1. Comprehensive reviews of past developments in the field of commodity prices and their impact on developing countries' trade have been carried out by various international organizations. In particular, at the Sixth Special Session of the United Nations General Assembly on Raw Materials the following studies of this subject were presented: UN Document A/95/4, Study of the Problems of Raw Materials and Development traces the evolution of commodity prices from 1950 up till the fourth quarter of 1973 and discusses some reasons for the recent large increases. Addendum 1 to the above document analyzes in detail the significance of basic commodities in world trade for the year 1970. Addendum 2 uses the 1970 commodity trade flows and January 1974 commodity prices to estimate hypothetical trade balances in 1974 for selected groupings of countries, which include developed and developing, and petroleum and non-petroleum exporters. UNCTAD document OSG/52, Problems of Raw Materials and Development, discusses in detail the long-term development of commodity prices, and the recent upsurge, with particular reference to effects on the terms of trade of developing countries. UNCTAD/OSG/52/Add.1, The Impact of Recent and Prospective Price Changes on the Trade of Developing Countries, estimates 1973 trade balances for various aggregates of developing countries and furnishes illustrative projections for their 1974 trade balances under different price assumptions. The IBRD paper Additional External Capital Requirements of Developing Countries analyzes the impact of both the recent commodity price changes and their projected trends on the growth prospects of developing countries up to 1980, in order to estimate the order of magnitude of the external financing needed to offset any detrimental effects of these developments and to safeguard a modest rate of growth.

2. With the availability of more recent data on prices and trade volumes, the GATT secretariat has also carried out a review of the new situation. Although the methods, assumptions and country coverage differed in several - though minor - respects from those used in the studies cited above, it may be stated at the outset that the conclusions drawn fall well within the orders of magnitude established in the studies by the other organizations. Before it proceeds to analyze the impact of the price changes, this note presents in the following section a review of actual price developments, the long-term trends as well as the major changes in 1972, 1973 and the first quarter of 1974.
Part One - Past Developments

3. Because separate data are not available for individual products, section I of this part of the paper makes no distinction between those products which are exported mainly by developing countries and those which are exported mainly by developed countries. For broad commodity groups however, price indices are available for primary (non-petroleum) exports by developing countries alone, and these are employed in section II.

4. The discussion of the rise in commodity prices is carried out from the point of view of export prices. However, it should be noted that commodity price developments also affect developing countries' imports to the extent to which they are large importers of some commodities. This aspect is allowed for in Part Two.

I. World export prices of primary commodities

A. Longer-term trends

5. It is well known that the measurement of price movements over a longer period poses a number of problems of a statistical nature and that, in particular, index numbers of large aggregates such as those of all primary products and of manufactures are subject to wide margins of error. They should therefore be considered only as indicators of broad movements.

6. From data given by both the United Nations and the GATT it appears that during the great depression of the 1930's the decline in prices had been more pronounced for primary products than for manufactures. During the war and the immediate post-war years prices of primary products increased more rapidly than those of manufactures. After a further strong rise during the Korean War (1950-1951), the prices of primary products started to decline.

7. Since 1953, three different stages in the relationship between prices of primary products and those of manufactures can be identified (see Table 1). Between 1953 and 1962 prices of primary products continued the downward trend which followed the Korean boom, while those of manufactures continued to rise, albeit at a very slow rate. Between 1962 and mid-1972 prices of primary products rose

---

3 For such a long period significant distortions can occur in the overall indices. These distortions can reflect, inter alia, changes in the commodity composition of both primary and manufactured products and the impossibility of measuring changes in quality (which may be of particular importance for manufactures). Furthermore, the choice of the base period can appear to bias the result obtained.
roughly in line with those of manufactures. Finally, between the second half of 1972 and the first quarter of 1974 the rise in prices of primary products greatly exceeded that of manufactures.

8. Between 1953-55 and 1960-62, the United Nations index of primary products (adjusted to include non-ferrous metals and exclude petroleum) shows a decline of about 2 per cent on average per year, whereas export unit values of manufactures increased by about 1 per cent annually.1 The prices of most primary commodities declined during this period, especially those of coffee and cocoa (about 8 per cent on average per year), cotton, wool, maize, rice, tea and most oilseeds and vegetable oils and copper (between 2 and 4 per cent). Some primary products (beef, fish, jute, sisal, rubber, aluminium and tin) recorded, however, price increases which exceeded those of manufactures.

9. Between 1960-62 and 1969-71, there was no great change in the relative price levels of primary products and manufactures.2 Among the major commodities, the prices of tea, wheat and wool continued to decline. Those of jute, sisal and rubber, which had increased between 1953-55 and 1960-62, experienced a sharp fall during the 1960's. Prices of all other primary products shown in the table increased, especially those of copper and bauxite (8 per cent per year), fish, beef, cocoa, lead, tin and zinc (4 to 5 per cent).

B. The commodity price boom of 1972-74

10. The rise in prices of primary products which had started during the second half of 1972 gained strength in 1973. The overall index of the United Nations of primary product prices (excluding petroleum but including non-ferrous metals), calculated in dollars, rose by 16 per cent from the last quarter of 1971 to the last quarter of 1972, and showed a further gain of 58 per cent between the last quarters of 1972 and 1973. In the same periods, unit values of exports of manufactures (excluding non-ferrous metals) increased by 4 per cent and 19 per cent respectively. Posted prices of petroleum, which had increased by 15 per cent between the end of 1971 and 1972, were raised at the end of 1973 to a level roughly four times higher than a year previously.

---

1Posted prices of petroleum, according to the United Nations index, declined by roughly 0.5 per cent on average per year.

2Between 1960-62 and 1969-1971, posted prices of petroleum rose by about 0.4 per cent per year, i.e., less than those of manufactures.
11. The United Nations index of prices of primary commodities is only partly based on price quotations which, during 1973, have been more than usually influenced by speculation arising from or intensified by monetary uncertainties. Although this index also attempts to take into account movements in actual transaction prices of commodities traded internationally (including, inter alia, prices in long-term contracts), it probably still over-estimates the rise in the actual export unit values received by producers of primary products.

12. The main factors in the commodity price boom of 1973 can be summarized as follows:

(i) The sudden, sharp and simultaneous rise of demand in almost all industrial countries. Incomes in developing countries also expanded at a faster rate than in the past partly as a result of the relative improvement in their terms of trade since mid-1972, while rapid income growth continued in the Eastern Trading Area. World manufacturing production, the best indicator of demand for raw materials, expanded by nearly 10 per cent in 1973, its largest annual increase on record, about one half larger than the yearly average of the last twenty years.

(ii) Whereas world demand was soaring, production of food, feed and agricultural raw materials was seriously affected by adverse weather conditions over wide areas. World agricultural production, which had increased by about 3 per cent on average per year during the last two decades, declined slightly in 1972/73, for the first time since the Second World War. Part of the growing gap between demand and production was covered by heavy drawing on stocks in 1972 and the first half of 1973. For most of the main commodities entering international trade, however, stocks had been reduced to such low levels that in most cases no further additional supplies were available from this source in the latter part of 1973.

(iii) The wide fluctuations in exchange rates, the monetary uncertainties and the general inflationary climate greatly stimulated buying activities in commodity markets. Although the influence of this factor is impossible to quantify, it is worth emphasizing that the sharpest price increases in world commodity exchanges coincided with violent speculative movements in the monetary field and with the steepest increases in the price of gold.
13. Although rises in prices of primary products were widespread in 1973, the overall index conceals large discrepancies between individual products and product groups.

14. Among the products shown in Table 1, prices of copra, coconut oil, cottonseed oil and zinc more than trebled in 1973; however, the first three had experienced a decline in the preceding year.

15. The price increases for sisal, wheat, rice, cotton, rubber, cocoa, copper (ore and metal) approached or exceeded 100 per cent. Among these, cotton and copper had suffered price declines in the preceding year.

16. Above average price increases, up to 80 per cent, were recorded for maize, lead, palm oil, soyabean, oilseed cake and beef.

17. Some commodities showed price increases ranging between 35 and 50 per cent, i.e., less than the average for all primary products (almost 60 per cent) but still exceeding the increase of manufacturing prices. Among them olive oil, lumber, wool, tin, fish, sugar and wine can be noted.

18. The prices of several commodities, such as coffee, fruit, tobacco, aluminium, rose only slightly more, or even less than, those of manufactures (19 per cent).

19. Finally, the dollar prices of several commodities either increased by less than 10 per cent, i.e., less than the depreciation of the dollar, or failed to rise at all. For iron ore, tea and jute, this was the second consecutive year when, even in dollar terms, the price had failed to increase. Only in the case of hides and skins did the decline in 1973 follow a strong price rise in 1972.

20. In general, prices of commodities continued to rise in the first quarter of 1974, although the rate of increase was already less rapid than during the last quarter of 1973. The largest increases over the fourth quarter of 1973 were recorded by the vegetable oils, among which coconut oil and soyabean oil prices rose by 50 and 43 per cent, respectively; sugar (58 per cent) and some of the non-ferrous metals (tin 37 per cent, lead and nickel 30 per cent). Most of the other important commodities entering world trade registered price increases of between 8 and 10 per cent which, although large for one-quarter, represent in most cases a slowing down of the quarterly rates observed in 1973. Included in this group are wheat, rice, maize, coffee, tea, cocoa, copper ore and metal, and zinc. Soyabean prices also rose by 10 per cent, having declined in the fourth

---

The movements in prices of individual products mentioned below refer to percentage changes between the fourth quarter of 1972 and the fourth quarter of 1973.
quarter of 1973. Nevertheless, they still remained nearly 10 per cent below their peak in the third quarter 1973. A third group of commodities showed price declines in the first quarter of 1974. For butter (-3 per cent) and oilseed cake and meal (-6 per cent), this represented a continuation of a decline which had started in the last quarter of 1973. Wool (-7 per cent) reached a peak in the first quarter of 1973, and apart from a small recovery in the third quarter of that year has been in a continuous decline since.

21. The account given in section I of the commodity prices changes in the period up to 1972, and of the price boom of 1972-74, is not intended to give an assessment of the changes in the terms of trade of developing countries because it does not take into account the relative position of developing countries as exporters of the various product groups discussed, nor the changes that have taken place in their share of trade in these commodities. It may be noted that developing countries were major exporters of only some of the primary commodities that benefited strongly from the price boom of 1972-1974. Moreover, developing countries are also importers of primary commodities and have in the most recent period significantly increased their dependence on imports of staple foods, particularly grains.

II. Developing countries' export prices, volumes and purchasing power of exports, by groups of primary products

22. The price indices used in the present section refer to groups of commodities exported by developing countries. In addition, an effort has been made to take account of changes in the volume of export of developing countries as well as changes in the unit value of their imports to give an indication of changes in the purchasing power of the exports of these countries.

23. Import demand for non-petroleum mineral exports from developing countries has expanded steadily since 1955, although affected by the cyclical fluctuations in world manufacturing production, reflecting in the main the shift from higher cost supplies in developed areas to the cheaper supplies available from developing countries. Because of this dynamism of world demand for minerals, a 4.5 per cent annual growth rate of export volume between 1955 and 1972 was accompanied by slightly higher prices. Although cyclical fluctuations in volume and price had caused export earnings to drop sharply in 1958 and 1970-71, on the whole the purchasing power of non-petroleum mineral exports grew much more rapidly than it

---
1 Defined as the "terms of exchange" (i.e. the ratio of developing countries' export prices for whatever product group is being considered to the export unit values of developed countries' manufactured exports) multiplied by a volume index for developing countries' exports.
did for agricultural exports. The growth in the purchasing power of developing countries' non-petroleum mineral exports, which averaged almost 4 per cent annually between 1955 and 1972, was largely due to the steady growth in the volume of exports; the terms of exchange having increased by less than half the rate of increase of volume. According to the United Nations index, prices of non-petroleum minerals exported by developing countries increased by 1.6 per cent on average per year between 1955 and 1972, while prices of manufactures exported by developing countries rose by 2.2 per cent. In 1973, in spite of a further expansion in export volume, prices increased sharply.

24. In the case of petroleum, a steady rise in export volume was almost entirely responsible for the 9 per cent annual growth of purchasing power of exports in the 1955-1970 period, in spite of declining terms of exchange. The acceleration in the growth of purchasing power to more than 25 per cent on average per year between 1970 and 1973 reflected both a continuation of the strong rise in volume and the gradual rise in prices. These data refer to the average of the calendar year 1973 and therefore do not reflect the sharp increase in prices announced by the producers at the end of December 1973.

25. For agricultural products exported by developing countries, prices, according to the United Nations index, in 1972 were at the same level as in 1955. These prices were largely determined by movements in supply. Thus, between 1955 and 1962 when the volume of exports grew by more than 4 per cent on average per year, prices declined steadily. Between 1962 and 1971 the growth in volume slowed down considerably, to less than 2 per cent on average per year, while prices tended to recover slightly. The price increase of 1972, when the volume of exports expanded more markedly, was no more than the devaluation of the dollar. Finally, in 1973, when prices rose sharply, the volume of exports failed to rise. Furthermore, as prices of manufactures exported by developed countries have been rising continuously throughout this period, the purchasing power of developing countries' agricultural exports expanded by less than 1 per cent on average per year.

26. The slow growth of developing countries' purchasing power of agricultural exports was due to the stagnation, or decline of export earnings from tropical beverages and agricultural raw materials, which together accounted for more than 60 per cent of the total in 1955. Basic foodstuffs, such as rice, wheat, and oilseeds and vegetable oils, of which developing countries are both exporters and importers, enjoyed a more favourable world import demand than tropical beverages and agricultural raw materials. Nevertheless, the volume and purchasing power of developing countries' exports of these products increased only slightly between 1955 and 1972 as rapid growth of domestic consumption tended to limit export availabilities. In these products by far the largest rise in export volume was achieved by the developed countries.
27. Finally, for products enjoying the highest growth of world demand, i.e. mainly meat and its major inputs (ma'ze, soyabeans and oilcakes in general, and fishmeal), a sharp expansion in the volume of exports was accompanied by a steady rise in prices. These products which made the greatest contribution to the rise in export volumes are, however, mainly produced in developed areas.

28. No attempt has been made in the course of this analysis to examine the possible role of trade policy as a factor in determining trading patterns in, or overall demand for, particular commodities.

Part Two - Implications for 1974

29. An attempt to assess the effect of these price trends, and of their most likely further developments, on the foreign trade payments and receipts of developing countries faces several difficulties. The most serious of them is the lack of reliable trade data for a sufficient number of developing countries in 1973; consequently the assessment for both 1973 and 1974 has to be based on the constant volumes of trade that were realized in 1972.

30. This is a major shortcoming of the method used and, therefore, the resulting calculations can give only a very approximate measure of the change in the terms of exchange that different groups of developing countries will experience if the prices of several characteristic product groups move according to different assumptions. The calculations must be understood not as forecasts of trade movements or trade balances but rather as an estimate of the payments gap that would have to be filled if the 1972 levels of imports were to be sustained.

31. There is also the difficulty of formulating realistic price expectations for 1974 on the average. Here at least some inferences can be made from the preceding analysis of the recent price movements complemented by the latest economic developments in the main industrial countries. The price of petroleum as fixed by producers was assumed to stay unchanged during the year. The prices of internationally traded manufactures have been subject to a rapidly accelerating inflation. Although strong anti-inflationary pressures are being brought to bear, it is unlikely that they could reduce the inflation rates into the single-digit range without major losses in output and employment for the year as a whole. Last year the prices of internationally traded manufactures increased by 15 per cent on the average. In the first quarter of this year, indications are that inflation in this area of trade has been accelerating significantly for the industrial countries as a group and has reached a rate without a precedent in the past quarter century. The central rate of 15 per cent has been assumed for internationally traded manufactures products in 1974 on the average. The main difficulty however relates to forming price expectations for the internationally traded primary products.
other than petroleum. As stated earlier in this note the steep price rise since the beginning of 1972 has been due to a coincidence of four factors: (a) the sharp and simultaneous acceleration of Gross National Product (GNP) growth in virtually all countries, certainly all the main industrial countries; (b) capacity limitations (i.e. past under-investment) in a number of primary production lines; (c) adverse weather conditions reducing agricultural output in a number of the main producing countries; and (d) international monetary uncertainty leading to significant speculative investments in commodity exchanges. On the basis of current developments, it can be expected that a deceleration of GNP growth in the industrial countries will make for a smaller increase in the intake of imported foods and industrial raw materials by this group of countries in 1974 than in either of the last two years. In the normal course of events, the strong prices prevailing in the recent period could be expected to bring forth an increased supply of primary products in 1974. It would seem, therefore, that the highest expectation for (non-fuel) commodity prices in 1974 would be the continuation of the level reached on the average for the first quarter of the year. Where the lower limit may be will depend on a number of factors relating to trends of manufacturing production and stock-holding decisions in both importing and exporting countries, conditions in the primary mineral industries in the industrial countries, etc. The price declines registered by a wide range of commodities in recent weeks suggests that the anti-inflationary monetary measures in effect in most industrial countries and the pronounced slowing-down of economic activity in most of these countries may have, in conjunction, already had a dampening effect on demand. For the purpose of the hypothetical calculation, the 1973 average level of commodity prices was taken as the lower limit for these prices in 1974.

32. A calculation on these price assumptions indicates that, if developing countries as a group, excluding the oil-exporting countries, continued to trade in 1973 and 1974 the same volume of exports and imports in the three main product categories as in 1972, they would see their 1972 trade deficit (imports valued c.i.f. and exports f.o.b.) of some $11 billion reduced to $9.5 billion in 1973, but then increase again to between $15 and $24 billion on the high and low commodity price assumption, respectively, in 1974.

33. The range of the 1974 deficits calculated on the high and low assumption for commodity prices would be very narrow for the small number of developing countries who are primarily exporters of manufactures, and very wide (from $7 to $14 billion) for those who are primarily exporters of commodities.

34. It is to be stressed again that the calculations made on this basis and presented in Table 2 are not a forecast. The calculated deficits could be expected to occur only if there would be sufficient amounts of foreign exchange
to finance them. If that exchange is not available in the form of reserves, increased earnings on the service account, investment of foreign capital or increased foreign assistance, deficits of such magnitude would clearly be unsustainable and would be reduced, either through an increase in exports, or a decrease in imports.

35. In most developing countries, imports of non-essential goods have already been cut to the bone and any further cuts would inevitably tend to concentrate on imports of basic foods, industrial raw materials and fuels, or investment goods. The possibilities of increasing exports to developed countries depend on a number of factors, including the ability of these countries to deal satisfactorily with their own balance-of-payments problems on current accounts. It is, however, clear that there would be an urgent need to avoid the imposition of restrictions on imports from developing countries and to work out effective measures aimed at securing a further expansion of these imports through appropriate measures in all areas to which the Multilateral Trade Negotiations are addressed.
### Table 1

#### DEVELOPMENT OF WORLD EXPORT PRICE-INDEXES OF SELECTED PRIMARY PRODUCTS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IV</td>
<td>IV</td>
<td>I</td>
<td>III</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IV</td>
<td>IV</td>
<td>I</td>
<td>III</td>
</tr>
</tbody>
</table>

#### ALL PRIMARY PRODUCTS ENSEMBLE DES PRODUITS PRIMAIREs

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IV</td>
<td>IV</td>
<td>I</td>
<td>III</td>
</tr>
</tbody>
</table>

#### Source:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exports (f.o.b.)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary products</td>
<td>29.6</td>
<td>42.9</td>
<td>56.2</td>
<td>42.9</td>
</tr>
<tr>
<td>Fuels</td>
<td>27.8</td>
<td>36.1</td>
<td>105.6</td>
<td>105.6</td>
</tr>
<tr>
<td>Manufactures</td>
<td>15.6</td>
<td>17.9</td>
<td>20.6</td>
<td>20.6</td>
</tr>
<tr>
<td>Total above/total</td>
<td>72.0</td>
<td>96.0</td>
<td>182.4</td>
<td>169.4</td>
</tr>
<tr>
<td><strong>Imports (c.i.f.)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary products</td>
<td>15.2</td>
<td>22.5</td>
<td>27.0</td>
<td>22.5</td>
</tr>
<tr>
<td>Fuels</td>
<td>6.5</td>
<td>8.5</td>
<td>24.7</td>
<td>24.7</td>
</tr>
<tr>
<td>Manufactures</td>
<td>49.1</td>
<td>56.5</td>
<td>64.0</td>
<td>64.0</td>
</tr>
<tr>
<td>Total above/total</td>
<td>70.8</td>
<td>77.5</td>
<td>116.5</td>
<td>112.0</td>
</tr>
<tr>
<td><strong>Trade Balance (f.o.b./c.i.f.)</strong></td>
<td><strong>42.2</strong></td>
<td><strong>49.4</strong></td>
<td><strong>60.9</strong></td>
<td><strong>57.1</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>-11.3</strong></td>
<td><strong>-15.3</strong></td>
</tr>
</tbody>
</table>