



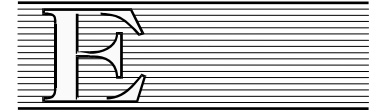
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# **The Status of Food Security in Africa**



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**ACRONYMS**

AFCR	Africa Food Crisis Response
AfDB	African Development Bank
AU	African Union
AUC	African Union Commission
CAADP	Comprehensive African Agriculture Development Programme
CILSS:	Comité Inter-Etats de Lutte contre la Sécheresse au Sahel (Inter-State Committee against Drought in the Sahel)
ECOWAS	Economic Community of West African States
EU	European Union
FAFS	Framework for African Food Security
FAO	United Nations Food and Agriculture Organization
FAPRI	Food and Agriculture Policy Research Institute
FEWS NET	Famine Early Warning Systems Network
GHI	Global Hunger Index
HLTF	High Level Task Force
IHS	IHS Global Insights, Inc
IMF	International Monetary Fund
ISAAA	International Service for the Acquisition of Agri-biotech Applications
ISFP	Initiative on Soaring Food Prices
MMT	Million Metric Tons
NEPAD	The New Partnership for Africa's Development
OECD	Organization for Economic Cooperation and Development
PAFO	Pan-African Forum Organization
RECs	Regional Economic Communities
SSA	Sub-Saharan Africa
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNECA	United Nations Economic Commission for Africa
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development.
USD	United States Dollar
USDA	United States Department of Agriculture
WB	World Bank
WFP	World Food Programme
WHO	World Health Organization

## I. INTRODUCTION

1. The present report uses most recent available food security data and research to provide an updated review of the status of food security in Africa in all of its four commonly discussed dimensions – availability, accessibility, stability and utilization. This is in light of the most recent structural changes that have been shaping the global and regional working policy space where global food security is increasingly and repeatedly being threatened. To recall, from 2006 to mid 2008 the international prices of agricultural commodities increased considerably, by a factor larger than two, flaring up civil unrests in various locations all over the world. In particular, wheat prices doubled during the year leading up to April 2008 and rice prices increased from around USD<sup>1</sup>\$370 a ton to over USD\$1000 a ton between January and April 2008 causing for the first time in history the number of people suffering from chronic hunger to reach one billion globally<sup>2</sup>. More recently, global food prices have increased to new historical levels with the FAO's global food price index reaching a record high in February 2011.

2. Food security is not a new global, regional, national and local concern. Perhaps it may be useful to define what it means for the sake of having a common understanding of the matter. Food security is commonly understood to exist 'when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life'<sup>3</sup>. In other words, food insecurity exists when people do not have adequate physical, social or economic access to food.

3. This food security status report is organized as follows: first, a brief background is provided to present the key food security issues and challenges, including the most salient registered trends and drivers of global and local developments in food output and prices over the period 2000-2010. The report concludes with a few lessons drawn from recent food crises experiences and key related actionable recommendations suggested to inform leaders and policymakers – politicians and opinion leaders alike - to act as they discuss 'the how' of solving the African food security problem at hand. The report focuses on Africa in general and on sub-Saharan Africa (SSA) in particular. Key policy messages for actions are highlighted in italics throughout the report. Figures and tabled information are all listed and attached in the annex to the report along with references.

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<sup>1</sup> United States Dollar (USD).

<sup>2</sup> of which Africa accounts for approximately one third.

<sup>3</sup> FAO. Trade reforms and food security. Conceptualizing the linkages. Commodity and Trade Division, Rome. 2003

## II. BACKGROUND

### **Why food prices have risen and are set to stay volatile and uncertain?**

4. At this stage, it is perhaps useful to quickly recall the main underlying drivers<sup>4</sup> of the global and regional food crises which have ranged from demand-driven forces (FAO et al. 2011; Heady et al. 2010; USDA, 2011 a,b) to supply shocks.

5. On the supply side, the major factors include the following:

(a) Climate change, climate variability (IPCC, 2007) and water stress (UNEP, 2009; UNEP, 2010; UNEP, 2011) affecting producing areas of many traditional large food suppliers causing droughts, floods or crop failures (World bank, 2010c);

(b) The relatively low level of global grain stocks which significantly dwindled (figure 1) in the past twenty years leading to 2007;

(c) The rising oil prices of 2007-2008 inducing higher transport costs (Mitchell, D. 2008);

(d) Some commodity specific explanations<sup>5</sup> (Peter T. 2011; Heady, et al. 2010);

(e) The depreciation of the US dollar;

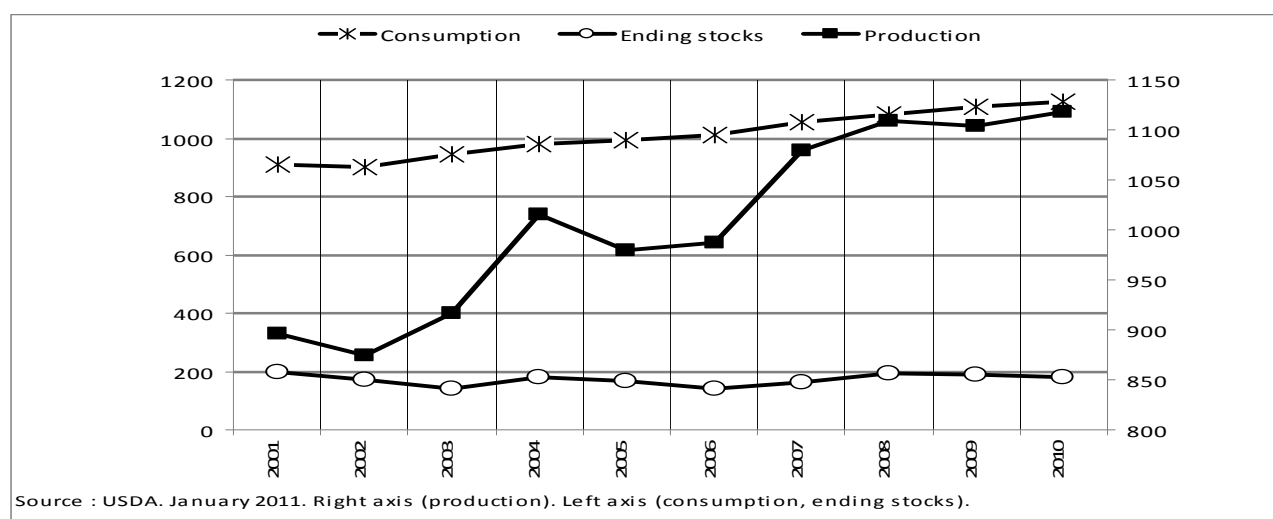
(f) The recent global financial crisis (IHS, 2010; World Bank, 2010b).

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<sup>4</sup> Recent food price movements: A time series analysis. Cook, B. and Robles, M. 2009. IFPRI.

<sup>5</sup> Anatomy of a crisis: the causes and consequences of surging food prices. Derek Headey and Shenggen Fan. IFPRI.2008.

**Figure 1: Tight total grain (wheat, rice, coarse grain) market situation with low global stock levels relative to global production minus consumption balances, (in millions metric tons), 2000-2010.**



6. On the demand side, it is worth mentioning the following (Vivas, E. , 2010; Heady et al., 2010; FAO et al. 2011; USDA, 2011a,b):

- (a) Financial activities out of control and speculation in future and commodity markets;
- (b) Increased export restrictions on food<sup>6</sup>;
- (c) High population and urban growth, growing Asian and Middle Eastern demand for high-value foods (cereals, dairy products and meat);
- (d) High economic growth in China and India;
- (e) Accelerated land grabbing (UNCTAD, 2009) and increased demand for bio-fuel resulting in diversion of significant food crop areas in European Union and the USA towards agro-fuel production (FAO, 2010d);
- (f) Ongoing civil and military strife in several fragile countries.

7. All of the above suggest the complexity of the food security equation and that future food security intervention should be conceived and implemented in a more concerted and holistic manner with all involved in food supply and value chains giving adequate attention to global as well as

<sup>6</sup> Over thirty countries introduced export restrictions on food. Evans, A. The feeding of the nine billion: Global food security for the 21<sup>st</sup> century. 2009. Chatham House.

domestic and local market conditions. Emphasis should also be placed on the root causes of the problem rather than on the symptom or quick fixes.

### III. CURRENT AND FUTURE FOOD SECURITY STATUS IN AFRICA

8. A review of key food security dimensions along with selected relevant indicators is now provided to show how the dynamics at play in global markets including the more recent global food price shocks or crises has impacted negatively upon the status of food security and nutrition in Africa from 2009-2010 bringing about a slowdown in progress towards reducing hunger and poverty<sup>7</sup> in the region.

9. Increases in food prices in recent years ((tables 1-2); USDA, 2011b), the high price variability on record and the food crises they have caused are no secret. The impacts of these on undernourishment and hunger have been significant and dramatic (Wodon et al. 2008; Benton et al. 2008; FAO, 2010d; Heady et al., 2010) especially in terms of household purchasing power and welfare losses<sup>8</sup>. This is so because poor households in Africa spend between 50 to 75 per cent of their income on food and they have little capacity to adapt to frequent or any significant food price hikes, in addition to untimely adjusted wages.

**Table 1: Degree of global to domestic price transmissions of selected food staples (USD\$), 2007-2008**

Commodity	No. of price series	Increase in domestic price in (USD\$)	Increase in domestic price as a percentage of the increase in world price
Beans	9	41	45
Cassava	5	12	13
Maize	26	87	112
Millet	5	43	62
Plantains	2	9	9
Rice	24	62	41
Sorghum	4	56	81
Wheat	7	65	111
Average	83	63	71

*Source: Calculations based on price data from FAO (2009a and 2009b) in Transmission of World Food Price Changes to Markets in Sub-Saharan Africa. Nicholas Minot. IFPRI Discussion Paper 01059. January 2011*

<sup>7</sup> 2009 global hunger index – the challenge of hunger: Focus on financial crisis and gender inequality. Von Grebmer, K., and al. IFPRI. 2009

<sup>8</sup> Poverty effects of higher food prices. A global perspective. Rafael E. and al. Policy Research Working Paper no. 4887. World Bank, 2009.



**Table 2: Degree of global to domestic price transmissions in selected African countries, 2007-2008**

<b>Country</b>	<b>No. of price series</b>	<b>Increase in domestic price in (USD\$)</b>	<b>Increase in domestic price as a percentage of the increase in world price</b>
Cameroon	18	32	32
Ethiopia	6	119	174
Ghana	3	32	39
Kenya	10	57	69
Malawi	9	127	158
Mali	4	55	53
Mozambique	4	69	78
Rwanda	3	54	54
Senegal	17	60	50
South Africa	3	16	25
Tanzania	3	75	78
Zambia	3	52	73
Average or Total	83	63	71

*Source: Calculations based on price data from FAO (2009a and 2009b) in. Transmission of World Food Price Changes to Markets in Sub-Saharan Africa. Nicholas Minot. IFPRI Discussion Paper 01059. January 2011*

### **1. Production of food and its availability to the people, especially to the poor**

10. During the period under review, 2009-2010, Africa witnessed an improvement in food availability in several subregions, following the massive and favourable responses to the 2008-2009 policy, in addition to the good weather conditions it benefited from over the period. According to some most recent food market analysis (FAO, 2010a,b; USDA, 2011a,b; FAO, 2011; FEWSNET, 2011), the region's food security situation improved from 2009 to 2010, following an improved economy and a continuation of the recent upward trend in food production. This remains true not only globally but also in many subregions across Africa. Figure 1 shows the increase in the registered total grain output at the global level for 2001-2010 and the upward trend registered in global stocks in 2008-2011 in response to the massive, favourable and ad hoc food security policy responses of 2008-2009. In the African subregions for example, West Africa and Southern Africa witnessed 4.4 per cent and 4.9 per cent per annum growth respectively in rice production over 2001-2009, attributed mostly to area expansion and good weather conditions rather than to yield improvement. In fact, some 75-80 per cent of the increase in cereal production in sub-Saharan Africa is reported to have come in recent years from increase in area harvested with less than 20 per cent coming from increases in yields suggesting that agricultural productivity growth be brought high on the food security policy reform agenda.

11. A case in point is the Economic Community of West African States (ECOWAS) region where cereal yield increased by barely 1 per cent per annum during the last 30 year period. This poor performance is worrisome for a region set to become the most populous area in Africa by 2050, with

population growing at about 4 per cent per annum. The favourable improvements just mentioned earlier are encouraging but not sufficient as underscored, to address the underlying established or expected imbalances to come in global and regional food markets. It is worth underscoring that in recent years, growth in demand has outpaced that of agricultural output per capita of several strategic food products (rice, wheat, corn, sugar, oilseeds) of high relevance to food security in Africa.

12. Prices of key food staples have also risen in recent years and will remain so in the next ten years according to available best global food market projections (FAO-OECD, 2009; FAPRI, 2010; USDA, 2011a,b; IHS, 2010; FAO et al. 2011) suggesting that the real opportunity that lies ahead for Africa is to invest massively and now in agriculture, especially in small scale food production systems. This will not happen by chance. It can only happen by design, through strategies and programmes backed by strong political commitment and will, sustained agricultural investments inflows, responsible leadership and pragmatism.

13. In fact, Africa stands on a razor-edge when it comes to the degree of extreme thinness experienced in several global food markets (USDA, 2011a,b); FEWSNET, 2011) with prices of food skyrocketing (oilseeds, sugar, grain, rice, wheat, corn) therein at a time when the number of food-insecure<sup>9</sup> people in the region is estimated at 390 million for 2010, a near 11 per cent decline from 2009

14. As for undernourishment<sup>10</sup>, the term refers hereafter to the indicator of progress towards the millennium development goal for the eradication of extreme poverty and hunger (MDG-1) which aims to reduce by half the proportion of hungry people in the world by 2015. This indicator is based on national food production figures and is a good measure<sup>11</sup> of food availability. Indeed, the number of undernourished people as estimated by FAO increased by around 75 million people<sup>12</sup> from 848 million in 2003-2005 to 923 million in 2007 (before the global food crisis) and from there the global number leaped to 1.02 billion in 2009, the year immediately following the global food price hike of 2007-2008. As shown in table 3, the global food crisis of 2007-2008 added an additional 148 million to the number of registered undernourished people of which 52.7 million people or 36 per cent of the global bulk were from Africa suggesting that Africa contributed significantly to the worsening of the global undernourishment situation. Table 3 also suggests that there are a great deal of lessons to be learned from China, a billion-plus people country which has showed the way effectively in reduction of the stock of undernourished by consistently providing the right will, policy and support to its agricultural and rural community.

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<sup>9</sup> Food insecure occurs when per capita food consumption for a country or income quintile falls short of the nutritional requirement (USDA, 2011).

<sup>10</sup> Not to be confused with under nutrition (discussed shortly in the next section) or malnutrition, both of which are a result of food intake of inadequate quantity and quality, poor health and sanitation.

<sup>11</sup> FAO. Measurement and assessment of food deprivation and under nutrition, International scientific symposium, Rome, 26-28 June. 2002. Summary of proceedings.

<sup>12</sup> Almost the size of Germany total population.

**Table 3: Trends in the change in the number of undernourished people in Africa relative to other regions (in million), 1990-92 to 2009**

<b>Regions</b>	<b>1990-92 to 1995-97</b>	<b>1995-97 to 2000-02</b>	<b>2000-02 to 2004-06</b>	<b>2004-06 to 2009</b>
World	-20.4	31.9	16.1	148
Developing world	-21	30.5	24.1	147.3
Latin America & the Caribbean	-0.8	-2.4	-4.1	7.7
Asia & the Pacific	-57.2	23.6	14.1	75.8
China	-34.1	-11.2	-5.1	
Southeast Asia	-17.1	5.3	-9.2	
South Asia	13.3	-3.9	5.8	
India	-16.7	29.5	28.5	
North Africa	0.3	0.2	0.4	
Sub-Saharan Africa	25.4	11.1	6.9	52.7

*Source: FAO 2009a,b; FAO 2010d.*

15. In fact, Africa is also the only region in the world that has not recorded a single decrease in the number of undernourished people since 1990. However, this regional trend as further detailed in table 4 masks a mixed performance picture when the number of undernourished people in subregional level numbers is considered over the same period. For example, West Africa registered some improvement in these numbers in 1990-1992 to 1995-1997 and in 2000-2002 to 2004-2006 (down 3.5 million and 3 million people respectively). Eastern Africa also made some strides (table 4) in reducing its stock of undernourished people in 1995-1997 to 2000-2002 (down 2.3 million people). These improvements were not enough to significantly bring down the degree of prevalence of undernourishment which dropped by 3 percentage points only from 29 per cent in 1990-1992 to 26 per cent in 2005-2007<sup>13</sup> in Africa while still remaining high in East Africa (40 per cent), Central Africa (33 per cent) and Southern Africa (28 per cent).

**Table 4: Trends in the change in the number of undernourished people by Africa sub region (in million), 1990-92 to 2009**

<b>Change in number of undernourished</b>	<b>1990-92 to 1995-97</b>	<b>1995-97 to 2000-02</b>	<b>2000-02 to 2004-06</b>	<b>2004-06 to 2009</b>
Sub-Saharan Africa	25.4	11.1	6.9	52.7
North Africa	0.3	0.2	0.4	
Central Africa	16.4	8.9	7.0	
East Africa	8.5	-2.3	3.1	
Southern Africa	3.4	0.7	0.2	
West Africa	-3.5	3.9	-3.0	

*Source: FAO 2009a,b; FAO 2010d.*

<sup>13</sup> State of Food Insecurity (SOFI). October 2010. FAO. Rome.

16. In terms of change in the proportion of undernourished people or prevalence of undernourishment, the food crisis drastically raised the level of hunger in sub-Saharan Africa with this region registering the highest proportionate change in the undernourished population relative to other regions (table 5). In other words, in the past two decades, the additional number of hungry people in sub-Saharan Africa more than doubled from 14.9 in the 1990-92 to 1995-1997 period to 24.8 for the 2004-2006 to 2009 period. As for East Africa, the subregion with the highest number of undernourished people, this bloc of fragile countries registered the fastest and sustained progress in terms of reduction in the percentage of undernourished people. Central Africa also remains worrisome because it is the region which recorded significant increases both in the number of undernourished (table 4) and also in terms of prevalence. Southern Africa witnessed a mixed picture; the region also recorded decreases in the prevalence of undernourishment while reporting a slight increase in terms of number of undernourished (table 4). On the contrary, West Africa recorded decreases both in terms of number (table 4) and degree of prevalence of undernourishment.

**Table 5: Trends in the change in proportion of undernourished people in selected regions including Africa (in percent), 1990-92 to 2009**

Regions	1990-92 to 1995-97	1995-97 to 2000-02	2000-02 to 2004-06	2004-06 to 2009
World	-2.4	3.9	1.9	16.8
Developing world	-2.5	3.8	2.9	17.2
Latin America & the Caribbean	-1.5	-4.6	-8.3	17
Asia & the Pacific	-9.8	4.5	2.5	13.4
China	-19.2	-7.8	-3.8	
Southeast Asia	-16.2	6	-9.8	
South Asia	16	-4.6	6.2	
India	-8	15.2	12.8	
North Africa	7.5	4.6	8.9	
Sub-Saharan Africa	14.9	5.7	3.3	24.8

*Source: FAO 2009 a,b; FAO 2010d. .*

17. As for 2010, the most vulnerable countries<sup>14</sup> are clustered in Central and Eastern Africa<sup>15</sup>. These include: the Democratic Republic of the Congo (DRC), Eritrea, Kenya, and Somalia. These countries are known to have been recently in, or currently entrenched in some kind of civil strife. Other food security hotspots across Africa for the period 2010-2020 include: Central African Republic (CAR), Ethiopia, Madagascar, Mozambique, the Niger, Nigeria, Senegal, Tanzania, Uganda, and Zimbabwe. The localized and drought related food crisis of 2011 in the horn of Africa adds Djibouti and Uganda to this list.

<sup>14</sup> Those where an estimated 80-100 per cent of the population is still food insecure.

<sup>15</sup> Mainly in the Horn of Africa countries.

18. In the food security hotspots reviewed, the poorest, landless, female-headed households and the sick are known to be the hardest hit by food crises suggesting that many of the recent macroeconomic policies adopted in Africa were inappropriately designed and unsustainable. Future anti-food insecurity policies should be carefully designed to target the most vulnerable with more focus on safety nets and social protection programmes<sup>16</sup>.

19. A projection of the food security situation by 2020<sup>17</sup> suggests the number of food-insecure people in sub-Saharan Africa will exceed 500 million, out of a total population of roughly 1 billion. In other words, more than half of the region's population will consume less than conventionally established nutritional targets. Likewise, the region's food security position is also set to deteriorate if appropriate corrective measures are not taken now to address the root causes of the problem.

## 2. Hunger and Nutritional status

20. In addition to the change in the number and proportion of individuals undernourished provided earlier, it is also useful to provide facts on the change in undernutrition and hunger status<sup>18</sup> as experienced at the country and household levels across Africa, drawing attention to the most affected subregions, countries and areas where action is most needed.

21. The 2010 Global Hunger Index (GHI) provided<sup>19</sup> (IFPRI et al., 2010) in table 6 tracks progress in hunger with incorporation of three interlinked hunger-related indicators (Wiesman, 2004; Wiesman, 2006) – the proportion of undernourished among the population, the prevalence of underweight children, and child mortality rate – insufficiently captured in available undernourishment indicators. Based on the GHI index, sub-Saharan Africa is second at 21.7 to South Asia which stood at 22.9 in terms of the highest registered 2010 regional GHI scoring levels. This is a 14 per cent drop from the region's 1990 GHI score compared to South Asia (25 per cent) and Near East and North Africa (33 per cent). The picture varies greatly in African subregions and countries with the least performing GHI scoring subregions being Central Africa and Eastern Africa. As a whole, progress in hunger reduction – measured by the annual reduction in GHI scores – was most felt in Tunisia (-58 per cent) and Ghana (-57 per cent), the only country in SSA which has fared satisfactorily among the globally 10 best performers in improving their GHI score since 1990. Among the nine countries in which the GHI rose worldwide between 1990 and 2010, all but one (North Korea), belong to Africa. The countries most affected based on their respective GHI scoring are: Burundi (+20 per cent), Comoros (+21 per cent), the Democratic Republic of the Congo (DRC) (+ 66 per cent), the Gambia (+6 per

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<sup>16</sup> The state of food security in the world: High food prices and food security – threats and opportunities. FAO. 2008.

<sup>17</sup> USDA food security report 2010, 11 January 2011.

<sup>18</sup> Which depends not only on the nutrient intake but also on non-nutrient food attributes, privately and publicly provided inputs and health status (Mortorell and Ho, 1984).

<sup>19</sup> The GHI score varies between zero and 100. Higher scores indicate greater hunger. The lower the score, the better the country's situation. The GHI scores ranging from 10 to 19.9 are considered serious, 20 to 29.9 are considered alarming and scores above 30 are extremely alarming in food security issue.

cent), Guinea-Bissau (+8 per cent), Liberia (+6 per cent), Swaziland (+14 per cent) and Zimbabwe (+12 per cent).

**Table 6 : Global Hunger Index (GHI) by Africa sub regions, 1990-2008**

	Proportion of undernourished (per cent)		A	Prevalence of underweight in children under 5 years (per cent)		B	Under-five mortality rate (per cent)		C	GHI		D
	1990-92	2004-2006		1988-92	2003-2008		1990	2008		1990 With data from 1988-92	2010 with data from 2003-08	
North Africa	7.8	5.8	25.4	16.7	11.3	32.1	8.3	5.2	37.3	11.2	8.5	24.1
Central Africa	35.6	33.5	6.0	21.3	20.4	3.9	15.3	15.2	0.7	24.1	23.0	4.2
East Africa	42.8	40.5	5.5	25.4	26.1	-2.6	16.6	12.3	25.7	28.2	25.7	8.7
Southern Africa	31.6	28.3	3.4	18.9	16.0	9.2	12.8	9.4	21.3	21.1	17.8	9.9
Western Africa	26.0	22.7	12.8	25.4	21.9	14.0	20.4	14.4	29.3	23.9	19.6	17.9
Africa	29	26	11	22	19	11	15	11	23	22	19	13

*Source: IFPRI. Global hunger index 2010 for details.*

*Notes: A is relative improvement in proportion of undernourished from 1990-1992 to 2004-2006; B is relative improvement in prevalence of underweight in children under 5 years from 1988-1992 to 2003-2008; C is relative improvement in under-five mortality rate from 1990 to 2008; D is relative improvement in GHI from 1990 to 2010. A, B, C, D are calculations from the author based on the data provided above.*

22. In terms of index components, Burundi, Comoros, the DRC, Eritrea have the highest proportion of undernourished people with more than 50 per cent of the population. Angola, Chad, and Somalia have the highest under-five mortality rate with 20 per cent or more. Child nutrition with accelerated progress in reducing child underweight should be swiftly addressed in SSA to see the kind of desired improvements sought in these numbers. Some cases in point include Ethiopia and Rwanda (51 per cent) and Guinea Bissau and the Niger (47 per cent) where about half of all children are stunted<sup>20</sup> according to UNICEF (2009a).

23. The regions or countries just mentioned should be given immediate attention for corrective actions on the ground to save the lives of millions of people. Saving one life is saving the world as prescribed in most commonly read books of scriptures.

<sup>20</sup> Low height for one's age.

### **3. Vulnerability of African countries and households to internal and external shocks, their accessibility to food and stability of food security factors**

24. One of the challenges to food security to deal with comes mainly from the frequent instability and the slow growth in earnings or purchasing power of the people, countries, households particularly in rain-fed rural producing areas in sub-Saharan Africa (SSA), all well known to remain exposed to risks and threats of various order, intensity and frequency.

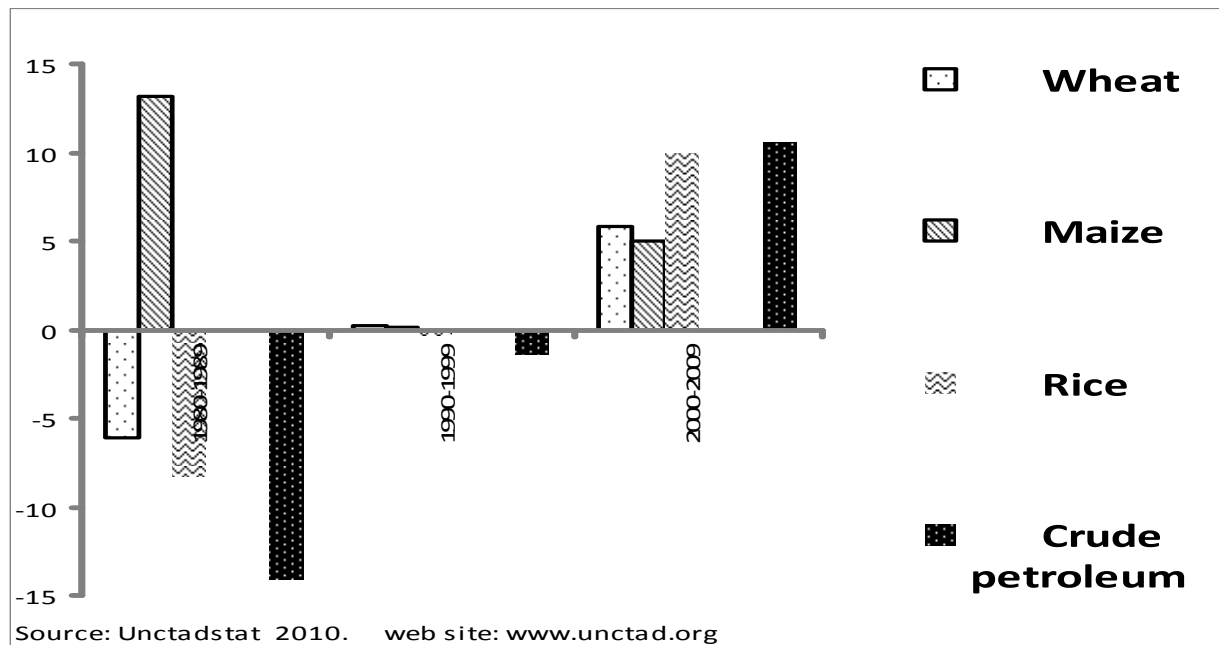
25. Access to food and its utilization and not the supply of food is central to food security in Africa because food insecurity is first about poverty and poverty is about lack of income-generating opportunities or unemployment, economic growth without household per-capita increase. As regards the stability of export earnings, revenues, especially agricultural incomes in the region, it is worth recalling the sudden drop in economic performance experienced in 2009 with growth rates dropping from 5 per cent in 2008 to 1.6 per cent on average (World Bank, 2010b) compared to the remarkable registered economic growth Africa experienced over 2000-2008. This shock was largely attributed to the negative effects of the global financial and economic crisis of 2008-2009 which severely hampered traditional export earnings as well as saving possibilities. This turmoil did lower real purchasing power and welfare in various ways thereby reducing the capacities of most African countries and households to meet their food import bills or purchase the food they need. As a result, poor households were forced to eat fewer meals and less nutritious food, cut back on health and education expenses, and sell their assets (Benton et al., 2008; FAO, 2010d; Heady et al. 2010; SWAC, 2011; Wodon et al. 2008)).

26. As can be seen for food prices stability (figure 2), Africa is increasingly faced with a growing unstable global food market environment whose regime of risks have significantly changed from a global commodity and food market environment of lower food prices (cheaper food) with relatively high commodity price instability in 1980-90 to an emerging global commodity and food market environment of higher food prices and high price volatility in 2000-2010 and beyond. In 2000-2009 for example, the degree of instability in key strategic energy and food commodity market prices for goods such as crude oil, wheat, rice, maize went up from more than 5 per cent for wheat and maize to more than 10 per cent for rice and crude oil. In 2007-2008 in particular (tables 1-2), the degree of price volatility<sup>21</sup> of strategic staple foods such as wheat, rice, maize even went up much higher in prices on domestic market than on the international markets. Except for rice whose price volatility was relatively lower (22 per cent versus 42 per cent on average), price volatility was relatively higher at 38 per cent for wheat and 38 per cent for maize on average in SSA domestic food markets compared to corresponding observed rates on international food markets, 36 per cent and 33 per cent on average respectively.

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<sup>21</sup> As commonly measured by the standard deviation, coefficient of variation provided or percentage of variation in relative prices level.

**Figure 2: Instability index of and trends in wheat, rice, maize and crude oil prices, in constant terms (per cent variation), 1980-1989, 1990-1999, 2000-2009**

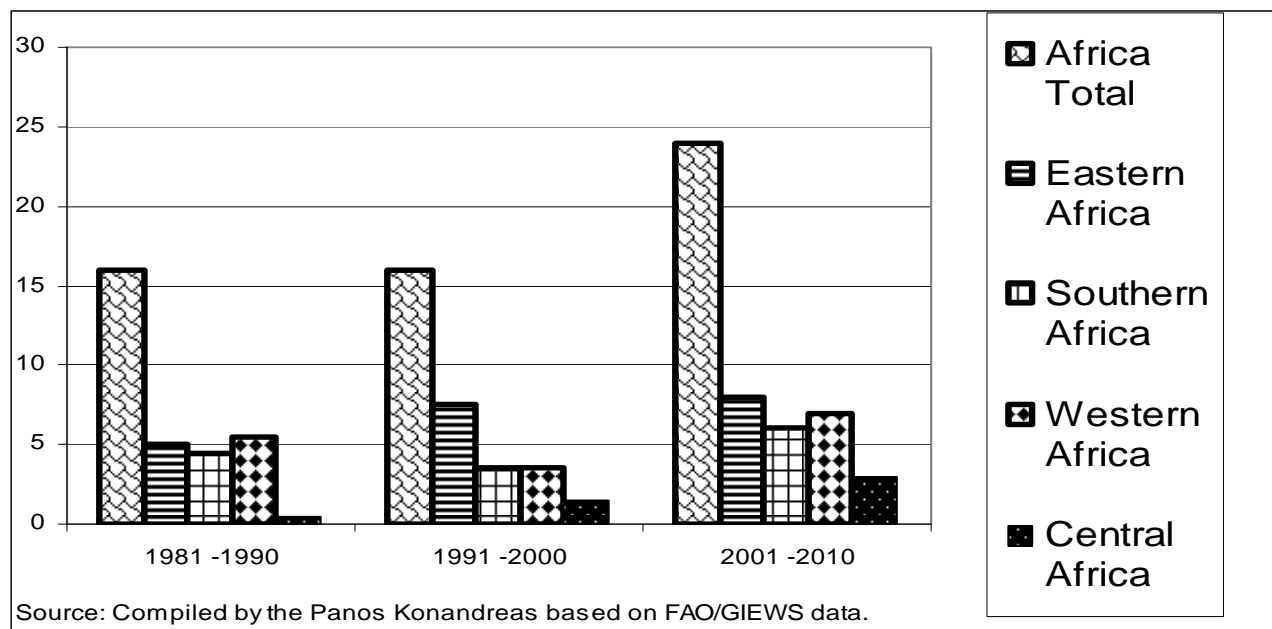


27. In addition to uncertainty set to surround future key global grain stock levels (figure 1) and prices of several strategic agricultural and food commodities of interest to Africa (FAPRI, 2011), the global food production environment is also increasingly becoming riskier due to several emerging uncontrollable food market movers including climate change and rapid biotechnology developments (Clive, J. 2007). In 2001-2010 for example, the number of countries that experienced emergency situation requiring assistance increased across Africa, and in all the African subregions as shown in figure 3 compared to the previous two decades reviewed (1981-1990 and 1991-2000). In this connection, it is important to underscore that the trend of total and per capita food aid receipts has been going downward globally as well as regionally with food aid in volume and in per capita terms increasingly reducing since 2002 (figure 4) despite increased demand for emergency and humanitarian assistance in Africa (figure 3). These patterns underscore a significant change in the previously established global and regional risk and related emergency and humanitarian regimes, suggesting that *food security policymakers in Africa should take much bolder preventive actions in order to better address unforeseen price or climatic shocks of the kind experienced in the late 1990s and in more recent years (2008, 2010, 2011<sup>22</sup>).*

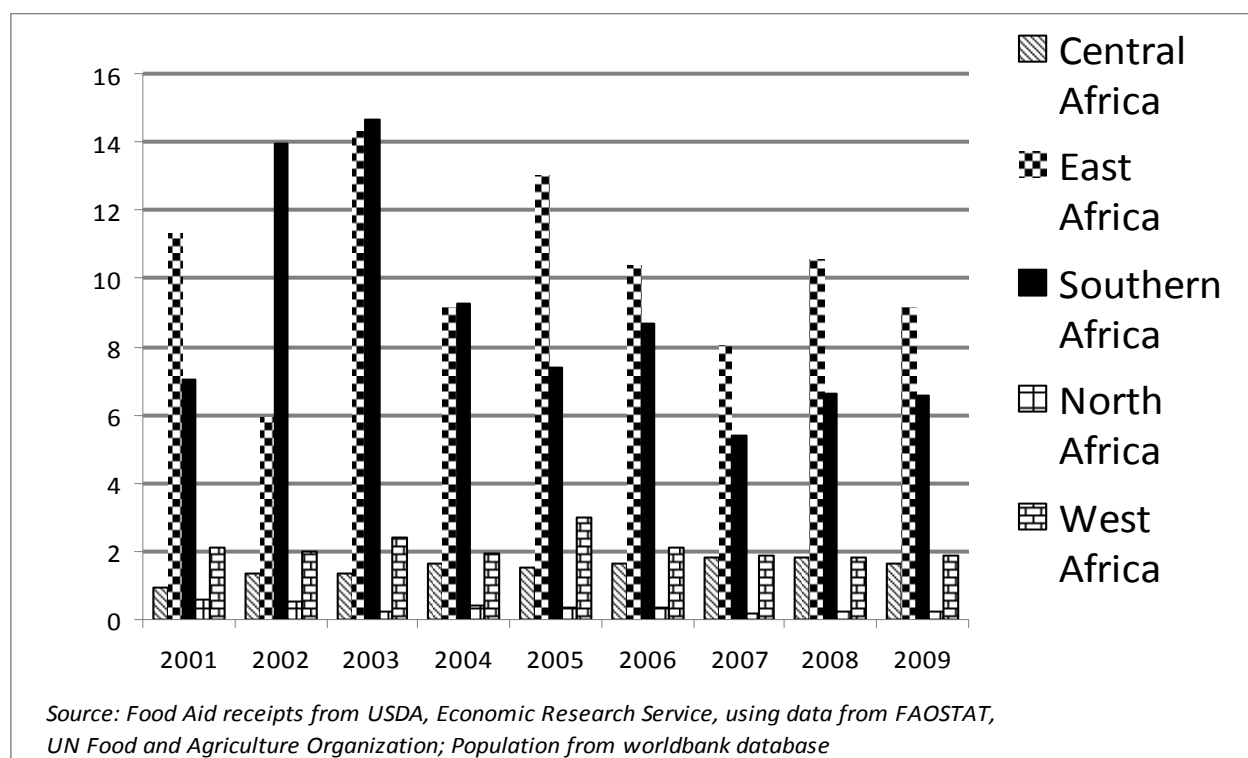
<sup>22</sup> 2011 Food crisis in the Horn of Africa.



**Figure 3: Number of countries (average per year) that experienced an emergency and required assistance in Africa, 1981-1990, 1991-2000, 2001-2010**



**Figure 4: Food aid receipts per capita (kg/head/year) by Africa sub region, 2001-2009**



28. In addition to being the most food-insecure region of the world according to several recent studies, sub-Saharan Africa's agricultural sector is also characterized on the supply side by high variability in agricultural outputs. In a region with financial constraints to importing food, and where 80 per cent of grain supplies are from domestic production, this variability can compromise food security at different points in time. On average, the region experiences a grain shortfall (when grain output falls below trend levels) every other year, with an average shortfall of 16 per cent.

29. On the demand side, the relatively high level of price variability (tables 1-2 and figure 2) as recently observed in key staple food markets in the region<sup>23</sup> combined with the uncertainty in output discussed earlier, put countries as well as household's earnings or welfare<sup>24</sup> at risk making the availability of food, the access to food and to other necessities uncertain in many parts of Africa. In this connection, anti-food insecurity interventions in Africa should focus more on the poorest rural and urban areas where there is most poverty and where uncertainty in price, output and farm incomes remain the highest.

30. In terms of food utilization, Africa has remained increasingly dependent upon several key food items which consumers in the region including the poor cannot easily do without. Rice is a case in point where countries such as Ethiopia, Kenya, Mozambique, South Africa and Zambia depend more than 50 per cent upon the international rice market to meet their domestic food requirements (SWAC, 2010; SWAC, 2011). In West Africa, consumer's preference for rice pushed imports to reach 5.2 million tons in 2010 compared with 1.7 million tons in the early 1990s. This represents about 60 per cent of West Africa rice needs, despite possessing considerable rice-growing potential (SWAC, 2011). In fact Africa, and particularly SSA as a whole, currently consumes more of what it does not produce enough of (US Wheat Associates, 2011) and produces more of what it does not consume enough of. The agricultural economies of the region have for the most part remained severely skewed towards the production of several cash crops to meet the needs of foreign markets at the expenses of domestic food production. The historical policy choices in place since colonial times have made the region now even more vulnerable when it comes to timely adjustment to any global food price shock that might arise when distant global food markets are stricken. The food import bill of SSA alone<sup>25</sup> is estimated at US\$ 36.8 billion in 2011, up 30.5 per cent from 2010 (FAO, 2011)<sup>26</sup>. That of North Africa is also set to increase, particularly with wheat and maize imports which account for some 54 per cent and 78 per cent of corresponding Africa food needs<sup>27</sup>. For North Africa alone, wheat imports will climb 51.4

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<sup>23</sup> FEWS NET. Price watch: December food prices, January 31, 2011. The famine early warning systems network. USAID.

<sup>24</sup> Rising food prices in sub-Saharan Africa: Poverty impacts and policy responses. Quentin Wodon and al. October 2008. Policy Research Working Paper no. 4738.

<sup>25</sup> North Africa's food bill is estimated at US\$13.5 billion and US\$9.86 billion for net agricultural and food imports in 2005-2008 (UNECA, 2011)..

<sup>26</sup> Global food import bills are projected to soar to an all-time high of almost USD\$ 1.3 trillion in 2011 with expenditure on imported foodstuffs for vulnerable countries to account for roughly 18 per cent of their total import bills compared to a world average of around 7 per cent. (FAO, 2011).

<sup>27</sup> SSA wheat imports will grow from 12.3 MMT in 2010 to 35.4 MMT in 2050 (US Wheat Associates, 2011)..

MMT in 2050, up 142 per cent from 2010, despite an expected negative wheat consumption per capita growth rate.

31. With population and food prices set to rise beyond control in years to come (FAPRI, 2011), this level of spending will not be sustainable in the future and needs to be corrected. Pouring money into agriculture without paying attention to the needs of the poorest farmers in the light of an increasingly changing climate will not be sufficient; what is most important is a paradigm shift to take steps that facilitate the transition towards a new agricultural policy that is more supportive of a small-holder food production system, more resilient to shocks (FAO et al. 2011) and which also has low-carbon emission and is resource- preserving (UN, 2010b).

32. On the demand side as highlighted earlier, wheat, rice, maize, sugar and vegetable oil will also remain among the most expensive food items in many parts of Africa due to the observed low purchasing power of the poor regarding these staples and also due to the relatively high demand (58 per cent of dietary energy consumption<sup>28</sup>) they traditionally accounts for<sup>29</sup> compared to other vegetal food sources<sup>30</sup>. These food products are internationally traded in several futures and options markets unlike locally-produced food items of interest such as beans, millet, sorghum, roots and tubers, plantain and banana. These local food products are easily available either in the processed or unprocessed form –and constitute the food basket of millions of African households but absent in formal trading in established futures, options or derivatives markets. Current trends in consumption and production patterns in Africa should therefore be seriously reviewed and totally corrected with more attention being paid to the development and promotion of local African foods and cuisine; starting with more aggressive and regular regional market research and household consumption and budget surveys. The proposed actions will contribute significantly to reverse African dependency on food imports be they commercial or food aid.

#### **IV. CONCLUSION, KEY RECOMMENDATIONS AND WAY FORWARD**

33. Food security is and will remain among the most burning issues in Africa for the next ten years and beyond with available projections putting the number of food insecure people by 2020 at about 500 million. Sub-Saharan Africa is set to be the most food insecure region in the world with the state of food security being constantly put at risk by the impacts of adverse climate change and prospects, external shocks, lack of adequate infrastructures and above all lack of political will to act and effect the necessary changes. The socio-economic impacts of food crises already on record, and the policy responses provided to cope with the consequences have been significant but insufficient to reduce the degree of undernourishment and hunger in the region.

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<sup>28</sup> FAO statistical year book 2009. FAOSTAT.

<sup>29</sup> Wheat <sup>29</sup>(15 per cent), rice (17 per cent) and maize (25 per cent).

<sup>30</sup> FAO statistical year book 2009. FAOSTAT. See 2003-2005 food basket structure from FAO standard household surveys.

34. The root causes of food crises and the resulting food insecurity are complex and intertwined as discussed earlier suggesting the need for a more holistic and massive investment response if one wants to see African food security problems kept at bay. Emphasis needs to be placed on poverty reduction in order to improve the overall food situation and to promote development in African countries. In this context, anti-food security interventions should focus more on increasing food production and generating farm and non-farm income in rural as well as urban poor areas where there is much poverty and price uncertainty.

35. There is also enough evidence to suggest that the global food system is fundamentally changing in a number of ways indicating the need to look beyond the immediate causes and impacts or symptoms of recent global fuel, food and economic crises, and to take a more critical look at ‘the how’ of resolving the acute African food security problem. The following set of actions, oriented recommendations and priority areas are proposed to address these issues in the short as well as the long term.

**1. Strengthen at all levels African governance and coordination structures and mechanisms, as well as monitoring and evaluation structures and systems in food and nutrition security matters**

36. African agricultural and food markets are dysfunctional because of the extreme degree of fragmentation across the continent and also because of the lack of a strong, committed, transparent, accountable supra national governing body to guide the common food security policy stakes and options, so as to set the rules of the game for all involved and to ensure that these are enforced. Strong coordination, implementation and surveillance mechanisms for food security are needed for organizing the African food markets into one well-functioning common market in line with the resolution of the 2006 Abuja Heads of State and Government food security summit. Food insecurity can effectively be reversed in the future by fast-tracking the establishment of an African Common Market for strategic food products (FAO, 2008) through the construction of regional common markets led by Regional Economic Communities (RECs) and public- private partnerships. In this context, the following should be considered among regional priorities: a common market prices guaranteed fund to (a) help stabilize farm gate prices; (b) help establish a regional grain reserve stock built upon a network of working subregional grain reserve stocks; (c) help establish or scale up required regional disaster risk management and preparedness capacities and tools (early warning, surveillance and crop insurance systems for food security) through the AUC, the RECs as well as win-win arrangements under public-private partnerships; (d) establish a regional agency for food and commodity markets surveillance and stabilization of commodity and food prices which is also long overdue. The responsibilities of such an agency should include regulation of speculation, food aid and intra and extra flows of spot food markets in a transparent and responsible manner; and (e) establish wherever possible appropriate food banks and post harvest infrastructure along the food supply chains globally as well as locally to reduce food waste.

2. **Scale up registered food security related to best pilot practices through active information sharing and exchanges of experiences among RECs and countries and all others concerned**
3. **Strengthen at all levels African emergency and humanitarian interventions, but reform food aid**

37. Emergency package should include anti-food insecurity interventions in Africa and focus more, in the short term, on expanding emergency responses and humanitarian assistance to food insecure people and growing unemployed population segments. Emergency food aid is a highly welcome support in Africa but perpetual food aid is very disturbing for national and local food markets as evidenced in many studies. It is therefore critical to effectively reform the implementation of a new kind of food aid programme to avoid adverse impacts on domestic food production and move towards more sustainable and robust African led and regionally-based solutions. Safety net interventions and social protection programmes are necessary to save lives but there is also the need for this to be consistent with a longer term poverty eradication strategy and fiscal sustainability.

38. Building subregional emergency strategic grain stocks is not enough for risk management. Several other complementary market-based risk management (insurance, contracts) policies will be needed to protect small farmers from future risks, shocks and uncertainty.

4. **Invest more responsibly at all levels into African agriculture to strengthen quality data collection, fast-track regional integration efforts targeted to scale up regionally-based joint agricultural investments in support of agricultural and rural transformation, and integrated well-functioning strategic regional commodity and food markets**

39. African RECs and governments should scale up investments into agriculture for sustained agricultural growth by fast-tracking the implementation of the Maputo declaration on agricultural based investment.

40. The international community should also take steps to meet the various pledges made in recent high level meetings on global food crisis <sup>31</sup> (G8, 2009; G20, 2011). What matters most to Africa is what is effectively mobilized and delivered in terms of financial resources to timely channel and scale up investments into African agriculture<sup>32</sup>. Africa needs some USD\$ 30 to 50 billion per annum<sup>33</sup> agricultural investment over a sustained period of time in order to effectively meet its agricultural and rural developmental needs.

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<sup>31</sup> "L'Aquila" Joint Statement on Global Food Security: L'Aquila Food Security Initiative. G8 Meeting, 2009.

<sup>32</sup> The State of Food Insecurity in the World 2009: Economic Crisis – Impacts and lessons Learnt.

<sup>33</sup> FAO estimates for Africa bankable investments project for NEPAD, 2005. See [www.fao.org](http://www.fao.org).

41. Public and private stakeholders should take a critical look at ways to work closely together in Africa to increase investments in agriculture, increase agricultural production and income, formulate contingency plans to finance products and deliver these on time.

5. **Act efficiently at all levels and on all scales to reduce food waste<sup>34</sup>.**
6. **‘Where there is a strong political commitment and will, there is a way’. It is not too late to act. Doing all of the above alone is perhaps smarter, so as to go much faster, but doing all of the above together is to think big, and go much farther.**

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<sup>34</sup> Post harvest and post production losses due to inadequate infrastructure, poor storage facilities, inadequate technical capacity and under-developed markets are the main causes of waste. Food losses in the field (between planting and harvesting) may be as high as 20 to 40 per cent of the potential harvest in developing countries (UN, 2010). Post-consumption food waste can also no longer be overlooked; ‘How can waste reduction help to healthily and sustainably feed a future global population of nine billion people?’. UK Government’s foresight Project on Global Food and Farming Futures. Workshop report :W4. 23-24 February 2010. London.

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