Demographic Trends: Implications for Future Food Demand

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Overview of Demographic Change - Opportunities for Agribusiness?

- Growing populations – 2 bn more mouths to feed especially in Asia and Africa
- Increasing demand for food (70-100%)
- Urbanization – fewer farmers
- Growing disposable income – higher value food
  - Large middle class in Asia
- Increasing demand for credence attributes
  - Safety certifications, organic, ethical and social attributes (e.g. animal welfare, sustainable)
- Food-related services
Urbanization

% of Population Living in Urban Area (1990-2012)

- Malaysia
- China & Indonesia
- Lao
Smallholders & Food Demand

• Produce ~80% of the food consumed in developing countries (IFAD, 2011)

• Smallholder farmers contribute significantly to global food production (Kremen et al., 2012)
  – 50% cereal,
  – 60% meat
  – 75% dairy

• Grain accounts for only 25% of Asia’s food consumption; majority (75%) is milk, meat/fish, oil, pulses, produce (Reardon, 2013)
Rising Disposable Incomes (1990-2012)

Gross National Income (GNI) per capita, Atlas method (current US$)

- China
- Indonesia
- Philippines
- Vietnam
- Thailand
- Australia
- European Union
- United States

USA
Australia
EU
Rising Disposable Incomes (1990-2012)

Gross National Income (GNI) per capita, Atlas method (current US$)

- China
- Indonesia
- India
- Cambodia
- Lao PDR
- Sri Lanka
- Philippines
- PNG
- Vietnam
- Thailand
- Brazil
- Pakistan

Years: 1990 to 2012
Dietary Upgrading

Share of food groups in total dietary energy supplies (percentage)

Asia | Latin America | N. Africa | Sub-Saharan Africa

Note: Data refer to households of lowest and highest income quintiles in 47 developing countries.

Vietnam, Rural vs. Urban
Total Food Expenditure Shares (2010)

Vietnam, Total Food Expenditure Shares by Income Tercile (2010)

Food Safety Issues

- Foodborne pathogens / microbiological contaminants
- Environmental contaminants – dioxins, PCBs, heavy metals
- Natural toxicants – mycotoxins, phycotoxins, GMO
- Pesticide and drug residues
- Processing contaminants
- Allergens
- Additives – illegal dyes
- Authenticity
- Deliberate adulteration (food fraud)
Indonesian share of food expenditures by type of food outlet

- Small shops (warung): 31%
- Traditional wet markets: 24%
- Peddlers: 11%
- Other: 8%
- Minimarkets: 6%
- Supermarkets: 6%
- Hypermarkets: 7%

Modern outlets account for 19% of food spending

http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/127967
Urban Indonesian share of food expenditures by type of food outlet and income


http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/127967
Urban Indonesian share of food expenditures by type of food outlet & food group

http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/127967
Retail Outlet “Best” for Price, Quality, Safety, Information

Modern = Blue

Traditional = Green

Price

Food Quality

Food Safety

Trust Product Information
Traceability underlines Quality- and Food Safety Leadership.

Star Farm:
- China’s first agriculture consulting firm
- Initiated by METRO to train local farmers/manufacturers:
  - Good Agricultural Practices (GAP)
  - Good Manufacturing/Hygiene Practices (GMP/GHP)
  - Good Distribution Practices (GDP).

- Maintaining quality control directly at the source
- Fulfilling the “From Farm to Fork” promise
- Monitoring every process detail from farm to fork.
Food Quality Cues

Environmental & Ethical
- Eco-labels
- Welfare
- Free-trade
- Worker protection

Production/Process
- Organic
- GMO-Free

Geographical Origin
- PDO
- PGO, COO
- Local

Traditional Quality Attributes
- Grades
- Brands
- Flavour, Sensory

Health & Nutritional Concerns
- Fat Content
- Gluten

Food Safety???
Beijing
Bogor, West Java
Wet Market
Surakarta, Indonesia
Consumers are Conflicted

Citizens = Public Values

• Social values
  – Environment
  – Local
  – Workers/society
  – Animals

Consumers = Private Values

• Value for money
• Personal / family benefits
  – Safety
  – Enjoyment
  – Nutrition
  – Health
• Convenience
Key Messages

• Increasing urbanisation, income and lifestyles are impacting
  – Demand for types of food products
  – Attitudes and concerns about food
  – Demand for safety and quality assurances (information)
  – Demand for social attributes (welfare, environment)
  – How and where consumers shop for food
    • Food-related services
• Consumers are heterogeneous –
  – dynamic preferences
  – Innovation treadmill
Thank you!
http://www.adelaide.edu.au/global-food/blog/wendy.umberger@adelaide.edu.au