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Local Response to the Rapid Rise in Demand for Processed and Perishable Foods: Results of an Inventory of Processed Food Products in Dar es Salaam

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Summary

1. Nearly 500 processed food products across five product categories (milled grains, packaged rice, dairy, fruit juices, and poultry) were identified in Dar es Salaam retail outlets;
2. Contrary to common views, local and regional processing – not imports from outside the continent - dominate this market;
3. Branding has expanded dramatically in the city in recent years. Branded maize meal now dominates in all retail outlet types; over 50 branded blended flour products can be found; even 20 brands of packaged rice can now be found, though currently limited to supermarket chains;
4. Many of the firms producing maize meal and blended flours appears to be small- and even micro in size;
5. Dar es Salaam's retail sector is changing rapidly, with new types of stores and new types of food-oriented retail developments opening regularly;
6. Much research needs to be done to understand the likely ability of local processing firms to remain competitive in this rapidly changing market, and to identify policies and programs that could sustainably enhance this competitiveness.

INTRODUCTION: Recent research by the Food Security Innovation Lab (FSP) has documented the rapid rise in demand for processed and perishable foods in East and Southern Africa (ESA) (Tschirley et al, 2015a; Tschirley et al, 2015b). This work has highlighted four results. First, the penetration of processed foods in consumption patterns in the region has been deep, with an overall share in purchased food of nearly 70%. Second, the penetration has been broad, with the share of all processed food in total food purchases being nearly as high in rural areas as in urban, and nearly as high among the poor as among the upper classes. Third, the main difference across types of households is that low value added processed foods ("low processed", e.g., purchased maize meal, milled rice, meat) predominate among lower-income and rural households, while high value added processed foods ("high processed", e.g., vegetable oils, bread, food away from home) predominate in urban areas and among higher income households[1]. Fourth, expenditure elasticities of demand are highest – and all above 1.0 – for perishable high processed foods, perishable low processed foods, and non-perishable high processed foods, respectively. Note that this same order is maintained, and all values remain above 1.0, in both urban- and rural areas.

[1] See Tschirley et al 2015a, 2015b for more detail on definition of the levels of processing.

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The implication of this fourth pattern is that market demand for these types of products will rise very rapidly as long as income growth and urbanization continue to advance: if economic growth in the region continues at the level and with the distribution it has shown over the past 10 years, and if urban populations grow as forecast by the United Nations, market demand for perishable high processed products, perishable low processed products, and non-perishable high processed products will increase by factors of 10, 8, and 7, respectively, over the next 30 years.

Growth of this magnitude implies huge business opportunities for entrepreneurs in the region's agrifood system – 7% to 8% annual growth in demand depending on the product group. Depending on the location and type of firms that produce the products, satisfying this demand could also drive rapid growth in employment in the post-farm segment of the region's agrifood system. This employment question is of great currency due to Africa's extremely young population, which foretells the entry of over 300 million youth into the labor market over the next 15 years.

At least four questions arise. First, what is the range of processed food products currently available at retail in these countries? Second, to what extent are these processed foods produced locally, thus generating local employment, as opposed to being imported? Third, what is the size distribution of local firms, and what share of the market do micro-, small-, and medium-sized firms hold compared to local large firms and foreign firms?

A fourth question relates to our expectation that there will be first a proliferation of local firms, followed by consolidation into the hands of fewer, larger firms. Where does Tanzania currently stand in this process, and what factors will determine how rapidly the sector consolidates? The answer matters, because we expect that larger firms will employ fewer workers per unit of output, a troubling prospect for a region so much in need of remunerative employment.

This Emerging Research Brief addresses the first two questions above, with a focus on retail outlets in Dar es Salaam, Tanzania. We first describe the data and how it was collected. We then present selected results from that data collection. We close by outlining the continuing research we intend to conduct to more fully explore the questions raised above regarding the extent and implications of the rise of food processing in Tanzania.

DATA AND RESEARCH METHODS: Data for this Emerging Research Brief were collected during March and April, 2015, across a range of retail outlets in Dar es Salaam. The research team first spent one week conducting a rapid appraisal to familiarize itself with the range of retail outlet types in the city and the range of processed foods available in them. Following this rapid appraisal, the team systematically visited the stores of large format regional and local supermarket chains, small format supermarkets, dukas (traditional, small format assisted-service stores) and sokos (municipal open air markets). In doing so, it identified products available for sale in five product categories:

- Processed grains products including maize meal and blended flours
- Packaged rice
- Dairy products including milk, yoghurt, cheese, and others
- Fruit juices
- Processed poultry

Within each category, the team identified each individual product available for sale and recorded specific information about it. An "individual product" was defined by the intersection of type of product (e.g., various types of maize meals, yoghurts, or packaged poultry) and company producing it: the same product type produced by a different company was classified as a different product. Volume data were not collected in this instance; such data will be collected in a formal retail survey that will be conducted in coming months.

For each identified product, the research team recorded the following information, as available.

- Product name
- Product category

- Company Name
- Packaging Type
- Ingredients
- Manufacturing location (country and city)
- Contacts, including phone numbers, email, and website

The team continued visiting retail outlets until few if any new products were not being found. In total, six supermarket chain outlets, 15-20 small format supermarkets, 25-30 dukas, and eight sokos were visited.

RESULTS: Tables 1 and 2 present the results of the data collection. Three findings stand out. First, we found that, contrary to the common view, imports from outside the continent do not dominate processed food availability. Sixty-one percent of the 486 identified products were manufactured in Tanzania. Tanzania dominates processed grains, packaged rice, dairy, and poultry. After Tanzania, imports from neighboring countries Kenya and Uganda account for 10% of all products found. Thus, locally and regionally processed foods account for over 70% of all processed food items (in our five categories) available for sale in Dar es Salaam. South Africa accounts for another 8%, bringing the continent's share of all products to nearly 80%. While these results cannot be definitive without data on volumes and market share, they suggest that, contrary to common views, local and regional processing dominate the market for processed foods in the country.

The only product category that Tanzania does not dominate is fruit juice. Here again, however, locally and regionally processed juices predominate, with 50% coming from Tanzania, Kenya, or Uganda; adding South Africa brings the continental total to 76%.

Second, branding has expanded dramatically in the city in recent years. Over 60 brands of Tanzanian maize meal were found, and the research team expects that more are available in the market; as the data collection proceeded, new brands of maize meal continued to be found even while no new products emerged in the other categories. Unlike packaged rice (vs. loose rice), branded maize meal now appears to dominate the market in all types of retail outlets from *sokos* to supermarket chains.

Fifty different blended flour products were found, and this category was completely dominated by Tanzania. These are products that contain two or more milled grains (the number often rises 4 or more ingredients) and sometimes other products such as dried ground fish or dried vegetable powder. These blended flour products sell for far higher prices than maize meal and may be far more profitable for the companies producing them.

This branding now extends to rice, though in less profusion than for maize meal and blended flours. Twenty brands of packaged rice were found, nearly all in chain supermarket chains. Small format supermarkets primarily carried unbranded packaged rice while *dukas* and *sokos* overwhelmingly carried only loose rice. The rapid rise of branding in maize meal and blended flour products is a potentially important dynamic that the team will work to understand through ongoing research. Key questions regard what value consumers gain from branding, how retailers view branding and choose among brands, and how rapidly one will see consolidation in the currently very large number of brands.

Third, Dar es Salaam has seen a profusion in types of retail outlets in recent years. The city now hosts three regional or international supermarket chains (Nakumatt, Uchumi, and GAME/Massmart), five local chains (Imalaseko, TSN, Village, Shoppers, and Sriji), innumerable small-format supermarket outlets, and an unknown but rapidly growing number of "new format retail clusters". These clusters feature parking areas and four- to five shops that cover the range of food needs of most consumers, typically including *dukas*, sometimes a small-format supermarket, fresh produce shops, and butcheries. These outlets now compete with traditional *dukas* and *sokos* and are likely taking market share from them.

FUTURE RESEARCH: Much research needs to be done to understand the dynamics of change underway in Tanzania at retail and in food processing, and to properly advise government and development partners regarding their implications for employment, for the equity of economic growth, and for policies and programs to encourage a local entrepreneurial response to emerging opportunities that is both robust and sustainable. Results of research at retail and processing level will be reported periodically in future Policy Research Briefs.

Table 1. Manufactured food products found in rapid reconnaissance of Dar es Salaam retail outlets, March 2015

Product Group	Country of Manufacture	Number of individual products	# of individual companies	Listing of product types (# of individual products)
Processed grains products	Tanzania	189	120	Sembe flour (57), dona flour (47), mixed flour (50), Sorghum flour (6), millet flour (8), others (21)
	Kenya	2	2	Sembe flour (1), mixed flour (1)
	South Africa	3	3	Mixed flour (1), Sembe (1), other (1)
	UAE	6	5	Mixed flour (1), Sembe flour (4), other (1)
	UK	3	3	Sembe flour (1), other (2)
	Undefined	15	3	Sembe flour (3), dona flour (2), millet (1), other (9)
Packaged rice	Tanzania	27	20	White rice (22), brown rice (5)
	India	5	5	White rice (5)
	South Africa	2	2	White rice (2)
	UAE	2	2	White rice (2)
	UK	14	4	White rice (12), brown rice (2)
	Pakistan	1	1	White rice (1)
	United States	1	1	White rice (1)
	Undefined	1	-	White rice (1)
Dairy products	Tanzania	53	12	Milk (8) yoghurt (22), cheese (8), other (15)
	Brazil	2	1	Milk (1), other (1)
	Denmark	1	1	Milk (1)
	EU	5	1	Yoghurt (5)
	Germany	4	2	Yoghurt (3), other (1)
	Holland	3	2	Milk (2), other (1)
	Ireland	5	3	Milk (1), yoghurt (1), other (3)
	Kenya	17	4	Milk (7), yoghurt (5), other (5)
	Saudi Arabia	1	1	Milk (1)
	South Africa	14	4	Milk (11), other (3)
	UAE	6	4	Milk (5), other (1)
	Uganda	5	2	Milk (3), yoghurt (2)
	UK	8	6	Milk (5), yoghurt (3)
	Undefined	5	1	Yoghurt (4) Milk powder(1)
Juices	Tanzania	12	5	Apple juice (1), mango juice (3), mixed juice (2), other (6)
	Egypt	8	1	Mango juice (1), mixed (2),other (5)

Product Group	Country of Manufacture	Number of individual products	# of individual companies	Listing of product types (# of individual products)
	Holland	3	1	Mango juice (1), other (2)
	Kenya	20	5	Mango juice (1), mixed juice (5), other (14)
	Singapore	-	-	-
	South Africa	18	3	Apple juice (1), mango juice (1), mixed juice (7), other (9)
	Uganda	2	1	Mango juice (1), mixed juice (1)
	UK	4	3	Apple juice (1), mixed juice (1), other (2)
	Undefined	1	1	Other (1)
Poultry	Tanzania	17	8	Whole chicken (8), chicken breasts (3), other (6)
	undefined	1	1	Whole chicken (1)

Note: (1) rapid appraisal was conducted in a selection of supermarket chains, small format supermarkets, dukas (traditional shops), and open-air markets; (2) **Undefined** includes unbranded products, unknown product types and products with unknown manufacturing countries; (3) Most of the packaged branded rice was found in chain supermarkets. Small format supermarkets had unbranded rice while dukas and sokos had loose rice.

Table 2. Total # of products by country

Country	# of products	%
Tanzania	298	61%
Kenya	39	8%
South Africa	37	8%
UK	29	6%
Undefined	23	5%
Various EU	16	3%
UAE	14	3%
Egypt	8	2%
Uganda	7	1%
India	5	1%
Ireland	5	1%
Pakistan	1	0%
United States	1	0%
Brazil	2	0%
Saudi Arabia	1	0%
	486	100%