



# A Study of the Rice Value- chain in Zambia

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## *Abbreviations and Acronyms*

ABF	: Agri-Business Forum
COMACO	: Community Markets for Conservation
COMESA	: Common Market for Eastern and Southern Africa
DTIS	: Diagnostic Trade Integration Study
EEC	: European Economic Commission
EIF	: Enhanced Integrated Framework
FAO	: Food and Agriculture Organisation
FRA	: Food Reserve Agency
IFAD	: International Fund for Agricultural Development
IGC	: International Grains Council
IMF	: International Monetary Fund
ITC	: International Trade Centre
LDC	: Least Developed Countries
MCTI	: Ministry of Commerce, Trade and Industry
NGOs	: Non-Governmental Organisations
NIU	: National Implementation Unit
PSD	: Private Sector Development
SADC	: Southern African Development Community
SME	: Small and Medium Enterprises

- SNV : The Royal Norwegian Society for Development
- TEWG : Trade Expansion Working Group
- UNCTAD : United Nations Conference on Trade and Development
- UNDP : United Nations Development Programme
- WTO : World Trade Organisation

# 1

## *Executive Summary*

This study seeks to present an analysis of the rice-value chain situation in Zambia and how the sector can be promoted further through support from the Enhanced Integrated Framework (EIF) initiative. Additionally, the intention is for the report to serve as point for public sector, donor, NGO and private sector discussion with particular focus on opportunities in the value-chain for securing and improving income among rural populations in the rice growing areas.

### **1.1 Situational Overview and Statement of Opportunities**

- i. Globally, rice is a major food staple and a mainstay for many rural populations. As such, it is an important food crop for the food security of significant numbers of rural dwellers in the world. It is mainly cultivated by small-scale farmers on holdings of less than 1 hectare. Rice is also a 'wage' commodity for workers in areas of production and in the processing plants. This duality, quite often, gives rise to conflicting policy objectives, with policy makers intervening to save farmers when prices drop, or to defend consumer purchasing power when there are sudden prices increases (Calpe, 2002).
- ii. According to the Food and Agriculture Organisation (2002), rice is vital for the nutrition of much of the population of Asia, as well as Latin America and the Caribbean and Africa. It is central to food security of over half of the world's population, not to mention the culture of many communities. Rice is, therefore, considered a 'strategic' commodity in many countries and is, consequently, subject to a wide range of government controls and interventions. For example, several countries



in eastern and southern Africa (ESA) imposed bans on rice exports during 2008, in response to the world food crisis of 2008.

- iii. According to Calpe, during the 1990s, global trade in rice expanded on average seven percent a year and that, despite such dynamic growth, the international rice market remained thin, accounting for only 5-6 percent of global output, since most of the rice is consumed in the areas it is being consumed. During the same period, Brazil, Indonesia, Saudi Arabia, Iraqi and the Islamic Republic of Iran were major destinations in the rice trade. However, since around the year 2000, imports by African countries have surged, providing a major stimulus to trade in rice. As such, the majority of countries in the Common Market for Eastern and Southern Africa (COMESA) region have become net importers of rice.
- iv. There is consensus in the literature that the level of imports is influenced by whether rice is regarded as a staple food or not. In addition, literature suggests that high imports may also indicate low price competitiveness of locally-produced rice, as compared to imported rice that tends to be cheaper. Furthermore, since the region is food insecure, an increase in rice production would enhance the availability of the needed staple food.
- v. The Alliance for Commodity Trade in East and Southern Africa – ACTESA (2008) – observed that sub-Saharan Africa (SSA) is expected to increase its rice production by 50 percent, since this is one of the areas where both yield and area expansion can still contribute to growth in production, as yields are 40 percent of the world average, while potential rice land is still vast in many cases. Rice demand in the COMESA region was estimated at 10 million tonnes in 2000. The demand from the year 2000-2020 is forecast to increase at 1.3 percent per annum, thereby reaching about 13 million tonnes in 2020. On the other hand, production is forecast to increase at a slightly higher rate of 1.4 percent per annum, thereby rising to about 12 million tonnes by 2020. COMESA will need to fill the expected market gap of 1.0 million tonnes by importing. The production of rice in the COMESA region is predominantly dependent on rain-fed lowlands, wetlands and plains. In Zambia, it is grown by smallholder farmers.
- vi. The rice enterprise is one of the highest labour-intensive crops amongst commonly cultivated crops. Its cultivation period coincides with that of other important food and cash crops. Farmers face competing needs for family labour and this has worsened by the advent of HIV/AIDS that

has reduced the quality and quantity of on-farm labour. Many have to resort to hiring implements and hired labour that is not only expensive but also tends to delay planting, leading to yield reductions. In many cases, hired labour becomes important for land preparation, ploughing and levelling, transplanting, weeding and harvesting rice. Hence, there is significant potential for employment creation with rice cultivation in rural areas. As such, support to the rice value-chain would be in tandem with its aspirations.

- vii. Rice has been identified to be one of the profitable smallholder cash crops in Zambia, with the potential to significantly contribute to increased incomes and employment among rural producers. Although rice is well established within the private sector market chains, the market links are often not well defined, with frequent cases of market failure. The critical gap in most cases has been the lack of a comprehensive result-oriented and market-driven commercialisation strategy that mobilises scarce human, material and financial resources to systematically address the constraints. Despite these market failures, historical records from the Ministry of Agriculture and Co-operatives show a steady increase of rice production in Zambia over the years. Rice has now become a designated crop in Zambia and the Food Reserve Agency (FRA) has started marketing it in some selected districts.
- viii. Notwithstanding the immense natural resource endowments, poverty has remained undesirably high among rural households in Zambia. According to an International Fund for Agricultural Development (IFAD) report, about 67 percent of Zambians live below the poverty datum line and 46 percent of those living below the poverty line live in extreme poverty. The high poverty levels in many rural areas have been mainly attributed to the generally poor small-scale agricultural productivity among farming households, which, many times, lack adequate food and income sources. Small-scale agricultural productivity in many parts of Zambia is negatively affected by a number of constraining factors, which include: (i) limited access to agricultural inputs such as fertilisers and improved seeds due to exorbitantly high prices and unreliable supplies; (ii) deteriorating soil fertility; (iii) poor transportation and communication rural infrastructure (roads, storage, etc.); and (iv) poor agricultural marketing systems, amongst others.
- ix. Given the soaring poverty levels among the rural communities of Zambia, there is need for appropriately designed and sustainable community-

based food security and income-generating activities that improve the rural households' livelihoods. Rice is one of the promising ventures which could significantly contribute to this. With suitable technical knowledge and practices, and with sound organisational management, small-scale rice production and marketing among the rural communities of Zambia could turn out to be a highly profitable and sustainable agricultural enterprise for improved food security and incomes.

- x. A functioning multi-stakeholder platform is likely to result into the desired synergy among value-chain actors that would optimise the utilisation of the existing resources. Such a platform is likely to improve the governance in the sector. Good governance is essential for confidence building between producers/smallholder farmers and the rice markets/processors/traders, which is currently quite limited. It is, therefore, being argued here that there are opportunities for the Integrated Framework Programme (through the EIF Aid for Trade component initiated by six multilateral agencies) to support a rice value-chain multi-stakeholder platform to achieve its intended objectives of contributing to mainstreaming trade into Zambia's national development planning and budgetary process. A rice multi-stakeholder platform, which is being facilitated by Royal Norwegian Society for Development (SNV) and the Agri-Business Forum (ABF), very much in its infancy stage, has the objective of being a strong lobby group for rice trade policy and intends to work with initiatives that are facilitating both domestic and regional trade.
- xi. Clearly, this study argues that rice offers opportunities for reducing rural poverty through trade. Rice production offers rural households in many parts of Zambia opportunities to:
- Switch from subsistence farming to cash crop farming;
  - Engage in cash crop production without giving up growing of their subsistence crop(s), since arable land has not been a major constraint for most rural households;
  - Households in rice growing areas can earn additional off-farm income by selling their labour to their neighbours who are growing rice, as it is labour-intensive; and
  - Households near rice mills can also sell their labour to the rice mills, as quite a number of them are located in the rice-producing areas.

xii. Further, the study has highlighted a number of constraints facing the commercialisation of the rice value-chain. The Integrated Framework Programme can assist through:

- Increasing transparency in both the supply and demand side of the value-chain. In the supply chain, traceability is important, while on the market side, the need to characterise the product would be important capacity in the sector and in line with the EIF objective of building capacity to develop standards and quality assurance;
- Assisting in developing objective lobbying positions for the industry stakeholder platform through policy briefs. Policy briefs do not only have the potential to influence government policy decisions but have also been successful in being catalysts for private sector investment. This, too, would be in line with EIF objective of being a catalyst for mobilising resources;
- Creating awareness about the immense un-exploited potential for trade in rice. For example, there is need to sensitise policy makers on the need to give rice high priority consideration. At the domestic level, the value-chain needs to be elevated to a food security crop for urban areas and at regional level. There is need to position rice as a crop with high export potential because of the large volumes of imports into both the Southern African Development Community (SADC) and the COMESA. The study argues that Zambia has a competitive advantage in rice production because of her vast un-utilised wet lands (suitable for rice production) and abundant water endowment. Zambia accounts for about 40 percent of surface water resources in the SADC in the region; and
- Assisting in building the capacity to develop standards and internal control systems in the supply chain, as these are necessary first steps in trade, especially for export. This will contribute to meeting the EIF purpose of enhancing market access and market penetration for Zambian commodities. This is especially important for the rice value-chain, in view of the over one million MT of rice imports out of Africa, into the COMESA region every year.

xii. Trade fundamentals change, since trade depends on many variables. As such, there is need for continuous review of the DTIS matrix to make it relevant to changing environments. For example, with the food crises

of 2008 and 2009, the fundamentals for global trade in grains changed, rice became subject to many non-tariff trade barriers in many countries in the far-east and within the region. That is why it is being suggested here that there is need for a review the of Diagnostic Trade Integrated Study (DTIS) matrix under the EIF to consider the eligibility of rice under the EIF support. Such non-tariff barriers (NTBs) imposed by countries like Malawi on rice call for concerted lobby and advocacy activities since such actions limit the fulfilment of benefit from trade.

## 2

# *The Study Objectives and Methodology*

The main objective of the study was to develop the rice value and assess opportunities and challenges of the industry that can be addressed by the EIF support and further measure the importance of the rice sector, in terms of export promotion, employment creation and food security in Zambia.

### **2.1 The Specific Terms of Reference**

- i. To examine the importance of the rice industry in Zambia with regard to income generation through exports and employment creation;
- ii. To develop the rice value-chain, highlighting opportunities and challenges that would require EIF interventions/support in the chain;
- iii. To analyse the available policies in the industry and the level of influence of rice farmers in the formulation of the same policies; and
- iv. To assess the level of consultations among stakeholders in the rice sector and investigate the organisation of the rice industry at all levels.

### **2.2 Methodology**

As a desk study, the main study method was review of existing literature. The data collection and analysis process was guided by a value-chain approach. As such, literature on the performance of the key actors from production to marketing were collected and analysed.

Qualitative data was collected whenever descriptive information about the rice value-chain existed. In particular, excerpts from written materials were obtained, various websites were visited, etc.

Quantitative data was collected wherever it was possible to collect numerical data that could be collated.

### **2.3 Limitations and Constraints**

The study was conducted as a desk study. It did not involve going out to the rice growing areas. However, using the relations, the author has with a number of Actors in the rice sector, as Secretary of the Agri-Business Forum in Zambia, contacts were made with key actors as shown in Annex I.

The rice-value chain is relative new, particularly its organisation. As such, information on the sector is scattered among several actors. There is no depository institution, a situation that would be desirable, as is the case with some value chains. For example:

Value Chain	Information Depository
Honey	Zambia Honey Council
Coffee	Coffee Board and Coffee Association
Tobacco	Tobacco Board of Zambia
Export Horticulture	Zambia Export Growers Association

# 3

## *Discussion of the Study Findings*

### **3.1 Global Supply and Demand**

World production of rice has risen steadily from about 200 million tonnes of paddy rice in 1960 to over 700 million tonnes in 2007. Rice provides more than 20 percent of the calories consumed by humans in their global diets. In the year 2007, the top three producers, out of about 110 rice-producing countries were China (26 percent of world production), India (20 percent), and Indonesia (nine percent). Demand for rice follows both population and income growth patterns. At low levels of income, rice is considered a luxury, but as incomes rise, rice becomes a substitute for coarse grains. In the decade between 1990 and 2000, rice demand grew by 1.7 percent annually (FAO 2007) and 96 percent of this demand was in the developing countries, concentrated in Asia, with China and India as major consumers. Population and income growth are the major variables that affect demand for rice.

Both the United Nations World Food Programme (UN WFP) and UN Food and Agriculture Organisation (UN FAO) are worried at the diminishing supplies of grains and the resulting price increases. At the end of January 2008, the major producer, Vietnam, announced a temporary ban on exports of rice. When the ban was lifted, the five percent broken rice grade rice was set at US\$390 a tonne for February contracts and US\$400 a tonne for March 2008. India, after lifting the ban, raised the minimum export price of rice to US\$500 per tonne, to discourage exports and make sure more food grains are available on the domestic market. During the same period, Thailand rice prices leaped up by about US\$20 per tonne. In the US, the acreage under rice plantation has reduced by about two percent, from 2.74 million acres. Analysts



expect the market to remain tight because rice, like wheat, is losing the acreage battle with rival crops maize and soya beans in the US. According to some estimates, total rice area has shrunk by 1.7 percent (ACTESA, 2008).

### **3.2 Regional Supply and Demand**

As can be seen from Table I, both SADC and COMESA are net importers of rice, in spite of the huge potential for the two trading blocks to increase rice production for trade among themselves. The COMESA region is estimated to be importing in excess of 1 million tonne annually. Within the EIF, interventions aimed at up-scaling the level of regional trade in rice can be designed. It is important to note, however, that most of the countries in the region, during 2008, put restrictions on exports of grain, including rice, as a result of the world food crisis. The bans on exports of rice by most countries in the region, illustrate the strategic importance the value-chains have assumed in recent years as an important food security crop. The region is characterised by increasing informal cross-border trade, which is normally not reflected in many trade data sets. This is illustrated in Table 2. Clearly, regional trade in rice is already taking place and is on an upward trend. It can be up-scaled by deliberate interventions from institutional set-ups such as the EIF.

The level of recorded informal cross-border trade suggests that there is need for regional governments to create supportive policies to the private sector, by providing appropriate conditions for the private sector to respond to the new opportunities – for example, easing of procedures for crossing borders, which currently present a real headache for cross-border traders.

### **3.3 Overview of the Rice Value-chain in Zambia**

Government and Non-Governmental Organisations (NGOs) supported the introduction of rice growing by small-scale farmers in Zambia in the 1970s. However, support dwindled with the advent of the market liberalisation policy from 1991. Producers have continued under the liberalised economy and are dealing directly with the challenges of the market. In recent years, there has been competition from East Asia and most mainstream processors and retailers sell imported products. Issues cited for this preference include the perceived superior quality of East Asian rice and its price affordability. The local rice, on the other hand, dominates the informal market, including cross-border trade to Democratic Republic of Congo mostly.

Production has continued with the challenges of inadequate extension support, poor technology and agronomic methods and lack of collective marketing

systems. Smallholders are also forced to perform a lot more in the rice-value chain than just farming and where they do not, there are middlemen who fill in the gap. Smallholders generally feel that the middlemen are not playing a mutually beneficial role to them, as they always claim to get less than their expected price.

Limited government support has also had an impact on information collection and dissemination, which would have been assisting smallholder producers to better understand the market dynamics. There are indications, however, that the government wishes to do more and support rice farmers, especially in view of the recent global food crisis and the consequent global price increases of grain, including rice.

As can be seen in Table 1, since 2000, trends in the cultivated area and production in Zambia have remained variable. However, between 1981 and 2006 the area planted increased by 135 percent, while production of rice increased 161 percent. This was largely as a result of the Zambian government and several development organisations and aid agencies starting a number of rice schemes.

For example, a gravity-fed surface irrigation system for rice at Sefula on the Zambezi plains was implemented with the support of the Japanese government to the Mongu Rural Development Project in 1998. The Korean government assisted Zambia in developing the irrigated rice project at Chanyanya on the Kafue Flats. The then European Economic Commission (EEC) also helped Zambia with a rice development project in the Chambeshi flood plains. A Zambia-China pilot irrigation project was implemented at Kafushi in Kabwe. Even though rice production in these areas increased, the magnitude was lower than expected, due to technical and management problems as well as the collapse of agriculture credit and marketing institutions, after the markets were liberalised in the 1990s.

The change of agricultural marketing policies, leading to the withdrawal of direct market support in 1994-95 season, explains the downward trends. The withdrawal of major rice development assistance programmes by the government and donors also contributed to the decline.

Even if rice production has had an upward trend, rice production continues to be characterised by various challenges that include how to improve smallholder farmer productivity, how to improve access to technologies (in particular seed) and support services including financial services, how to attract more

<b>Table I: Paddy Rice Production Statistics and Trends</b>									
<b>Area Harvested (1000 ha)</b>									
Level	1993	1999	2000	2001	2002	2003	2006	2007	Growth Rate (1993-2003)
Zambia	14	16	12	9	10	10	14	20	0.2
SADC	1,114	1,207	1,200	1,088	1,077	1,077			-0.2
COMESA	2,513	2,536	2,519	2,420	2,463	2,605			0.4
World	145,820	153,305	153,857	151,232	147,144	150,938			0.3
<b>Production (1000 MT)</b>									
Zambia	14	15	14	12	12	12	14	18	1.8
SADC	1,224	1,442	1,377	1,132	1,122	1,120			-0.7
COMESA	7,422	9,104	9,169	8,596	8,981	9,398			2.2
World	529,590	611,283	602,605	597,787	576,280	584,976			1.1
<b>Yield (kg/ha)</b>									
Zambia	1,014	912	1,133	1,256	1,200	1,200	970	910	1.5
SADC	1,099	1,194	1,148	1,040	1,041	1,040			-0.5
COMESA	2,954	3,590	3,640	3,552	3,646	3,608			1.9
World	3,632	3,987	3,917	3,953	3,916	3,876			0.8
<b>Imports (1000 MT)</b>									
Zambia	2	6	8	7	14	21			18.9
SADC	1,143	1,221	1,195	1,031	924	1,119			1.1
COMESA	759	747	833	662	587	604			0.9
<i>Source: FAO, 2004: Africa Statistics Yearbook and Selected Indicators of Food and Agriculture.</i>									

private sector participation (that would forge formal linkages) in the value-chain and how to create a common (long term) vision for commercialisation of rice production.

Rice imports have equally been on an upward trend as illustrated in Table 1. This, to a large extent, is reflecting increased domestic consumption. In 2007, rice consumption was estimated at 35,000 MT, while per capita consumption was estimated to be still relatively low at 3 kg per year. While national demand

for rice was estimated at 35,000 MT per annum, average production was only 18,000 MT in 2006-07. This explains the high rice imports in recent years. Zambia can close this gap through expansion of local production, by converting an estimated 80,000 hectares of potential rice farming land. Another avenue for increased rice production is to raise the level of productivity and yield from the current national average of 0.9 MT/ha, through promotion of yield-enhancing technology, to about 2.5 MT, which are the average yields of the materials being used in Zambia under good management/husbandry practices.

South Africa is Zambia's leading source of imported rice, even though much of this rice is imported from out of the region and re-exported to Zambia and other countries in the region by international merchants. This offers scope for Zambia to increase the production and capture part of the regional market.

Clearly, there is a viable market for expansion of rice production, in view of the growing domestic and regional demand, in the face of diminishing supplies from traditional suppliers in the Far East.

Opportunities for export of locally-produced rice remain unexploited. Nearly all the countries around Zambia (neighbours), import rice. In fact, both SADC and COMESA are net importers of rice, as illustrated in Table I. As already highlighted, the volume and the value of informal cross-border trade in rice is on the increase. It has also been illustrated in Table I that both SADC and COMESA are net importers of rice, estimated to be importing in excess of 1 million MT annually by 2020.

Zambia is involved in rice cross-border trade with most of her neighbours, as illustrated in Table 2. This poses a great opportunity to see how best this business can be enhanced. It is an opportunity for EIF's participation. As indicated earlier, over 90 percent of the rice produced globally gets consumed in the areas of production. Only 5-6 percent gets traded internationally. This is an opportunity for Zambia to develop an export-led strategy for rice.

Table 2: Regional Cross-border Trade in Rice in MT															
Source	Destination	2004/05				2005/06				2006/07					
		Jul-Sep-2004	Oct-Dec-2004	Jan-Mar-2005	Season	Apr-Jun-2005	Jul-Sep-2005	Oct-Dec-2005	Jan-Mar-2006	Season	Apr-Jun-2006	Jul-Oct-2006	Oct-Dec-2006	Jan-Mar-2006	Season
Tanzania	Zambia	360	151	36	547	99	184	172	178	641	100	168	165	124	557
Malawi	Tanzania	367	83	0	450	?	61	0		135	56	740	106	315	1,217
Tanzania	Malawi	0	0	70	70	3	4	108	797	912	4	0	0	0	4
Zambia	DRC	2786	4157	5701	12,644	6,164	5,661	690	114	12,629	46	231	1,125	295	1,697
Zambia	Malawi	0	0	0	0	?		0	?	0	?	0	0	0	0
Malawi	Zambia	0	0	1	1	30	1	0	?	31	?	2	12	60	74
Zambia	Zimbabwe	16	16	18	50	15	16	34	41	106	55	141	76	531	803
Mozambique	Malawi	153	1853	526	2,532	1,456	0	152	83	1,691	222	1,155	275	66	1,718
Malawi	Mozambique	1	0	0	1	4	2	0	6	12		0	0	1	1
Mozambique	Zimbabwe	0	0	58	58	188	97	45	69	399	99	166	253	332	850
South Africa	Zimbabwe	0	0	0	0	21	19	9	15	64	6	3	67	6	82
<b>Total Traded (MT)</b>		<b>3683</b>	<b>6260</b>	<b>6410</b>	<b>16353</b>	<b>7980</b>	<b>6045</b>	<b>1210</b>	<b>1303</b>	<b>16620</b>	<b>588</b>	<b>2606</b>	<b>2079</b>	<b>1730</b>	<b>7003</b>

Source: FEWSNET (2008), Informal Cross Border Food Trade in Southern Africa, issue No. 39.

Rice has been assessed to be a profitable smallholder value-chain that offers opportunities for the diversification of smallholder farmers' incomes. For example, according to a rice sub-sector research commissioned in 2007, smallholder rice production was profitable, as illustrated in the gross margin analysis in Table 3:

<b>Table 3: Gross Margin (in ZMK) of 1 Ha of Paddy Rice in Western Province</b>				
Commodity	Paddy Rice			
Hectares	1.11			
Yield (kg/ha)	2,424			
Price (K/kg)	1,231			
Interest on capital	20 percent p.a.			
Total asset value	964,443			
Lifespan (years)	10			
Family labour days/ha	158			
Wage rate K/day	6000			
Farmer Name	Average			
Location	Western Province			
<b>Inputs</b>	<b>Unit</b>	<b>Unit cost (K)</b>	<b>Quantity</b>	<b>Total (Kw)</b>
Seed	Kg	1,631	148	241,388
Fertiliser	Kw/kg	1,600	11	17,600
Manure	Ox-Carts	60,000	0	-
Pesticide	Kg	7,000	0	-
Packaging bags	Each of 50kg	2,200	48	105,600
Transport to market/depot	Each	72,000	1	72,000
Hired labour	Kw	647,666	1	647,666
Depreciation of assets	Kw	96,444	1	96,444
<b>Total variable costs</b>				<b>1,180,698</b>
<b>Gross income</b>	<b>Kw</b>	<b>1,500</b>	<b>1500</b>	<b>2,250,000</b>
<b>Gross margin</b>	<b>Kw</b>			<b>2,772,846</b>
<b>Return to capital</b>	<b>Percent</b>			<b>235</b>
<b>Return to labour</b>	<b>K/day</b>			<b>17,550</b>
<b>Break-even price</b>	<b>K/kg</b>			<b>1,144</b>
<b>Break-even yield</b>	<b>Kg/ha</b>			<b>1,700</b>
<i>Source: SNV Zambia 2008.</i>				

As can be seen in Table 3, the gross margin based on 1.1 ha was found to be ZMK 2,772,846.00 (approximately US\$792/ha at 2007 exchange rate of S1 = ZMK3,500). The return to capital was 235 percent, while return to labour was found to be K 17, 750.00 The report also observed that the rice gross margins average about 40 percent across the country, which compares favourably with other smallholder high-value crops such as Coffee (gross margin estimated by a World bank study in 2005 at US\$250-400/ha).

### 3.4 Institutional Structure of the Rice Value-chain

Presently, the active players in the rice value-chain are presented in Table 4 below:

<b>Table 4: Active Players in the Rice Value-chain in Zambia</b>	
<b>Stakeholder</b>	<b>Role</b>
Ministry of Agriculture and Co-operatives	Policy, co-operative and agribusiness, extension support, research and technology development and infrastructure development
Food Reserve Agency	Crop marketing
Ministry of Commerce, Trade and Industry	Trade and investment policy development and public-private sector strategic partnership development
Smallholder farmers	Take the primary risk to invest in producing the rice
<b>Other Organisations</b>	
Zambia National Farmers Union	Farmer organisation, lobby and advocacy
Zambia Co-operative Federation	Co-operative organisation and management
Japanese International Development Agency	Irrigation financing and rice research
Oxfam	Agriculture finance
Concern World Wide	Agriculture finance and capacity building services
European Union	Project support for extension services and input supply

*Contd...*

Stakeholder	Role
<b>Private Companies and Associations</b>	
Millers	Buying and processing
Agri-Business Forum	Trade association, multi-stakeholder dialogue platform, business development and financial services linkages, lobby and advocacy
ZACSMBA	Lobby and advocacy for SME
Financial Institutions	Financing
Traders	Buying
Retailers (Spar Zambia, Shop Rite, Melisa and Embassy Supermarkets)	Retailing

Even if there is a wide spectrum of actors, their interaction is limited. In fact, many more actors are unknown and could be brought to participate in a multi-stakeholder platform of a public-private sector nature. The incentive would be for a common goal of improved performance of the value-chain, resulting mainly from possible leverages and synergy out of the interaction. An all-inclusive approach would be desirable to ensure that even the smallholder rice producers on less than hectare of land get to be heard and their views incorporated in any policy affecting the industry.

Some of the key characteristic of the rice value-chain landscape within which key actors operate from are given in the section below.

### 3.4.1 Public Markets

Most of the local rice finds itself on urban public markets. These urban public markets are important for the rice farming and value-chain. Their influence is felt far and wide. Public markets have increasingly become part of the rice distribution chain because of the domination of informal traders. They provide an important outlet for rice, especially for those farmers who are unable to transport their produce in bulk to take advantage of economies of scale. The farmers either sell the rice to the market traders at a wholesale price or secure a market stand to sell directly to consumers in the town in the production areas.

Several entrepreneurs have installed rice mills at the Lusaka Buseko market and paddy rice is now being delivered by farmers and traders to these mills.



The marketers then buy the polished rice originating from all over the country and sell it at wholesale retail price in Soweto, Kamwala and other township markets. The popularity of the local rice is evidenced by the mixing of brands going on at these two markets, claiming all is Mongu or Chama rice. The traders here also buy imported rice and sell it alongside the local rice. Pure local rice tends to be more expensive than ordinary brands. Normally delivery to such markets is done by both farmers and traders and through individual efforts. Although they face tremendous difficulties, marketing and processing margins may be attractive sometimes.

### **3.4.2 Rice Delivered to Retailers**

There are a number of rice retailers dealing in local rice in Lusaka. Outside Lusaka, the local rice is not sold in retail shops and only imported brands are stocked. This is because the local rice is on the streets and public markets. In Lusaka, local rice is stocked in major retail outlets, but is not well packed, labelled or even sorted, in some cases. The retailers buy from farmers and agents of local brands.

The Zambian rice market is currently characterised by a mixture of varieties and brands as indicated in the Table 4. Table 5 characterises the main brands on the market in comparison to each other.

Branding of local rice is still undeveloped. Imported rice stocked by established wholesalers, such as Melcome Marketing and Distributors, Safina Pharmaceuticals and Amanita Premium Oils, are easily recognisable through their uniform grain quality and is generally cheaper than the local rice. The products are well branded and presented professionally. Even though major retail chains, such as Spar, are beginning to stock local rice, it is poorly presented. Rice is labelled by hand and, sometimes, in wrongly labelled packets, like Zambia sugar bags.

A survey carried out in early 2008 revealed that the most expensive brand on the market was Tastic Indian Rice at US\$1.730 (K8,075) per kg. Chama rice at US\$1.439 (K6,710) per kg was second most expensive and highest priced among local brands. It is professionally packaged and branded by Community Markets for Conservation (COMACO). Despite some of the local (e.g., Mongu) rice being poorly presented, most retail outlets are sticking it and its retail price is among the highest, averaging US\$1.124 (K5,242) per kg and ranging in price from US\$0.956 (K4,458) to US\$0.956 (K6,000) per kg.

<b>Table 5: Rice Varieties and Brands on the Zambian Market</b>	
<b>Rice variety/brands</b>	<b>Origin</b>
Basmati rice	India
Bhimbiri	India
Ghandi	India
Best rice	India (repacked in Zambia)
Faya (Malawi rice)	Malawi (sold mainly at open air markets)
Kilambero(Malawi rice)	Malawi (sold mainly at open air markets)
Fresco	Packed in Zambia (origin not known)
White rice	Pakistan
Crown	Pakistan (repacked in Zambia)
Golden Crown	South Africa
Heena	South Africa
Mandarin	South Africa
Tastic	South Africa
People's Pride	South Africa (repacked in Zambia by National Milling)
Tanzania	Tanzania (sold mainly at open air markets)
Thai	Thailand
Ashion	Thailand (repacked by National Milling)
Hanio	Vietnam
Pamboyi	Vietnam and India
<b>Mbala</b>	<b>Zambia</b>
<b>Mpunga</b>	<b>Zambia</b>
<b>Gold Gtar</b>	<b>Zambia (milled by APG in Lusaka)</b>
<b>Chama</b>	<b>Zambia (milled in Chama- small scale)</b>
<b>Mongu Rice (Supa)</b>	<b>Zambia (Milled in Mongu and by APG in Lusaka )</b>
<b>Blue Bonnet</b>	<b>Zambia (milled in Mongu mainly for local market)</b>
<b>Luapula</b>	<b>Zambia (Sold mainly at open air markets)</b>
<b>Nakonde</b>	<b>Zambia (Sold mainly at open air markets)</b>
<b>Kasama</b>	<b>Zambia milled in Kasama</b>
<i>Source: SNV October 2007 Rice Value Chain Analysis Study.</i>	

The survey further revealed that the element of competition between local and imported rice based on price differences shows that local brands are more expensive. The lowest priced brand was Quality rice, which was lower value brand of mixed standard sold cheaply by some wholesale outlets. Imported brands averaged US\$0.945 (K4,410) per kg, while local brands averaged US\$1.020 (K4,756) per kg. The taste preference is still very much in favour of local rice, but local value chain stakeholder should reduce the cost of producing local rice, improve uniformity and market appeal, if it is to remain competitive.

In some cases, farmers are able to add significant value to their paddy rice. In this way, they are able to sell or process and sell to retailers and intermediaries at various urban markets at considerable high prices that act as incentives for the farmers to venture into such markets. However, it is risky, as prices at these centres may collapse, due to flooding of the market, leading to losses. The most popular markets are Buseko and Soweto in Lusaka and district centre markets in the rice-producing areas. This also includes retail outlets that are not willing to work with individual farmers on a long term basis.

### **3.4.3 Rice Farmer Delivers to Local Depots**

The Government Food Reserve Agency (FRA) had opened community-level depots in a few districts where farmers delivered the rice. The payment was made after two-three weeks. Millers, traders and the public could then buy from FRA depots within the rice-producing areas and polish it, usually off season, when prices would have risen on the market. The FRA had the potential to become a significant player in the rice market and the value chain. However, due to management problems, the FRA has discontinued buying rice. This is an opportunity for rice entrepreneurs to take up the void left by the government.

### **3.4.4 Farmer Delivers to Millers and Polishers**

Two scenarios exist. The farmer or domestic trader would deliver the product to a miller for polishing only and pays a polishing fee, thereafter selling the polished rice on the local or urban market. Another phenomenon is where farmers bring to millers and polish the rice at a fee and then sell to traders, consumers and marketeers. In another scenario, bigger millers/polishers, like APG, DMDC and Mayeya Milling, would buy the rice from farmers and stock it for their own polishing and sale.

Grading, sorting and packaging are the poorest aspects of rice marketing in Zambia. Packaging provides a convenient container for the product to be handled, protects the products from damage and it provides a convenient

way to arrange for retail sale. Most of the mills produce a mixed quality product, mixing long grain and short grain rice. In some cases, manual grading is attempted (like Sefula farmers), but only the APG mills is fitted with grading cylinders and only them and Mongu Diocese pack their products with identifiable labels. By the existing laws, processed food like rice must be labelled and should give the following information:

- Brand or trade name, if any;
- Common name of the food;
- Net contents in terms of weight, volume or number;
- Ingredients, in descending order of their proportions;
- Coding and date marking (if required);
- Name and address of manufacturer, packer, distributor, importer, exporter or seller; and
- Sell-by date and special storage conditions (if applicable).

#### **3.4.5 Transportation**

Farmers and private traders incur transport costs and transportation remains one of the biggest components of marketing cost. Both farmers and traders rely on bicycles and ox-carts to move rice from farms to roadsides. They then hire or hike trucks to move the crop to urban centres for processing and marketing. Transportation is the biggest challenge and contributes highest to marketing costs due to poor rural roads and bridges. Kalabo, for instance, in the western province is almost cut off during the rainy season and is accessible only by boat. In addition to the poor state of the roads, the constant rise in fuel price does not help the situation, let alone the small volumes of rice that get moved to the centre/towns do make much economic sense. There is need to develop bulking sites so that economic volumes can be mobilised, before being moved to the rice mills.

#### **3.4.6 Competition**

There are very few major distributors active. Informal traders, dominate rice distribution.

Table 6 provides a summary analysis of retail prices of rice varieties and brands that are common on the Zambian market in major wholesale and retail outlets of Lusaka.

Table 6: Profiles of Rice Varieties and Brands on the Zambian													
Brand Name	Pack Sizes (Kg)	Producer	Pack Label	Other Market Info	Origin	Private and Public Retail Outlet and Markets (Price/kg)						No	Mean Brand Price
						Mongu	Senanga	Kaoma	Lukulu	Lusaka	Public Market - Lusaka		
Tastic Indian Rice	1, 2	Private	Yes	Yes	Asia					8075		2	8,075
White Chama Rice	1	COMACO	Yes	Yes	Local	5980				7440		3	6,710
Rab's Super Malawi Faya	1, 10	Malawi	Yes	Yes	COMESA	5980				5498	4400	5	5,293
Mongu Rice	0.2, 5, 10	Private	No	None	Local	6000		5000	5000	5750	4458	10	5,242
House of Kamwala Rice	2	Private	Yes		Asia		5000					1	5,000
Chimwemwe	2	Private	Yes	Yes	Local					4500		1	4,500
Quality Mother's Pride	1, 5, 10	NMC	Yes	Yes	Local	4380				4508		6	4,444
Midlands Rice	1, 2, 5	Private	Yes	Yes	Asia					4375		4	4,375
Wonder Rice	1, 20	Private	Yes		Asia		4750			3975		4	4,363
Nakonde	2	Private	No	None	Local						4334	2	4,334
Yesyani King of Quality	1	Private	Yes	None	Local	4280						1	4,280
Trade Africa	50	Private	Yes	Yes	Asia			4000				1	4,000

Contd...

Brand Name	Pack Sizes (Kg)	Producer	Pack Label	Other Market Info	Origin	Private and Public Retail Outlet and Markets (Price/kg)						Mean Brand Price	
						Mongu	Senanga	Kaoma	Lukulu	Lusaka	Public Market - Lusaka		No
Mr. Cook	2	Private	Yes	Yes	Asia					4000		1	4,000
Mandarin	1	RSA	Yes	Yes	COMESA	3980				3980		2	3,980
Quality People' Pride	1	NMC	Yes	Yes	Local	3780						2	3,780
Mpunga Wabwino	0.5, 1	Private	Yes	None	Asia		4200	3825		3200		8	3,742
Thai Rice	1, 5	Private	Yes	Yes	Asia					3950	3500	4	3,725
Mpunga Usuma	0.5	Private	Yes	None	Asia			3600				1	3,600
Quality Rice	1, 5, 10	Unknown	No	None	imported						2768	7	2,768
<b>Average Retail Price</b>						<b>4911</b>	<b>4650</b>	<b>4106</b>	<b>5000</b>	<b>4938</b>	<b>3750</b>	<b>65</b>	<b>4,559</b>
<b>Average Retail – Local</b>													<b>4,756</b>
<b>Average Retail – Imported</b>													<b>4,410</b>

Source: SNV October 2007 Rice Value Chain Analysis Study.

A consumer survey showed that rice in Zambia was consumed regularly at breakfast, lunch and dinner in both Lusaka and Mongu. But, there is a limited range of final end products and food presentations, apart from boiled rice, unlike in other parts of the world. Mongu rice is known and preferred by most consumers because of its characteristic aroma and taste. The most popular rice variety among consumers is Supa from Mongu and Malawi Faya, because they have long grain, sweet aroma and do not easily break. Even if consumers prefer local rice, they resort to Thai rice, even though it is not as good, simply because it is readily available throughout the year and is also relatively cheaper.

The survey showed that the average quantity bought per month per consumer was 11 kgs. If the Zambian population is estimated at 10 million, the family size of seven and the urban population is 714,286, of whom 50 percent will buy rice, then we can estimate that the effective demand for rice is 47,143 MT per year. It is significant that most of the consumers intend to increase the consumption of rice. The advice from consumers is that Mongu rice needs to be competitively priced and better packaged.

### **3.5 Policy Environment**

Since the early 1990s, Government of the Republic of Zambia (GRZ) has been implementing institutional reforms, aimed at liberalising the agricultural markets and encouraging the private sector to take the lead in agricultural sector development. Under these institutional reforms, GRZ has stated intentions of focusing on providing public goods that are needed for efficient sector growth, such as rural and agricultural infrastructure, research, extension and disease control. Government policy has embraced the commercialisation of smallholder agriculture, as the main driver of poverty reduction, by generating sustainable incomes from farming, as a business.

The Ministry of Agriculture Units all pronounce commitment to market solutions. It is notable, however, that the Ministry has created an Agribusiness and Marketing Department which, if not well managed, could conflict with some of the government desires and aspirations of putting the private sector in the driving seat. One of the potential sources for conflict would be from the scramble for the meagre resources available for development.

GRZ launched the Fifth National Development Plan 2006-10 (FNDP) in 2007, with an emphasis on revitalising agriculture as the engine for national economy. Its Agricultural Marketing, Trade and Agribusiness Development component

aims to “promote the development of a competitive, efficient and transparent public and private sector-driven marketing system for agricultural commodities and inputs through a wide spectrum of interventions”. For example through:

- Facilitating market information flow among stakeholders;
- Creating a market-driven environment with no market distortions for improved input and output marketing; and
- Promoting crops with both domestic and export markets.

The liberalisation of agricultural markets has been characterised by the expansion of out grower schemes. Outgrowing can be defined as a contractual arrangement between smallholders and agribusiness companies whereby the former produce and sell a specific crop to the latter in exchange for services, including seasonal loans and technical advice.

Lintco, a government parastatal in Mumbwa, pioneered outgrowing in the late 1970's. Most out grower schemes that have emerged in the last two decades have operated on the cotton model. More so in recent years when the DUNVANT Cotton Farmer Distributor Model has had great influence on the way other out grower promoters have conducted their business. There is no out grower scheme for rice at present. However, a number of rice millers feel that this is the way to go for them to secure the commodity through production contracts.

There is an opportunity for development organisation's intervention to assist the rice processors organise viable out grower arrangements that would be mutually beneficial to the smallholders and the processors themselves. Another possibility for intervention would be to contribute to improving the capacity of the processors to grade and package branded rice that will meet local and regional consumer requirements.

With regard to trade, there is a general policy of liberalised commodity trade, punctuated by sporadic export and import bans. At a rice stakeholders meeting in 2008, the Ministry of Commerce, Trade and Industry pointed out that, with regard to the influx of imported rice, the government could not take action unless called upon by industry stakeholders. This calls for an industry platform for lobbying and advocacy to champion such a cause, should it be necessary.



## 4

# *Potential Benefits to the Economy from a Vibrant Rice Value-chain*

A well co-ordinated and managed rice value-chain in Zambia is likely to result into many benefits. These would include, but not limited to, the following:

- The rice industry is a very important activity, in so far as economic development and poverty reduction are concerned. It contributes to rural livelihoods, household food security and nutrition, employment creation, offer entrepreneurship opportunities in the communities and can contribute to forest conservation. In recent years, the value of rice imports has exceeded US\$5mn annually. With targeted interventions, import substitution, through promoting local production, can increase exponentially and result into substantial foreign exchange savings.
- According to an IFAD report, about 67 percent of Zambians live below the poverty datum line and 46 percent of people living below the poverty line live in extreme poverty. The report points out that the prevalence and depth of poverty is higher in rural areas, where people earn less than US\$70 per day. As can be seen in the results of the Living Conditions results of 2006 presented in Table 7, Zambia is a poor country, with very high poverty incidence levels.

Provinces	1991	1993	1996	1998	2004	2006
	Incidence of poverty	Incidence of poverty	Incidence of poverty	Incidence of poverty	Incidence of poverty	Incidence of poverty
Central	70	81	74	77	76	72
Copperbelt	61	49	56	65	56	42
Eastern	85	91	82	79	70	79
Luapula	84	88	78	82	79	73
Lusaka	31	39	38	53	48	29
Northern	84	86	84	81	74	78
North Western	75	88	80	77	76	72
Southern	79	87	76	75	69	73
Western	84	91	84	89	83	84

*Source: Civil Society for Poverty Reduction (2005).*

As can be seen from Table 5, the incidence of poverty is high in rural areas, areas remote from the railway line. It is also apparent that the incidence is highest in the areas where rice production is common (compared Tables 7 and 8). This means that if interventions aimed at improving the performance of rice production were successful, they would also be succeeding in alleviating poverty among the rice producers.

- The Rice industry is a viable economic activity, especially if well supported by the government and cooperating partners, through a private sector-driven programme. The industry can provide employment to a large segment of rural population, since a lot of people could be engaged in the production, marketing and processing for both the local and export markets. The industry can also lead to development and utilisation of most wetlands in Zambia, since water is essential in the production of quality rice. It is important to point out that Zambia accounts for about 40 percent of the water in the SADC. With this essential and necessary element for rice production, the industry can, therefore, be elevated to contribute to employment creation and poverty reduction among rural dwellers and around the existing milling capacities. In addition, rice has the potential to contribute to the growth of the outgrower sub-sector/the agribusiness as well to the national economy.

<b>Table 8: Provincial Distribution of Rice Production for 2005-06 Season</b>			
<b>Province</b>	<b>Area Planted(ha)</b>	<b>Area Harvested(ha)</b>	<b>Production(MT)</b>
Northern	6,911	5,082	6,944
Eastern	4,572	3,512	4,557
Luapula	1,183	1,088	1,291
Western	1,644	903	1,112
North-Western	36	36	48
Copperbelt	7	7	9
Lusaka	4	1	1
Southern	2	2	1
<b>Total</b>	<b>14,359</b>	<b>10,631</b>	<b>13,963</b>
<i>Source: SNV Zambia 2007.</i>			

- Because of widely spread of wet land in Zambia, rice can be widely grown. The exact number of households growing rice is unknown. However, some estimates indicate that there are an estimated 80,000 rice growers. Most of them are located in Northern, Eastern, Western, Luapula and Central provinces, in that order. A significant amount of export quality rice can be organised from these households through training and structuring marketing, on the lines of out grower schemes. In particular, creating financial incentives for the rice growers to produce rice in an organised marketing arrangement.
- The rice enterprise is one of the highest labour-intensive crops amongst commonly cultivated crops. Its cultivation period coincides with that of other important food and cash crops. Farmers face competing needs for family labour and this is worsened by the advent of HIV/AIDS that has reduced the quality and quantity of on-farm labour. Many have to resort to hiring implements and hired labour that is not only expensive but also tends to delay planting, leading to yield reductions. In many cases, hired labour becomes important for land preparation, ploughing and levelling, transplanting, weeding and harvesting rice. Hence, there is significant potential for employment creation with rice cultivation in rural areas.

## 5

### *Why the Value Chain Approach for Rice?*

Typically, a value-chain begins and ends with the market. It is argued here that chains are developed to respond to the demands of the marketplace. Interaction with the marketplace provides information to decision makers for every link in the chain. Literature suggests that a well-functioning value-chain provides the means to effectively link production activities to market demands. This calls for a shift from emphasis on the narrow approach to value addition of firm developing a product to a focus on the complex relationships between key actors in the process of getting a product from say, a farm, to a supermarket shelf. Traditional business relationships have been characterised by little or no information-sharing, a primary focus on cost or price, a commodity orientation, supply push power relations, independent organisational structure and a self-optimisation philosophy.

In contrast, what is being proposed here are value-chain relationships, based on extensive information-sharing, primary focus on value and quality rather than price, differentiated product, demand pull power relationships, interdependent organisational structure and a philosophy of chain optimisation. The approach for a rice multi-stakeholder platform recognises the fact that agri-food producers, processors and retailers should no longer compete as individual entities, rather, they should collaborate as strategic value-chains and compete with other value-chains in the market place, including for development resources.

Given the difficulty in creating and maintaining value in an intensely competitive world of changing domestic, regional and overseas markets and

technologies, businesses should now be forming value-chain platforms to meet new demands and remain viable. Companies in the developed countries now find it difficult to *go it alone* in these circumstances. They find strength and security in a customer-focused chain that might begin in a farmer's field and end in the supermarket. Africa needs to follow suit.

There are a number of actions and steps required to keep such chain bound together. These include some of the following:

- An essential and necessary first step is the definition of stakeholder's roles and responsibilities which have to be defined through a continuous and pragmatic process, based on the capacity of each partner to deliver specific operational outputs in the partnership. The goal is to utilise the comparative advantages and resources of each partner in the most effective way.
- For the value-chain platform to succeed, it will depend on the partners' respect for the agreed upon strategy and their access to significant benefits. The intention is for the partnership to operate with minimal formality and procedure, concentrating on maximum efficiency of service delivery to the sector and focusing on addressing prioritised constraints along with the entire length of the value-chain. However, some clear operational principles are needed. This requires development of some kind of a Code of Conduct to provide details of these operating principles by which the partnership will be asked to abide by and provide a legal framework.

## 6

# *Enhanced Integrated Framework and the Rice Sector*

The EIF Programme was initiated at the first WTO Ministerial Conference held in Singapore in 1996 to support Least Developed Countries (LDCs) governments in trade capacity building and integrating trade issues into overall national development strategies. The multilateral agencies participating in the IF – the International Monetary Fund (IMF), the International Trade Centre (ITC), the United Nations Conference on Trade and Development (UNCTAD), the United Nations Development Programme (UNDP), the World Bank and the WTO – combine their efforts with those of LDCs and their other development partners to respond to the trade development needs of LDCs, so that they can become full and active players and beneficiaries of the multilateral trading system (MTS).

Zambia became an IF beneficiary country in 2004. As a basis for implementing the IF, a DTIS was conducted and subsequently validated to pave the way for implementation of the IF. A priority activity matrix was also developed in this regard. The DTIS was validated in July 2005. Prior to acceding to the IF, the Zambian government worked with the private sector, civil society and cooperating partners and developed the Private Sector Development Reform Programme (PSD-RP). The PSD-RP has identified six broad reform areas and lists various areas of intervention and activities to ensure the private sector takes its rightful place as the engine of socio-economic growth for the Zambian economy. These areas are:

- Policy environment and institutions;
- Regulation and laws;
- Infrastructure;
- Business facilitation and economic diversification;
- Trade expansion; and
- Local empowerment.

To avoid duplication of implementation structures and ensure synergy and efficiency, Zambia has integrated the IF/EIF into the PSD-RP, by adopting the DTIS action matrix as the framework for all trade-related aspects of the PSD Reform Programme. The Trade Expansion Working Group (TEWG)<sup>1</sup>, established under the PSD-RP, assumed the role of the EIF Steering Committee.

To ensure accelerated implementation, an EIF National Implementation Unit (NIU), comprising the Focal Point Adviser and the National Trade Expert, has been set up in the Focal Point (Ministry of Commerce, Trade and Industry in the case of Zambia).

While the NIU is expected to evolve proposals and ensure actual implementation of EIF priority activities, as identified in the DTIS, the TEWG is, in general, expected to monitor the overall EIF process and activities and provide direction for implementation.

On the donor side, there has also been re-organisation to facilitate effective delivery of assistance to trade and other areas. They have signed a Joint Country Assistance Strategy (JASZ)<sup>2</sup>, which allows donor specialisation. The Finnish Embassy is currently the lead donor in the area of Trade and is, therefore, a member of the TEWG. It is hoped that all donors will harmonise their trade-related programmes within the EIF and that will give greater recognition to the importance of trade and secure funds for the implementation of the action matrix in a sustainable manner. All this is expected to result in

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1. Membership to the TEWG includes Ministry of Commerce, Trade and Industry (MCTI), Ministry of Agriculture and Cooperatives (MACO), Zambia Development Agency (ZDA), Zambia National Farmers Union (ZNFU), Zambia Export Growers Association (ZEGA), Zambia Association of Manufacturers (ZAM), Ministry of Finance and National Planning (MoFNP), Zambia Association of Chambers of Commerce and Industry (ZACCI), Zambia Business Forum (ZBF), Civil Society Trade Network Zambia, (CSTNZ), Zambia Revenue Authority (ZRA), Finish Embassy (Donor Facilitator), and UNDP (IF Fund Manager).
  2. The JASZ describes a division of labour along the lines of the sectors as described in the FNDP.

greater trade management capacity in Zambia and to a more prominent role of trade in national development strategies.

It is being observed here that the effective operations of these implementation arrangements are cardinal in mainstreaming trade into Zambia's development plans and economic growth strategies. These implementation arrangements need to ensure more effective follow-up to DTISs and implementation of action matrices for greater and more effective co-ordination amongst donors and national EIF stakeholders.

Currently, in the EIF Zambia matrix, cotton, tobacco honey and the dairy sectors are earmarked for funding, due to their export potential. It is clear from this study that the rice sector offers great opportunities to the achievement of some of the objectives of the EIF in Zambia. In particular, to the following:

- Rural poverty reduction;
- Diversified income sources and/or livelihoods of many rural households;
- Employment creation in the rice growing areas and around the rice mills;
- Immense export potential in the region would contribute to foreign exchange earnings; and
- Increased rice production would contribute foreign exchange savings through reduced imports, currently at around US\$5mn per year.

It is in view of the forgoing that it is being suggested here that the DTIS, under the EIF, requires a review to update parameters that resulted in the EIF matrix. Clearly, there is a case for rice to be in the matrix. The food crisis of 2008 has re-positioned rice in many countries in the region to a strategic position, for both domestic and regional trade.



# 7

## *Conclusions and Recommendations*

- i. Broadly speaking, the rice value-chain satisfies some of the conditions essential for contributing to improvements in the living standards of rural people, including their food security, as well as to the growth of Zambia's Small and Medium Enterprises (SMEs) and the expansion of non-traditional exports. For example, the value-chain has:
  - high potential to contribute to economic activities required for employment creation and, subsequently, poverty reduction; and
  - sufficient opportunities for market expansion, particularly into the regional market.

What is needed is to enhance the sector's ability to expand supply in response to market opportunities. The EIF is one mechanism that Zambia can utilise to enhance the sector. As such, it is argued here that if supply constraints in the rice supply chain can be overcome, the value-chain could become one of the drivers for employment creation and poverty reduction in many rural areas of Zambia.

Specifically the study observes as follows:

- ii. Agriculture will continue to play a dominant role in Zambia, with the main potential lying in diversification from traditional exports to higher value crops, such as rice, and an increasing private sector role in commercialising various high-value agricultural commodity supply chains. However, the opportunities for growth lie, to a very large extent,

in galvanising synergies of the various actors of a particular value-chain. Unfortunately, the rice value chain remains generally fragmented, with small scale-farmers locked out of retail markets and bearing the highest risks.

- iii. Rice is becoming a significant source of nutrition in Zambia and in the region, among urban consumers, creating opportunities for production and trade in the commodity. Even though it is getting established within the private sector market chains, the market links are not well defined, with frequent cases of market failure. The critical gap for Zambia has been the lack of a multi-stakeholder platform, result-oriented and market-driven to spearhead the commercialisation of the value-chain. One of the value-chains with a functioning multi-stakeholder platform in Zambia is honey. Lessons could be drawn from this process.
- iv. EIF could consider participating in initiatives that promote broad participation in learning and dialogue processes, involving public and non-state actors (NSAs) in the value chain. Evidence suggests that supporting and promoting partnerships between different actors is essential for achieving sustainable policy reform. Currently, such efforts are being supported by a Dutch NGO, SNV Zambia, and are quite preliminary. Several rice support initiatives could potentially be harmonised/integrated, if co-ordination of the sector is enhanced. Under tier 2 of the EIF, a proposal could be developed that can be financed to address some of the constraints being faced by the sector.
- v. With the food crises of 2008 into 2009, the fundamentals for trade in grains and many food items changed. There is, therefore, need to review the DTIS matrix under the EIF, so that the portfolio of commodities could include rice, as there is a case for it due to its immense opportunities for both domestic and regional trade.
- vi. At a regional level, rice exports from Zambia have been limited and facilitated through informal cross-border trade. It is possible to enhance this type of trade through support activities aimed at strengthening cross-border trade in rice. As illustrated in Table 3, Zambia's cross-border trade has been on the increase. More cross-border trade can be facilitated. The Ministry of Commerce, Trade and Industry (MCTI) needs to play an important role in providing the required facilitation for this type of trade.

- vii. Commercialising rice and integrating smallholder producers and traders into commercial value-chain is a surmountable, though challenging, proposition. It is realistic to expect that, with the right approach and leadership, stakeholders can be sufficiently mobilised and capacitated to harness the right value-chain focus, mobilise the necessary results-driven partnerships and forge market linkages and promote effective institutional frameworks for sustainable commercialisation of rice in Zambia.

This should result in increased incomes to the farmers from the current maximum of 30 percent to more than 40 percent gross margin. It will also contribute to reducing the import bill of rice currently estimated to be in excess of US\$5mn per year. Through organised lobbying and advocacy, the government can be encouraged to look at the savings from import substitution which could support the rural economy by deliberate interventions to promote rice production.

- viii. Supply chains are changing rapidly, tilting towards transactions that increasingly involve co-ordinated links between farmers, traders, processors and retailers. Traditional marketing channels with *ad hoc* sales are being replaced by co-ordinated links in the marketing chain. Consumers are becoming choosier and enlightened, as well as more demanding, in terms of safety and quality of products, as well as clear traceability possibilities for quality assurance and food safety.

The EIF could consider supporting activities that would be enhancing co-ordination of linkages in the marketing chain. One such possibility would be to look at the possible interventions to support organising of smallholder rice production, through contract farming. There is a lot of evidence suggesting that outgrowing, if well arranged, could offers many benefits to both smallholder farmers and agribusiness, as it can result into enhanced linkages between smallholders and service providers, such a input supply, out put marketing and agro-processing.

As such, assisting the organisation of rice value-chain around outgrower schemes by the EIF could elevate the performance of the industry. In addition, such an approach would be linking farmers to markets in a sustainable manner, rather than *ad hoc* sales, as the situation is currently.

In addition, the government policy documents and a number of development organisations' and NGOs' strategic plans have identified co-operatives as strategic avenues through which socio-economic

development programmes could be delivered to communities, particularly, smallholder rural producers. Support to establishing rice outgrowers requires interventions to mobilise self-driven farmer groups with the required capacity among the membership for synergy to generate economic quality and quantities. There is also need to look at building capacities of Apex Associations that are providing various support services to farmers at either the production or the marketing/trade side of the value-chain.

- ix. There is no doubt at policy pronouncements about the government's resolve to commercialise agricultural commodity markets, including rice. However, the challenge, which in itself is an opportunity for intervention, is how to stimulate these markets for growth and how to improve smallholders' access and participation in them. There are divergent views on what the main policy response to this challenge should be.

On the one side, there is liberalisation or market failure view which emphasises the need to reduce direct state intervention in markets and, on the other, an embedded market view which questions liberalisation strategies, citing the frequent failure of the private sector to replace state market functions.

What is generally agreed in the literature, however, is that the solution to this fundamental problem lies in building more effective private markets, which could be promoted by initiatives such as the EIF, which is not a short term task. While the end point must be markets led by the private sector and responding to market signals, the government has a key role to play in helping create markets, where they are missing, through effective and predictable targeted interventions and introducing regulations necessary to make markets function properly.

It is, therefore, argued here that governments and markets should be seen as complements and not substitutes, thus the argument herein for a public-private sector approach for developing the rice value-chain. As such, galvanising the various stakeholders in the rice value-chain is likely to yield dividends for those who invest in such processes.

- x. The sector is characterised by weak enterprises, traders and processors. These too need some capacity building interventions. A model of decentralised processing capacity in areas (districts) where the rice is being grown is an obvious opportunity and has an added advantage of

locating the value-chain in the local economy, thereby maximising incomes and economic spillovers.

- xi. The number of people or households employed in this industry is not known, neither is it documented, as the sector is relatively new. There is need for a baseline which would be a basis for planning and designing of realistic interventions. However, suffice it to say that the government policy is clear about its desire to increase employment opportunities in rural areas by building up rural sector economic activities. Rice production is one such possibility. What is required is a concerted and co-ordinated approach to dealing with the many challenges that the rice sector faces.

*Annex I:*  
*List of People Talked to and*  
*Retailing Places Visited*

- |                                   |                                 |
|-----------------------------------|---------------------------------|
| 1. Muswala Kapalu                 | SNV-WP                          |
| 2. Fr. Jim Chambers               | Diocese of Mongu (DMDC)         |
| 3. Eugene Lubinda                 | DMDC                            |
| 4. Charles Akakandelwa            | DMDC                            |
| 5. Ngula Mubonda                  | People's Participation Services |
| 6. Nasilele                       | People's Participation Services |
| 7. Angeline Kahari                | SNV, Zambia                     |
| 8. Maria Masisri                  | Spar, Zambia                    |
| 9. Max Mbunji                     | SEEDCO                          |
| 10. Shop rite Manda Hill          |                                 |
| 11. Embassy Super market          |                                 |
| 12. Melisa Supermarket, Kabulonga |                                 |
| 13. Buseko market                 |                                 |
| 14. Soweto market                 |                                 |

## *Bibliography*

Agro-Business a/s (2005). Synthesis Study on Options for Smallholder Commercialisation in Zambia, prepared for the World Bank.

Alliance for Commodity Trade in Eastern and Southern Africa – ACTESA (2008), Design Plan.

Anonymous, (2009), Global Competition Environment (online). Available from: <<http://members.tripod.com/ivong/Global.htm>> (Accessed March 29, 2009).

Anonymous, (2009), Namibian Rice Starts to Pick Up (online). Available from: <<http://oryza.com/Africa/Namibia>> (Accessed April 07, 2009).

Anonymous, (2009), Namibian Rice to Enter the Markets Soon (online). Available from: <<http://oryza.com/Africa/Namibia>> (Accessed April 07, 2009).

Anonymous, (2009), Estimated Global Rice Exports to Fall by almost 10 Percent: IGC (online). Available from: <<http://oryza.com/Global-rice/8628.html>> (Accessed April 07, 2009).

Anonymous, (2009), Experts Predict Record Rice Crop for 2009 (online). Available from: <<http://oryza.com/Global-rice/9646.html>> (Accessed April 07, 2009).

Calpe, C. (2002). Status of the World Rice Market. FAO, Rome, Italy.

Civil Society for Poverty reduction (2005). Fifth National Development Plan, 2006-2011: A Civil Society Perspective.

Common Market for Eastern and Southern Africa (COMESA) Website.

Central Statistical Office (2006), Living Conditions Monitoring Survey 2004-2006.

International Fund for Agricultural Development (2008), Smallholder Agribusiness Promotion Programme, Programme Design Report.

Consumer Unit Trust Services (2009).

Export Board of Zambia (2005), Export Audit Report 2005.

FEWSNET (2008). Informal Cross-Border Food Trade in Southern Africa, Issue No. 39

Food and Agriculture Organisation (2003). Linkages between Smallholder Farmers and Supermarkets in Zambia: What Role for Good Agricultural Practices?

Forum for Food Security in Southern Africa (2004). Achieving Food Security in Southern Africa: Policy Issues and Options.

Ministry of Agriculture and Co-operatives (2004). National Agriculture and Co-operatives Policy, 2004-2015, Lusaka.

Ministry of Commerce, Trade and Industry (2005). Zambia Diagnostic Trade Integration Study, Lusaka.

Ministry of Community Development and Social Services (2003). Public Welfare Assistance Scheme, Lusaka.

SNV Zambia (2007). Building Production, Marketing and Processing Capacity in the Rice Value-chain in Zambia.

Suppan Steve (1996). Rice, Trade and Biotechnology in the Philippines, Food Security Fact Sheet Np. 5.

Swedish International Development Agency (2007), Re-governing Markets' Information Sheet on Small-scale Producers in Modern Agri-food Markets.

US International Development Agency (2008). Public-Private Alliances.

World Bank (2003c), Zambia. The Challenge of Competiveness and Diversification.





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