



CAVA II

Cassava: Adding Value for Africa Phase II

ASSESSMENT OF THE USE OF CASSAVA AS ALTERNATIVE ENERGY FEEDSTUFF IN LIVESTOCK FEEDS IN NIGERIA

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INTRODUCTION

Nigeria is the largest producer of cassava in the world (FAO, 2010).

She produces up to 49million metric tonnes annually and high quantity of the annual production is targeted for the domestic food market in forms such as cassava flour, gari, fufu among many others (IITA, 2002)

Recent knowledge revealed that the crop can be processed into several other products like chips, high quality flour, pellets, adhesives, alcohol, starch etc. which are raw materials in livestock feeds, alcohol/ethanol, textiles, confectionery, wood, food and soft drink industries (Iheke, 2008).

Sanni (2015) reported that cassava has contributed to economic growth of Small Holder Farmers (SHF) and community processors groups with increased income from \$7,173,920 in 2013 to \$10,073,336 in 2014 in Nigeria.

INTRODUCTION CONTD.

However, general developmental trend identified with cassava utilisation has not been well grouted in the livestock industry.

The Nigerian livestock and feedmill industries involve the use of energy feedstuffs which constitute about 50-65% of daily ration produced for some animal species such as Poultry.

The use vary between 35 and 50% in ruminants (sheep and goat and cattle) and other monogastrics like swine and rabbit.

It also varies with physiological stage of animal and production target (Flushing, Steaming, Fattening etc.) of the Farmer.

JUSTIFICATION

In spite of the Country's advantage in cassava production; over 12million Livestock Farmers Population (NBS 2012) and high population of the Livestock species, cassava and cassava products have not fully explored in the Livestock industry particularly, Poultry which has over 150million population (Timothy et al., 2011)

There is a dearth of information on the current trend of cassava and cassava products as alternative energy feedstuff and utilization in livestock value-chain and this necessitated the need for this study.

MATERIALS AND METHODS

The study was conducted in southwest Nigeria.

Random sampling technique was used to select three states: Ogun, Osun and Oyo States and a total of 35 feedmill operators were randomly selected and interviewed across the three states.

The selection was not evenly distributed following the uneven distribution of the feedmills across and within the selected states.

However, the sampling ensured inclusion of both small and large feedmills in each of the states.

Structured questionnaire was used in drawing data from the respondents.

The data collected were analysed using descriptive statistics.

RESULTS AND DISCUSSION

Figure 1: Experience in Feedmill Operations

- Over one-third (38.35%) of the respondents had feedmill business experience that spanned over 20years.
- Livestock and poultry industry are ancient enterprise in Nigerian Agricultural business e.g. the Farm Settlement Scheme of 50s was such that allowed livestock and crop production as the main source of livelihood.

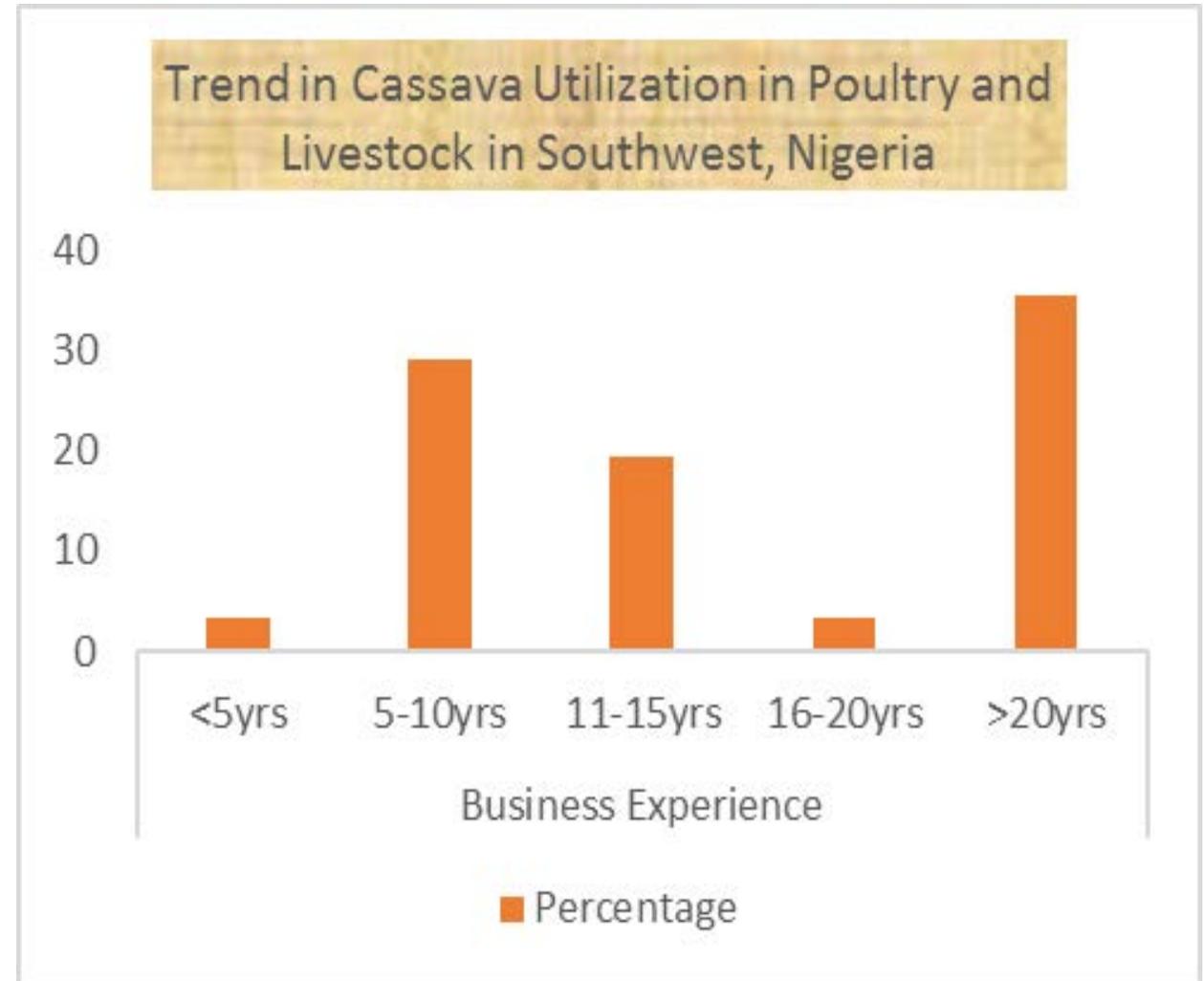


Figure 2: Feed Type Produced for Various Livestock

Figure 2 shows that 90% of the feedmill operators produced feed for poultry while 38% produced feed for the pig farms.

Feeds produced for Rabbit, Sheep and Goat and Cattle were between 17 and 20%.

This distribution could be as a result of vast growing attention that poultry production have received over the years in Nigeria.

Also quick return on investment, ability to attain market weight within short period (about 6weeks), high quality protein of chicken meat and egg etc (FAO 2011). account for this

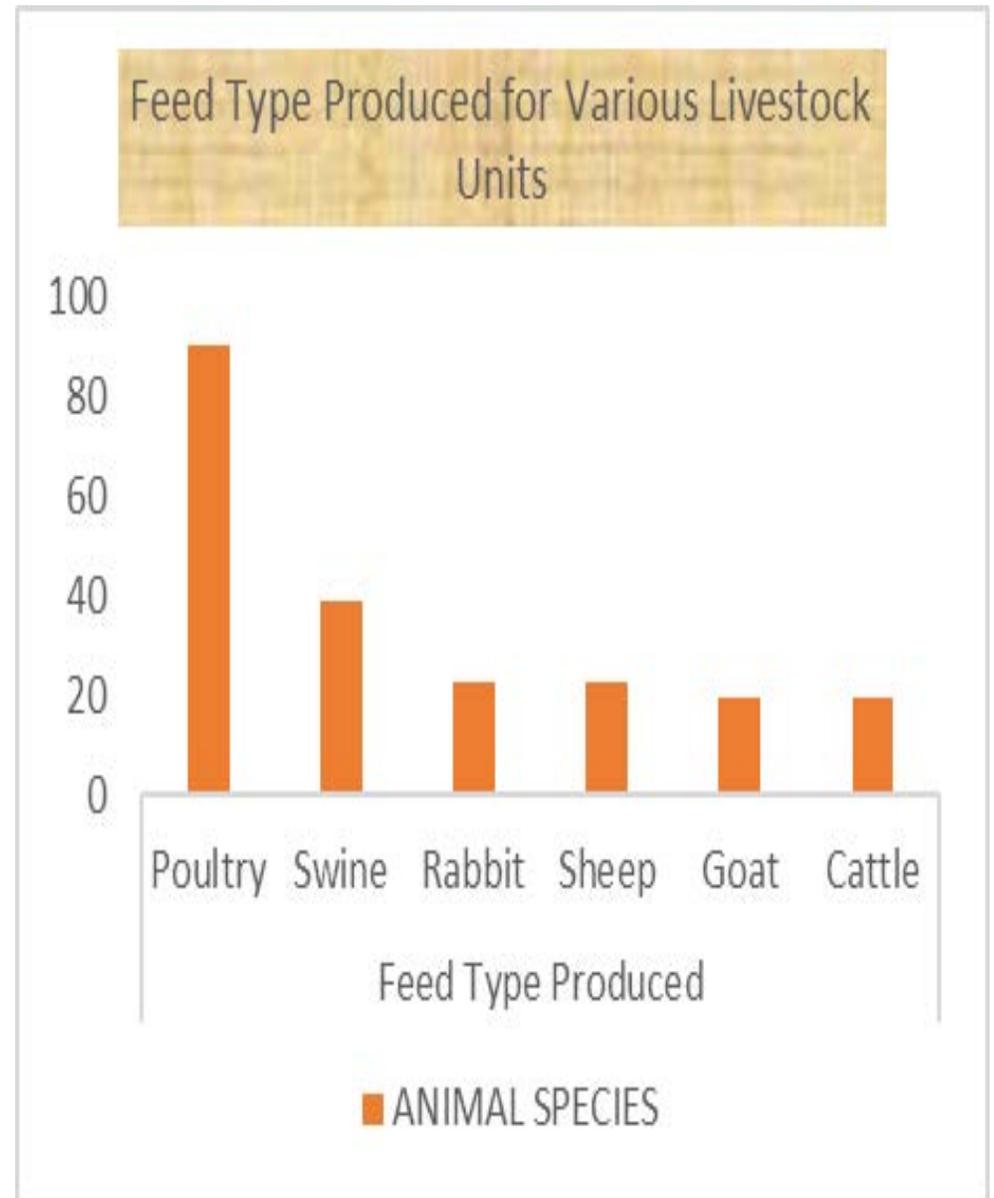


Figure 3: Trend in Commercial Poultry Production

- Figure 3 reveals that 87.1% of the total feed output of the Feedmill industry are produced for diets of broilers (87.1%), layer diet (87.1%), and cockerel (70.97%).
- Proliferation of fast food joints that make use of broiler chickens while layers also, are raised throughout the year could be responsible.

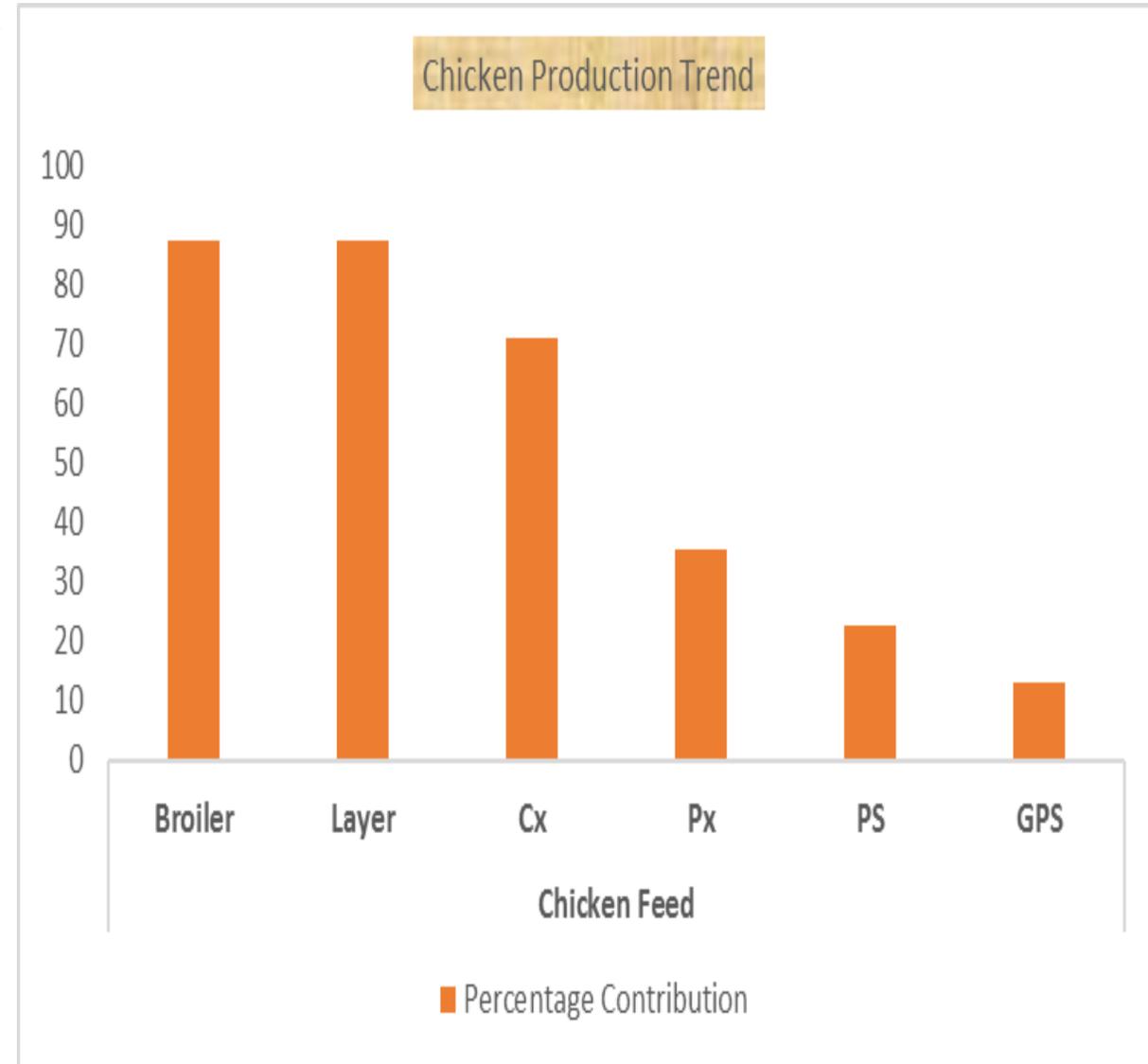


Figure 4: Preferred Energy Feedstuff for Livestock Feeds

Maize was the preferred (93.55%) energy feedstuff utilised in livestock feed formulation while 16.13 % of the respondents used cassava as energy feedstuff.

Sorghum utilisation was only reported by 3% of the respondents.

The distribution in preference could be attributed to high level of maize production as against cassava (Tewe, 2004).

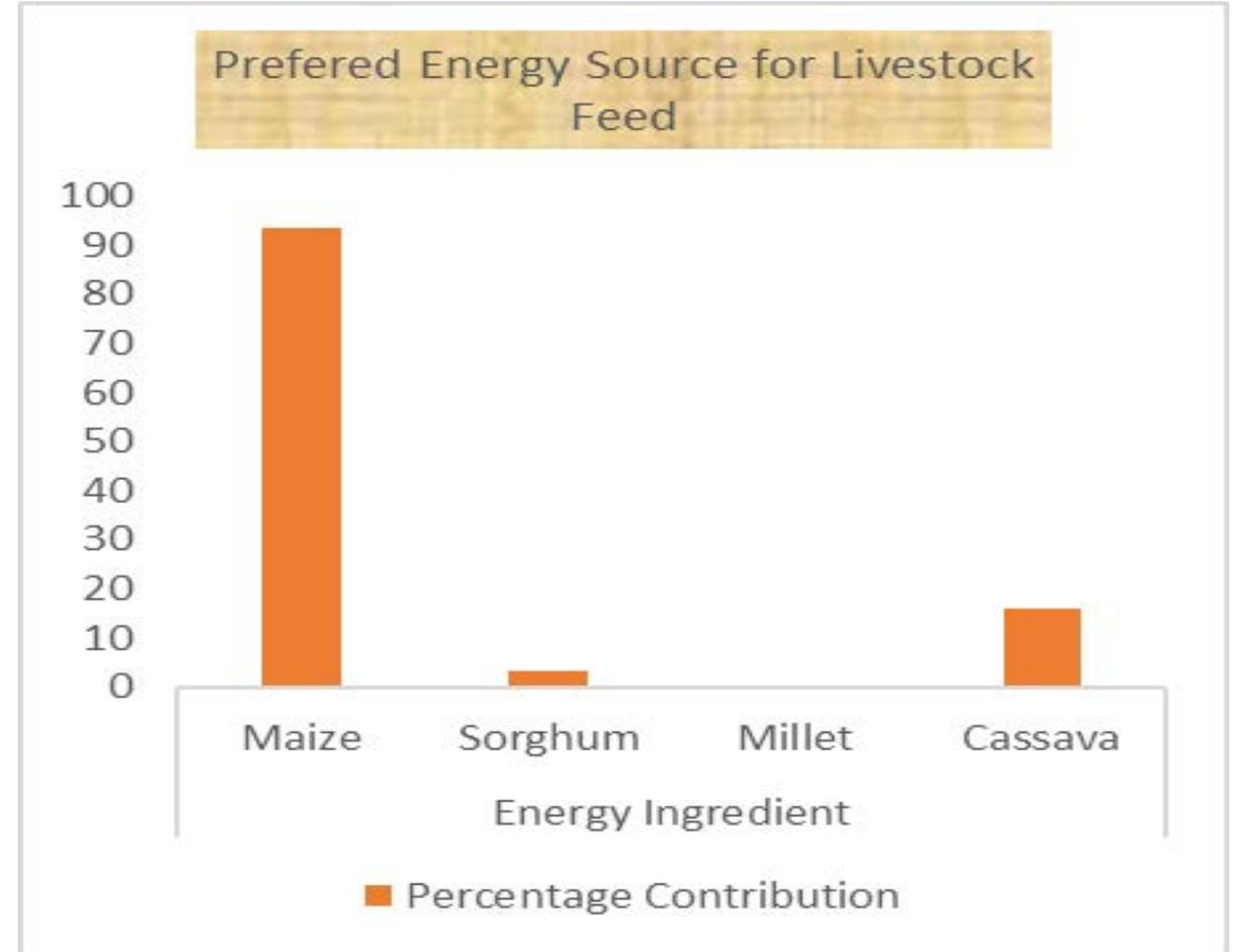


Figure 5: Quantity of Energy Feedstuffs utilised by Feedmill operators per day

Majority (43%) livestock feed producers used less than 5tons of maize.

While the medium scale feed producers utilised between 6-10tons per day, the integrated and custom feed millers used over 20tons.

An Industrial Farm, for example disclosed that she uses more than 80tons of maize per day.

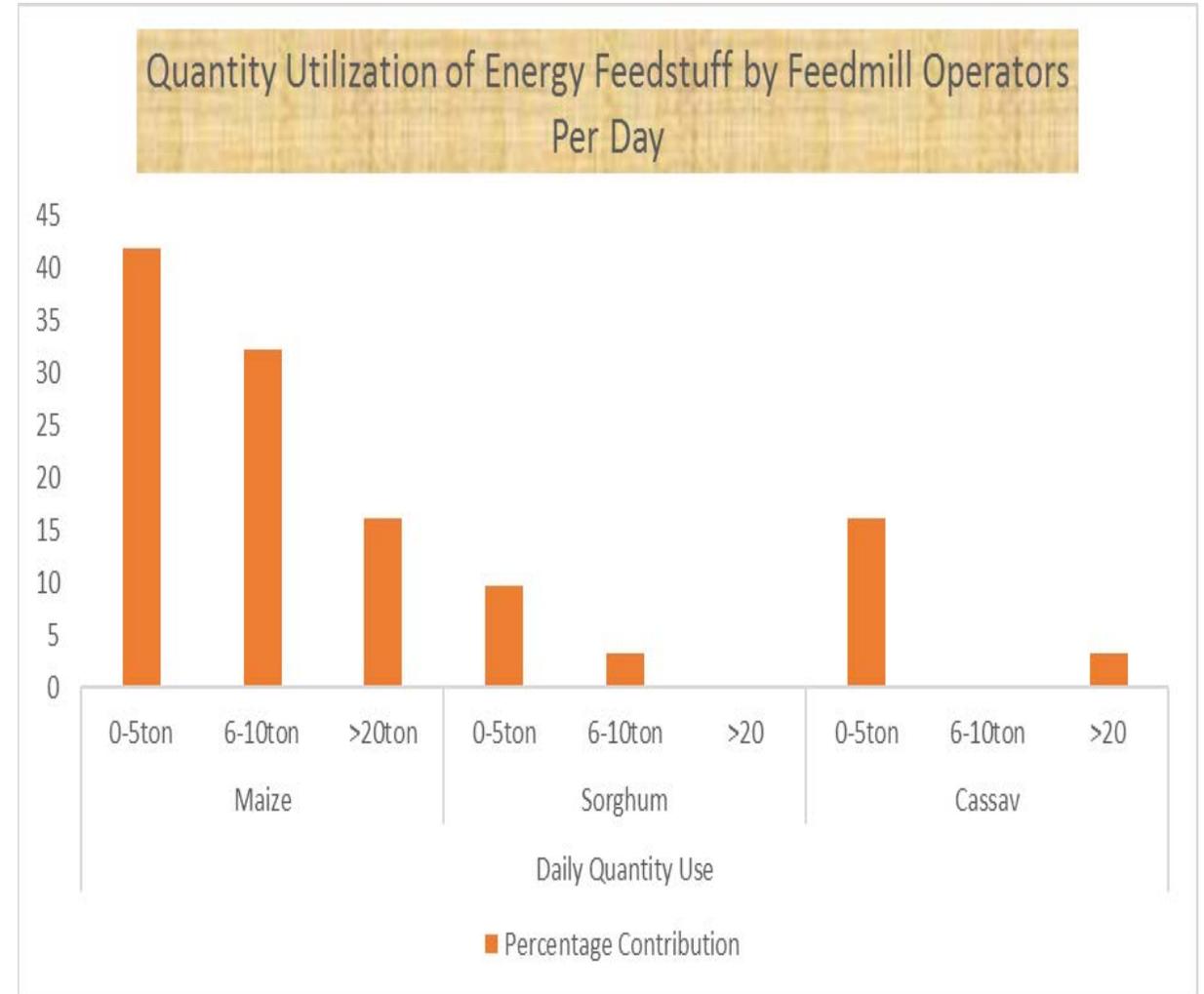


Figure 6: Factors Considered for Energy Feedstuff for Livestock Feeds

Reasons advanced for use of maize as the preferred energy source in poultry diet were availability, ease of use and nutrient quality among others.

Majority of the feedmill operators target Poultry farms which operate intensive production system and are sensitive to nutrients requirement of the birds in order to meet production targets.

The report of Tewe (2004) who opined that intensive production pattern and productivity as being critical in production system is strategic to this finding

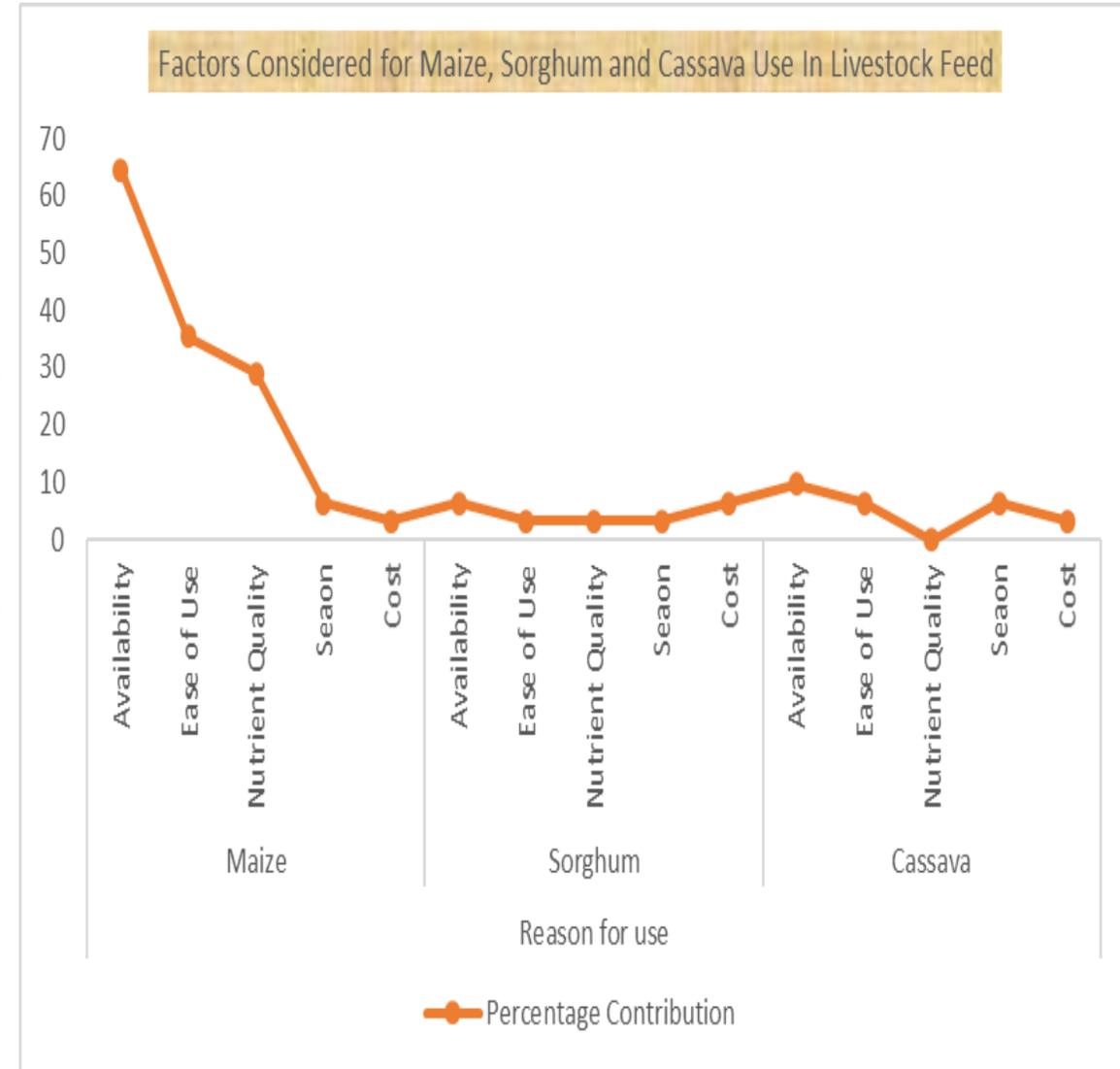
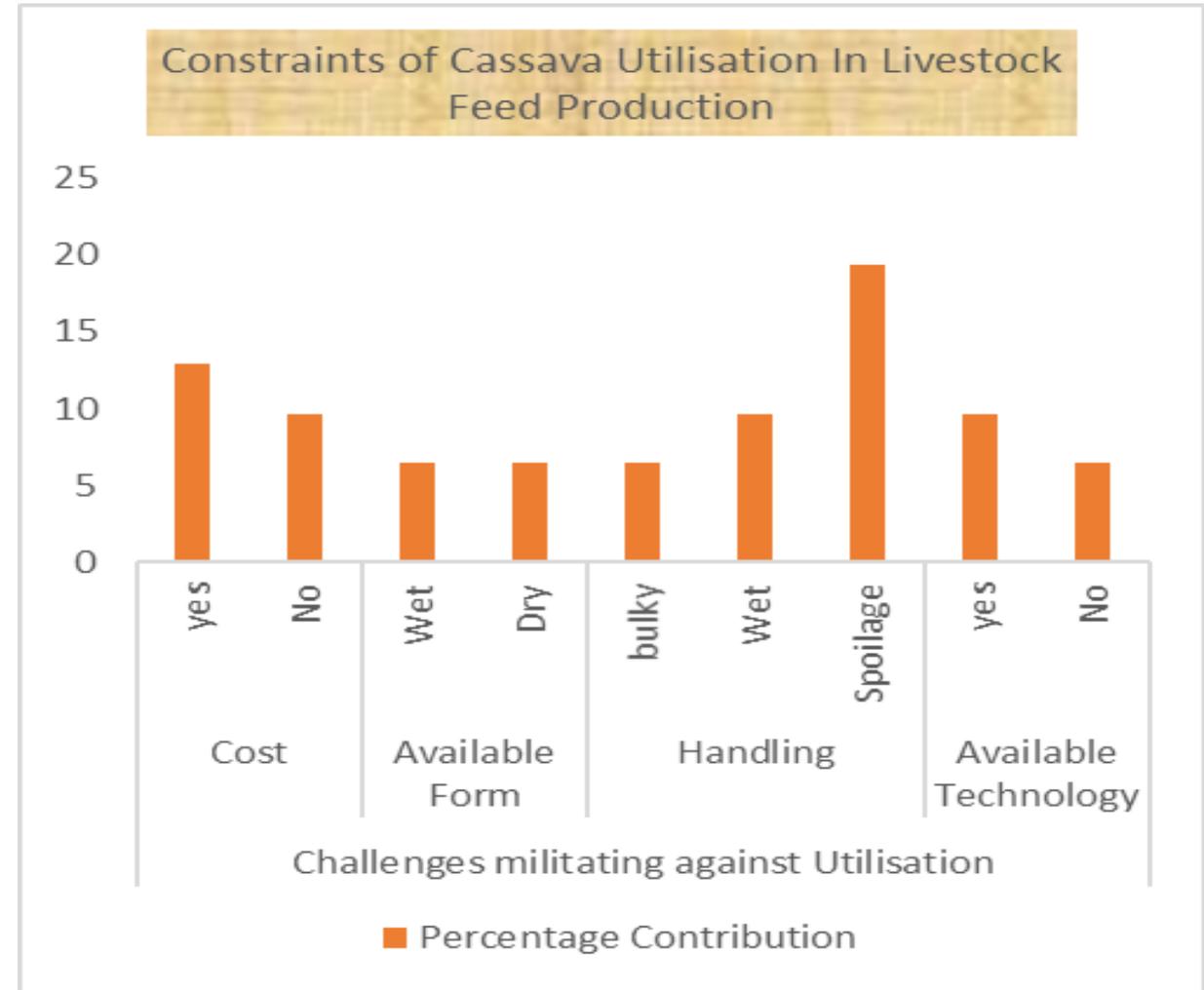


Figure 7: Constraints in the Use of Cassava in Livestock Feeds

Over all high cost, high water content (wetness) and spoilage were main factors identified to be militating against cassava utilization by feedmill industry.

Some respondents also disclosed that cassava was too dusty. Where oil seeds are included to reduce the dustiness, cost of production increased with loss profit margin to the feed producers



CONCLUSION AND RECOMMENDATIONS

From the findings of the study, the following conclusion could be drawn:

- Livestock feed mill operators in Nigeria have more than 20years experience in the industry while many new small and medium scale operators have emerged in the last 10years.
- Small and Medium Scale Livestock Feed Producers form the largest (58%) population of the feed mill operators in Nigeria.
- Poultry feed was the main feed produced by the industry and maize was the main energy feedstuff of the formulated feeds due to availability, ease of use and nutrient quality etc.
- The study recommended that efforts should be geared towards increasing yield per hectare so as to reduce cost while improved processing method should be facilitated among the cassava processors of cassava for it to compete favourably with maize as preferred livestock feedstuff for the future.

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