Overview of Food Security and Hunger situation in Asia and the Pacific and the Double Burden of Malnutrition at The Round Table on the Double Burden of Malnutrition (14 March 2014, Ulaanbaatar, Mongolia)

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Outline/Structure of Presentation

- Global challenges in achieving food security and nutrition
- Global Scenario on Malnutrition
- Food Security and Nutrition Landscape in Asia
- Malnutrition in the Pacific Island countries
- Why Investing in reducing Malnutrition matters?
- Causes of Malnutrition
- Addressing the Double burden of malnutrition
Global challenges in achieving food security and nutrition

- Population growth projected to reach 9.2 billion by 2050
- Production
- Urbanization
- Food price hike and volatility
- Climate change
- Market infrastructure
- Land degradation, desertification, and land use change
- Water scarcity for producing more foods
- Food consumption trends
- Food losses and wastes
- Food Safety
World Population Trends

Source: UN, 2011
60% increase in food production needed by 2050 (77% increase, if developing countries only)

Source: Bruinsma, 2011
Global Urbanization Trends

Source: UN, 2011

The chart illustrates the trends in global urbanization from 1950 to 2050. The blue line represents rural population, while the red line represents urban population. The y-axis is labeled in billions, and the x-axis represents years from 1950 to 2050.

From the chart, it can be observed that the urban population is consistently increasing, whereas the rural population shows a decrease. This indicates a significant movement of population from rural to urban areas globally.

Additional insights from the chart include:
- The rural population peaked around 1985.
- The urban population started to rise around 1955 and is projected to continue increasing.

These trends highlight the importance of urban planning and infrastructure development to accommodate the growing urban population.
Asia Urbanization trends

- Urbanization – growing rapidly – 50% currently live in urban areas
- Estimated that by 2050, close to 70 percent of the world’s population will be residing in urban areas
- In Asia urban population is 42.2% growth fastest rate
- In last 20 years Asian cities grown faster than any other region
- 13 of 20 most populated urban areas now in Asia
- SE Asia, by 2050 nearly 63% of total population expected to live in urban areas

Population (Asia figs)

<table>
<thead>
<tr>
<th>Region</th>
<th>Urban 2010</th>
<th>Rural 2010</th>
<th>Total 2010</th>
<th>Urban 2050</th>
<th>Rural 2050</th>
<th>Total 2050</th>
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<tr>
<td>WORLD</td>
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<td>3.4</td>
<td>6.9</td>
<td>6.3</td>
<td>3</td>
<td>9.3</td>
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</tbody>
</table>

- ~20% increase in total population; ~89% increase in urban population
The FAO Food Price Index in September 2013 averaged 199 points, which was 1% lower than the previous month, but still 100% higher than 10 years ago.

* The real price index is the nominal price index deflated by the World Bank Manufactures Unit Value Index (MUV)
The number of natural disasters occurring worldwide has doubled in past 10 years - affecting food production & price stability.

Arable land is getting limited in Asia

- Arable land in use, 1997-99, million ha.: 232
- Total suitable for rainfed crop production, million ha.: 366

Water Scarcity

Definitions and indicators
- **Little or no water scarcity.** Abundant water resources relative to use, with less than 25% of water from rivers withdrawn for human purposes.
- **Physical water scarcity (water resources development is approaching or has exceeded sustainable limits).** More than 75% of river flows are withdrawn for agriculture, industry, and domestic purposes (accounting for recycling of return flows). This definition—relating water availability to water demand—implies that dry areas are not necessarily water scarce.
- **Approaching physical water scarcity.** More than 60% of river flows are withdrawn. These basins will experience physical water scarcity in the near future.
- **Economic water scarcity (human, institutional, and financial capital limit access to water even though water in nature is available locally to meet human demands).** Water resources are abundant relative to water use, with less than 25% of water from rivers withdrawn for human purposes, but malnutrition exists.

Source: International Water Management Institute analysis done for the Comprehensive Assessment of Water Management in Agriculture using the Watersim model; chapter 2.
Food Consumption Trends (Kcal/person/day)

Source: Alexandratos, 2011
Globally, an estimated 1.3 billion tons of food is lost or wasted every year.

Magnitude of Food Losses & Waste Across Regions

Per capita food losses and waste (kg/year)

Europe: 95, North America & Oceania: 115, Industrialized Asia: 80, Subsahara Africa: 6, North Africa, West & Central Asia: 11

FAO 2011
Food Safety

- Food safety has a strong impact on food security and nutrition status of populations thereby influencing productivity & livelihoods.

- Public health impact due to food borne illness with social & economic impacts (Food and waterborne diarrhoeal diseases cause ~2.2 m deaths worldwide annually (1.9 m children) [WHO]).

- Impacts costs - public health as well as destruction/rework/recall of food consignments.

- Impacts food losses and wastes.

- Impacts national & international market access, which effects purchasing power of farmers, food businesses & consumers.
Global scenario on malnutrition

- Undernourishment currently at 842 m (12% of global population)
- Around 2 billion people suffer from micronutrient deficiencies (30%)
- 165 million children are stunted (26%)
- 1.4 billion adults are overweight, of which 500 million are obese
Food Security & Nutrition scenario in Asia

- 60% of world’s population
- Most populous countries
- Fastest growing economies with wide income inequalities
- Per capita income increases: 64% East Asia, 31% South Asia, 21% South East Asia
- Large agricultural exporter and importer
- Proportion of undernourished population decreased from 24.1% to 13.5% between 1992 to 2013
- 563 million people are undernourished (62% of world total)
- In South Asia around 39 percent of children under age of 5 are stunted
- ~75 percent of people with micronutrient deficiencies live in Asia
Millennium Development Goal Hunger Indicator (%)

It costs on average just US$25 cents a day to feed a hungry child and change her life forever.

While food is the most basic of human needs required for survival, on average, 1 in 8 people go to bed hungry each night.

We can achieve Zero Hunger in our lifetimes. Halving hunger by 2015, as pledged in the Millennium Development Goals, is the first step.

Hunger Map 2013

Proportion of total population undernourished, 2011-13

Zero Hunger Challenge

World Food Programme

wfp.org

Take a look at our interactive hunger map at http://cdn.wfp.org/hungermap/
Undernourishment in Asia

Numbers (left axis)  Prevalence (right axis)
Prevalence of Undernourishment (%) in Asian Countries (1990/1 to 2011/3)

Source: FAO
Number of Undernourished People in Asian Countries (2011 to 2013)

Source: FAO
Micronutrient deficiencies still high in Asia

Accumulative Mineral and Vitamin Deficiency Index, Asia

Source: Maplecroft 2012
Prevalence of Wasting in Children less than 5 years (%) (2000 to 2012)

Source: FAO
Prevalence of Stunting among Children less than 5 years (%) (2000 to 2012)

Source: FAO
Globally - All forms of undernutrition are highest in South Asia.
Prevalence of Overweight in Asian countries (BMI≥25) in adults

Source: WHO Global NCD Status Report, 2010
Average Dietary Energy Supply (kcal/person/day) Asian Countries

Source: FAO
Huge Disparities: by wealth and residence

Fig. 1: Stunting in children U5 by Wealth Quintile (%)

Fig. 2: Stunting in children U5 by Urban/Rural Area (%)

Source: MICS and DHS, 2005-2010
Malnutrition in the Pacific Island countries

- 80% of adults are overweight in the Cook Islands, Kiribati, the Republic of the Marshall Islands, Nauru, Tokelau, Tonga and Samoa
- 60% of adults are obese in Tonga and the Cook Islands;
- 75% of all adult deaths are due to NCDs;
- 40% of children under the age of five are anaemic in Papua New Guinea, Fiji, Nauru, the Solomon Islands; Tuvalu;
- 40% of pregnant women are anaemic in the Solomon Islands, Fiji, Nauru and Samoa
Good Nutrition is the foundation for human health and well-being, physical and cognitive development and economic productivity.
Causes of malnutrition

- A complex interplay of economic; social; environmental and behavioral factors

- Diets low in quantity, quality and variety – insufficient micronutrients (Vitamin A, iron, iodine, folate, etc);

- Infectious diseases and parasitic infections;

- Overconsumption or excessive energy-dense and highly processed foods with low levels of physical activity;

- High food prices can exacerbate food insecurity and malnutrition
Addressing the Double burden of malnutrition

Policy and Institutions

- Political will, commitment and support for nutrition;
- Nutrition objectives in the health, agriculture, and development agenda and policies and programs;
- Advocacy on nutrition issues – civil society, media and academia;
- Technical/institutional/financial/human capacity strengthened – to assess, design intervention strategies, provide operational/managerial support;
- Transfer of scientific knowledge to academic/field levels;
- More budget allocation for direct nutrition and nutrition-sensitive programmes
Addressing the Double burden of malnutrition

**Food Systems**

- Focus on improving nutrition through adequate diets (rather than medical based interventions)

- Recognizes that every aspect of food system impacts the availability/accessibility of nutritious foods – agricultural production, supply chain and consumer level

- Identifying critical points in food chain for enhancing and protecting nutritional value
  - Promotion of community, home and school gardens
  - Crop varieties with higher nutritional content;
  - Research for nutrient-dense foods;
  - Post-harvest/processing methods to preserve nutrition value;
  - Markets for nutritious foods;

- Empowering women and supporting women farmers
Addressing the Double burden of malnutrition

Food Systems – Data and Statistics

- Correct assessment of nutritional situation important – for policy making, advocacy, accountability, allocating funds, decision making for eradicating malnutrition

- Data and appropriate indicators on nutrition important – total energy, micro-nutrient consumption

- Design efficient data parameters, collection tools and cost-effective indicators;

- Collect both agricultural and nutrition information with consistent and timely data analysis & interpretation;

- Conduct baseline surveys and nutritional impact assessments of agriculture interventions
Addressing the Double burden of malnutrition

Food Systems - Education and Awareness

- Nutrition education for increase consumption of adequate and diverse diets;

- Focus on maternal and child nutrition - education to teenage girls, women, mothers, grandmothers important;

- Interventions such as home/school gardens, complementary feeding education, school curricula, extension services effective;

- Consumer awareness and education for better food choices, changing consumer behaviour for healthier diets;

- Food labelling on nutritional content/ FBDGs also important for changing consumer and FBO behaviour
Addressing the Double burden of malnutrition

Food Systems – **Partnerships and Coordination**

- Multiple causes (diets, water, sanitation, medical facilities) – so requires multi-sectoral holistic approach with integrated action & complementary interventions;

- Coordination with other sectors (agriculture/ health/ social affairs/ education and finance/ trade); private sector; civil society actors

- Global and regional platforms and collaborations – SUN, REACH, UN Standing Committee on Nutrition: facilitate regional dialogues to identify opportunities for action and collaboration among sectors
THANK YOU

Any Questions?