

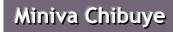


## Seasonality Revisited

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Understanding Seasonality Implications on Quality of Life through the Innovative JCTR Rural Basket:

The Case of Select Rural Areas of Matushi, Saka and Malama of Zambia



# Understanding Seasonality Implications on Quality of Life through the Innovative JCTR *Rural Basket*: The Case of Select Rural Areas of Matushi, Saka and Malama of Zambia

### By Miniva Chibuye (JCTR)

"In today's difficult situation, a more exact awareness and a wider diffusion of the set of principles for reflection, criteria for judgment and directives for action would be of great help in promoting both the correct definition of the problems being faced and the best solution to them"...

The Social Agenda, 2000.

#### Introduction

The above quotation is a strong reminder that the best solutions can only be defined once accurate information and critical analysis has been conducted. This conference offers a good platform to strengthen the assertion that paying attention to all elements affecting food security is a starting point to devising sustainable ways of dealing with hunger.

Zambia is one of the poorest countries in the world with 64% of its people living below the poverty threshold and about 51% living in extreme poverty¹ measured by failure to meet the minimum required basic food items. Predictably, the rural population makes up the majority of the poor currently averaging 80%. Extreme poverty incidence within Zambia has not substantially reduced from 58% in 1991 to 51% in 2006. The expectation is that the figures will rise due to effects of the 2008 global food and economic crisis, making the dream of attaining the first MDG far-fetched and creating a wider barrier to the achievement of human development.

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<sup>&</sup>lt;sup>1</sup> 2006 Draft Living Conditions Monitoring Survey for Zambia

In 2008, Zambia ranked 163 out of 179 countries listed on the 2008 Human Development Index (a comparative measure of life expectancy, literacy and standards of living for countries world over)<sup>2</sup>. The causes of poverty and required responses are no longer a secret. Problem identification and policy directions have clearly been spelt out in national documents and strongly reflected in international commitments. However, the major challenge in the Zambian context has been implementation of these well spelt out policies inevitably leading to hunger.

Major challenges in documents have been identified as inadequate infrastructure such as all weather roads, lack of irrigation facilities, unsustainable agriculture practices, inaccessible credit facilities, etc. The responses to these problems have been characterised by mostly haphazard plans of action influenced by political ambitions causing avoidable food shocks and stress. In Zambia for instance, much of the budget towards the Ministry of Agriculture is consumed by the popular Fertiliser Support Programme (FSP) at the expense of other core programmes such as expanding access to irrigation facilities or increasing extension services. The majority of small scale farmers have had to rely on rain fed agriculture leading to recurrent hunger due to seasonality influences. Due in part to the pressure from many stakeholders, the Government is in the process of reviewing the FSP as observations have been made that these high allocations have over the years not had commensurate increase in production output or substantially increased its contribution to the GDP.

The unsuccessful story of the agriculture sector has led to a long historical struggle of improving living conditions of the people in both rural and urban areas. Whereas academicians, policy makers and development specialists have widely focused on it, including producing well analysed documents, most Zambian households have continued to struggle to improve their living conditions on a daily basis.

The implications of these hardships are obvious. Among others, the manifestation of high malnutrition levels is a likely consequence. For instance, a study done by the WHO in 2008 revealed that Zambia was among the ten most malnourished countries in the world. Further, the National Food and Nutrition Commission in its 2008 study on rates of malnutrition admissions in major hospitals within Zambia showed an unprecedented increase. More

<sup>&</sup>lt;sup>2</sup> See 2008 Human Development Report

seriously, the recently published Zambia Demographic Health Survey revealed that 45% of Zambia's children are stunted, a sign of chronic malnutrition. Certainly, the cognitive development of the children will have serious consequences for the development of the economy.

#### Caveats

What compounds the problem of responding to the problem of poverty and food security especially in rural areas is the lack of regular national statistics to inform timely action. For instance, it is difficult to estimate additional statistics of people that will become food insecure as a result of the food and economic crisis. Undoubtedly, to have an ingenious solution to the challenge of food security, constant data collection and analysis on the extent of food insecurity and how it responds to different factors is imperative.

Additionally, there has been lopsided development favouring urban population at the expense of rural areas. Accessibility to social services and infrastructure development such as irrigation and rural roads is constrained making poverty situations worse. Since agriculture is the mainstay of most rural areas, inadequate attention towards infrastructure undercuts the realisation of the potentials in rural areas and instead creates household vulnerability particularly to seasonality changes. It is because of these realities that the Jesuit Centre for Theological Reflection (hereafter JCTR)<sup>3</sup>, a faith based organisation that is seeking to see a society where faith promotes justice for all especially for the poor extended its works to the rural areas through the innovative *Rural Basket* tool. To accomplish the mission of promoting faith through justice, the thrust of the JCTR work is to conduct research which informs advocacy.

#### The JCTR's Rural Basket, a Tool for Understanding Seasonality Effects

The quality of life measured in various dimensions changes with seasonal variation, especially in the case of rural households in developing countries like Zambia. However, it should be acknowledged that the impact of seasonality on rural households is reinforced by long-standing non-seasonality oriented challenges. By and large, Government and other

<sup>&</sup>lt;sup>3</sup> For more information about the JCTR, see <u>www.jctr.org.zm</u>

stakeholder responses to these challenges have been narrow, short-term, reactive and relief in orientation as opposed to being development in orientation. These long-standing non-seasonality challenges include inadequate or lack of access to health, agricultural extension service, credit facilities, education, an absence of road and other infrastructure, etc. However, the combination of seasonality and non-seasonality factors increases the poverty levels to untold heights.

One of the ways through which seasonality and its implications on quality of life -- rural development -- can be deeply understood, monitored, and upon which accurate interventions can be properly designed to improve quality of life is the JCTR's initiative of the *Rural Basket*.

The *Rural Basket* is a monthly household research that depicts various facets of the rural household situation that include prevailing food availability and consumption patterns, cost of non-food essentials such as cost of soap, lighting, cost of milling maize, sorghum, millet, sources of livelihoods, etc. This *Rural Basket* is primarily designed as a tool for assessing living conditions of the people in rural areas. It is designed to be a basis for different stakeholders to raise the profile of rural areas to feature more prominently in policy debates and designs or interventions. It is a tool for use in attaining structural changes that encourage investment in sustainable development, away from short-term relief orientations.

The research is conducted in three rural districts in Zambia: Saka area in Masaiti District (Copperbelt Province), Malama area in Mambwe District (Eastern Province) and Matushi area in Mufumbwe District (North-Western Province). Matushi area in Mufumbwe is potentially a highly productive area with good soils and a good rainfall pattern. Saka in Masaiti is characterised by not so fertile soils but has advantages of proximity to some of Zambia's major towns. Quite distinct from others, Mambwe lies in a Game Management Area (GMA) where implementation of agricultural activities is challenging due to interference from wild animals such as elephants and monkeys inducing the "human-animal conflict". Furthermore, the area lies in a valley making it prone to frequent floods during the rainy season. All these areas are mainly inhabited by small scale farmers relying largely on own production for consumption and income generation.

The *Rural Basket* research is conducted on a monthly basis from randomly selected households using a recall method. Local researchers are used to ensure regularity in data collection.

The *Rural Basket* highlights major Rural Development elements such as food security, agricultural activities, social service delivery, livelihood strategies, etc., As such, the *Rural Basket* has five (5) sections, A, B, C, D and E representing food items, non food items, essential services, prevailing livelihoods of select households and agriculture information.<sup>4</sup> This paper largely focuses on the food security section though reference to other sections is also made.

The food security section presents culturally acceptable basic food items consumed by an average household size in a particular area. The average household size differs across the *Rural Basket* research areas to depict the actual situation of the area as measured by the local health centres and validated by the JCTR research.

The Basket is presented in such a way that the first two sections have two columns. For instance for the first section on basic food items, the column on the left represents what people expressed could be the ideal foods available and desired for consumption in a particular season. This expressed ideal food available and desired for consumption was subjected to nutritional analysis to establish amounts necessary for consumption for the recommended calories which averages 2,400 calories per person per day, the recommended calorie intake for someone doing light work. Therefore the expressed ideal food items depict the food items available in each season. Essentially, each area has four ideal seasonal baskets depicting the food items consumed in the four agricultural seasons ("January to March", "April to June", "July to September" and "October to December"). The left column therefore changes with the season to depict the ideal food items available in a particular season adding up to a 2,400 calorie mark per person per day.

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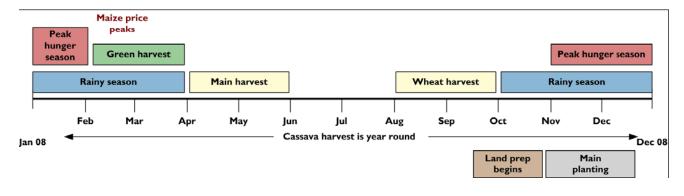
<sup>&</sup>lt;sup>4</sup> See attached Masaiti February 2009 Rural Basket

On the other hand, the column on the right represents average household consumption of food that was actually consumed on average in a particular month. The difference between the recommended calorie requirement in the left column and the right column constituting the actual calorie derived from the food that was consumed represents the level of *calorie attainment* or *deprivation*. It should be noted that among other things, deprivation in calorie intake affects growth in children and also active economic engagement in adults.

#### Seasonal Hunger

Zambia has four seasons segregated cumulatively in groups of three months. The monthly *Rural Basket* research facilitates among others an analysis on the influence of seasonality on food security.

Below is a depiction of an agriculture calendar.



Source: FEWS NET

The above seasonal calendar compiled by FEWS NET in Zambia shows that food security improves as new harvests increase and reduces towards the end of the year when peak hunger season sets in.

Specifically, the following observations have been made across the three areas since the pilot period in 2006 and subsequent implementation of the *Rural Basket* Research.

#### January to March

This period is characterised by low calorie intake as the main staple, maize is not ready to be consumed. Most households survive by consuming seasonal fresh foods such as sweet potatoes, pumpkins and fresh vegetables. Households are generally food insecure in January. The *Rural Basket* research revealed that all households recorded average calorie intake between 1,100 and 1,400 per person per day against the recommended 2,400 calorie intake. According to the Food and Agriculture Organisation (FAO), persons consuming less than 1,600 calories per day are considered to be ultra hungry.

The situation however improves in February and March as the availability of farm produce increases. During this period, the *Rural Basket* indicated an improvement of up to 1,900 calories. Fresh maize can also be consumed during these months for households that planted early. Additionally, households would be lacking in income usually sourced through selling farm produce hence, become more vulnerable. One consequence from this is that pupils may delay in reporting back to school at the beginning of term time due to lack of income.

#### April to June

Food security during this season continues to improve following the main harvest period. Most households consume food items from own production. According to the Rural Basket, average food consumption ranged between 1,600 and 2,000 calories per person per day. However, some households sell their produce in order to meet competing household needs such as school fees, essential non-food items, etc.

The food portfolio during this season is much more varied with a combination of greens, fish, groundnuts, sweet potatoes, maize and cassava.

#### July to September

The *Rural Basket* revealed a limited variety of food during this period and calorie intake dramatically reduced to below 1,600. In most households, rationing of maize consumption is practiced further reducing the calories consumed. Dry vegetables are predominant during this period but preservation of other food items such as sweet potatoes and fruits is not practiced.

#### October to December

Most households experience hardships during this season and food consumption is low. The food portfolio is limited but fruits such as mangoes are available in November and December. According to the *Rural Basket*, the average calorie intake was also below 1,600 per person per day. In areas such as the remote Malama, most households in 2008 were in need of relief food, which was later provided by the Government and the Wildlife

Conservation Society to deter inhabitants from poaching animals. This situation of food insecurity has been recurring since JCTR started conducting its survey in 2007.

#### **Observations**

*Food Security Problems*. The *Rural Basket* so far shows that food security is a vexing problem for most households. Even where some food is available for certain duration in the year, especially the immediate post-harvest period, the diet is very narrow to assure good nutrition for households, particularly children.

Availability of food is generally influenced by the rainy season, a sign of rain dependent agriculture. Furthermore, rural areas in Zambia are not well endowed with preservation methods as fresh vegetables and tubers are depleted by June.

Evidence so far indicates that rural areas in general terms exist in a state of vulnerability observed through both income and food insecurity. According to the JCTR *Rural Basket*, none of the communities has ever achieved the recommended 2,400 calorie intake.

Recurrent Cry for Rural Infrastructure: In all our visits to the areas, the need for an all "season passable" road and construction of bridges has featured prominently. One classical illustration for this need are the experiences that teachers are going through relating to their salaries in Malama area. One teacher shared that with the onset of the rainy season in October or November, teachers' November salary is the last for the year until April or May when the road becomes relatively passable. Furthermore, Malama area in Eastern Province is affected by extreme weather conditions, i.e. recurring floods and sometimes droughts. This situation is exacerbated by the practice of agriculture activities only during the rainy season. Irrigation farming practice would reduce dependence on rain fed agriculture.

The general implications of these results are that the households are faced with high levels of vulnerability and disease incidence. It also becomes costly for the Government as rural households have limited coping strategies in times of poor agriculture production hence, the rural poor become reliant on Government's relief programmes to cushion their food production failures.

In the wider realm of rural development, the *Rural Basket* has revealed households continued inability to meet essential non-food items, including poor access to essential services. Other findings include dire limits of non-farm income sources coupled with inadequate input supply -- both knowledge and otherwise -- in relation to household-based economic activities.

To genuinely respond to the challenge of rural poverty, there is need to take a holistic approach and deal with the basics such as introducing wide spread irrigation facilities and constructing all weather roads. A score at this level would have positive externalities for urban areas.

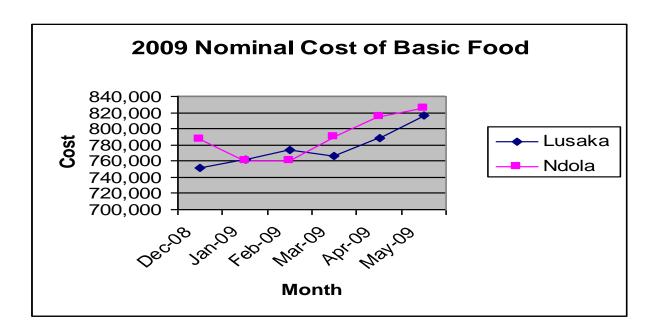
#### The Interplay between Rural and Urban Food Security

Availability of food in rural areas has a direct impact on affordability of food in urban areas. A high correlation has been observed between seasonality effects and cost of food items. According to the urban *Basic Needs Basket* conducted by the JCTR since 1991 and consistently since 2001, observations have been made that the cost of food reduces during the harvest season.

One important thing to note regarding this situation of prices is the *seasonality* and *policy* dimensions in offering explanation. The reduction in the price of refined maize meal is usually experienced around April on account of the increasing availability of maize during the harvest period. Reductions in green vegetables and tomatoes have to do with the ease (less chemical input) with which green vegetables and tomatoes are grown. However, prices increase towards the end of the year when there is less supply of food items such as maize grain.

For the above reason, the JCTR conducts the monthly urban *Basic Needs Basket* not as a mere statistical exercise but to understand the dynamism of living conditions seen through cost of living. In capturing prices of food and non-food essential items in urban areas, the *Basic Needs Basket* helps in understanding fluctuations of seasonality and difficult economic situations experienced by households and therefore shading light on the kind of strategies or policy responses to design.

However, unlike in the previous years, the prices of food have continued to rise as depicted by the graph below, showing the 2009 nominal food prices for two of the eight towns where the JCTR conducts its urban cost of living research.



While global food prices are now declining, the prices of food within Zambia in 2009 have been unseasonably high for a post harvest period. This is largely due to the unprecedented increase in the 2008 prices of agriculture inputs such as fertiliser and pesticides, which increased the cost of production for most farmers. According to the JCTR urban Basic Needs Basket, which measures the cost of living in urban towns for an average family of six, prices of tomatoes and onions (a regular addition to main meals) had more than doubled in May 2009 when compared to the prices in April 2008. Dairy products as well as greens also recorded an upward increase in prices.

Therefore, the urban *Basic Needs Basket* for Lusaka<sup>5</sup> (capital of Zambia) for an average family of six in Lusaka revealed very high food prices amounting to K815,850 up from K788,200 in the month of April 2009 (approximately US\$157).

The urban poor are the ones who are hurt more by the high prices as they are net food buyers and rely mostly on the cheaper vegetables for relish (consumed with the staple maize meal) rather than beef or chicken. In towns especially around the copperbelt (home to Zambia's biggest mining companies), household food insecurity has increased due to job

<sup>&</sup>lt;sup>5</sup> See attached urban *BNB* for Lusaka

losses in the wake of the economic crisis which instantly reduced the purchasing power of many households.

The effect of long term experience of unaffordable food cost could, for instance, be seen in the recently published Zambia Demographic Health Survey which revealed that 45% of the Zambian children were stunted, a sign of chronic malnutrition.

Considering the low incomes averaging about K1,500,000, the cost of food is unbearable as when adding non-food such as housing, utility costs, etc., the total *BNB* for May was K2,240,280 up from K2,219,230.

That is why any claims of improvements in any economy should be judged by no other criteria than quality of life indicators such as accessibility of food, good health care and education, adequate food at household level, adequate incomes, etc. In urban areas, the measuring rod would be affordability of these all these needs. Therefore one can contend that there should be no abstract and inadequate notions of measuring the performance of the economy -- such as in GDP terms only as important as this may be -- other than placing primacy on what is happening in people's lives in qualitative terms.

#### Using the Rural Basket for Structural Change

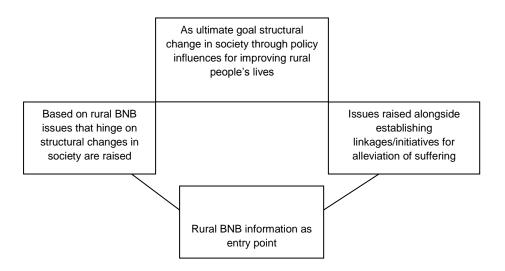
While the JCTR's urban *BNB* has made many successes at both national and international level among others featuring in the country 2003 UNDP annual report and winning a regional 'Drivers of Change Award' by a South African Trust in conjunction with the Guardian Mail., the *Rural Basket* has had a short life span but is promising to have a lot of potential.

The advocacy strategy has been crafted in such a way that it should be at different levels, households, community, national and international levels.

The *Rural Basket* is premised on raising the profile regarding living conditions of the rural people. As such, part of the effort is directed at establishing links with groups or organizations working at alleviating poverty of the rural people. This effort is meant to

address structural issues that are at the root cause of poverty (e.g., unjust markets or the total absence of markets, inadequate health and education, etc).

This is because redress of structural aspects in our current context is perceived to be futuristic – takes time to achieve changes — in orientation but promises sustainable development. On the other hand giving people some relief facilitates their effective participation in any development initiative. Even more importantly as a concerted effort the voice on behalf and together with the rural people must be heard the loudest at every layer of policy making. The diagram below sheds more light on this thought:



Therefore, the *Basket* is meant to influence at many levels. At the household level, the JCTR will utilise the last section of the *Rural Basket*, E, a powerful planning section that households can rely upon as it is linked to section A in that it demonstrates the minimum level of agricultural production in order to achieve food security. It highlights the required cultivation area and levels of inputs in a particular area for meeting food production (e.g., maize, cassava, beans, groundnuts, etc.) necessary to achieve food security. Keeping in mind that to achieve sustained household well being, there is need for surplus production.

The *Rural Basket* will be used to influence the work of organisations and Government departments with a rural focus. So far, stakeholder meetings have been held with Government departments and other organisations within the districts where the researches

are conducted. The *Rural Basket* is therefore meant to complement efforts of organisations and departments within these rural districts by conducting a monthly research on food security and overall rural development issues.

At the national level, meetings have been held with different cooperating partners on the *Basket*. For instance, upon request from the Germany Development Service (DED), a presentation on the effect of the global economic crisis on rural poverty was made.

Furthermore, upon invitation from the nutrition wing of the Government, a presentation on how both the urban and *Rural Basket*s can be used to measure access to food within the country was made at the National Symposium Conference on Access to Food.

Undoubtedly, the Rural Basket has been identified as one of the tools that can influence Government policy decisions. For instance, the Government through the Ministry of Finance and National Planning recently requested that the JCTR Rural Basket be presented at the Poverty Reduction Budget Support (PRBS) review meeting. The PRBS focuses on Macroeconomic, Governance, Poverty reduction and Public Finance Management. Therefore, the rich information from the Rural Basket has been identified as a rich source of information for monitoring poverty reduction and service delivery in rural areas.

It being the first of its kind, the *Rural Basket* therefore has a lot of potential because of its relevance at many levels particularly policy levels. It informs policy on specific development interventions.

The *Rural Basket* is therefore a powerful monitoring tool for access to food in rural areas as it measures household food consumption. It provides a genuine and comprehensive measure of the scale of extreme and overall poverty in select rural areas in Zambia. Furthermore, it is an indicator of the success or failure of different policies in alleviating poverty. For instance the success of agricultural policies such as Fertiliser Support Programmes can be measured by improvement in household income as well as household food security. Therefore, it provides clues on the determinants of chronic poverty and is useful in the design of targeted poverty alleviation policies and programmes.

The JCTR has used the *Rural Basket* to advocate for more targeted policies such as the need for Government to reduce budgetary allocation for the "failed" Fertiliser Support Programme and instead increase allocation to other core agricultural programmes such as irrigation and extension services. The findings have been highlighted in meetings with policy makers and implementers at both the district and national level. Additionally, press releases illuminating challenges faced in rural areas have been published in both electronic and print media.

It also facilitates trend analyses of household food consumption, a much more powerful and accurate tool to measure the behaviour of individual commodities upon which informed policy responses can be made. These trends are a good indication of household access to food and influences of particular occurrences – e.g seasonality – and policies on prices of food. For instance, the basket over time has revealed price increases towards the end of the year through to the beginning of the subsequent year.

Fundamentally, the *Rural Basket* is primarily designed as a tool for assessing living conditions of the people in rural areas. It is designed to be a basis for different stakeholders to raise the profile of rural areas to feature more prominently in policy debates and designs or interventions. It is a tool for use in attaining structural changes that encourage investment in sustainable development, away from short-term relief orientations.

#### Some Broader Challenges of Rural Basic Needs Basket

While the JCTR has managed to collect data on a monthly basis by training local teachers in data collection, regular publication of the Rural Basket is impeded by the absence of post offices and impassable roads especially in the remote area of Malama in Eastern Province. In terms of the Project activity of collecting information, it might be the case that we will have some serious delays in receiving the information from the Field Researcher during the rainy season hence creating is a lag in publication of the *Rural Baskets*.

Additionally, the *Rural Basket* is faced with the challenge of only researching for advocacy and not relief oriented. Collection of such information that is designed for structural changes

in society in an economically depressed environment poses a challenge as benefits may not be seen tangibly by wider society and in particular by the people directly participating in it. Because people are constantly living on margins of survival, they are in a hurry to see benefits accrue of any development initiative.

Quite understandably, expectations are very high with regards to what this activity will do to lift up living conditions of the people in Malama. The Field Researcher during data collection got remarks as *Pamene Pemuyambila Kulemba Paliye Vetionapo Seo* ("since you started collecting this information, there is nothing we have seen as outcomes/ benefits"). The team in their visit to some of the households discussed with the informant on this issue, explaining the exact intentions of this activity and the kind of benefits that might arise. It ought to be realized that this concern is particularly buttressed by the fact that already a significant number of households have either run out of food or are beginning to do so.

Apart from the reason for the immediate needs of the people, particularly that of food, one is compelled to conclude that it is because of failed development both at the local and national levels over the years that is also accounting for this situation. Activities that are not relief per se in orientation will always be subjected to such questioning, especially seen in the history of none-existent or underachievement in development outcomes. But what is important is what the follow-ups are to such situations both in specific and general terms.

#### Conclusion

The need to monitor changes in living conditions at the household and local level is very critical to accurately judge Zambia's new economic situations and to effectively plan ahead

But what kind of conclusions can be drawn from this situation as revealed by the Rural Basket? First, the *Rural Basket* illuminates the seasonal consumption changes and the significant influence that agriculture production in rural areas has on the price changes in urban areas. The Rural Basket has revealed seasonal fluctuations in food availability, with increases in calorie intake following a good harvest. This however is followed by reduction in food intake towards the end of the year.

The second conclusion to make is the significant position agriculture has in influencing people's welfare, including maintaining low food inflation. Therefore, dealing with seasonality fundamentals will have positive effects on availability and affordability of food in rural and urban areas alike.

Clearly, food is the most basic of all human needs, without which human existence would be improbable. To promote the inherent dignity of every human being, it is imperative to respond to all fundamentals that ensure food security especially those that have to deal with seasonal factors.

#### JCTR RURAL BASKET: SAKA AREA, MASAITI

#### February 2009

#### (A) BASIC FOOD ITEMS FOR AVERAGE SIZE FAMILY OF SEVEN IN SAKA AREA

Item Maize Grain Cassava Tubers Eggs Chicken Sweet Potatoes Dry Fish Beans Groundnuts Tomatoes Onions Mushroom Cassava Leaves Sweet Potatoes Pumpkin Leave Pumpkins Wild Spinach (I Mango Loquat (Masukt Sugar Salt Cooking oil		Quantity 100Kg 20 Kg 300g	<b>Item</b> Maize Grain	Quantity		Means of Access
Cassava Tubers Eggs Chicken Sweet Potatoes Dry Fish Beans Groundnuts Tomatoes Onions Mushroom Cassava Leaves Sweet Potatoes Pumpkin Leave Pumpkins Wild Spinach (I Mango Loquat (Masuki Sugar Salt		20 Kg		31Kg	Harv	est/ K6,000 per 5 Kgs
Chicken Sweet Potatoes Dry Fish Beans Groundnuts Tomatoes Onions Mushroom Cassava Leaves Sweet Potatoes Pumpkin Leave Pumpkins Wild Spinach (I Mango Loquat (Masukt Sugar Salt		_	Mealie meal (b/	_		,000 per 10Kg
Chicken Sweet Potatoes Dry Fish Beans Groundnuts Tomatoes Onions Mushroom Cassava Leaves Sweet Potatoes Pumpkin Leave Pumpkins Wild Spinach (I Mango Loquat (Masukt Sugar Salt			Chicken	300g	Rear	
Dry Fish Beans Groundnuts Tomatoes Onions Mushroom Cassava Leaves Sweet Potatoes Pumpkin Leave Pumpkins Wild Spinach (I Mango Loquat (Masuki Sugar Salt		5 Kg	Fresh Fish	200g	Fish	ing
Beans Groundnuts Tomatoes Onions Mushroom Cassava Leaves Sweet Potatoes Pumpkin Leave Pumpkins Wild Spinach (I Mango Loquat (Masukt Sugar Salt		10Kg	Dry fish	200g	K2,0	000
Groundnuts Tomatoes Onions Mushroom Cassava Leaves Sweet Potatoes Pumpkin Leave Pumpkins Wild Spinach (I Mango Loquat (Masukt Sugar Salt		1 Kg	Beans	300g	Harv	est
Tomatoes Onions Mushroom Cassava Leaves Sweet Potatoes Pumpkin Leave Pumpkins Wild Spinach (I Mango Loquat (Masukt Sugar Salt		5 Kg	Groundnuts	100g	Harv	est
Onions Mushroom Cassava Leaves Sweet Potatoes Pumpkin Leave Pumpkins Wild Spinach (I Mango Loquat (Masukt Sugar Salt		5 Kg	Cassava Tubers	200g	Harv	est
Mushroom Cassava Leaves Sweet Potatoes Pumpkin Leave Pumpkins Wild Spinach (I Mango Loquat (Masukt Sugar Salt		10 Kg	Sweet Potatoes	7Kg	Harv	est
Cassava Leaves Sweet Potatoes Pumpkin Leave Pumpkins Wild Spinach (I Mango Loquat (Masukt Sugar Salt		2 Kg	Tomatoes	2 Kg	Harv	est
Sweet Potatoes Pumpkin Leave Pumpkins Wild Spinach (I Mango Loquat (Masuki Sugar Salt		2 Kg	Onion	1Kg	Harv	est
Pumpkin Leave Pumpkins Wild Spinach (I Mango Loquat (Masuki Sugar Salt	;	1 Kg	Rape	800g	Harv	est
Pumpkins Wild Spinach (I Mango Loquat (Masuki Sugar Salt		2 Kg	Pumpkin Lvs	3 Kg	Harv	vest .
Wild Spinach (I Mango Loquat (Masuki Sugar Salt	S	6 Kg	Sweet potato Ly	s 2 Kg	Harv	/est
Mango Loquat (Masuki Sugar Salt		5 Kg	Garden Eggs	700g	Harv	/est
Loquat (Masuki Sugar Salt	Bondwe)	2 Kg	Okra	2Kg	Harv	est
Sugar Salt		10 Kg	Cassava Lvs	800g	Harv	est
Salt	u)	3 Kg	Sugar	700g		500 per Kg
		2 Kg	Salt	2Kg		000 per Kg
Cooking oil		1 Kg	Cooking oil	900mls	K3,0	000 per 500mls
		2 litres				
. Calories / per	son / day	2400	Avg. Calories / per	son / day	1200	<b>Deficit</b> (-1200)
SSENTIAL NO  Monthly Non-l		S	Average Actual Ex	penditure	on Non-Food	l Needs
Item	Quantity	Cost (K)	Item		Quantity	Cost (K)
	750 mls x 2	15,000	Paraffin		750mls	7,500
	5 boxes	1,000	Matches		10 boxes	2,000
	4 tablets	18,000	Bath Soap – Ge		l tablet	4,500
	2 x 400g boom		Wash Soap – Bo		1 x 400g	4,500
	1 x 500 mls	4,500	Milling		31 kg	15,500
	1 x 400 mls	6,500	Lotion- Caro Li		1 x 400mls	6,500
	100Kgs	50,500		C		,
Total Cost		K104,500	Average Expendi			K40,500

#### (C) ESSENTIAL SERVICES

Service	Cost	Distance	Comment		
Water	Time	_	Borehole is broken down/ households drawing water from unprotected		
	Time		wells		
Saka Basic			Saka Basic has now enrolled grades 8 / However, the school is drastically		
School School	Free	Local	understaffed with only 5 MOE teachers and 1 volunteer teacher catering		
School			for 600 pupils. There is no qualified secondary school teacher		
Secondary Sch. K60,000-100,000 /		30 km	There is no senior secondary school education/ Pupils who qualify to		
(8-9 / 10-12)	(10-12) K190,000-250,000		grade 10 must attend boarding school in Luanshya		
Lisomona Clinic	Free consultation	15 km	Catchment area of 7,000 people / No qualified medical personnel / CDEs		
Lisoinona Cimic	riee consultation	13 KIII	diagnose patients and prescribe drugs / Coartem shortages are common		
Ibenga Hospital	Free consultation	25 km	Severe cases are referred to Ibenga Hospital		
Transport	K10,000 - K20,000	-	Cost of renting bicycle for 1 day/ Bicycle common transport to Luanshya		
			Masaiti experienced heavy rainfall with adverse effects on crops in some		
		_	instances/ Bridge linking Area to Luanshya not yet constructed. Each		
Community			rainy season the makeshift bridge collapses, leaving pupils cut off from		
Development			school/ The campaign against charcoal burning in the district has been		
	-		intensified. A number of checkpoints on the main road have been		
			mounted to curb this activity		

#### (D) PREVAILING LIVELIHOODS OF SELECT HOUSEHOLDS IN FEBRUARY

	Charcoal burning	Charcoal burning Charcoal burning		
Input Costs	-			
Sales				
Profit / Wage	K300,000	K100,000	K140,000	

#### (E) MINIMUM ANNUAL FOOD PRODUCTION FOR HOUSEHOLD FOOD SECURITY IN SAKA, MASAITI

	Maize	Cassava	Beans	Groundnuts
<b>Total Quantity</b>	1200 Kg (13.3 x 90 Kg bags)	240 Kg	60 Kg	60 Kg
Cultivation area	2.4 Lima (1.5 Acre)	0.32 Lima (0.2 Acre)		0.2 Lima (0.125 Acre)
<b>Required Inputs</b>	12 Kg Seed / 240 Kg Fertiliser	800 x 30 cm Cuttings		3.75 Kg Groundnuts
<b>Total Input Cost</b>		Recycled Seed		Recycled Seed

This survey was conducted during the first week of **March 2009** by the Social Conditions Programme of the Jesuit Centre for Theological Reflection. Average calories were calculated on the basis of food consumption from randomly selected households within Saka Area. Additional information was collected from rural health centres, Ministry of Agriculture and Cooperatives, schools etc., within Masaiti district.

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#### JCTR BASIC NEEDS BASKET: LUSAKA

#### **May 2009**

#### (A) COST OF BASIC FOOD ITEMS FOR A FAMILY OF SIX IN LUSAKA

Commodity	Kwacha	Quantity	Total
Mealie meal (breakfast)	62,500	3 x 25 Kg bags	187,500
Beans	11,600	2 Kgs	23,200
Kapenta (Siavonga)	47,800	2 Kgs	95,600
Dry Fish	40,000	1 Kg	40,000
Meat (mixed cut)	19,500	4 Kgs	78,000
Eggs	8,500	2 Units	17,000
Vegetables (greens)	7,500	7.5 Kgs	56,250
Tomato	10,500	4 Kgs	42,000
Onion	10,200	4 Kgs	40,800
Milk (fresh)	10,500	1 x 2 litres	10,500
Cooking oil	29,100	2 x 2 litres	58,200
Bread	3,600	1 loaf/day	108,000
Sugar	5,800	8 Kgs	46,400
Salt	2,000	1 Kg	2,000
Tea (leaves)	10,400	1 x 500 g	10,400
Sub-total			

K815, 850

K2, 240,280

#### (B) COST OF ESSENTIAL NON-FOOD ITEMS

Charcoal	55,000	2 x 90 Kg bags	110,000
Soap (Lifebuoy)	2,100	10 tablets	21,000
Wash soap (Boom)	4,200	4 x 400 g	16,800
Jelly (e.g., Vaseline)	9,100	1 x 500 ml	9,100
Electricity (medium density)	53,000	300 units	53,000
Water & Sanitation (med - fixed)	114,530		114,530
Housing (medium density)	1,100,000		1,100,000

Sub-total K1, 424,430

Totals from previous months	<b>May 08</b>	Jun 08	Jul	Aug 08	<b>Sep 08</b>	Oct 08	Nov 08	<b>Dec 08</b>	Jan 09	Feb 09	Mar 09	<b>Apr 09</b>
Amount	1,931,350	1,941,350	1,893,150	1,834,100	1,828,100	1,854,850	1,914,450	1,934,950	2,186,980	2,199,880	2,213,930	2,219,230

#### (C) SOME OTHER ADDITIONAL COSTS

Total for Basic Needs Basket

Item	Kwacha	Item	Kwacha
Education		Transport (bus fare round trip):	
Grades 8-9 (User+PTA/year)	K300,000 - K420,000	Chilenje-Town	K5,600
Grades 10-12 (User+PTA/year)	K500,000 - K720,000	Chelston-Town	K6,800
School Uniform (grades 8-12)	K90,000 - K180,000	Matero-Town	K5,000
Health (clinic)		Fuel (cost at the pump)	
3 Month Scheme (per person)	K5, 000	Petrol (per litre)	K5, 818
No Scheme Emergency Fee	K5, 500	Diesel (per litre)	K5, 417
Mosquito Net (private)	K15,000 - K20,000	Paraffin (per litre)	

<sup>&</sup>quot;The government should seriously address the high mealie meal prices ... our children are starving"- Garden resident

#### (D) SOME COMPARATIVE FIGURES OF WAGES--"TAKE HOME PAY"

	Teacher	Nurse	Guard with Security Firm	Secretary in Civil Service	Average Monthly Income in Urban Low-Cost Area - CSO	Pieceworker on a Farm	
Pay Slip	K1,145,300 to	K1,121,000 to	K300,000 to	K915,000 to	645,326 (between	K3,000 to K15,000	
	K1,631,600	K2,624,000	K750,000	K1,480,000	October 2004 and January 2005)	per day	

This survey was conducted on 31<sup>st</sup> Mayl 2009 by the Social Conditions Programme of the Jesuit Centre for Theological Reflection. Average prices were calculated on the basis of prices gathered from retail outlets at Northmead, Shoprite (Kafue Road), and City Market, Chawama, Chainda, Kabwata, Matero and schools, clinics/hospitals around Lusaka. The Mayl Basic Needs Basket is approximately US\$431 based upon an average middle exchange rate of 5195 Kwacha per US\$ at the end of May.

Case Study

Advocacy on Socio-Economic Development

2009

# Understanding Seasonality Implications on Quality of Life Through The Innovative JCTR Rural Basket: The Case of Select Rural Areas of Matushi, Saka And Malama of Zambia

Chibuye, Miniva

Jesuit Centre for Theological Reflection

Chibuye, M. (2009). Understanding Seasonality Implications on Quality of Life through the Innovative JCTR Rural Basket: The Case of Select Rural Areas of Matushi, Saka and Malama of Zambia. Lusaka, Zambia: Jesuit Centre for Theological Reflection (JCTR). https://repository.jctr.org.zm/handle/20.500.14274/221

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