



Putting enough food on the table is a constant struggle for many BOP households. Purchasing food takes more than half of BOP household budgets in many countries, especially in Africa and Asia. In Nigeria, food accounts for 52% of BOP household spending—in rural Pakistan, 55%. As incomes rise, the share of household spending on food declines. Food nevertheless represents the largest share of BOP household spending and the largest BOP market.

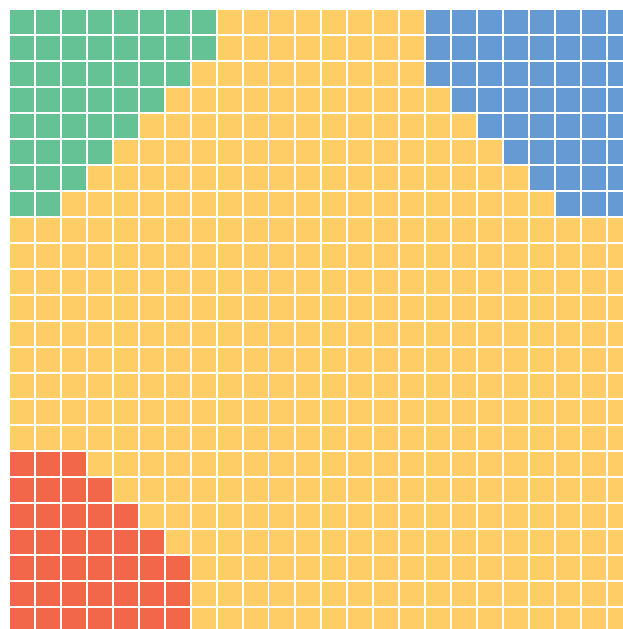
Improving distribution to expand access to food and providing better food products, including more nutritional ones, are clearly significant business opportunities—as well as investments that could benefit the BOP. Opportunities also exist in agriculture, an essential part of the food value chain and a major source of employment and income for the BOP.

How large is the market?

The measured BOP food market in Africa (12 countries), Asia (9), Eastern Europe (6), and Latin American and the Caribbean (9) is \$1.53 trillion. This represents annual household spending on food by 2.16 billion people in the 36 low- and middle-income countries for which standardized data are available. The total BOP household food market in these four regions, including all surveyed countries, is estimated to be \$2.89 trillion, accounting for the spending of 3.96 billion people (see box 1.5 in chapter 1 for the estimation method).¹

Asia has the largest measured regional BOP food market, \$1.1 trillion, reflecting a large BOP population (1.49 billion). The total BOP food market in Asia (including the Middle East) is es-

BOP spending on food
\$2,894 billion



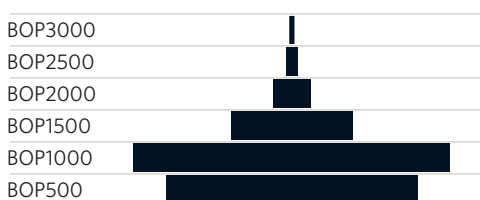
	\$ billions (PPP)
Africa	215
Asia	2,236
Eastern Europe	244
Latin America	199

Each square represents approximately \$5 billion

In 17 countries in Africa and Asia, the bottom three BOP income segments account for more than 50% of measured national food spending.

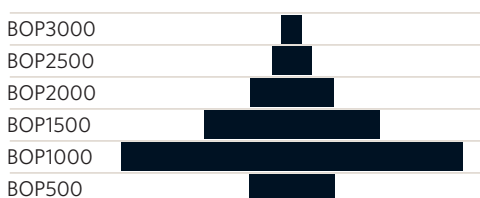
Nigeria

TOTAL FOOD SPENDING BY INCOME SEGMENT



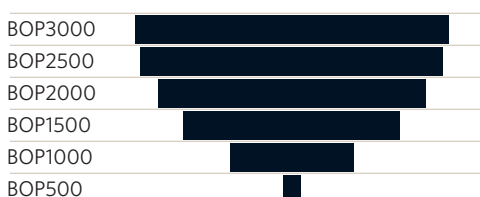
Indonesia

TOTAL FOOD SPENDING BY INCOME SEGMENT



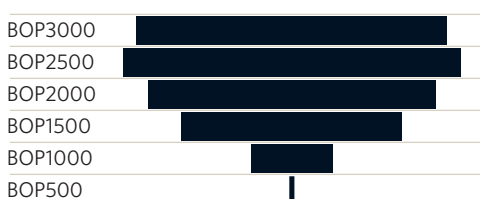
Colombia

TOTAL FOOD SPENDING BY INCOME SEGMENT



FYR Macedonia

TOTAL FOOD SPENDING BY INCOME SEGMENT



estimated to be \$2.24 trillion, accounting for the spending of 2.9 billion people. Latin America follows, with a measured BOP food market of \$167 billion (275.8 million people) and an estimated total BOP food market of \$199.4 billion (360 million people). Eastern Europe has recorded BOP food spending of \$137 billion (147.8 million people) and estimated total BOP spending of \$244.0 billion (254 million people). Africa's measured BOP food market is \$97.0 billion (253.3 million people), and its estimated total market \$215.1 billion (486 million people).

Asia also has the largest BOP share of the measured food market, at 89%. Africa follows with 80%. Latin America has a markedly smaller BOP share, at 51%—as does Eastern Europe, at 50%.

In national food markets the BOP share is consistently high across measured countries in Asia. Bangladesh, Indonesia, Pakistan, and Tajikistan all have BOP shares exceeding 95%. Thailand, with 67%, is the only country with a BOP share less than 80%. In Africa the extremes at the high end are Nigeria (99%), Sierra Leone (97%), and Burkina Faso (96%)—and at the low end, South Africa (46%). In Eastern Europe, Uzbekistan (99%) marks the high extreme—and Russia (41%), FYR Macedonia (42%), and Ukraine (44%) the low. In Latin America the extremes are Peru (78%) and Colombia (33%).

How is the market segmented?

Bottom-heavy BOP food markets—in which the bottom three BOP income segments outspend the top three—occur in 24 of the 30 countries measured in Africa, Asia, and Latin America. These countries with bottom-heavy BOP markets often also have a national market dominated by the BOP.

Indeed, in 17 of the 18 countries in Africa and Asia with bottom-heavy BOP food markets, the bottom three BOP income segments account for more than 50% of measured national food spending. The bottom two BOP groups alone account for more than 50% of national food spending in 8 of these countries in Africa (Burkina Faso, Burundi, Cameroon, Côte d'Ivoire, Malawi, Nigeria, Rwanda, and Sierra Leone) and 5 in Asia (Bangladesh, Indonesia, Nepal, Pakistan, and Tajikistan). Only one country in Eastern Europe (Uzbekistan) shows this concentration, and none in Latin America.



In Latin America five of the nine measured BOP food markets are bottom heavy, and in each case the BOP accounts for more than 50% of measured national food spending. In four countries (Guatemala, Honduras, Jamaica, and Peru) three middle BOP income segments (BOP1000–2000) account for more than 50% of national food spending.

Top-heavy BOP food markets—in which the top three BOP income segments outspend the bottom three—occur in four of the measured countries in Latin America (Brazil, Colombia, Mexico, and Paraguay) and five of the six measured in Eastern Europe (Belarus, Kazakhstan, FYR Macedonia, Russia, and Ukraine). In six of the countries with top-heavy BOP markets, the mid-market segment dominates the national market, accounting for more than 50% of total spending on food.

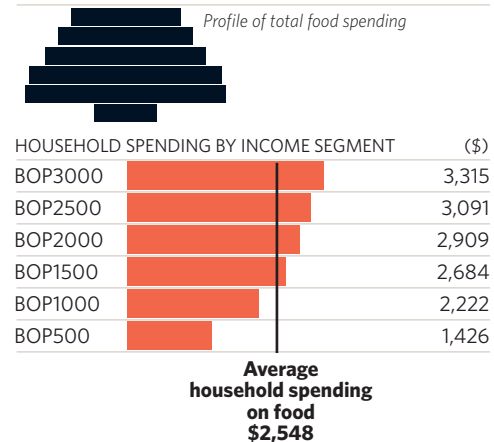
What do households spend?

Average annual food spending per household in the BOP varies across measured countries. The median value among these averages by region may be the most useful indicator: in Africa, \$2,087 (Cameroon) and \$2,548 (South Africa); in Asia, \$2,643 (Pakistan); in Eastern Europe, \$3,687 (Kazakhstan) and \$3,744 (Uzbekistan); and in Latin America, \$3,050 (Peru).

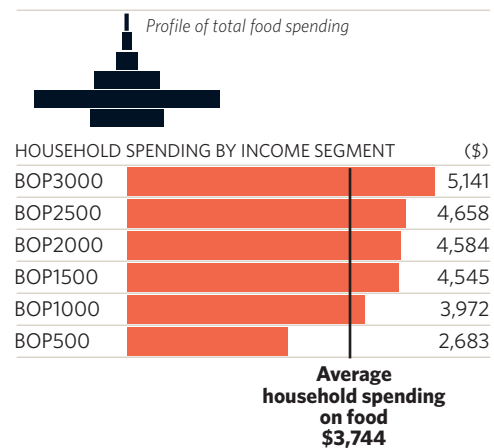
Household spending on food increases less rapidly than income. Or put another way, the share of the household budget devoted to food declines as household income rises. This can be seen by comparing measured annual food spending by BOP3000 and BOP500 households in the countries above. While BOP3000 households have 6 times as much income on average, they outspend BOP500 households in the food market by a ratio of only 2:1 in Cameroon, 2.3:1 in South Africa and Pakistan, 2.4:1 in Kazakhstan, 1.9:1 in Uzbekistan, and 3:1 in Peru.

This pattern probably reflects the simple fact that even in the lowest segments of the BOP, households must spend a minimum amount to ensure survival. Business strategies that can deliver more value for these minimum food expenditures accordingly can create significant market value—for BOP consumers and for the company (case study 8.1).

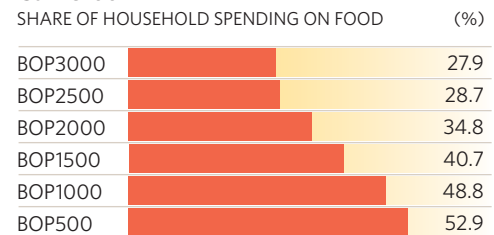
South Africa



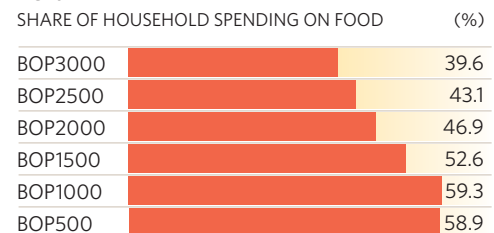
Uzbekistan



Cameroon



Peru



CASE STUDY 8.1 HEALTHIER FOOD: MAKING MORE OF LESS FOR BOP MARKETS

Making “more of less” is critical to health in the BOP. Recognizing this, private enterprises are working to find ways to help meet the nutritional needs of low-income populations. One effort has focused on insufficient dietary iodine, a leading cause of mental retardation in India. More than 70 million people in India, and 200 million globally, suffer from iodine deficiency disorder. In the developed world most salt is fortified with iodine and everyone can afford it. But in India only 20% is iodized, and this salt is priced higher than noniodized salt, putting it out of reach for many in the BOP. Moreover, climate conditions, storage practices, and traditional cooking methods in India tend to eliminate the iodine from the salt.

Hindustan Lever Limited (HLL), an Indian division of consumer giant Unilever, tackled this problem. Putting modern science and technology to work, it developed a method for producing iodized salt that would remain stable under any conditions in India—yet still be affordable to the BOP (Rajendra and Shah 2005). Its new Annapurna brand salt is profitable—and the success in India has led to initiatives in other Unilever markets. Among these are Côte d'Ivoire, Ghana, Kenya, and Nigeria, where the product has been adapted to incorporate other essential nutrients.²

The Bangladesh microfinance institution Grameen Bank and the French multinational Groupe Danone have partnered, in a 50:50 joint venture, to produce low-cost, high-nutrient yogurt products targeted to the BOP consumer market. What makes the model interesting is that it also focuses on BOP producers and distributors. Grameen Danone Foods will source the milk from hundreds of microfarmers, who typically own one or two cows purchased with a microloan. And it will sell the yogurt through a network of stands and food kiosks operated by microentrepreneurs. Each serving of yogurt contains three times as many nutrients as the competition, costs less than US\$0.07, and comes in a 100 percent biodegradable cup.

Still another initiative has developed a cheap source of protein. The idea got its genesis when Hector Gonzales, the founder of Cuadritos, a successful milk, cheese, and yogurt company in Mexico, established a food bank in that country. In less than two years, by harnessing efficient logistics with corporate donations, the food bank grew to feed 100,000 people a day. As Gonzales saw that thousands of tons of food were discarded daily, simply because they had not sold by their “best used by” date, he developed a technology to reprocess the protein from milk, yogurt, and vegetables. Turned into a powder, the reprocessed protein can be added to a variety of foodstuffs, such as dairy and soy milks and cookies and other baked goods (New Ventures 2006). Nutrient recycling may be the 21st-century version of the pulp and aluminum recycling of the late 20th century—profitable and beneficial.

Both of these enterprises, in innovating to address the unique conditions of the markets they encountered, illustrate a strategy of **focusing on the BOP**.

Where is the market?

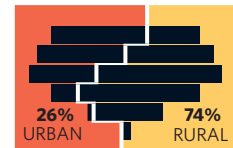
The distribution of BOP food spending between urban and rural areas closely tracks the distribution of the BOP population. In Africa, where measured BOP spending on food is \$97.0 billion, the BOP food market is predominantly rural in 9 of 12 countries (Djibouti, Gabon, and South Africa are the urban-tilting exceptions). Across these 12 countries the rural market is 1.6 times as large as the urban one. Significant malnutrition in the region underscores the need to improve farmers' productivity and strengthen food supply chains (case study 8.2).

Asia has similarly rural-skewed BOP food spending. At \$811 billion, the region's measured rural BOP food market is 2.5 times the size of the urban market; only Indonesia has an urban market larger than the rural one. The dominance of rural markets stems from the dominance of the rural BOP population: in Asia rural BOP households outnumber urban ones by a ratio of almost 3:1. The large size of rural food markets underscores the importance of distribution strategies that can efficiently reach rural BOP households—like those being developed in India by Hindustan Lever Limited. For this company, rural BOP markets have also become a source of bottom-up learning (case study 8.3).

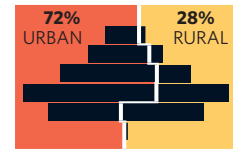
In Eastern Europe and Latin America BOP food markets are predominantly urban in 11 of 15 countries. In Latin America the measured urban BOP food market is \$106 billion, 2.4



India



Mexico



Total BOP food spending by income segment, urban and rural

times the size of the rural market. Only three countries in the region—Guatemala, Jamaica, and Paraguay—record a rural-tilted BOP food market.

Despite the mostly larger rural food markets, on average urban BOP households spend more on food than rural ones in 30 of the 36 measured countries (the exceptions are Brazil, Jamaica, Kazakhstan, Tajikistan, Ukraine, and Uzbekistan). The difference is smaller in total household spending. In Côte d’Ivoire, Nigeria, Pakistan, and Thailand, for example, the difference between urban and rural areas in BOP household spending on food is less than 10%, while the difference in spending in all markets is at least 33%.

What does the BOP buy?

In the developing world, particularly for the BOP, food is more a local than a global business. Favored foodstuffs reflect the local climate, geography, and traditions. So it is not surprising to find in household survey data—as for Brazil—that BOP spending patterns on food do not differ appreciably from those of the mid-market segment, either in the types of foods purchased

CASE STUDY 8.2

PUMPING UP PRODUCTIVITY: NEW WATER PUMPS FOR BOP FARMERS

BOP farmers can play an important part in local or even international food value chains, and innovations that improve their productivity also increase their incomes. With this in mind, the NGO International Development Enterprises has developed a family of step-action foot pumps for agricultural use, all of which can be locally manufactured from locally available metal and wood materials.³ Since these basic pumps were introduced in 1985, more than 2 million have been installed worldwide. Different designs allow the use of different water sources—from rivers and other surface water to boreholes and other groundwater sources.

Another NGO, KickStart, has focused on developing appropriate technologies for African entrepreneurs that can be fully market driven, creating enterprises at every level of the value chain from manufacture to distribution, retailing, and end use by farmers.⁴ KickStart’s “MoneyMaker” line of pumps—ranging from simple treadle to more complex suction-pressure pumps—are in wide use, mostly in East Africa (John Deere 2005).⁵

These enterprises, producing meaningful innovations in response to BOP needs, exemplify a strategy of **focusing on the BOP.**

The large size of rural food markets underscores the importance of distribution strategies that can efficiently reach rural BOP households

FOOD CASE STUDY 8.3 REACHING THE BOP INNOVATIONS IN DISTRIBUTION

Some of the BOP penalty can be ascribed to the difficulties and added cost of distribution in low-income communities, whether urban neighborhoods or rural villages. Many companies are finding innovative new ways to reach BOP customers, as examples in the health and financial services markets show. What is true in these markets is also true in those for fast-moving consumer goods, consumer durables, and food: future growth will come largely from the BOP.

Convinced of this, Hindustan Lever Limited tries every angle to reach the BOP.⁶ It requires new managers to spend six to eight weeks in a rural village, learning from BOP customers, as part of their training. To make products accessible—key in reaching the BOP market—HLL uses “sachet” packaging. Low-priced, single-serving sachets account for 55% of its shampoo sales (Balu 2001). HLL also uses unconventional marketing to reach the BOP. Fairs, festivals, and traveling cinema vans have all become important parts of its consumer outreach, combining entertainment with health and hygiene education.

Through innovations in distribution, HLL has reached deeper and deeper into rural markets. It has set up distribution networks that carry its products to the most remote villages by whatever means required—motorbike, bicycle, oxcart—and has also employed direct sales agents.

The approach builds brand loyalty at the same time that it creates employment—and exemplifies the business strategy of **enabling access**.

or in the allocation of spending among these types.

Still, survey data for Brazil do reveal differences. Two categories of food purchases that appear in the top 10 for the BOP do not show up in the top 10 for the mid-market segment: “other cereals, flours” and “sugar.” Similarly, two categories in the top 10 for the mid-market segment—“mineral waters and soft drinks” and “fresh or chilled fruits”—rank only 14 and 15 for the BOP. It can be surmised that the calorie-rich carbohydrates of cereals and sugars are simply more important in the basic diets of people with lower incomes—and that fresh fruit and bottled beverages are more affordable alternatives for those with higher incomes.

Spending per household differs significantly, of course. Brazilian households in the bottom three BOP segments (BOP500–1500) spend an average of \$1,332 a year on food, while those in the mid-market segment spend an average of \$3,487. Even so, the difference is smaller than might be expected. The income ratio between mid-market households (median income \$12,000) and BOP1000 households is 12:1, yet the ratio of average household food spending for these two groups is only 3:1. This is consistent with the finding from household survey data that the share of food in household spending steadily declines as incomes rise—and does so in all income groups.

Brazil

	SHARE OF HOUSEHOLD SPENDING ON FOOD (%)
BOP3000	25
BOP2500	28
BOP2000	29
BOP1500	33
BOP1000	37
BOP500	37



The ratio of household food spending between the mid-market segment and the BOP1000 segment is consistent with the finding that the share of food in household spending steadily declines as incomes rise—and does so in all income segments.

Endnotes

1. Reported household expenditures in a given country should be regarded as a minimum estimate of actual expenditures, because surveys may not have collected information on all types of food-related spending.
2. Janet Roberts, “Project Shakti: Growing the Market While Changing Lives,” Case Weatherhead School of Management, <http://worldbenefit.cwru.edu/inquiry/featureShakti.cfm> (accessed January 9, 2007).
3. International Development Enterprises, “Homepage,” <http://www.ideorg.org/> (accessed January 9, 2007).
4. KickStart, “KickStart: The Tools to End Poverty,” <http://www.kickstart.org/> (accessed January 9, 2007).
5. KickStart, “25 Entrepreneurs Who Are Changing the World: KickStart,” FastCompany.com, <http://www.fastcompany.com/social/2006/statements/kickstart.html> (accessed January 9, 2007).
6. Hindustan Lever Limited, “Creating Markets: Delighting Customers Everywhere,” http://www.hll.com/brands/creating_markets.asp (accessed January 9, 2007).