



# China - Food and Nutrition Security Profiles

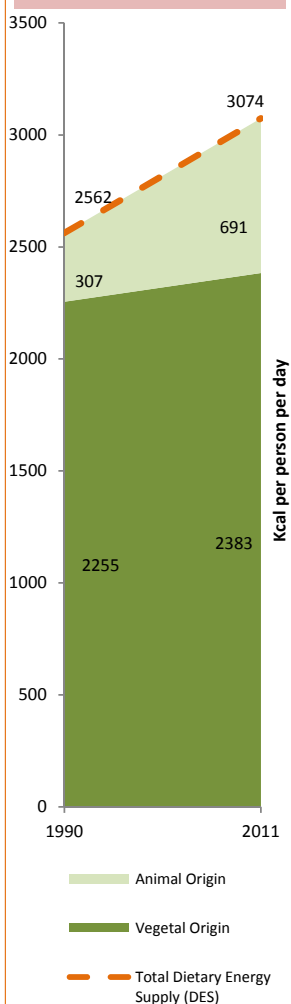


## Key Indicators

- Huge diversity exists in China, and averages may not reflect the food and nutrition security situation in different parts of the country. China has experienced rapid growth in per-capita GDP and Dietary Energy Supply (DES), combined with a sharp decrease in undernutrition, but disparities between rural and urban areas remain high.
- Child mortality and undernutrition have consistently been reduced over the last decades and will achieve the desired Millennium Development Goal (MDG) target by 2015.
- Despite improvements in undernutrition, overweight and obesity have increased, while anaemia is high and will need to be addressed through public health interventions such as supplementation and food fortification.

**Figure 1.1 Food Availability From 1990 to 2011:**

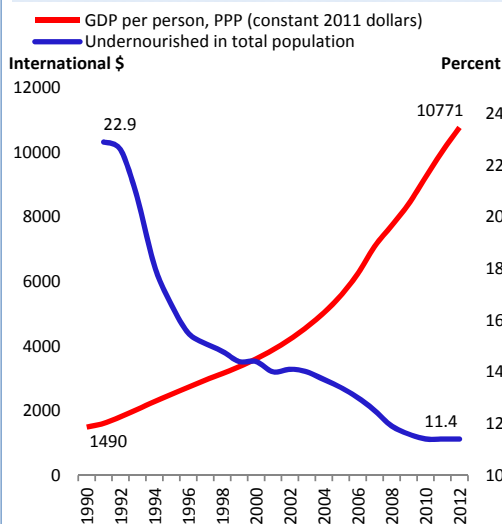
- DES increased 20%
- Animal-origin supply increased 125%
- Vegetal-origin products increased just 6%, but remain the major DES source



Source: FAOSTAT FBS: 2014 update

**Figure 1.2 Undernourishment and Economic Growth From 1990-2012:**

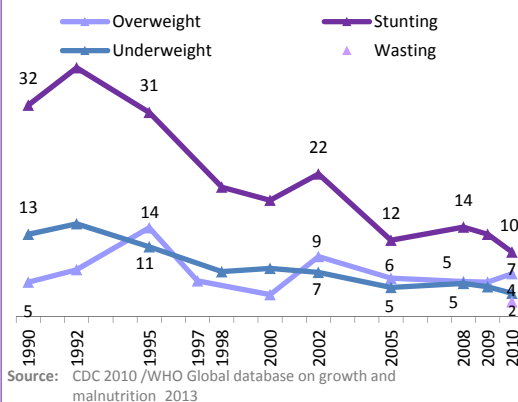
- GDP increased 623%
- Undernourishment declined 50%, although 11% of people remain undernourished



Source: GDP: WDI 2014 / Undernourished: FAO FSI\_2013

**Figure 1.3 Children Malnutrition From 1990 to 2010**

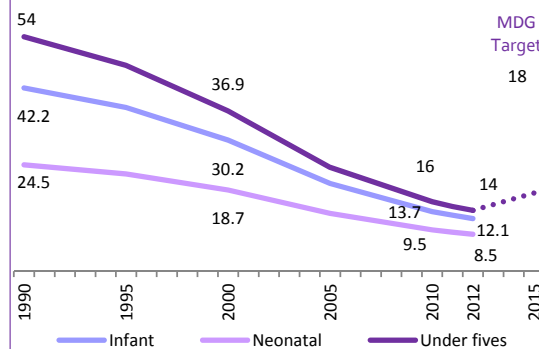
- Stunting declined 71%
- Underweight declined 73%
- Overweight increased 5% to 7%
- Only 3% of infants are born with Low Birth Weight (Table 1.1)
- Wasting was estimated at 2% in 2010



Source: CDC 2010 / WHO Global database on growth and malnutrition\_2013

**Figure 1.4 Child Mortality From 1990 to 2012:**

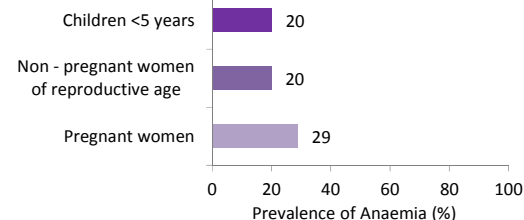
- Under-5 mortality reduced 74% and already achieved the MDG target
- Infant mortality reduced 71%
- Neonatal mortality reduced 65%



Source: Inter-agency Group for CME (2013)

**Figure 1.5 Anaemia prevalence**

- Anaemia remains a public health issue, for pregnant women (29%), non-pregnant women (20%) and children under 5 (20%)
- Deworming and iron supplementation can successfully reduce rates of anaemia among children and pregnant women



Source: WHO Worldwide prevalence of Anaemia (1993-2005)

## Anthropometry (Table 1.1)

|  |        |      |
|--|--------|------|
| Underweight women (BMI < 18.5 kg/m <sup>2</sup> )  | 8.5 %  | 1996 |
| Overweight adults (BMI ≥ 25 kg/m <sup>2</sup> )  | 18.9 % | 2002 |
| * BMI values calculated using adult cut off points, population < 20 should be analyzed using WHO growth reference for school aged children and adolescents |        |      |
| Proportion of infants with low birth weight  | 3 %    | 2008 |

Source: NHSS 2008/ WHO Global Database on BMI & DHS 2008



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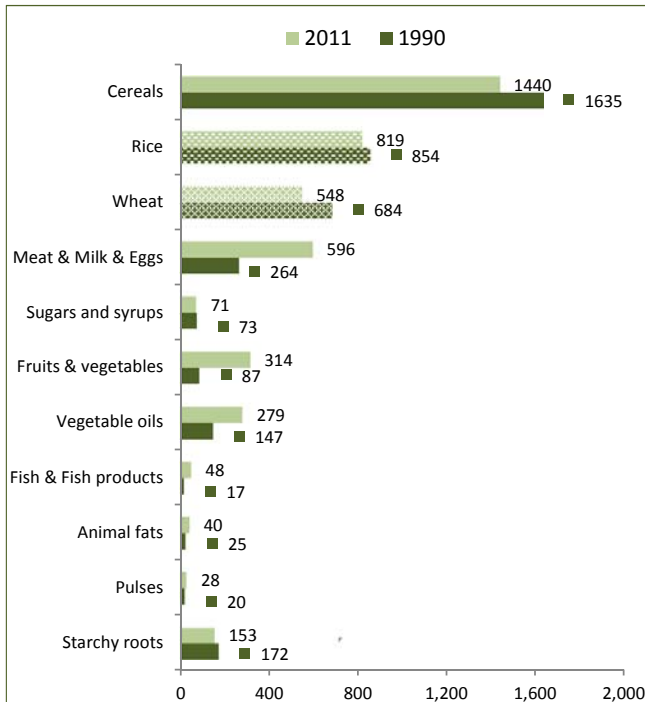


## Food Availability / Food Access

### Food Availability

**Figure 2.1 Food supply by food group**

(kcal/person/year) Total dietary energy supply= 3,074 (2011)



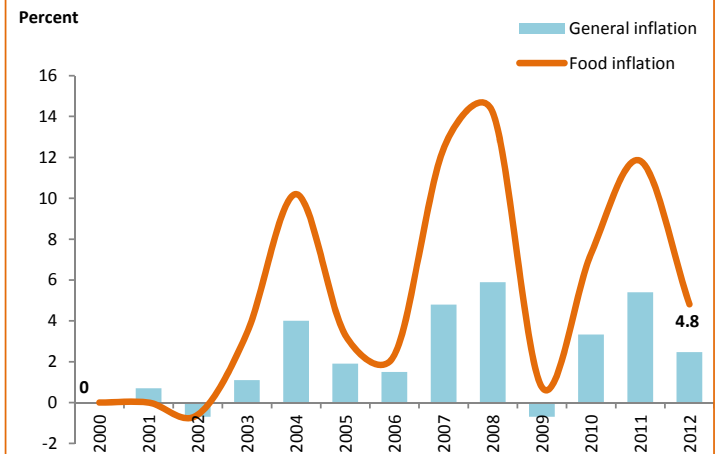
Source: UN\_FAO Food Balance Sheets\_2014 Update

- Although cereals remain as the most important source of food energy, they decreased 12% in their contribution of total DES in 2011
- Dietary diversity has improved: Fruits and vegetables have notably increased availability of 261%, fish increased 182% and meat, milk and eggs 126%.
- Both rice and wheat have decreased their contribution, by 4% and 20% respectively

### Access to food

**Figure 2.2 Economic access to food**

General and food inflation

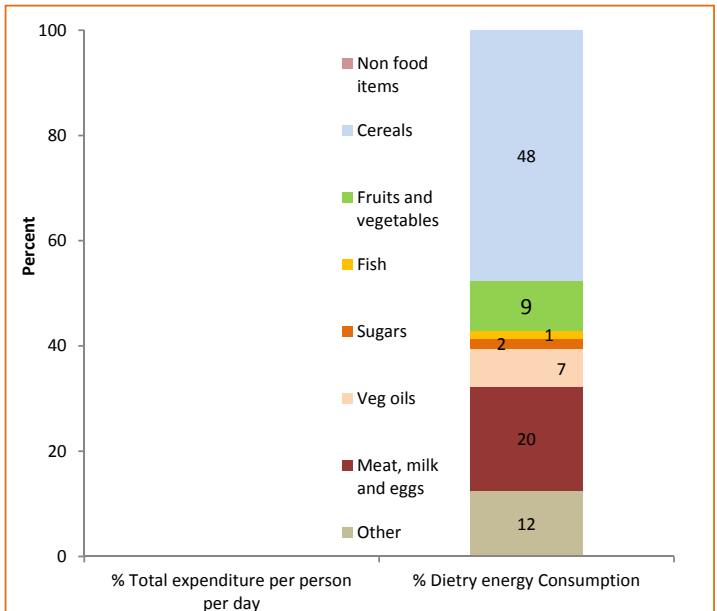


Source: ILOSTAT Database Consumer Price Indices 2014

- Food inflation is consistently higher than general inflation
- Cereals contribute to 48% of total dietary energy consumption

**Figure 2.3 Share of food expenditure**

(2009)



Source: UN\_FAO RAP based on national HIES, ECS, SES, HLSS 2013 Update, China



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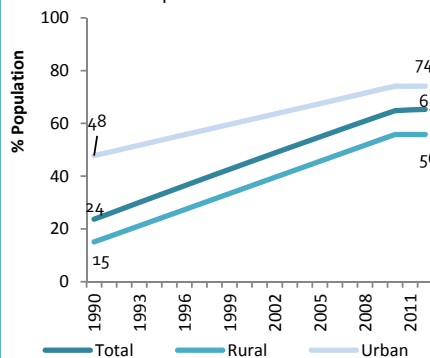
## Food Utilization

Food utilization refers both to household preparation practices of foods, which influence the nutrient content of consumed foods, and to the absorption of nutrients by the human body after consumption. Nutrient absorption in the gut is strongly influenced by health status, particularly the presence of diarrhoea. Hygienic environmental conditions related to water and sanitation are important determinants of health and infection incidence and prevalence. In China, water and sanitation conditions have improved during the past 20 years. These improvements have contributed to the reduction in malnutrition among under-5 shown in Fig 1.3.

## Water and Sanitation

**Figure 3.1 Access to Improved Sanitation**  
From 1990 to 2012:

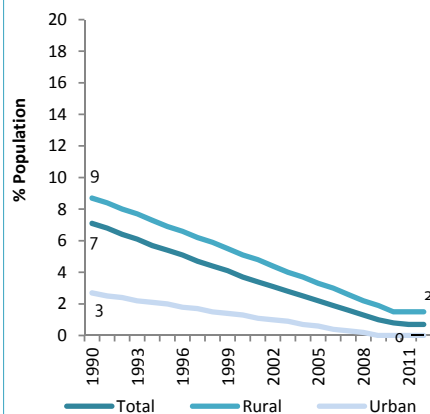
- Access to improved sanitation increased 176% in 22 years
- Disparities between rural and urban areas have decreased (from 33% to 18%), although access among rural populations still stands at only 56%
- 35% of the overall population still does not have access to improved sanitation



Source: WHO-UNICEF Joint Monitoring Programme, 2014

**Figure 3.2 Open Defecation**  
From 1990 to 2012:

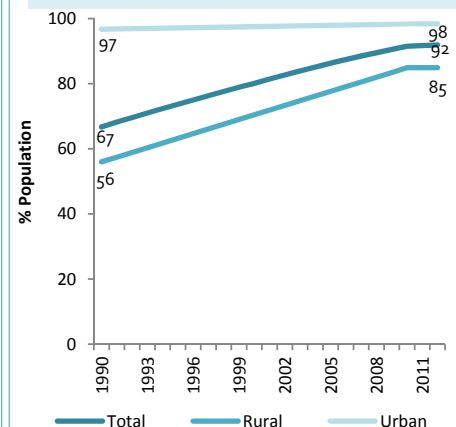
- Open defecation decreased 85% in 22 years
- The practice has disappeared in urban areas and remains prevalent among only 2% of rural populations



Source: WHO-UNICEF Joint Monitoring Programme, 2014

**Figure 3.1 Access to Improved Water Sources**  
From 1990 to 2012:

- Disparities in access to improved water sources between urban and rural areas have been reduced but remain significant
- At least 92% of people have sustainable access to improved water

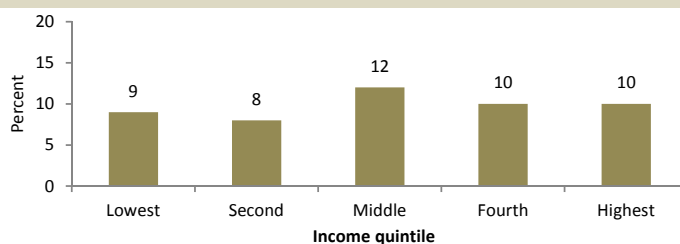


Source: WHO-UNICEF Joint Monitoring Programme, 2014

## Food Safety

**Figure 3.4 Diarrhoea**

- Diarrhoea among under 3 is not related to income in China, as no significant differences can be found between income levels and diarrhoea prevalence in children under 3.



Source: Baseline Survey Integrated Maternal and Child Health Project 2011-2013

## Management of Diarrhoea (Table 3.1)

### Zinc

Share of children under age 5 with diarrhoea receiving zinc treatment

-

### Existing policy framework

Zinc Supplementation and Reformulated Oral Rehydration Salt in the Management of Diarrhea

Source:



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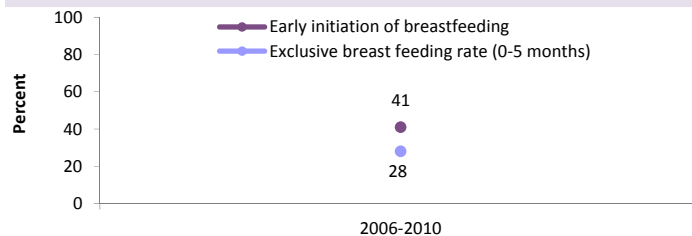


## Food Utilization

## Nutrition and Health

**Figure 3.5 Exclusive Breast Feeding**

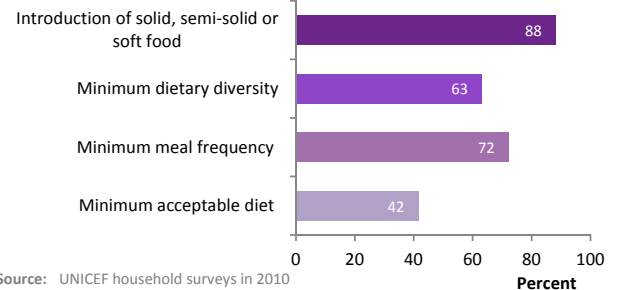
- Early initiation of breastfeeding stood at 41% during 2006-2010
- Exclusive breastfeeding was 28% in the same period
- Policies are relatively supportive of exclusive breastfeeding. Maternity leave is 13 weeks, with paid nursing breaks of 1 hour per day after returning to work. Extended leave of up to 1 year at 80% of pay also may be provided.



Source: UN\_DHS, MICS, other national household surveys, and UNICEF\_SOWC 2012

**Figure 3.6 Complementary Feeding**

- Introduction of complementary feeding is timely
- 72% of children attain the minimum meal frequency
- 63% Meet the recommended dietary diversity
- Only 42% receive the minimum acceptable diet



Source: UNICEF household surveys in 2010

**Figure 3.7 Duration of Breastfeeding**

No Data

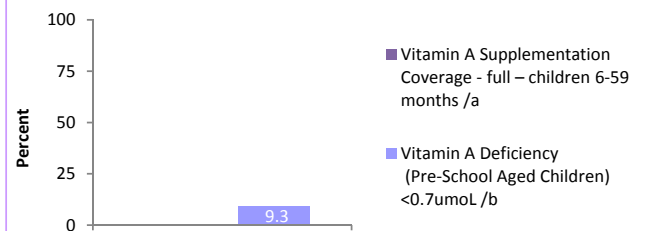
**Figure 3.8 Child Malnutrition and Poverty**

No Data

## Micronutrient Status

**Figure 3.9 Vitamin A**

- Vitamin A deficiencies (9 % among pre-schoolers) do not indicate a severe public health issue



\* VAD is a severe public health problem if >20% of preschool children (6-71 months) have low serum retinol (<0.7μmol/L)

Source: a/ UNICEF, State of the World's Children 2012, b/ WHO Global prevalence of vitamin A deficiency in population at risk 1995-2005 report.

## Iodine (Table 3.2)

|   |        |
|---|--------|
| Households consuming iodized salt (2011)/a  | 96.8 % |
| Iodine deficiency (Urinary Iodine Concentration <100ug/L) among school-age children (2011) /b | 12.2 % |

\*Optimal UIE 100 - 199ug/L

Source: a/UNICEF State of the World's Children 2014 b/2011 IDD survey report China



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Policy Table - 1

## Enabling environment for Nutrition and Food security - Policy documents addressing nutrition issues

1. National Strategic Plan for Food and Nutrition Improvement for 2010-2014
2. National Plan of Action for Nutrition, 1997, State Council of China -
3. Chinese Guidelines for Overweight and Obesity Prevention and Control for Adults (2003)
4. Chinese Guidelines for Overweight and Obesity Prevention and Control for Children (2008)
5. National Plan of Action for Iodine Deficiency Disorders (2006-2010)
6. The 12th five year national plan of endemic diseases control and prevention  
*Inlcuding elimination of Iodine defidency disorders*
7. Program for Development of Chinese Children (2011-2020)
8. Strategies for Infant and Young Child Feeding 2007
9. General Standard for Complementary Food Supplement 2009
10. Nutrition Improvement Programme for Rural Compulsory Education Students 2011

| Nutrition related issues covered in these policies |   | Covered                             | Comments  |
|--|---|-------------------------------------|---|
| Maternal and Child Undernutrition                  | Child undernutrition  | yes                                 |   |
|  | Low Birth Weight  | yes                                 |   |
|  | Maternal undernutrition   | yes                                 |   |
| Obesity and diet related NCDs                      | Child obesity   | Adults                              |   |
|  | Adult obesity   |                                     |   |
|  | Diet related NCDs   | yes                                 |   |
| Infant and Young Child Nutrition                   | Breastfeeding   | yes                                 |   |
|  | Complementary feeding   | yes                                 | Many - but not all - provisions of the Int'l Code on BMS; under revision to increase scope of ban of marketing;   |
|  | Int'l Code of Marketing of BMS  | yes                                 |   |
| Vitamins and Minerals                              | Supplementation:<br>Vitamin A children/women<br>Iron Folate children/women<br>Zinc children<br>Other vitamins & min child/women | no<br>Folic Acid(pregnant)<br>Child | No Vitamin A supplementation policy; updated deworming guidelines?<br>Adoption of policy to use zinc with Oral Rehydration Salts in management of diarrhoea<br>Micronutrient supplementation guidelines for children in targeted areas<br>Ying Yan Bao complementary food supplement called for 6-to 24-mo-old children in 10 provinces |
|  | Food fortification  | yes                                 | Mandatory: Salt , Voluntary: Flour (1%) ..  |
|  |   |                                     |   |
|  |   |                                     |   |
| Underlying and contextual factors                  | Food Safety   | yes                                 |   |
|  | Food security   | yes                                 |   |
|  | Food Aid  | no                                  |   |
|  | Nutrition and Infection   | no                                  |   |
|  | Gender  | ??                                  | Paid nursing breaks of 1hr per day after return to work;  |
|  | Maternal leave  | 13 weeks                            | extended leave of up to one year at 80% of pay may be provided  |

## Food safety policies or legislation

### 1. Five-Year Plan to Upgrade Food Safety Regulations (2012)

14 government departments, including the Ministry of Health, the Ministry of Science and Technology and the Ministry of Agriculture, will be revamping outdated standards, reviewing and abolishing any contradicting or overlapping standards and working out new regulations

### 2. Food Safety Law – (2009)

Aims to ensure food safety from the very base of the food chain to the way foods are advertised. It covers standards for the use of pesticides, fertilizers, feeding and breeding programmes in the agricultural production of food to stringent rules on the use of additives in manufactured foods. Food Safety Commission to be established that will coordinate and oversee the new food supervision apparatus. Nationwide significant health risk warning and early response system in place.

### 3. Government's White Paper on Food Quality and Safety – (2007)

China does have a basic food hygiene law; however, its scope does not extend to the whole food chain (UN report 2008); the Eleventh Five-Year Plan (2006-2010) clearly recognized that improving food safety is a critical national task

### 4. State Council Leading Group on Product Quality and Food Safety – (2007)

### 5. Decision on Further Strengthening Food Safety Supervision – (2004)

### 6. Hazard free Food Action Plan (2001)

## Agricultural policies addressing food security

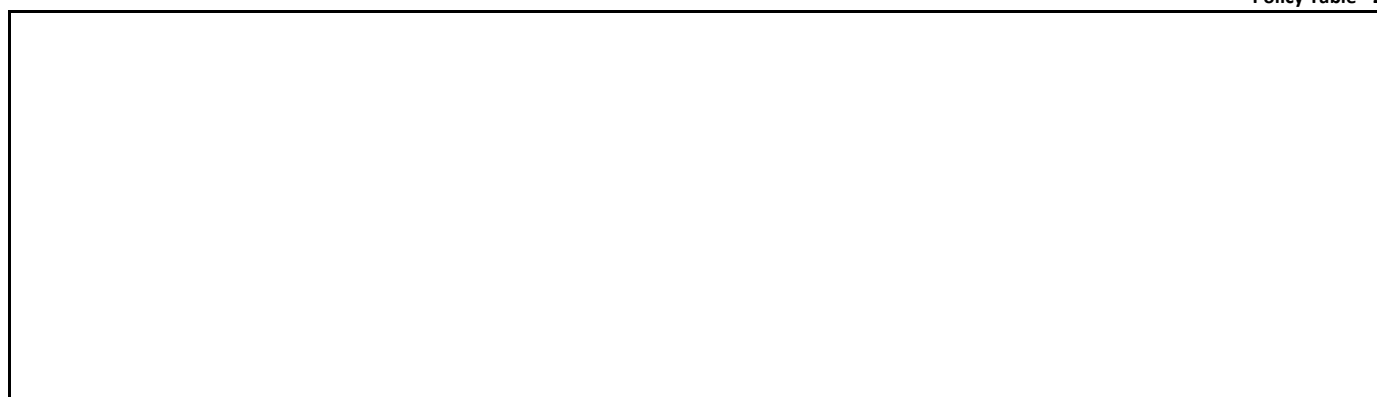
China considers self-sufficiency the foundation of its food security strategy. However, it faces a severe shortage of land and water resources in per capita terms – 40% and 28% of world average respectively...



# China - Food and Nutrition Security Profiles



Policy Table - 2



| Demographic Indicators (Table - 5.1)   |           |      | Year      | Economic Indicators (Table - 5.3)   |                |         | Year |
|--|-----------|------|-----------|---|----------------|---------|------|
| Population size (thousands) /a   | 1,350,695 |      | 2012      | GDP annual growth rate /c   | 7.8 %          |         | 2012 |
| Average annual population growth /a  | 0.49 %    |      | 2012      | GDP per capita (PPP)<br>(constant 2011<br>international dollars) /c   | 10,771         |         | 2012 |
| Proportion of population urbanised /c  | 51.8 %    |      | 2012      |   |                |         |      |
| Number of children <5 years (thousand) /a  | 87,100    |      | 2012      | Gini index /c<br>(100= complete inequality;<br>0= complete equality)  | 42.06          |         | 2009 |
| Education level of mothers of under-fives: None (%)                                  | -         |      | -         |   | 42.48          |         | 2005 |
| Life expectancy at birth (Years) /c  | Male      | 74   | 2010      | Unemployment rate /c  | -              |         | -    |
|  | Female    | 76.5 | 2010      | Population below US \$ 1.25<br>(PPP) per day /c (%)   | 11.8           |         | 2009 |
| Agriculture population density(people/ ha of arable land /b)                         | 6.7       |      | 2006-2008 |   |                |         |      |
| Employment in agriculture sector (% of total employment) /c                          | 34.8 %    |      | 2011      | Poverty gap ratio /e  | 4              |         | 2005 |
| Women employed in agriculture sector<br>(% of total female employment)               | -         |      | -         | Income share<br>held by<br>households /c  | Poorest<br>20% | 4.67 %  | 2009 |
| Adolescents (Table - 5.2)  |           |      | Year      |   | Richest<br>20% | 47.09 % | 2009 |
| Adolescent birth rate<br>(number of births per 1,000 adolescent girls aged 15-19) /c | 9         |      | 2012      | <b>Sources:</b><br>a/ World Bank, Health Nutrition and Population Statistics, 2013 update.<br>b/ FAOSTAT 2014 Update;<br>c/ World Bank, World Development Indicators Database, 2014 Update;<br>d/ UNICEF, State of the World Children 2014 (data refer to the most recent year available during the period specified) ;<br>e/ UN Statistics Division, MDG database 2013 Update. |                |         |      |
| Adolescent girls aged 15-19 currently married or in union /d                         | -         |      | -         |   |                |         |      |
| Women aged 20-24 who gave birth before age 18 /d (%)                                 | -         |      | -         |   |                |         |      |

The information included in this Food Security and Nutrition profile, is backed by recognized, validated and properly published information available until June 2014. Although updated information might be available at national level from different sources, until requirements of quality, validity and proper publication are met, it has not been included in this profile.



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