



COMMITTEE ON WORLD FOOD SECURITY

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

1. GLOBAL FOOD SECURITY SITUATION AND OUTLOOK

1.1 Staple food production situation

1. Global 1995 production of **staple foods**, comprising the major cereals and roots and tubers, was forecast to decline by around 3 percent from last year, to around 2 040 million tons, mostly due to smaller cereal production.¹
2. World **cereal** production in 1995 was estimated at 1891 million tons, some 3 percent or 58 million tons below the 1994 volume and well below trend for the third consecutive year. Global coarse grain production in 1995 was forecast to decline by 8 percent in anticipation of a much smaller maize crop in the United States and reduced harvests in the CIS. By contrast, total wheat production was estimated at some 2 percent more than in 1994 in spite of smaller crops particularly in the developed countries. World output of paddy was also forecast to rise by some 1 percent in 1995.
3. The largest declines in cereal production were expected in the CIS and the United States. The decrease in the CIS was expected to be more than offset by an increase in output in China and India combined (Table 1, indicator 4). For the developing countries as a whole, total cereal production was forecast to rise by around 2 percent. Aggregate cereal production in the low-income food-deficit countries (LIFDCs) was expected to increase by 3.4 percent, but by somewhat less if China and India are excluded (Table 1, indicators 5 and 6).
4. In Africa, total cereal production in 1995 was estimated at some 13 percent below the 1994 level. The bulk of this decline represented a fall in the output of coarse grains in sub-Saharan Africa, particularly due to sharply reduced maize harvests in South Africa and Zimbabwe. In addition, wheat production was down by 19 percent in North Africa where bumper crops in Algeria and Egypt were more than offset by the effects of drought in Morocco and Tunisia. By contrast,

¹ Rice production is on paddy basis.

total cereal production in Asia in 1995 was forecast to exceed the previous year's level by over 2 percent, mainly due to larger crops in China and India. In Latin America and the Caribbean, aggregate cereal production was forecast at around the same level as in 1994. The decline in Mexico's wheat and coarse grain harvest was largely offset by higher coarse grain and paddy production in Brazil.

5. **Roots and tubers** represent a growing source of food intake for many developing countries. World production of roots and tubers is estimated to have risen marginally in 1995, reaching 148 million tons in grain equivalent compared with 147 million tons the previous year. The increase in output was particularly pronounced in developing countries, especially in the LIFDC countries, which account for over three-quarters of world production and where roots and tubers constitute 11 percent of total staple food production in grain equivalent. The increase in supplies of roots and tubers reflected mainly larger production of cassava and yams. By contrast, global output of potatoes and sweet potatoes remained unchanged and that of minor roots and tubers declined from last year's level.

6. **Cassava** output in 1995 was estimated to have grown by almost 1 percent while that of **yams** rose by 3 percent, compared with 1994. Yam production increased substantially in the major producing countries of West Africa, primarily in Nigeria, where production reached a record following a significant expansion in plantings and the continued adoption of pest-resistant high-yielding varieties. Much of the increase in cassava production came from Africa and Latin America. In Africa, the main countries with larger output were Angola, Cameroon, Côte d'Ivoire, Mozambique, Nigeria and Uganda, where plantings benefited from favourable weather. In Latin America and the Caribbean, output of cassava expanded in a number of countries, especially in Brazil, Bolivia and Colombia, as a result of higher producer prices and favourable growing conditions. By contrast, in Asia, smaller cassava crops were harvested in Indonesia, Thailand and Viet Nam following a reduction in plantings and the negative effect of drought on yields.

1.2 Current cereal market situation and outlook

7. **World trade in cereals** in 1995/96 was forecast at 200 million tons, virtually unchanged from 1994/95. The only likely expansion in trade was expected in wheat; the global trade in coarse grains and rice was forecast to fall below last year's levels. The tight cereal supply situation in 1995/96 was likely to keep export prices of nearly all types of cereals well above the previous year's levels. This was expected to limit the rise in imports of basic cereals. Overall, total cereal imports by the developing countries in 1995/96 were forecast to rise by around 1 percent to 145 million tons, while imports by the developed countries were anticipated to decline by about 3 percent, to 55 million tons.

8. Aggregate wheat imports by the developing countries in 1995/96 (July/June) were projected at around 75 million tons, some 3 percent above imports in 1994/95. The bulk of this increase was likely to take place in a small number of countries in Asia and Africa. China's import demand for wheat was expected to increase most. In Africa, higher imports were anticipated by drought-stricken Morocco, but purchases of Algeria and Egypt were expected to decline slightly following bumper harvests in both countries. For the sub-Saharan region as a whole, this year's wheat imports were expected to remain close to 1994/95 estimated levels.

9. The global wheat export availabilities during 1995/96 were anticipated to be constrained by strong demand in domestic markets of major exporters. Larger shipments were expected from the United States and Australia, but those from Argentina, Canada and the EC were likely to decrease. Wheat exports from Saudi Arabia were anticipated to cease following a policy-induced reduction in domestic output and shipments from Turkey were also forecast to decline.

10. Aggregate coarse grain imports into the developing countries in 1995/96 (July/June) were expected to reach 56 million tons, close to last year's volume. In Asia, China and the Republic of Korea were likely to import substantially more than in 1994/95. Together they would account for over one-third of total coarse grain imports into all developing countries. In China, larger imports were expected as the result of a strong growth in demand for feed, especially for poultry and pork production. Larger coarse grain imports by the Republic of Korea would mainly reflect relatively cheaper maize availabilities in the international markets as compared to low quality wheat. Minor changes from last year's imports were anticipated in most other developing countries. In Africa, a combination of smaller maize imports by Egypt and lower barley imports by Algeria would offset larger maize and barley purchases by Morocco. Overall, coarse grain output in the developing countries of sub-Saharan Africa was likely to exceed last year's level slightly, but imports by Kenya were forecast to rise by 500 000 tons because of smaller domestic crops.

11. Global export supplies of coarse grains in 1995/96 would be constrained by a sharp drop in 1995 output in the United States. The situation was expected to remain particularly distressing in the case of maize because of a near absence of any significant exports from other countries, such as South Africa and China. However, the shortage in maize export availabilities in these countries was likely to be mitigated by larger shipments from the United States, obtained by drawing down stocks.

12. Global rice trade in 1995 rose by a record volume of nearly 2 million tons to an unprecedented level of 18 million tons. Bangladesh, China and Indonesia, which consume about 50 percent of global output, bought heavily to meet the large deficits caused by a poor crop in the previous year. Similarly, the Korea DPR and the Philippines imported near-record quantities to meet domestic demand. By contrast, Africa's imports, which were already substantially reduced in the previous year as a result of the devaluation of the CFA franc, fell further in 1995 as high international rice prices created difficulties of access to rice, especially among the LIFDCs. Among exporting countries, the most dramatic development was the emergence of India as a major exporter of rice. Its exports in 1995 rose by an estimated 700 000 tons or 87 percent to reach 1.5 million tons.

13. Taking into account the production outlook in 1995 and likely carry-over stocks into 1996, the international rice market was expected to remain tight while the volume of global rice trade would contract. The forecast, however, was still highly tentative, as much would depend upon crop performances in early 1996.

14. Total food aid in cereals for 1995/96 (July/June) was forecast at 7.6 million tons. This forecast was based on donor's budgetary allocations and their minimum contributions under the 1995 Food Aid Convention (FAC). In addition, the eventual size of food aid shipments would also depend on the level of commodity prices and shipping costs during the year. At the forecast level, food aid shipments would not only represent a decline of 1 million tons compared to the already reduced 1994/95 level of 8.6 million tons, but would be the lowest volume since the mid-1970s. The ratio of cereal food aid to total cereal imports for LIFDCs has declined steadily for the last four years and was forecast to fall to 9 percent in 1995/96 (compared to 10 percent in 1994/95, 13 percent in 1993/94 and 16 percent in 1992/93).

15. The current FAC came into force in July 1995 for the duration of three years, with the possibility of extension for successive periods of not more than two years each. Compared with the minimum annual commitments of the member countries in the 1986 Convention of 7.52 million tons of food aid in wheat equivalent, there was a reduction by 2.17 million tons to 5.35 million tons. This decline was due to a 1.97 million-ton cut in the commitments by the United States from 4.47 million tons to 2.5 million tons and by Canada from 600 000 tons to 400 000 tons.

16. As of November 1995, pledges to the 1995 International Emergency Food Reserve (IEFR) amounted to just over 1 million tons of food commodities, of which 849 164 tons were in cereals

and 232 211 tons of other foodstuffs. In addition to the IEFR contributions, some 459 316 tons of cereals and 59 186 tons of other food commodities were pledged by November 1995 under the subset of the WFP regular resources for meeting the requirements of Protracted Refugee Operations (PROs).

17. World **cereal stocks** at the close of individual country crop years ending in 1996 were forecast at only 265 million tons, some 15 percent below their already reduced opening levels. While the bulk of this decline was anticipated to be in coarse grains, carryovers of wheat and rice were also projected to fall. Consequently, the ratio of global cereal stocks at the end of the 1995/96 crop years to trend utilization in 1996/97 was forecast at between 14-15 percent, well below the 17-18 percent range the FAO Secretariat considers the minimum necessary for world food security and considerably below the average ratio of the past several years (Table 1, indicator 1). Changes in national policies prompting moves away from heavy public stock holding have played a major role in the continuing reduction of cereal inventories in some countries. The low volume of wheat and coarse grains inventories held by the major exporters were among the main reasons for this year's sharp increases in international prices (Table 1, indicators 2 and 3).

18. International **cereal prices** have risen sharply and were expected to remain firm throughout the rest of this season. Average international wheat prices (US No. 2 hard winter, fob Gulf) stood at US\$193 per ton between the beginning of the season in July and the end of October 1995, i.e. 26 percent above the corresponding period a year ago (Table 1, indicator 7). Similarly, maize export prices moved up substantially since the beginning of the season, and by the end of October the quoted prices of United States No. 2 yellow maize (delivered Gulf ports) averaged US\$131 per ton, 36 percent above the same period in 1994. International rice prices also rose sharply in 1995. For instance, for the period January through October, prices of Thai A1 Super were 47 percent higher than in the previous year.

19. As a result of higher cereal prices, reduced export subsidies and curtailed donations of food aid, the aggregate cereal import bills of LIFD countries were anticipated to expand by around 25 percent, or US\$3 000 million, in 1995/96 compared to the previous year. Although not all LIFDCs would be affected, the substantial increase in cereal import bills was estimated to have a particularly strong impact on those countries whose imports were forecast to significantly increase in 1995/96, such as Côte d'Ivoire, Kenya, Morocco, Zambia, Zimbabwe and Colombia. Even countries, such as China, Egypt and the Philippines, for which the volume in cereal imports was forecast to decline in 1995/96, could face much higher import bills due to the higher prices and reduced EEP availabilities.

20. Regarding the **outlook for the 1996** cereal crops, planting of winter wheat in the United States for harvest in the summer of 1996 was almost complete. As of early November crop development in that country was reported to be good to fair. In the EC, generally dry and mild weather in October favoured both the harvest of the last summer crop and planting of winter grain. Early indications pointed to an expansion in winter cereal area sown, especially wheat, due to attractive prices and a cut in set-aside levels from the previous season.

21. In the southern hemisphere, plantings of the 1995/96 rice and maize crops were well under way in several countries in South America. In Argentina and Brazil, the area under maize was forecast to increase over last year and early indications suggested that output would be significantly higher. However, plantings of rice in Brazil were expected to decline. Prospects for the 1995 winter grains crop in Australia were favourable and production was forecast to increase by about 80 percent over the previous year's drought-affected volume. Early indications were for the 1995/96 paddy rice output in Australia to reach 1.2 million tons, up 7 percent from the previous year. Prospects for the summer coarse grain harvest in Australia were also favourable, following September rains which raised soil moisture reserves.

1.3 Update on food security emergencies

22. For FAO/GIEWS purposes, food security emergencies are defined as "shortfalls in food supplies requiring exceptional external assistance": this refers to an exceptional shortfall in aggregate supplies or a localised deficit as a result of crop failures, natural disasters, interruption of imports, disruption of distribution, excessive post-harvest losses, other supply bottlenecks and/or an increased demand for food arising from population movements within the country or an influx of refugees.
23. As of November 1995, a total of 31 countries were identified as facing food emergencies during the calendar year. Of these countries, 16 were in Africa, six in Asia, five in Europe and four in Central America. In 17 countries, food emergencies occurred primarily as a result of conflicts, mostly civil strife, while sudden natural disasters were responsible for food emergencies in only seven countries. Crop failures, either as a result of drought, pest or other types of agro-ecological disasters occurred in seven countries, all of them in Africa.
24. As a response to these emergencies, FAO/GIEWS has mounted a series of Crop and Food Supply Assessment Missions, often in collaboration with WFP. A Nutrition Assessment Mission has also been mounted to Iraq. As a result of these missions, FAO has issued one Special Alert for the southern African countries and 17 Special Reports, of which 13 related to Africa, three to Europe (eastern Europe) and one to Asia. Four missions were under way or planned for late 1995 which may result in additional reports.
25. Although the food security prospects in these countries over the next year will depend on the prospects of next season's food production and imports, it is already clear that emergency food assistance will continue to be essential especially for vulnerable populations in many places where the underlying problems persist.
26. Of particular importance in this respect is the lingering impact of mines left in zones affected by armed conflict. Currently there are 64 countries and other areas that are infested, and all but 12 are located in developing regions. "Designed to kill and injure, to impede movement and to sow seeds of uncertainty and chaos during times of war, land-mines continue to fulfil their destructive mission until they are found and destroyed."² Land-mines have a *direct* impact on food security to the extent that they are laid under agricultural land, reducing food and agricultural production. They also have an *indirect* effect on food security to the extent that they are laid along roads, lines of communications and essential supplies (i.e. water, electricity, gas, etc.), and around inhabited areas, reducing access to markets and sources of inputs and hindering relief operations. However, given the paucity of data related to the topic, exacerbated by the conditions of war, it is very difficult to quantify both the direct and indirect impact of land-mines on food security.

2. PROGRESS REPORT ON THE EVALUATION OF THE "MINIMUM SAFE" STOCK-TO-UTILIZATION RATIO

2.1 Conceptual background and definitions

27. FAO has been using the estimates of the ratio of year-end cereal stocks to trend utilization for the coming year as one of several indicators for monitoring the status of global food security. A benchmark value for the ratio of 17-18 percent was calculated over two decades ago³ and is still used by the Secretariat as the "minimum safe level" of cereal stocks that would ensure global food security. This benchmark is essentially a judgmental estimate based on statistical analyses conducted then. In the light of significantly changed national and global food policy regimes and improved

² United Nations, *Assistance in Mine Clearing - Report of the Secretary General*, Document A/49/357, New York 1994 and various background papers prepared for the International Meeting on Mine Clearance, Geneva, 5-7 July 1995.

³ FAO *Approaches to World Food Security*, FAO Economic and Social Development Paper No. 32, Rome, 1983, p. 25.

transport and logistics infrastructure, the CFS requested the Secretariat at its 20th Session to re-evaluate the global minimum safe cereal stock-to-utilization ratio of 17-18 percent and report to a subsequent session. Preliminary results of this work are given below.

28. The methodologies used in the derivation of the benchmark ratio usually make a distinction between working/pipeline and emergency/reserve stocks because it is relatively easier to derive a separate normative yardstick for these components of the total stock figures rather than for stocks as a whole. The working stock component represents the "desired" level of stocks held by public and private marketing agents, based on their "expectations" about the conditions likely to prevail during the relevant marketing period that would allow them to maintain their "normal" marketing and milling practices without significant interruption. The emergency component represents stocks that may be held, largely by public marketing agents, to cope with the consequences of any "unexpected" market shortfalls. Since neither the working nor the emergency/reserve stocks are clearly distinguished and directly observable, the estimation of their level necessarily involves some normative analysis. In the case of working stocks, this ranges from making informed judgements about years in which "observed" total stocks are perceived as containing no reserve element, to applying economic/behavioural optimization models that fully specify the way in which expectations of marketing agents are formed and the nature of the stock adjustment process. In the case of reserve stocks, on the other hand, some analyses of historical variation in yields and/or production are combined with simulation analysis to estimate levels that would satisfy some consumption-related, normative food security objectives.

2.2 Assessment of the approach adopted in the past

29. The 17-18 percent minimum safe stock-to-utilisation ratio for cereals currently used by FAO was derived by summing an estimate for working stocks of approximately 12.5 percent and estimates for reserve stocks ranging from 5 to 5.5 percent, the range of estimates in the latter case representing different statistical procedures used in its calculation. In the case of the working stocks, it had been assumed that the observed stock-to-utilization ratio for the 1973/74 season, when the ratios for wheat and coarse grains had been at their lowest levels in 14 years, was equal to the desired level of working stocks and, thus, that there was no reserve element left. In the case of the reserve stocks, observed "worst" case production shortfalls were used to estimate their size, reflecting the assumption that possible worst case scenarios would have to be accounted for in order to "maintain consumption levels and safeguard against acute shortages in the event of a crop failure or natural disaster."⁴

30. Given that the international cereal markets were particularly tight in the 1973/74 season, the reserve stocks were exhausted at that time and the production shortfalls were so large that it may have been necessary to draw down working stocks below the level which would normally be held. Thus, using the observed closing stocks for the 1973/74 season of 12.5 percent as being equal to the level of normal working stocks may have led to its *underestimation*. Conversely, since the probability of occurrence of the production shortfalls in all cereals and in all regions at the same time tends to be very low, estimating the reserve stocks necessary to safeguard food security based on such a worst case scenario may have led to its *overestimation*. However, it is likely that any underestimation of the level of global working stocks would have been largely offset by the overestimation of the level of reserve stocks, so that the ratio of 17-18 percent nevertheless represented a valid indicator, based on this approach.

⁴ One of the methods used estimates the largest negative deviations from production trends for each of the three cereals (wheat, coarse grains and rice) and sums them to arrive at an aggregate reserve stock level regardless of the year when the production shortfalls had occurred. The other assumes a low yield/production scenario for the major exporting countries (which held the bulk of the cereal stocks at that time) and a high import demand situation (two to three standard errors above trend) for the importing countries to determine the level of reserve stocks. It should be noted that the probabilities associated with the occurrence of such events are extremely small.

31. As a first step in the re-evaluation of the "minimum safe" stock-to-utilization ratio for cereals, the methods that were used in the previous FAO studies were applied as far as possible to data for the 1979-1995 period. The "worst case" production scenarios for the new period indicate an increase in the range of the estimates of reserve stocks to about 6-8 percent from the previous 5-5.5 percent. This is essentially due to increased variability about the trend in the production of coarse grains. The lowest observed end-of-season stocks to utilisation ratios for wheat, rice and coarse grains during the past 15 years yield an estimate of around 11.5 percent for cereal working stocks. This is slightly less than the 12.5 percent estimated nearly two decades ago, although the more recent market conditions were not as tight as those prevailing in the mid-1970s. The 11.5 percent ratio relevant for the market conditions of more recent years may represent the decline that incorporates the improvements in international marketing and transport infrastructure since the 1970s and the changes in the national and international policy environment, particularly if the 12.5 percent was an underestimate of the minimum level of global working stocks in the 1960s and early-1970s. Taken together, these two estimates would imply that the safe stock-to-utilization ratio reflecting current market conditions is still around 17.5-19.5 percent. However, as long as the worst case production scenarios are used in the estimation of the reserve element, this range could still exceed minimum safe levels.

2.3 Preliminary results of evolving new approaches

32. The analysis was expanded, therefore, to allow a return to the original concept of minimum safe levels, by simulating different levels of global food security. The assumption was that the objective of keeping reserves was to provide "adequate" supplies of cereals to all countries during times of "shortfalls" that result from yield variability. The adequacy of supplies is defined as a level of reserves that would be sufficient to cover global shortfalls with different degrees of certainty, ranging from "complete" coverage to coverage sufficient for meeting global needs 90 percent of the time or 18 years out of 20; a "shortfall" is defined as a shortage of global supply, caused by stochastic yield variability, to meet trend demand within a single year.

33. Grouping the countries of the world into two broad categories, i.e. major exporters and the rest of world for wheat, rice and coarse grains separately, appropriate (non-linear) trend equations were fitted to the relevant yield series to derive measures of variability to be used in the simulation exercise. Using these estimated variances, 1 000 random yield shocks⁵ were generated that allow the calculation of a corresponding number of excess and inadequate production scenarios. The level of reserves that would allow the global effective demand to be covered according to a chosen level of food security can then be obtained by simple examination. To increase the level of confidence attached to the estimates, the procedures described above were replicated a number of times. As expected, if the reserves are to cover the worst production scenarios generated in the simulations, the appropriate reserve stock-to-utilization ratio, on average, is around 6 percent (falling within a minimum of 5 percent and a maximum of 7 percent). However, if the reserves are kept at a level that would cover global cereal shortfalls on average 19 out of 20 years, then the benchmark reserve ratio falls, on average, to about 3 percent (falling within the 2.9-3.1 percent range). Reducing the desired level of global food security to covering cereal shortfalls on average 18 out of 20 years, reduces the reserve ratio, on average, to about 2.5 percent (falling within the 2.4-2.6 percent range). If the ratio for working stocks appropriate for the current period is around 11.5 percent, then these lower estimated reserve requirements would imply a "safe" benchmark stock-to-utilization ratio of around 14-15 percent compared with the 17-18 percent currently used, if non-coverage of global shortfalls in one or two years out of twenty is considered safe.

34. In order to evaluate the validity of the preliminary finding that the benchmark ratio may be lower in light of conditions in international cereal markets, some statistical analyses were also

⁵ The simulation analysis was conducted assuming normally and independently distributed error terms around the estimated trend functions, after testing their validity through appropriate statistical methods.

undertaken linking prices of individual cereals to their respective observed total end-of-season stocks and deviations from trend of global cereal production. The estimated associations between the stock-to-utilization ratios for total cereals and assumed equilibrium international prices suggest a similar decline in the benchmark ratio as that derived from the analysis reported above. In other words, a part of the tightening of the cereal markets observed in the current marketing year may be due to recent structural decreases in the surplus stocks generated by price support programmes in much of the developed world during the greater part of the past two decades, and not to any decreases in food security reserves. Thus, the results obtained from different types of analyses tend to converge in providing support to the notion that the minimum safe global stock-to-utilization ratio in cereals is somewhat lower than the 17-18 percent currently in use.

35. It must be stressed, however, that the analyses reported above still shares some of the other shortcomings of the methodologies employed earlier, in that the distributional aspects of the stocks in terms of their location, make-up and turn-over within the calendar year are not treated; neither is the possibility of the occurrence of successive production shortfalls considered. But perhaps of greater significance is the fact that these approaches do not explicitly take into account the underlying economic processes within which decisions regarding accumulating and releasing stocks are made. Of particular importance in this respect is the role that price signals play in influencing the levels of both working and reserve stocks. The past two decades have witnessed relative stability in the long-term equilibrium prices of cereals and underlying structure of the international cereal markets. Changes in the underlying structure of markets and long-term equilibrium prices may alter significantly the stock holding behaviour of the marketing agents, requiring corresponding changes in the benchmark stock-to-utilization ratios used in monitoring the food security implications of short-term market fluctuations.

2.4 Future work

36. Given the various limitations of the preliminary analyses reported here, the Secretariat is continuing its efforts to improve the analytical framework on which to base its revisions of the benchmark ratio. The Secretariat plans to make use of FAO's World Food Model for this purpose, since the detail and the economic consistency in the model could allow assessment of the issues of composition, placement and spatial distribution of stocks within a market equilibrium framework. Attempts are also being made to establish empirically whether logistical, transport and communication advances have had an impact on the level of working stocks by consulting marketing and processing agents involved. The results of these efforts will be reported to appropriate FAO bodies, including the Committee on World Food Security, during the coming biennium.

3. URUGUAY ROUND FOLLOW-UP

37. At its last session the Committee asked the Secretariat to undertake a number of activities related to the Uruguay Round. The steps taken by the Secretariat are reported on below.

3.1 Agreement on agriculture Article 12 on export restrictions

38. At its last session the Committee asked the Secretariat to contact the WTO concerning the interpretation of Article 12 of the Uruguay Round Agreement on Agriculture.

39. The concern arose about a situation of high world food prices in which developing countries could find themselves exporting food to the possible detriment of local food security. In this context a developing country could invoke Article XI:2(a) of the GATT 1994 on the use of temporary export restrictions "*to prevent or relieve critical shortages of foodstuffs*". However, under

Article 12 of the Agreement on Agriculture,⁶ a Member has to give "*due consideration to the effects of such prohibition on importing Members' food security*". Article 12 then goes on to spell out that this condition only applies to a developing countries member which is a net-food exporter of the specific foodstuff concerned. Thus it would seem that Article XI:2(a) could be used without Article 12 restrictions if the developing country member were a net-food importer or at least not a net-food exporter. The question arises as to the definition of "net-food exporter of the specific foodstuff concerned". Accordingly, the Secretariat wrote to the WTO Secretariat which replied that the WTO Secretariat was not authorized to interpret the provisions of any of the WTO Agreements, this being the exclusive prerogative of the WTO Members. However, Article XI:2(a) of GATT 1994 can be used in any event (provided that the conditions of this Article are met). What a net-food exporter of the relevant product would have to do in addition is to notify, and consult if so requested. As for the concept of "net-food exporter of the specific product concerned", for the time being there is no more precise definition; ultimately, it would be for the WTO dispute settlement process to decide if a WTO developing country Member that took action under Article XI:2(a) of GATT 1994 without notifying (having Article 12:2 of the Agreement on Agriculture in mind) was challenged by another WTO Member, with respect of the notification (and possible consultation) requirements under Article 12 of the Agreement on Agriculture.

3.2 Action taken on the decision on measures concerning the possible negative effects of the reform programme on least-developed and net food-importing developing countries

40. The Committee at its last session, while recognizing that the implementation of this decision was the responsibility of the WTO Committee on Agriculture, in collaboration with other organizations including FAO, stressed the importance that FAO continue to provide technical assistance to Members on this aspect. The Secretariat was asked within its normative capacity to help in defining the net food importing countries who are entitled to be assisted to alleviate the effect of the Uruguay Round.

41. Accordingly the FAO Secretariat prepared a study on the Definition of Net Food Importing Countries that was transmitted to the WTO Secretariat and made available to interested countries in early November 1995.

42. On the basis of intense informal consultations by the Chairman of the WTO Committee on Agriculture following its September session, at its Fourth Session 20-21 November 1995 the Committee came to an agreement on the establishment of a list of WTO Net Food Importing Developing Countries (NFID) for the purpose of the Decision, the least-developed countries being those as recognized by the ECOSOC. The agreement reached is basically that an NFID country could be any developing country Member of the WTO which was a net importer of basic foodstuffs in any three years of the most recent five-year period for which data were available and which notified the Committee of its decision to be listed as a net food importing developing country for

⁶ Article 12 *Disciplines on Export Prohibitions and Restrictions* of the Agreement on Agriculture reads in full:

"1. Where any Member institutes any new export prohibition or restriction on foodstuffs in accordance with paragraph 2(a) of Article XI of GATT 1994, the Member shall observe the following provisions:

- (a) the Member instituting the export prohibition or restriction shall give due consideration to the effects of such prohibition or restriction on importing Members' food security;
- (b) before any Member institutes an export prohibition or restriction, it shall give notice in writing, as far in advance as practicable, to the Committee on Agriculture comprising such information as the nature and the duration of such measure, and shall consult, upon request, with any other Member having a substantial interest as an importer with respect to any matter related to the measure in question. The Member instituting such export prohibition or restriction shall provide, upon request, such a Member with necessary information.

2. The provisions of this Article shall not apply to any developing country Member, unless the measure is taken by a developing country Member which is a net-food exporter of the specific foodstuff concerned."

the purposes of the Decision. When a NFID country notifies it has to accompany its notification with statistical data in respect of total and net imports (on a value and quantity basis) and of their relative importance as a proportion of domestic consumption of the products concerned. These notifications have to be made at least 15 days prior to the regular March meeting of the WTO Committee on Agriculture in any year.

43. In addition to this significant breakthrough, the WTO Committee on Agriculture agreed that work should get under way on the substantive provisions of the Decision. To this end countries have agreed to give priority attention to examining the follow-up to the Decision on reviewing the levels of food aid and on the guidelines relating to concessionality of food aid (paragraphs 3(i) and 3(ii) of the Decision). Priority would also be given to collecting information on technical assistance being provided to these countries. Regarding the latter, it is not possible to report on levels of assistance to this group of countries until the list is established at the March 1996 session of the WTO Committee on Agriculture.

44. Following the successful negotiation concerning the list of countries potentially eligible for assistance under the Decision on Measures Concerning the Possible Negative Effects of the Reform Programme on Least-Developed and Net Food-Importing Developing Countries, it is to be hoped that there will be an early implementation of this Decision so that this group of countries does not suffer from a lack of adequate imported supplies of food on reasonable terms and conditions during the implementation of the Uruguay Round commitments.

4. CONCLUSIONS AND RECOMMENDATIONS

45. The above discussion raises important issues that the Committee might consider. The following salient points may provide the basis for future actions to be undertaken by the Secretariat in the order in which they were taken up in the present document:

- need to consider the possible contribution to food security of measures to stabilize production (small-scale irrigation development, breeding and seed multiplication programmes for drought-resistant varieties, improved land and water management practices, crop diversification);
- need to promote early resolution of conflicts, as an essential precondition for food security;
- need to complete reassessment of minimum safe stock levels and consider recommendations for appropriate national/regional reserve stock policies in light thereof;
- need to consider improved cereal import financing arrangements for LIFDCs facing abnormal production shortfalls and declining food aid availabilities.

TABLE 1
Change in food security indicators

	Average 1/	1993/94	1994/95	1995/96 2/
1. Ratio of World cereal Stocks to World Cereal Consumption Trends	19	19	18	15
2. Ratio of Five Major Grain Exporters 3/ Supplies to Requirements	1,22	1,17	1,16	1,11
3. Closing Cereal Stocks as a %age of Total Disappearance of Major Exporters				
Wheat 3/	24,1	21,8	15,4	13,5
Coarse Grains 3/	20,7	14,4	15,7	9,9
Rice 4/	12,1	11,4	10,3	9,2
Total	19,8	15,9	14,5	10,7
	Annual Trend Growth Rate 1984/85 – 94/95	Percentage Change from Previous Year		
4. Changes in Cereal Production in China, India and CIS	0,57	0,53	-6,20	-0,16
5. Changes in Production of Cereals in LIFD Countries	1,02	3,36	-0,54	3,37
6. Changes in Production of Cereals in LIFD Countries less China and India	1,17	6,33	1,52	2,59
	Percentage Change from Previous Year			
7. Export Price 5/ (Annual Averages):	Wheat	0,5	9,7	25,9
	Maize	16,6	-7,5	35,9
	Rice	-10,6	15,5	47,0

- Note: 1 1988/89–1992/93 average
2 Forecast.
3 Argentina, Australia, Canada, EU, United States.
4 China, Pakistan, Thailand, United States, Vietnam.
5 Wheat= US no. 2 Hard Winter: Maize=US no.2 Yellow: Rice= Thai broken (A1super).

For 1995/96 wheat and maize prices, four months average only (July–October). The percentage changes are calculated by comparing the first four months of the season with the corresponding period in 1994–95. Rice prices are based on calendar year average of the first year shown.

