Structured Demand & Home-Grown School Feeding

Background and funding options

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What is structured demand?

- **Structured demand in a nutshell**
  Structured demand connects large, predictable sources of demand for agricultural products to small farmers, which reduces risk and encourages improved quality, leading to improved systems, increased income, and reduced poverty.
What is structured demand?

- It involves a series of interventions—such as increasing access to inputs, storage, training, and financing—rather than a single intervention.

This makes structured demand complex—but also transformative when successfully implemented.
Sources of structured demand

• The foundation’s vision is primarily focused on national programs for social good
  • School feeding programs
  • Maternal and newborn health programs
  • Nutritional support for HIV/AIDS and TB patients, and food programs targeting orphans and other vulnerable children

• Others, like the World Food Programme (WFP)*, target those and other programs for social good
  • Food-for-work programs
  • Food for refugee camps

• There are other opportunities as well
  • Export to other markets, particularly in the Middle East
  • Provision to cafeterias, hospitals, and jails
  • Military rations
Types of structured demand

- **Large-scale food assistance programs are delivering benefits in many countries**
  School feeding, food for work, and emergency feeding programs, and others are contributing to positive educational and nutritional outcomes for millions of people.

- **However, the role of agriculture is often overlooked**
  Most programs focus on the recipients, but not the providers, of food. There is extensive data on the educational and nutritional benefits of existing food assistance programs, but little data on the potential agricultural benefits of linking local to predictable sources of demand.
An effective structured demand program must operate at scale and be predictable to generate job creation and private sector growth.
Theory of change

“Large-scale, predictable programs employing food for social good will drive the systemic changes needed to provide sustainable market access for small farmers.”

- Beliefs
  - Reliable demand is powerful. It provides farmers with incentives to invest in producing more and better food.
  - It also provides incentives for banks, input suppliers, and others to increase engagement with small farmers.
  - Investments in quality standards, training, market information, and other areas will enable farmers to participate more effectively in markets.
  - These public investments will spur private investments, and lead to increased jobs and profits in rural areas.
  - The scale and popularity of structured demand programs will lead to increased policy attention and effectiveness.
1. UNDERSTANDING STRUCTURED DEMAND: The transformative qualities of structured demand

The transformational possibilities

STRUCTURED DEMAND

Local and national government
- Policies and regulations
- Quality standards
- Extension
- Infrastructure
- Quality standards
- Extension
- Taxes and credits

Private sector
- Ag finance
- Provision of ag inputs
- Job and profit creation

Agriculture
- Market information
- Business acumen
- Access to ag. inputs
- Gender equity
- On-farm storage, testing and handling

Large-scale predictable demand
- Schools
- Hospitals
- Jails
- Military
- Planned aggregate demand (e.g., Gulf States)

Food processing and storage
- Micronutrient fortification
- Preparation for local tastes
- Preservation
- Storage facilities
- Food safety and handling

Markets
- Quality control and testing
- Pricing and accounts
- Weights and measures
- Food safety

Transportation is a key aspect of structured demand. It is a complex challenge that is not currently a priority of the foundation’s strategy.
There is tremendous potential to link farmers to markets

Structured demand can help transform social safety net programs into agricultural and economic development programs. If school feeding were scaled for just the poor children in Ethiopia, for example, it would result in an additional demand for food of around 445 thousand tons per year. For millions of farmers, structured demand offers realistic hope for increased market engagement that can help them increase their incomes and overcome poverty.
Theory of change

Structured Demand Interventions

ACCESS:
Interventions target increased sales for smallholder farmers by incentivizing large scale, predictable buyers to use smallholder-friendly procurement (Example: P4P)

INCENTIVES:
Interventions target policy change to open existing and future markets to smallholder farmers, either through government purchase or private sector (Example: Home Grown School Feeding)

Immediate Effects

FARMERS:
• Can increasingly afford inputs
• Have incentives to pursue knowledge and adopt improved practices
• Have reason to participate in farmers organizations and market as a group

ALONG THE VALUE CHAIN:
• Financial institutions have increased incentives to lend in agriculture
• Private sector sees greater opportunity for profits from smallholder farmers

Secondary Effects

• Farmers can supply expanding & new markets
• Farmers understand quality, safety, weights, & measures
• Tools and services align around successful groups
• Rural jobs and profits are created to support Ag growth
• SME development in processing, transport, and other sectors emerges
• Governments adopt more smallholder supportive policies
• Demand for improved technologies (including seeds) grows and becomes institutionalized in private or public sector

Change at Scale

Innovations are taken up by public and private actors and are scaled in non-intervention areas

Productivity Increases
# Opportunities and challenges

## Opportunity

- Increase market engagement for millions of small farmers
- Create jobs and profits in rural areas
- Reduce risk for farmers
- Improve the effectiveness/sustainability of national school feeding programs
- Create synergies with other investments
- Strengthen farmer organizations and empower women farmers
- Introduce consistent quality standards and improve food safety
- Reduce macroeconomic risks by strengthening social safety net programs

## Challenge

- Ability of small farmers to reliably produce required quantity and quality of food
- Availability of financing
- Access to storage, warehousing, and transportation
- Potential for waste, fraud, and abuse
- Limited evidence on policy and regulatory issues
- Perceived conflicts between school feeding and nutrition, other government programs
- Lack of data on the agricultural benefits of structured demand
Case study: The trajectory of school feeding programs

India’s Mid-Day Meal Scheme

The Mid-Day Meals program is an early example of an important truth:
Once established, school feeding programs are rarely cut. Rather, they expand in scope.

1920s  School meal program established in the city of Madras
        in 1923, for all students attending Corporation schools

1950 – 60s  Program expands to entire state of Tamil Nadu
            High demand prompts other states to follow suit

2000s  Mid-day meals become a constitutional right for all children
        enrolled in government-run or -aided primary schools, following a 2001 Supreme Court
        ruling. The program has been adopted almost universally and now feeds approximately
        120 million children per day.

Amartya Sen, a vigorous supporter of school feeding, said that school feeding programs are “economically affordable and effective, socially productive, and, as it happens, politically attractive, too.”
School feeding programs

Increasing market engagement for millions of farmers

Looking at school feeding in Kenya—just one source of structured demand, in just one country—provides a sense of the scale of the opportunity.

Kenya

- There are >6 million children enrolled in primary schools in Kenya. One study found that if the national school feeding program supplied all these children with home-grown school meals, it would create demand for 547,000 MT of grain.
- Tens of thousands of farmers could benefit. A foundation-funded modeling exercise concluded that if the Kenyan school feeding program purchased maize from small farmers in a high-potential area, the annual incomes of 175,000 farmers would increase by around $50 per farmer per year, excluding off-farm income gains.

Sub-Saharan Africa

- There are 114 million children enrolled in primary schools in Sub-Saharan Africa. 70 million of these children live and attend school in hunger-stricken areas.
- Other structured demand programs add millions more potential consumers. While data does not exist, the size of the market for structured demand implies a predictable supply that could enable millions of farmers to engage with markets, increase their incomes, and overcome poverty.
School feeding programs

Creating jobs and profits in rural areas

- **HGSF programs can strengthen the private sector.** The Government of Chile, for example, very deliberately and successfully linked the goal of strengthening small and medium enterprises (SME) with the national school feeding program by providing grants and technical assistance to enterprises that competed to procure, process, and deliver food to schools.

- **HGSF programs create jobs and profits in rural communities.** In Ghana, the national school feeding program is estimated to have created 12,000 off-farm jobs. The income multipliers from agricultural growth in sub-Saharan Africa are significant.

- **In developed countries, the impact is in the billions of dollars.** In the United Kingdom, 65% of all government-procured food is of UK origin. While 58% of the food was for schools, over 40% was for hospitals, prisons, and the armed services. With the UK government’s procurement of food totaling over £2 billion, the economic impact of focusing on procuring from local farmers is huge. The U.S. Government’s National School Lunch Program cost $9.8 billion in 2009.

- **In the US, school feeding did not begin as a local agricultural development program, but new programs are attempting to do just that now.** USDA reports of a program established in 1997, “Both schools and small farmers benefit from their participation in the ‘farm-to-school’ initiative. Schools provide children fresh, tasty, nutritious produce, while small farmers acquire new markets. Schools are able to provide fresh produce quickly and with lower transportation costs by buying it from small farmers instead of from distant markets. And children learn from farmers…”


School feeding programs

Improving government school feeding programs

- **School feeding is here to stay.** According to the World Bank, “Every country for which we have information is in some way and at some scale seeking to provide food to its schoolchildren.” By and large, these countries are looking to expand their programs and make them sustainable, not scale them back.

- **Data and best practices are in short supply.** Data on the costs of school feeding programs and the agricultural benefits of home-grown school feeding are sorely lacking, making it hard for policymakers to make informed decisions and tradeoffs.

- **Programs vary widely.** Country programs use different models, are in different stages of maturity, and get very different results. In Kenya, the per capita cost of feeding a child is 12% of the cost of educating a child. In Zambia, it is over 40%, while in Malawi it is approximately 65%, and in Benin, it is over 120%. There are clearly opportunities to help countries contain costs and increase efficiency.
2. DEFINING THE OPPORTUNITY: School feeding programs

School feeding programs

Improving government school feeding programs (cont.)

- **All countries have room for improvement.** Some countries, like Ghana, are seeking to scale up their programs. Others, like Cote d’Ivoire, are looking for ways to become more financially self-sustainable. Still others, like Tanzania, are looking for more basic help. As the World Bank notes, “the countries with the greatest need are those where the school feeding programs are currently least adequate.” But even developed countries are reassessing their school feeding programs and choosing to buy locally more frequently.

- **Transitions take a long time, but they do happen.** At least 22 countries have transitioned from having externally funded and administered school feeding programs to government funded and administered programs. These include some of the most effective HGSF programs, including Brazil and Chile.

- **With support, more countries can transition to HGSF programs that allow them to:**
  - Feed more students,
  - Support more farmers,
  - Strengthen their agricultural sectors, and
  - Contain costs.
Case study: Chile

Chile: What Success Looks Like

JUNAEB, the national school feeding program, was established by law over 40 years ago. Today, the program, which is funded by taxes and has a budget of over $430 million, is recognized as one of the most effective programs in the world.

Investing in schools to invest in agriculture
Chilean politicians have long competed to support school feeding. Over time, they saw school feeding as a way to improve not only educational but agricultural and economic outcomes. As a result, the government embarked on a deliberate strategy of linking school feeding to small and medium enterprises through three-year contracts and financial planning assistance.

Public-private partnerships
In 1980, the program transitioned from being operated by the government to being outsourced to private companies. Today, contractors compete for three-year contracts based on price and quality. The government receives over 100,000 proposals for each contract cycle.

Demonstrable results
JUNAEB serves over 1.8 million children in Chile each day. The program has helped lift the school attendance rate to nearly 100 percent, and has significantly decreased malnutrition. Results continue to improve: from 1995 to 2002, food quantity increased by 24% while costs decreased by 22%.
## Fit with mission

<table>
<thead>
<tr>
<th>Neglected issue</th>
<th>Potential for large-scale impact</th>
<th>Scalable and sustainable solutions</th>
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</table>
| • There is little knowledge or expertise to support policy change in governments and others seeking to harness the power of structured demand. | • School feeding programs alone reach tens of millions of children, and other structured demand programs could reach additional millions of people.  
• Studies show that connecting predictable demand to small farmers can lift their incomes by $50 per year, in addition to creating off-farm jobs.  
• It can also have transformational system-wide effects like improving quality standards and increasing the availability of inputs, financing, and other key supplies. | • Investing in data and policy analysis can give decision makers in dozens of countries the ability to increase the efficiency and decrease the costs of their programs.  
• Demystifying how developing and developed countries have paid for public feeding programs (whether for schools or prisons) will help developing countries design cost-effective, sustainable programs long-term, which is essential for realizing smallholder benefits. |
The opportunity

- There is also significant support from stakeholders
  
  Local and regional purchase programs are popular with a wide range of key stakeholders.

<table>
<thead>
<tr>
<th>Global Stakeholders</th>
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<tbody>
<tr>
<td>International organizations</td>
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<tr>
<td>Donor community</td>
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<tr>
<td>Multi-national corporations</td>
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<tr>
<td>Regional bodies</td>
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<tr>
<td>National governments</td>
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</table>
There is also significant support from local stakeholders

<table>
<thead>
<tr>
<th>Local Stakeholders</th>
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<tbody>
<tr>
<td>Parents &amp; other children, farmers</td>
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<tr>
<td>School directors, teachers, cooks, Parent-teacher organizations</td>
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<tr>
<td>Local Administration &amp; small traders, processors, farmers, transporters, community organizations</td>
</tr>
<tr>
<td>District, Province, or Regional governments and medium-size businesses, processors, transporters, traders, etc.</td>
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<tr>
<td>National government, large-scale traders, food processors, equipment suppliers, food safety inspectors, etc.</td>
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Funding & cost control options in your country

Do you have food reserves?

Could those be automated and managed to increase efficiencies and reduce losses to spoilage, waste, corruption, rodents, and other pests?

Do you have long delays in your payments to caterers/schools?

Could those be electronic, reducing the stress and need for short-term loans in order to pay for food?
Funding & cost control options in your country (continued)

Do you have a system of taxation?

Could you raise taxes in a way that does not burden the poor? Examples: Taxes on luxury items, airport/tourist taxes, cigarette and alcohol taxes, voluntary taxes, lottery or gambling taxes

Do you fine people and businesses who engage in bad or unhealthy behavior?

Could you create a fund based on fines? Examples: traffic tickets, drinking, gambling, fighting, corruption
Funding & cost control options in your country (continued)

Do you have funding for gender, agriculture, industry, or other related fields?

Could funds from those programs be used to support HGSF? Examples: Min. of Women’s Affairs could train the cooks, MOAg could train the farmers, Min. of Industry or Environment could provide support for fuel-efficient stoves, etc.

Do you have menu options that include low-cost, or locally-donated foods?

Could you ask parents to provide fruit that would go to waste, or make it into fruit juice? Could you use broken cashews or other products of cash-crop operations?
Funding & cost control options in your country (continued)

Do you have cartels or monopolies that cause high prices for needed commodities?
   Could you work to create more competition and more reasonable pricing?

Do you have high fuel & transport costs?
   Could you establish a transport management system that increases the efficiency of transport and reduces these costs?

Do you have some parents who can afford to pay for school meals alongside parents who cannot?
   Could you arrange to have those parents who can afford to pay to do so without stigmatizing parents/children who cannot?
Thank you.

Questions?