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THE STATE OF FOOD AND AGRICULTURE

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I. INTRODUCTION – A LONGER-TERM PERSPECTIVE

1. World agriculture, including fisheries and forestry, has achieved notable success over the past half century but faces serious challenges now and in the coming decades.[1] The proportion of people suffering from hunger has fallen by half since 1969-71, the earliest period for which estimates are available. Progress is still being made on reducing the proportion of undernourished people, but the absolute number appears to have risen since 1995-97.

2. Agricultural growth contributes directly to food security, but it also supports poverty reduction and acts as an engine of overall economic growth in much of the developing world. The success of the agricultural sector at the global level has not been shared uniformly across regions and countries, however, and seems to have waned since the early 1990s. Many of the least developed countries, particularly those located in marginal production environments, continue to experience low or stagnant agricultural productivity, rising food deficits, and rising levels of hunger and poverty. The challenge is to revive agricultural growth at the global level and extend it to those left behind.

II. AGRICULTURAL, FISHERY AND FOREST PRODUCTION AND USE

A. AGRICULTURE

3. The value of total agricultural output (all food and non-food crop and livestock commodities) has almost trebled in real terms since 1961 (Figure 1), an average increase of 2.3 percent per year, well ahead of global population growth (1.7 percent per year). Much of this growth originated in developing countries and also reflects the rising share of high value commodities such as livestock products and horticulture in the total value of production.

4. Global agricultural value added per capita has grown at an average rate of 0.4 percent per year in real terms since 1961 (Figure 2). Latin America and South Asia have seen a small increase, while East Asia and the Pacific has more than doubled agricultural value added per capita over the last four decades. Sub-Saharan Africa is the only region in which per capita agricultural value added has not seen a sustained increase, with a declining trend on average for the period and considerable variation over time and across countries (Figure 3).

5. The composition of agricultural production has changed considerably over the last 40 years, as the output of cereals, oil crops, sugar, vegetables, eggs and meat increased more than population growth rates, while the production of pulses and roots and tubers declined relative to total population.

6. Total meat production in developing countries more than quintupled from 27 million tonnes to 147 million tonnes between 1970 and 2005 (Figure 4), and, although the pace of growth is slowing down, global meat demand is expected to increase by more than 50 percent by 2030. Satisfying the increasing demand for animal food products, while at the same time sustaining the natural resource base and coping with climate change and vulnerability, is one of the major challenges facing world agriculture today.

[1] This report is based primarily on Wik, M., P. Pingali and S. Broca. 2007. Global agricultural performance: Past trends and future prospects. Background paper for the *World Development Report 2008.* Other sources are cited in the text.

B. FISHERY PRODUCTION AND USE

7. Fisheries play an important role in the world food economy. About 42 million fishers and fish farmers gain their livelihoods from capture fisheries and aquaculture. Globally, fish provide about 16 percent of animal proteins consumed, with regional variations from 22 percent in Asia to 19 percent in Africa and around 7 percent in Latin America and the Caribbean.

8. Total fishery production has more than doubled since 1970 and in 2005 reached 141.4 million tonnes, of which 93.3 from capture fisheries and 48.1 from aquaculture (Figures 5-7). While total capture production has been relatively stable during the last decade, total marine catch showed a substantial decline of 1.8 million tonnes in 2005. World aquaculture production has been increasing rapidly in recent years and now accounts for 34 percent of total fisheries production. Most of the expansion has been in the Asia-Pacific region (in particular in China), which accounts for over 90 percent of total aquaculture production volume.

9. About three quarters of world fishery production (108 million tonnes in 2005) is for direct human consumption and the rest (33.4 million tonnes in 2005), all from capture fisheries, is used for non-food purposes, primarily for livestock and aquaculture feed. The contribution of aquaculture to the total supply of fish for food use has increased substantially in recent years, accounting now for 45 percent at the global level (85 percent in China and 23 percent in the rest of the world). In order to meet future demand at current levels of consumption, it is projected that production from aquaculture will need to reach 60 million tonnes by 2015. Any increases in consumption will require an even more rapid growth in aquaculture.

C. FORESTRY AREA, PRODUCTION AND USE

10. According to the *Global Forest Resource Assessment 2005*, total forest area is just under 4 billion hectares. The annual rate of deforestation during the period 2000-2005 is estimated at about 13 million ha, but taking into account the area afforested and natural expansion of forests, the net annual loss of forests is about 7.3 million ha. This is down from the annual loss of 8.9 million ha during the period 1990 – 2000.

11. World roundwood production has increased more than 40 percent since 1965 and in 2005 reached an estimated 3 503 million cubic metres (Figure 8). Globally, about half of total roundwood is used for industrial purposes (49 percent in 2005) and half is burned as fuel (51 percent). The vast majority of woodfuel is used in developing countries, which in 2005 accounted for about 91 percent of world woodfuel production, reflecting the importance of wood as the primary source of energy for most of the developing countries. Rising costs of fossil fuels and growing concern about climate change are expected to increase the demand for wood as a source of energy, both in developing and developed countries.

12. Developing countries produced 2 154 million cubic metres, or 62 percent of total roundwood production, in 2005 (Figure 9). Woodfuel production accounted for 76 percent of roundwood and continues to increase each year. Developing countries' production of industrial roundwood declined by 7 percent during 1996–2001, but since 2003 it reached a record level and continues to grow (526 million cubic meters in 2005), partly due to the increasing supply from the maturing planted forests.

13. Roundwood production in developed countries declined significantly in the early 1990s and, despite growing steadily since 2001, remains well below the peak levels of 1989–90 (Figure 10). Industrial roundwood accounts for about 88 percent of total roundwood utilization in developed countries, while woodfuel is of relatively marginal importance. Continued strong demand from industry as well as increasing demand for wood for energy, particularly in Europe, suggests that roundwood removals will continue to increase in the near future.

III. CONSUMPTION

14. The world has made significant progress in raising food consumption per capita from an average of 2280 kcal/person/day in the early 1960s to 2800 kcal/person/day today (Figure 11), with the gains predominantly reflecting those of developing countries, given that the developed countries already had fairly high levels of per capita food consumption. The overall progress of the developing countries has been decisively influenced by the significant gains made in East Asia.

A. DIVERSIFICATION OF FOOD CONSUMPTION

15. Both reflecting and driving the changes in agricultural production described above, global dietary patterns have changed dramatically over the past four decades (Figure 12). Diets have shifted away from staples such as cereals, roots and tubers and pulses towards more livestock products, vegetable oils and fruits and vegetables.

16. Income growth, relative price changes, urbanization and shifts in consumer preferences have altered dietary patterns in both the developed and developing countries. When people have more money to spend, they add more variety and more expensive and high-value foods to their diets, although responses differ between developing and developed countries. In the latter, most consumers can already afford the foods they prefer; when their incomes rise, changes in their diets and food purchases are therefore relatively small.

17. In developing countries (Figure 13) on the other hand, rising incomes have an immediate and pronounced impact on diets, as people adjust their budgets to include higher-value food items. As wages increase, people are also willing to pay for more convenience, which frees up their time for income earning activities or leisure. They demand more processed foods with shorter preparation times. This is typically the case when more women participate in the labour market.[2] Also, declining real food prices have allowed poor consumers access to improved diets at existing income levels.

18. Urbanization is another important factor influencing consumers' preferences. Large urban markets create opportunities for the establishment of large supermarket chains, and they attract foreign investment and advertising from global corporations. Combined with trade liberalization and declining transportation costs, this is making non-traditional foods more accessible to urban populations.

B. EMERGING OBESITY CONCERNS IN DEVELOPING COUNTRIES

19. The progress in raising and diversifying per capita food consumption has become a mixed blessing in several developing countries. When dietary energy supplies rise to 3 000 kcal/person/day, the related diet transition often includes a large increase in the consumption of refined carbohydrates and processed fats and oils. This, combined with a more sedentary lifestyle, generally results in rapidly growing rates of overweight, obesity and a number of diet-related non-communicable diseases such as type 2 diabetes and heart diseases in developing countries. It is now common to find overweight/obesity and malnutrition side by side in developing countries, even sometimes within the same households, with obese parents and malnourished children under the same roof.

20. Globally, 1.6 billion adults are overweight and at least 400 million are obese. Two out of three overweight and obese people now live in low and middle income countries, with the vast

[2] Pingali, P. 2007. Westernization of Asian diets and the transformation of food systems: Implications for research and policy. *Food Policy*, 32(3): 281-298.

majority in emerging markets and transition economies.[3] Obesity-related health problems and diseases tend to appear side by side with those related to undernutrition. Many countries are thus confronted with a "double burden of malnutrition", resulting in novel challenges and strains on their health systems.

IV. AGRICULTURAL TRADE, PRICES AND DIVERSIFICATION[4]

A. TRADE

21. Since the early 1960s, the nominal value of agricultural exports has increased tenfold, while the share of agricultural trade in total merchandise trade has followed a long-term downward trend falling from almost 25 percent to less than 10 percent in recent years (Figure 14).

22. Over this period, the net flow of agricultural commodities between developed and developing countries has reversed direction (Figure 15). In the early 1960s, developing countries had an overall agricultural trade surplus of almost US$ 7 billion per year. By the end of the 1980s, however, this surplus had disappeared. During most of the 1990s and early 2000s, developing countries were net importers of agricultural products. Without Brazil, the deficit of the rest of the developing world would have been considerably bigger and would have grown from US$ 20 billion in 2000 to US$ 27 billion in 2004.

23. The change has been even more pronounced for the least developed countries (LDCs), which over the same period have changed from being net exporters to significant net importers of agricultural commodities (Figure 16). By the end of the 1990s, imports by the LDCs were more than double their exports.

24. Cereal foodstuffs once dominated international agricultural trade. Now, however, the share of cereals in total agricultural imports has fallen below 50 percent in developing countries and below one-third in developed countries. While the share of cereal imports has declined, both developed and developing countries are importing greater quantities of higher-value and processed foods, particularly edible oils, livestock products and fruits and vegetables.

25. About 40 percent (live weight equivalent) of world fish production enters international markets, with a value of US$ 78.4 billion in 2005 (Figure 17). Developing countries contributed slightly less than 50 percent by value and 57 percent by quantity (live weight equivalent) of global exports, with the top nine exporters accounting for two-thirds of the developing country total by value. The developed countries absorbed more than 80 percent of total fisheries imports in value, with Japan and the USA together accounting for 32 percent of the total. Cumulated net exports of fisheries products from developing countries (US$ 21.9 billion in 2005) has become far greater than export earnings from other agricultural commodities such as coffee, bananas, and rubber.

B. PRICES

26. Agricultural commodity price trends over the past 40 years reveal some striking features (Figure 18):

- Real prices of agricultural commodities relative to prices of all manufactured goods have declined significantly, almost 2 percent per year;
- Real prices have fluctuated considerably around a long-term downward trend;

[3] WHO (World Health Organization). 2006. *Implementing the global strategy on diet, physical activity and health.* Diet and physical activity: global programming note 2006-2007. Geneva, Switzerland.

[4] This section is based on FAO. 2004. *The State of Agricultural Commodity Markets 2004* and FAO. 2006. *The State of Agricultural Commodity Markets 2006.*

- Both the fluctuations and the long-term decline have been less pronounced since the mid-1980s.
- Cereal and oilseed prices have increased recently, driven partly by increased demand for biofuels and partly by weather-related production shortfalls.

27. A number of factors have contributed to these trends. Trade policy reforms and improvements in transportation and logistics have helped to hold down prices of traded goods, including agricultural products. Technological advances have reduced costs and made it possible, at given prices, to expand production at a rate that has outstripped demand growth despite rising population and income. Trade liberalization has permitted a wider range of countries to participate in world commodity markets, reducing the relative importance of the supply situation in any one country, while technological advances have reduced the vulnerability of some crops to climatic influences.

28. Production and export subsidies in some developed countries have also contributed to pushing down world prices for many agricultural products grown in temperate zones, reducing the export earnings of developing countries that export commodities such as cotton, sugar and rice.

29. Even though real prices for all agricultural commodities have declined over the past 40 years, the rate of decline has varied from one commodity to another. Traditional commodities like raw materials, tropical beverages, oil crops and cereals have experienced the largest variation and steepest decline.

30. Recent rises in commodity prices have been driven by weather-related production shortfalls and other factors such as the emergence of liquid biofuels as a significant source of demand for agricultural commodities. It remains unclear whether this signals a new paradigm for agricultural prices and, if so, what that might mean for agricultural development, poverty reduction and food security.

C. TRADE DIVERSIFICATION

31. Some developing countries have taken advantage of changing price and demand trends by shifting production and trade into the non-traditional higher-value sectors. It has mainly been the more advanced and prosperous developing countries that have managed to do this. Developing countries other than the LDCs have more than doubled the share of horticultural, meat and dairy products in their agricultural exports, while they reduced the share of tropical beverages and raw materials in their agricultural exports from 55 percent in the early 1960s to around 30 percent in 1999-2001.

32. An analysis of FAO data indicates that trade in some non-traditional agricultural exports, including fruits, vegetables and selected speciality and processed products (excluding trade in bananas and citrus) is currently worth more than US $ 30 billion annually. Developing countries held a 56 percent share of world trade in non-traditional fruit and vegetables in 2001. In the same year, they also accounted for two-thirds of trade in selected speciality products, such as chillies, ginger and garlic.

33. Across a broad range of these products, developing countries have been gaining market share at the expense of the developed countries. This is especially the case of trade in vegetables and speciality products, in which developing countries have taken the lion’s share of the very substantial growth in global trade during the last decade.

34. This non-traditional agricultural export market is, however, dominated by just a handful of countries. Some of these, such as Mexico, Chile, Argentina, Brazil and Costa Rica are leading exporters of more than one product. Other countries are dominant in the market for only one product: for example; Kenya for green beans, Malaysia for minor tropical fruits, Thailand for minor fresh fruits and Zimbabwe for green peas. A large number of countries have only a very limited participation in the market for non-traditional products.

35. LDCs account for only 0.5 percent of world fruit trade and only 0.8 percent of world vegetable trade. On the other hand, they increased their dependence on traditional export products such as raw materials and tropical beverages for their agricultural export earnings from 59 percent to 72 percent during the last forty years.

36. For LDCs, export earnings failed to increase, and rising import prices further eroded their purchasing power. Real agricultural export earnings of LDCs fell by more than 30 percent over the last two decades, and by half over the last 40 years (Figure 19).

V. FOOD INSECURITY CONTINUES IN MANY PARTS OF THE WORLD[5]

37. The World Food Summit (WFS) established the target of reducing the *number* of undernourished people in the world by half by 2015, from a 1990-92 base period. The Millennium Developed Goal (MDG) target is to reduce the *proportion* of undernourished people suffering from undernourishment by half during the same time period.

38. The historical trend of increased food production and consumption per capita as a world average has resulted in a reduction of the proportion[6] of undernourished people in the developing countries from 37 percent in 1969-71 to 17 percent in 2002-2004 (Figure 20). Most of the reduction occurred in the first two decades of this period; indeed since the 1990-92 base period, the proportion of undernourished has fallen only by 3 percentage points. The number of undernourished in the developing world declined from 960 million in 1969-71 to 830 million in 2002-04, but almost all of the decline occurred before 1990-92, and indeed the number has risen since 1995-97.

39. Since 1990-92, the only significant progress towards reducing the number of undernourished people has been concentrated in very few, but populous, subregions: China, Southeast Asia and South America (Figures 21a and 21b). In India, the prevalence of hunger declined by 5 percentage points, but the reduction in the number of undernourished was small because of population growth. At the same time, the number of undernourished increased in the rest of East Asia (excluding China) and even more in the rest of South Asia (excluding India).

40. The Near East, North Africa, Central America, East Asia (excluding China) and Central Africa experienced an increase in both the number and proportion of undernourished since 1990-92.

41. In sub-Saharan Africa, recent progress in reducing the prevalence of undernourishment is noteworthy. For the first time in several decades, the share of undernourished people in the region's population declined significantly: from 35 percent in 1990-92 to 32 percent in 2001-03, after having reached 36 percent in 1995-97. West-Africa and Nigeria saw a decline in both the number and prevalence of undernourishment. In Southern Africa and East Africa the prevalence of hungry people declined (but not the number). By contrast, Central Africa experienced a dramatic increase in both the number and prevalence of undernourishment.

42. The recent decline in the share of undernourished people in sub-Saharan Africa is an encouraging development. Still, the task facing the region remains daunting. Sub-Saharan Africa accounts for 25 percent of the undernourished people in the developing world, and it has the

[5] This section is based on FAO. 2006. *The State of Food Insecurity in the World 2006* and food security statistics updated on the FAO website.

[6] One of the two targets of the first Millennium Development Goal is to halve, between 1990 and 2015, the proportion of people who suffer from hunger.

highest proportion (one-third) of people suffering from chronic hunger. In 14 countries in the region, 35 percent or more of the population were chronically undernourished in 2001-03. Since 1990-92, the number of undernourished people increased from 169 million to 206 million, and only 15 of the 39 countries for which data are reported reduced the number of undernourished.

43. Efforts to reduce hunger in the region have been hampered by natural and human-induced disasters, including conflicts occurring during the 1990s and the spread of HIV/AIDS. Indeed, the increase in the number of undernourished people since the World Food Summit (WFS) baseline period was driven mainly by five war-torn countries: Burundi, the Democratic Republic of Congo, Eritrea, Liberia and Sierra Leone. Particularly dramatic was the worsening of food insecurity in the Democratic Republic of the Congo, where the number of undernourished people tripled from 12 to 36 million and the prevalence rose from 31 to 72 percent of the population.

44. In addition to Ghana, which has already reached the WFS goal of halving the number of undernourished people, Angola, Benin, Chad, Congo, Ethiopia, Guinea, Lesotho, Malawi, Mauritania, Mozambique and Namibia have also reduced the number of undernourished people. Although the explanations for success varied among these countries, most seem to have combined good economic growth performances with a significant expansion of per capita agricultural and food production.

45. There is a clear correlation between countries' income per capita and prevalence of undernourishment in the population (Figure 22). Ample evidence confirms that sustained economic growth leading to increased productivity and prosperity at the national level will result in reduced hunger. But cross-country studies of developing countries suggest that economic growth alone, in the absence of specific measures to combat hunger, may leave large numbers of hungry people behind for a long time, particularly in rural areas.

46. Numerous studies have provided evidence that the impact of economic growth on reducing hunger and poverty depends as much on the nature of the growth as on its scale and speed. Some 70 percent of the poor in developing countries live in rural areas and depend on agriculture for their livelihoods, either directly or indirectly. In the poorest countries, agricultural growth is the driving force of the rural economy. Particularly in the most food-insecure countries, agriculture is crucial for income and employment generation. Agricultural growth is, therefore, a critical factor in hunger reduction.

A. FUTURE TRENDS FOR FOOD SECURITY

47. Historical trends towards increased food consumption per capita at the global level and particularly in the developing countries will, according to FAO scenarios, continue in the near future, but at a slower rate than in the past as a large number of countries approach medium-high levels. The average of the developing countries may rise from today's 2650 kcal per person per day to 3070 kcal by 2050. By the middle of the century, more than 90 percent of the world population may be living in countries with more than 2700 kcal per day, up from 51 percent presently and only 4 percent three decades ago. As in the past, great advances in China and a few other populous countries will continue to carry a significant weight in these improvements.

48. However, not all countries are likely to achieve adequate food consumption levels. This is especially the case for countries that currently have high rates of undernourishment, high population growth rates, poor prospects for rapid economic growth and often meagre agricultural resources. Today, 32 countries are in this category with an average undernourishment rate of 42 percent. The population of these poor countries is expected to increase from the current 580 million people to 1.39 billion by 2050, and food consumption could, under fairly optimistic assumptions, increase from the current 2000 kcal/person/day to 2450 kcal in the next 30 years. This would still not be enough for good nutrition in several of these countries. Hence the conclusion that reducing undernourishment may be a very slow process in these countries.

49. Despite the slow pace of progress in reducing the occurrence of undernourishment, the FAO projections do imply considerable overall improvements. In the developing countries, the numbers of well-fed could increase from 3.9 billion in 1999/01 (83 percent of the population) to 6.2 billion (93 percent) in 2030 and to 7.2 billion (96 percent) by 2050. The problem of undernourishment will tend to become smaller both in terms of absolute numbers affected and, even more, in terms of the proportion of the population.

VI. OPPORTUNITIES AND CHALLENGES IN THE FUTURE

A. CONTINUING POPULATION GROWTH IN POOREST COUNTRIES

50. Global population growth has been the major driving force for growth in world food demand and production. The population will continue to grow, but longer term projections suggest that population growth may slow down by the middle of this century. World population is expected to increase from the current 6.7 billion to 9.2 billion by 2050.[7]

51. Almost all of this increase is expected to take place in developing countries, and especially in the group of the 50 least developed countries. These countries may still have inadequate consumption levels in 2050 and therefore there is significant scope for further increases in demand for food even when population growth slows down.

B. SLOWING AGRICULTURAL PRODUCTION GROWTH[8]

52. Growth of world agricultural output is expected to fall to 1.5 percent per year over the next three decades and further to 0.9 percent per year in the succeeding 20 years to 2050, compared with 2.3 percent per year since 1961.

53. All the major commodity sectors (except for the milk sector) are expected to take part in the deceleration of agricultural growth. The cereals sector has already been in such downward trend for some time now, and is expected to continue to have the lowest growth rate among the major commodity sectors during the next 50 years.

C. BIOENERGY

54. Recent high petroleum prices are creating new markets for agricultural products that can be used as feedstock for the production of biofuels. The competitiveness of biofuels may be further enhanced if the savings of greenhouse gas emissions resulting from substituting ethanol for gasoline were to be monetized in the form of tradable carbon credits (Certified Emission Reductions of greenhouse gases) through the Clean Development Mechanism under the provisions of the Kyoto Protocol. If world agriculture were to become a major source of feedstock for the biofuel industry, this would have as yet unknown implications for food security and for the environment. This area requires in-depth analysis to clarify the full spectrum of implications for food security and poverty alleviation.

D. WATER

55. Agriculture accounts for 70 percent of all water use in the world and as much as 95 percent in many developing countries, almost all for irrigating crops. Per capita use of water has decreased from about 700 to 600 cubic meters per year since 1980, and water productivity in

[7] UN. 2007. *World Population Prospects: the 2006 revision. Highlights.* New York, USA, United Nations.

[8] Based on FAO. 2006. *World Agriculture Towards 2030/50: Interim Report*. Rome.

agriculture increased by at least 100 percent between 1961 and 2001[9], but total water use is still increasing and is expected to continue to increase due to population growth, urban expansion and increasing industrialisation.

56. Today, more than 1.2 billion people live in areas of physical water scarcity[10] and by 2025 over 3 billion people are likely to experience water stress. The gap between available water supply and water demand is increasing in many parts of the world, limiting future expansion of irrigation. In areas where water supply is already limited, water scarcity is likely to be the most serious constraint on agricultural development, especially in drought-prone areas.[11]

E. CLIMATE CHANGE

57. There are still large uncertainties as to when, how and where climate change will impact on agriculture production and food security, but it is generally agreed that agricultural impacts will be more adverse in tropical than in temperate areas.[12,13] Model-based scenarios predict slight to moderate reductions on potential crop yields. While the adverse impacts of climate change will fall disproportionately on the poor, actual impacts will depend at least as much on the socio-economic conditions as on the biophysical processes involved. Policies and investments supporting trade, sustainable agricultural practices and technological progress can help mitigate the effects of climate change on agriculture and food security while increasing the capacity of people and societies to adapt.[14]

[9] FAO. 2003. *Unlocking the Water Potential of Agriculture*. Rome.

[10] Comprehensive Assessment of Water Management in Agriculture. 2007. *Water for food, water for life: a comprehensive assessment of water management in agriculture*. London, Earthscan and Colombo, International Water Management Institute.

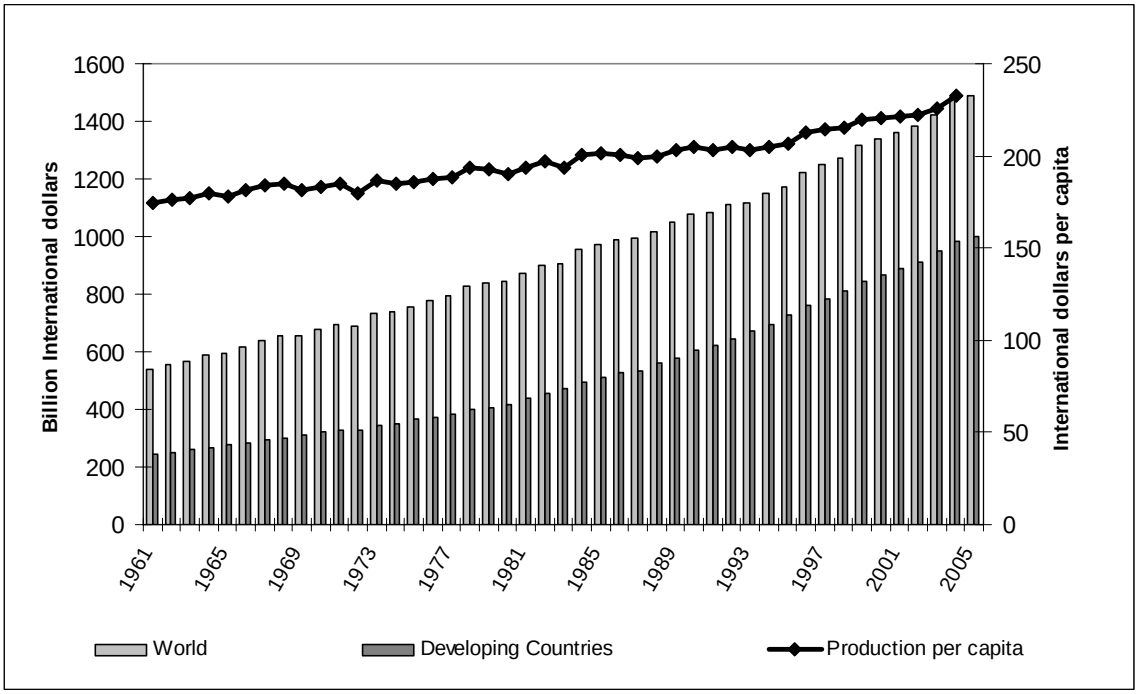
[11] Millennium Ecosystem Assessment, 2005.

[12] Stern, N. 2007. *The economics of climate change: The Stern Review*. Cambridge, UK, Cambridge University Press.

[13] IPCC (Intergovernmental Panel on Climate Change). 2007. Summary for policymakers. In *Climate Change 2007: the physical science basis. Working Group I contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge, UK, Cambridge University Press.

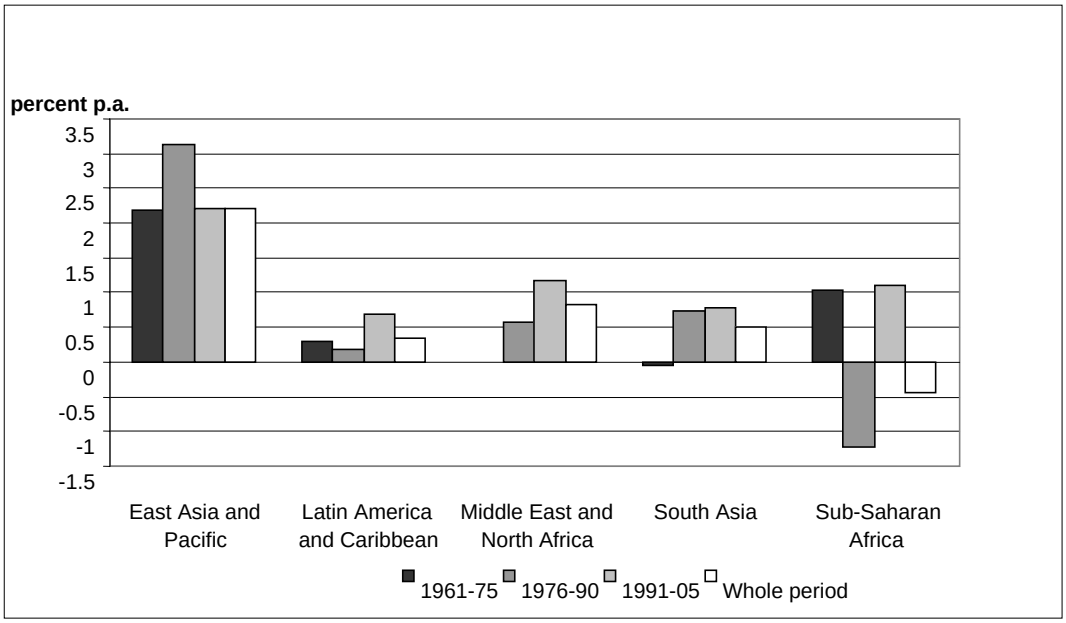
[14] FAO. 2006. *World Agriculture Towards 2030/50: Interim Report.* Rome.

Figure 1. Total and per capita agricultural production



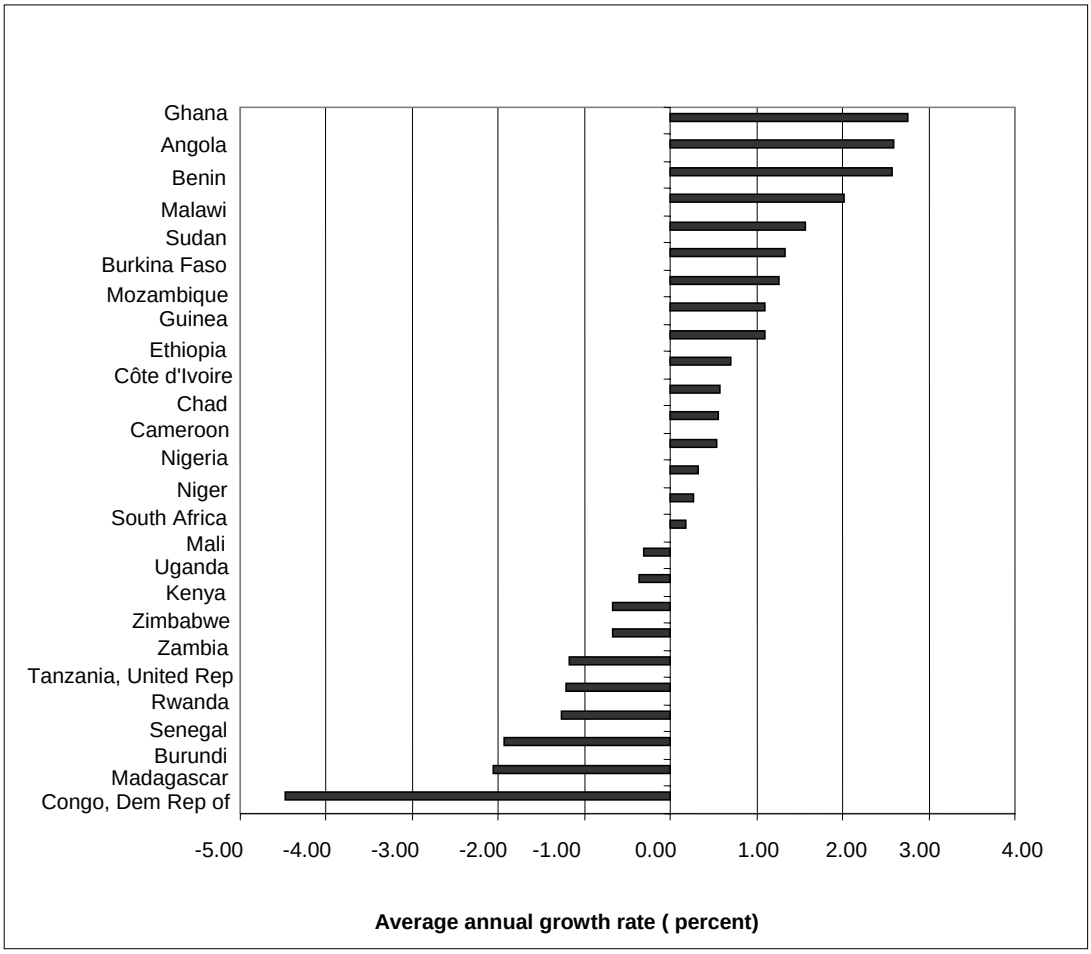
Source: FAO

Figure 2. Growth rate in agricultural value added per capita, by region



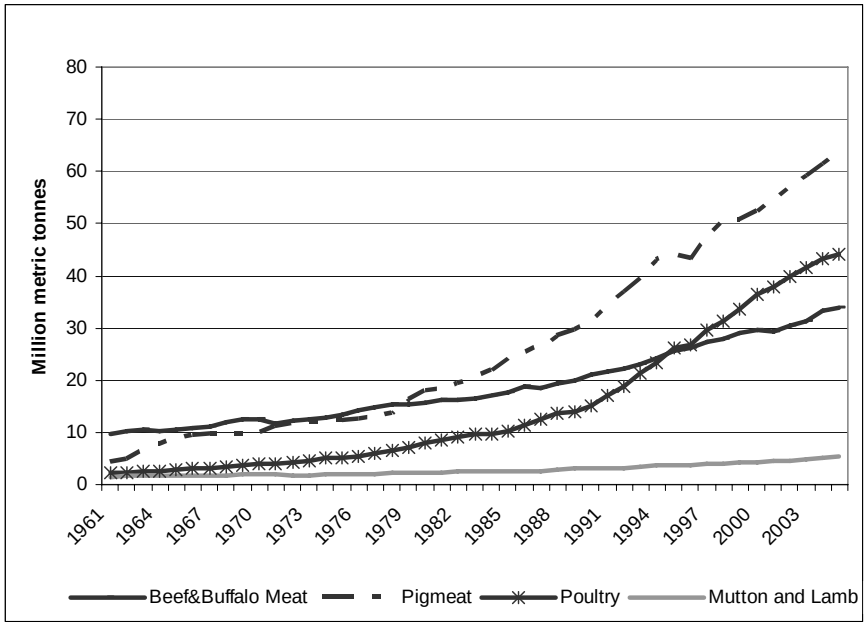
Source: WDI 2006

Figure 3. Per capita agricultural production growth rate in Sub-Saharan Africa, 1990-2004



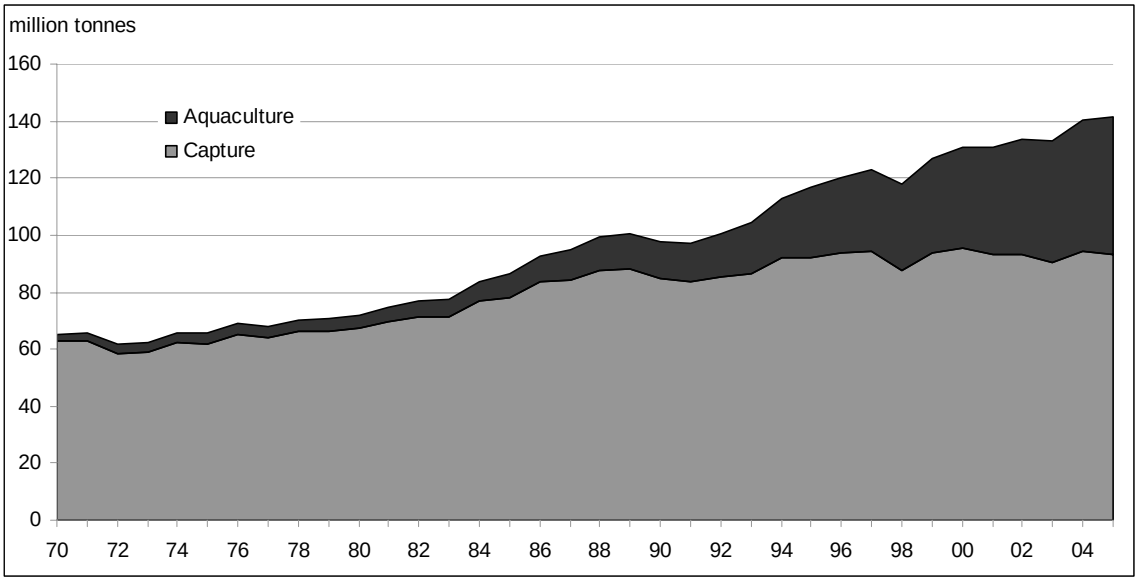
Source: FAO

Figure 4. Meat production in developing countries



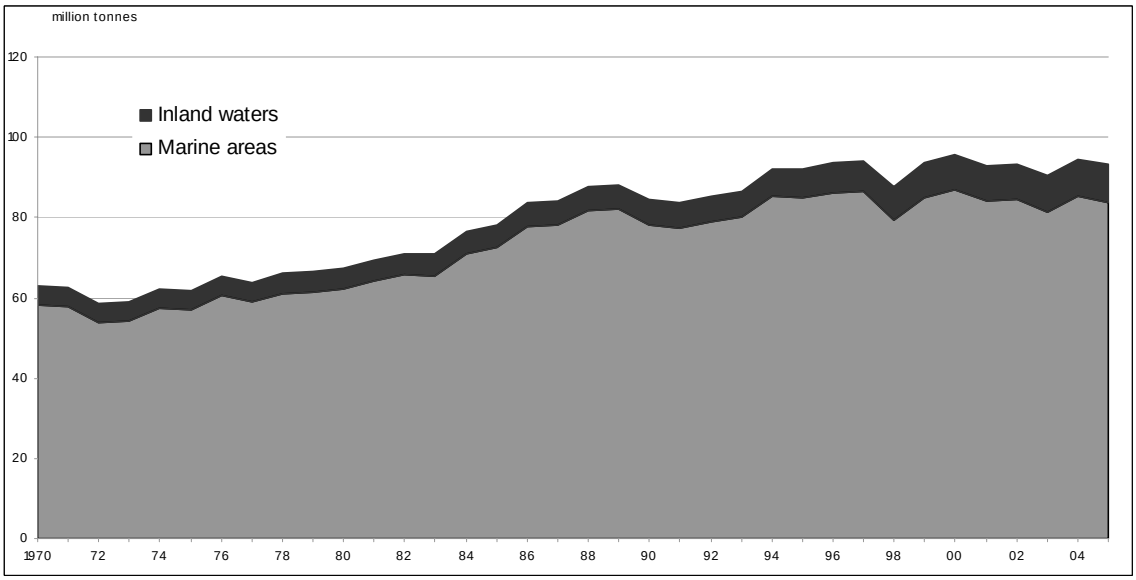
Source: FAO

Figure 5. Total fishery production - Capture and Aquaculture



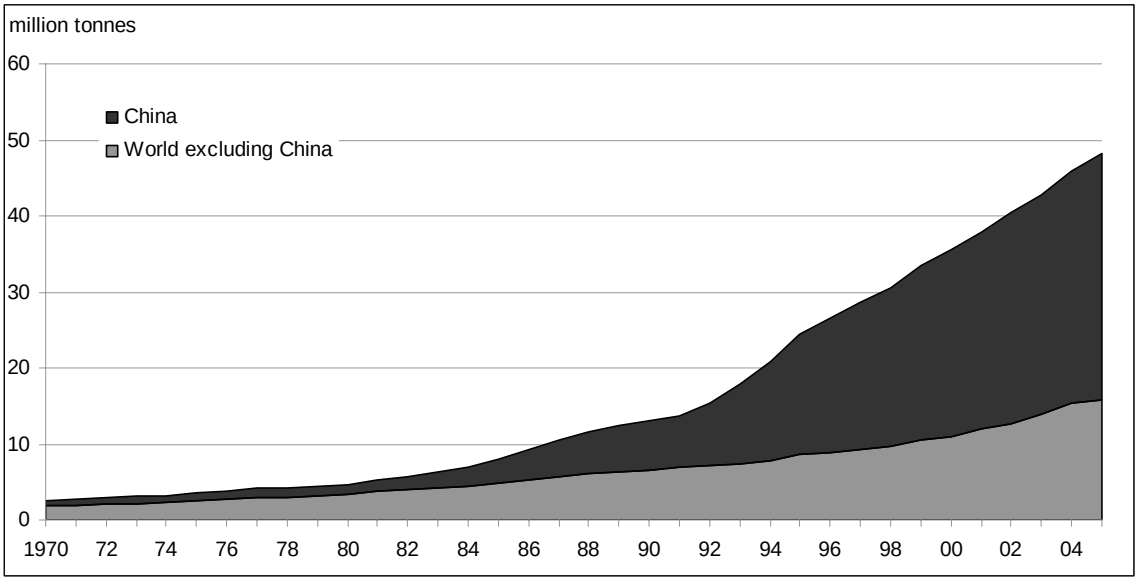
Source: FAO

Figure 6. Capture fishery production - Marine and Inland



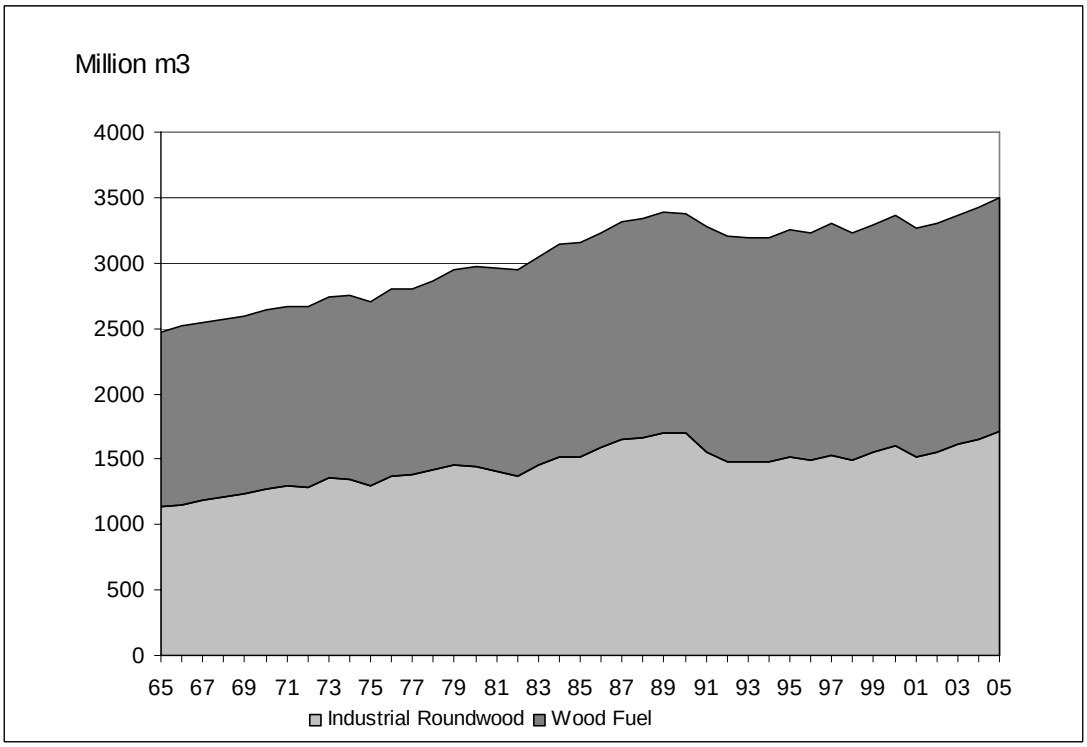
Source: FAO

Figure 7. Aquaculture fishery production - World and China



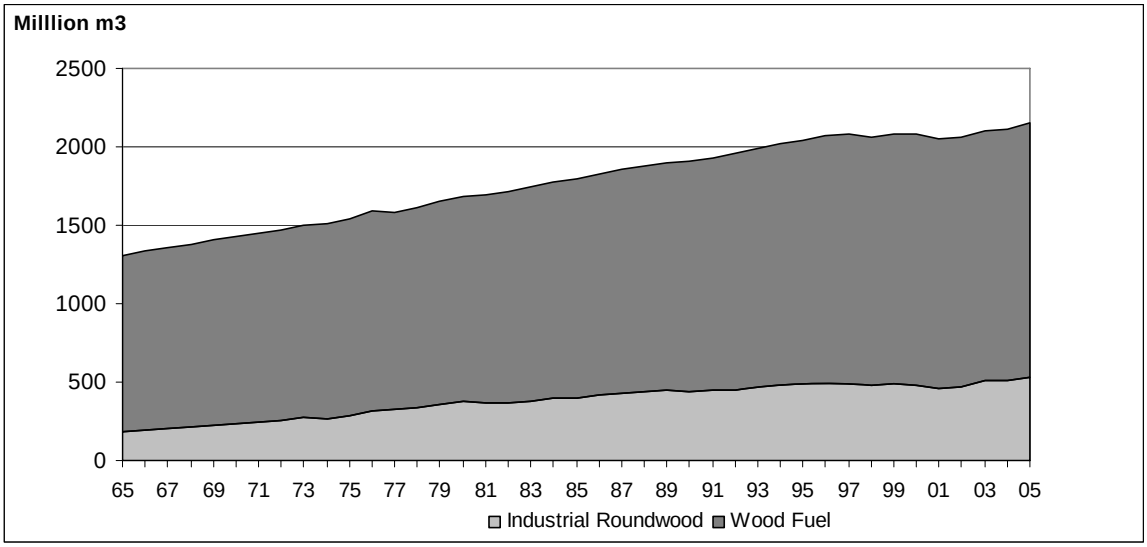
Source: FAO

Figure 8. Industrial roundwood and wood fuel production, world



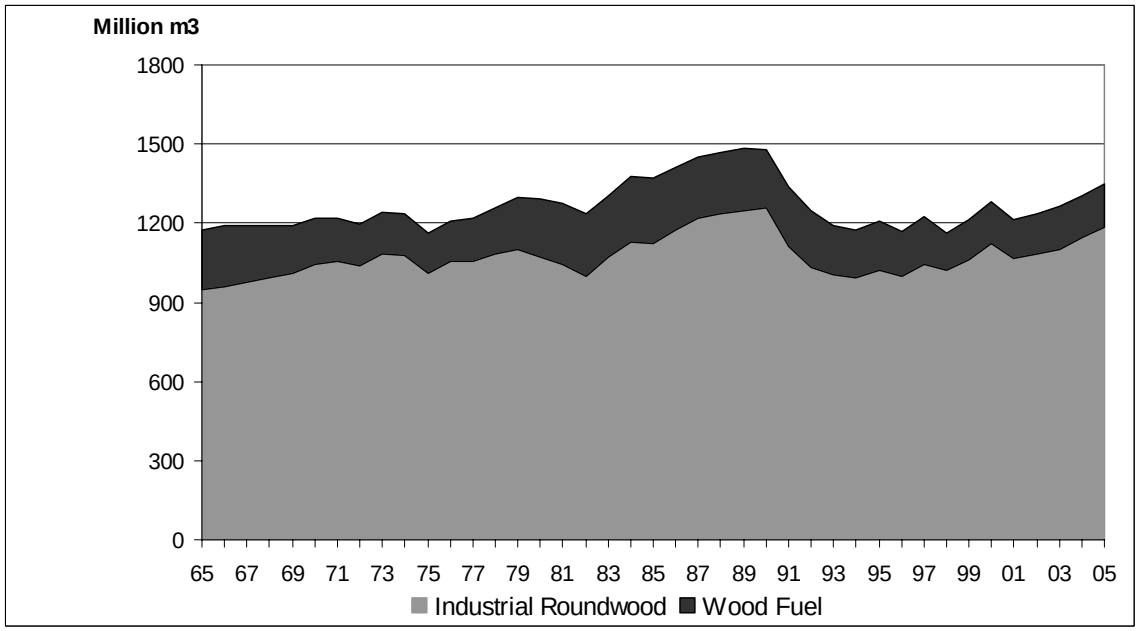
Source: FAO

Figure 9. Industrial roundwood and wood fuel production - Developing countries



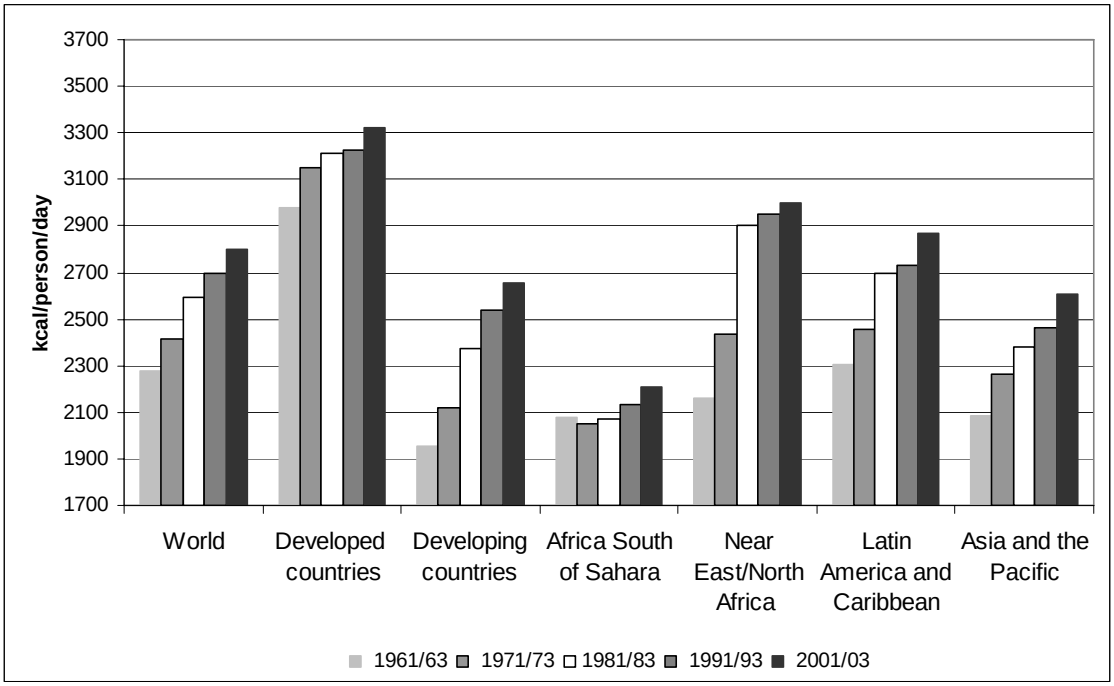
Source: FAO

Figure 10. Industrial roundwood and wood fuel production - Developed countries



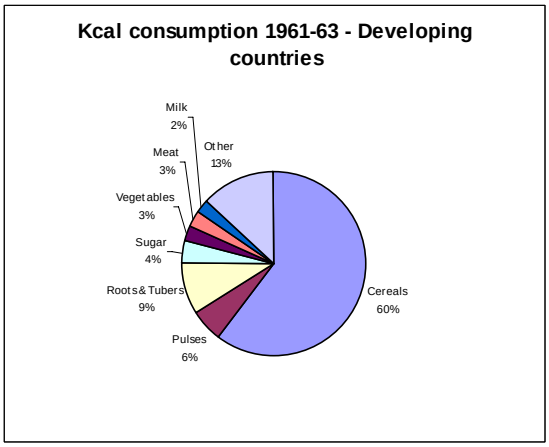
Source: FAO

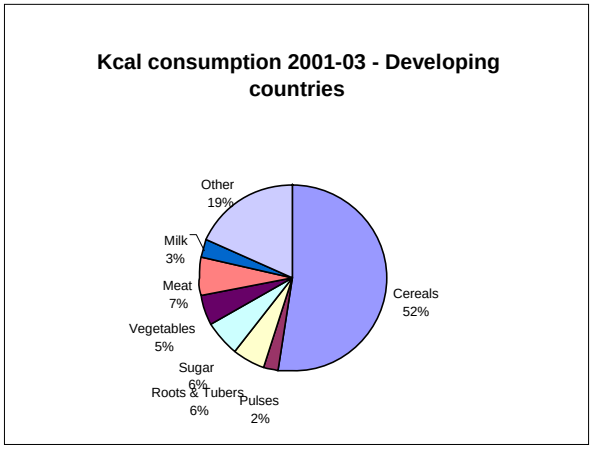
Figure 11. Food consumption per capita



Source: FAO

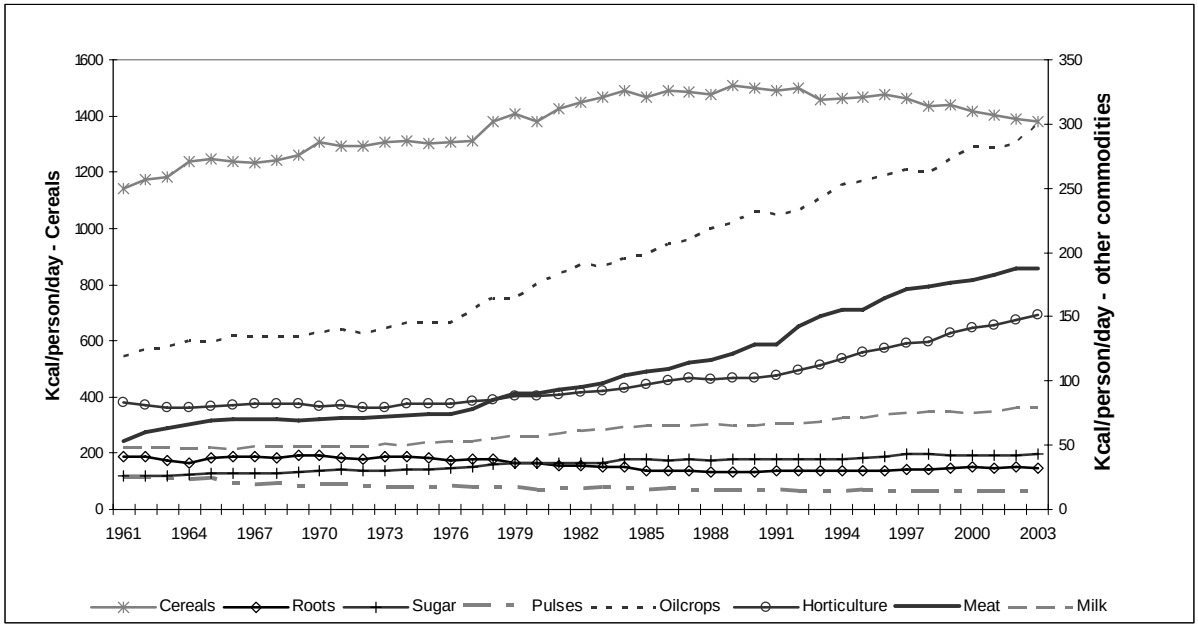
Figure 12. Changing composition of food consumption





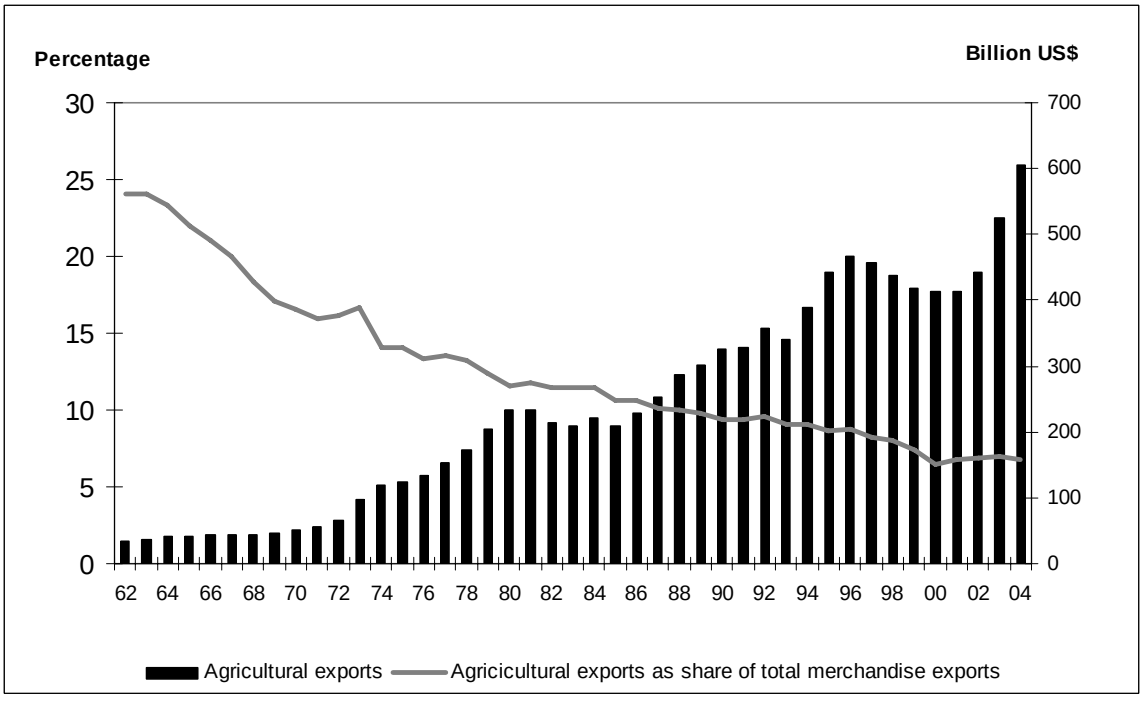
Source: FAO

Figure 13. Consumption of different food commodities in developing countries



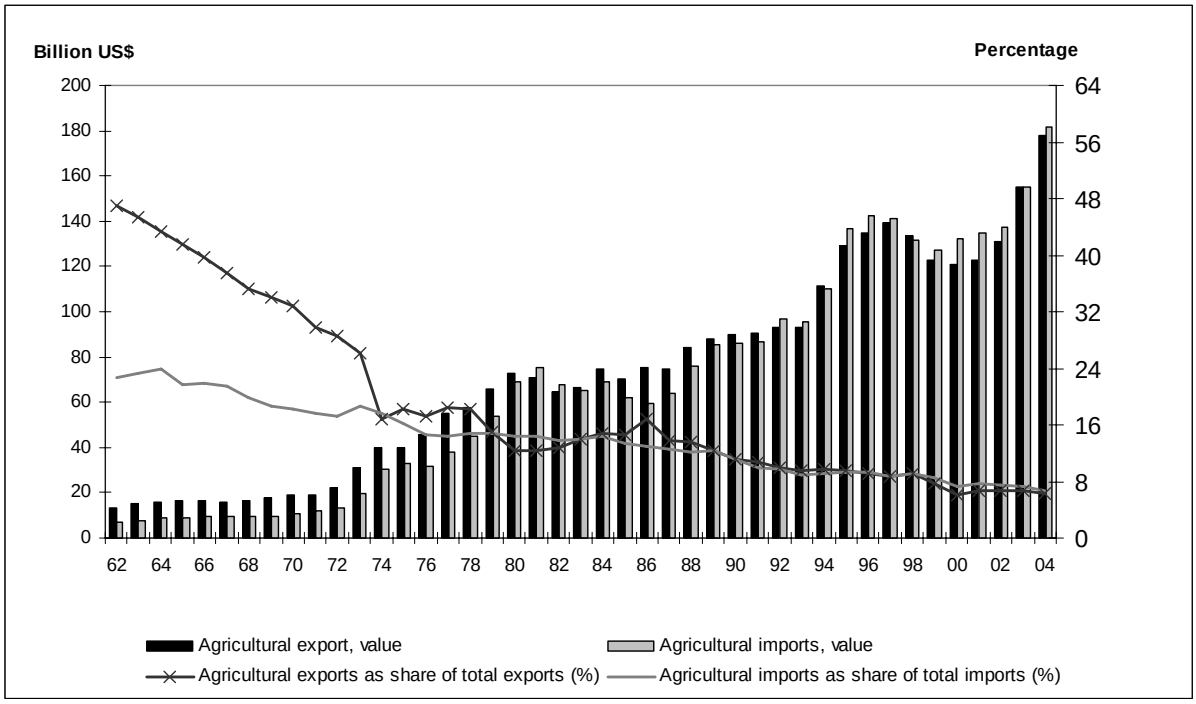
Source: FAO

Figure 14. Global agricultural exports



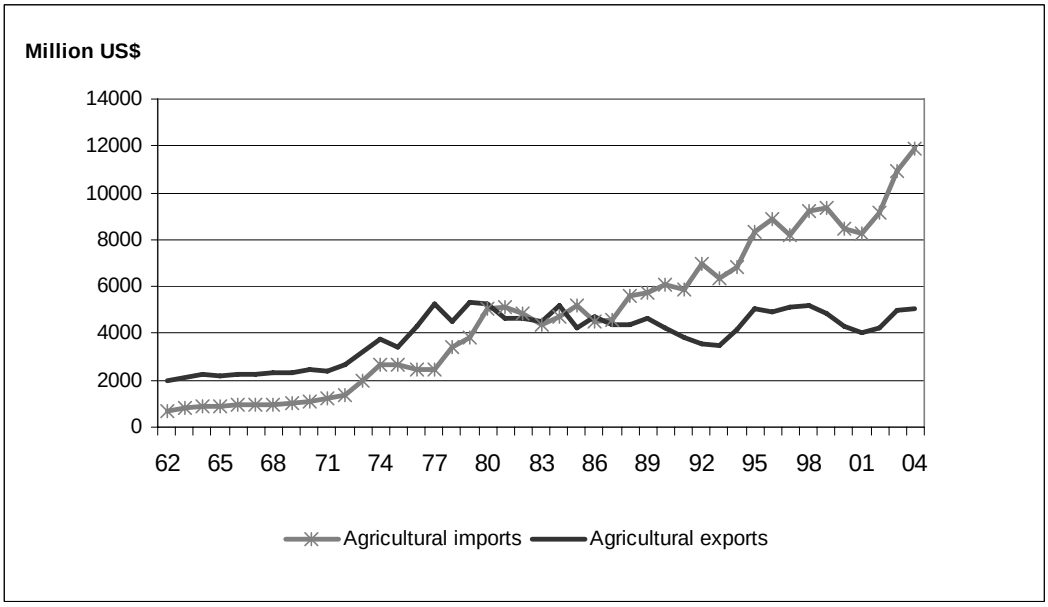
Source: FAO

Figure 15. Agricultural exports and imports in developing countries



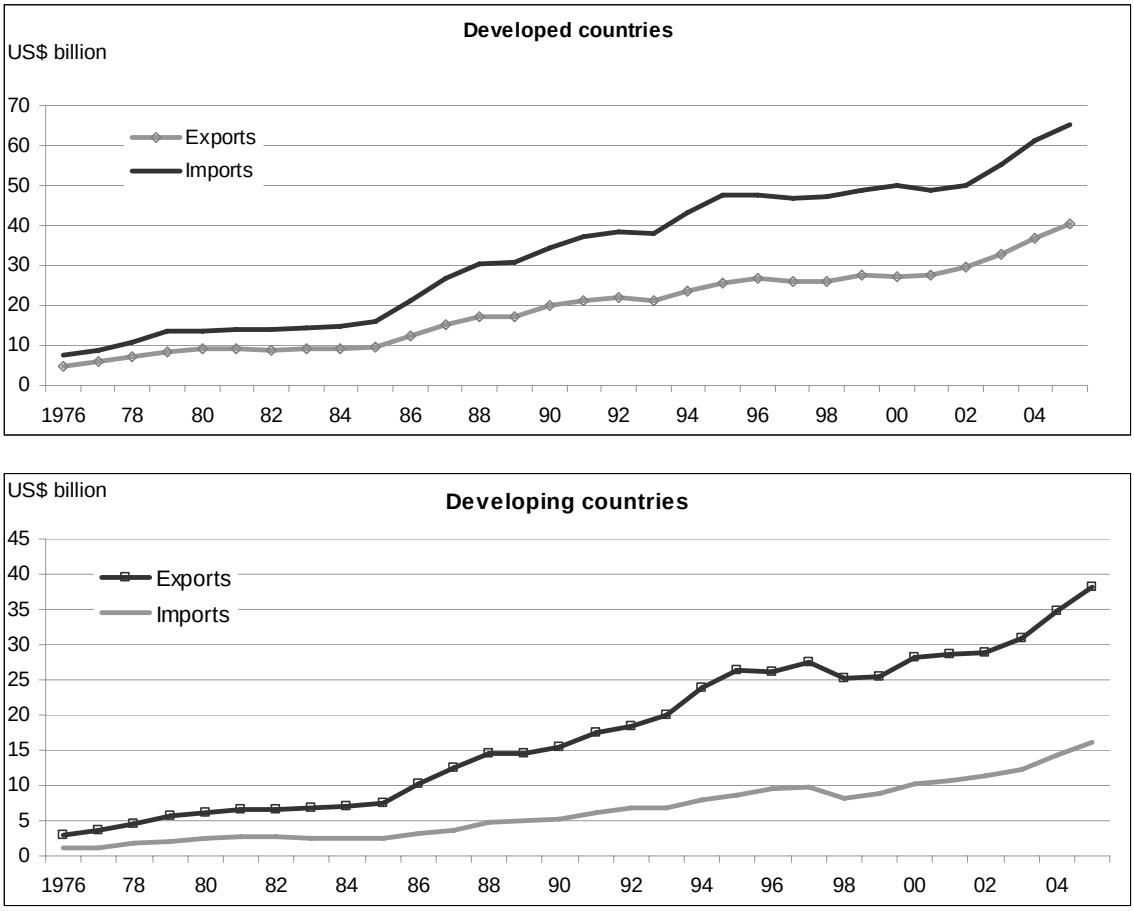
Source: FAO

Figure 16. Agricultural trade balance of least developed countries



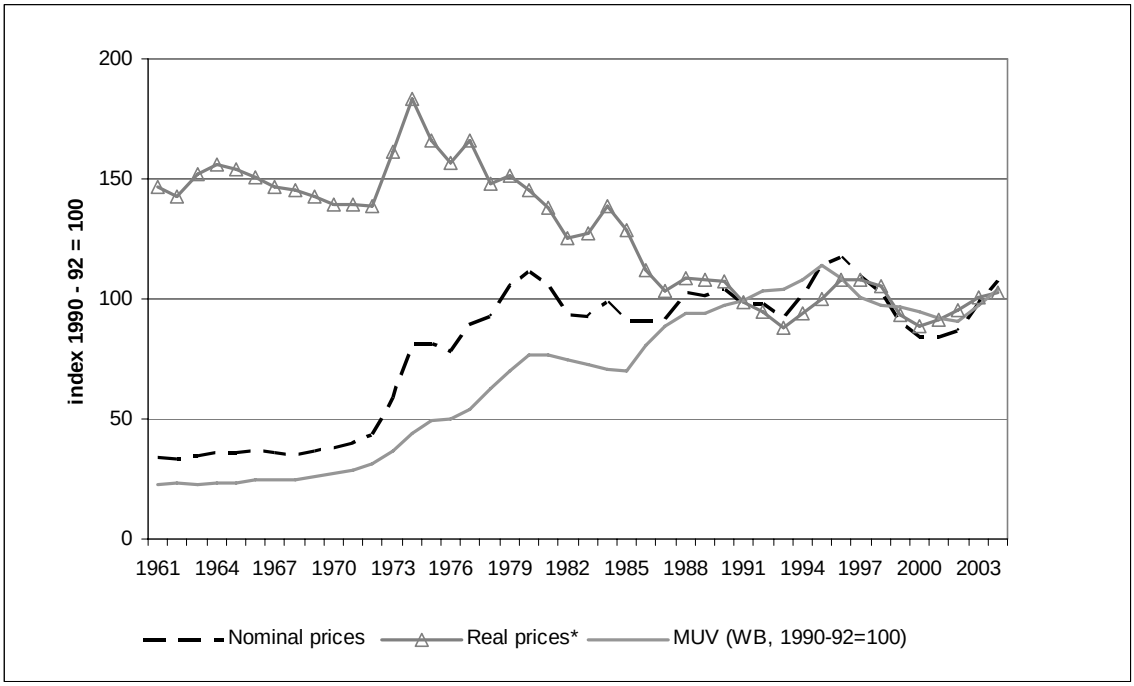
Source: FAO

Figure 17. Exports and imports of fishery products - developed and developing countries



Source: FAO

Figure 18. Agricultural commodity prices

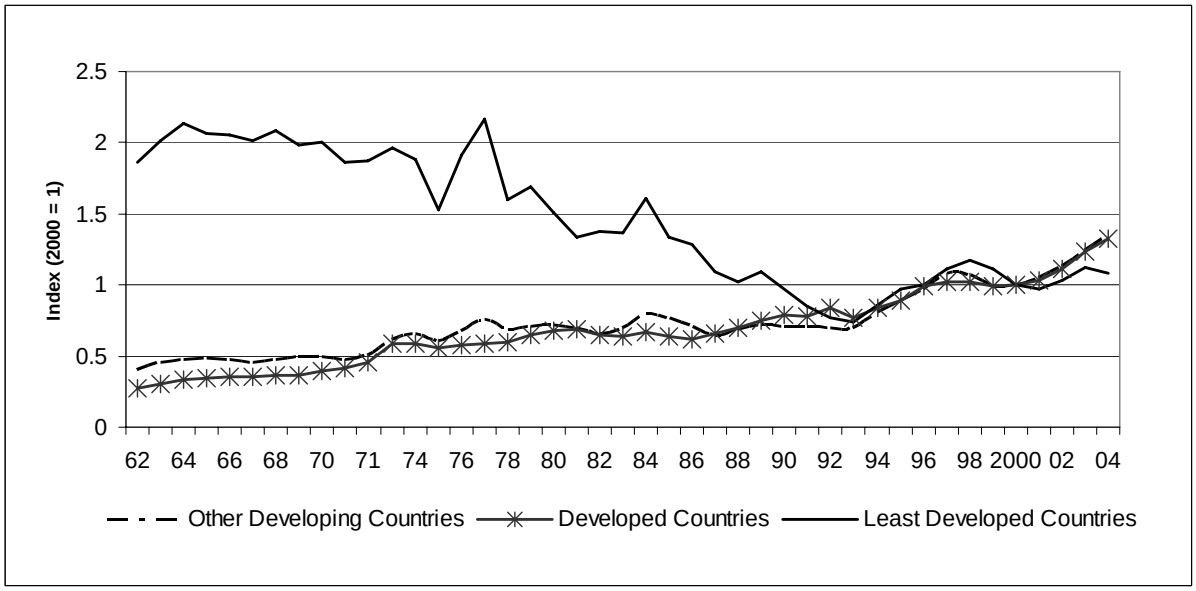


* Real prices deflated by export unit values of all merchandise exports

** MUV = Manufactures export unit value

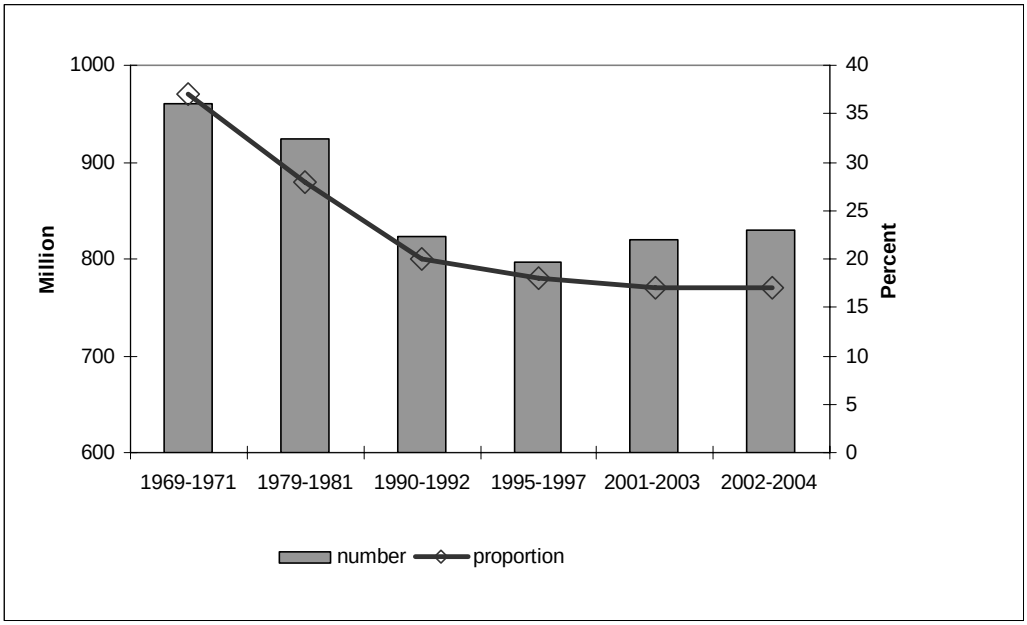
Source: FAO

Figure 19. Income terms of trade for agriculture



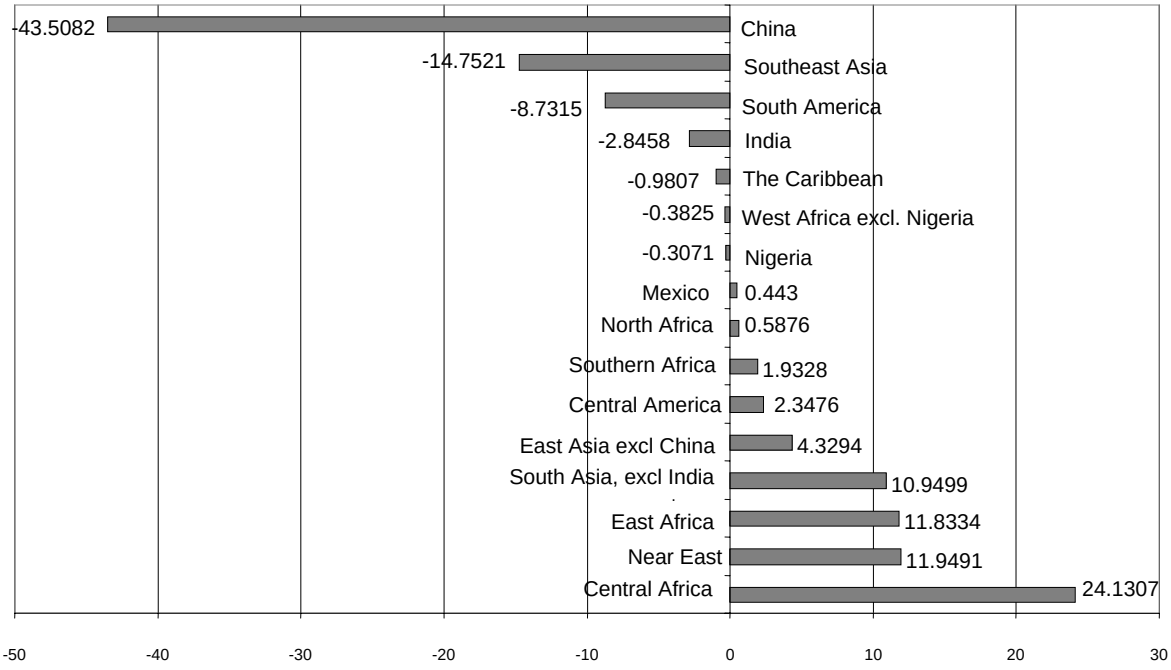
Source: FAO

Figure 20. Undernourishment in developing countries



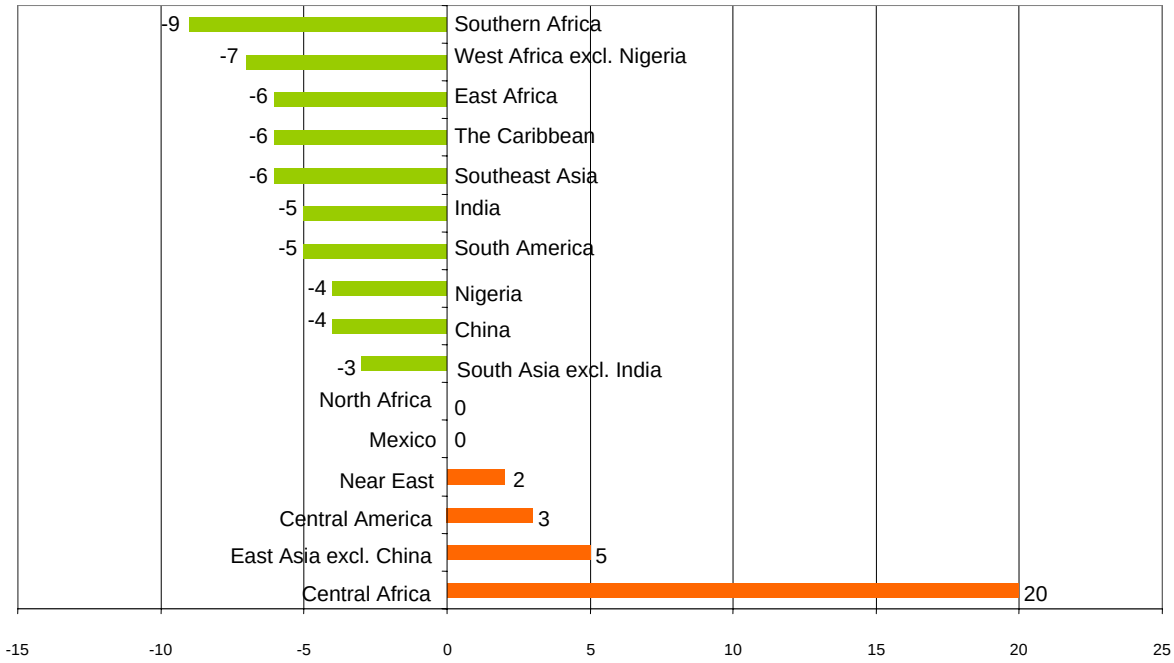
Source: FAO

Figure 21a. Changes in number of undernourished in subregions from 1990-92 and 2001-03 (millions)



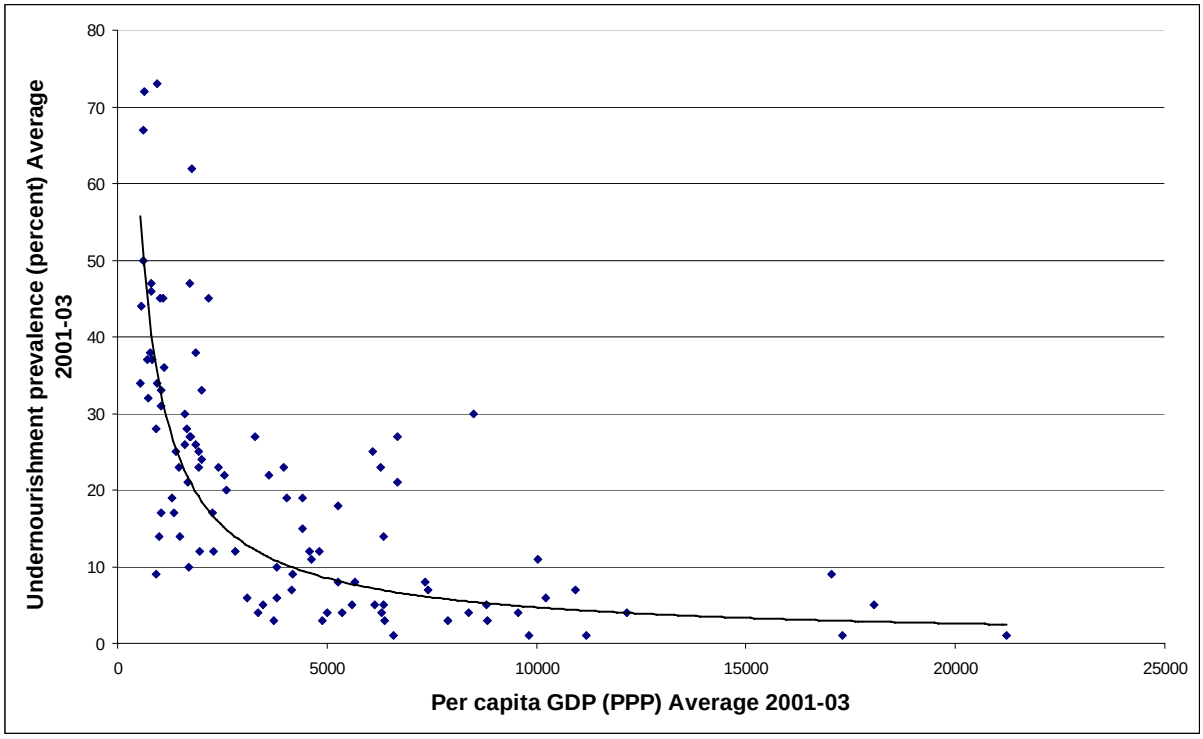
Source: FAO

Figure 21b. Changes in proportion of undernourished in subregions between 1990-92 and 2001-03



Source: FAO

Figure 22. Per capita GDP and undernourishment



Source: FAO, WDI 2007