

Innovative Finance to Address Nutrition in Southeast Asia

Financial Innovations Lab® Report



January 2016



MILKEN INSTITUTE



Financial Innovations Lab[®] Report

Innovative Finance to Address Nutrition in Southeast Asia

January 2016



Financial Innovations Lab® Report

Financial Innovations Labs® bring together researchers, policymakers, and business, financial, and professional practitioners to create market-based solutions to business and public-policy challenges. Using real and simulated case studies, participants consider and design alternative capital structures and then apply appropriate financial technologies to them.

Acknowledgments

We are grateful to those who participated in the Financial Innovations Lab for their contributions to the ideas and recommendations summarized in this report. We would especially like to thank the Economic Development Board of Singapore and the Singapore Management University for generously hosting us. Additionally, we would like to thank Milken Institute colleagues Laura Deal Lacey, Heng Wing Chan, Curtis Chin, and Nassia Shams for their work on the project. Finally, we would like to thank editor Dinah McNichols for her work on the report.

This report was prepared by Belinda Chng and Caitlin MacLean.

About the Milken Institute

A nonprofit, nonpartisan economic think tank, the Milken Institute believes in the power of finance to shape the future. The Milken Institute produces rigorous, independent economic research—and maximizes its impact by convening global leaders from the worlds of business, finance, policy, academia, and philanthropy. By fostering collaboration between the public and private sectors, we transform great ideas into action.

©2016 Milken Institute

This work is made available under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License, available at <http://creativecommons.org/licenses/by-nc-nd/3.0/>

TABLE OF CONTENTS

INTRODUCTION.....	1
ISSUES AND PERSPECTIVES.....	3
The Double Burden of Malnutrition in Asia.....	3
Barriers to Investment in Nutrition.....	6
INNOVATIVE FINANCE SOLUTIONS FOR ADDRESSING NUTRITION.....	11
Volume Guarantees.....	11
Social Impact Bonds.....	12
SME Investment Funds.....	14
CONCLUSION.....	17
APPENDIX	19
ENDNOTES.....	20



Introduction

While malnutrition is a global issue, it has become a particularly severe public health disaster across Southeast Asia. There, as in other developing regions, world health experts speak of the “dual burden” of malnutrition, by which they mean the alarming rise in both undernutrition (nutrient-deficient and underweight) and overnutrition (overweight and obesity) rates. This lethal combination taxes already fragile public health systems and poses significant risks for future generations.

Many families and communities in Southeast Asia still lack access to enough food, or to essential nutrient-rich foods, or the means to purchase fortified foods and vitamins. Vitamin and nutrient deficiencies lead to high infant mortality, to stunting and wasting, to delayed development and impaired cognition. Yet elsewhere, due to urbanization, employment opportunities, rising per capita income, and the attendant marketing and consumption of unhealthy snacks and “fast food” diets, the problems associated with obesity—increased susceptibility to diabetes, hypertension, stroke, and some cancers—are likewise adding undue pressure to health-care systems.

The health impacts, as devastating as they are for individuals and families, spill over into community and regional economies as well, in terms of lost productivity, rapidly rising medical costs, and a slowdown in GDP growth. The impacts become particularly important as more capital flows in and out of Southeast Asia, making it imperative that both the region’s workers and its consumers—those who support the businesses and governments driving investment, and those who purchase goods and services created with investment dollars—remain productive and healthy. They will ultimately determine the economic momentum of the region.

Malnutrition is a complex issue, rooted in numerous socioeconomic and area-specific factors. This report does not intend to address the causes, social and genetic factors, or prevailing intervention and treatment methods (e.g., outreach, improved sanitation, access to fresh and healthy foods, and exercise programs) led and funded by governments, NGOs, philanthropic organizations, and private companies. Rather, it explores potential funding alternatives that could bolster these efforts and help close the Southeast Asia funding gap, estimated to be up to \$6 billion a year—more than half of the global funding gap—needed to address the region’s undernutrition and obesity epidemics.

Because the funding gap is so acute and funding sources insufficient to bridge it, the Milken Institute Asia Center is examining ways to engage new forms of capital that could broaden and diversify the pool of investors willing to support high-impact programs like malnutrition intervention. To this end, the center hosted a Financial Innovations Lab at Singapore Management University on June 30, 2015. Lab participants included health researchers and academics, as well as representatives of governments, NGOs, and donor foundations. The discussion focused on innovative financing models that have been put to work successfully in other regions, and to see if they could be applied in Southeast Asia.



Issues and Perspectives

THE DOUBLE BURDEN OF MALNUTRITION IN ASIA

Malnutrition is an imbalance of nutrient consumption that doesn't necessarily result in hunger. Undernutrition is a health crisis for newborns and young children, and affects their long-term health due to stunting, wasting, and a susceptibility to severe and chronic disease. Overnutrition, or overeating, which is now seen increasingly in very young children as well as adults, leads to weight gain and obesity, and the attendant health risks of type 2 diabetes, heart disease, cancers, and stroke. As shown in table 1, malnutrition is driven by a variety of factors, such as poverty, lifestyle transitions, and a lack of basic health information and education.

TABLE 1 || Understanding undernutrition and overnutrition in Asia

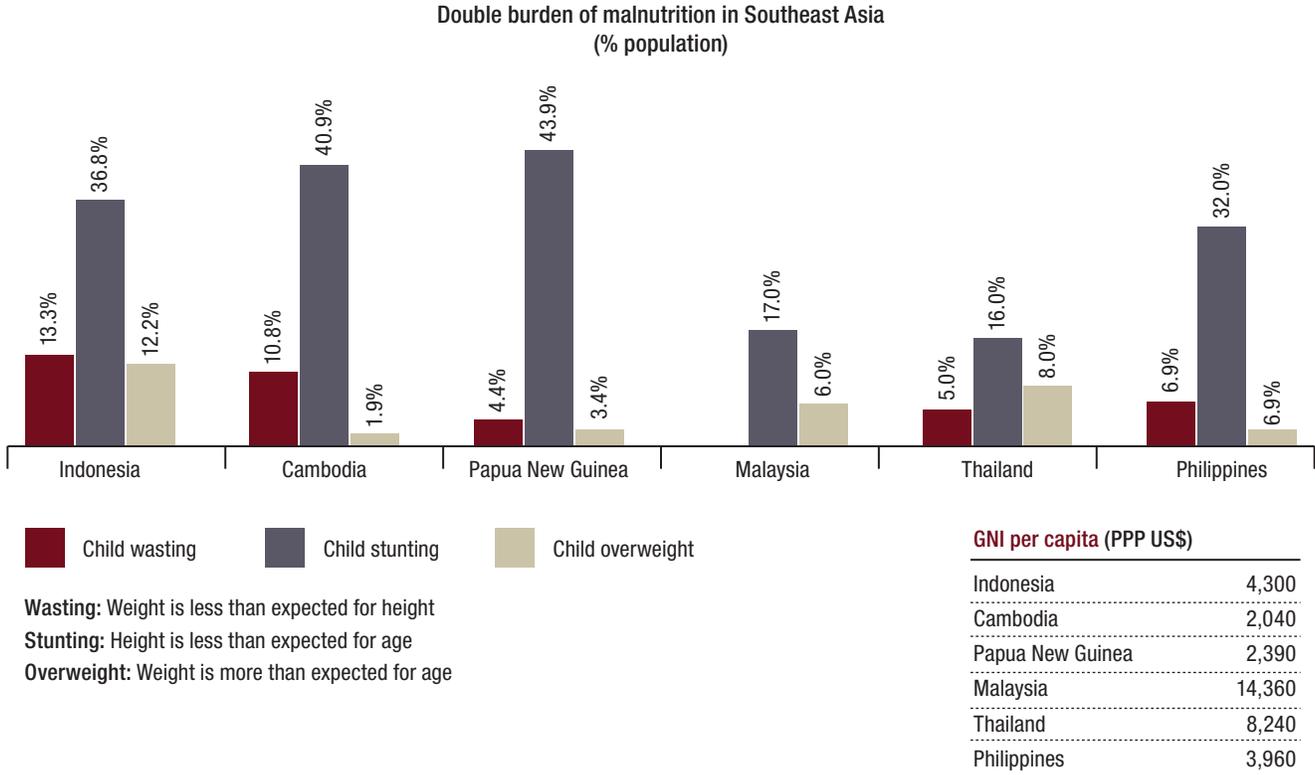
Undernutrition	Overnutrition
<ul style="list-style-type: none"> Low-calorie, low-micronutrient diets that are linked to stunting, wasting, and disease 	<ul style="list-style-type: none"> Consumption of too much fat, sugar, and salt, and too little exercise, and the link to obesity
<p><i>Manifestations</i></p> <ul style="list-style-type: none"> Premature death Low height for age, weight for age, weight for height Micronutrient diseases Cognitive deficits Immune system deficits Depression 	<p><i>Manifestations</i></p> <ul style="list-style-type: none"> Premature death Obesity, overweight Hypertension, diabetes Heart disease Depression
<p><i>Drivers</i></p> <ul style="list-style-type: none"> Poverty Food insecurity Poor care and feeding practices Poor health environment Lack of proven interventions Lack of government commitment 	<p><i>Drivers</i></p> <ul style="list-style-type: none"> Emergence from poverty in a Westernized, increasingly urbanized, processed-food context Lack of health-care education Urban space that is not conducive to exercise Undernutrition at an early age in life Malnutrition

Adapted from: Lawrence Haddad, "The Growing Double Burden of Malnutrition in Asia and the Pacific: Regional Action for Global Public Goods," Institute of Development Studies, Sussex, 2014.

The drivers of malnutrition translate into a global epidemic. An estimated 165 million, or 26 percent, of the world's children are stunted.¹ Almost 30 percent of the world's population suffers from one or more micronutrient (e.g., iron, iodine, vitamin A, zinc) deficiency. In Southeast Asia alone, one of the regions hardest hit with this health crisis, 65 million people are undernourished—and half the population suffers from the big three: iron deficiency, leading to anemia and slowed development; iodine deficiency, leading to brain damage and cognitive abnormalities; and vitamin A deficiency, resulting in childhood blindness and vulnerability to malaria and other diseases.²

At the same time in the region, 22 percent of men and 28 percent of women over age 20 are overweight or obese.³ As figure 1 illustrates, many Southeast Asian countries have malnourished populations—due both to a lack of nutrients and dangerous overeating of unhealthy diets.

FIGURE 1 Measuring Southeast Asia’s double burden of malnutrition

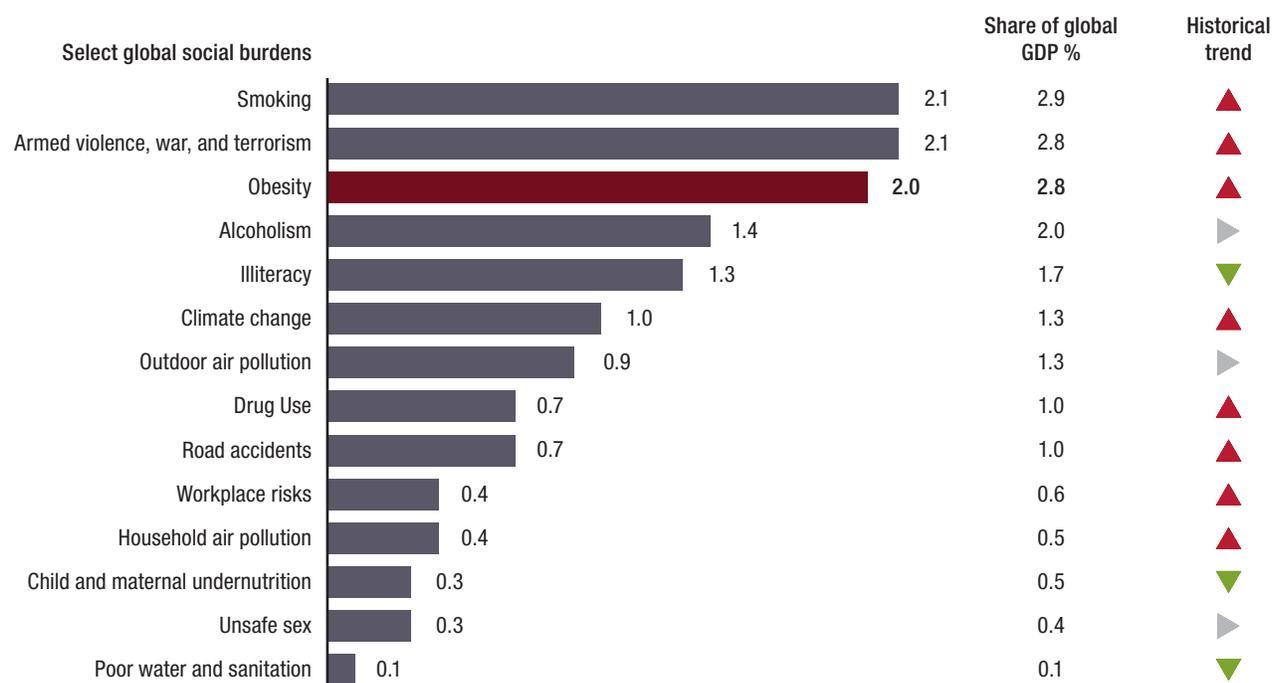


Source: UNICEF State of the World’s Children Report 2012.

Obesity alone has dramatic, long-term impacts on economies; as seen in figure 2, a recent McKinsey study places the global economic impact at somewhere around \$2 trillion per year.⁴ In Southeast Asia, where 41 percent of the world’s overweight and obese children live,⁵ the negative effects of malnutrition can cause communities to languish economically for decades. Health and disease-related costs are already straining national health systems; on a regional level, undernutrition alone reportedly caused a loss of GNP across Asia of up to 11 percent during the period 2000–2009.⁶

FIGURE 2 | The economic burden of obesity

Estimated annual global direct economic impact and investment to mitigate selected global burdens, 2012 GDP, \$ trillion



Source: "Overcoming obesity: An initial economic analysis," McKinsey Global Institute, 2014.

In recent years, various countries' government policies have begun to shift from focusing on food quantities to the provision of nutritious food, in part due to advocacy efforts to improve nutrition awareness. Yet other factors already cited—including higher rates of urbanization, greater rates of female employment, increased discretionary income, and social perceptions—have created greater demand for processed and fast foods, and diets that contain unhealthy levels of sugars and fats.

Interventions to prevent undernutrition often include holistic packages that address the key dimensions of health; they include programs that promote breastfeeding, greater accessibility to essential vitamins and minerals, tobacco cessation, education on hand washing and hygiene, and medical treatments where malnutrition is acute. Intervention programs deal with obesity target education, exercise, portion size, and diet changes, and can include subsidized school meals, standards on calorie and nutrition labeling, restrictions on advertisements for high-calorie foods and drinks, public health campaigns, and community initiatives to encourage group activities and exercise.

Current funding for these programs comes from diverse public and private partnerships and reflects the impacts and challenges of malnutrition across the health, agricultural, sanitation, and infrastructure sectors. That diversity, however, hinders the ability to obtain precise program allocation amounts since budget allocations for nutrition tend to be included, but not noted as line items, in public budgets, and financed through more than one department.⁷ In Thailand, for example, the ministries of public health, agriculture, commerce, and education all allocate funds for programs whose components target malnutrition, as do the Thai Health Promotion Foundation and the National Health Commission.⁸

Aggregating data from various studies provides a snapshot of the funding landscape. In 2010, for example, domestic funding allocations in five South Asian countries to address “basic nutrition” totaled \$1.5 billion; not surprisingly, this supported more programs targeting undernutrition than overnutrition.⁹ Of national spending, some 70 percent came from the private sector.¹⁰ Overseas development aid (ODA) from bilateral and multilateral agencies, such as USAID, the Canadian government, and the World Food Programme (WFP), represents additional capital for these efforts. Over the period 2009–2011, however, “South Asia received only 28 percent of basic nutrition ODA, although it represents 56 percent of the global financial gap” of \$10.3 billion, according to a report by the nonprofit New Venture Fund.¹¹

BARRIERS TO INVESTMENT IN NUTRITION

Lab participants acknowledged the dire need for additional funding for the region, especially for research and development, advocacy programs, and nutrition-specific interventions. Barriers, which are addressed in this section, come under the headings of insufficient funding, inadequate government budgetary documentation, a surfeit of variables, public perceptions and cultural norms, monitoring and evaluation, affordability for consumers, and inadequate structures for public-private partnerships.

BARRIER

1

INSUFFICIENT FUNDING

International donors have not focused on nutrition issues so much as crises of famine and chronic hunger, and their related health consequences. Nutrition funding has mostly been financed from donor government budgets, private foundations and multilateral agencies, or domestically through a country’s agencies and ministries. As noted, the funding stream doesn’t match the need, which is growing exponentially. The Lab participants were hopeful that innovative financing would enable investments from larger groups of stakeholders and provide for more sustainable funding.

BARRIER

2

INADEQUATE GOVERNMENT BUDGETARY DOCUMENTATION

As noted previously, it can be difficult, and sometimes impossible, to calculate line-item funding allocations that target nutrition interventions. For instance, the funding allocation for nutrition research in Malaysia is not available; it is a fraction of the estimated 10 percent overall funding allocated to the general area of “health sciences.” Lab participants agreed that a more specific push toward showing nutrition programs as line items within national and state budgets would provide the kind of documentation and transparency that would reassure investors and donors alike.

BARRIER

3

A SURFEIT OF VARIABLES

Project feasibilities and partnerships often depend on such vagaries as serendipitous timing, matched priorities, success of prior outcomes, or particular interest in a country or localities. As such, it can be frustrating to calibrate the priorities and specifics of various operating environments. To illustrate: a nutrition partnership between the USAID, General Mills, Cargill, and the Dutch-based DSM to support agribusinesses in East Africa came about because there was already abundant funding for nutrition and food security initiatives in the region, and because

East Africa represented a new supply source for the companies whose products would then be sold to USAID beneficiaries. The challenge lies in meeting the right partners, collaborating on a suitable project, and finding ways to structure the project within the parameters of available funding or programs in the pipeline.

BARRIER
4**PUBLIC PERCEPTIONS AND CULTURAL NORMS**

Public investment in advocacy and marketing campaigns is necessary to generate awareness of the health benefits of good nutrition and healthy diets. Simple white rice, for example, is a dietary staple, and generations of families consume the same brand and type of rice. In some areas of Southeast Asia, it may be all children have to eat at mealtime. But rice is low in iron and zinc, as well as vitamins, and without added nutrition, children show levels of stunting and slower mental development. But introducing a fortified or genetically engineered rice has proved to be a challenge on several counts—cultural attitudes toward the food are deeply enmeshed in daily life, and there is opposition to GMO crops.



Because of the generational demand for specific rice brands, nutritionists have moved to fortify flour as well, to ensure absorption of key nutrients and vitamins.

In addition, as happens elsewhere, changes in perception must happen for long-term behavioral changes to succeed. Healthy eating habits, adding micronutrients and vitamins, exercise, recognizing the difference between healthy weight and overweight, especially in small children—all these are interventions that require a general shift in attitude and awareness. Educational efforts are under way to teach communities about the benefits of fortified foods, and to encourage consumers to understand that locally grown products are often superior to the foreign “convenience” products that are now heavily marketed to them. In cases where demand can be strengthened and extended to upper-tier markets, Lab participants agreed that nutritional products need to be marketed to consumers at all income levels to build brand awareness and market interest. For example, enhanced versions of the basic product can be sold to middle markets with sufficient differentiation and product packaging.

BARRIER

5

MONITORING AND EVALUATION

Current stakeholders in the nutrition landscape have vastly different objectives and unique systems for monitoring, reporting, and evaluating their specific programs. Their particular interventions target particular impacts, and while the “proof” of their success is in laborious reporting, even so, they may find it difficult to report how their particular programs have had an exclusive impact on nutrition.

Funders will likely require that programs they invest in adopt well-established and accepted methods for monitoring and evaluation, and that reports capture baseline evidence and narrative at the outset of each project. These methods make it possible to cost exercises and determine local production numbers at the start of a project and strengthen the business case by taking into consideration an assessment of both social and market impacts. But Lab participants acknowledged that the expenditures in time and human resources to create standards for monitoring and evaluation within and across projects may be formidable.

BARRIER

6

AFFORDABILITY FOR CONSUMERS

Physician-prescribed nutritional supplements don’t fall in the same classification as pharmaceuticals, and are rarely reimbursed by national health-care systems or insurers. Patients normally pay out-of-pocket. Because nutritional supplements tend to be costly, they are accessible only to those in the upper-middle-income brackets, but these are not the people who need them. Low-income communities and local migrants to urban centers, despite being in critical need, are generally unable to gain access to nutritional products or healthy food. Furthermore, with the demand stresses on health-care systems and infrastructure, most developing countries have little means to extend medical care to these communities.

Lab participants suggested that one way of improving access to nutritious and affordable food in rural areas or food deserts is by incentivizing small-business entrepreneurs to set up stalls in these areas. Additionally, as industrialization moves into the second- and third-tier cities, food companies that are looking to set up manufacturing plants may see the value of improving nutrition for their own workers, and expanding business opportunities for food distribution channels to rural areas.

BARRIER

7

INADEQUATE STRUCTURES FOR PUBLIC-PRIVATE PARTNERSHIP

Another significant challenge as countries scale up their nutrition programs is the absence of supporting legal structures and frameworks to foster public-private partnerships. Governance and legal mandates often stand in the way of government efforts to encourage partnerships with local industries or support efforts by other agencies, such as the Global Alliance for Improved Nutrition (GAIN) and the World Food Programme, to develop nutritional products.

In Vietnam, micronutrient powder produced by the National Institute of Nutrition, GAIN, and DSM was well received by mothers, but revenue generation became a problem. Vietnam’s national health-care agency, the National Institute of Nutrition, had no mandate to generate or retain revenue from its activities, even though the revenue would help to sustain the collaboration. Likewise, in Pakistan, the government is subject to laws that restrict its ability to purchase products produced overseas, and to complex regulations surrounding the government purchase of local products.

Lab participants agreed that designing legal structures to enable and support sustainable public-private partnerships is a key challenge. Successes in Latin America may hold lessons for Asia. A number of nutrition interventions in the form of school meal programs in Brazil, Colombia, Ecuador, and Chile were backed by strong public investment and have significantly reduced rates of stunting and micronutrient deficiency. The market-based approach adopted by Chile in developing a milk product for expecting mothers may also be instructive. Apart from providing startup capital, the Ministry of Health actively engaged private-sector involvement from the start of the project in the 1990s, and worked with three stakeholders, including DSM, to develop the product. When the milk product Purita Mamá was launched, it was distributed to women for free as part of a national complementary feeding program to address nutritional deficiencies, support fetal development and reduce the risk of premature birth.^{12,13}

BARRIER

8

POLICY UNCERTAINTY AND NEED FOR CONVERGENCE

As members of the Association of Southeast Asian Nations (ASEAN) work toward regional economic integration, there have been efforts to “harmonize” food safety and other regulatory standards among member countries. Progress has been made in several areas, such as “developing guidelines for food hygiene, labeling for pre-packaged goods, and food control systems as well as setting up an ASEAN Food Reference Laboratory,” but differing standards in the use of ingredients and additives, as well as contaminant limits, remain a barrier to the creation of a single market for food products.¹⁴

The ASEAN Food and Beverage Alliance (AFBA) has outlined five priority areas for harmonization: nutrition labeling, pre-market registration (which requires all product information and packaging to be submitted for approval prior to sale as opposed to post-market registration), import-export certification, authorization of food ingredients and additives, and contaminant limits and analytical methods.¹⁵ Lab participants agreed that countries with smaller markets can benefit from exporting locally made products only if trade and non-trade barriers are gradually removed. It will be helpful to build an argument based on health economics and preventive care, and to highlight success stories of countries that drive the good-nutrition agenda from the highest levels of government within a systematic framework.



Innovative Finance Solutions for Addressing Nutrition

After reviewing the barriers, participants discussed potential innovative financing models to attract more capital for much-needed interventions. Below is a prioritized list of the options.

VOLUME GUARANTEES

A volume guarantee is a promise to purchase a specific amount of a product—for example, fortified or ready-to-use food—so that the producer/manufacturer can forecast demand and justify the expense of production. The guarantee addresses two of the biggest challenges of improving access to healthy products: it creates an opportunity to drive private investment toward companies that would otherwise be less profitable, and it helps overcome the uncertainty around local market demand. Volume guarantees have been offered for vaccines, drugs, and nutrition products by donors such as the Gates Foundation and the Clinton Health Access Initiative for Vaccines. However, they have not been used at a large scale in Southeast Asia.

Lab participants agreed that volume guarantees could help drive local production in various Southeast Asian countries. Food companies, on average, have low margins, and when selling to the bottom of the income pyramid, the profit potential shrinks even further. A guaranteed volume at a specified price would mean that producers could generate more attractive profits, which in turn means that they could look to external investors for growth capital to expand their businesses to reach more communities. The challenge of applying a volume guarantee lies in accurately mapping market demand and identifying suitable interventions and marketplaces that will benefit from this type of funding incentive.

TABLE 2 || Vetting a guarantee

Questions to vet a volume guarantee
What types of food, fortified staples, and supplements are children, teenagers and adults in a specific country consuming?
What do women typically eat while pregnant? While nursing?
What are typical breastfeeding practices? What are common reasons for introducing foods/liquids before six months? Common reasons for stopping breastfeeding before 2 years?
What are typical water, sanitation, and hygiene conditions?
What fortified complementary foods are available on the market? What are the costs?
Which local or regional companies are producing high-quality processed foods at medium- to large-scale?
Are any actors in the region—governments, NGOs, companies—purchasing fortified foods for infants and young children and/or pregnant and nursing women?
Are any programs underway in the region to distribute fortified foods for infants and young children and/or pregnant and breastfeeding women? Are any results/learnings available?
What types of social safety net programs are in place through national governments?
What are common staple crops, and how are they typically produced and marketed? (e.g. smallholder farmers, cooperatives, commercial farms?)
Are there policies in place to determine prices for agricultural inputs or energy inputs for production of food products in a specific country?
What types of distribution systems are in place—public or private—that reach rural/remote areas?
What are the common channels for dissemination of health and nutrition information? (e.g. community health workers, NGOs?)

Source: Adapted from the Clinton Health Access Initiative.

It's important to note that volume guarantees do not fix some of the fundamental challenges with the *quality* of locally produced goods, which is often below that of multinational brands. Nor do volume guarantees address the marketing needs that could arise because of this perceived or actual quality differential.

Application to Southeast Asia

In Malaysia, for example, which has high childhood obesity rates, a donor-supported volume guarantee could help fund healthy snack options for children. In Vietnam, a guarantee could support the production of fortified milk or bread products.

SOCIAL IMPACT BONDS

The social impact bond model started in the United Kingdom with a number of charities and foundations committing to help fund service programs trying to prevent reincarceration of short-term prisoners in the communities around the Peterborough prison. Recidivism rates were high, and the cost of reincarceration on society was significant. Using a control group for comparison, the SIB would trigger full repayment to investors if the recidivism rate dropped in a given period to a given percent; slower rates would mean a slower repayment, with the government (the Ministry of Justice) responsible for repayment.¹⁶ In a SIB, the outcome payer, often a government agency, creates a contract with investors to “pay for performance.” Investors would provide the upfront capital to pay for a specified intervention whose purpose is to result in cost savings to the public; if the intervention was successful, the agency would repay the investors their principal and some type of return. However, if the program wasn't successful, the government wouldn't pay, or wouldn't pay in full, and therefore the risk would be spread between the government and the investors.

This model has been used in various regions and sectors, from health care in California and rain forests in Southeast Asia to education in the Middle East. However, there has yet to be a model implemented for nutrition in Southeast Asia. Lab participants discussed the challenges of a SIB nutrition model. First is the need to measure and quantify success; it must be possible to demonstrate the strong causal relationship between the intervention and the cost-savings to the outcome payer. Participants agreed that this would be a difficult component of the structure when addressing either undernutrition or obesity—reduction of stunting or diabetes, for example, requires multiple inputs, and one intervention would be difficult to document as the key to prevention. A community could see lower rates of wasting, but the causes could be multiple, from better education and school meal programs to better sanitation and even improved roadways. Very few nutrition interventions have measurable direct outcomes. The SIB model could perhaps be used, however, to scale up existing intervention programs.

Application to Southeast Asia

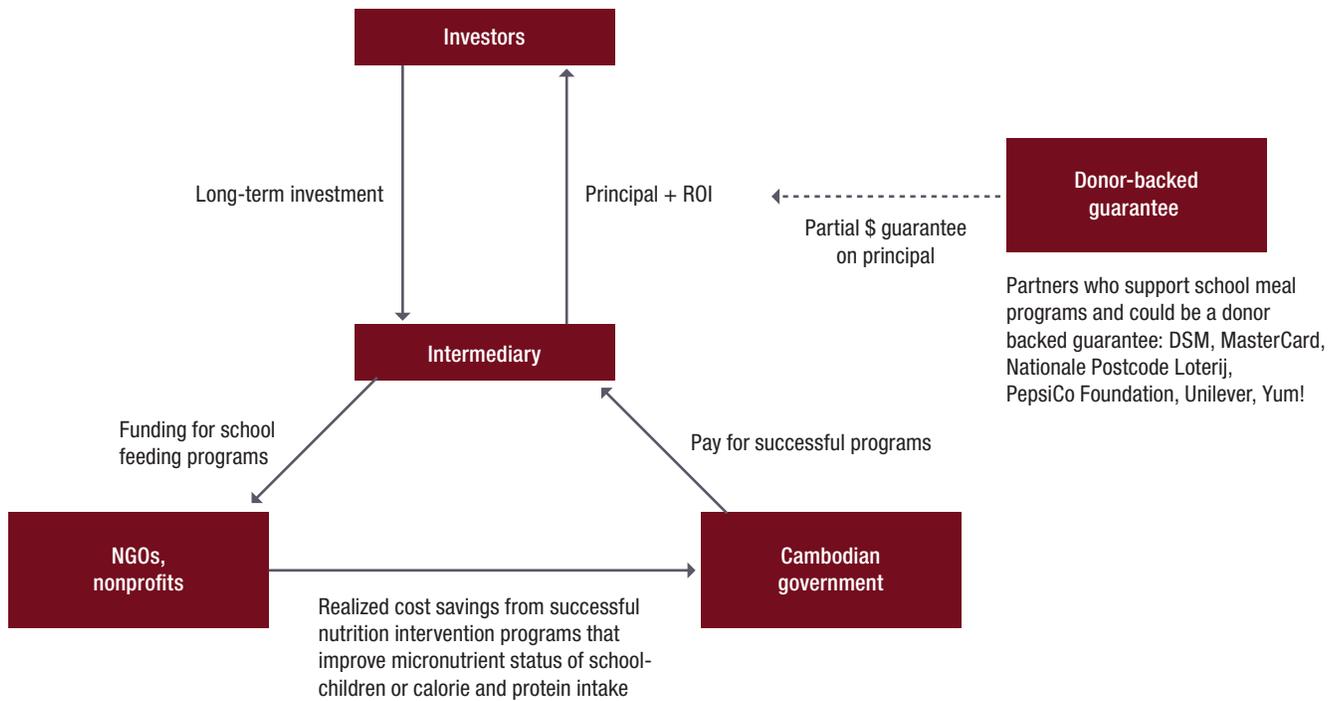
One suggestion coming from the Lab discussion is a SIB to support school meal programs in Cambodia. The World Food Programme has introduced initiatives, from providing fortified food to deworming regimes, in many communities. These programs currently reach almost 250,000 students. On top of that, the program offers take-home rations, so that children can eat a healthy meal when they get home and provide one for their family. WFP partners with the Cambodian government, NGOs, and banks to provide the necessary resources.

Lab participants discussed the possibility of expanding this program with a SIB, keeping key components, including the take-home rations and access to clean water, to improve not only the students' nutritional intake but also that of the broader community. Currently there is no long-term funding for the program; a SIB could add much-needed, long-term support. In its favor as well, the program has already produced data on the impact on students' cognitive abilities, school retention rates, and graduation successes. A next step would be to translate this information into cost savings for the government.

Lab participants debated possible metrics for judging success for such a SIB. These include: number of children fed, rations and deworming tablets distributed, schools reached, improved micronutrient status of schoolchildren, improved micronutrient status of students’ families, improved calorie and protein intakes, increased enrollment and attendance, and improved child cognition.

As seen in figure 3, the SIB could create a contract between the Cambodian government and investors so that funding would flow to the NGOs and then back to the investors, should the programs be successful. One additional feature is a donor-backed guarantee. Some recent SIB models in the United States have used this added level of protection to attract investors.

FIGURE 3 || A social impact bond for school feeding



Source: Milken Institute.

Another option discussed during a follow-up working session could be improved nutrition programs in hospitals, as it’s been proven that nutritious meals and supplements can help to reduce the number of nights of a patient’s stay and prevent readmission.¹⁷ One participant suggested that a social impact bond model could be used in Singapore, with strong economics of cost of average hospital stays per person. The cost savings to a hospital or insurer could then be the basis of the bond structure.

SME INVESTMENT FUNDS

Investment funds that target small- to medium-sized enterprises (SMEs) have been successful in emerging markets. For industries such as agriculture and technology, investment funds seeded by institutional investors, development finance institutions, and banks have provided capital to facilitate growth for companies and generate returns for investors. While perhaps not as lucrative as investment funds allocating specifically to developed markets, SME funds can also help to promote economic growth.

Lab participants discussed how investment funds for SMEs could benefit nutrition programs in Southeast Asia. They recognized that because the funds are profit-seeking, they cannot target nonprofits or NGOs, and it is unclear how many for-profit companies (and their size, scope, and market potential) are working to address malnutrition. Many of these are likely social enterprises, companies that have both a financial and social mission. For example, a local production company in Vietnam that produces fortified porridge has a social mission to improve nutrition—but also sells the product for a profit.

There are still many challenges after identifying for-profit companies that could accept investment capital. As previously mentioned, local production of micronutrients and ready-to-use foods can be costly, and the lack of perceived volume or scale-up potential may deter investors.

This leads to an undeveloped pipeline of potential portfolio companies. Any SME investment fund, then, would have difficulty disbursing funds without enough options to invest in. Often donors complement investment activities of SME funds by creating pools of capital that help provide technical assistance, from financial training to building a business plan, to prepare social entrepreneurs or small businesses for future financing opportunities. Such programs, incubators or accelerators, can be effective in building pipeline and creating businesses that have potential to scale to a level that would be more attractive to market-rate investors. In Asia, the Impact Investment Exchange has created an accelerator for social enterprises in the Philippines, providing training and mentorship, as well as \$20,000 in seed investment.¹⁸

Not all incubators are created equal. In a recent study by Emory University, entrepreneurs ranked the most important programmatic elements to ensure success. As seen in table 3, these included networking opportunities with potential funders, access to capital, and mentorship. Consequently, workshop participants agreed that any new incubator created to bolster the pipeline of nutrition projects in Asia would have to have a strong focus on acquiring new financing.

TABLE 3 || Benefits of incubators

Potential benefit	Average rank (lower = more important)
Access and connections to potential investors/funders	3.38
Network development (e.g., with potential partners and customers)	3.40
Securing direct venture funding (e.g., grants or investments)	3.43
Mentorship from business experts	3.50
Business skills development (e.g., finance and marketing skills)	4.00
Awareness and credibility (e.g., association with a recognized program, press/media exposure)	4.89
Gaining access to a group of like-minded entrepreneurs	4.92

Source: “The Entrepreneurship Database program at Emory University: 2015 Mid-Year Data Summary.”

Once there is a more robust pipeline, a new investment fund could be structured. SME funds can be pure equity looking for returns based on owning shares of the company; they may take the form of a debt fund that issues loans to a company; or they could be a hybrid offering both positions. The fund could be structured to include a guarantee or first-loss fund, to protect investors' capital, as with the social impact bond. This has proved effective in other regions and sectors to attract investors to seed the fund who would normally perceive the investment as too risky.

One example of a fund investing in nutrition is the California FreshWorks Fund. The \$264-million loan fund provides capital to small businesses and grocery stores that operate in "food deserts," that is, geographic areas lacking access to healthy and affordable foods. The fund was capitalized by foundations, impact investors, and commercial banks.¹⁹ It also makes small grants on a case-by-case basis, but the funding is predominately disbursed in the form of low-cost loans. After repayment, the funds can be recycled to support new companies.

Application to Southeast Asia

Participants agreed that to bring an SME investment fund for nutrition to Asia, there would first have to be an incubator or accelerator created alongside. Workshop participants discussed the criteria needed to vet potential entrepreneurs and small-business owners who would qualify for such a mentoring and networking program.

Key criteria for selecting the potential beneficiaries of the nutrition accelerator could include:

- Addresses a challenge with delivering nutrition programs in Southeast Asia
- Compelling value proposition
- Competitive landscape
- Financial viability/sustainability
- Market opportunity and potential
- Social/environmental impact
- Strength of the management team

An Asia-specific nutrition investment fund could be created to support companies working on overcoming malnutrition. One potential structure could be a debt fund, similar to the California FreshWorks Fund, for a specific country to address healthful food access. It could provide financing for local grocery stores and food producers to expand their products to include fruits, vegetables, and healthy proteins. Another potential structure could be a fund addressing undernutrition across countries; it could invest in social enterprises that produce micronutrients or other food products geared toward overcoming nutrient deficiencies.



Conclusion

Malnutrition is a serious issue in Southeast Asia, not only for the health of families and local communities, but for the region's sustained economic growth. Having a double burden of underweight and obese populations can affect the region for decades to come. And while proven interventions could address both undernutrition and obesity, more funding is needed to scale up these programs—to the tune of nearly \$6 billion a year.

How will this funding gap be filled? It will take a partnership between the public and private sectors to complement traditional funding mechanisms for nutrition. Whether a social impact bond, a volume guarantee, or an investment fund, new financing solutions are needed. These will channel more capital for high-impact interventions that will reach more people and reverse the effects of malnutrition.

What is needed now is the political will to push these solutions forward.



APPENDIX

Financial Innovations Lab Participants

(Affiliations at time of Lab)

Michel Anglade
Save the Children
 Campaigns and Advocacy Director, Asia

Heng Wing Chan
Milken Institute
 Chairman, Asia Center

Belinda Chng
Milken Institute
 Associate Director, Innovative Finance
 and Program Development

Joshua Chu
Clinton Health Access Initiative
 Senior Regional Program Director

Laura Deal Lacey
Milken Institute
 Managing Director, Asia Center

Yannick Foing
DSM Nutritional Products
 Regional Nutrition Improvement Program Manager

Mathilde Forslund
World Vision, One Goal
 Campaign and Advocacy Director

Stefan Germann
World Vision
 Director

Ralph Graichen
*A*STAR*
 Director, Food and Nutrition

Jeremy Lim
Oliver Wyman
 Partner and Head of Health and Life Sciences Asia Pacific

Caitlin MacLean
Milken Institute
 Director, Innovative Finance

Regina Moench-Pfanner
Global Alliance for Improved Nutrition
 Director

Mohd Ismail Noor
Taylor's University Malaysia
 Emeritus Professor in Nutrition

Jennifer Rosenzweig
World Food Programme
 Regional Nutrition Specialist

Nassia Shams
Milken Institute Asia Center
 Manager, Operations and Administration

Marianne Smallwood
USAID
 Regional Partnerships Builder

Eline Van Der Beek
Nutricia Research, Danone Nutricia Early Life Nutrition
 Early Development Science, Research Director

Yee Ting Wong
Food Industry Asia
 Head of Nutrition, Innovation and Partnerships

ENDNOTES

1. <http://www.fao.org/docrep/meeting/030/mj302e.pdf>
2. FAO, 2013.
3. Ng, et al., “Global, regional, and national prevalence of overweight and obesity in children and adults during 1980–2013: A systematic analysis for the Global Burden of Disease Study 2013,” *The Lancet*, Volume 384, August 30, 2014.
4. Dobbs, et al., “Overcoming obesity: An initial economic analysis.” McKinsey Global Institute: November 2014.
5. Ibid.
6. Horton, Sue and Richard Steckel, “Malnutrition Global economic losses attributable to malnutrition 1900– 2000 and projections to 2050,” 2011.
7. Di Ciommo, Mariella, “The Aid Financing Landscape for Nutrition,” Development Initiatives: April 2013.
8. “Nutrition Impact of Agriculture and Food Systems Thailand,” United Nations, p. 50, August 2013.
9. Di Ciommo, Mariella, “The Aid Financing Landscape for Nutrition,” Development Initiatives: April 2013.
10. Ibid.
11. Ibid.
12. http://www.dsm.com/products/nip/en_US/productsservices/productsservices-tailoredsolutions.html
13. Lab participant, Financial Innovation Lab on “Innovative Finance to Address Nutrition in Southeast Asia,” Milken Institute: June 2015
14. <http://foodindustry.asia/food-industry-calls-on-asean-leaders-to-accelerate-harmonisation>
15. “White paper: ASEAN Harmonisation in the Food Sector,” ASEAN Food and Beverage Alliance, 2014. <http://afba.co/wp-content/uploads/2014/01/AFBA-White-Paper.pdf>
16. “The Success of the Peterborough Impact Bond,” Brinda Ganguly, The Rockefeller Foundation. See: www.rockefellerfoundation.org/blog/success-peterborough-social-impact/. Accessed October 14, 2015.
17. Lakdawalla D, Snider J, Perloth D, LaVallee C, Linthicum M, Philipson T., “Oral nutrition supplements’ impact on hospital outcomes in the context of the Affordable Care Act and new Medicare reimbursement policies.” The 35th Annual Meeting of the Society for Medical Decision Making, pages 1–29, <https://smdm.confex.com/smdm/2013md/webprogram/Paper7814.html>. Accessed October 14, 2015.
18. “Impact Accelerator,” Impact Investing Exchange of Asia, <http://www.asiaiiix.com/impact-accelerator/>. Accessed on December 7, 2015.
19. http://cafreshworks.com/wp-content/uploads/2014/01/CFWF_FAQ_9.pdf



MILKEN INSTITUTE

1250 Fourth Street
Santa Monica, CA 90401
Phone: 310-570-4600

1101 New York Avenue NW, Suite 620
Washington, DC 20005
Phone: 202-336-8930

137 Market Street #10-02
Singapore 048943
Phone: 65-9457-0212

E-mail: info@milkeninstitute.org • www.milkeninstitute.org