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COTTON: CURRENT SITUATION, MAJOR ISSUES,  
AND RECENT INTERNATIONAL DISCUSSIONS

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This paper summarizes the current world cotton situation and reviews the major problems faced by the world cotton economy, their implications for the future and the reactions of the principal exporting countries at the 1969 meeting of the International Cotton Advisory Committee.

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COTTON: CURRENT SITUATION, MAJOR ISSUES, AND  
RECENT INTERNATIONAL DISCUSSIONS

Introduction

1. The 28th Plenary Meeting of the International Cotton Advisory Committee (ICAC) was held in Kampala, Uganda, from June 2 to 11, 1969<sup>1/</sup>. This was the second meeting of the thirty-year-old Committee to be held in Africa (the first one was held in Cairo, in 1948), and the choice of location this year reflects anew a recognition of the importance of the African continent in world production, and particularly exports, of raw cotton<sup>2/</sup>. The Meeting was attended by representatives from 33 member countries and observers from seven non-member countries and eight international organizations, including the Bank.

2. The Bank's long-standing interest in the activities of the ICAC is associated with the fact that the latter is the only international body dealing actively with cotton problems (there are no permanent or ad hoc study groups or bodies on cotton under FAO or UNCTAD, for example). Moreover, as there is no formal or informal international agreement in cotton, the annual meetings of the ICAC usually provide helpful indications concerning the current focus or future direction of the cotton policies of major producing and consuming countries - and this year's meeting was no exception. In fact, policy issues, including the question of collective action under an international cotton agreement, received at this year's meeting the closest attention since the Lima meeting in 1966.

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<sup>1/</sup> The International Cotton Advisory Committee is a world-wide organization of governments, with headquarters in Washington, D.C., designed "to afford a continuous understanding of the world cotton situation and to promote cooperation in the solution of international cotton problems." The Committee's membership has risen from 41 to 42 countries this year, with the accession of Hungary - the first Eastern European country to join the ICAC.

<sup>2/</sup> The African continent accounts for nearly 15 percent of world cotton output and approximately 25 percent of world cotton exports (excluding, in both cases, centrally planned economies). More than three-fourths of the African countries produce some cotton, mostly for export, and cotton plays a significant role in the economies of most of these countries. It is interesting to note that half of 24 countries in the world where cotton exports account for five percent or more of total export earnings are in Africa (see "Cotton: Past Trends and Outlook," Sec M 69-251, May 12, 1969, Table 3).

3. This paper reports and comments on the major topics of interest to the Bank discussed at or highlighted by the recent cotton meeting, taking the current world cotton situation as a point of departure. A list of selected conference documents distributed at the meeting is given in Annex I.

### CURRENT SITUATION AND IMPLICATIONS

#### Background

4. Generally speaking, the world cotton economy has been facing two major problems in the last few years, namely, (a) a slackening in the growth rate of world cotton consumption, largely as a result of the inroads made by man-fibers (demand for all textile fibers combined has been growing at a more or less steady rate), and (b) a tendency for world cotton production to outstrip world cotton consumption<sup>1/</sup>. The problem of competition from man-made fibers has been present longer (since the late thirties) and the intensity of its impact on global cotton consumption and prices has been more continuous and less variable; consequently its effects have been rather insidious. The problem of oversupply, however, has shown a tendency to vary widely in intensity, particularly as manifested in irregular but marked stock cycles (most of the variation occurring in the United States stocks). The latter problem, reinforced by considerations relating to the problem of inter-fiber competition, has led to periodic significant downward adjustments in prices, associated with changes in U.S. cotton policy<sup>2/</sup>. Consequently, and given the natural tendency of most countries to be more concerned with short-term than with long-term problems, in periods of excessive supplies, the world cotton community's attention has been concentrated on how to cope with the stock problem, and the problem of inter-fiber competition has often been relatively neglected. This has been the case since the beginning of the 1966/67 season, when world stocks reached an all-time high, as noted below. The present paper reviews the interaction of the two forces, i.e., overproduction and inter-fiber competition, during this period, their implications for the future and the reaction of the principal exporting countries at the latest meeting of the ICAC.

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<sup>1/</sup> To these two may be added a third problem area, namely, that associated with exports of cotton textiles from developing countries, which has repercussions both on industrialization in developing countries and on trends in import demand for raw cotton.

<sup>2/</sup> For a detailed discussion of the mechanics of the links between world cotton prices and U.S. domestic and export price policies, and their effects on producing countries in the rest of the world, see background paper on "Cotton: Past Trends and Outlook," May 12, 1969, pp.16-17 and also "Recent Developments Affecting Cotton," Commodity Note No. 55, November 17, 1966, pp. 4-5.

### The 1968/69 Season

5. The upswing of the last stock cycle had begun with the 1962/63 cotton season (August - July) following a period of relative equilibrium between world demand and supply in the preceding three seasons. A record level of stocks was reached by the beginning of the 1966/67 season, when the world carryover stood at 30.6 million bales (one bale equals 478 pounds of lint cotton, net), equivalent to seven months' disappearance (consumption plus cotton statistically unaccounted for), compared to an average of roughly 20 million bales, or five months' disappearance, in the 1960/61-1962/63 period. By the beginning of the 1968/69 season (i.e., on August 1, 1968), however, world cotton stocks were reduced to 21.6 million bales, or slightly under five months' disappearance. More importantly, stocks held by the United States on August 1, 1968 were 6.5 million bales, compared with 15.9 million bales two years before (Table 1).

6. The liquidation of surplus stocks (those above normal carryover) this time had been achieved in a remarkably short period<sup>1/</sup> and without the anticipated immediate downward adjustment in prices. This was made possible by two successive short crops in 1966/67 and 1967/68 (roughly 7 percent and 10 percent, respectively, below world consumption), reflecting largely sharp voluntary cutbacks in U.S. acreage, although other factors also helped: some constraint in expanding acreage in other countries and below-average yields in the U.S. and in several other areas<sup>2/</sup>. As the U.S. and world stock position shrank, prices began to edge upward during the 1967/68 season: first in medium-long staple varieties<sup>3/</sup> (in which a selective shortage had developed) and later in most other varieties.

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<sup>1/</sup> The stock reduction in the previous cycle had been carried out over five years (1955/56 to 1960/61)!

<sup>2/</sup> While the U.S. Government had the authority and machinery (under the U.S. Food and Agriculture Act of 1965) to reduce its stocks by offering them for export at whatever prices were necessary, it nevertheless encouraged sharp voluntary cutbacks in acreage (by increasing farmers' incentives to divert larger proportions of their cotton acreage allotments to other uses) in order to expedite the liquidation of stocks and avert a major decline in world prices. As a result, U.S. cotton output fell from an average of roughly 15 million bales in 1963/64-1965/66 to 9.9 million bales in 1966/67 and 7.2 million bales in 1967/68.

<sup>3/</sup> 1" to 1 - 3/32".

This, coupled with some speculative buying, pushed average cotton prices for 1967/68 10 percent or more above levels of the preceding season (Table 2).

7. The performance of the world cotton economy in 1968/69 has been "mixed," as is brought out succinctly in the following extract from the ICAC Secretariat's annual review of the world cotton situation.

"For the first time for many years, world production and consumption are in equilibrium. Moreover, the quality distribution of supply is better balanced than has been the case in other seasons. Despite these optimistic factors, however, problems of considerable magnitude still confront the world cotton economy. World use of cotton remains at around the record level, but consumption failed to make any real headway in a rapidly growing fiber market this season, primarily because of the competitive gains of the man-made fibers. World trade in cotton remains below the level of two years ago and, considering the decline in prices, total export earnings from cotton declined this season. Thus, despite the improved statistical situation, difficulties still exist and renewed efforts must be made to expand consumption and trade to provide outlets for the anticipated increase in production over the next few years."<sup>1/</sup>

8. The statistical position in the 1968/69 season (ending on July 31, 1969) appears to be developing as follows. World cotton output is provisionally estimated at 52.7 million bales, compared to 47.7 million bales in 1967/68, and at approximately the same level as the ICAC Secretariat's forecast for world consumption, namely, 52.6 million bales - a level representing no change over a year ago (Table 1). This implies little or no change in ending stocks compared to those at the beginning of the season. World cotton exports are expected by the ICAC Secretariat to remain near last season's level of 17.2 million bales. Meanwhile, most of the gain that had taken place in prices during 1967/68 appears to have been lost this season: prices of most cottons by March 1969 were 10 percent or more below March 1968, although there were notable exceptions<sup>2/</sup> (Table 2); the price decline seems to have leveled off somewhat

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<sup>1/</sup> ICAC, "Cotton: Monthly Review of the World Situation," May-June 1969, p. 1.

<sup>2/</sup> The supply of short, harsh cottons (used primarily in non-spinning uses and exported largely by India and Pakistan) is very tight, and prices have risen to levels comparable to certain medium staple cottons. Extra-long staple cotton prices continue to reflect the strong statistical position of such cottons this season.

in the last few months, however<sup>1/</sup>. The sharp losses in prices (particularly in the early part of the season), given the apparent balance between production and consumption, appear to be attributable to speculative behavior associated with expectations of larger availabilities, leading to greater pressure to sell than to buy, and the impact of high interest rates in some countries on stocking policies.

9. Three-fourths of the estimated increase in world output occurred in the United States, where output rose from 7.2 million bales last year to 10.9 million bales in 1968/69, and the remainder in countries other than the centrally planned economies (output in the latter showed little change for the third year). It is interesting to note that nearly two-thirds of the increase in production outside the U.S. and the centrally planned economies took place in Mexico and Brazil, and dramatic gains of 10 to 40 percent were registered by countries such as Colombia, Argentina, Iran, Syria, Sudan, El Salvador, Israel and Australia (Table 3). Whereas, among these, in Mexico, Argentina and El Salvador (and to some extent in Syria), the rise in output this season reflected a return to more normal levels, in the others it represented a continuation or acceleration of longer upward trends in production. In addition, while most of the countries listed above experienced favorable growing conditions and improved yields, except for Israel (where the increase in area was marginal), the gains in production resulted also from acreage expansion (Tables 4 and 5). The expansion of acreage in most cases was undoubtedly stimulated by the high prices which had been obtained in the 1967/68 season.

10. The above countries appear to have had no serious difficulty in marketing their larger exportable surpluses so far this season, in view of the relatively unfavorable export supply position of the United States. Despite the 50 percent increase in U.S. cotton production, total availability in the U.S. in 1968/69 (beginning stocks plus this season's crop) has been 2.3 million bales less than in the previous season<sup>2/</sup>. In addition, mid-season shipments were adversely affected by a prolonged dock workers' strike. Earlier in the season, cotton exports were slowed down by enlarged supplies of more competitively priced cottons from

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<sup>1/</sup> The c.i.f. Liverpool price of Mexican Strict Middling 1 - 1/16" (a pivotal grade), which had risen from an average of 29.3 cents per pound in 1966/67 to an average of 31.9 cents per pound in 1967/68, stood at 28.5 cents in March 1969 (compared to 32.2 cents in March 1968), and has been quoted at 28 cents during the first week of July of this year.

<sup>2/</sup> Beginning stocks in 1968/69 were 6.5 million bales compared to 12.4 million bales in 1967/68, i.e., six million bales down, or more than the increase in output of 3.7 million bales.

other sources. U.S. exports in 1968/69 are expected to total around 2.5 million bales compared to 4.2 million bales in 1967/68. Thus, while total world exports for 1968/69 may not be too different from the level of 1967/68, exports from countries outside the U.S. and centrally planned economies may show a substantial increase in 1968/69.

11. As implied in the ICAC statement, therefore, while the current world cotton situation is encouraging in some respects, it does not mark any firm progress toward the solution of the basic problems confronted by cotton for several reasons, which are examined below.

#### The Problem of Overproduction

12. Foreseeable developments on the production side of the equation alone, indicate that the balance between production and consumption which has been achieved in the 1968/69 season may not endure during the next one or two years (a longer term look at the problem of overproduction will be taken later). Having achieved its objective of reducing its stocks to a manageable level, the U.S. has indicated that it plans to raise its output, as soon as practicable, back to a more "normal" level. On the basis of various official statements, this policy implies a level of production sufficient to meet its domestic requirements (roughly 8.5 million bales at the current depressed rate of consumption), and exports of about four million bales in the short-run (compared to an estimated 2.5 million in 1968/69 and 4.2 million in 1967/68) and perhaps more later. In addition the U.S. may find it desirable to add 0.5 million bales to stocks in order to improve the variety-composition of the carryover. This would put the U.S. production goal for the near future at around 13 million bales compared to the 1968/69 level of 10.9 million. The 1969/70 crop is forecast at around 12 million bales, and a crop of 13 million bales may materialize in 1970/71. Production growth in the rest of the world (excluding the centrally planned countries), though unlikely to match the experience of 1968/69 when it rose by 1.6 million bales, or 6.7 percent, in response to the high prices of a year earlier, may be estimated in the order of 800 thousand bales per annum in the next two seasons, in accordance with past trends. In addition, modest advances in production are also likely to occur in cotton producing centrally planned countries. Thus, by 1970/71 world cotton output may be as high as 57 million bales, compared to 52.7 million bales in 1968/69. On the other hand, at recent prices, world consumption by 1970/71 is unlikely to rise above 54-55 million bales, even under the most optimistic assumptions (compared to an estimated 52.6 million bales in 1968/69). This would fall some two to three million bales short, or possibly more, of anticipated production. Thus, other things being equal, the short-term outlook points toward continued weak, or further weakening, cotton prices, the actual levels depending largely on the yield out-turn and on the performance of cotton consumption, particularly vis a vis man-made fibers.

13. The countries participating at the recent ICAC meeting were generally aware of the above possibilities and approached the subject by raising the question "whether the current level of world stocks is adequate or not" (and its corollary, namely, "what constitutes an adequate level of stocks under current market conditions"); in other words, could or should part of the anticipated growth in production be absorbed into stocks? This question seems to be, in a sense, "academic," since there is no international agreement in cotton or a mechanism for achieving collectively a particular stock position<sup>1/</sup>. The countries raising this question (particularly the developing countries planning to expand their cotton output) seemed to be implying, however, that if it could be agreed that the current level of stocks were rather low, the United States ("as the world's largest producer and exporter") should be persuaded to take appropriate action, ex ante, to raise its stocks by withholding some of its anticipated larger supplies from export, thus easing the expected pressure in the coming years of enlarged world supplies on prices.

14. While it was generally agreed that the current global stock position was too tight, particularly in view of the intensified competition from man-made fibers<sup>2/</sup>, no consensus could be reached on what constitutes an "adequate" level of stocks. One delegate rightly pointed out that the latter depended on "who held the stocks" - more precisely, on the disposal policies (particularly concerning price and timing) of the countries holding the bulk of the stocks (or the world cotton community's expectations regarding them). The United States, for example, which is usually the most important holder of stocks, gave no indication of any disposition to alter its present policy objective (under the Food and Agriculture Act of 1965) of avoiding another major stock build-up in the future.

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<sup>1/</sup> It will be recalled that, unlike earlier periods, since the enactment of the U.S. Food and Agriculture Act of 1965, the U.S. has not been committed to supporting any pre-established world price of cotton and accumulating stocks below such a price. (See "Recent Developments Affecting Cotton, "Economics Department, Commodity Note No. 55, November 17, 1966.)

<sup>2/</sup> It was stressed, in a report on inter-fiber competition, that one of the key advantages of man-made fibers over cotton was the assurance of adequate (quantitatively and qualitatively), stable (or easily replenishable), and conveniently located stocks at the suppliers' end. (ICAC, "Report on Inter-Fiber Competition," Doc. 20-XXVIII, June 1969, p. 8.)

Recent Developments in Inter-Fiber Competition

15. According to recent preliminary estimates of world textile fiber consumption (i.e., consumption of the so-called apparel fibers, namely, cotton, wool, and man-made fibers) by the ICAC, although calendar 1968<sup>1/</sup> was a good year for textile raw materials in general, the relative performance of cotton in the same period was most disappointing. Global mill consumption of raw cotton in 1968 (in terms of actual weight<sup>2/</sup>) made a modest advance of 0.4 percent compared to 1967 (and compared to an average growth rate of 1.8 percent per annum during the last ten years), while in the same year, consumption of the principal apparel fibers combined registered a sharp gain of 6.8 percent (compared to an average annual growth rate of 4.1 percent between 1958 and 1968). Consequently, the share of cotton in aggregate consumption of apparel fibers, in terms of actual weight, shrank from 60.2 percent in 1967 to 56.7 percent in 1968<sup>3/</sup>.

16. The loss in cotton's market share in 1968 becomes even more pronounced when consumption of other fibers is converted into "cotton equivalents"<sup>4/</sup> in order to take into account their cotton-displacement capabilities. Cotton's share, in this case, appears to have contracted from 53.9 percent in 1967 to 49.6 percent in 1968, i.e., below one-half of the total apparel fiber market for the first time in history, and by 4.3 percentage points in one year. This represents the sharpest decline in the last 10 years, for which comparable data are available<sup>5/</sup>.

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<sup>1/</sup> There are no estimates of world apparel fiber consumption on a cotton-year basis, i.e., August 1 - July 31.

<sup>2/</sup> Since a given volume of man-made fibers tends to displace a larger volume of cotton (due to the generally lighter weight and lower waste-factors of the former), it is important, in measuring relative performance, to distinguish between consumption figures on an actual-weight basis and those on a "cotton-equivalent basis," as will be done in the next paragraph.

<sup>3/</sup> "Report on Inter-Fiber Competition," op. cit., p. 3.

<sup>4/</sup> Using USDA conversion factors published periodically.

<sup>5/</sup> The average annual decline in cotton's share between 1958 and 1968 works out to slightly under two percentage points per annum, and the sharpest decline in one year over the same period was three percentage points (in 1962). See Table 6.

Meantime, wool's share declined from 3.8 percent to 3.6 percent, although consumption in absolute terms rose by 2.9 percent on an actual-weight basis and 3.9 percent on a cotton-equivalent basis, recovering from the depressed level of 1967. The share of cellulosic fibers (rayon and acetate) also declined, though marginally, for the fifth consecutive year. In effect, therefore, the bulk of the growth in aggregate apparel fiber consumption went to synthetic (non-cellulosic) fibers, leading to an expansion in their market share from 22.2 percent in 1967 to 27.0 percent in 1968 (Table 6). The sharpest erosion of cotton's markets in 1968 occurred in the United States, where although total fiber consumption rose by 11 percent (in terms of cotton equivalents) from its 1967 level, mill consumption of raw cotton was approximately seven percent below a year ago. As a result, cotton's share of the U.S. fiber market shrank from 39.8 percent to 33.3 percent, or by a remarkable 6.5 percentage points in one year<sup>1/</sup>.

17. Some of the factors explaining cotton's unusually poor performance in 1968 were the familiar forces contributing to the dramatic success of man-made fibers in the past, such as the superiority of some of the physical properties (such as strength and durability) of man-made fibers in general, the greater profitability of the latter in most steps of processing and marketing, and vast research and promotion expenditures compared to natural fibers, etc.<sup>2/</sup> In addition, however, there were in 1968 several significant developments (some of which had appeared in 1967) which intensified the competition between man-made fibers (particularly non-cellulosic fibers, or synthetics) and cotton. The most important of these were (a) keen price competition between cotton and synthetic fibers (particularly polyester, which is generally spun in cotton-spinning systems and mostly blended with cotton); and (b) the emergence of permanent-press, or no-ironing, properties as one of the most important non-price factors in inter-fiber competition.

18. The price parity between cotton and synthetic fibers (taking the list price of branded fibers in the case of the latter), which had narrowed considerably in 1967 largely as a result of sharp declines in synthetic fiber prices, narrowed further in 1968 in most markets, this time as a consequence of rising cotton prices (Table 7). Moreover, although list prices of most synthetic fibers showed little change in 1968, off-list selling prices ruled considerably below official quotations, and prices of unbranded fibers were reported to be even lower. Furthermore, conversion of synthetic fiber prices to "cotton equivalents" throws additional light on the relationship between the latter and cotton prices.

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<sup>1/</sup> "Report on Inter-Fiber Competition," op. cit., Table 1.

<sup>2/</sup> See "Cotton: Past Trends and Outlook," op. cit., pp. 14-15.

19. Thus, in the United States, for example, while the mill price of cotton (Strict Middling 1 - 1/16") in February 1969 was 36 cents per pound (nearly 10 percent below a year ago) and the list price of branded polyester was quoted at 61 cents per pound, the off-list price of the latter (on a cotton-equivalent basis) has been estimated at 41 cents per pound - probably even lower in the case of unbranded fiber - or only five cents above the price of cotton. While the above adjusted price difference between cotton and branded polyester fiber may still appear to be substantial, it is a far cry from the margin of 25-30 cents just two years ago. Moreover, the "cotton-equivalent" comparison does not take into account the relative advantages and disadvantages in technical characteristics, end-use suitability and suppliers' services (technical advice, promotion allowances, etc.) of the two fibers, which tend to favor polyester. Bearing in mind these advantages, "the above price relationships indicate that there is now an area of direct price competition between cotton and polyester, just as there has been between cotton and rayon for years."<sup>1/</sup>

20. There seems to be little doubt that the narrowing price parity between cotton and polyester over the last two years has been a major factor leading to the poor performance of cotton relative to man-made fibers in 1968, particularly when it is remembered that polyester, due to its special physical properties, has been one of the two major competitors of cotton (the other being rayon) to begin with<sup>2/</sup>. The key, or most desirable, property of polyester fibers (in the context of present consumer preferences) is their suitability for manufacturing permanent-press fabrics (valued highly by consumers in developed areas, where labor is relatively expensive) when blended with cotton. Although permanent-press fabrics made entirely out of cotton have been developed and marketed in some countries recently, it is generally agreed that these are no match (at least so far) to the polyester/cotton blends which have been displacing all-cotton fabrics in end-uses traditionally dominated by cotton<sup>3/</sup>. Consequently, polyester/cotton blends are reported to have

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<sup>1/</sup> "Report on Inter-Fiber Competition," op. cit., p. 7.

<sup>2/</sup> It should be noted, however, that while there was no apparent physical shortage of cotton in 1968, the progressive tightening of the supply situation and associated fears of a possible physical shortage may have contributed to the shift by some mills from cotton to man-made fibers.

<sup>3/</sup> While it is technically feasible to apply satisfactory durable-press finishes to cotton, these finishes tend to affect adversely the tensile strength and durability of the fabric. In the case of polyester/cotton blends, the loss in the strength of the cotton component is made up by the superior strength of the polyester component.

made significant advances in the shirt market in a number of countries; they seem to have penetrated in a substantial way the sheet market; and they appear to be making inroads into the market for men's underwear.

21. An inevitable preliminary conclusion emerging from the recent experience summarized above is that in order for world cotton consumption growth in the next few years to average anywhere near the 2 - 2.5 percent per annum experienced in the last 10 - 12 years, cotton will have not only to retain its current share, but also to regain (at least partly) the share lost to polyester in 1968, in key end-uses. This will depend largely on (a) the future price relationship between cotton and polyester, (b) the development of improved durable-press finishes for cotton, and (c) promotion.

22. It is extremely difficult to project the price parity between cotton and polyester or other man-made fibers with any precision. The key imponderable, in addition to demand/supply considerations, is the future trend in the relative production costs of the two fibers. It seems reasonable to assume in this respect (on the basis of past experience and the obvious dissimilarities between the economic characteristics of cotton cultivation and man-made fiber production) that, barring a major breakthrough in cotton yields, the scope for cost reductions in the case of polyester and indeed man-made fibers in general (through economies of sale, and research and development) is greater than in the case of cotton. Moreover, cotton growers in most countries are not as disposed (or cannot afford) to allow their profit margins - which are relatively low - to fall, as are man-made fiber industries - where margins have been considerably higher. (Besides, the latter as a group can maintain their profit levels, in such contingencies, by expanding their volume of sales through product development, improvement and promotion!) Thus, whichever way prices of cotton and polyester move in the medium term (when a breakthrough in cotton yields can be ruled out), it is highly unlikely that the margin between the two will widen again sufficiently to tilt the scales, by itself, in favor of cotton<sup>1/</sup>.

23. One of the concerns of cotton producing countries at the ICAC meeting was therefore research and development and in particular the "progress report" of the International Institute for Cotton (IIC), which

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<sup>1/</sup> It will be interesting to observe (when data becomes available) how relative shares have been moving in 1969, during the first half of which cotton prices have ruled below 1968 levels.

has been active in these fields since 1967<sup>1/</sup>.

24. The IIC reported on its activities since the last meeting of the ICAC in June 1968, which included significant cotton research and promotion programs, and indicated that the results so far had been most encouraging. For example, the development of improved permanent-press finishes for cotton were said to be "within reach." In addition, the IIC was continuing to finance research aimed at increasing scientists' knowledge of the molecular structure of the cotton fiber in order to improve the spinning and end-use properties of cotton. Special meetings are planned for 1970 between geneticists and industry representatives to determine the areas of research that ought to be concentrated on in the future. In the area of promotion, the IIC reported that it undertook several successful promotion and advertizing campaigns in a number of countries such as Japan, the United Kingdom, Italy and Norway, with the cooperation of major retail outlets in these countries. These appear to have led to dramatic increases in sales of cotton products in all instances. The number and scope of the campaigns, however, were limited by the availability of funds, and the success stories reported, though promising, pertained to the sales record (in the products advertized) of a dozen or so cooperating retailers. Consequently, as the gloomy statistical picture for 1968 indicates, the results have not been on a sufficiently large scale to be reflected in improved aggregate cotton consumption figures for individual countries. Nevertheless, the IIC seems to have proven convincingly and to a large audience (ranging from cotton producers to mills, retailers and consumers) that cotton research and

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<sup>1/</sup> The IIC is an independent inter-governmental organization founded in 1966 (under the auspices of the ICAC) by six countries (namely, the U.S., India, Mexico, the UAR, the Sudan and Spain) whose objective is cotton research and promotion. Three more countries (Greece, Tanzania, and more recently, Peru) have joined the Institute since then. Member countries contribute one dollar per bale of cotton exported to Western Europe and Japan - the promotion target areas, which account for nearly 60 percent of world cotton imports. Its annual expenditures are estimated in the order of \$7 - \$10 million, roughly half of which are obtained through members' contributions and the other half from cotton interests in importing countries cooperating in the promotion campaigns. (This, incidentally, is a fraction of the total expenditures of man-made fiber industries in these fields - see my memorandum on "Research and Promotion Expenditures on Some Industrial Fibers," dated March 29, 1968.) The U.S. has a similar national program for cotton research and promotion on a domestic scale.

promotion pays - and this may be its greatest, and indeed a valuable, contribution so far. The major brake on further concrete progress seems to be the limitation of resources.

25. In conclusion, despite some encouraging elements in cotton research and promotion, man-made fibers continue to cast a dark shadow over the future of cotton. This continues to be of particular concern in view of the rather ambitious long-term production plans of several cotton producing countries, which are discussed next below.

#### LONG-TERM PRODUCTION PLANS AND IMPLICATIONS

26. A novel contribution at the recent Plenary Meeting of the ICAC was the presentation by the Secretariat of a document - at the request of last year's Plenary Meeting - on cotton production plans for the next five years (i.e., for 1973), which also included some estimates of consumption growth over the same period. The document is reproduced in full in Annex II. The data therein are based on government submissions of "the best available estimates on production plans over the next five years," and should be treated with caution for several reasons. First, as stated in the Secretariat's preface, "in some instances the figures given are planned increases, and in others purely opinions." Second, the price levels at which production was projected by different countries, and other underlying assumptions (regarding area and yield, for example), were not specified in most cases. Nor are the bases for the consumption estimates (where given), to which the production plans appeared to be linked in some instances, clear<sup>1/</sup>. Finally, no further light was thrown on the figures during the Meeting. In fact, the paper was hardly discussed, although the Secretariat was requested to continue to collect and improve the coverage of such information in the future.

27. Despite their obvious shortcomings, however, the figures merit some analysis as they are. In the following paragraphs, an attempt is made to put the data in perspective by relating them to past trends or by making some simple assumptions in order to highlight their most obvious implications.

28. Production plans for 1973 were reported by 31 countries, including the United States, accounting for 54 percent of world output in 1968/69 ("world" including centrally planned countries, hereafter

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<sup>1/</sup> For example, since the consumption projections shown refer to domestic farm and mill consumption of raw cotton (rather than to consumption of cotton goods), it is not clear whether, or what proportion of, the anticipated increase in consumption is expected to result from exports of cotton textiles.

abbreviated as c.p.c.) and 78 percent of world output, excluding c.p.c. The 30 reporting countries, other than the U.S., produce 33 percent of world output (including c.p.c.) and 48 percent of it (excluding c.p.c.).

29. Of these, 25 countries (not including the U.S.) reported also estimates for consumption in 1973. Those reporting on both consumption and production account for 30 percent of world output (60 percent, if we exclude from the base both the U.S. and c.p.c.), and 22.4 percent of world consumption (or 44.7 percent, excluding the U.S. and c.p.c.) - indicating that nearly one-fourth of the group's output is produced for export. Thus, the sample of countries is not insignificant, particularly in the case of production.

30. According to their submissions, aggregate production in these 31 countries is projected to increase from 28.4 million bales in 1968/69 to 35.4 million bales in 1973, or at a rate of 4.5 percent per annum (see Annex II for details). U.S. production would recover from a level of 10.9 million bales in 1968/69 (compared to an average of 15.0 million in 1961/62-1965/66, i.e., before the sharp voluntary cutback in acreage three years ago) to 13.0 million bales; and production in the other 30 countries would grow from 17.5 million bales in 1968/69 (compared to 15.8 million five years ago) to 22.4 million bales in 1973. That is, of the implied growth of seven million bales for the 31 countries as a group, five million bales (or roughly 70 percent) would materialize in 30 countries outside the U.S. accounting for only 33 percent of world output (including c.p.c.) in 1968/69.

31. The implied expansion of seven million bales over the next five years in these 31 countries alone (accounting for 54 percent of total world output, including c.p.c., in 1968/69) is equivalent to the total growth in the cotton output of the entire world registered during the last seven years. If production in centrally planned countries is projected at half the rate achieved in the last five years (namely, at about two percent per annum) and output in the rest of the world (i.e., in non-reporting countries) is assumed to continue to expand at the same rate as in the past few years, world output in 1973 would work out to 64 million bales, compared to 52.7 million in 1968/69 and 48 million bales in 1962/63.

32. If world cotton consumption were to grow at the same rate of 2.0 percent per annum achieved between 1963/64 and 1968/69 in the next five years, it would reach a level of only 58 million bales by 1973, or eight million bales below the hypothetical 64 million bales arrived at above. In order for world consumption in 1973 to match the implied level in world production, demand would have to grow twice as rapidly as in the past - i.e., the growth rate would have to double from about two percent to four percent, per annum.

33. Finally, the implied future growth rate of consumption for the group of 25 countries reporting on the latter works out to 3.9 percent per annum. While this is higher than the rate of 2.2 percent achieved by these countries collectively in the last five years, it is nevertheless far below the implied growth rate of 5.3 in the cotton output of the group. As the ICAC Secretariat put it, "From the information supplied it is apparent that, generally speaking, the planned increases in consumption are much less than the anticipated increase in production. This leads to the conclusion, therefore, that the bulk of the increase in production will be made available for export."

34. We recognize that the picture presented above, given the shortcomings of the data noted in paragraph 26, is by and large hypothetical. But it seems appropriate to conclude that there are many forces at work making for a substantial increase in cotton production over the long run. This would imply continued downward pressures on prices in the future.

35. Although the above conclusion appeared to be obvious to most countries participating at the ICAC meetings, very few countries seemed disposed to entertain the idea of scaling down their production plans. At the same time, they did not relish the prospect, in the absence of such action, of an inevitable decline in cotton price. However, the majority of cotton producing countries appeared to place their hopes for an improvement in the future outlook for cotton on (a) a sharp voluntary cutback in U.S. production and export targets<sup>1/</sup>, and (b) improvement of demand prospects through research and promotion. A few countries stressed the necessity to consider the feasibility of an international cotton agreement.

36. With regard to the first possibility, the U.S. (in spite of its delegation's often repeated statement that the new administration was in the process of reviewing its cotton policy)<sup>2/</sup> does not seem to

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<sup>1/</sup> An obvious invitation to such action by the United States was made on behalf of developing countries in the opening speech by the Vice-President of Uganda: "I wish on behalf of developing countries to appeal to our colleagues in this Organization who belong to the more developed countries to give a helping hand to developing countries by avoiding executing policies which adversely affect the prices of raw materials produced by developing countries. This will enable the developing countries to sell their products, and in this particular case, cotton, at reasonable prices."

<sup>2/</sup> The current cotton legislation expires in July 1971 and blueprints for the new legislation must get underway soon.

be prepared to bear the burden of slowing down the future growth of world production unilaterally (at least in the near future), by a sharp and permanent curtailment of its own output, in order to avoid a decline in world prices. The head of the U.S. delegation, who is Under-Secretary of Agriculture, made the following remarks in this connection at the Meeting:

"We suggest that the oft repeated goal of 'a remunerative price that is fair both to the producer and the consumer' may be replaced by 'the highest level of producer price that is compatible with achieving a balance of production and consumption at the highest practicable level.' This objective takes full notice of our competition in the form of manmade fibers and suggests that we distinguish between alternatives by applying the test: which contributes to the higher level of cotton consumption?" 1/

37. These would seem to imply that the United States will not stand in the way of future downward adjustments in prices (by curtailing output) if these would help to improve the competitive position of cotton against other fibers.

38. With regard to the second possibility mentioned above, i.e., stimulating research and promotion, it must be noted that although all the countries who spoke on the subject paid lip-service to the need of expanding the International Cotton Institute's resources and activities, very few countries appeared prepared to join the Institute. (It may be remembered that only three countries have joined the six founding members since 1966, compared to nearly 50 countries exporting cotton.) The reason given most often for inability to join is the foreign exchange burden of the required contributions. Several countries indicated that they might find it easier to become members if the assessment per bale (one dollar, at present) were reduced, but this suggestion did not bring forth any reaction from the IIC. Thus, the prospects for a significant multiplication of IIC's funds in the near future are rather slim.

#### THE QUESTION OF AN INTERNATIONAL COTTON AGREEMENT

39. The question of an international agreement in cotton had been raised first in the ICAC in 1952 and again in 1954 and, more recently, in 1966. Obviously, no action was taken on any of these occasions, for

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1/ "United States Cotton Policy Statement," Kampala, June 1969 (mimeographed).

reasons explained elsewhere<sup>1/</sup>. The question became again, more or less inadvertently, a heated subject of discussion at the 1969 meeting of the ICAC, although it had not been placed on the agenda.

40. The question of collective action had been raised earlier this year by Latin American cotton-producing countries who met in Nicaragua in April under the auspices of the Inter-American Cotton Federation. In the policy statement issued at the conclusion of the meeting, known as the Managua Declaration, participating countries affirmed "support of the International Cotton Advisory Committee in the study of all means of international cooperation including the feasibility of an international cotton agreement" (see Annex III for the full text of the Declaration). During the first day of the ICAC Meeting, reference to the Managua Declaration was made by the Executive Director in his annual report to the Committee, and while the Director was pessimistic about the feasibility of an international cotton agreement<sup>2/</sup>, his reference generated comments later on which developed into a full-fledged discussion on this subject.

41. The revival of interest in the feasibility of an international cotton agreement (at least on the part of the signatories of the Managua Declaration, who raised the issue first) may be attributable, generally, to the worsening cotton situation and outlook in the current season, in terms of weaker prices, stronger pressures from man-made fibers, and increasing competition in the export market, etc. It also seems to have been induced by a feeling that perhaps 1968/69 was a good time to consider anew the question of collective action, since world stocks were at a more or less reasonable level. (At the ICAC's Lima meeting in 1966, when the subject was last discussed, a stumbling block had been the problem of disposing of or distributing the huge stocks held by the United States at the time.)

42. The deliberations at the recent meeting, as in 1966, took the form of considering the desirability of undertaking a study of the feasibility of an international cotton agreement. As was the case in 1966,

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<sup>1/</sup> See "Recent Developments Affecting Cotton," pp. 8 - 10.

<sup>2/</sup> "...experience has taught us that the conclusion of an agreement would be difficult. Unless an agreement included, or at least took account of the synthetic fibres, it could well be self defeating and we could find ourselves in real difficulty. And, let's not delude ourselves for one moment that the man-made fibres will be willing to become bed partners with cotton unless the bed sheets are predominantly man-made." ("Report of the Executive Director," Doc. 10, p. 4.)

there was not enough support for such action<sup>1/</sup>. Since no vote on this question was taken, it is difficult to speak of the degree of support or opposition in terms of numbers. It is interesting to note, however, that the language of the countries which opposed the undertaking this time was more explicit and much stronger than three years ago. Since the reasons for opposition were rarely given, it may be concluded simply that the majority of countries did not find it in their interest to change the status quo.

43. The Executive Director of the ICAC, noting the often cited difficulties that would be posed by the classic types of agreements (export quota, buffer stock, etc.) in the case of cotton, raised the possibility of considering some type of "informal arrangement" along the lines of those arrived at in the case of jute and hard fibers under the auspices of FAO. This generated some, but not sufficient, interest, although it would not be surprising if the idea were pursued further in the future.

44. Without passing judgment on the desirability or feasibility of an international agreement in cotton, it is important to note that, despite the recent failure of attempts to move closer toward collective action in this field, the possibility of an agreement being negotiated at a future date should not be ruled out. That is, the antecedents, by themselves, in this instance do not make up a case against the desirability, applicability or feasibility of an international agreement in cotton, for several reasons.

45. First, the question of a cotton agreement has always been discussed in rather nebulous terms. It has never been really clear, nor was it clear at all at the recent meeting, what an "international cotton agreement" would do (what would be its main objectives?) or could do. There has not been offered, at least in recent years, a clear elucidation of the above question, supported by the appropriate statistical analysis and material. Thus, it is quite likely that in taking a position on the desirability or feasibility of a cotton agreement in the past, the countries involved have been reacting to widely differing individual views of what such an agreement should do, would do, or could do for the world cotton economy as a whole, to begin with.

46. Second, this obviously complex subject has always been discussed at plenary sessions, i.e., at a very large gathering and, one might add, without an agenda of specific points for step-by-step consideration. Consequently, the discussions have generally lacked orientation or direction.

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<sup>1/</sup> The position of the U.S., which is of special interest, may be summarized as neutral.

47. Finally, two major hidden obstacles to a systematic discussion of the subject have been (a) the fear of developing countries that an agreement would sanction U.S. production at a high historical level, and (b) their hope or expectations (justified or not) that eventually the U.S. may become persuaded to make a sharp and permanent cut in its output and exports unilaterally, thus materially improving their prospects for the future. It is perhaps not an exaggeration to conclude that, regardless of any other difficulties, as long as there are uncertainties (justified or not) in developing countries' minds concerning such points, it is unlikely that there will be any significant drive toward an international cotton agreement.

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Table 1: RECENT TRENDS IN THE WORLD COTTON ECONOMY

(Million bales)

Year Beginning August 1	Average 1958/59- 1962/63	1963/64	1964/65	1965/66	1966/67	1967/68	1968/69 <sup>1/</sup>
<u>Consumption</u>							
United States	8.7	8.6	9.2	9.5	9.5	9.0	8.2
Western Europe	7.5	7.4	7.2	7.3	7.1	6.7	6.9
Japan	3.0	3.2	3.4	3.2	3.3	3.4	3.4
Other (excl. c.p.e.)	12.1	13.8	14.5	14.6	15.3	15.8	16.2
Gen. Planned Econs.	15.1	14.7	15.8	16.3	17.2	17.7	17.9
World	46.4	47.7	50.1	50.9	52.4	52.6	52.6
<u>Production</u>							
United States	14.0	15.3	15.2	14.9	9.9	7.2	10.9
Other (excl. c.p.e.)	19.0	22.2	23.0	23.5	22.8	23.9	25.5
Gen. Planned Econs.	13.5	12.9	13.9	14.8	16.2	16.6	16.3
World	46.5	50.4	52.1	53.2	48.9	47.7	52.7
<u>Area (million acres)</u>							
United States	14.7	14.2	14.1	13.6	9.6	8.0	10.2
Other (excl. c.p.e.)	46.9	49.8	50.7	50.1	49.0	50.2	52.0
Gen. Planned Econs.	18.2	16.7	17.3	17.8	18.3	18.7	18.6
World	79.8	80.7	82.1	81.5	76.9	76.9	80.8
<u>Yield<sup>2/</sup> (lbs/acre)</u>							
United States	453.6	517	517	527	480	447	512
Other (excl. c.p.e.)	193.6	214	217	223	221	227	233
Gen. Planned Econs.	351.7	369	384	399	421	423	419
World	279.8	299	303	313	302	297	312
<u>Exports</u>							
United States	5.0	5.7	4.1	2.9	4.7	4.2	n.a.
Other (excl. c.p.e.)	9.0	10.4	10.6	11.5	10.7	10.4	n.a.
Gen. Planned Econs.	1.8	1.8	2.1	2.4	2.5	2.6	n.a.
World	15.8	17.9	16.8	16.8	17.9	17.2	n.a.

Table 1: Continued

Year Beginning August 1	Average 1958/59- 1962/63	1963/64	1964/65	1965/66	1966/67	1967/68	1968/69 <sup>1/</sup>
<u>Imports</u>							
Japan	3.1	3.2	3.4	3.1	3.6	3.5	n.a.
Western Europe	7.0	7.2	6.5	6.8	6.8	6.5	n.a.
Other (excl. c.p.e.)	2.8	3.3	3.3	3.4	3.8	3.8	n.a.
Gen. Planned Econs.	3.3	4.0	4.3	4.2	4.0	3.7	n.a.
World	16.2	17.7	17.5	17.5	18.2	17.5	n.a.
<u>Stocks<sup>3/</sup></u>							
United States	8.0	11.2	12.4	14.3	16.9	12.5	6.5
Other Net Exporters	3.7	3.8	3.8	4.2	4.4	4.5	4.8
Net Importers (excl. c.p.e.)	5.9	5.8	6.8	6.2	5.8	6.2	6.8
Gen. Planned Econs.	3.1	2.5	3.0	3.3	3.5	3.7	3.5
World	20.7	23.3	26.0	28.0	30.6	26.9	21.6
<u>Centrally-Planned Countries</u>							
Exports to	1.7	2.5	2.5	2.5	2.2	2.0	n.a.
Imports from	.3	.2	.3	.6	.8	.9	n.a.
Net exports to	1.4	2.3	2.2	1.9	1.4	1.1	n.a.

<sup>1/</sup> Preliminary and partly estimated.

<sup>2/</sup> The yield figures may be slightly different from those obtained by dividing the production figures by the area figures shown above, due to rounding.

<sup>3/</sup> August 1 of first year shown.

Source: ICAC, Cotton-World Statistics, various issues, and "Cotton - Monthly Review of the World Situation," May - June 1969.

Table 2: RECENT TRENDS IN WORLD COTTON PRICES: C.I.F. QUOTATIONS AT LIVERPOOL

(U.S. cents per pound)

Origin	Specification	1965/66	1966/67	1967/68	March 1968	March 1969
United States	Orleans/Texas M1"	26.1	25.1	27.5	28.3	25.5
United States	Memphis SM 1 - 1/16"	29.3	28.7	33.8	34.2*	29.0
United States	California SM 1 - 3/32"	33.4	n.a.	39.8 <sup>1/</sup>	38.4*	32.5
Mexico	SM 1 - 1/16"	28.3	29.3 <sup>1/</sup>	31.9	32.2	28.5
Brazil	Sao Palo Type 5, 1-1/32"	25.0 <sup>1/</sup>	24.8	27.8 <sup>1/</sup>	29.4 <sup>2/</sup>	23.2 <sup>2/</sup>
Pakistan <sup>3/</sup>	289 F. Punjab S.G.	28.0	26.0	26.3	26.2	28.0
Pakistan <sup>3/</sup>	N.T. Sind R.G.	25.9	24.0	25.6	25.4	27.9
Syria	SM 1 - 1/16"	n.a.	28.2	32.2	33.8	30.2
Iran	SM 1 - 1/16"	28.1 <sup>1/</sup>	29.0	32.0 <sup>1/</sup>	33.2 <sup>2/</sup>	29.9 <sup>2/</sup>
Nicaragua	SM 1 - 1/16"	27.1	27.6	30.4	30.5	26.0
Greece	SM 1 - 1/16"	29.1 <sup>1/</sup>	28.9 <sup>1/</sup>	31.4	n.a.	31.6
Uganda <sup>3/</sup>	B.P. 52	31.9	32.0	36.7	37.5	35.6
U.S.S.R.	SM 1 - 1/16"	29.0	30.0	33.2	34.2	29.0
India <sup>3/</sup>	Bengal Desi Choice	25.9	21.8	24.1 <sup>1/</sup>	25.9	28.5
Peru	Tanguis Type 5	34.0	39.0	37.9	36.4	31.3
Peru	Prima No. 1, 1 - 9/16"	41.2 <sup>1/</sup>	43.9	47.7 <sup>1/</sup>	46.4	45.9
Sudan <sup>3/</sup>	G 5 L	38.9	33.9	35.2	35.2	38.3
Sudan <sup>3/</sup>	G 5 S	43.8	38.2	40.7 <sup>1/</sup>	39.5	43.9
U.A.R.	Dendera F.G.	39.6	40.4	44.7	45.4*	49.9*
U.A.R.	Menoufi F.G.	49.8	51.3	55.8	56.8*	63.4*

<sup>1/</sup> Average for less than twelve months.

<sup>2/</sup> February.

<sup>3/</sup> From 1967/68 on, shipment via Cape.

Source: ICAC, Cotton - World Statistics, various issues.

Table 3: COTTON PRODUCTION: RECENT TRENDS, BY COUNTRY

(1,000 bales)

	1959/60- 1961/62	1965/66	1966/67	1967/68	1968/69 <sup>1/</sup>
United States	<u>14,484</u>	<u>14,920</u>	<u>9,860</u>	<u>7,215</u>	<u>10,900</u>
<u>Others, excluding c.p.e.</u>					
Mexico	1,916	2,615	2,240	2,000	2,500
Nicaragua	177	510	530	470	420
Guatemala	102	410	290	355	325
El Salvador	195	240	180	160	190
U.A.R.	1,954	2,398	2,098	2,014	2,014
Turkey	887	1,500	1,760	1,825	1,855
Syria	512	655	585	585	710
Iran	455	700	530	545	690
Israel	51	101	116	131	150
Australia	10	91	85	150	170
Greece	334	344	405	443	340
Spain	370	375	415	300	315
India	4,025	4,600	4,600	5,330	5,000
Pakistan	1,425	1,795	2,110	2,315	2,450
Sudan	695	755	890	905	1,000
Uganda	256	375	360	285	285
Tanzania	156	310	365	325	250
Chad	102	155	205	175	200
Argentina	496	480	400	335	450
Brazil	2,050	2,500	2,050	2,750	3,250
Peru	620	544	471	390	400
Colombia	326	300	405	465	665
Others	<u>1,324</u>	<u>1,760</u>	<u>1,797</u>	<u>1,678</u>	<u>1,889</u>
Total	<u>18,438</u>	<u>23,513</u>	<u>22,887</u>	<u>23,931</u>	<u>25,528</u>
U.S.S.R.	7,099	8,930	9,480	9,460	9,450
China (Mainland)	6,666	5,800	6,500	7,000	6,700
Eastern Europe	71	95	145	115	120
Total	<u>13,836</u>	<u>14,825</u>	<u>16,125</u>	<u>16,575</u>	<u>16,270</u>
World Total	<u>46,758</u>	<u>53,258</u>	<u>48,872</u>	<u>47,721</u>	<u>52,698</u>

<sup>1/</sup> Preliminary.

Source: ICAC, Cotton-World Statistics, various issues, and "Cotton - Monthly Review of the World Situation," May-June 1969.

Table 4: COTTON ACREAGE: RECENT TRENDS, BY COUNTRY

(1,000 bales)

	1959/60- 1961/62	1965/66	1966/67	1967/68	1968/69 <sup>1/</sup>
United States	<u>15,352</u>	<u>13,615</u>	<u>9,552</u>	<u>7,997</u>	<u>10,175</u>
<u>Others, excluding c.p.e.</u>					
Mexico	2,020	1,959	1,733	1,703	1,795
Nicaragua	169	351	373	362	353
Guatemala	74	285	210	220	218
El Salvador	134	203	122	112	130
U.A.R.	1,611	1,972	1,930	1,688	1,515
Turkey	1,560	1,693	1,759	1,773	1,768
Syria	567	732	630	592	650
Iran	830	950	970	720	890
Israel	27	43	54	73	75
Australia	33	48	54	71	77
Greece	418	335	350	340	356
Spain	654	488	578	367	330
India	18,793	19,626	19,358	20,300	20,300
Pakistan	3,366	3,877	3,975	4,281	4,500
Sudan	1,019	1,086	1,200	1,193	1,160
Uganda	1,717	2,174	2,176	2,114	2,000
Tanzania	467	550	600	650	670
Chad	617	750	740	735	780
Argentina	1,237	1,095	815	723	900
Brazil	5,033	5,500	5,000	5,600	6,500
Peru	649	544	469	465	450
Colombia	384	395	412	431	590
Others	5,030	5,520	5,588	5,681	6,060
Total	<u>46,409</u>	<u>50,176</u>	<u>49,096</u>	<u>50,194</u>	<u>52,067</u>
U.S.S.R.	5,500	6,034	6,098	6,034	6,100
China (Mainland)	12,565	11,500	12,000	12,500	12,300
Eastern Europe	251	168	176	180	180
Total	<u>18,316</u>	<u>17,702</u>	<u>18,274</u>	<u>18,714</u>	<u>18,580</u>
World Total	<u>80,077</u>	<u>81,493</u>	<u>76,922</u>	<u>76,905</u>	<u>80,812</u>

<sup>1/</sup> Preliminary.

Source: ICAC, Cotton-World Statistics, various issues, and "Cotton - Monthly Review of the World Situation," May-June 1969.

Table 5: COTTON YIELDS: RECENT TRENDS, BY COUNTRY

(Pounds per acre)

	1959/60- 1961/62	1965/66	1966/67	1967/68	1968/69 <sup>1/</sup>
United States	<u>451</u>	<u>527</u>	<u>493</u>	<u>447</u>	<u>512</u>
<u>Others, excluding c.p.e.</u>					
Mexico	453	638	618	562	666
Nicaragua	501	695	680	621	569
Guatemala	659	687	659	771	714
El Salvador	696	566	705	682	700
U.A.R.	580	581	520	570	634
Turkey	272	241	330	492	504
Syria	432	191	261	473	522
Iran	262	352	261	362	371
Israel	903	1,120	1,027	865	956
Australia	145	916	757	1,006	1,055
Greece	382	491	553	619	457
Spain	270	367	343	391	456
India	102	112	114	126	118
Pakistan	202	221	254	258	260
Sudan	326	332	354	363	412
Uganda	71	581	520	64	68
Tanzania	160	269	291	239	178
Chad	79	99	132	114	123
Argentina	192	210	234	221	239
Brazil	195	217	196	235	239
Peru	457	492	416	453	478
Colombia	406	363	470	516	539
Others	<u>126</u>	<u>152</u>	<u>154</u>	<u>141</u>	<u>149</u>
Average	<u>190</u>	<u>224</u>	<u>223</u>	<u>228</u>	<u>234</u>
U.S.S.R.	617	707	743	749	741
China (Mainland)	254	241	259	268	260
Eastern Europe	135	270	394	305	319
Average	<u>361</u>	<u>400</u>	<u>421</u>	<u>423</u>	<u>419</u>
World Average	<u>279</u>	<u>313</u>	<u>302</u>	<u>297</u>	<u>312</u>

<sup>1/</sup> Preliminary.

Source: ICAC, Cotton-World Statistics, various issues, and "Cotton - Monthly Review of the World Situation," May-June 1969.

Table 6: WORLD APPAREL FIBER CONSUMPTION IN TERMS OF COTTON EQUIVALENTS  
(PERCENTAGE DISTRIBUTION BY FIBER), CALENDAR 1958-1968

	Cotton <sup>1/</sup>	Wool <sup>1/</sup>	Rayon and Acetate <sup>2/</sup>	Non- Cellulosics <sup>2/</sup>	Total <sup>3/</sup>
1958	68.4	5.0	21.4	5.2	100.0
1959	66.6	5.2	21.8	6.4	100.0
1960	65.6	5.2	21.7	7.5	100.0
1961	63.7	5.2	22.3	8.8	100.0
1962	60.7	5.1	23.1	11.1	100.0
1963	58.8	4.8	23.4	13.0	100.0
1964	57.2	4.4	23.3	15.1	100.0
1965	56.3	4.2	22.5	17.0	100.0
1966	54.7	4.1	21.3	19.9	100.0
1967	53.9	3.8	20.1	22.2	100.0
1968 <sup>4/</sup>	49.6	3.6	19.8	27.0	100.0

<sup>1/</sup> Based on mill consumption.

<sup>2/</sup> Consumption is assumed to be equal to production.

<sup>3/</sup> Excluding glass fibers.

<sup>4/</sup> Partly estimated.

Source: ICAC, "Report on Inter-Fiber Competition," Doc. 20-XXVII, June, 1969.

Table 7: RECENT TRENDS IN U.S. MARKET PRICES OF COTTON, RAYON AND POLYESTER COMPARED

Period	Cotton		Rayon				Polyester	
	List Price <sup>1/</sup>	Cotton Equi- valent cost <sup>2/</sup>	Regular List Price	Cotton Equi- valent cost <sup>2/</sup>	Modified List Price	Cotton Equi- valent cost <sup>2/</sup>	List Price	Cotton Equi- valent cost <sup>2/</sup>
(.....Cents per pound.....)								
1960	38	43	30	31	40	42	129	108
1966	29	33	28	29	36	38	81	68
1967	31	35	28	29	36	38	63	53
1968	35	40	28	29	37	39	61	51
<u>1969</u>								
January	32	36	28	29	38	40	61	51   41 <sup>3/</sup>
February	32	36	28	29	38	40	61	51   41 <sup>3/</sup>

1/ SM 1-1/16" mill price.

2/ For cotton, adjustment needed to convert to a net-weight basis; USDA conversion factors, used here, are: cotton, 0.88; rayon, 0.96; and non-cellulosics, 1.19.

3/ Price after additional adjustment for off-list selling, branded fibres; unbranded fibre is reported to be selling at still lower prices.

Source: ICAC "Report on Inter-Fibre Competition," Doc. 20, June 1969, p. 7.

ANNEX I:

List of Selected Conference Documents Distributed  
at the ICAC Meeting

1. "Cotton: Monthly Review of the World Situation" (devoted to the Annual Review of the World Cotton Situation 1968/69), May - June 1969, (Doc. 11).
2. Cotton Stocks and Prices (Doc. 21), in three parts:
  - (a) W.W. Shindy, "The Cotton Stock Cycle."
  - (b) "Statistical Analysis of Some Factors that Influence World Cotton Stocks and Prices," USDA, Foreign Agricultural Circular Cotton, FC 7-69, April 1, 1969.
  - (c) David S. Murray (Statistician, ICAC), "The Role of Carryover in a Balanced Cotton Economy."
3. Cotton Price Policies and Market Access Restrictions that Affect Cotton Trade (Doc. 19).
4. Preliminary Report on Cotton Production Plans Over the Next Five Years (Doc. 17).
5. Report on Inter-Fiber Competition (Doc. 20).
6. Government Regulations on Cotton, 1969 (Doc. 15).
7. Breeding for Improved Yields in Modern Commercial Varieties of Cotton (Doc. 14).
8. Questionnaire on Commercial Transactions and Shipping (Doc. 16 )
9. Bibliography on Man-Made Fibers and Inter-Fiber Competition.

## ANNEX II:

### Preliminary Report on Cotton Production Plans Over the Next Five Years<sup>1/</sup>

#### PREFACE (By the Secretariat)

By instruction of the 27th Plenary Meeting, producing countries were to supply the Secretariat with the best available estimates on production plans over the next 5 years. The response has been quite gratifying and 31 countries - representing 54% of total world production - have replied.

When the estimates are aggregated it shows that production in these countries could increase by several million bales. However, I think it is necessary to exercise caution in interpreting these data. In some instances the figures given are planned increases, and in others purely opinions.

The trend in cotton production will be determined by many factors, but particularly by the level of cotton prices and the export potential of the various countries. Even if the increases in production do not reach planned levels, the fact remains that there are many forces at work making for an increase in cotton production over the long run.

The Standing Committee also decided to request projections on a future level of cotton consumption in producing countries. From the information supplied it is apparent that, generally speaking, the planned increases in consumption are much less than the anticipated increase in production. This leads to the conclusion, therefore, that the bulk of the increase in production will be made available for export.

It is emphasized that the information in this document refers merely to production plans. These plans may change depending on the price situation and demand prospects.

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<sup>1/</sup> ICAC, Document 17-XXVIII.

COTTON PRODUCTION AND CONSUMPTION  
PROJECTIONS FOR 1973

Country	Production		Consumption	
	1968/69 Preliminary	1973	1968/69 Preliminary	1973
	(..... 1,000 bales <sup>1/</sup> .....)			
Australia	170	180	130	148
China (Taiwan)	1	3	385	575
Colombia	665	828	300	n.a.
Dahomey	35	106	1	n.a.
El Salvador	190	279	55	n.a.
Greece	350	553	200	208
Guatemala	325	365	45	n.a.
Upper Volta	35	91	5	5
India	4,900	6,600	5,400	6,600
Iran	690	922	250	277
Israel	150	300	120	140
Italy	10	10	1,030	1,000
Kenya	25	33	8	33
Korea	15	15	420	487
Malawi	20	80	7	14
Mexico	2,450	2,697	685	846
Nicaragua	420	500	15	35
Nigeria	240	323	120	155
Paraguay	45	105	18	23
Peru	400	650	75	208
Portugal	240	392	398	461
Sudan	875	900	65	n.a.
Syria	710	1,000	110	161
South Africa	75	80	200	273
Tanzania	250	500	20	59
Turkey	1,875	2,075	760	945
U.A.R.	1,940	2,200	875	950
Uganda	285	481	55	90
U.S.A.	10,900	13,000	8,300	n.a.
Venezuela	70	110	90	110
Yugoslavia	18	69	420	503
Total	<u>28,374</u>	<u>35,447</u>	-	-

<sup>1/</sup> 478 lbs net.

NA = Not applicable.

## ANNEX II: (Continued)

### United States

Projections of production and consumption must be limited to 1969 and 1970 because legislation on which current programmes and policies are based will expire at the end of 1970. Actual planted acreage likely to remain in the 12 to 13 million acre range.

The desired production level under current policy is just enough cotton to cover annual needs for domestic consumption and exports with no significant change in carryover from the 6.5 million bale total on August 1, 1968. These annual requirements may be projected at 13 to 14 million bales.

### India

On the basis of an estimated population of 606 million, per capita consumption of cloth at 15.5 metres, exports of cotton manufactures and raw cotton at 750 million metres and 0.29 million bales respectively and extra factory consumption of 0.29 million bales, the total demand for cotton is projected at 7.0 million bales by 1973-74. Assuming that the present average annual imports of 0.60 million bales may be reduced to 0.37 million bales of only superior and extra long staple cottons, the net requirements of Indian Cotton by 1973-74 would be roughly 6.6 million bales.

In order to meet this demand, a cotton production target of 6.6 million bales has been proposed for the Fourth Plan, to be achieved by 1973-74. This target is based on an estimated production of 4.9 million bales during 1968-69, the base year.

To achieve the above target, the present average production of 111 pounds per acre has to be raised to 161 pounds per acre.

ANNEX II: (Continued)

Brazil No production plans. Planting decisions left entirely to the farmers guided by their market expectations.

China (Taiwan) Domestic consumption will probably increase 10% per year.

Guatemala Future acreage will be determined by the market situation but in any case it will be very difficult to surpass the acreage and production of 1968/69.

Israel Goal for 5 years is to reach 120,000 - 150,000 acres, compared to present level of 75,000 acres.

Kenya Forecast of 33,000 bales consumption subject to large margin of error. Local market is in doldrums at present which could stop construction of new mills being planned.

Malawi Messrs David Whitehead & Sons are the only domestic cotton consumer. Projections of consumption require a good knowledge of the factors affecting the market which at present they do not have. On a five year basis cotton production plans are 1965 - 31,000 bales, 1970 - 50,000 bales, and 1975 - 100,000 bales.

Nicaragua It is likely that both acreage and production will continue to decline in the near future as a result of low prices now ruling in the market.

South Africa According to the latest Economic Development Programme the average annual increase in the production of textile goods, inter alia, is set at 7.3% for the programming period 1968-1973. A linear extrapolation of the production trend of cotton over the past 20 years indicate that production in 1970 and 1980 will be in the vicinity of 51.5 million pounds and 67.5 million pounds respectively.

Sudan No plans to change acreage and therefore crop will be at about its present level.

Syria Plan is to raise production to 200,000 tons minimum or 225,000 tons maximum.

Uganda 1970/71 target for production is 481,000 bales.

## ANNEX III:

### THE MANAGUA DECLARATION

The cotton situation has been characterized by a chronic disequilibrium between supply and demand, resulting in price instability. The market is now characterized by a pronounced downward trend in cotton prices and a very slow purchase rate. This situation presents serious problems and causes grave concern to the American countries, the majority of which are cotton producers, whose economies depend to a great extent on cotton production and sales.

In view of these circumstances, the Government of Nicaragua called a meeting of the cotton-producing countries of this continent, through the Federación Interamericana de Algodón (FIDA), in order to study the situation, exchange points of view, and examine at the same time the Agenda for the Twenty-eighth Plenary Meeting of the International Cotton Advisory Committee, which will take place in Uganda this June.

The following items were considered: Price trends in the international market; the need to stabilize cotton prices and the effects of price instability on cotton production and consumption; the cotton consumption and stock situation; protectionist policies in production and restrictions on trade; market conditions; manmade fiber competition; and the feasibility of an international trade agreement under current conditions.

Participating countries also exchanged views on the important role to be played by the industrialized countries and the cotton producing and importing countries if orderly marketing is to be attained.

After due consideration of the above, the First Pan-American Cotton Meeting recommends:

- I. Closer international cooperation to solve the problems which affect the cotton economy.
- II. Continuation of the analysis of the world cotton situation and, in order to find the most effective methods of cooperation, organization by the Federación Interamericana del Algodón of a Second Pan-American Cotton Meeting, during the Plenary Meeting of the International Cotton Advisory Committee in Uganda.
- III. Support of the International Cotton Advisory Committee in the study of all means of international cooperation, including the feasibility of an international cotton agreement.

Managua, D. N., Republic of Nicaragua, April 24, 1969.

Signatories: Brazil, Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Peru and the United States (as an observer).

Source: As reprinted in USDA, Foreign Agricultural Service, "Foreign Agriculture," Vol. VII, No. 26, June 30, 1969.