking a product from one level to the next. Tubene (2005) defines it as an activity that enhances value to a commodity as a result of change in its physical state. Ohmart (2003) elucidates that value addition comes in many forms through modification or any form of product enhancement to have a higher value.

Example of value added products are vegetables or fruits that can be transformed into gourmet food such as jams, spreads, sauces etc. (Horwitz et al, 2008).Some non-edible products from bees are wax, pollen or even venom (Krell, 1990).

Falk (2002), Richards and Wechsler (1996) and Babcock (2008) also allude to value addition of farm products that include activities such as marketing of foods, labeling, packaging, grinding, combining and distribution.

Farmers consider value addition as a survival strategy because over the years they have been spectators as other members of the agricultural supply chain get raw/unprocessed products from farmers and simply do some value addition to justify windfall profits.Farmers would have been paid a paltry amount which will be bordering on just breaking even. Season after season, Zimbabwe small scale farmers have always appealed for financial assistance from the Government.

Hence, Fleming (2005) argues that value addition has a pivotal role as a strategy for transforming unprofitable farmers into self-sustaining and profitable enterprises. The long term survival of farmers in Zimbabwe is anchored on a value added strategy. If a farmer simply grows groundnuts and harvest them at the end, to sell groundnuts raw to a local processor, the groundnuts will be sold to peanut butter processor at a low price, at times the product may be sold at below production cost because the farmer may be unaware of the farming cost per unit. In some cases, even if farmers try to compute an accurate production cost, small scale farmers usually under cast their costs by not including the cost of own labor and family members who are not remunerated.

However, whilst there are clear indications that farmers need to take a value-adding initiative to be able to survive, there are a plethora of cases where participants have made huge losses. This is vividly captured by Amanor- Boadu (2003), "the participants who lost money in such ventures ride on wounded horses into dim sunset to nurse their wounded bank accounts and sometimes their deflated pride."

The purpose of this study was;

- To determine the value adding activities which are done by farmers in agro-economical region 2 in Zimbabwe.
- To determine farmers' level of preparedness in value adding initiatives.
- To explore major constraints that are faced by farmers in implementing value addition.

BRIEF LITERATURE REVIEW ECONOMIC REALITY

The primary objectives of value addition are to maximize producers' net farm income and wealth so that they do not just produce so as to enrich participants in the downstream of their supply chain. Economists have advocated for expansion of activities in value addition so as to benefit from economies of scale. Boadu (2003) argues that the industry has had an assumption that larger operations will yield larger net incomes.

Studies by Kansas State University noted that about $0, 25/acre increase in profitability for each percent that a farm is larger than the next farm. (Nivens, Kastens and Dhuyvetter, (2002)) However, Peterson (1997) discovered that as farm sizes increase economies of scale not only disappear but actually diseconomies of scale will emerge.There has been an upsurge in consumer demands for readily prepared food. Most Agricultural products that were studied are inputs or major ingredients to food products.

Boadu (2003) noted that there has been an upward trend for expenditure on food that is consumed away from home. The change in consumer behaviour makes it imperative for farmers to incorporate value addition so as to maximize their net farm incomes. A value adding activity is only considered to be economically rewarding if a participant on the downstream is willing to pay for the activity.Value addition should not be done basing on emotional sentiments but it should fit into the farmer`s business strategy.

The most important element of a value addition initiative is the fact that it increases the farmer`s role in the supply chain. Without value addition, a famer is just a producer, nothing else. Value addition will increase the farmer`s role from producing to transformation of the raw product.

This additional role in the supply chain will actually imply that farmers may benefit from getting part of profit that was traditionally meant for other participants in the downstream together with the risk associated with such activities.Farmers will have committed a large amount of capital, implying that if they fall, their fall will be more financially grievous than without value addition. Boadu (2003) argues that risk reduction does not occur due to value addition but through diversification of product portfolio.

A decision to embark on value addition requires a careful contemplation so that it is not just driven by the desire to increase farmers` net income without due regard for risk enhancing that comes with value addition.

THE MARKETING PERSPECTIVE OF VALUE ADDITION

Value addition perceived from a marketing perspective should only be initiated after carrying out a market research. There should be a customer who is willing to reward the farmer for the value addition initiative. As shown in Figure 1 below, the marketing orientation is more rewarding but the other orientations may not be rewarding to the farmer.

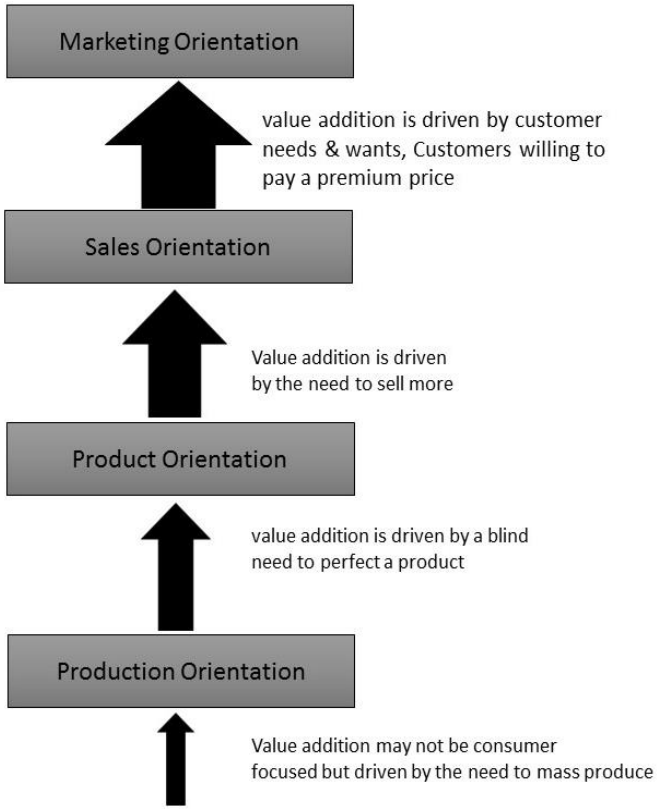
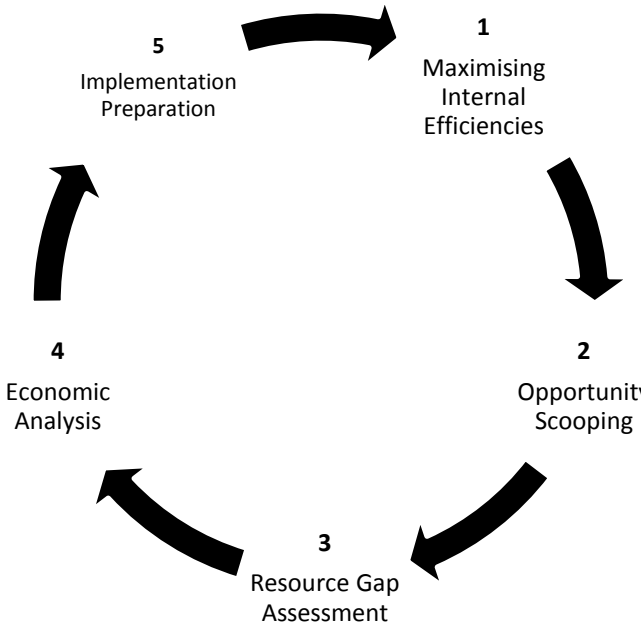


Fig 1: Value addition and Marketing Orientations. The farmer has to take a marketing view so as to embark on value addition which incorporates changing consumer needs.

VALUE ADDITION PREPAREDNESS. Boadu (2003) clearly articulated five basic stages that a farmer should go through if the initiative will make



business sense.

Figure 2 succeeding at value- adding initiatives

Source: Boadu (2003)

Stage 1: Maximizing Internal Efficiencies:

Maximizing internal efficiencies entails that the farmer has to maximize from profit margins, which is the excess of revenue generated over variable costs incurred. Although farmers cannot usually influence market prices, they can employ lean production to reduce variable costs.

Stage 2: Opportunity Scooping:

A farmer needs to assess the value addition opportunity by considering any alternative options, if any. The value adding opportunity must be sustainable on the market in the long-run. The farmer must also assess participants on the market for the value added product.

Stage 3: Resource Situation Assessment

This stage requires an arrangement of available human and capital resources that are necessary for the success of the value addition initiative. At this stage farmers may identify the needs for training of employees in the requisite agro-processing value addition skill.

Stage 4: Technical and Economic Feasibility Assessment

Having noted availability of resources the farmer should assess technical issues such as technology to be used and quantities to be produced, chemical processes and packing, regulatory agencies etc.Economic feasibility will focus on costs of production, pricing issues, potential market size, cash flow projections etc.

Stage 5 Preparing For Implementation.

Human resources skills gap that was noted at stage 3 should now be filled up by providing adequate training to would be employees in the value addition initiative. A comprehensive business plan should now be prepared with inter alia the following sections;

- **S**ituational analysis
- **O**bjectives
- **S**trategies
- **T**actics
- **A**ctions
- **C**ontrols

All players should have a shared vision to ensure success of the value addition initiative.

METHODOLOGY

The research design for this study was a survey of farmers in agro-ecological region 2 in Zimbabwe. The target population was farmers in region 2 that is Manicaland province, Mashonaland Central and Mashonaland West provinces.

The sample size of the study was 390 farmers from the three provinces. The composition of the sample was as follows: Manicaland 100, Mashonaland Central 197 and Mashonaland West 93. The land tenure for the farmers was as follows:

Table 1: Land Tenure for Farmers.

A1	106
A2	13
Old Resettlement	61
Communal	94
Small Scale	116
Total	***390***

The province tenure cross tabulation is shown below:

Table 2: Land Tenure/ Province Cross Tabulation.

		A1	***A2***	***Communal***	***Old Resettlement***	***Small Scale***	***Total***
Province	Manicaland	-	-	-	-	100	100
	Mashonaland Central	22	5	93	61	16	197
	Mashonaland West	84	8	1	-	-	93
		106	*13*	*94*	*61*	*116*	*390*

A questionnaire with 13 questions on farmer's demographic profile, land tenure, value addition activities, marketing outlets for products and constraints was administered to farmers. Research assistants were agricultural extension officers in the areas visited. Data was analyzed using descriptive statistics so as to provide basic facts of the situation on the ground.

FINDINGS AND DISCUSSIONS

Out of 390, 254 farmers specialized in only one farming enterprise whilst 136 had two or more enterprises. The major farming enterprises in the three provinces are illustrated below:

Table 3: Farming Enterprises in the three Provinces

	Cropping	*Dairy*	*Horticulture*	*Animal Husbandry*	*Apiculture*	*Total*
Manicaland	90	4	-	-	4	100
Mashonaland Central	188	3	2	2	2	197
Mashonaland West	91	-	1	1	1	93

Focusing on just one farming enterprise as is the case with the 254 farmers, increases risks to farmers. Boadu (2003) states that risk are only reduced by having a portfolio of farming activities and products rather than having to rely with a single basket.

VALUE ADDING ACTIVITIES

The major value addition activities that were done by farmers were bagging, bottling, chilling, drying processing, shelling and pressing, curing and grinding. The most prevalent activity was basic bagging of maize, ground nuts and soya beans, summing up to 320 farmers. See fig 1 below. Processing was done by farmers who produced peanut butter in some cases using traditional/manual methods rather than machines. Excess vegetables were dried using the sun by some farmers although the quantities were very low. In most cases farmers did not consider distribution to lucrative markets in urban areas as a value adding activity. They would sell to traders who will carry their products to urban areas and sell their products raw at premium prices.

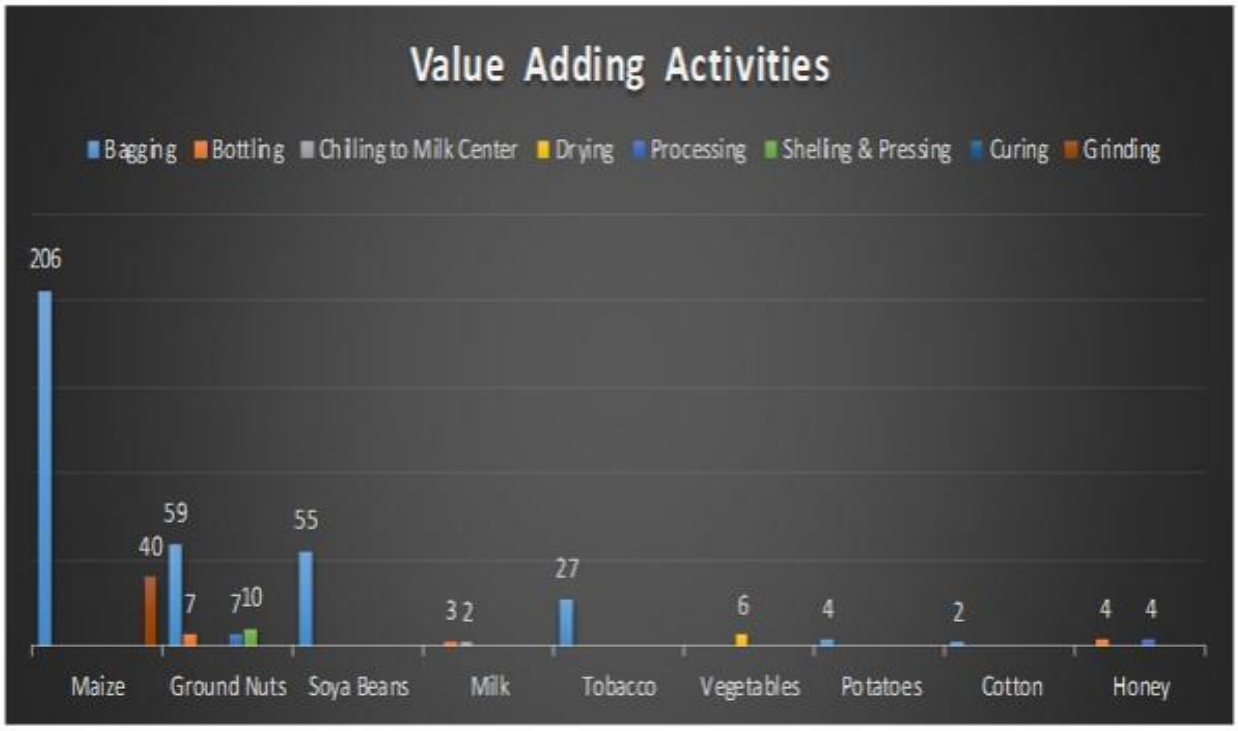


Fig 3: Value addition activities in agro-ecological region 2 in Zimbabwe.

Source: Primary data.

CONSTRAINTS FACED BY FARMERS IN VALUE ADDITION.

Most farmers indicated that their major limiting factor in value addition was lack of capital. Value addition requires machinery and technology that most small scale farmers cannot afford. The current economic climate in Zimbabwe coupled with the influx in cheaper products from neighboring countries. There were 141 farmers who indicated that they were in dire need of capital, Mashonaland central province had the highest number. See fig 2 below.

The second major constraint was lack of technical knowledge on the various value adding activities especially processing of raw products. Low market prices were raised by mostly maize and tobacco farmers. Unavailability of electricity and irrigation were also raised.

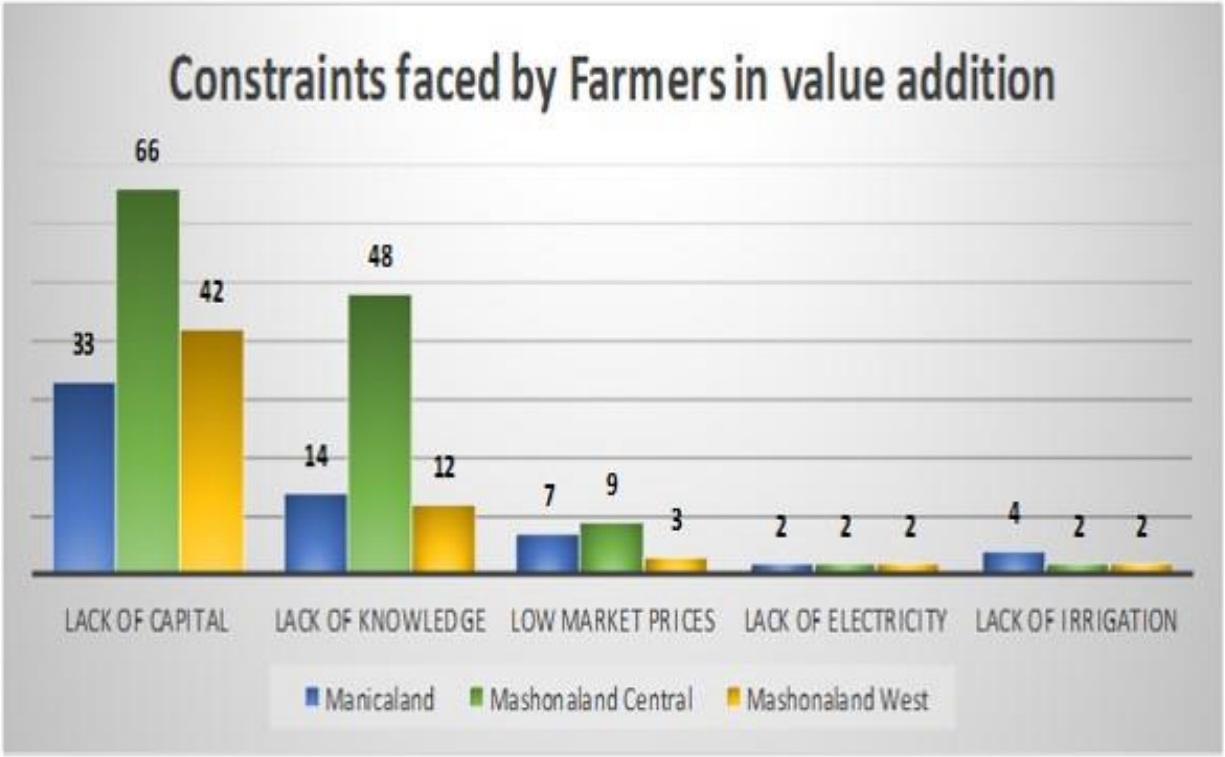


Fig 4: Constraints faced by farmers in value addition in Zimbabwe region 2.

Source: Primary data.

RECOMMENDATIONS AND AREAS OF FURTHER STUDY.

Most farmers in Zimbabwe's region two aim at producing in large quantities without even considering availability of a market for their products. A few farmers are into contract farming which guarantees them of a

forward price for their produce and also resource advances. We recommend that farmers should evolve from production orientation to marketing orientation to enhance their viability. Value addition requires strategic planning as elucidated by Boadu (2003).Value addition should not be done on ad hoc basis. Running workshops and field training should be provided to farmers on value addition options or alternatives that are viable to farmers of a particular raw product in their farming areas. Possibilities of co-operative processing of raw products should also be navigated so that farmers would pool risks and resources. Further research is required focusing on value addition on particular products.

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