AFRICA'S UNFOLDING DIET TRANSFORMATION: What do we know, what do we need to know, and What role for policy?

David Tschirley Presented at the World Bank Washington, DC, 30 March 2017 Co-hosted by African Agriculture Policy Unit and Agriculture Policies Community of Practice (APCoP)

BACKGROUND

Extensive analysis of household expenditure data sets across Africa and Asia

- Processed foods inventories
- "Stacked surveys" of rapidly growing value chains
- 30 years of fieldwork in Africa and Asia
- A focus on linking rural and urban, not just on urban needs

What do we know?

#1: DIETS ARE TRANSFORMING IN THREE WAYS

Food is becoming more purchased

About 50% of food in rural areas of Africa (by value) is purchased
60% to 70% in Asia



#1: DIETS ARE TRANSFORMING IN THREE WAYS

Food is becoming more perishable

 meats, dairy, fresh produce (especially fruit and new vegetables)



 Non-cereals are 50% to 70% of diets in value terms



#1: DIETS ARE TRANSFORMING IN THREE WAYS

Food is becoming more processed and prepared

- 50% to 65% of all food is now processed
- 70% to 80% of purchased food
- Food away from home exceeds 15% of food expenditure in some countries of ESA
 - and is growing everywhere more rapidly than any other category



Every one of these transformations means the <u>post-farm segment</u> of the agrifood system is becoming ever more important

#2: THE TRANSFORMATION IS NOT JUST AN URBAN MIDDLE CLASS STORY

- The transformation is broad
 - In rural and urban areas
 - Across Africa and Asia
 - Across the income distribution (not just the middle- and upper classes)

CATEGORIZATION SCHEME USED IN LSMS DATA

	Unprocessed	Processed, Low Value Added	Processed, High Value Added
Non- perishable	Legumes Maize grain others	Maize meal Milled Rice Sugar Others	Veg oils Breads Food away from home Others
Perishable	Vegetables Fresh fish Fruit Others	Beef Other meat (incl. poultry) Dried/pkgd fish Others	Food away from home Dairy Others



Source: Author calculations from LSMS data sets



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#3: URBAN DEMAND IS DRIVING THE TRANSFORMATION

- Urban demand now over 50% of all food demand through markets in East and Southern Africa
 - The least urbanized area of the continent
 - Up to 70% and 80% elsewhere
- Very rapid growth
 - 3% to 4% growth in urban populations PLUS ...
 - 2% to 5% growth in per capita incomes ...
 - means explosive growth in urban demand through markets
 - Up to 8x over 30 years

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#3: URBAN DEMAND IS DRIVING THE TRANSFORMATION

- Especially secondary and tertiary cities
 - About 60% of urban population, growing rapidly
 - A chance to "get it right" in urban areas with little marketing infrastructure

About 90% of all food is from local production

And reliance on imports is <u>not</u> systematically rising, even in Africa

Real value of food imports, 2008-2015 (2011 PPP USD)

	Real value of food	Imports as share of
Country	imports	food expenditure
Malawi	1	+
Mozambique	1	1
Nigeria	1	
Rwanda	1	1
Tanzania	1	\leftarrow
Uganda	\leftarrow	↓ ·

Source: COMTRADE for imports; WB for hh consumption expenditure; authors' calculations to generate food expenditure

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- In urban East and Southern Africa, the import share in the diet does not rise with income
- Import shares do rise with income in rural areas ...
- And they are higher in urban- than in rural areas
- But both appear to be driven by the move to <u>purchased</u> <u>food</u>, not by income per se

Contrary to conventional wisdom, many countries in Africa are "holding their own" in meeting their food needs, and rising incomes per se should not change this

#5: FLOW OF FOOD BI- AND EVEN TRI-DIRECTIONAL

Rural-urban

- What we've always known
- But now more than ever, <u>linking to urban</u> demand is central to rural growth and poverty alleviation
- Urban-rural
 - Flow of processed foods out to small towns and rural areas
 - Might this change with more distributed energy generation (solar)?
- Rural-rural
 - e.g. oilseed processing concentrated in areas around production, then flows to other rural areas

#6: CITIES ARE NOT ADEQUATELY PREPARED







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- 10 Asian cities and 11 of SSA have signed the Milan Urban Food Pact
- But very little investment (certainly in SSA)
 - Unsuccessful attempts (Nairobi)
- Appalling conditions (at least in Africa)
- Outmoded models for investment and management in urban marketing infrastructure
- Food not being integrated into urban planning
 - Africa and Asia

#6: CITIES ARE NOT ADEQUATELY PREPARED

- In Africa, the supermarket revolution is real ... but (still) very young
 - Supermarket sales need to rise by more than 5% per year just to MAINTAIN their SMALL market share!

Private investment cannot be expected to solve the dramatic inadequacy of urban marketing infrastructure in the short- to medium-term

Policy challenges in three areas

POLICY CHALLENGES

Massive <u>agribusiness opportunities</u> • Who's going to capture the growth? • Imports, or local farmers and processors? • If local: large, medium, or small?

Massive challenge for <u>cities</u>

- Need for new physical infrastructure
- New ownership and management models

Increasing importance of <u>diet quality</u> Nutrition

Food safety

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Food safety

Food environment

#1: Capturing agribusiness opportunities

1 a: Ensuring a place at the table for SMEs1 b: Ensuring growth and learning

FIRM SIZE AND EMPLOYMENT (GRAIN MILLERS IN DAR ES SALAAM)

-Market share -Total equality



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-Market share -Total equality -Labor share



Non-parametric regression on firm size and LQ ratio (grain millers in DeS



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Business type	Size avint	# of obs	Mean total receipts (million TSH)	Mean revenue per unit cost (RevPCost)	Share RevPCost >1
All businesses	1	61	3.0	0.59	17.7
	2	44	9.6	1.21	62.0
	3	59	30.6	1.97	78.3
	4	66	112.5	2.04	80.8
	5	77	886.4	5.31	84.9
	All	307	206.2	2.21	64.6

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Keeping small- and medium firms in the Busi market makes a receipts All businesses 1. 61 3.0 059.1 17.7

employment ... and many of them can be competitive for some time 78.3

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1A: ENSURING A PLACE AT THE TABLE FOR SMES

Access to credit, training, technical information

- Secured transactions reforms as key element to potentially spur private sector interest
- Lots of agencies to promote small industry but <u>little known about</u> <u>effectiveness</u>

Clustering for other services

Infrastructure, energy, proximity to production

Public norms and standards for smaller firms to piggyback

1A: ENSURING A PLACE AT THE TABLE FOR SMES

Importance of a local production base

- Lack of same likely hurts SMEs more than large players
- Though the rise of food processing means <u>lots of value can be</u> added to imported commodities
- Scalable renewable energy for more rural processing??

Cooperative wholesaling models?

It's probably about slowing consolidation, not stopping it

1B: ENSURING GROWTH AND LEARNING

A global market

Scale and sophistication matter

Competing globally highly unlikely for some time for most food processing firms

But operating only locally (nationally) a death sentence
Incomes are rising, consumers are evolving, the African market is not static

1B: ENSURING GROWTH AND LEARNING

Using regional trade strategically

 to learn, grow scale, increase sophistication, <u>stay competitive</u> <u>locally</u>, step eventually into global markets

Requirements

- Road and rail links
- One-stop borders
- Harmonized norms & standards

Commitment by policy makers to trade <u>rules & processes</u>

#2: Helping cities meet the challenge

2a: "Making the trains run on time" (logistics) 2b: Promoting healthy food choices (food environment)

2A: URBAN FOOD MARKETING INFRASTRUCTURE

Food is nowhere on the urban planning agenda (even in the World Bank!)

Need new models of ownership and management for market places, <u>not just more infrastructure</u>

Remember the supermarket revolution ... real ... young ... not an immediate solution

Must deal with the political economy problem

2B: IMPROVING THE FOOD ENVIRONMENT

Retail modernization and the manipulation of the food environment

- Maximize sales Salt, fat, sugar
- Not just inside supermarkets
 - Billboards, use of traditional marketing outlets

We <u>know</u> what will happen in the absence of a public response

Obesity and NCDs already rising rapidly in Africa







We may be accustomed to thinking about the degradation of developing country diets as a product only of FDI, and packaged foods





Traditional prepared foods, and traditional market outlets, can be major elements of this problem

Sim

ARE SMES PART OF THE PROBLEM?

- How does nutritional quality and food safety vary by:
- Imported vs. local products ?
- Firm size among locals?
 - Some concerned that SMEs are a major problem for food safety
 - Sets up a potential <u>major conundrum</u>:
 - how to promote greater employment growth in agrifood system while safeguarding food quality and safety?

ACTIONS FOR A MORE NUTRITION-FRIENDLY FOOD ENVIRONMENT

Global Panel <u>Foresight Report</u> a rich source of ideas **Fundamental problem:** actions need to be location-specific, nuanced, systematically implemented • Difficult to do in absence of high quality public sector

ACTIONS FOR A MORE NUTRITION-FRIENDLY FOOD ENVIRONMENT (SELECTED IDEAS)

Ag research to reduce the cost of producing nutrition, not calories

- Examine contradictions between trade objectives and nutrition objectives
- Do African consumers really need Lay's potato chips at the cheapest possible price??

Build public market places to promote food safety and healthy food choices

Taxes on "unhealthy" foods

Better facilities for FAFH vendors favoring safety and nutrition

Thank you!