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# THE STATE OF FOOD AND AGRICULTURE

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ANNEX: THE STATE OF FOOD AND AGRICULTURE IN FIGURES

# I. INTRODUCTION

1. Ten years are left to achieve the first of the Millennium Development Goals of halving the proportion of people suffering from hunger and those living in extreme poverty (less than US\$1 per day) between 1990 and 2015. The world is on track to achieve the poverty goal according to estimates from the World Bank.<sup>1</sup> At the present pace of progress, however, the hunger MDG will not be achieved by 2015.

- 2. At the global level, poverty has declined both in absolute numbers (from 1.2 billion to 1.1 billion) and in relative terms (from 30 percent to 21 percent). The East Asia region met its poverty reduction target in 2001, 14 years ahead of the timetable. South Asia, too, made considerable progress during the 1990s, reducing the proportion of extreme poor from 41 percent to 31 percent, and is on track to achieve the poverty MDG.
- 3. The poverty reduction goals seem much more challenging in the other regions. In sub-Saharan Africa poverty increased between 1990 and 2001 in both absolute and relative terms. The available World Bank projections suggest that the MDG poverty goal may be beyond reach for sub-Saharan Africa, where indeed the absolute number of poor may in fact rise considerably. If this scenario should materialize, close to half the world's poor will live in sub-Saharan Africa in 2015.
- 4. The reduction of hunger and poverty and the attainment of many other Millennium Development Goals are inter-related. Levels of child and maternal mortality and low rates of school attendance in developing countries are intimately linked to the prevalence of hunger and malnutrition. The same applies to environmental sustainability: the overexploitation or misuse of natural resources too often compromises people's food security. To a great extent the achievement of most of the MDGs depends critically on progress in improving nutrition and reducing hunger.
- 5. This year's Conference document on the *State of Food and Agriculture* presents information on global food security developments and highlights recent trends in agricultural production, markets and trade, as well as in external assistance to agriculture.
- 6. Delegates are also invited to refer to various recent FAO documents and web pages for more current information and detailed analysis. For example, the latest versions of "Food Outlook" and "Foodcrops and shortages" offer updated commodity production and market information, as well as information on food emergencies; comprehensive information on food insecurity can be found in "The State of Food Insecurity in the World 2005."

# II. CURRENT FOOD SECURITY SITUATION

#### A. TRENDS IN UNDERNOURISHMENT

7. FAO estimates the number of undernourished people in the world in 2000-2002 at 852 million. This figure includes 815 million in the developing countries, 28 million in the countries in transition and 9 million in the developed market economies (see Annex, fig.1). By regions, the

<sup>&</sup>lt;sup>1</sup> Global Monitoring Report 2005: Millennium Development Goals: From Consensus to Momentum . World Bank. 2005.

largest share of the total number of undernourished are found in Asia and the Pacific with 60 percent, followed by sub-Saharan Africa, which accounts for 25 percent of the total.

- 8. The proportion of the population which is undernourished varies between the different developing country regions (Annex, fig.2). The highest incidence of undernourishment is found in sub-Saharan Africa, where FAO estimates 33 percent of the population to be undernourished. This is well above the 16 percent undernourished estimated for Asia and the Pacific and the 10 percent estimated for both Latin America and the Caribbean and the Near East and North Africa.
- 9. At the global level, the long-term trends for many food security indicators have been positive. The prevalence of undernourishment in developing countries fell from 37 percent of the total population in 1969-71 to 17 percent in 2000-2002 (Annex, fig.3). Due to population growth, however, the decline in absolute numbers of undernourished people has been slower than for the percentage incidence of undernourishment (Annex, fig.4).
- 10. The average global calorie supply per person grew by 16 percent since 1969-71 to reach 2795 kcal/person/day in 2000-2002, with the developing country average expanding by more than 25 percent. As consumption increased, diets shifted towards more meat, milk, eggs, vegetables and oils and away from basic cereals. The past progress in aggregate food consumption numbers and undernourishment indicators for the developing countries was influenced decisively by the significant gains made in the most populous countries, including Brazil, China, Indonesia and Nigeria.
- 11. Most of the improvement in undernourishment figures over the past three decades has been concentrated in Asia, which reduced the proportion of undernourished by 25 percentage points over the period. In sub-Saharan Africa, the change in the proportion of undernourished has been very limited while the number of undernourished has risen from 93 million in 1969-71 to 204 million in 2000-2002. Latin America and the Caribbean experienced a significant decrease in both proportion and absolute numbers of undernourished in the 1970s, but has made little progress since then. In Near East and North Africa the proportion of undernourishment fell significantly in the 1970s but by 2000-2002 it was slightly above the level of two decades earlier, after having actually increased over the 1990s.
- 12. Undernutrition exacts a heavy toll on developing countries in both human and economic terms. More than 5 million children die each year and households lose more than 200 million years of productive life from family members whose lives are impaired by hunger and malnutrition. The direct economic costs related to medical problems associated with undernourishment amount to more than US\$30 billion per year. The estimated indirect costs associated with lost productivity due to undernourishment range into the hundreds of billions of dollars. These extraordinary human and economic costs underline the fact that reducing hunger is not only a crucial MDG in itself it is central to the achievement of the other MDGs as well.

#### B. FOOD EMERGENCIES

13. As of June 2005, the number of countries facing serious food shortages throughout the world stood at 34 with 23 in Africa, 8 in Asia, 2 in Latin America and 1 in Europe<sup>2</sup>. The causes are varied but civil strife and adverse weather predominate. The recent outbreak of desert locusts in western Africa and the tsunami disaster in south Asia have had serious though localized food

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<sup>&</sup>lt;sup>2</sup> FAO, GIEWS, Food Crops and Shortages, No. 2, June 2005. The countries of the Near East in Asia are classified with Asia, while the countries of the Near East in North Africa are classified with Africa.

security consequences. In many of these countries, the HIV/AIDS pandemic is a major contributing factor to food shortages.

- 14. Civil strife and the existence of internally displaced people or refugees are responsible for more than half of the reported food emergencies in Africa as of June 2005. The proportion of food emergencies that can be considered human-induced has increased over time. Indeed, conflict and economic failures were cited as the main cause of more than 35 percent of food emergencies between 1992 and 2004, as compared to around 15 percent in the period from 1986 to 1991. In many cases, natural disasters are compounded by human-induced disasters, leading to prolonged complex emergencies.
- 15. The recurrence and persistence of emergencies often compound the severity of their impact. Thirty-three countries experienced food emergencies during more than half of the years of the period 1986-2004. In particular, many conflict-induced complex emergencies are persistent and turn into long-term crises. No less than 8 countries suffered emergencies during 15 or more years of the period 1986-2004 and, in all instances, war or civil strife was a major factor behind the emergencies.
- 16. In contrast, many countries that enjoy relatively stable economies and governments but are plagued by unfavourable weather have implemented crisis prevention and mitigation programmes and established effective channels for relief and rehabilitation efforts. For these countries, a natural disaster need not result in a prolonged humanitarian crisis.

## C. FOOD AID

- 17. Food aid in cereals fell to 7.4 million tonnes in 2003/04 (June to July), 1.8 million tonnes (or 20 percent) below that for 2002/03 (Annex, fig.5). The sharpest decrease occurred in Asia, with shipments falling from 4.8 to 3.6 million tonnes, a decline of 25 percent. The top 5 recipients of cereal food aid in 2003/04, ranked in terms of volumes of shipments, were Iraq, Ethiopia, Democratic People's Republic of Korea, Zimbabwe and Bangladesh. All of these countries, except Zimbabwe, were among the top 5 food aid recipients during the previous year as well.
- 18. Cereal food aid has been characterised by relatively large annual fluctuations. It has tended to decline relative to the level of the late 1980s and early 1990s. Also in per caput terms, shipments have declined substantially relative to the early 1990s (Table 1). Disregarding exceptionally large shipments to the Russian Federation in certain years, Africa remains the largest recipient in per caput terms, albeit at levels well below those of a decade ago.
- 19. The FAO Principles of Surplus Disposal and Consultative Obligations, originally agreed in 1957 and enshrined in the WTO Agreement on Agriculture disciplines on export subsidies in 1995, are intended to limit the potential of food aid to disrupt normal trade flows. Food aid may be further disciplined in the ongoing Doha Round of trade negotiations (discussed more fully in section III.D below). The WTO Members have agreed to eliminate by a fixed date food aid that is not in compliance with operationally effective disciplines. The role of international organizations as regards the provision of food aid by Members, including related humanitarian and developmental issues, is being

addressed in the negotiations, as is the question of providing food aid exclusively in grant form.<sup>3</sup>

Table 1: Per caput shipments of food aid in cereals (in grain equivalent) (kg per capita)

	92/9 3	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04
Africa	10.1	5.0	5.0	3.4	2.3	2.7	3.0	3.4	4.4	2.6	4.3	3.7
Asia	0.9	1.1	1.2	1.2	0.7	0.9	1.5	1.2	1.2	1.1	1.3	0.9
Latin America and the Caribbean	3.4	3.4	2.4	1.2	1.2	1.0	1.9	1.5	1.1	1.4	1.4	0.7
Russian Federation	7.6	16.7	0.1	0.5	0.1	0.3	13.6	16.8	2.1	1.1	0.0	0.2
Other	3.1	1.5	0.7	0.4	0.4	0.2	0.4	0.6	0.3	0.4	0.2	0.3

Source: WFP

# III. CURRENT AGRICULTURAL SITUATION

#### A. CROP AND LIVESTOCK PRODUCTION

20. Global crop and livestock production increased over the past two years at rates above the averages of the previous four decades. The higher global agricultural output growth in 2003 and 2004 is the result of an upsurge in production in developing and developed countries, respectively. For developing countries as a group, output growth peaked in 2003, but decreased in the next year to values below the averages of the previous decades. The developed country group recorded a significant output growth of almost 5 percent in 2004 after some years of contracting or stagnant agricultural production. This rise is the result of a strong recovery in the transition countries and an increasing output growth in the developed market economies (Annex, fig.6). With regard to transition countries particularly strong growth was experienced by Belarus (13.9 percent), Czech Republic (18.2 percent), Hungary (18.8 percent), Romania (14.8 percent), Serbia and Montenegro (13.4 percent), and the Ukraine (17.5 percent). Poland and Russia saw more moderate, but still strong, growth of 4.1 and 5.2 percent, respectively.

21. In all developing country regions, output growth was lower in 2004 than in 2003. In Asia and the Pacific, agricultural performance improved in 2003, expanding 4.5 percent after the lower 2 percent recorded in 2002. The rate of agricultural production growth in the region has nevertheless declined in 2004 to 2.5 percent. Latin America and the Caribbean experienced systematically increasing rates of production growth over the

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<sup>&</sup>lt;sup>3</sup>. WTO, Doha Work Programme, Decision Adopted by the General Council on 1 August 2004, DOC WT/L/579, paragraph 18, Geneva, 2 August 2004.

period 2000-2003, which slowed down to 2.4 percent in 2004. In the Near East and North Africa, agricultural performance continues to be characterized by very pronounced fluctuations due to variable climatic conditions in many countries in the region; after increasing almost 7 percent in 2002 and falling to 2 percent in 2003, output growth was virtually stagnant in 2004. Sub-Saharan Africa has likewise recorded variable growth in agricultural output over the last years, but at rates below the average of the 1990s.. Data for 2004 indicate an increase of only 0.5 percent in the region's overall agricultural production (Annex, fig.7).

22. Long term trends in per caput food production provide an indication of the contribution of the sector to food supplies (Annex, fig.8). Global per caput food production has increased steadily over the past 30 years with an average annual growth rate reaching 1.2 percent during the past decade. Both developing and developed countries shared in this expansion, with per capita production growing at higher rates in the developing countries vis-à-vis the developed countries. Sub-Saharan Africa is the exception, with per caput food production falling steadily over the 1970-1982 period. After two decades of stagnant or very slow growth, per capita food production in the region remains well below the levels attained in 1970.

#### B. WORLD CEREAL SUPPLY SITUATION

- 23. After several years of stagnation, global cereal production increased sharply in 2003/04 and is forecast to reach a record 2 057 million tonnes in 2004/05, up 9.2 percent from the previous year. With this level of production, even after allowing for an expected increase in global cereal utilization in 2004/05, a significant surplus is expected, for the first time since 1999/2000 (Annex, fig.9). This implies that global cereal reserves should increase by the end of the 2004/05 season, a positive development for world food security after sharp drawdowns in the past four years.
- 24. World cereal stocks are forecast to rise to 450 million tonnes at the close of crop seasons ending in 2005 (Annex, fig.10). This anticipated accrual in world cereal reserves is noteworthy in that it represents the first such expansion in several years. The bulk of the accumulation is likely to occur where production prospects have been most favourable, especially in the EU and the United States. Even in China, the country responsible for the bulk of the reduction of global inventories in the past few years, only a relatively marginal decline is expected this year following the good 2004 harvest. The global stocks-to-utilization ratio is forecast to reach 22 percent in 2005.

## C. INTERNATIONAL COMMODITY PRICE TRENDS

- 25. In 2004, prices of basic food commodities reached their highest levels since the mid-1990s (Annex, fig.11). Prices of oils and fats have led this trend, rising 63 percent from the depressed levels of 2000 and 2001. Other basic food prices, including cereals, meat and dairy, have risen as well, although by smaller margins.
- 26. Price increases in the oilseeds sector reflect continuing strong demand growth for oils for food use and meals for animal feed. The current high level of oilseed prices is stimulating farmers to increase plantings, and assuming weather conditions remain good

and pest incidence low – an anticipated expansion in oilseed production in 2004/05 could dampen the upward trend in prices.

- 27. Cereal prices rose 29 percent between 2000 and 2004. Despite much lower stocks than have prevailed historically, cereal prices moderated somewhat in mid-year on the basis of favourable harvests.
- 28. International meat prices increased in 2003 and 2004 as animal disease outbreaks in major meat exporting countries and resulting bans on imports from these areas reduced exportable supplies. Poultry and pig meat prices have moderated somewhat in 2004, but bovine meat prices continued to surge as disease problems and higher feed prices depress output and trade prospects.
- 29. In contrast with the rising prices of basic food commodities, the price situation for tropical products and raw materials is mixed. A preliminary FAO forecast of the world sugar market for 2005 indicates that world sugar consumption would slightly surpass global production for the second consecutive year. The anticipated shortfall in global output would lead to falling stocks in major importing countries, underpinning the continued strengthening in market prices.
- 30. Significant oversupply and sluggish demand growth in the world market resulted in coffee prices falling by 58 percent between 1998 and 2001. Prices have remained weak since and although some rises occurred in the interim period, it was not until February 2005 that prices actually reached the same level they averaged in 1999. Preliminary estimates point to a similar crop size in 2004/2005 as that harvested in 2003/04, and a continued upward trend in prices.
- 31. After falling almost 50 percent between 1998 and 2000, cocoa prices recovered strongly starting in late 2001 and continuing in 2002 and 2003 largely on the basis of disease-reduced harvests. Cocoa prices have decreased slightly in 2004, but recent difficulties with shipments from West Africa have led to a slight strengthening in prices in February 2005.
- 32. Cotton prices declined in late 2004 as a result of record output in the major cotton producing countries (Brazil, China, India, Pakistan and the United States which together account for more than 70 percent of world production). World cotton prices have been recovering in the first three months of 2005 mostly due to expectations of lower production in 2005/06, following reduced plantings in response to low prices at sowing time.
- 33. Rubber prices have also recovered in 2003 and 2004 from the very low levels that prevailed during the previous years. Stronger economic growth and higher prices for petroleum-based synthetic rubber are responsible for the recovery in rubber prices.
- 34. Weak and volatile prices, especially for beverages and other tropical products, have negative effects on the ability of many developing countries to generate export earnings. As many as 43 developing countries depend on one single agricultural commodity for more than 20 percent of their total export revenues and more than 50 percent of their agricultural export revenue. The high dependence on only a few export commodities makes the overall economies of these countries extremely vulnerable to market conditions for these commodities. Large fluctuations in export proceeds, in their turn, are likely to have negative impacts on income, investment, employment and growth.

#### D. AGRICULTURAL TRADE

35. After declining for several years, the value of global agricultural exports expanded from 2001 onwards and reached a record value in 2003 (Annex, fig.12). The share of agricultural trade in total merchandise trade continued a long-term downward trend throughout the 1990s, as agricultural trade has expanded more moderately than trade of manufactured goods. The recent upturn in agricultural exports has stabilized agriculture's share of total merchandise trade at 7 percent, compared to around 25 percent in the early 1960s (Annex, fig.13). For the developing countries, the share of agricultural exports in total merchandise exports has dropped from almost 50 percent in the early 1960s to only 7 percent in 2003. The declining share of agriculture in the total merchandise exports of developing countries reflects both a diversification of their trade towards manufactured goods and the relatively slow growth of agricultural trade.

- 36. Until the early 1990s, the developing countries recorded an agricultural trade surplus in most years but they have since seen this traditional agricultural trade surplus position shrinking, and throughout most of the 1990s their agricultural exports and imports were roughly in balance, with deficits posted in some years (Annex, fig.14). FAO's outlook to 2030<sup>4</sup> suggests that, as a group, they will become net agricultural importers and projects a developing country agricultural trade deficit of US\$ 18 billion (in US\$ of 1997/99) in 2015, rising to US\$ 35 billion in 2030.
- 37. Quite different agricultural trade positions are found in the different developing country regions. In particular, the Latin America and the Caribbean region has seen a widening of its agricultural trade surplus, starting around the mid-1990s. At the same time, Asia and the Pacific has become a net agricultural importer, while the significant structural deficit of the Near East and North Africa shows no signs of diminishing. Most striking is the gradual marginalization of sub-Saharan Africa on international agricultural export markets, with their share of global agricultural exports declining gradually from almost 10 percent four decades ago to about 3 percent today.
- 38. High levels of undernourishment are correlated with a high dependence on agricultural exports. Country groups with the higher levels of undernourishment tend to depend on agricultural products for a large share of their national income, employment and export earnings (Annex, fig. 15). At the same time, the country group with the highest levels of undernourishment spends more than 14 percent of its total export earnings to finance food imports (Annex, fig. 16). Moreover, countries with the worst levels of undernourishment have agricultural sectors that are the least integrated into the international markets (Annex, fig. 17).
- 39. Exports of processed agricultural products have been expanding significantly faster than semi-processed or bulk commodities and now account for nearly half of global agricultural trade. However, the Least Developed Countries have not participated in this growth, seeing instead a decline in processed exports from about 30 percent of total agricultural exports in the 1960s to less than 20 percent in the 1990s (Annex, fig. 18).
- 40. The rapid growth in processed agricultural trade is due largely to the demographic and economic transformations that are sweeping through the developing world. Urbanization, participation by women in paid employment, and rising incomes have increased the opportunity cost of purchasing and preparing bulk foods and help explain the rapid shifts towards processed foods that are occurring in both international trade and domestic markets. An important related

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<sup>&</sup>lt;sup>4</sup> FAO. World agriculture towards 2015/30: Summary Report. Rome 2002.

development is the rise in supermarkets in developing countries. This development is leading to a transformation in the retail trade and has significant implications for small farmers and rural communities. In particular small-holder farming structure must change in response to purchasing practices of supermarkets.<sup>5</sup>

- 41. Trade can influence poverty and food security directly or indirectly through both general trade and agricultural trade in particular.<sup>6</sup> Increased participation in and integration into international trade fosters economic growth, increases employment opportunities and improves the income-earning capacity of the poor and food-insecure it enhances access to food. In addition openness to agricultural trade can promote food security by augmenting food supplies to meet consumption needs and reduce variability of overall food supplies.
- 42. The largest part of the estimated global income gains from agricultural trade liberalization would accrue to industrial countries which tend to have a higher incidence of economically inefficient agricultural policies. However, the largest relative gains in terms of GDP are obtained for developing countries, with gains estimated at between 0.2-0.7 percent of GDP. Very significantly, for developing countries about 70-85 percent of the potential gains come from reform of their own agricultural policies.
- 43. Not all countries may benefit from agricultural trade liberalization. Net food importing countries experience negative terms of trade effects as world food prices rise in the wake of policy changes. Also, current beneficiaries of preferential trade arrangements may also lose. But also for these countries agricultural liberalization could contribute significantly to raising the wages of unskilled workers who are often among the poorest of the poor. Indeed, labour markets are one of the most important avenues through which trade liberalization affects poverty at the household level.
- 44. Trade liberalization alone cannot enable most developing countries to achieve their MDG poverty and hunger targets. Rather, it is important to note that 'non-policy' barriers to trade, such as weak infrastructure and high-transport cost, may mean that even extensive trade policy reform may have a slow impact. Appropriate domestic policies and public investments promoting propoor growth and safety nets are crucial to food security strategies. Expanding markets through trade can provide growth opportunities, encourage efficiency, and remove scale and scope constraints in the case of small, low income economies with limited domestic markets.

# E. FISHERIES: PRODUCTION, UTILIZATION AND TRADE

- 45. Fisheries play an important role in the world food economy. More than 38 million fishers and fish farmers gain their livelihoods from capture fisheries and aquaculture. Globally, fish provide about 15 percent of animal proteins consumed, with variations from an average of 23 percent in Asia to approximately 18 percent in Africa and around 7 percent in Latin America and the Caribbean. Developments in world supply of fish over the last decade have been overshadowed by trends in China, which has reported very strong growth in fish production, in particular from inland aquaculture and has become the world's largest fish producer.
- 46. Total fishery production in 2003 was 132.5 million tonnes, of which 42.3 million tonnes was from aquaculture (Annex, fig.19). World capture fisheries production was 90.2 million tonnes, 3 percent below production in 2002 (Annex, fig.20). Most of the

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<sup>&</sup>lt;sup>5</sup> FAO. The State of Agricultural Commodity Markets 2004. Rome 2004.

<sup>&</sup>lt;sup>6</sup> FAO. *The State of Food and Agriculture 2005*. Agricultural trade and poverty: Can trade work for the poor? Rome 2005 (forthcoming).

fluctuations in capture production in recent years have been the result of variations in catches of Peruvian anchoveta, which are driven by climatic conditions (i.e. el Niño). In 2003, China reported a production of 16.8 million tonnes, a slight increase compared to 2002. Peru (6.1 million tonnes), the USA (4.9 million tonnes), Indonesia (4.7 million tonnes) and Japan (4.6 million tonnes) were other large producers.

- 47. World aquaculture production has been increasing rapidly in recent years and now accounts for 32 percent of total fisheries production (Annex, fig.21). Most of the expansion has been attributable to China, which is now responsible for more than two-thirds of total aquaculture production in volume terms (28.9 million tonnes in 2003).
- 48. About 40 percent (live weight equivalent) of world fish production enters international trade, approaching in 2003 a value of US\$ 63 billion. Developing countries contributed slightly less than 50 percent of such exports, with the first 10 exporters accounting for two-thirds of the developing country total. The developed countries absorbed more than 80 percent of total world fisheries imports in value terms (Annex, fig.22). Japan and the USA together accounted for as much as 36 percent of total world imports of fisheries products. The importance of fisheries exports as a foreign currency earner for developing countries has increased significantly. Currently, cumulated net exports of fisheries products from developing countries far exceed export earnings from major commodities such as coffee, bananas, and rubber.
- 49. In per caput terms, while total supplies of fish for food from capture have been stagnating in recent years, per caput supplies from aquaculture have increased strongly (Annex, fig. 23). This is particularly so in China, where per caput supplies from aquaculture have increased to the point of providing slightly more than 75 percent of total per caput fish supplies for food, as compared to only 18 percent in the rest of the world.

#### F. FORESTRY

- 50. World roundwood production in 2003 reached 3 342 million cubic metres, about 1.2 percent above the level of the preceding year (Annex, fig.24). The greater part of global wood production is burned as fuel. Of total roundwood production in 2003, 53 percent was wood fuel and the remaining 47 percent industrial roundwood. The vast majority of wood burning occurs in developing countries, where wood is often the most important source of energy. On the other hand, the larger part of industrial roundwood production continues to be accounted for by the developed countries which provide more than 70 percent of the total.
- 51. The developing countries accounted for 2 000 million cubic metres, or 60 percent of total roundwood production in 2002 (Annex, fig.25). Almost 80 percent of roundwood production consists of wood fuel, production of which has been stable in the last years. Developing country production of industrial roundwood started to rise slowly after some years of decline.
- 52. In the developed countries, industrial roundwood accounts for 87 percent of roundwood production, while wood fuel production is of relatively marginal importance. Also, developed country production, following a significant decline in the early 1990s, is still well below the peak levels of 1989-90.

## IV. RESOURCES TO AGRICULTURE

#### A. EXTERNAL ASSISTANCE TO AGRICULTURE

- 53. Measured in constant 2000 prices, preliminary data for 2002 indicate that total external assistance to agriculture was virtually unchanged from the previous two years (Annex, fig.26). The global picture however masks shifts between the regions. Latin America and the Caribbean and the transition countries experienced variability in recent years while assistance to Asia continues to decline. External assistance in sub-Saharan Africa is estimated to expand for the third consecutive year, rising from US\$ 2,8 billion in 2001 to US\$ 3,4 billion in 2002.
- 54. The longer term trends in external assistance to agriculture reveal a very significant decline in real terms from the early 1980s (with a peak in 1982) to the early 1990s (Annex, fig. 27). From 1993 onwards, external assistance to agriculture has fluctuated around levels close to half of those recorded over the period 1982-86. Both bilateral and multilateral assistance have contributed to the significant contraction in levels of assistance compared with those of the former part of the 1980s. On the other hand, the share of concessional assistance in the total has tended to increase somewhat, reaching more than 80 percent in 2000.
- 55. When measured in terms of amounts per agricultural worker, external assistance to agriculture has more than halved since the peak level in 1982 (Annex, fig.28). Among the developing country regions, sub-Saharan Africa seems to recover from the declining trend of the last two decades, with US\$ 17 of external assistance per agricultural worker in 2002. A possible slight increase in the 2002 values for Near East and North Africa and Latin America and the Caribbean cannot be confirmed until final data become available. The amount of assistance per agricultural worker in Asia and the Pacific remains below the other regions. Of concern is also the fact that external assistance to agriculture does not tend to reach the neediest countries in terms of the prevalence of undernourishment. Indeed, external assistance per agricultural worker is higher in the countries with the lowest prevalence of undernourished people in the population (Annex, fig. 29).
- 56. In view of the decline in resources to agriculture the recent decision by some donor countries to raise development assistance and cancel debt is a significant development. The Council of the European Union has set an ODI/GNI ratio of 0.56 percent by 2010 rising to 0.70 percent by 2015. Moreover the recent agreement reached by the G8 cancels all debts owed to them by 18 countries without a reduction in the overall funds available to those or other countries. These are important steps towards implementing the Monterrey consensus which will also require a greater share of commitments going to agriculture and rural areas.

## B. AGRICULTURAL CAPITAL STOCK

57. Capital stock in agriculture is an important determinant of agricultural labour productivity and of farm incomes. FAO has prepared estimates of capital stock in agriculture, using physical data on livestock, tractors, irrigated land and land under permanent crops, etc. as well as the average prices for the year 1995. This data enabled the derivation of Capital Stock in Agriculture. The annual change in the latter is taken to reflect investment in agriculture.

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<sup>&</sup>lt;sup>7</sup> The capital stock in agriculture refers to replacement value in monetary terms (at the end of the year) of tangible fixed assets produced or acquired (such as machinery, structures, livestock, land improvements) for repeated use in agriculture production process.

58. Relating capital stock in agriculture to the number of economically active people in agriculture provides an indicator of the degree of capitalization of the sector (Annex, fig. 30). Agricultural capital stock per agricultural worker differs very significantly among the developing country regions, with levels in Latin America and the Caribbean and in the Near East and North Africa well above those in sub-Saharan Africa and in Asia and the Pacific. When looking at the longer-term trend, since 1975 agricultural capital stock per agricultural worker has increased relatively significantly only in Latin America and the Caribbean, while only limited increases have occurred in the Near East and North Africa and Asia and the Pacific. The most worrisome feature is the slow, but seemingly inexorable, decline in capital stock per agricultural worker in sub-Saharan Africa.

59. A look at capital stock per agricultural worker in the primary agriculture of developing countries shows that it is extremely low and stagnant in countries where prevalence of undernourishment is high, as compared to those that have managed to reduce hunger. And the investment gap is growing. Countries with the lowest current levels of undernourishment (less than 5 percent of the population) have had strong growth in capital stock in agriculture since 1975. In all other categories, investment has increased little, if at all. And in the group of countries where more than one-third of the people are undernourished, the value of capital stock in primary agriculture has declined in real terms over the past quarter century (Annex, fig. 31).

#### C. PUBLIC INVESTMENT IN AGRICULTURE

60. Public investment in infrastructure, agricultural research, education and extension is essential for stimulating private investment, agricultural production and resource conservation. The importance governments give to agriculture relative to its importance in the economy is reflected in the "agricultural orientation index", i.e. agriculture's share of public expenditure by its share of GDP (Annex, fig. 32). Countries with lower levels of undernourishment provide the strongest agricultural orientation in their public expenditure. In comparison, in countries with high levels of undernourishment, the index is very low. There is clearly the need to strengthen public expenditure on the agricultural sector in order to fully exploit its potential contribution to employment creation, poverty alleviation and reduction of food insecurity.

#### V. SUMMARY

- 61. This document highlights a number of positive and negative features in the state of world food and agriculture. Some of the major features include:
  - The number of undernourished people in developing countries remains stubbornly high, at an estimated 815 million people in 2000-2002. Past progress in reducing these numbers has been unacceptably slow and extremely uneven across countries and regions. The fall in undernourished people is estimated at only 9.2 million over the last decade.
  - At the same time, a large number of countries and people worldwide continue to be affected by food emergencies. Many of these are attributable to unfavourable climatic conditions and natural events, but an increasing number are also determined by humaninduced disasters.
  - Food security is much more than a food production problem but the agricultural sector plays an important and, in some cases indispensable role in reducing both food security and poverty. Analysis of crop and livestock production data show that over the past two years output has grown at rates above the average of the previous four decades. This is the result on an upsurge in production in developing and developed countries production.

After several years of stagnation world cereal production increased sharply in 2003/04.
 This implies a welcome increase in world cereal stocks, after several years of drawdowns.

- In 2004 prices of basic food commodities reached their highest levels since the mid-1990s. However the price situation for tropical products and raw materials is mixed.
- After declining for several years, the value of global agricultural exports expanded from 2001 onwards and reached a record value in 2003. However, the net agricultural trade position of the developing countries, and particularly the least-developing countries, has worsened over time and this trend looks set to continue. In this regard it is important to emphasise the role of the on-going WTO negotiations on agricultural trade in the context of the Doha Round. The outcome of these negotiations may play a critical role for enhancing the contribution of trade in agricultural products to economic development in many developing countries.
- Long term trends in external assistance to agriculture reveal a very significant decline in real terms from the early 1980s. The global picture masks shifts between regions with sub-Saharan Africa seemingly recovering from the declining trend as external assistance to agriculture is estimated to expand for the third consecutive year. Of concern is the fact that external assistance to agriculture does not tend to reach the neediest countries in terms of the prevalence of undernourishment. The inadequacy of resource flows to agriculture is also underlined by the extremely low capital stock per agricultural worker.
- 62. In addition to the trends discussed above, the state of food and agriculture is shaped by important forces in the broader economy. These include, *inter alia*, urbanization and the shifting location of hunger and poverty from rural to urban areas; globalization and market integration; income growth and the graduation of more and more countries from low-income to middle-income status, with a possible shrinking of the relative importance of agriculture as a driver of economic growth and poverty reduction and a rise in non-agricultural activities that contribute to improving the living conditions of rural people; the rising demand for global public goods such as international rules, standards and conventions; mitigation of the effects of climate change; limitation of fossil energy and the role of agriculture as a provider of bio-energy; and the increasingly important role of the private sector in knowledge generation and standard setting.

## ANNEX: THE STATE OF FOOD AND AGRICULTURE IN FITGURES

Fig. 1: Undernourished population by region, 2000-2002 (millions)

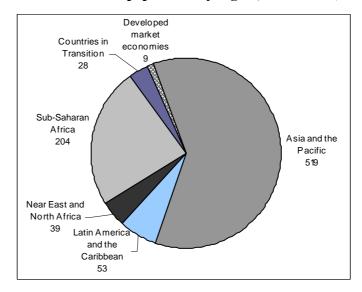
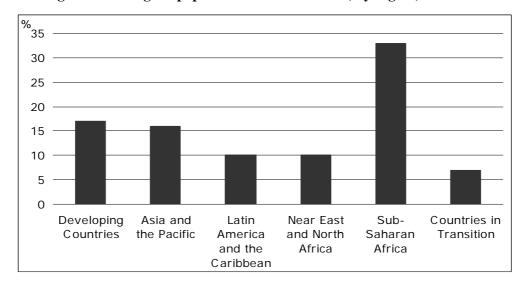


Fig. 2: Percentage of population undernourished, by region, 2000-2002

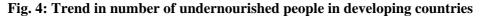


% 1969-71 1979-81 1990-92 2000-02 45 40 35 30 25 20 15 10 Developing Asia and the Latin America Near East and Sub-Saharan

Countries

Pacific

Fig. 3: Trend in percentage of population undernourished in developing countries

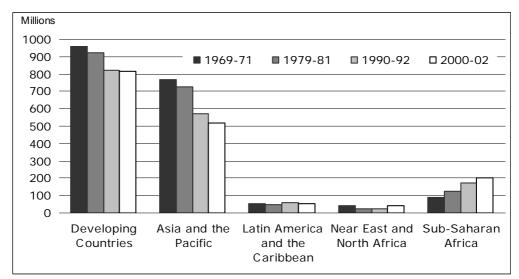


and the

Caribbean

North Africa

Africa



16
14
12
10
8
6
4
2
0
92/93 93/94 94/95 95/96 96/97 97/98 98/99 99/00 00/01 01/02 02/03 03/04

■ Africa ■ Asia □ Latin America and the Caribbean ■ Russian Federation ■ Others\*

Fig. 5: Recipients of food aid in cereals (in grain equivalent)

Source: WFP

Note: years refer to the 12-month period July/June. Countries of the Near East in Asia are classified with Asia. Countries of the Near East in North Africa are classified with Africa.

<sup>\*</sup> including countries in transition

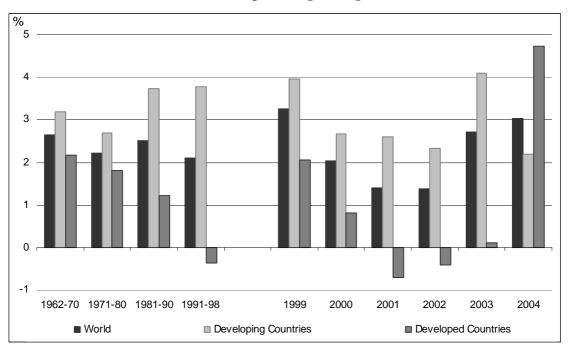
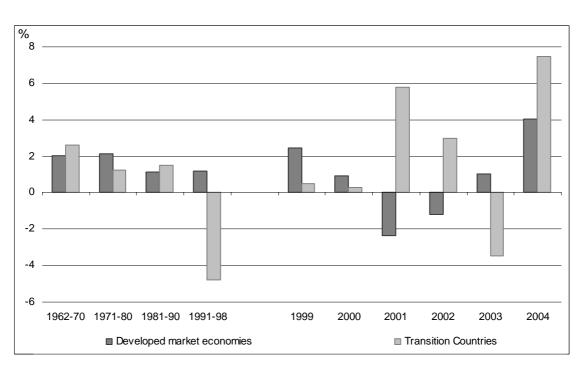


Fig. 6: Changes in crop and livestock production Annual percentage change



Developed countries are disaggregated into "Developed market economies" and "Transition Countries" in the lower panel (and subsequent figures).

Fig. 7: Changes in crop and livestock production by developing country region

Annual percentage change

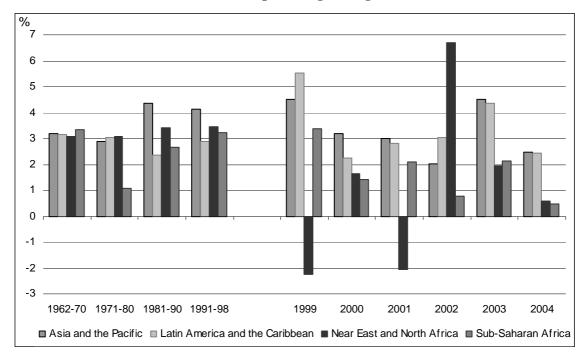
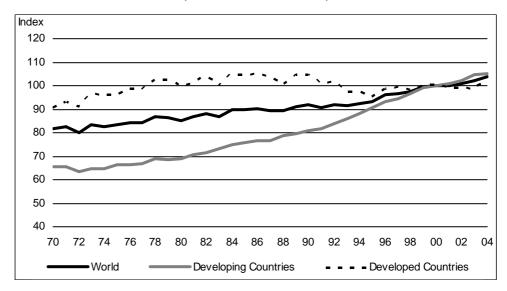
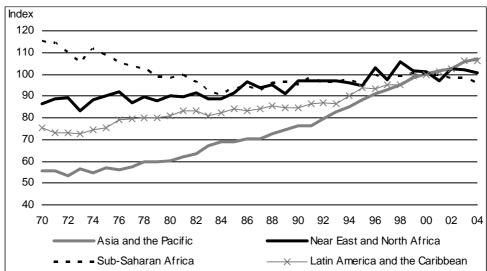
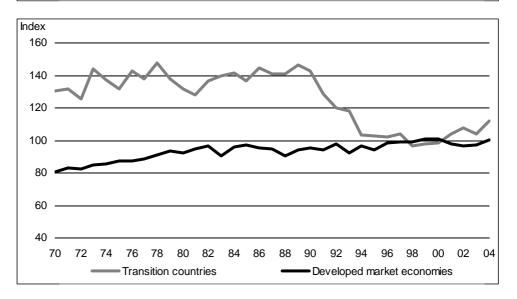


Fig. 8: Long-term trend in per caput food production by developing country region (index 1999-2001=100)







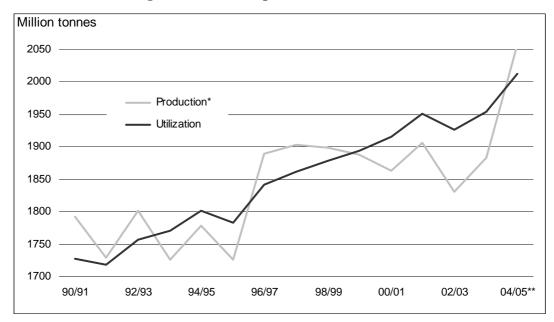


Fig. 9: World cereal production and utilization

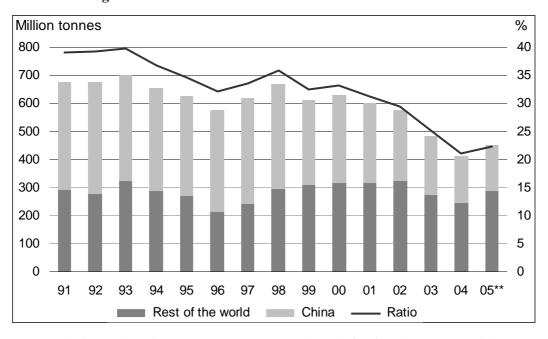


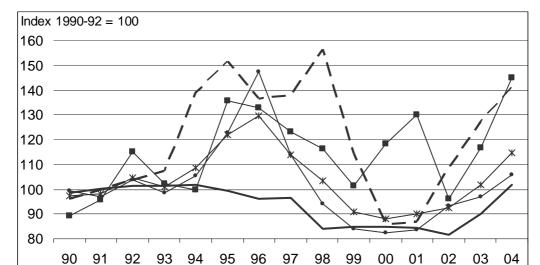
Fig. 10: World cereal stocks\* and stocks-to-utilization ratio

<sup>\*:</sup> data refer to the calendar year of the first year shown

<sup>\*\*:</sup> forecast

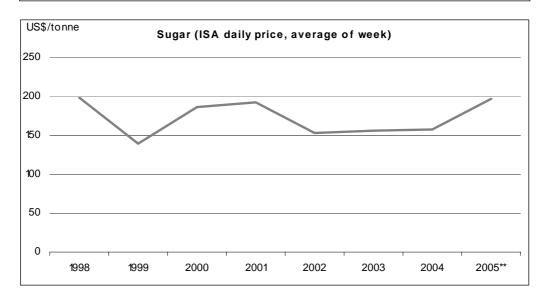
<sup>\*:</sup> stock data are based on aggregate carryovers at the end of national crop years and do not represent world stock levels at any point in time

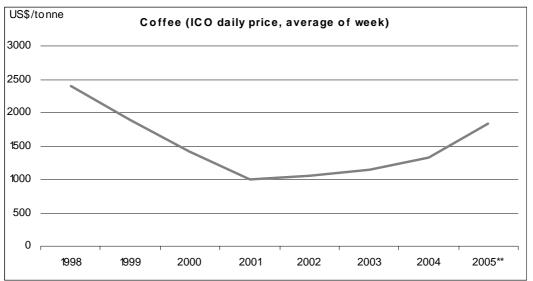
<sup>\*\*:</sup> forecast

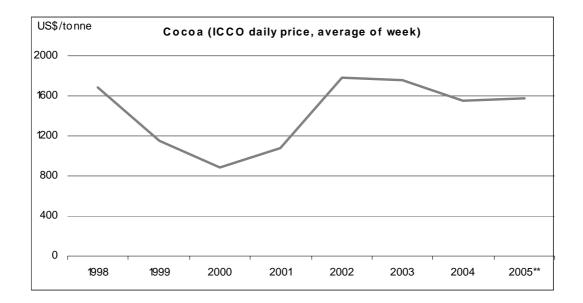


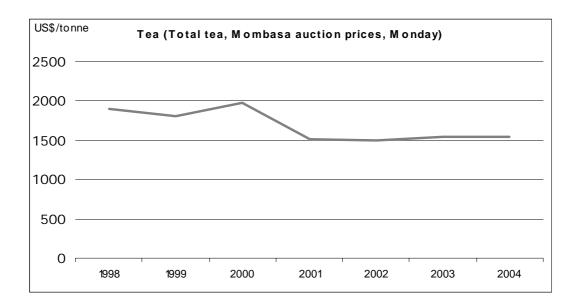
- Meat —■— Dairy —— Cereals — — Oils and fats — — Foodstuffs

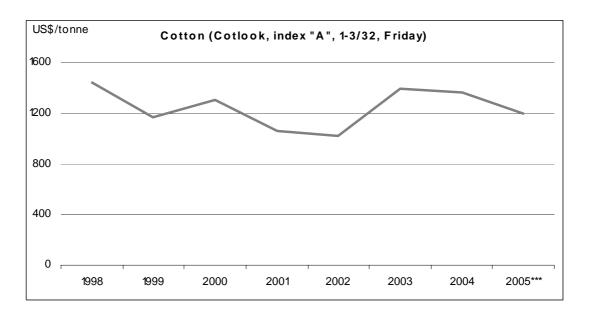
Fig. 11: Commodity price trends

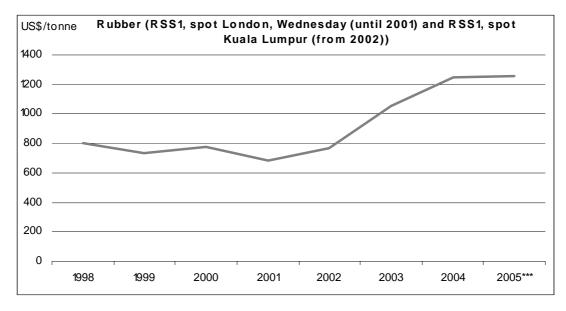












Source: FAO

\*\*: two-month average, January-February

\*\*\*: five-month average, January-April

Fig. 12: Annual change in US\$ value of global agricultural exports (percentage change)

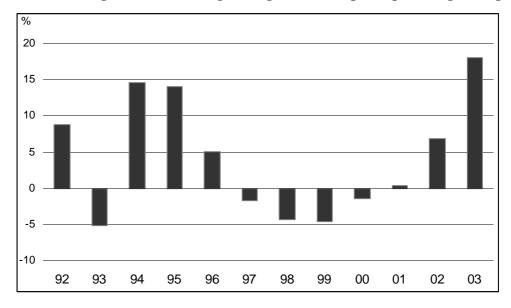


Fig. 13: Global agricultural exports (US\$ and percent of total merchandise exports)

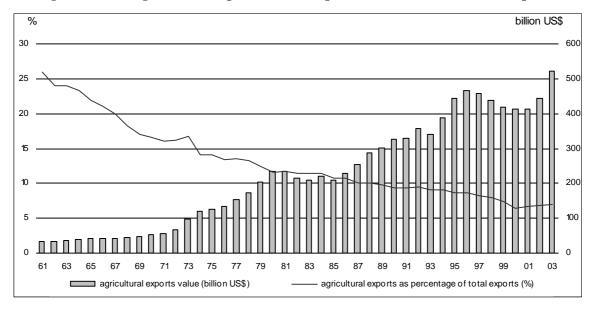
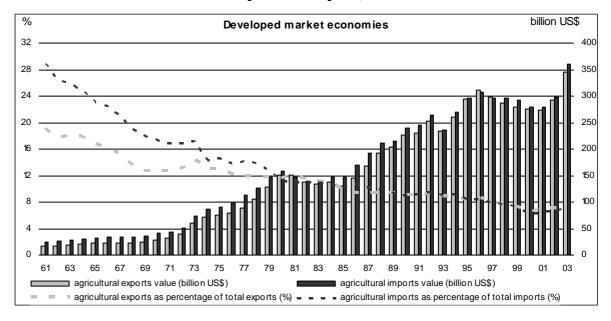
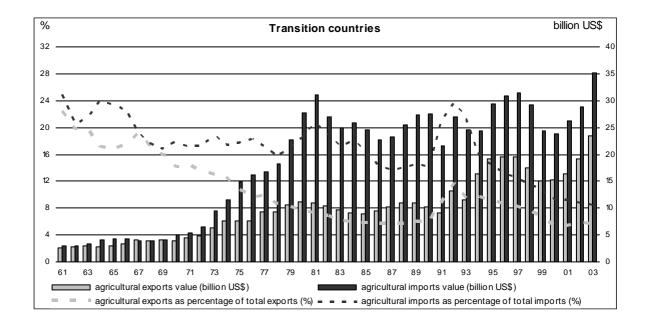
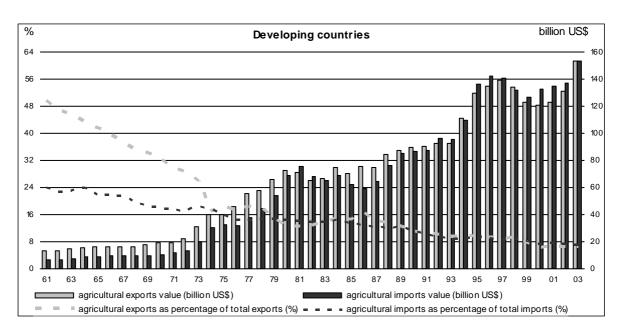
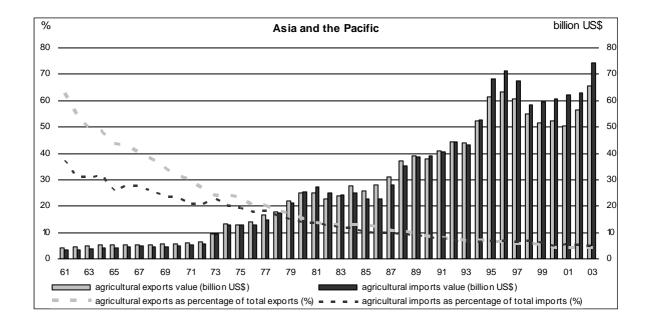


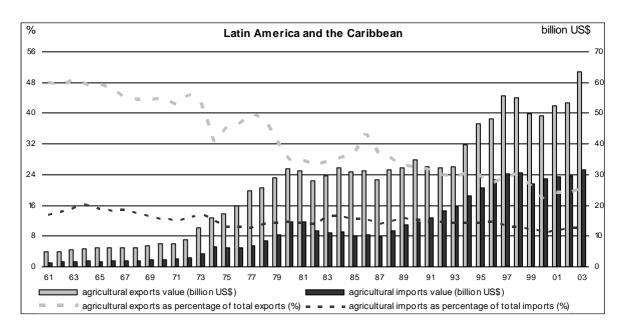
Fig. 14: Agricultural imports and exports by region (in value and as share of merchandise exports and imports)

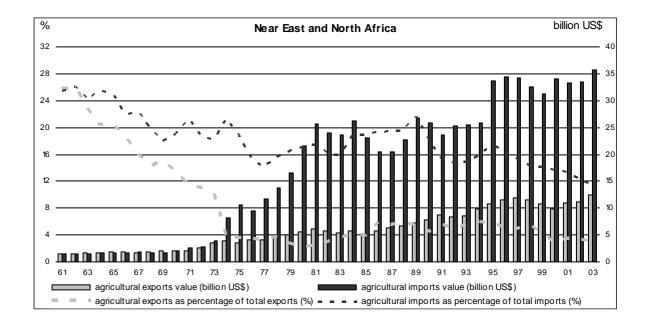


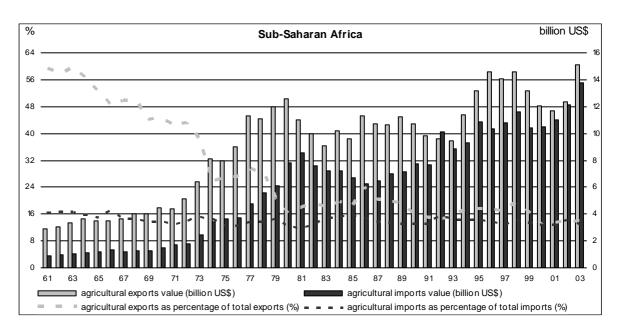












Developing >34%
20-34%
5-19%
2.5-4%
<2.5%

0 3 6 9 12
Ag exports / Total exports

Fig. 15: Agricultural exports and under-nourishment

Source: FAOSTAT and World Bank

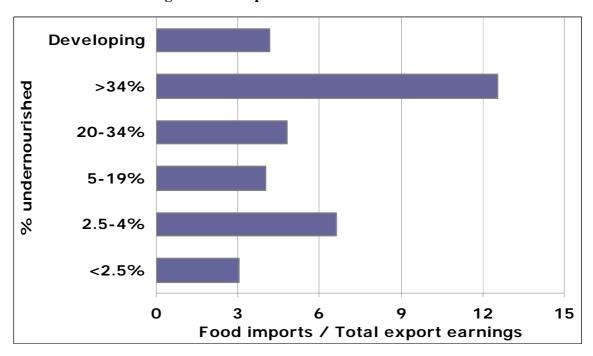


Fig. 16: Food imports and under-nourishment

Source: FAOSTAT

Developing >34% % undernourished 20-34% 5-19% 2.5-4% <2.5% 0 10 20 30 50 70 80 40 60 Ag imports + ag exports / Ag GDP

Fig. 17: Integration of agriculture into world markets and under-nourishment

Source: FAOSTAT and World Bank

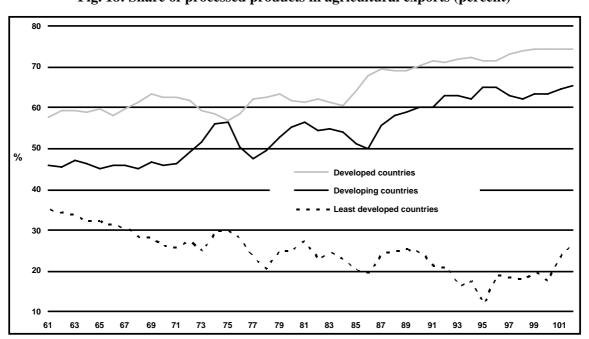


Fig. 18: Share of processed products in agricultural exports (percent)

Source: FAO

Million tonnes

140

120

100

China

80

40

World excluding
China

1950 54 59 64 69 74 79 84 89 94 99 2003

Fig. 19: Total fishery production - World and China

note: Data exclude production of marine mammals, crocodiles, corals, sponges, shells and aquatic plants

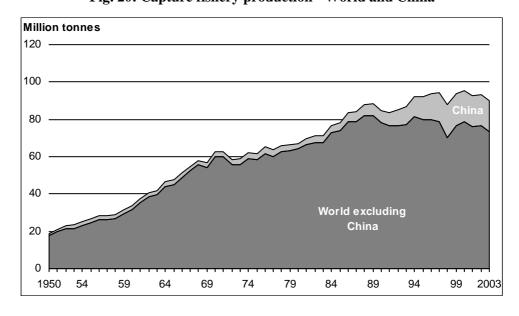


Fig. 20: Capture fishery production - World and China

Million tonnes 45 — World excluding China 

Fig. 21: Aquaculture fishery production – World and China

note: Data exclude production of marine mammals, crocodiles, corals, sponges, shells and aquatic plants

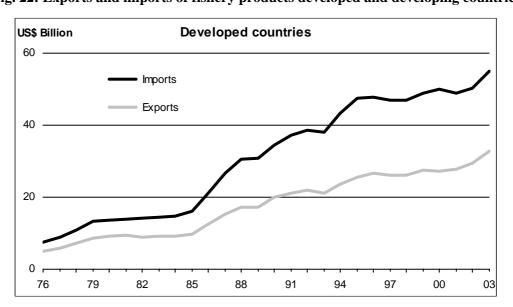
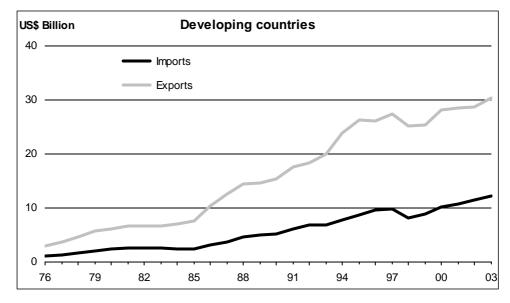
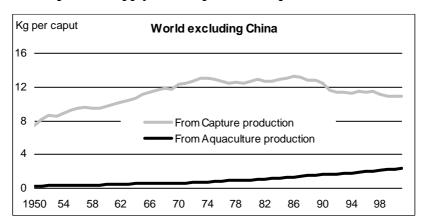


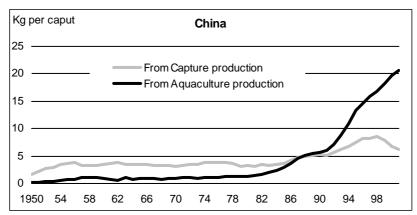
Fig. 22: Exports and imports of fishery products developed and developing countries



note: Data exclude production of marine mammals, crocodiles, corals, sponges, shells and aquatic plants

Fig. 23: Per caput fish supply from capture and aquaculture -World and China





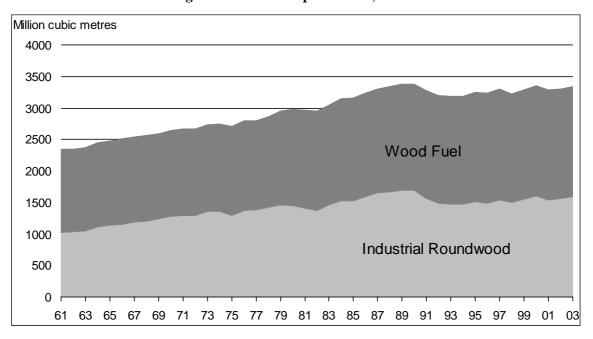


Fig. 24: Roundwood production, World

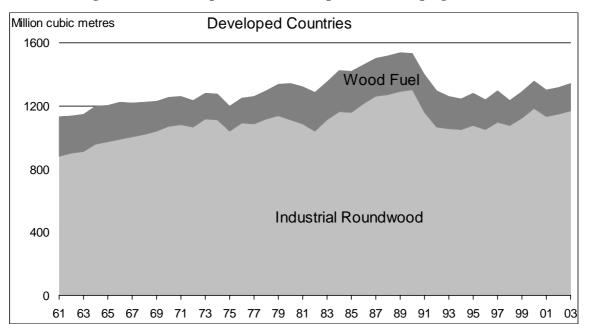


Fig. 25: Roundwood production, developed and developing countries

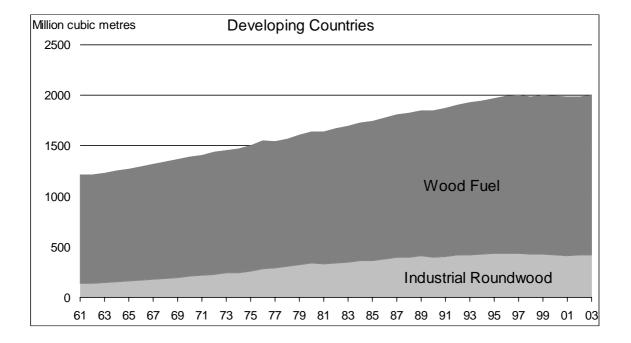


Fig. 26: Commitments of external assistance to agriculture by main recipient regions (at constant 2000 prices)

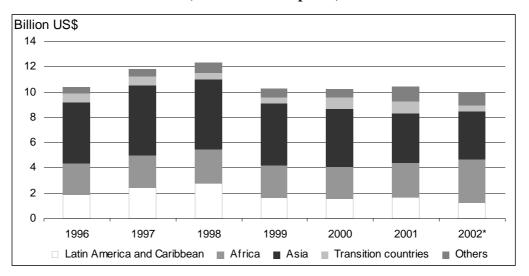
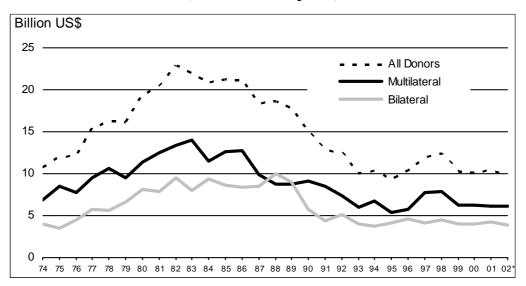


Fig. 27: Long-term trend in external assistance to agriculture, 1974-2002 (at constant 2000 prices)



Notes: \* provisional data

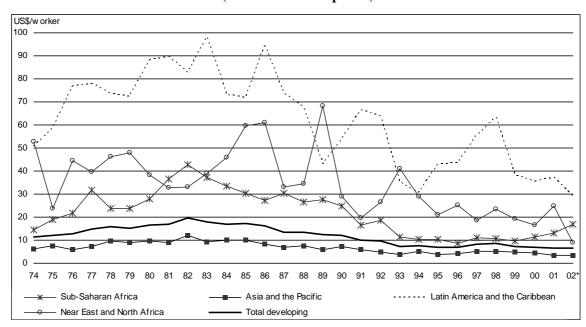


Fig. 28: External assistance to agriculture per agricultural worker (in constant 2000 prices)

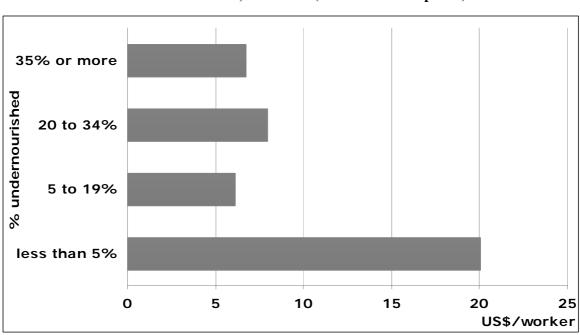


Fig. 29: External assistance to agriculture per agricultural worker according to prevalence of undernourishment, 1998-2000 (in constant 2000 prices)

<sup>\*</sup>Preliminary

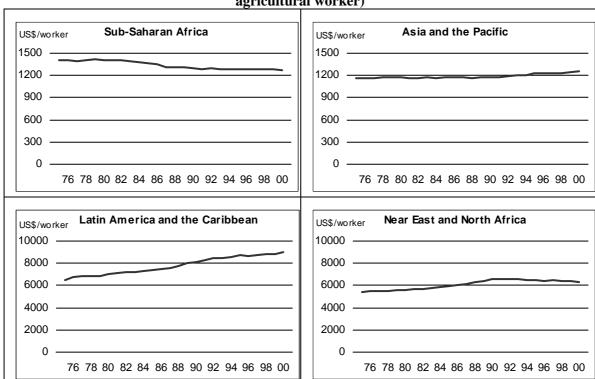
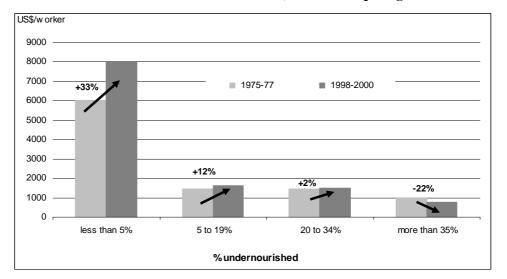


Fig. 30: Agricultural capital stock per agricultural worker, by region (US\$ of 1995 per agricultural worker)

Fig. 31: Agricultural capital stock per agricultural worker in developing countries by prevalence of undernourishment in 2000-2002 (US\$ of 1995 per agricultural worker)



% population undernourished <2.5% ■ 1990-92 average 2.5 - 4% 5 - 19% ■ 1996-98 (or most 20 - 34% recent period for w hich data are available) >= 35% 0.5 0.0 0.1 0.2 0.3 0.4 Agricultural orientation index\*

Figure. 32: Agricultural orientation of public investment

Source: FAO calculations based on data from IMF and World Bank