UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

EVALUATION OF THE
INTERNATIONAL NATURAL RUBBER AGREEMENTS OF 1979, 1987 AND 1995

Report by the UNCTAD secretariat

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INTRODUCTION

1. Section I of this report reviews the main features of the International Natural Rubber Agreement, 1979 and its successor of 1987, and includes information on their durations and memberships. It also includes a review of the main features of the International Natural Rubber Agreement, 1995 and information on its provisions for entry into force and status of action by governments to become parties to it.

2. Section II of the report is a summary and evaluation of the buffer stock operations and other activities which took place under the 1979 Agreement and the 1987 Agreement. As the 1995 Agreement had just entered into force at the time of writing, there were no activities under it.

I. MAIN FEATURES, DURATIONS AND MEMBERSHIPS OF THE INTERNATIONAL NATURAL RUBBER AGREEMENTS

A. The 1979 Agreement

1. Objectives

3. The objectives of the 1979 Agreement were maintained in the 1987 and 1995 Agreements. As established in article 1, they are:

(a) To achieve a balanced growth between the supply of and demand for natural rubber, thereby helping to alleviate the serious difficulties arising from surpluses or shortages of natural rubber;

(b) To achieve stable conditions in natural rubber trade through avoiding excessive natural rubber price fluctuations, which adversely affect the long-term interests of both producers and consumers, and stabilizing these prices without distorting long-term market trends, in the interests of producers and consumers;

(c) To help stabilize the export earnings from natural rubber of exporting members, and to increase their earnings based on expanding natural rubber export volumes at fair and remunerative prices, thereby helping to provide the necessary incentives for a dynamic and rising rate of production and the resources for accelerated economic growth and social development;

(d) To seek to ensure adequate supplies of natural rubber to meet the requirements of importing members at fair and reasonable prices and to improve the reliability and continuity of these supplies;

(e) To take feasible steps in the event of a surplus or shortage of natural rubber to mitigate the economic difficulties that members might encounter;

(f) To seek to expand international trade in and to improve market access for natural rubber and processed products thereof;
(g) To improve the competitiveness of natural rubber by encouraging research and development on the problems of natural rubber;

(h) To encourage the efficient development of the natural rubber economy by seeking to facilitate and promote improvements in the processing, marketing and distribution of raw natural rubber; and

(i) To further international co-operation in and consultations on natural rubber matters affecting supply and demand, and to facilitate promotion and co-ordination of natural rubber research, assistance and other programmes.

2. Operational provisions of the 1979 Agreement

4. When the 1979 Agreement was concluded on 6 October 1979, it was widely considered as an important step forward in international commodities negotiations. It was the first new agreement concluded under UNCTAD’s Integrated Programme for Commodities and it contained certain innovative features.

5. As compared to Agreements on other commodities, the 1979 Agreement on Natural Rubber was unusual at the time it was concluded in that it provided for a buffer stock of a maximum size of 550,000 metric tonnes as the sole instrument of market intervention for price stabilization. The maximum stock comprised 400,000 tonnes of normal buffer stock plus 150,000 tonnes of contingency buffer stock. The Agreement thereby excluded export quotas or production controls, which in some other Agreements were important means of, or the only instruments for, price stabilization.

6. Another special feature of the 1979 Agreement was that it was the first commodity agreement in which buffer stocks were financed by direct cash contributions by governments and the costs of the buffer stocks were shared equally by importing countries and exporting countries. Within each group, contributions were assessed in proportion to members’ shares in trade. The contingency buffer stock could, at the discretion of a member, be financed by cash borrowed from commercial sources on the security of stock warrants and/or government guarantees or undertakings.

7. A third special feature of the 1979 Agreement was that it provided for periodic revisions of the price ranges in close relationship to movements in the daily market indicator price (DMIP)\(^1\) and changes in the buffer stock’s size. The underlying rationale of this feature was that buffer stock operations could be kept in line with market conditions, and it would be possible to avoid situations where the agreed price limits could not be sustained because the buffer stock was either exhausted or filled.

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\(^1\) The daily market indicator price (DMIP), as defined in the 1979 and 1987 Agreements, is a composite average of daily official current-month prices on the Kuala Lumpur, London, New York and Singapore markets. It is comprised of RSS1, RSS3 and TSR20 grades of rubber, RSS being ribbed smoked sheet and TSR being technically specified rubber in block form. All quotations are converted to f.o.b. Malaysian/Singapore ports and expressed in a composite Malaysian/Singapore currency.
8. The 1979 Agreement established upper and lower intervention prices demarcating price levels where the buffer stock manager had discretion to act when the DMIP was outside these levels. As seen in chart 1, these intervention price levels were set at ± 15 per cent of the reference price level. The reference price was set at an initial level of 210 Malaysian/Singapore cents per kilo. The 1979 Agreement also established upper and lower trigger action prices at ± 20 per cent of the reference price, which the buffer stock manager was obliged to defend. Around these price levels, but not specifically related to them, were the upper and lower indicative prices which could not be breached through revision of the reference price and trigger action prices.

9. The 1979 Agreement established a Committee on Other Measures to promote and seek finance for the development of the natural rubber economy through expanded and improved production, productivity and marketing. Four areas specified were: research and development programmes and projects of benefit to exporting and importing members, including scientific research in specific areas; programmes and projects to improve productivity in the natural rubber industry; ways and means to upgrade natural rubber supplies and achieve uniformity in quality specifications and presentation; and methods of improving the processing, marketing and distribution of natural rubber.

3. **Duration and membership of the 1979 Agreement**

10. The 1979 Agreement was open for signature from 2 January to 30 June 1980. It entered into force provisionally on 23 October 1980 and definitively on 15 April 1982, as the conditions for coming into force in the Agreement were met. The Agreement was in force for its initial five-year period and, by decision of the Council, it was extended for a period of two years, the maximum period of extension provided in the Agreement.

11. The expiry of the Agreement on 22 October 1987 marked the start of a hiatus which ended on 29 December 1988 when the 1987 Agreement entered into force. During the hiatus, the International Natural Rubber Council and the Organization remained in being under paragraph 7 of article 67 of the 1979 Agreement and sales from the buffer stock could take place under liquidation provisions but no purchases could be made for the buffer stock.

12. The 1979 Agreement had as members seven exporting countries accounting for about 95 per cent of world exports and 25 importing countries plus the European Economic Community, which together represented three-fourths of world imports at the time. A list of exporting and importing members, as of 22 October 1987, is given in annex I.

13. The headquarters of the International Natural Rubber Organization was established in Kuala Lumpur, Malaysia, where it has been maintained to date.

**B. The 1985 Conference to renegotiate the 1979 Agreement**

14. At the request of the International Natural Rubber Council, the United Nations Conference on Natural Rubber, 1985, was convened to renegotiate the 1979 Agreement. The Conference was proceeded by consideration of issues in a
Preparatory Committee which was convened by the International Natural Rubber Council.

15. At the first session of the Conference (22 April - 8 May 1985), wide divergences emerged between proposals of exporting countries and those of importing countries, particularly as regards the initial level of the reference price and related price ranges, and the mechanisms for revision of these levels. Exporting countries did not explicitly propose a major change in the means for market intervention such as an export quota or supply restriction scheme to supplement the buffer stock. Underlying the divergences in the views of the groups were basic differences in their conceptions of the role of a commodity agreement for natural rubber.

16. Importing countries held the view that, given practical constraints in operations, the role of an agreement and its buffer stock was essentially to reduce excessive price fluctuations around the trend in market prices. Representatives of main importing countries expressed approval of the way in which the 1979 Agreement had functioned. Despite the most serious recession in decades, the Agreement had kept prices from breaching the lower trigger action price or "must buy" level of the buffer stock manager. Importing countries attributed this success to three main factors: participation in the Agreement of countries representing very high shares of world exports and imports, adequate financing for the buffer stock and a price range attuned to market conditions. Given their generally positive assessment of the 1979 Agreement, they did not wish to see substantial changes in the structure of the Agreement or in its key elements.

17. Exporting countries saw the goals of a new agreement as being not only to stabilize prices by avoiding excessive price fluctuations but also, as stated in the 1979 Agreement, to promote balanced growth of supply and demand, and to help to stabilize export earnings and increase these earnings based on expanding export volumes. In particular, they stressed the need to support prices at levels considered as remunerative and just to producers, as well as sufficiently attractive to growers to encourage them to undertake investment in order to ensure orderly growth of the industry in the longer term, since consumption was expected to continue to grow. The price ranges under the 1979 Agreement were too low as inflation had increased production costs since these ranges were negotiated in 1979. Further, the exporting countries asserted that the lower intervention price did not provide a sufficient incentive to ensure that growers would undertake replanting or planting of new areas. They proposed for a new Agreement a large increase in the reference price and narrowing of the width of the price ranges around the reference price.

18. Regarding the semi-automatic revision of the reference price and related price ranges in the 1979 Agreement referred to in paragraph 7, the exporting countries proposed giving more discretionary authority to the Council to determine when and by how much the reference price and related ranges should be revised. They also placed much importance on including movements in the costs of production in the criteria for adjusting these price levels.

19. Negotiations on these issues continued at the second to the fourth sessions of the Conference, which were held respectively in May and October 1986 and March
1987. The President of the Conference also held a number of informal consultations in the periods between the sessions. At its final plenary meeting, on 20 March 1987, the Conference established the text of the International Natural Rubber Agreement, 1987.

20. The representatives of 55 states and the European Economic Community participated in the Conference. A number of specialized and related agencies of the United Nations and two intergovernmental organizations participated as observers.

C. The 1987 Agreement

1. Objectives

21. The 1987 Agreement maintained the same objectives as in the 1979 Agreement which are given in paragraph 3 above.

2. Operational provisions of the 1987 Agreement

22. The operational provisions of the 1987 Agreement are much the same as those of the 1979 Agreement.

23. As in the 1979 Agreement, prices are to be stabilized through the operations of a buffer stock of a maximum size of 550,000 metric tonnes as the sole means of market intervention. The maximum size consists of a normal buffer stock of 400,000 tonnes and a contingency buffer stock of 150,000 tonnes.

24. The 1987 Agreement maintains the basic structure of the price range. The reference price on entry into force was set at 201.66 Malaysian/Singapore cents per kilo, the current level at that time. As seen in chart 1, the upper and lower intervention prices were maintained at +15 per cent of the reference price and denote levels above which the buffer stock manager may intervene in the market but is not obliged to do so. The upper and lower trigger action prices were maintained at +20 per cent of the reference price and demarcate limits which the buffer stock manager is obliged to defend. Around these price levels, but not specifically related to them, are the upper and lower indicative prices, which are limits that cannot be breached by the trigger action prices when the reference price (and consequently the intervention and trigger action prices) are revised. The upper and lower indicative prices were maintained at 270 and 150 Malaysian/Singapore cents per kilo respectively. The composition of the daily market indicator price remained the same as in the 1979 Agreement.²

25. Like the 1979 Agreement, the 1987 Agreement contains provisions for semi-automatic revisions of the reference price, based on market price trend and net changes in the buffer stock's size. However, several modifications were made to the revision mechanisms. The reference price is reviewed every 15 months instead of every 18 months under the 1979 Agreement. A second modification relates to the size of the revision of the reference price. Under the 1979 Agreement, if at the time of the regular price review the average of the daily

² See footnote 1 above.
market indicator price (DMIP) has been above the upper intervention ("may sell") price or below the lower intervention ("may buy") price, for the preceding six months, the reference price is automatically revised upwards or downwards by 5 per cent respectively, unless the Council decides on a different percentage adjustment. The percentage adjustment could be more or less than 5 per cent. Under the 1987 Agreement, the automatic 5 per cent adjustment is maintained but, unlike the 1979 Agreement, the Council may only decide on a greater percentage adjustment. A similar change was introduced in the semi-automatic provision for adjustment of the reference price by 3 per cent when buffer stock purchases or sales of 300,000 tonnes are effected. In this case, too, the Council may only decide on a higher percentage adjustment.

26. As in the 1979 Agreement, when purchases or sales from the buffer stock reach the 400,000-tonne level, the Council shall decide on the price at which the contingency buffer stock is to be brought into action to defend the upper or lower indicative prices. There was, however, a modification to the price levels for intervening with the contingency buffer stock. Under the 1987 Agreement, unless the Council decided otherwise, these levels were set at 2 Malaysian/Singapore cents per kilo above the lower indicative price and 2 cents per kilo below the upper indicative price. Under the 1979 Agreement, they were defined as the mid-point between the lower trigger action price and the lower indicative price, and the mid-point between the upper trigger action price and the upper indicative price.

27. As under the 1979 Agreement, members of the 1987 Agreement commit themselves to financing the total cost of the buffer stock of 550,000 tonnes. The financing of both normal and contingency stocks is shared equally by exporting and importing countries, and assessments within each group are in proportion to trade, as determined through allocation of votes, including initial votes for each member. The total cost of the normal buffer stock and the contingency buffer stock are to be paid by direct cash contributions made by governments. Unlike the 1979 Agreement, the 1987 Agreement does not contain a provision for borrowing to finance purchases for the contingency buffer stock (see paragraph 6 above). The 1987 Agreement nevertheless contains the same provision as in the 1979 Agreement authorizing the Council to take full advantage of the financing facilities of the Common Fund for Commodities.

28. Regarding developmental activities, the functions and areas covered by the Committee on Other Measures referred to in paragraph 9 were maintained. Added to them was development of end-uses of natural rubber through programmes and projects leading to increased and new uses of the commodity.

3. Status and membership of the 1987 Agreement

29. The Agreement was open for signature from 1 May to 31 December 1987. It entered into force provisionally on 29 December 1988 and definitively on 3 April 1989, as the conditions for entry into force in the Agreement were met. The coming into force of the 1987 Agreement on 29 December 1988 ended the hiatus which existed since the expiry of the 1979 Agreement on 22 October 1987, as discussed in paragraph 11.
30. The 1987 Agreement was in force for its initial five-year period and, by decisions of the Council, it was twice extended by one year each time, to the maximum period of extension provided in the Agreement. After the expiry of the Agreement on 28 December 1995, the International Natural Rubber Council and the Organization remained in being under paragraph 6 of article 66 of the Agreement and liquidation provisions in it which do not permit purchases for the buffer stock.

31. As listed in annex II below, 6 countries were exporting members and 21 countries plus the European Economic Community were importing members of the 1987 Agreement. They represented respectively 94 per cent of world exports and 69 per cent of world imports in recent years. Leading exporting countries are Indonesia, Malaysia and Thailand. Major importing countries and groups are China, the European Economic Community, Japan, the Russian Federation and the United States of America.

32. Under the Agreement, the headquarters of the International Natural Rubber Organization is maintained in Kuala Lumpur, Malaysia.

D. The 1994 Conference to renegotiate the 1987 Agreement

33. At the request of the International Natural Rubber Council, the United Nations Conference on Natural Rubber, 1994, was convened to renegotiate the 1987 Agreement. The Conference was proceeded by consideration of issues in a Preparatory Committee convened by the International Natural Rubber Council.

34. The first session of the Conference (5 - 15 April 1994) had before it proposals submitted by importing countries and proposals submitted by exporting countries. Most of the proposals by importing countries concerned technical matters or minor changes to the 1987 Agreement, as the importing countries considered the 1987 Agreement to be a good basis for negotiations. Exporting countries proposed increases in the reference price and increases in the lower and upper indicative prices. They also proposed deletion of the intervention prices and setting the trigger action prices at plus and minus 15 per cent of the reference price instead of 20 per cent as in the 1987 Agreement. Among other proposals by exporting countries was an increase in the period for review and revision of the reference price from every 15 months under the 1987 Agreement to every 18 months, and that the percentage for adjustment under automatic revision of the reference price be changed from 5 per cent to 3 per cent.

35. Negotiations on these and other issues continued at the second and third parts of the Conference held in October 1994 and February 1995. The President of the Conference also held a number of informal consultations in the periods between the sessions. At its plenary meeting, on 17 February 1995, the Conference established the text of the International Natural Rubber Agreement, 1995.

36. At the fourth part of the Conference, held on 28 March 1996, a resolution was adopted which provided for the period of signature to be extended to 31 July 1996 (see paragraph 46).
37. The representatives of 37 States and the European Community participated in the Conference. A number of specialized and related agencies of the United Nations and two intergovernmental organizations participated as observers.

E. The 1995 Agreement

1. Objectives

38. The 1995 Agreement maintains the same objectives as in the 1979 and 1987 Agreements, as given in paragraph 3 above.

2. Operational provisions of the 1995 Agreement

39. The main features of the Agreement are much the same as those of the International Natural Rubber Agreement, 1987, and its predecessor of 1979. As in the 1979 and 1987 Agreements, natural rubber prices are to be stabilized through the operations of an international natural rubber buffer stock of a maximum size of 550,000 tonnes as the sole instrument of market intervention. It consists of a normal buffer stock of 400,000 tonnes and a contingency buffer stock of 150,000 tonnes.

40. The 1995 Agreement maintains the basic structure of the price range. The reference price on entry into force of the Agreement will be the reference price at the time of the expiry of the 1987 Agreement on 28 December 1995 which was 206.68 Malaysian/Singapore cents per kilo. The lower indicative price on entry into force will be 157 Malaysian/Singapore cents per kilo. It was 150 Malaysian/Singapore cents per kilo under the 1979 and 1987 Agreements. The upper indicative price remains unchanged at 270 Malaysian/Singapore cents per kilo, the level set under both previous Agreements. Around the reference price are the upper and lower intervention prices at plus and minus 15 per cent of the reference price. At these levels, the buffer stock manager may intervene in the market but is not obliged to do so. At plus and minus 20 per cent of the reference price are the upper and lower trigger action prices, which are levels at which he must intervene in order to stabilize prices. Above and below these levels, but not specifically related to the reference price, are the upper and lower indicative prices, which are limits that cannot be breached by the trigger action prices when the reference price (and consequently the intervention and trigger action prices) is revised upwards or downwards. A new feature of the 1995 Agreement is that revision of the reference price will not result in the intervention price breaching the level at which the contingency buffer stock will be brought into operation.

41. Like the 1979 and 1987 Agreements, the 1995 Agreement contains provisions for revisions of the reference price, based on trends in market prices and/or net changes in the buffer stock's size. There are, however, several modifications to the provisions for the periodicity of reviews and size of revision of price levels governing market intervention. The first review of the reference price under the 1995 Agreement will take place at the first regular session of the Council after the entry into force of the Agreement. Thereafter, the reference price will be reviewed every 12 months, instead of every 15 months under the 1987 Agreement and every 18 months under the 1979 Agreement. The
periodicity of reviews of the indicative prices will be every 24 months, with an initial review at the first regular session of the Council under the 1995 Agreement. The indicative prices were reviewed every 30 months under the 1979 and 1987 Agreements. Another modification relates to revision of the reference price at the first regular session of the Council under the 1995 Agreement. Under the 1987 Agreement, if at the time of the regular price review the average of the daily market indicator price for the preceding 6 months has been above the upper intervention ("may sell") price or below the lower intervention ("may buy") price, the reference price is automatically revised upwards or downwards by 5 per cent, unless the Council decides on a higher percentage adjustment. While this feature is maintained under the 1995 Agreement, an exception has been made for revision at the first Council session which may be only 4 per cent of the reference price. It is noteworthy that, under the 1979 Agreement, revision was automatically 5 per cent, unless the Council decided on a lower or higher percentage adjustment.

42. As in the 1979 and 1987 Agreements, when purchases or sales for the buffer stock reach the 400,000-tonne level, the 1995 Agreement provides that the Council will decide on the price at which the contingency buffer stock is to be brought into action to defend the lower or upper indicative prices. As under the 1987 Agreement, unless the Council decides otherwise, these intervention levels will be 2 Malaysian/Singapore cents above the lower indicative price for buffer stock purchases and 2 Malaysian/Singapore cents below the upper indicative price for buffer stock sales. Under the 1979 Agreement, they were defined as the midpoint between the lower trigger action price and the lower indicative price and the midpoint between the upper trigger action price and the upper indicative price.

43. A number of other modifications were made in the 1995 Agreement as compared to both the 1979 and 1987 Agreements. For the purpose of the efficient operation of the buffer stock, the Council, under the 1995 Agreement, may decide by consensus to allow the buffer stock manager to purchase future contracts up to a maximum of two months forward on the strict and absolute condition that tenders are taken up on maturity. The daily market indicator price is maintained as a composite, weighted average of daily official prices on the Kuala Lumpur, London, New York and Singapore markets, as under the 1979 and 1987 Agreements. However, unlike the previous Agreements, the Council may decide to include additional established commercial markets in the calculation of the daily market indicator price if such markets are deemed to influence the international price of natural rubber. Also, the weightings of the three grades (RSS 1, RSS 3 and TSR 20) used in the calculation will be in the proportion of 2:3:5, respectively. The weightings were equal under the 1979 and 1987 Agreements. A new article provides that members shall endeavour to pay due attention to environmental aspects, as agreed at the eighth session of the United Nations Conference on Trade and Development and the United Nations Conference on Environment and Development held in 1992. A further change was that the 1995 Agreement shall remain in force for an initial period of four years while its predecessors provided for an initial period of five years. However, each of the three Agreements provided for extensions not exceeding two years.

3 See footnote 1 above.
3. **Provisions for entry into force and duration of the 1995 Agreement**

44. The Agreement provides that it be open for signature at United Nations Headquarters from 3 April 1995 to 28 December 1995 inclusive by governments invited to the United Nations Conference on Natural Rubber, 1994. The Agreement provides that it will enter into force definitively on 29 December 1995 or on any date thereafter, if by that date governments accounting for at least 80 per cent of net exports and 80 per cent of net imports as set out in annexes A and B to the Agreement have deposited their instruments of ratification, acceptance, approval or accession, or have assumed full financial commitment to the Agreement. The Agreement provides for provisional entry into force on 29 December 1995, or on any date before 1 January 1997, if instruments of ratification, acceptance or approval, or notifications of provisional application with full financial commitment, have been deposited on behalf of governments accounting for at least 75 per cent of net exports and at least 75 per cent of net imports as set out in the annexes referred to above.

45. At its session held from 27 November to 1 December 1995, the International Natural Rubber Council urged all members to ratify the 1995 Agreement so that it would come into force as soon as possible. The Council noted positive indications from members that the 1995 Agreement would succeed the 1987 Agreement. It recognized that there would be a one-year interim period after 28 December 1995, the date of expiry of the 1987 Agreement, to facilitate ratifications of the 1995 Agreement by members. To assist in the transition from the 1987 Agreement to the 1995 Agreement, the Council agreed the extension of the staff of the Organization beyond the expiry of the 1987 Agreement.

46. The period of signature of the 1995 Agreement was extended to 31 July 1996 by a resolution adopted at the fourth part of the United Nations Conference on Natural Rubber, 1994 which was held on 28 March 1996. As of 28 December 1995, the close of the period of signature provided for in the Agreement, four exporting countries representing 94.383 per cent of net exports and 15 importing countries plus the European Community together representing 48.662 per cent of net imports had signed the Agreement. While the exporting countries could fulfil the above-mentioned requirements for provisional and definitive entry into force on their side, the importing countries and groups which signed the Agreement could not reach the level of 75 per cent of net imports represented by importing countries and groups which have deposited instruments or notifications of provisional application, even if all the signatories became parties to the Agreement. Thus, the Agreement could not enter into force by the above-mentioned provisions and the fourth part of the Conference was held to extend the period of signature to enable countries which had not signed the Agreement to do so.

47. The Agreement provides that, if it does not come into force provisionally by 1 January 1997, the Secretary-General of the United Nations shall invite the governments which have deposited instruments of ratification, acceptance or approval, or notifications of provisional application, to meet with a view to recommending whether or not such governments should take the necessary steps to put the Agreement provisionally or definitively into force among themselves in whole or in part.
48. A Meeting was convened on 6 February 1997, pursuant to the above-mentioned provision. All of the countries which were parties to the Agreement were present. At the Meeting, the decision was taken unanimously to put the Agreement into force provisionally among themselves in whole and with immediate effect, for a period of up to 12 months in accordance with paragraph 4 of article 61 of the Agreement. The requirements for the definitive entry into force of the Agreement were expected to be fulfilled by the end of the 12-month period.

49. As seen in annex III of this report, as of 6 February 1997, five exporting countries accounting for 97.329 per cent of total net exports and fifteen importing countries accounting for 73.484 per cent of total net imports, as set out in the annexes to the Agreement, and the European Community had deposited the required instruments or given notification of provisional application. They included the three main exporters, Thailand, Indonesia and Malaysia, and two minor exporters, Nigeria and Sri Lanka. The world's leading importers of natural rubber, the United States of America, the European Union and Japan, had also taken action. China and Italy had signed the Agreement but had not deposited any instruments or given notification of provisional application. However, at the Meeting held on 6 February 1997, China and Italy said that they were each proceeding with the necessary arrangements to become members of the Agreement.

50. If the requirements for definitive entry into force have not been met within 12 months of the provisional entry into force of the Agreement on 6 February 1997, the Agreement provides that the International Natural Rubber Council shall review the future of the Agreement and decide on one of the three following possibilities: to put the Agreement definitively into force among the current members in whole or in part; to keep the Agreement provisionally in force among the current members in whole or in part for an additional year; or to renegotiate the Agreement. In the absence of any decision by the Council, the Agreement shall terminate at the expiry of the 12-month period.

51. The Agreement shall remain in force for a period of four years after its entry into force on 6 February 1997, unless extended or terminated earlier by decision of the International Natural Rubber Council. The Agreement provides for extension by a period or periods not exceeding two years in all, commencing from the date of expiry of the four-year period.

II. OPERATIONS OF THE 1979 AND 1987 AGREEMENTS

A. Buffer stock operations

1. Operations under the 1979 Agreement

52. As seen in chart 1, a year after the 1979 Agreement entered into force in October 1980, the daily market indicator price (DMIP) had fallen by 35 per cent and had entered the buffer stock manager's "may buy" zone. A total of 273,000 tonnes of natural rubber was purchased for the buffer stock to support prices in the 14-month period running from the last week in October 1981 to the end of January 1983.
53. On 8 May 1982, the reference price was revised downward to 207.9 Malaysian/Singapore cents per kilo from its initial level in the 1979 Agreement of 210 cents per kilo. The revision was pursuant to the provision pertaining to the action to be taken when the six-month average of the DMIP was below the lower intervention price, as discussed in paragraph 7.

54. The DMIP unexpectedly soared from the lower intervention price in mid-January 1983 to the upper intervention price in mid-April 1983. It fluctuated around that level to mid-March 1984. Although the DMIP was in the "may sell" zone from time to time, the recovery in demand was not considered strong enough to warrant sales from the buffer stock. The DMIP then fell rapidly from mid-March 1984 to the end of October of that year, although there was a short-lived recovery around July and August 1984.

55. From November 1984 to the first week of May 1985, the DMIP fluctuated around the lower intervention price. Purchases of 3,550 tonnes were made for the buffer stock. From then to the end of the year, the DMIP was near the "must buy" level and over 100,000 tonnes were purchased for the buffer stock to support prices. These purchases brought the total size of the buffer stock to about 357,000 tonnes.

56. On 15 August 1985, the reference price was revised downward to 201.66 cents per kilo in connection with the provision in the 1979 Agreement pertaining to net purchases of 300,000 tonnes referred to in paragraph 7.

57. From January 1986 to August 1987, the DMIP soared from near the "must buy" level to the "may sell" level. It was in the "may sell" zone and above it from the beginning of September 1987 to the third week of March 1989. The entire buffer stock was sold in this period in an attempt to limit upward price movements. This interval covers the interim period between the expiry of the 1979 Agreement on 22 October 1987 and the entry into force of the 1987 Agreement on 29 December 1988, referred to in paragraph 11.

2. Operations under the 1987 Agreement

58. When the 1987 Agreement entered into force on 29 December 1988, 25,000 metric tonnes remained in the buffer stock. The daily market indicator price (DMIP) was still in the buffer stock manager's "may sell" zone where it remained through the first quarter of 1989, as seen in chart 1. The 25,000 tonnes in the buffer stock were sold in this quarter as the DMIP continued to be in the "may sell" zone.

59. On 7 April 1989, at the first session of the Council under the 1987 Agreement, the reference price was revised upward to 218.10 Malaysian/Singapore cents per kilo pursuant to the provisions in the Agreement pertaining to the net sale of 300,000 tonnes since the last revision and another provision on revision relating to the average of the DMIP over the previous six months.

60. Market sentiment turned weak in the second quarter of 1989 on reports of slower economic growth and declining sales in the motor vehicle and tyre industries in many of the industrialized countries. As a result, the DMIP fell rapidly into the "may buy" zone by the end of the year, marking the start of a
four-year period of low prices.

61. In the first quarter of 1990, 34,500 tonnes were purchased for the buffer stock to support prices as the DMIP remained in the "may buy" zone. The DMIP also remained in that zone during the second quarter. On 10 July 1990, the reference price was revised downward to 207.20 cents per kilo in the revision procedure pertaining to the six-month average of the DMIP. Consequently the "may buy" zone was lowered and the DMIP hovered above it in the second half of 1990. No purchases for the buffer stock were made in the second through fourth quarters of 1990.

62. The world economy continued to suffer from economic recession and conditions in the rubber market were weak and depressed by poor consumer demand. Major automobile and tyre manufacturers reported huge losses and were forced to reduce production. A total of 76,000 tonnes was purchased for the buffer stock in August, October and December 1991 to support prices when the DMIP was in the "may buy" zone. The total size of the buffer stock reached 110,000 tonnes at the end of 1991.

63. Prices remained weak in 1992. A resurgence of demand in the first half of the year was slight and shortlived. The DMIP was in the "may buy" zone for most of the year, rising above it only in April, May and December. A total of 69,000 tonnes was purchased for the buffer stock in August through October to sustain prices, thus bringing its overall size to 179,575 tonnes at the end of 1992.

64. A review of the reference price in connection with the six-month average of the DMIP was held on 29 January and 2 February 1993. The reference price was reduced by 5 per cent, bringing it to a new level of 196.84 Malaysian/Singapore cents per kilo.

65. Purchases for the buffer stock were made in September, October and December 1993. The total size of the buffer stock reached nearly 222,000 tonnes by the end of 1993.

66. Prices of natural rubber rose strongly through 1994, as the world economy improved and tyre manufactures increased purchases. The DMIP, which had started the year at a level just above the "may buy" zone, rose to the "may sell" zone at the end of June. Sales from the buffer stock holdings of nearly 222,000 metric tonnes commenced in early July and, by the end of September 1994, the entire buffer stock was sold in an effort to limit upward price movements. The DMIP, however, continued to rise above the "may sell" zone in the last quarter of 1994.

67. The DMIP continued to rise in early 1995 to an all-time high of 371.86 Malaysian/Singapore cents per kilo on 6 February 1995. It then fell considerably, reaching the "may sell" zone in July, only to rise strongly from then to the end of the year, as seen in chart 1.

68. On 2 August 1995, the reference price was revised upwards by 5 per cent to 206.68 Malaysian/Singapore cents per kilo, by a decision of the Council pursuant to the provision pertaining to action to be taken when the six-month average of the DMIP is above the upper intervention ("may sell") price.
69. As seen in chart 1, the DMIP was at a peak in late 1995 and fell throughout the year 1996. It was in the "may sell" zone in the second half of the year 1996 and in the "no intervention" zone in January of 1997.

B. Effectiveness of the buffer stock operations

70. It is generally recognized that purchases for the buffer stock succeeded in their price stabilization objective of supporting the DMIP in the "may buy" zone and preventing it from falling below the lower trigger action price or "must buy" level. This result is clearly seen in chart 1. Buffer stock sales from late 1987 to early 1989 were apparently less successful in defending the upper trigger action or "must sell" level, although the 357,000 tonnes sold helped to meet shortages and limit the high price movements. The same may be said of the summer of 1994 when nearly 222,000 metric tonnes of stock were sold to limit upward price movements.

71. As regards a basic objective of the 1987 Agreement on achievement of balanced growth of supply and demand there was widespread and strong criticism in the exporting countries of the low levels of the reference price and price ranges related to it. When the 1979 Agreement entered into force in 1980, the reference price was set at 210 Malaysian/Singapore cents per kilo. Fifteen years later it was actually lower at 206.68 cents per kilo. New higher yielding varieties of rubber trees and other technological improvements that improved yields have offset, to some extent, the effects of increases in the costs of labour and purchased inputs. Nevertheless, as a result of low prices and low returns to growers, some producers abandoned holdings and reduced tappings. Questions were also raised as to whether there were sufficient incentives for replanting land bearing old unproductive trees with young high-yield trees which are important for security of supplies to consumers as well as for producers' income in the future. National policies relating to replanting and new plantings had to be reviewed because of the low levels of prices over long periods, particularly the low levels prevailing from 1989 to 1993. The concept of stabilization of prices around the market trend was criticized as not meeting the objective of orderly development of the natural rubber economy over the long term. The period of high prices since mid-1994 has, to some extent, alleviated these concerns.

72. Another basic objective of the 1987 Agreement is to help to stabilize export earnings and increase them based on expansion of export volumes. It is generally recognized that purchases for the buffer stock have supported prices and helped in this way to make export earnings less unstable. It is difficult to quantitatively separate the effects of price stabilization from the effects of numerous other factors affecting supply and demand, for example, exports of raw natural rubber have decreased because exports of rubber manufactures have increased, particularly in Malaysia. Despite such complexities, the overall performance of exports of raw natural rubber is interesting. Statistical analysis of volumes of exports of raw natural rubber, export earnings expressed in SDRs and unit values as a proxy for price, shows the following results for the period from 1980 to 1994 for Thailand and Indonesia, and 1980 to 1993 for Malaysia. Thailand's export earnings grew rapidly at an average of 6.2 per cent per year over the period, as export volume shot up by an average of 8.8 per cent
per year and despite a fall in unit value of 2.3 per cent per year on average. Indonesia had a loss of an average of 0.1 per cent per year in export earnings, as an increase in export volume of an average of 1.6 per cent per year was more than offset by a fall in unit value of 1.7 per cent per year on average. Malaysia's export earnings fell sharply by an average of 7.0 per cent per year, as export volume dropped by 3.4 per cent per year and unit value fell by 3.7 per cent per year over the period. Thus, these trends suggest that one of the major exporters had a very large increase in export earnings based on a strong expansion of export volume and despite a drop in unit value while a second major exporter had a decrease in earnings as unit value fell more than volume increased, and a third major exporter had a sharp fall in earnings as both export volume and unit value fell.

73. While the price stabilization objective is the overriding aim of the International Natural Rubber Agreements and profit on buffer stock operations is not a stated aim, it is noteworthy that the nearly 222,000 metric tonnes of rubber bought at a cost of 496 million Malaysian Ringgits (US$ 190 million) and sold in buffer stock operations in 1990-1994 showed a gross profit of 98 million Malaysian Ringgits (US$ 37.6 million) and a net profit of 30 million Malaysian Ringgits (US$ 11.5 million), after deduction of maintenance costs for warehouse rent, storage insurance and rubber inspection expenses.

C. Factors favouring the effectiveness of buffer stock operations

74. The 1979 and 1987 Agreements benefited from wide participation of importing and exporting countries representing respectively some three fourths of world imports of natural rubber and 90 to 95 per cent of world exports.

75. The price ranges in the Agreements were realistic in relation to the means available, a buffer stock of a maximum size of 550,000 tonnes as the sole means for market intervention, although the low levels of price support were criticized, as discussed in paragraph 71.

76. Adjusting the price range to follow the trend in market prices and changes in the size of the buffer stock helped to keep the price range realistic in relation to the means available to defend the lower price limit.

77. By following the trend in market prices, the price policy favoured growth in consumption, as compared to a price policy which would have raised market prices.

78. Timely and full cash contributions by members assured the financial resources necessary for purchases of stock.

79. As there were no export quotas or other supply restrictions in the Agreement, a number of problems associated with setting and enforcing them were avoided.

80. As a tropical product without problems connected with agricultural support policies of developed countries, natural rubber does not face the serious adjustment problems of other agricultural products.
81. Natural rubber is a commodity which has shown a rising trend in production and consumption. As a necessary input in manufacturing, its price elasticity of demand is low. Its short-term supply also does not vary greatly in response to price fluctuations. Thus, the characteristics of its market favour effective buffer stock operations.

D. Other activities under the Agreements

82. With regard to commodity development measures in production, marketing and end-uses of natural rubber, a large number of project proposals have been considered by the Council. The Common Fund for Commodities agreed to provide approximately US$2 million for a project, "Development of blends of natural rubber with specialty elastomers", which was sponsored by the International Natural Rubber Organization (INRO) and has been carried out by the International Rubber Research and Development Board. The Common Fund has also agreed to provide US$ 2.9 million for a project sponsored by INRO on quality improvement and quality control of African natural rubber.

83. INRO has also carried out a range of other developmental activities. One of these efforts was preparation and distribution of directories of polymer science and short management courses. Studies, such as one on natural rubber production and environmental issues, have been undertaken.
Chart 1

DAILY MARKET INDICATOR PRICE (DMIP) AND THE INRO PRICE RANGE

(Monthly averages, October 1980 - January 1997)
Annex I

MEMBERS OF THE INTERNATIONAL NATURAL RUBBER ORGANIZATION
AS OF 22 OCTOBER 1987

Exporting members
Côte d’Ivoire
Indonesia
Malaysia
Nigeria

Papua New Guinea
Sri Lanka
Thailand

Importing members
Australia
Brazil
Canada
China
Czechoslovakia

European Economic Community:
Belgium
Denmark
France
Federal Republic of Germany
Greece
Ireland
Italy
Luxembourg
Netherlands
United Kingdom

Finland
Iraq
Japan
Mexico
Norway
Peru
Sweden
Switzerland
Union of Soviet Socialist Republics
United States of America
Annex II

MEMBERS OF THE INTERNATIONAL NATURAL RUBBER ORGANIZATION
AS OF 1 APRIL 1996

Exporting members

Côte d'Ivoire
Indonesia
Malaysia

Nigeria
Sri Lanka
Thailand

Importing members

China

European Economic Community:
Belgium
Denmark
France
Germany
Greece
Ireland
Italy
Luxembourg
Netherlands
Portugal
Spain
United Kingdom

Finland
Japan

Morocco
Norway

Russian Federation
Sweden

Switzerland
United States of America
### Annex III

**STATUS OF ACTION ON THE INTERNATIONAL NATURAL RUBBER AGREEMENT, 1995**

**AS OF 6 FEBRUARY 1997**

<table>
<thead>
<tr>
<th>Exporting Countries</th>
<th>Signature</th>
<th>Share as set out in the Annexes to the Agreement</th>
<th>Action to become a party to the Agreement</th>
<th>Shares of parties to the Agreement</th>
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*a/ Share of Luxembourg included with share of Belgium.

prov. appl. = provisional application