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Organización  
de las  
Naciones  
Unidas  
para la  
Agricultura  
y la  
Alimentación

## COMMITTEE ON WORLD FOOD SECURITY

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### ASSESSMENT OF THE CURRENT WORLD FOOD SECURITY SITUATION AND SHORT-TERM OUTLOOK

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## I. CONCLUSIONS AND RECOMMENDATIONS

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1. There was an appreciable improvement in the world production of staple foods in 1996 and a return to the upward trend in global output after the disappointing crops harvested in several parts of the world during the preceding year. As a result, the global supply situation improved in 1996/97, prices fell and aggregate cereal carryover stocks are anticipated to rise modestly for the first time in four years. All indicators to measure global food security confirm the improvement in 1996/97. However, despite this overall positive development, food shortages continue to grip a number of LIFDCs especially in sub-Saharan Africa but also in some countries in Asia, mainly due to civil unrest and unfavourable weather conditions. The decrease of food aid shipments continued in 1995/96 but may come to a halt in 1996/97. Early prospects for 1997 cereal crops are generally favourable and no major problems have been reported, so far.

2. Apart from the short-term situation, several long-run issues on structural food security problems remain. These include (i) the situation of the 800 million undernourished people in the world and the conclusions of the Sixth World Food Survey which are examined in another document CFS:97/4 Sup.1, (ii) the question of cereal price instability and (iii) the changes in the volume of global cereal stocks and the effect of shift of ownership from public to private stockholders. These issues have been analyzed by the Secretariat recently and the present document has drawn heavily from the findings of these studies. Thus, a review of the benchmark stock-to-use global food security indicator was undertaken without coming to a final conclusion as to the minimum safe level of global cereal stocks. A study of the degree of transmission of changes in international cereal prices to internal prices reviewed the domestic impact of these changes and policy responses by importing countries, primarily comprising tariff reductions and higher import quotas. A third study assessed possible future grain price instability in light of changes in the international trading environment.

3. As some of the studies drawn upon will have been reviewed by the Intergovernmental Group on Grains at its Session in February 1997, the CFS may also wish to take into account the conclusions and recommendations of this Group<sup>1</sup>. Finally, the Committee may wish to link further consideration of the stock-to-utilization ratio and other global food security indicators to its review of the process of developing targets and verifiable indicators of national and global food security in 1998, in the context of its follow-up to the World Food Summit Plan of Action, Objective 7.3(b).

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## II. THE GLOBAL FOOD SUPPLY SITUATION AND OUTLOOK

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### 1. Staple food production

4. In 1996, global production of **staple food** (which includes cereals, roots and tubers) is estimated to have risen to 2216 million tons (Table 1), 7 percent above the poor harvest in 1995. Most of that increase was in cereals, representing mainly a recovery in the developed countries.

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<sup>1</sup> CFS:97/Inf.9, Excerpt from the Report of the 27th Session of the Intergovernmental Group on Grains, February 1997.

Table 1. STAPLE FOOD: WORLD PRODUCTION, UTILIZATION, TRADE AND STOCK CHANGES

	PRODUCTION			UTILIZATION				TRADE <sup>1/</sup>			CHANGE IN ENDING CEREAL STOCKS	
	1994	1995	1996	1994/95	1995/96	1996/97 fcast	1994/95	1995/96	1996/97 fcast	1994/95	1995/96	1996/97 fcast
(..... million tons.....)												
<b>BY COMMODITY</b>												
Total Staples <sup>2/</sup> (rice paddy)	2110.4	2067.5	2215.8	1953.8	1947.7	1991.5	987.8	1007.1	1026.3	208.9	214.2	194.1
Total Staples <sup>2/</sup> (rice milled)	1933.4	1885.7	2029.8	1803.2	1791.7	1834.3	904.8	921.3	939.7	201.1	205.9	185.8
Total Cereals (rice paddy)	1959.8	1911.5	2058.6	553.0	562.9	573.0	392.6	399.7	405.3	91.4	94.4	84.0
Total Cereals (rice milled)	1782.8	1729.7	1872.6	367.3	374.2	381.3	325.4	331.8	338.6	21.0	19.1	18.5
Wheat	527.4	547.2	588.0	882.9	854.6	880.0	186.8	189.8	195.8	88.7	92.4	83.3
Rice (milled)	361.6	371.8	379.8	150.6	156.0	157.2	83.0	85.8	86.6	7.8	8.3	8.3
Rice (paddy)	538.6	553.6	565.8	894.6	815.0	915.0	796.5	758.2	780.4	57.5	56.7	53.6
Coarse Grains	893.8	810.7	904.8	1157.3	1189.5	1211.1	807.5	824.3	841.3	151.4	157.5	140.5
Roots and Tubers <sup>3/</sup>	150.6	156.0	157.2	872.3	901.4	918.3	654.6	668.2	682.3	74.3	80.2	64.2
<b>BY COUNTRY GROUPS</b>												
Developed countries	894.6	815.0	915.0	377.9	388.8	398.6	277.4	286.1	294.2	55.8	54.5	49.9
Developing Countries	1038.8	1070.7	1114.8	824.3	824.3	841.3	682.3	682.3	682.3	-15.2	-15.2	2.2
LIFDC (rice paddy)	973.0	1004.0	1038.0	404.4	409.7	428.5	404.4	409.7	428.5	-7.7	-7.7	-0.8
LIFDC (rice milled)	829.9	862.4	892.4	358.5	367.6	384.0	358.5	367.6	384.0	-10.6	-6.7	3.9
LIFDC (rice paddy) <sup>4/</sup>	404.4	409.7	428.5	377.9	388.8	398.6	277.4	286.1	294.2	55.8	54.5	49.9
LIFDC (rice milled) <sup>4/</sup>	358.5	367.6	384.0	872.3	901.4	918.3	654.6	668.2	682.3	74.3	80.2	64.2

Source: FAO

Totals computed from unrounded data

1/ Imports for Cereals, Exports for Roots and Tubers

2/ Includes Cereals and Roots and Tubers

3/ In grain equivalent

4/ Excluding India and China

Relatively rapid growth in staple food production in the developing countries continued, exceeding population growth in 1996.

5. World production of **cereals** in 1996 is put at 2059 million tons (rice in paddy terms; 1873 million tons on milled rice basis), almost 8 percent above the 1995 level but close to the long-term trend (1986-1995). Production of all three major types of cereals rose, but the bulk of the increase was due to the sharp recovery in coarse grains. Global **coarse grain** production increased by nearly 12 percent in 1996 as attractive prices combined with favourable weather conditions boosted plantings and yields in several regions, particularly in the United States, where output rose by 28 percent. World output of **wheat** increased by 7.5 percent after the sharp fall in 1995 and exceeded the long-term trend for the first time in three years. For **paddy**, global production rose by another 2 percent in 1996 from the already good harvest in the preceding year.

6. World production of **root and tubers**, the second most important staple after cereals, is estimated to have risen in 1996 to 157 million tons in grain equivalent, an increase of less than one percent over the previous year, the slow down due to the sharp fall in sweet potato output in China. World **cassava** output, the most important root crop in the developing countries, is estimated to have grown in 1996 by 2.5 percent to 169 million tons in fresh root equivalent, mainly reflecting increases in Africa and Latin America, particularly in Nigeria and Brazil, the world's two largest producers. In Asia, production is estimated to have remained virtually at the same level as the preceding year. Global production of **other roots and tubers**, such as potatoes, yams and minor roots and tubers, also increased in 1996.

7. Livestock products represent significant sources of protein in many countries. World **milk** production again changed little in 1996, following several years of stagnation. Increased output in the developing countries, especially in Asia and Latin America, but also in Oceania, exceeded the reduced production in the CIS. The 1996 global output of **meat** rose by 4 percent. Although tempered by high feed costs, production of pig and poultry meat increased fastest. Among other foods which make an important contribution to world food supplies, **oils and fats** are of particular significance. However, their global production in 1996/97 is estimated to have remained close to the previous year's level. Increases in soybeans, groundnut, olive and palm oils were largely offset by a sharp fall in the production of rapeseed oil and moderate declines in cottonseed and sunflower oils.

## 2. Cereal supply, utilization, stocks and trade situation in 1996/97

8. Following the significant recovery of the world cereal production in 1996, the outlook for global food **supplies** in 1996/97 improved appreciably over the preceding year. 1996 world cereal output is estimated to have brought back global cereal supplies to the 1994/95 level, i.e. prior to the dramatic price increases experienced during 1995/96. However, with the expected growth in utilization forecast for 1996/97, only limited quantities are anticipated to remain for the rebuilding of stocks.

9. Indications for 1996/97 are for world cereal **utilization** to recover by over 2 percent, or 43 million tons to 1834 million tons (rice in milled terms), still leaving total utilization slightly below the long-term trend. Global food consumption of cereals are forecast to increase by 2 percent, which would bring per caput food consumption for the world as a whole above trend. The bulk of the increase in total food consumption is anticipated to occur in developing countries, mainly due to the good harvests in Africa and in many parts of Asia. The most significant change in global cereal utilization in 1996/97, however, is expected in the recovery of feed use which is forecast to rise by almost 3 percent. This would be a return to the average level for the last five years. Lower international grain prices are expected to bring livestock feeding in the developed countries

back to more normal levels from the low volume fed in 1995/96. Cereal feed use in the developing countries is anticipated to continue its uninterrupted upward trend also in 1996/97.

10. Following last year's sharp decline in global cereal **stocks**, end-of-season carryovers of national crop years closing in 1997 are forecast to rise to 294 million tons. This volume would be 32 million tons, or 12 percent above the extremely low opening level. The anticipated partial replenishment of world cereal stocks would be the first in four years. However, the expected stock build-up would be largely concentrated in the major exporting countries and in particular in the United States while total stocks in the other countries would continue to decline for the third year in a row. Virtually all of the increase in world cereal carryovers would be in the developed countries while indications point to no change in the aggregate volume of stocks held by the developing countries. Most of the anticipated replenishment of global cereal stocks would reflect larger inventories of coarse grains, which are forecast to increase by 22 million tons. Carryovers of wheat were expected to rise only by 12 million tons, while those of rice were forecast to fall further.

11. At the current anticipated volume, the ratio of end-of-season stocks in 1997 to trend utilization in 1997/98 would increase from 14.3 to 15.8 percent but would still remain below the minimum safe level the FAO Secretariat regards as necessary for world food security. This implies that the moderate build-up of stocks during the current season, while a welcome development, would be insufficient in the event of a significant production shortfall in 1997.

12. The general improvement in domestic supplies among the major importing countries resulting from higher domestic production is likely to curb international **trade** in cereals significantly in 1996/97. World imports of cereals are forecast at 186 million tons, some 20 million tons or 10 percent down from the previous year, representing the lowest volume since the beginning of this decade. All the three major types of cereals are anticipated to contribute to the fall. Developing countries are forecast to account for 85 percent of the total decline, mainly due to sharply lower purchases expected for China and several countries in Northern Africa. It may be worthwhile to recall that almost three quarters of world imports of cereals are now accounted for by the developing countries, compared with less than half 15 years ago.

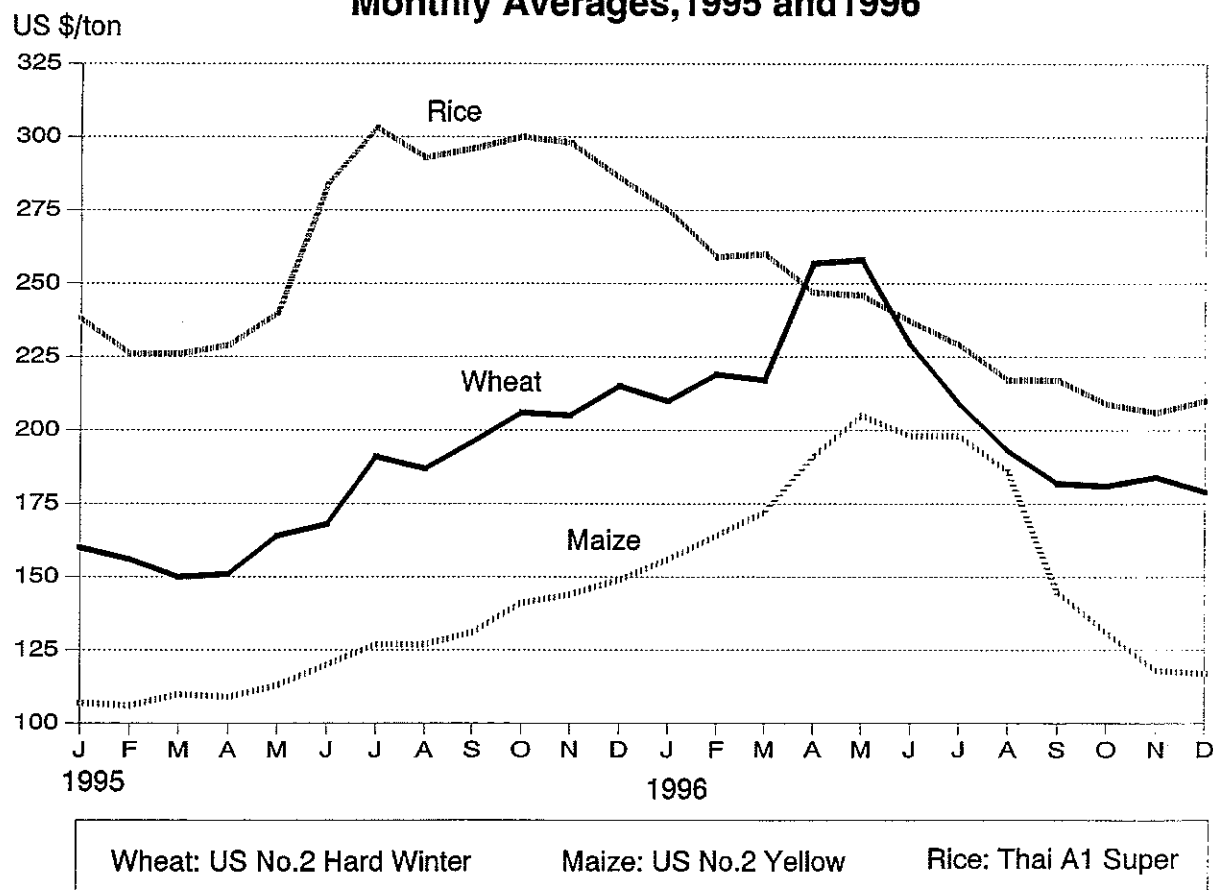
13. The forecast for world imports of wheat and wheat flour (in grain equivalent) in 1996/97 is 84 million tons, or 10 million tons less than in 1995/96, and would be the smallest volume since the late 1970s. This contraction is due to increased production in several countries that had been large importers in the previous year, in particular China and Morocco. The forecast for global trade in coarse grains in 1996/97 is put at 83 million tons, about 9 million tons down from the previous year and would be the smallest volume traded in the last two decades. Again, the bulk of the fall is anticipated to occur in the developing countries. Most of the decline in international trade would be on account of smaller maize imports. Trade in barley could increase slightly while that for other coarse grains, such as oats, sorghum and rye would remain close to last year's levels.

### 3. Cereal price developments in 1995/96 and outlook for 1996/97

14. Following the sharp decline in world cereal supplies in 1995/96 as a result of very low carryover stocks from the 1994/95 season and disappointing crops harvested in several parts of the world in 1995, international market prices for wheat and coarse grains rose steeply during 1995/96 while those of rice first increased in 1995 and then declined in 1996. These developments followed a period of fairly stable cereal prices during the previous three crop years: wheat at around US\$ 150 per ton (US No. 2, hard winter, ordinary protein, fob Gulf), maize at around US\$ 105 (US yellow No. 2, delivered Gulf) and rice at around US\$ 180 (Thai broken, A1 super, fob Bangkok). The price of **wheat** began to rise from a level of US\$ 151 in April 1995 and

reached a peak of US\$ 258 in May 1996, an increase of 71 percent. **Maize** prices rose continuously from US\$ 113 in May 1995 to US\$ 204 in May 1996, an increase of 81 percent. Unlike the pattern seen for these two grains, **rice** prices reached their highest levels during the months of July to November 1995 but declined thereafter.

## International Market Prices of Wheat, Rice and Maize Monthly Averages, 1995 and 1996



15. With the prospect for a large recovery in world cereal production in 1996, resulting from a combination of good response by farmers to high prices, government policy measures and favourable weather conditions, and thus an improvement in the global food supply situation, prices for wheat and coarse grains started to fall toward the middle of 1996 while those for rice continued their downward trend.

16. Already by May 1996, most indications were for a modest growth in global wheat production in 1996. International **wheat** prices came under downward pressure and by mid-January 1997 US export prices of hard winter No. 2 had reached US\$ 177 per ton, US\$ 23 per ton below the corresponding period in 1996 and US\$ 120 per ton or 40 percent less than the record high of April 1996. Bumper crops in Argentina and Australia have intensified competition among the major exporters and this is expected to put more pressure on wheat prices during the first half of 1997 assuming a normal development of the 1997 crop. At the same time, however, concerns over the low level of wheat stocks, especially in the United States, could provide some support to wheat prices.

17. Export prices from most origins and for nearly all types of **coarse grains** continued on an upward path until May 1996 and remained volatile from then on. They only started to turn downward in August as prospects for a major recovery in 1996 crops became more certain. By mid-January 1997, export prices for maize (US yellow No.2) fell to around US\$ 120 per ton, some US\$ 80 per ton less than in July 1996 and US\$ 35 per ton below the corresponding period of a year ago. A further moderate decrease in international maize prices could occur, later in the season, due to lower import demand compared to the previous year and keener competition among major coarse grain exporters, in combination with declining wheat prices and larger availabilities of low quality wheat, which could substitute for coarse grains in livestock feed rations.

18. International rice prices weakened during most of 1996 as world import demand slackened following a year of record trade. The FAO Export Price Index for Rice (1982-84=100), which soared during the course of 1995 to reach 143 points in January 1996, fell by 14 points to 129 by December. Lower quality rice took the brunt of the price decline in 1996. The prices of fully broken rice such as Thai A1 Super fell from the start of 1996 as did the prices of Thai 25 percent and 35 percent. As a result, the sub-index for lower quality rice lost 34 points during the year to reach 122 by the end of 1996. By contrast, the prices for higher quality rice were more resilient at first but with an impending record global output of paddy in 1996, the prices of higher grades also fell during the last quarter of 1996. By December, the export price index of higher quality rice was 8 points down from its January level. Expectations are for prices to recover slightly in early 1997 as the delayed harvest of the main rice crop from Thailand is expected to push up the prices of rice on the world market.

#### 4. Food aid and food emergencies

19. The decrease of food aid shipments continued in 1995/96. Total cereal shipments during the July/June period reached only 7.2 million tons, 2.2 million tons, or 23 percent less than those of 1994/95 and as much as 6 million tons, or 45 percent below the annual average food aid supplies during the past five years. Practically all of the decline occurred in shipments to the low-income food deficit countries. Among them, about half of the fall was in countries of sub-Saharan Africa, where shipments dropped by almost one third. Other countries receiving less food aid were located in Latin America, the Caribbean, Eastern Europe and the CIS. By contrast, shipments to Asia rose somewhat, essentially due to larger supplies to the Democratic People's Republic of Korea, as there was the decline in food aid to other recipients of the region. As regards non-cereal food commodities, global food aid deliveries in 1996 (January-December) fell for the third consecutive year by about 20 percent, to less than one million tons. Smaller shipments primarily of dairy products and pulses, but also of vegetable oils, meat and fish accounted for the decline.

20. The three year uninterrupted fall in total cereal food aid shipments, however, seems to have come to a halt in 1996/97. Although information on food aid budget allocations by individual donors is incomplete, total cereal food aid shipments in 1996/97 are expected to remain roughly at the previous year's volume.

21. At the forecast level, food aid in cereals would, however, still be only half of the volume provided four years ago. The major factors which led to this decline were heavy cuts in government budgets of several donor countries, which also affected food aid allocations; improvement of cereal production in 1996 in a number of recipient countries, including several of the former centrally-planned countries of eastern Europe and the area of the former USSR; the erosion of cereal surplus stocks held by the major exporters; and exceptionally high cereal prices during the recent past which reduced the volume of cereals that could be bought from a given amount allocated for food aid in donors' budgets.



22. As of the end of 1996, a total of 26 countries were identified as facing shortfalls in food supplies in their current marketing years requiring exceptional and/or emergency assistance, about the same number as a year ago. Fourteen were located in Africa, 10 in Asia, one in the Caribbean and one in Europe. In 12 countries, food emergencies occurred primarily as a result of conflicts, mostly civil strife, while sudden natural disasters were responsible for food emergencies in 6 countries. Economic problems resulted in food supply difficulties in a further 8 countries. During the past calendar year a total of 24 alerts and special reports have been issued by the Global Information and Early Warning System, a similar number as in 1995, mainly based on FAO/WFP Crop and Food Supply Assessment Missions.

#### 5. Review of food security indicators

23. To measure the global food security situation, the Committee customarily reviews a set of indicators which taken together provide some indications of the present and future global cereal supply and demand situation. Table 2 shows eight individual food security indicators. The analysis of their changes in 1996/97 compared with the previous year and their implications discussed below.

24. The first indicator provides the ratio of world cereal stocks to world cereal utilization. The FAO Secretariat considers 17-18 percent as the minimum necessary to safeguard world food security, the total consisting of a 12 percent working stocks and a 5-6 percent reserve stock element. Following its sharp decline last year to unprecedented levels since the world food crisis in the mid-1970s, the ratio of global carryovers by the close of crop years ending in 1997 to trend utilization in 1997/98 is forecast to improve somewhat (at 15.8 percent) but still be below the benchmark level. World cereal market prices, therefore, are expected to remain volatile for the rest of the season.

25. In pursuance of the Committee's recommendation at its 20th Session, to undertake a "reconsideration of the minimum safe level of global cereal stocks", the Secretariat made further progress in its assessment of this benchmark food security indicator on the stock-to-use ratio<sup>2</sup>. The Secretariat attempted to re-estimate both the working stock and reserve stock elements used in arriving at the ratio. The study concluded that the estimate of the 12 percent working stock element used in the original FAO methodology was likely still valid, while the validation of the reserve stock element was less certain. A re-estimation of the ratio using the original methodology for 1979-94 showed a significant increase in the reserve ratio component, some 7-8 percent compared to the original 5-6 percent, mainly due to the increase in production variations for coarse grains observed in more recent years. An alternative methodology, also based on the more recent years, showed that a ratio of the cereal reserve element could be in the order of 3-7 percent of trend utilization, if the requirement were to cover, statistically, 95 to almost 100 percent of single year production shortfalls. Thus, on these assumptions, the range of estimates for the minimum safe level of global cereal stocks would lie between 15 and 20 percent of trend utilization, according to the results of the work completed thus far. The findings have been considered by the Intergovernmental Group (IGG) on Grains at its 27th Session in February. Extracts of its report on this and related subjects will be tabled for information.

26. The second indicator also demonstrates a slight improvement of the world food security situation. It shows the ability of the five major exporters of wheat and coarse grains to meet the demand for imports, consisting of the ratio of their supplies to requirements. It relates the sum of their production, imports and opening stocks to the sum of their domestic utilization plus exports. Also this ratio is expected to improve in 1996/97, due to sharp increases in output for wheat and coarse grains by almost all major exporters.

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<sup>2</sup> Review of FAO's Global Cereal Stock-to-Use Ratio, 27th Session of the Intergovernmental Group on Grains, February 1997, CCP:GR 97/4

Table 2 - CHANGES IN FOOD SECURITY INDICATORS

	Average <sup>1/</sup>	1994/95	1995/96	1996/97 <sup>2/</sup>
<b>1. Ratio of World Cereals Stocks to World Cereal Consumption Trends</b>	19.7	17.8	14.3	15.8
<b>2. Ratio of Five Major Grain Exporters <sup>3/</sup> Supplies to Requirements</b>	1.19	1.13	1.10	1.14
<b>3. Closing Stocks as a %age of Total Disappearance of Major Cereal Exporters</b>				
Wheat <sup>3/</sup>	24.3	15.3	15.1	20.0
Coarse Grains <sup>3/</sup>	18.7	15.5	8.2	14.0
Rice <sup>4/</sup>	12.6	8.6	8.2	8.7
Total	18.5	13.1	10.5	14.2
	<b>Annual Trend Growth Rate</b>	<b>Percentage Change from Previous Year</b>		
	<b>1986-1995</b>	<b>1994</b>	<b>1995</b>	<b>1996 <sup>2/</sup></b>
<b>4. Changes in Cereal Production in China, India and CIS</b>	0.84	-5.62	1.31	2.45
<b>5. Changes in Cereal Production in LIFD Countries</b>	2.32	-0.24	3.82	3.71
<b>6. Changes in Cereal Production in LIFDCs less China and India</b>	2.40	2.47	2.73	6.00
		<b>Percentage Change from Previous Year</b>		
		<b>1994/95</b>	<b>1995/96</b>	<b>1996/97 <sup>6/</sup></b>
<b>7. Export Price Movements <sup>5/</sup> (Annual Averages)</b>				
Wheat		9.7	37.2	-6.1
Rice		15.5	44.1	-12.7
Maize		-7.5	52.3	9.2
<b>8. Export Price Movements <sup>5/</sup> (December Averages)</b>				
Wheat		3.1	31.1	-16.7
Rice		39.8	27.1	-26.6
Maize		-15.7	46.1	-21.5

Source: FAO

1/ 1989/90-1993/94 average

2/ Forecast

3/ Argentina, Australia, Canada, EC and United States.

4/ China, Pakistan, Thailand, United States and Viet Nam.

5/ Wheat: U.S. no.2 Hard Winter; Maize: U.S. no.2 Yellow; Rice: Thai Broken (A1 Super).

6/ For 1996/97 wheat and maize prices, six months averages only (July/Dec). Changes are calculated by comparing the first six months of the season with the corresponding period in 1995/96. Rice prices are based on calendar year average of the first year shown.

27. The third indicator relates the level of closing cereal stocks held by the major exporters of wheat, coarse grain and rice to their total disappearance (domestic utilization plus exports). This indicator also shows some improvement in the global food supply situation this year compared with 1995/96, although the figures are still well below the averages of earlier years. The increase in this food security indicator is largely attributed to improvements in the position of the major wheat and coarse grain exporters, for rice the improvement is only marginal.

28. Variations in annual cereal output of the major cereal importing countries (China, India and the CIS) have traditionally had a significant influence on the size of world trade in cereals. In recent years, however, of this group only China remained a major trader on the world market. Indicator 4, measuring the change in cereal production of this group of major consumers against the trend and the preceding year shows appreciable positive values in both cases. Especially in China, the record 1996 cereal production is seen to have a dampening effect on this country's imports in 1996/97.

29. Changes in aggregate cereal production of the LIFDCs (indicator 5) provide another way of measuring food security. However, since production in China and India heavily influences that for LIFDCs in total, indicator 6 excludes these two countries. In fact, the remaining LIFDCs include a significant proportion of the world's most vulnerable countries. Both indicators for 1996/97 provide cause for encouragement. This is not only due to continuing expansion of output in China and India but also by the group of other LIFDCs. As indicator 6 shows, the combined production of these latter countries rose by about 6 percent in 1996, mainly on account of excellent harvests in many parts of Africa.

30. A comparison of export prices for the major cereals is provided by indicators 7 and 8. Both show an overall decline. An exception is the first six months average for maize given by indicator 7, which covers the period July-December 1996. Maize prices peaked in July 1996 and started their downward movement thereafter. The sharp price falls, including for maize, presented by indicator 8, compare average prices for the month of December and reflect price movements close to the time of writing.

31. On balance, the eight indicators confirm the general improvement of the overall food supply situation in 1996/97 compared to the preceding year. However, it should be noted that the improvement is not evenly spread and that the indicators camouflage some of the differences between individual and groups of countries. Certain food security features of the LIFDCs, therefore, are examined in more detail below.

#### 6. Early production prospects for 1997

32. Looking at first indications concerning the cereal production in 1997, the early outlook for **wheat** crops is somewhat mixed. In the United States, the harvested area for winter wheat may turn out to be similar to last year's. In Europe, winter wheat plantings are reported to be up in the EC but are unlikely to increase much over last year's area in eastern European countries. For the CIS, there are indications of lower winter wheat sowings. In Asia, the winter wheat outlook is favourable reflecting ample water reserves for developing crops. Regarding the 1997 **coarse grains** production, the outlook is favourable in southern Africa and South America. In the United States, the maize area could be at least equivalent to the previous year. In Europe, the coarse grain area could expand somewhat in the EC but may remain constrained in eastern European countries. In the equatorial belt and the southern hemisphere, the newly planted 1997 season **rice** crop is progressing under generally favourable conditions.

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### III. SELECTED FOOD SECURITY ISSUES

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#### 1. Production, utilization, stocks and trade in LIFDCs

33. Total production of staple food for LIFDCs as a group is estimated to have increased by 34 million tons or 3.4 percent to 1038 million tons in 1996 (rice in paddy terms; 892 million tons on milled rice basis). Excluding China and India, production is estimated to have risen by 4.6 percent compared to the previous year.

34. The 1996/97 imports of cereals by the LIFDCs are forecast to fall sharply, by 16 million tons or 21 percent to 61 million tons. However, China is expected to account for the bulk of this decline. If China and India are excluded, imports by the other LIFDCs are anticipated to fall by 9 percent. Cereal carryover stocks held by the LIFDCs are forecast to increase slightly during 1996/97. Yet, notwithstanding the overall improvement in the aggregate food security situation for 1996/97, the position of many individual low-income food-deficit countries remains delicate, several of them continuing to suffer from serious food supply difficulties, including emergencies.

35. At currently forecast levels of production, imports and stocks, average per caput cereal food consumption of the LIFDCs in 1996/97 is expected to increase, exceeding the 1991/92 - 1995/96 average. Thirty one out of the 82 LIFDCs are anticipated to experience a decline in their per caput cereal food consumption in 1996/97. In Africa, the only region where average per caput food use is forecast to rise, it is expected to improve in 27 of the 42 LIFDCs and to remain stable in a further three countries, reflecting primarily the recovery of production in the northern and southern sub-regions and generally good crops in Western Africa. The situation is different in Asia where only 9 out of the 17 countries are forecast to show an improvement (or at least no decline) in their per caput food use of cereals. The situation has deteriorated in the LIFDCs of the CIS where all countries, with the exception of Armenia, show a further erosion of their per caput cereal food use in 1996/97.

#### 2. Implications of high grain prices for importing countries and remedial measures taken

36. The sharp increase in international prices for wheat and coarse grains was among the main features which characterized the world grain economy during 1995/96. Most countries were affected by this development. Many importers were faced with substantially higher import bills. The latest estimate puts the total cereal import bill of LIFDCs at about US\$ 17 billion for 1995/96, US\$ 4.9 billion above the value of their imports during the preceding year. This increase is the result of both a bigger volume of imports (which were estimated to have risen by 5.8 million tons from 1994/95) and higher international prices. Out of the total increase of the LIFDCs' import bill in 1995/96, China alone accounted for half of the rise, partly due to larger purchases. As the volume of aggregate cereal imports by LIFDCs, excluding China, is estimated to have changed only marginally between 1994/95 and 1995/96, the increase of their estimated total import bill is due almost exclusively to higher world market prices.

37. As a result, many countries faced serious difficulties in meeting their import needs, a situation aggravated by the further decline in food aid shipments and other concessional exports during 1995/96. In many LIFDCs this had serious negative implications for their national economies, including for their generally strained balance of payments. However, it is expected that with lower international prices and a decline in their anticipated imports, largely in China, the total import bill of the LIFDCs will significantly fall in 1996/97, currently forecast to be back to the 1994/95 level.

38. Wide fluctuations of prices in international markets, such as those experienced, however, do not always get transmitted into domestic markets to the same extent. There are several reasons for this phenomenon, including the degree of dependency on imports to satisfy domestic requirements; the time-lag between purchases and deliveries; the structure of domestic marketing channels; government policies; changes in currency exchange rates and product differences.

39. The sharp increases in international prices last season triggered action by many countries to mitigate their effect on domestic markets. To analyze these coping measures, the Secretariat undertook a study which examined the extent to which the increase in world market prices was passed on to consumers<sup>3</sup>.

40. The study came to the following major conclusions:

- i) Domestic retail prices paid by consumers in national currencies rose sharply in many countries<sup>4</sup>. However, these price increases were in part on account of the depreciation of local currencies in several countries.
- ii) The domestic supply situation played an important role in moderating the transmission of international prices to the domestic market, i.e. good 1995 harvests in a number of countries were associated with smaller domestic price increases.
- iii) The estimated transmission elasticities<sup>5</sup> were found to be the lowest for rice, followed by wheat and highest for maize, as the predominant food use of the first two types of cereals leads governments in general to provide for them a higher degree of protection from rising prices. By contrast, the large share of maize for animal feed keeps the maize sector in many countries more open and exposed to market forces.
- iv) Tariff reductions and/or increased import quotas were the most common trade related measure used by governments to minimize the rise in prices. Other measures to moderate rises of domestic prices included the use of consumer price controls, subsidy programmes and/or the postponement of the liberalization of cereal imports.

### 3. Issues related to grain price instability

41. Recent grain market volatility, typified by the sharp increase in prices during 1995/96, raises the question of whether these events were short-term or whether the world would enter into a period of greater market price instability. To examine this question, the Secretariat undertook a study, considered by the Intergovernmental Group on Grains at its session in early February this year<sup>6</sup>.

42. The study found that there were several major independent sources of price instability at work. First, since the 1960s, output variation decreased for both wheat and rice but more than doubled for coarse grains (mainly due to maize) which account for over 40 percent of global cereal production. Regarding the future it is difficult to gauge the extent of underlying production instability but shifts in production between countries resulting from the Uruguay Round are

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<sup>3</sup> Review of Cereal Price Situation in Selected Developing Countries in 1995-96 and Policy Measures to Offset the Price Rise, Commodities and Trade Division, ESCP No.1, September 1996, and Impact of the Rise in International Grain Prices in 1995/96 on Domestic Prices in Selected Importing and Exporting Countries, 27th Session of the Intergovernmental Group on Grains, February 1997, CCP:GR 97/2.

<sup>4</sup> They rose by at least as much as much as the world market prices in 10 out of the 19 sample countries for wheat, in four out of 19 countries for maize, and in only one of the 21 sample countries for rice.

<sup>5</sup> Percentage change of the domestic price expressed in US dollars associated with a one percent change in the international price also in US dollars

<sup>6</sup> Grain Price Instability in the New International Trading Environment, 27th Session of the Intergovernmental Group on Grains, February 1997, CCP:GR 97/3, and Report of a Meeting of Experts on Agricultural Price Instability, FAO Commodities and Trade Division, ESCP No. 2, June 1996.

unlikely to have an influence on this development in the years to come, as these changes are expected to be relatively small.

43. Another factor which tends to increase price fluctuations is the decline in the volume of government stocks. It is generally expected that lower total stocks will tend to be price destabilizing, but that the increased share of private stocks may offset this effect to some extent.

44. Demand responses to price changes, especially by the livestock sector, is another factor which could exercise increasing influence on price movements in the future. On the one hand, capital-intensive and vertically-integrated livestock production structures tend to be less sensitive to changes in feed prices. On the other hand, advances in feed technology have raised elasticity of substitution of various feeds to the effect that feed compounders have a greater flexibility in mixing various feeds.

45. The increased presence in commodity markets of institutional investors, including investment funds, is a more recent factor in the market. It is thought that this might influence short-run, within the year, price volatility but probably not long-term price variations.

46. On balance, it cannot be concluded with any certainty what the net effect of all these and other factors will be on stability in international cereal market prices. Thus, during the next few years, while countries adjust to the new policy regime, ushered in by the Uruguay Round, the variability of international cereal prices is likely to remain higher than when the transition phase to a new market environment is concluded. The Plan of Action adopted at the World Food Summit specifically recommends that the close monitoring of world food prices and stocks by international organizations, and particularly FAO, should continue and member countries be kept informed about these developments.

#### **4. Status of measures to counter possible negative effects of the Uruguay Round for selected cereal importers**

47. Progress in the implementation of the commitments under the Agreement on Agriculture was monitored by the WTO Committee on Agriculture which held its most recent meeting in November 1996. The Committee prepared a report on the follow-up to the Marrakesh Ministerial Decision on Measures Concerning the Possible Negative Effects of the Reform Programme on Least Developed and Net Food Importing Developing Countries, which was considered by the WTO's Ministerial Conference at its first meeting in Singapore in December 1996. The Conference fully endorsed all the Committee's recommendations on follow-up action. Such action would also be in line with the pledges adopted by the World Food Summit under Commitment Four for member countries of the WTO to fully implement this Decision. In particular, in anticipation of the renegotiation of the current Food Aid Convention (FAC) expiring in June 1998, the Ministerial Conference supported the initiation of action in 1997, to develop recommendations towards establishing a level of food aid commitments sufficient to meet the legitimate needs of developing countries during the reform programme. Thus, it should be noted that a clear link has been established between the implementation of the Decision and the renegotiations of the FAC.