

## **Demographic Trends: Implications for Future Food Demand**

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## Introduction

Globally, demographic trends are driving shifts in demand for agricultural commodities and food products. Without a doubt, the most dramatic demographic changes affecting food demand are taking place in developing and emerging economies, particularly in highly populated countries across Asia (USDA, 2015).

Population growth, rapid urbanization, increasing disposable incomes and significant development of a large “consuming” middle-class offer significant opportunities for the United States’ agricultural and food sector. This paper aims to discuss each of the inter-related global demographic trends in detail, highlighting their likely impact on demand-side market dynamics and implications for food system participants.

## Global Population Growth

The global population in 2015 is estimated to be 7.35 billion people. The largest share of the population, approximately 60%, lives in Asia. China and India account for 37% (19% and 18%, respectively) of the global population. Africa, with 16% of the global population is the next most populous region, followed by Europe (10%), Latin America and the Caribbean (9%), North America (5%) and Oceania (0.5%) (United Nations, 2015b).

The 2015 “United Nations World Population Prospects” report forecasts the global population to grow by 16% over the next 15 years (2015 to 2030), and to increase 32% over the next 45 years (2015 to 2050). Total world population is projected to reach 9.7 billion people by 2050 (United Nations, 2015b). This growth means that there will be approximately 1.2 billion more mouths to feed in 2030 and 2.4 billion more by 2050. Thus, total demand for food will inevitably increase over the next several decades as well.

However, *how* and *where* food demand will increase depends on the other simultaneous market dynamics. The aim of this section is to focus on global population growth rates and the expected population growth for each region over the next several decades. This information will provide insight on relative changes in food demand from one region to the next from 2015 to 2050.

Although total population is growing in most regions of the world, population growth rates in both developed and developing countries are expected to slow down over the next twenty to thirty years. Global population growth rates are expected to average 1.0% per annum for the next decade (2015 to 2024), which is slightly lower than the global population growth rate of 1.2%, which took place from 2001 to 2010 (USDA, 2015). The decline is partially due to increased economic development, which will be discussed in a later section.

Generally speaking the growth rates of developing countries will exceed those of the developed world and the share of total population in developing countries is expected to reach 83% by 2024 (compared to 79% in 2000) (USDA, 2015).

The largest population growth rates are expected in Africa where total population is expected to increase by 42% over the next 15 years and more than double by 2050 (Table 1). Although the total population of Africa is increasing in size, like the rest of the world, population growth rates in Africa are also expected to decline annually from 2015 to 2024. For example, the population growth rate for Sub-Saharan Africa is expected to decline from 2.6% (1991-

2000) to 2.3% for 2015 to 2024.

Africa's rate of growth is still considered to be large relative to other regions in the world (USDA, 2015). For example, China's population growth rate from 2015 to 2024 is expected to average only 0.3%, which is less than the projected global average growth rate of 1.0%, as well as growth rates for the United States (0.7% per year), India (1.1% per year) and Indonesia (0.8% per year) over the same time period.

**TABLE 1. World Population by Region, 2015 to 2030 (Medium-Variant Projections)**

| Major area                | Population (Millions) |      |      | % Change    |             |
|---------------------------|-----------------------|------|------|-------------|-------------|
|                           | 2015                  | 2030 | 2050 | 2015 - 2030 | 2015 - 2050 |
| World                     | 7349                  | 8501 | 9725 | 15.7%       | 32.3%       |
| Africa                    | 1186                  | 1679 | 2478 | 41.6%       | 108.9%      |
| Asia                      | 4393                  | 4923 | 5267 | 12.1%       | 19.9%       |
| Europe                    | 738                   | 734  | 707  | -0.5%       | -4.2%       |
| Latin America & Caribbean | 634                   | 721  | 784  | 13.7%       | 23.7%       |
| Northern America          | 358                   | 396  | 433  | 10.6%       | 20.9%       |
| Oceania                   | 39                    | 47   | 57   | 20.5%       | 46.2%       |

Source: United Nations, Department of Economic and Social Affairs, Population Division (2015b).

Moving forward to 2050, the largest share of the global population is expected to remain in Asia. However, differences in regional population growth rates mean that the relative share of the population in China, India and Africa will shift, particularly over the next 15 years. The United Nations (2015b) estimates that the population of India will overtake that of China (approximately 1.4 billion) by 2022.

Interestingly, Nigeria, which is currently the seventh largest population in the world, is projected to become the third-most populated country in the world by 2050 (United Nations, 2015b). Clearly population growth throughout Asia and Africa will continue to have important implications for agricultural and food demand, particularly considering that many countries in these regions currently struggle with food security and are not food self-sufficient. International trade of agricultural commodities and food products will be increasingly important to ensure food demand is met with adequate supplies of high quality and safe food.

If all other market forces were constant, as the global population increases then demand for all agricultural and food products would increase proportionally. However, other market forces (e.g. urbanization and economic growth) are also dynamic, and additionally, population growth rates are not consistent across the globe. The following sections discuss simultaneous changes in urbanization and economic development, which are taking place across the world.

## Urbanization

Urbanization is another major force significantly affecting global demand for food. As economies urbanize, fewer people are directly involved in agricultural production.

Individuals, and even entire households exit agriculture and shift from rural areas to cities in order to take advantage of opportunities for higher wages. As the labor force urbanizes, it typically becomes more productive as a result of higher wage rates. Eventually, disposable household incomes increase, as does real GDP and purchasing power parity. This allows an increasing number of households to make discretionary purchases.

Urbanization usually also leads to an increasing number of women in the workforce, and households have less time for domestic duties such as cooking and demand increases for convenience food products (e.g. products that require less time to prepare).

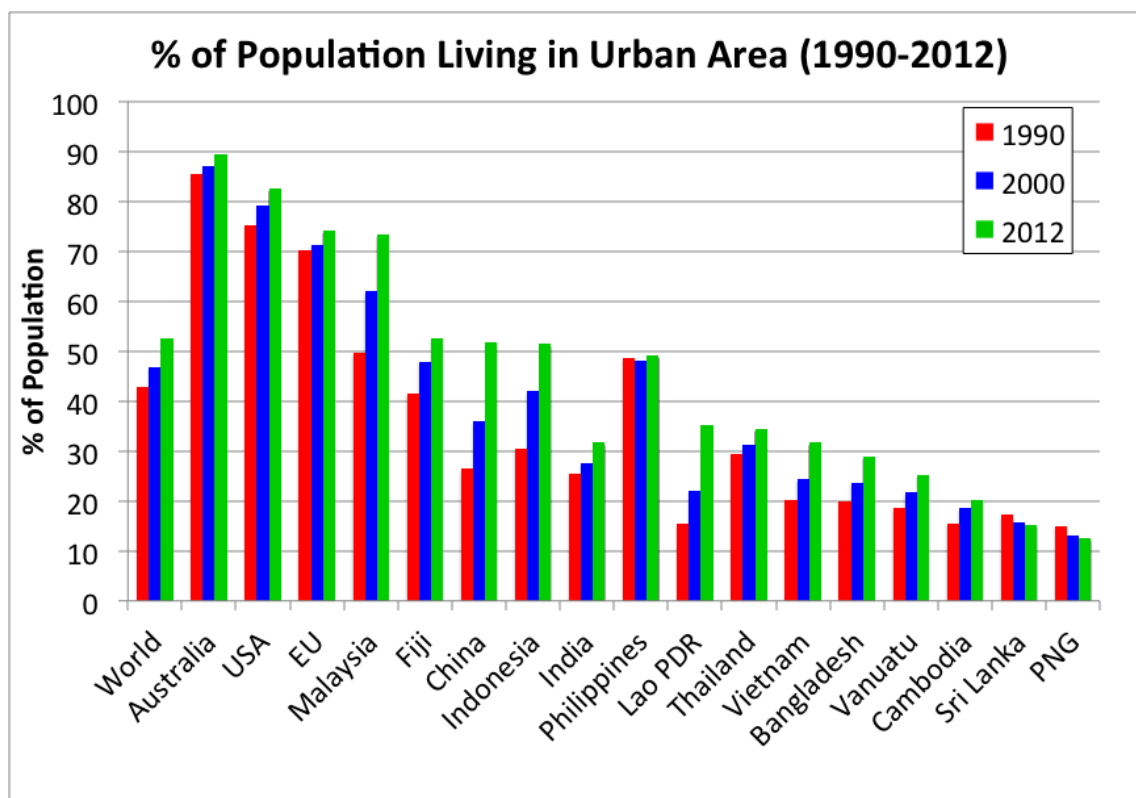
Figure 1 is provided to illustrate the level of urbanization and the relative rates of urbanization across the globe from 1990 to 2012. The share of the population living in urban areas has been increasing in all areas of the world since 1950 (United Nations, 2015a). Relative to the global urbanization figures (world), it can be seen in Figure 1 that developing countries such as China and Indonesia (with the largest and fourth largest populations, respectively), have seen some of the most significant increases in urbanization since 1990.

Although levels of urbanization (% of population living in urban areas) are expected to continue to increase over the next 35 years (Figure 1), the rate of urbanization is projected to decline.

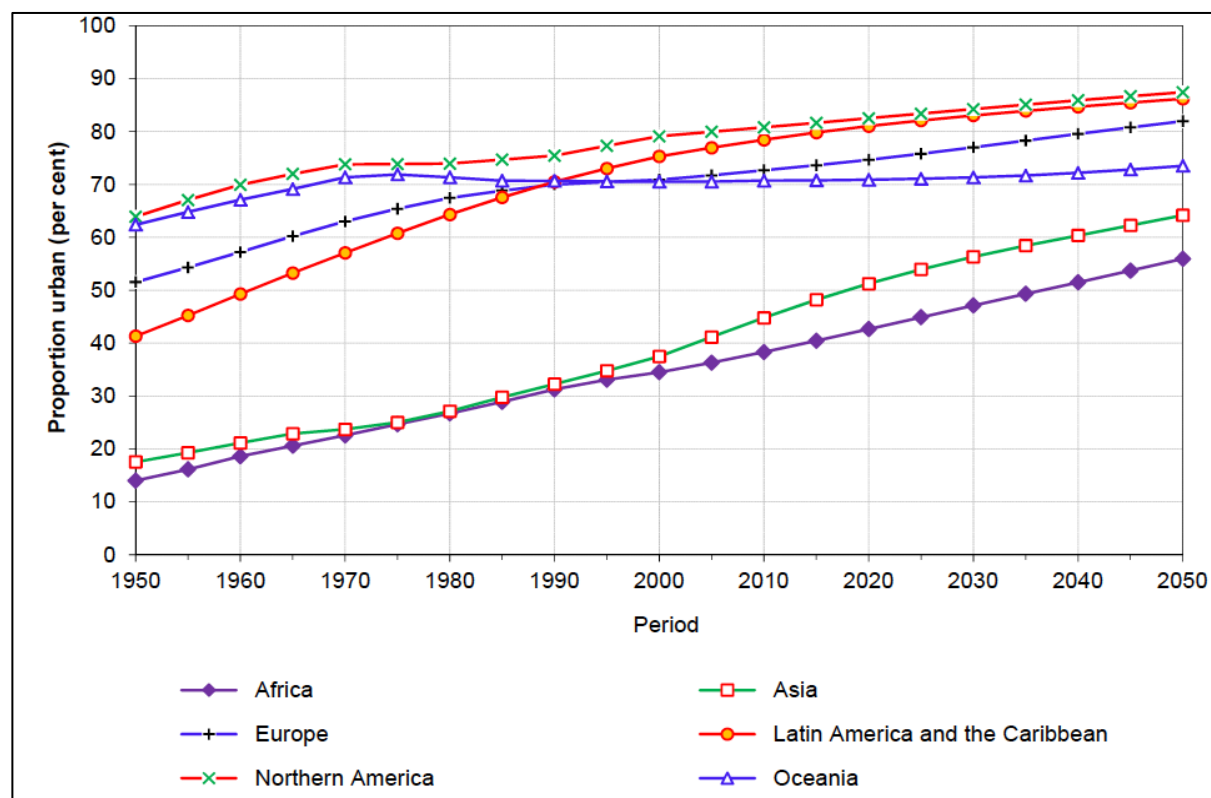
Asia and Africa are the two least-urbanized regions in the world; however, from 1950 to 2014, the share of population living in urban areas in these regions more than doubled (Figure 2). As discussed in the previous section, these two regions are expected to experience the highest rates of population growth over the next several decades, and the United Nations (2015a) urbanization projections also suggest they will experience the highest rates of urbanization.

By 2020, more than 50% of Asia and 40% of African populations are expected to live in urban areas, and these shares are expected to be even higher in 2050 as shown in Figure 2 (United Nations, 2015a). It should be noted that both rates and levels of urbanization differ within each of the regions. For example, currently, East Asia, which includes China, Korea, and Japan, has the highest level of urbanization, and the South Asia region has the lowest urbanization level.

Ultimately, increasing urbanization will both directly and indirectly, lead to changes in food demand, which include increasing demand for higher value and “luxury” food products and highly processed food products (Pingali, 2007; Popkin, 1999; Reardon et al., 2014).



**FIGURE 1.** Share of population living in urban areas in select regions and countries of the world, 1990, 2000, 2012. (Source: World Bank, 2015; <http://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS>)



**FIGURE 2.** Percentage of the Global Population that is Urban by major area, 1950-2050 (Source: United Nations, 2015a; p. 39)

## Economic Growth

Demand is both the *willingness* and the *ability* to purchase a product. Thus, economic growth, measured through Gross Domestic Product (GDP) generally stimulates demand for products, including food – when disposable incomes grow, consumers’ *ability* to purchase food products increases.

According to 2015 USDA projections, the average annual “global real economic growth” rate is expected to be 3.5% for the next 10 years. Since 1990, for developing countries, Gross Domestic Product (GDP) growth rates have generally exceeded those of the developed economies.

Developing countries are expected to continue to experience the strongest rate of growth over the next decade with an average rate of 5.5% annually from 2015 to 2024, with China and India experiencing the highest rates GDP growth rates of 7.1% and 7.5%, respectively.

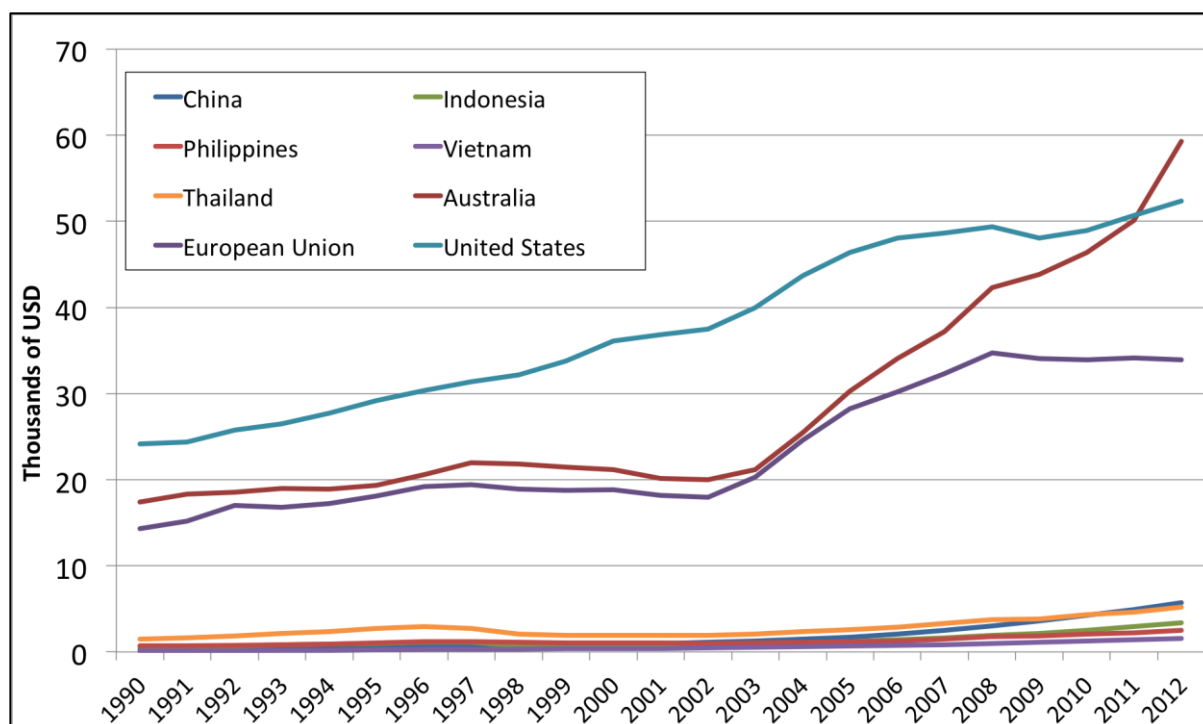
GDP growth for Africa, which is the poorest region in the world, is expected to be high at 5.0% per year for the next decade. On the other hand, over the next 10 years, countries in Latin America and the Former Soviet Union are expected to experience relatively lower GDP growth rates, 4.1% and 3.3%, respectively (USDA, 2015).

Significant per capita income growth in developing countries means that the number of middle-income and high-income consumers will increase dramatically over the next several years. Engel’s law suggests that as incomes rise, the proportion of income spent on food declines and consumers are able to be more selective in what they consume, thus relative demand for specific types of food products changes as disposable incomes increase. Thus, it is important to understand how increasing incomes affect demand for specific types of food products and product attributes.

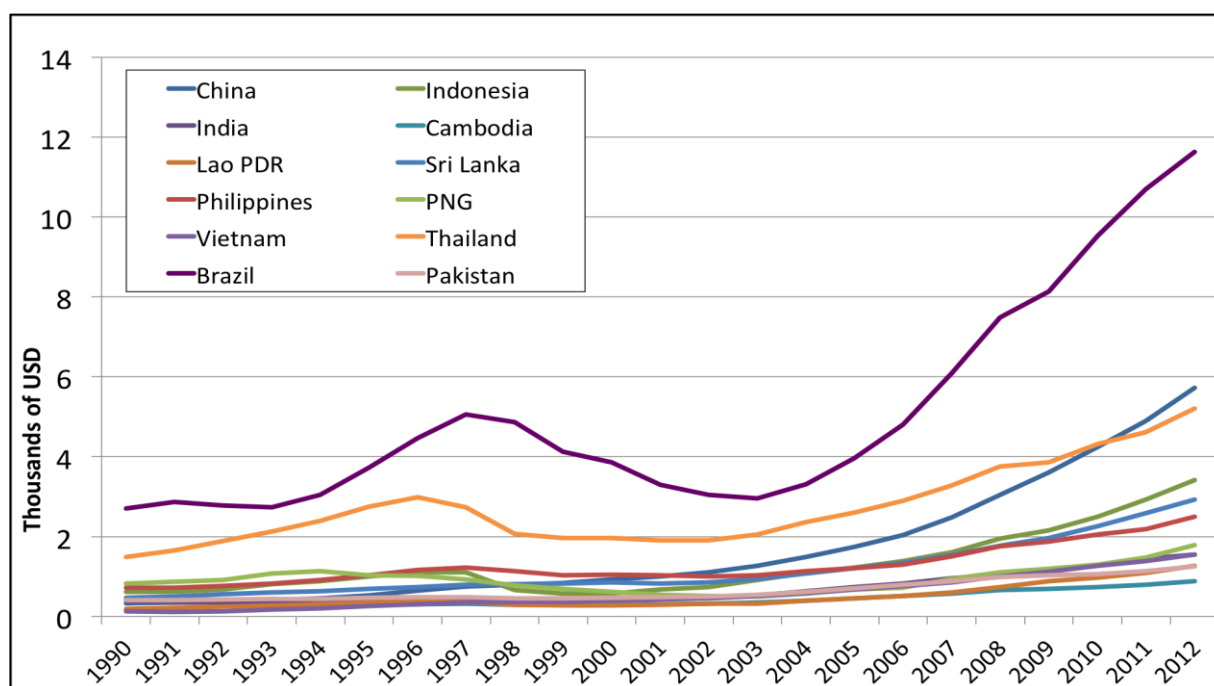
Several reports (e.g. Alexandratos and Bruinsma, 2012; USDA, 2015; Woetzel et al., 2014) project that consumption changes driven by growth of the middle-class segment will lead to increasing global demand for imports of high-value food products as well as agricultural commodities for livestock feed. These reports suggest that most significant opportunities for agricultural and food firms appear to be in Asia, as a result of the combined forces of population growth, urbanization and economic growth projected for this region.

Although GDP growth has been relatively strong in most developing countries, Gross National Income (GNI) per capita in these countries is still very low relative to the United States, Australia and European Union (Figures 3a and 3b). Figures 3a and 3b show that while GNI has grown in many countries from 1990 to 2012, the average GNI is still far below that of the developed world.

The data provided in Table 2 allows comparison of the GNI per capita and purchasing power parity figures for the world versus low-income, middle-income and high-income countries. Average per capita purchasing power for low-income countries is only \$1,570 per capita per year, compared to the world average of \$14,900 per capita per year. Nevertheless, as Figures 3a and 3b show, the GNI is trending upward and expected to continue to do so over the next decade.



**FIGURE 3a.** Gross National Income (GNI) per capita, Atlas Method (current US\$)  
(Source: World Bank, 2015; <http://data.worldbank.org/indicator/NY.GNP.PCAP.CD>)



**FIGURE 3b.** Gross National Income (GNI) per capita, Atlas Method (current US\$)  
(Source: World Bank, 2015: <http://data.worldbank.org/indicator/NY.GNP.PCAP.CD>)

**TABLE 2.** 2014 World Development Indicators (Source: World Bank, 2015; available at: <http://wdi.worldbank.org/table/1.1#>)

|                                | Population | Surface area  | Population density  | Gross national income, Atlas method | Gross national income per capita, Atlas method | Purchasing power parity gross national income |             | Gross domestic product (GDP) |                     |
|--------------------------------|------------|---------------|---------------------|-------------------------------------|--|---|-------------|------------------------------|---------------------|
|                                | (millions) | (sq. km 000s) | (people per sq. km) | \$ billions                         | \$   | \$ billions                                   | Per capita  | % growth                     | % growth per capita |
| <b>World</b>                   | 7,260.70   | 134,324.70    | 56                  | \$ 78,259.60                        | \$ 10,779.00                                   | \$108,347.20                                  | \$14,923.00 | 2.50                         | 1.30                |
| <b>Low income</b>              | 622.00     | 14,455.80     | 47                  | \$ 389.10                           | \$ 626.00                                      | \$ 976.20                                     | \$ 1,570.00 | 6.20                         | 3.40                |
| <b>Middle income</b>           | 5,239.90   | 62,144.10     | 86                  | \$ 24,382.00                        | \$ 4,653.00                                    | \$ 50,573.40                                  | \$ 9,652.00 | 4.80                         | 3.60                |
| Lower middle income            | 2,879.10   | 20,523.20     | 142                 | \$ 5,793.30                         | \$ 2,012.00                                    | \$ 17,267.70                                  | \$ 5,998.00 | 5.80                         | 4.20                |
| Upper middle income            | 2,360.80   | 41,620.90     | 58                  | \$ 18,586.20                        | \$ 7,873.00                                    | \$ 33,402.70                                  | \$14,149.00 | 4.50                         | 3.70                |
| <b>Low &amp; middle income</b> | 5,861.90   | 76,600.00     | 79                  | \$ 24,773.40                        | \$ 4,226.00                                    | \$ 51,540.10                                  | \$ 8,792.00 | 4.80                         | 3.40                |
| East Asia & Pacific            | 2,020.70   | 16,270.80     | 127                 | \$ 12,367.70                        | \$ 6,121.00                                    | \$ 23,842.70                                  | \$11,799.00 | 6.80                         | 6.10                |
| Europe & Central Asia          | 264.30     | 6,385.60      | 42                  | \$ 1,814.60                         | \$ 6,865.00                                    | \$ 3,588.30                                   | \$13,575.00 | 2.10                         | 1.40                |
| Latin America & Caribbean      | 525.20     | 15,769.30     | 34                  | \$ 4,724.20                         | \$ 8,995.00                                    | \$ 7,358.20                                   | \$14,011.00 | 1.70                         | 0.60                |
| Middle East & North Africa     | 357.30     | 8,775.40      | 41                  | ..                                  | ..   | ..  | ..          | 0.00                         | -1.90               |
| South Asia                     | 1,721.00   | 5,136.20      | 361                 | \$ 2,584.10                         | \$ 1,502.00                                    | \$ 9,129.60                                   | \$ 5,305.00 | 7.10                         | 5.70                |
| Sub-Saharan Africa             | 973.40     | 24,262.60     | 41                  | \$ 1,653.50                         | \$ 1,699.00                                    | \$ 3,332.20                                   | \$ 3,423.00 | 4.30                         | 1.50                |
| <b>High income</b>             | 1,398.80   | 57,724.80     | 25                  | \$ 53,597.30                        | \$ 38,317.00                                   | \$ 57,018.20                                  | \$40,762.00 | 1.70                         | 1.10                |
| Euro area                      | 338.70     | 2,758.50      | 127                 | \$ 13,269.20                        | \$ 39,173.00                                   | \$ 13,235.30                                  | \$39,073.00 | 0.90                         | 0.40                |



## **Diet Transition and Changing Consumer Preferences for Food Products**

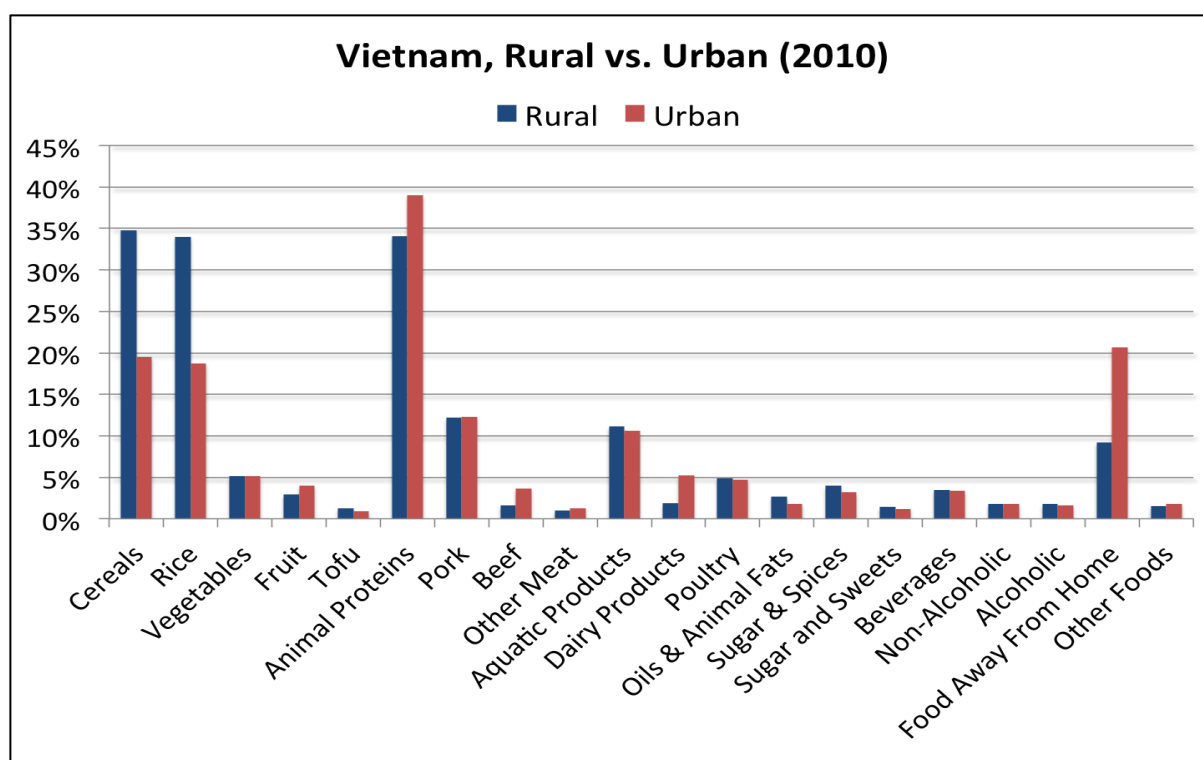
Urbanization, economic growth, and globalization of food markets are influencing the quantity of food demanded by consumers as well as their preferences for food products and food attributes. As disposable household incomes increase, very low-income households first increase the amount of food they consume, and then they increase the diversity of their diet.

As a result of urbanization and income growth, consumers shift away from producing mainly traditional staple foods (cereals, tubers and root crops) for home consumption, and begin to “commercialize” both food production and consumption. Consumers start to rely on urban food markets, and their diets tend to diversify and shift away from mostly unprocessed primary products (e.g. traditional cereals, fruits and vegetables) to consumption of more diverse sources of protein, non-traditional fruits and vegetables, and highly processed food products.

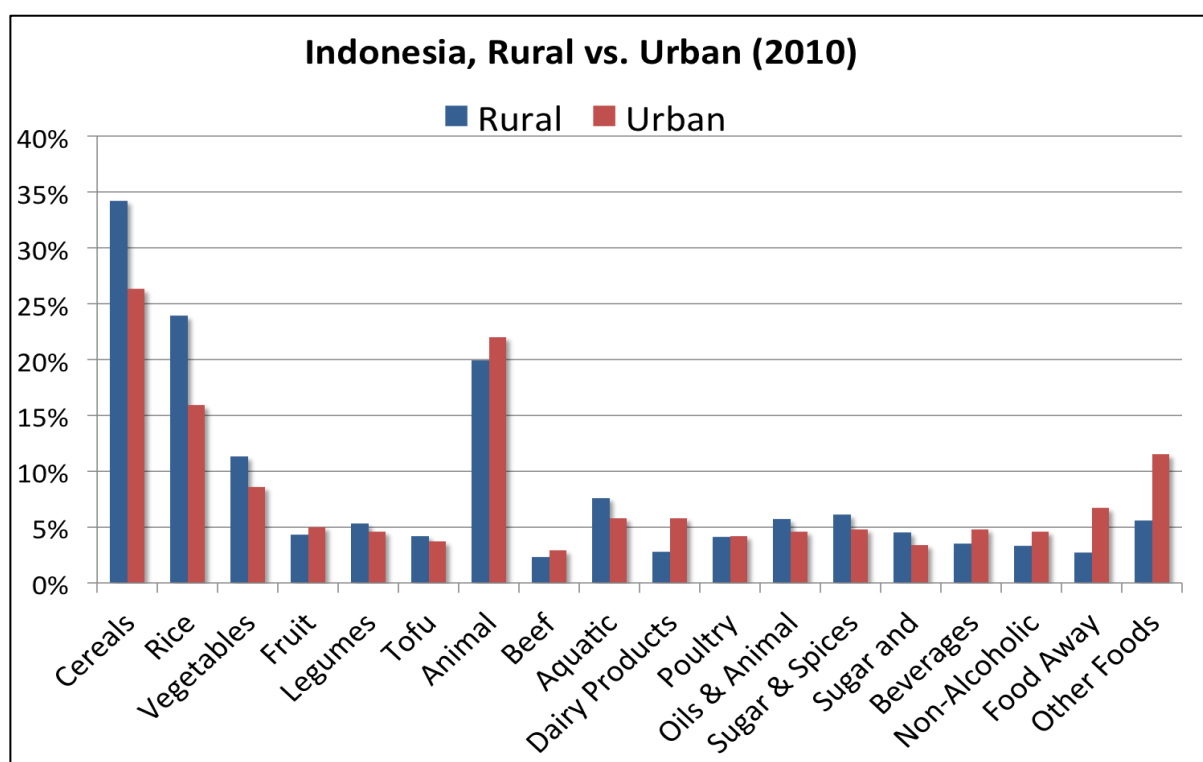
Figures 4a and 4b are provided to illustrate the effect of urbanization on demand for several food product categories using comparable 2010 Vietnamese and Indonesian household food expenditure share data for both rural and urban households. Looking at the Vietnamese data (Figure 5a), notable differences can be seen between rural and urban households in expenditure shares for cereals (35% for rural, 20% for urban), animal proteins (34% versus 39%) and food-away-from-home (9% and 21%). The Indonesia data (Figure 5b) shows similar differences in rural and urban household consumption of cereals (34% for rural and 26% for urban), however, compared to the Vietnamese data, differences in other food categories are not as significant (Reardon et al., 2014).

In addition to urbanization, economic growth and increasing per capita disposable income also lead to changes in consumer preferences for food products and more diverse diets. The combined impact of urbanization and income growth is clearly changing food demand in China, India and the countries in the Association of South East Asian Nations (ASEAN), which includes the ten countries of Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar (Burma), the Philippines, Singapore, Thailand and Vietnam. A 2014 McKinsey Report suggests that already there are “...already 81 million households in ASEAN states are part of the “consuming class,” with incomes exceeding the level at which they can begin to make significant discretionary purchases (Woetzel et al., 2014; p. 22).” The same report estimates that this middle class segment of the population will more than double by 2030, which will continue to drive demand for higher value agricultural and food products and related services. Among the ASEAN countries, Indonesia, the Philippines and Vietnam are expected to have the largest growth in the middle-class sector by 2030 (Woetzel et al., 2014).

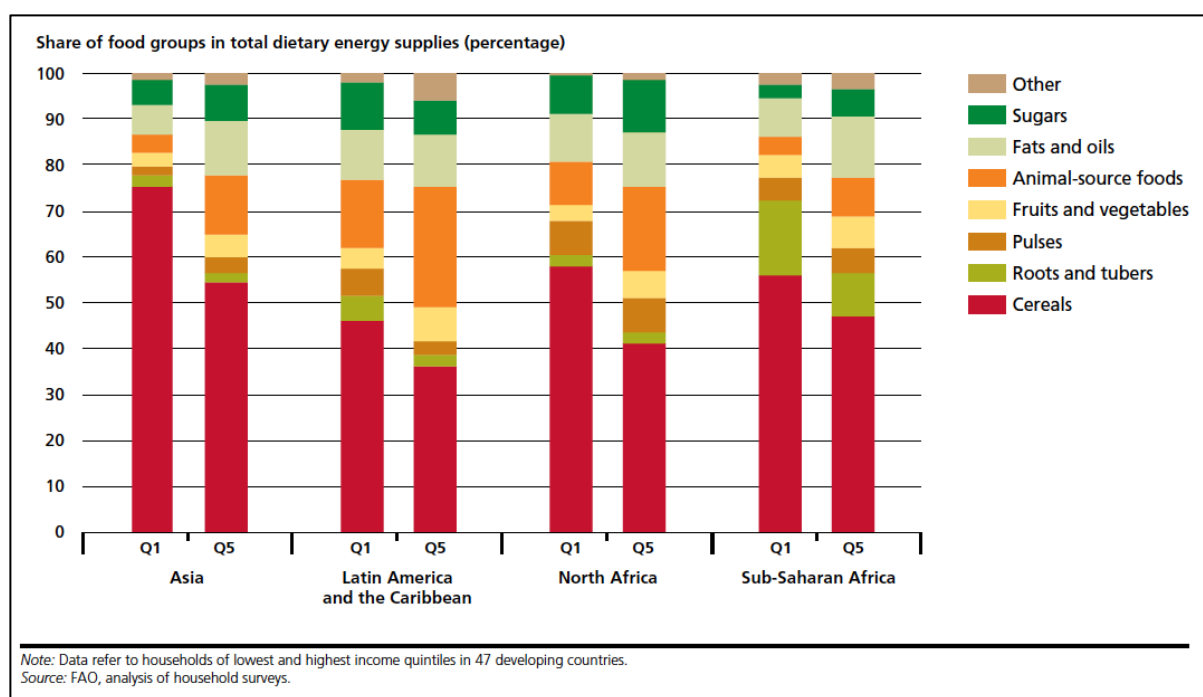
Using FAO household data from 47 developing countries across four regions, Figure 5 illustrates the differences in diet composition between the lowest income quintile (Q1) and the highest income quintile (Q5) households. Most notably, across all four regions, higher income households consume substantially less cereals and significantly more animal-sourced foods. There is also a noticeable difference between high and low-income households in the share of calories that come from sugars, fats and oils, fruits and vegetables, and “other” types of food products. These differences in consumption by income quintiles reflect likely changes in demand for food products as disposable incomes grow in these regions.



**Figure 4a.** Vietnam, Food Expenditure Shares, Rural versus Urban Households (2010);  
Source: Reardon, et al. 2014.



**Figure 4b.** Indonesia, Food Expenditure Shares, Rural versus Urban Households (2010);  
Source: Reardon, et al. 2014.



**Figure 5.** Shifts in Diet Composition with Income Growth (Income quintile 1 vs. quintile 5).  
Source: FAO, WFP and IFAD. 2012. (p. 18)

### Consumer Concerns: Food Quality, Food Safety and the Social Impact of Food Systems

Globally consumers are becoming more concerned and about food quality, food safety and the nutritional content and health consequences of their food consumption decisions. These concerns are a result of a combination of the factors discussed earlier including increasing disposable incomes, urbanization, as well as increasing foreign direct investment in food retailing and processing, and more liberal trade policies leading to increasing food trade and globalization of food markets (Grunert, 2011; Grunert et al., 2014; Loureiro and Umberger, 2007; Reardon and Timmer, 2014; Umberger et al., 2015).

Food safety concerns, which have been an issue on the minds of consumers in developed countries for several decades are now becoming more prominent globally, particularly in Asia (PWC, 2015). This is due to a number of global food safety issues including food borne disease (e.g. 2011 *E-coli* outbreak which originated in Germany from contaminated fenugreek sprouts and spread throughout the European Union and the United States), food contamination (e.g. 2008 contamination of infant formula with melamine), and cases of false labeling and food adulteration (e.g. 2013 horse meat scandal in Europe) (PWC 2015; Saunders et al., 2015). Additionally, consumers are becoming concerned about ethical and social issues related to food production and consumption (e.g. environmental impact, treatment of workers, and the welfare of animals) (Grunert et al., 2014; Umberger et al., 2015).

Changes in consumer preferences and attitudes affect consumers' value and willingness-to-pay for agricultural and food product and product attributes including those that may be associated with improved food quality, safety, health and social benefits. In particular, products that provide consumers with information (e.g. certifications and labels) about product attributes related to origin, process and production methods, termed "credence"

attributes, often fetch a higher price in the market (Caswell and Mojduszka, 1996). Market premiums do not always cover the additional costs incurred by producers and marketers of food products differentiated with credence attributes.

Demand for food products with credence attributes such as organic appears to be on the rise in emerging economies like China, India and Indonesia. For example, Saunders et al. (2015) recently measured consumers' attitudes towards credence attributes (e.g. food safety, fair trade, animal welfare, environmental quality, and healthfulness) as well as price in three developed countries (the United Kingdom, Korea, and Japan) and three developing countries (China, India, and Indonesia). Not surprisingly, for all six countries, food safety was the most important attribute when shopping for food. Interestingly, respondents from developing countries placed a higher level of importance on animal welfare, environmental quality and healthfulness.

Consumers' perceptions about the determinants of food quality and safety are dynamic and consumers are heterogeneous in the relative value they place on different credence attributes. Consumers are becoming more skeptical of the traditional quality and safety systems in their countries and are demanding additional assurances. These concerns have led to the development of food traceability systems, and globally accepted quality standards and assurance systems (e.g. Hazard Analysis of Critical Control Points (HAACP); Good Agricultural Practices (GAP); the International Organization for Standardization (ISO) systems). An ever-growing number of food certification programs (e.g. certified organic, free-range, pesticide-free, fair-trade, environmentally-friendly) are being developed, those that appear to be most valued by consumers use independent third-party auditors to verify the credence attributes.

### **Food Shopping Behavior: Changes in Where and How Consumers Purchase Food**

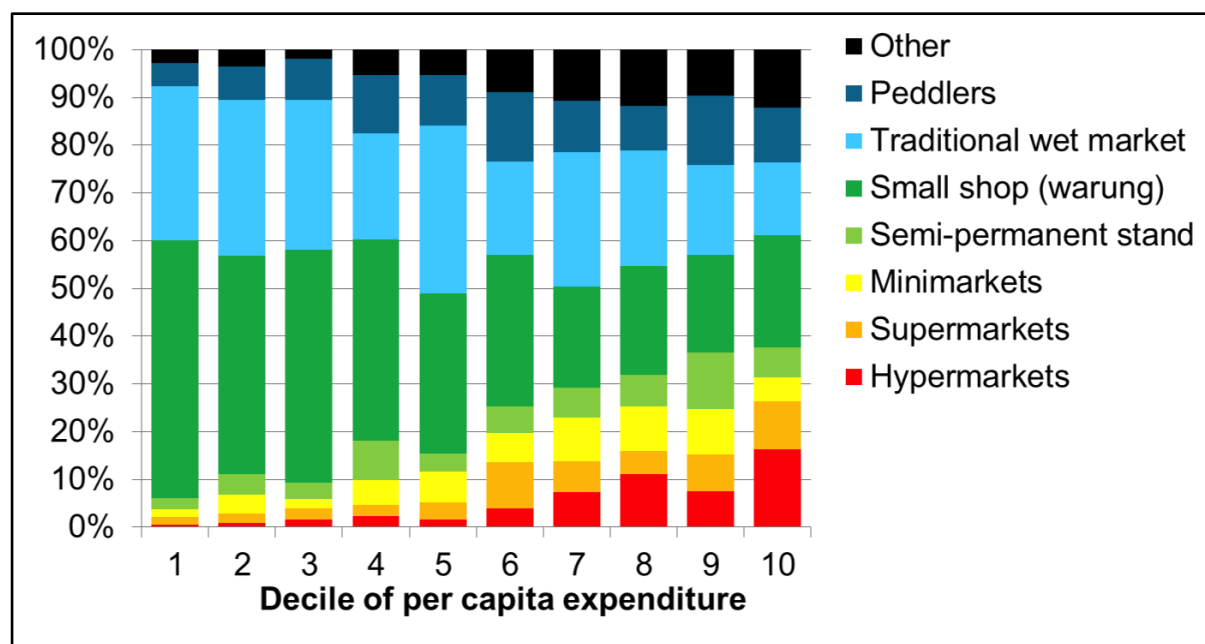
In addition to changes in the types of food products they purchase, increasing disposable incomes, urbanization, globalization and changing consumer preferences are also having an impact on *where* and *how* consumers in developing countries purchase their food.

For example, a 2010 study of urban Indonesian households' food shopping behavior suggests that as income increase, consumers increasingly use modern food retail outlets, including hypermarkets, supermarkets and minimarkets (Minot et al., 2013). Indonesian households in the lowest five income deciles spent less than 15% of household food expenditures at modern retail outlets, whereas higher income households spent 20% to 30% of their food dollar at modern food retailers (Figure 7).

Why do consumers shift towards increasing use of modern retail outlets? Toiba et al. (2013) found that many consumers perceived modern food retail outlets to be better than traditional outlets with respect to convenience (e.g. a "one-stop" shop), offering a large variety of products (food and non-food, processed food, ready-to-cook, ready-to-eat, imported food), providing trustworthy information and increased product safety and quality assurances, and access to entertainment.

Increasing e-commerce and online purchasing of food and grocery is another noteworthy trend that is likely to impact demand for high quality food products from countries like the United States. Growth in online food sales appears to be driven by food safety concerns, increasing disposable incomes and household time constraints. Initially online food sales via

companies like Alibaba in China were mainly highly processed, long-shelf life products; increasingly, however, highly perishable items such as fresh fruit, vegetables, dairy and meat products are being marketed using e-commerce (Crawford, 2015). The largest growth in online food shopping over the next decade is expected to take place in Asia particularly China, India, Indonesia and Singapore (PWC, 2015).



**Figure 6.** Urban Indonesian households' share of food expenditures by type of food outlet and income. (Source Minot et. al., 2013).

## Implications for Future Food Demand

Demand for agricultural commodities and food demand is shifting out as the size of the urban middle-class consumer segment grows across the world, and the food and agricultural sectors become increasingly globalized. Population growth over the next several decades, particularly in China and Africa means the quantity of agricultural commodities and food will continue to increase annually. However, population growth is only one driver of demand and annual growth rates are slowing over time.

The most significant driver of agricultural and food demand over the next decade will be changing consumer preferences for food products as a result of 1) increasing disposable incomes and the large expansion of the “middle-class” consumer; and 2) elevated concerns about food safety and social issues, particularly in highly populated developing and emerging economies.

This growth in the middle-class segment of the population is expected to stimulate tremendous global demand for livestock-based food products and feedstuffs, as well as innovative (e.g. “smart” foods with benefits such as enhanced nutrition), luxury, and highly processed (e.g. snack and convenience) food products.

Global trade of agricultural commodities and food products is becoming more important. USDA (2015) projections suggest that over the next decade, demand growth for agricultural products from developing countries will exceed their growth in domestic production, particularly with respect to meat, grains and oilseeds.

Over the next decade, more than 80% of the global growth in demand for meat, grains and oilseeds is projected to be from developing countries. The large majority of global imports of high value agricultural commodities will be from developing countries. For example, 92% of the global imports of meat will be from developing countries. Countries like the United States with a long-term comparative advantage in producing agricultural commodities and food products are likely to play a significant role in fulfilling the needs of countries that are net importers of food (USDA, 2015).

Additionally, due to the growing “consuming” middle-class and changes taking place on the supply side which have the potential to impact food safety and quality, there is growing demand for food products with credence attributes. Food products carrying credence-related claims are often perceived by consumers to provide enhanced safety or quality assurances (e.g. organic, antibiotic-free, hormone-free, pesticide-free, grass-fed etc.), health benefits (e.g. gluten-free, low-fat), or perceived to be “better” from a social or ethical standpoint (e.g. environmental impact, good or fair conditions for workers, humane treatment of animals).

In some cases the market offers premiums to firms that are able to efficiently produce products with credence attributes. However, as the food market becomes saturated with products with credence claims, consumers are becoming increasingly skeptical and confused about the value of products with claims. Standards, auditable systems that allow trace-back, and reputable third-party certification are required for future demand growth of credence-differentiated food products. Unfortunately, the certification process is often costly for firms, particularly small- and medium-sized enterprises, and thus participation in these markets is not a viable opportunity for the majority of firms.

Increasingly, to compete in global markets and to maintain consumer trust in brands, processors and retailers are requiring their suppliers show they are able to meet certain private standards related to production and processing methods (e.g. safety, environmental, ethical) that go above conventional safety and quality requirements. Thus, in many cases credence-related food standards are becoming a market barrier to entry rather than a market opportunity for firms.

## **Summary**

Food markets are dynamic and consumer preferences are heterogeneous. This means that there are many consumer food market segments, but continuous innovation is required to maintain market share. Without a doubt, the most significant growth in demand is taking place in regions where there are already significant food security concerns (e.g. Asia and Africa), thus global trade of agricultural commodities and food products is expected to continue to grow.

In order to grow demand for products and to take full advantage of the market opportunities both domestically and overseas, firms will need to understand the drivers of demand, be capable of forecasting changes, and ultimately be willing and able to adapt to the dynamic market

Ultimately, shifts in food demand have important implications and offer both challenges and opportunities for all firms involved in the food system, including those directly engaged in food production and distribution (e.g. input suppliers, producers, processors and manufacturers, retailers), as well as those firms with indirect interests (e.g. private equity firms and investment funds, service sector).

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