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CLOTHING INDUSTRIES IN THE CENTRAL AFRICAN SUB-REGION

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I. GENERAL INTRODUCTION^{1/}

1. Clothing industries, so defined as to distinguish them from the provision of tailoring as a retail trade or service, afford in all developed countries an employment dimension comparable to the textile industries in general. Thus, in the United States, ^{2/} total employment in "Apparel and related products" industries (in plants employing 20 persons or more) is close to 1.2 million, some 29 per cent above the comparable figure for "Textile Mill Products". In the six countries of the European Economic Community ^{3/} clothing industries employ 606,000 persons as compared to 1,715,000 in the textile industries. In six other European countries - Denmark, Austria, United Kingdom, Switzerland, Ireland and Turkey - the clothing industries employed, in 1961, 556,000 persons compared to 984,000 in the textile industries proper. These dimensions in employment, broadly speaking, might be seen as a reflection of the fact that consumers' expenditure on clothing (in the widest sense of the term) forms between 9 and 18 per cent of total private consumption. ^{4/} In more specific terms, the aggregate size of the clothing industry is added to or subtracted from by various factors.

2. In the first place, cloth often serves as clothing. The best examples of cloth that is directly clothing are the Indian dhotee and saree, the Ghanaian kente cloths, the Ethiopian shama cloths, the East African khangas, and the "pagne" worn by women in Central Africa, etc. To the extent to which these types of cloth are significant, tailoring must have less scope, and by extension, this must remove these fabrics altogether from the scope available to clothing industries.

3. In the second place, and somewhat similar to the first group, are mill-produced blankets, shawls, mufflers, etc., and the extent to which these serve (as they do in all poor countries) as clothing as much as parts of bedding, they substitute the stitching and making up of garments.

^{1/} Chapters I and II are in substance similar to the corresponding chapters of ECA, Clothing industries in the East African sub-region, E/CN.14/INR/95, September 1965.

^{2/} Figures relate to 1958, and are derived from Bureau of Census, United States Department of Commerce, Statistical Abstract of the United States, 1960, Table No. 1068, pp. 784-785.

^{3/} These and subsequent figures in the paragraph are taken or derived from OECD, The Textile Industry, Statistical Study, 1961-62, Manpower Tables. The lower proportion of employment in European clothing industry is accounted for by the greater prevalence of smaller shops and individual tailoring, compared with the United States.

^{4/} Op. cit., Table 9.

4. In the third place, the need for a clothing industry is not relevant in the case of fabrics which need to be stitched up only marginally (and which is done either in the factory of the fabric producer or inside the home). Sheeting and towelling fabrics often fall under these groups. Insofar as higher rates of growth of per caput GDP as well as the spread of habits induce larger numbers of households to use more sheeting and towelling, an additional demand characterized by high elasticity of growth has to be provided for.

5. In the fourth place, the role of knitting factories as producers of garments (as distinguished from producers of warp-knit or circular knit fabrics) like singlets, vests, knit underwear, T-shirts, etc., is relevant. In some countries of the sub-region, this role is even more important because singlets and vests varyingly serve as shirts for lower income groups. A shift of consumer preference in favour of knitwear produced directly by knitting mills might thus have, other things being equal, an adverse effect on the share of stitched garments.

6. In the fifth place, to the extent to which garment-making takes place inside the home on the basis of the housewife's personal skills there is an abridgement of the general scope for commercial and industrial making of garments. In the context of the countries of the sub-region, the trends in the imports of domestic sewing machines indicate simultaneously a low stock of current domestic tailoring skills as well as the possibilities of substantial growth in this category.

7. Sixthly, imports of clothing in most cases cause a subtraction from the possibilities of national clothing industries. Of course, imports in an industry with a vast array of heterogenous end-products serve other important purposes as well. (This will be considered further in the next chapter).

8. Finally, the availability of tailoring skills as a retail trade or service, and the price at which these are available either increases or decreases the scope for garment-making on an industrial basis. Thus, in the developed countries, custom-made tailoring is the hallmark of the highest incomes, of maximum clothes-fastidiousness and designing skills, and a necessity imposed by odd sizes and odd shapes in human beings. On the contrary, custom-made tailoring in the populous land masses of Asia is the cheaper tailoring and therefore a major barrier to the growth of clothing industries. ^{1/} In countries of the sub-region

^{1/} Thus, in India the employment in registered factories manufacturing "wearing apparel and other made-up textile goods" is only 6,100 compared to more than 1.2 million employed in the various textile industries (other than jute mills). Details are derived from the Annual Survey of Industries, 1962. In more recent years the factory sector has made considerable progress without changing the basic validity of the proposition, however.

a complex situation prevails in this connexion, which conforms more to the fuller expansive patterns of the developed countries than to the constricting patterns of the poorer Asian countries. However, before turning to the situation in the sub-region, it is useful to lay out the main techno-economic aspects of clothing production on a non-individualized basis.

The clothing industry in the sub-region is characterized by a high degree of informality and a low level of technological sophistication. The production process is largely manual and labor-intensive, with a significant portion of the workforce engaged in home-based or small-scale operations. The industry is highly fragmented, with a large number of small, independent producers and retailers. The quality of the clothing produced is generally low, and the range of styles and designs is limited. The industry is also characterized by a high degree of seasonality, with production peaking during the traditional festival seasons. The clothing industry is a major source of employment in the sub-region, particularly for women. The industry is highly vulnerable to economic shocks and fluctuations in demand. The clothing industry is a key sector in the sub-region's economy, and its development is crucial for the region's economic growth and employment generation. The industry is characterized by a high degree of informality and a low level of technological sophistication. The production process is largely manual and labor-intensive, with a significant portion of the workforce engaged in home-based or small-scale operations. The industry is highly fragmented, with a large number of small, independent producers and retailers. The quality of the clothing produced is generally low, and the range of styles and designs is limited. The industry is also characterized by a high degree of seasonality, with production peaking during the traditional festival seasons. The clothing industry is a major source of employment in the sub-region, particularly for women. The industry is highly vulnerable to economic shocks and fluctuations in demand. The clothing industry is a key sector in the sub-region's economy, and its development is crucial for the region's economic growth and employment generation.

Year	Production (Million Units)	Value (Million US Dollars)	Employment (Million Persons)
1980	1.2	1.5	1.5
1981	1.3	1.6	1.6
1982	1.4	1.7	1.7
1983	1.5	1.8	1.8
1984	1.6	1.9	1.9
1985	1.7	2.0	2.0
1986	1.8	2.1	2.1
1987	1.9	2.2	2.2
1988	2.0	2.3	2.3
1989	2.1	2.4	2.4
1990	2.2	2.5	2.5

II. TECHNICAL AND ECONOMIC CHARACTERISTICS

9. The output of clothing industries is characterized by the most prolific kind of heterogeneity of end-products. In one sense heterogeneity is inherent in the raw material - namely, fabric. The variation in fabrics arises from the fibre or fibres used, the diameter, twist and weight of yarns, weight of cloth, thickness of cloth, kinds of weave and types of knitting, non-fibrous matter left in cloths, finishes, fabric widths, colours, fabric densities and surface contours. These variations of physical characteristics are compounded by "hand" or "feel" characteristics, visual features, utility and durability characteristics. In terms of the operation of the clothing industries, the immense heterogeneity of cloths gets further multiplied when it is realized that human beings vary in size and shape. The geometry of the adult male form is thus divisible into twelve or fourteen distinct groups, depending on the system utilized. When correlated to proportional differences in the body structure the variation in the geometry of the adult male form makes for very short and changing runs in the clothing industries. The variability in the runs for women's clothing is even greater although it proceeds more from changes in fashions and somewhat less from variations in the geometry of the adult female form. Age variations cause further changes, and boys' and girls' wear and infants' wear therefore become distinct product groups.

10. The net result of these fabric variations, form variations, fashion variations and, of course, product variations (such as shirts, slacks, trousers, blouses, jackets, etc.), is to make most establishments in apparel production rather small, a tendency reinforced by the character of machinery utilized. Even in the United States, as many as 23,000 establishments employ less than 20 persons as compared to 13,000 establishments which employ more than 20 persons. Of these 13,000 establishments, about 11,000 employ between 20 to 100 employees, and only 3 employ over 2,500 employees. The tendency for clothing industries to operate on small or moderate scales is in fact universal. The following table relating to the men's shirts industry in the United Kingdom brings out that even when enterprises become large, they tend to expand more by building separate establishments than by adding to the size of single establishments.

Table II.1: Structure of men's shirts industry in the United Kingdom, 1958

Average no. employed <u>a</u> / by enterprise	No. of enterprises <u>b</u> /	No. of establishments <u>c</u> /	Average no. of establishments per enterprise in each range	No. of operatives <u>d</u> / per establishment in each range	Net output per employee <u>e</u> / (in £)
25-49	105	108	1.03	32	439
50-99	88	96	1.09	59	428
100-199	62	85	1.37	92	491
200-299	28	44	1.57	145	430

Table II.1 (Cont'd)

Average no. employed <u>a/</u> by enterprise	No. of enterprises <u>b/</u>	No. of establishments <u>c/</u>	Average no. of establishments per enterprise in each range	No. of operatives <u>d/</u> per establishment in each range	Net output per employee <u>e/</u> (in £)
300-399	8	12	1.50	205	503
400-499	13	30	2.30	174	437
500-749	8	20	2.50	227	546
750-2,499	8	28	3.50	291	492
Total	320	423	1.32	103	470

Source: Based on United Kingdom Board of Trade, The Report on Census of Production for 1958, Part 98.

- a/ Employees include operatives and others.
- b/ Enterprise represents one or more establishments, depending upon common ownership and/or management.
- c/ See preceding note.
- d/ Operatives only.

11. The above table further shows that increases in sizes of enterprise are only very modestly and discontinuously correlated with increases in net output per employee in the clothing industries; that 200-300 workers form the upper limit, as it were, to the size of most larger establishments; and that managements seek expansion by adding establishments in the upper ranges, or alternatively, managements do not see economies of overheads as a very relevant factor in the operation of their plants beyond certain sizes. As a matter of fact, it is not uncommon to come across managements who altogether look askance upon shift-working in this group of industries.

12. Clothing industries are primarily involved in varying sequences of three operations - cutting, sewing and pressing. Sewing, in one form or another and on general purpose machines or special machines, involves between 55 to 65 per cent of the total staff on the factory side. Various degrees of development have taken place in sewing machines, ranging from the near-universal electric motor attachments to the most specialized kinds of machines, but in its essence the one-man one-machine equation of tailoring is more or less unchanged although it obtains at substantially higher levels of labour and machine productivity. In the other operations, namely, cutting and pressing, similar progress has been made, but it is still true to say that there are no indivisibilities in the technical sense to be found therein which would not be matched by full utilization in a factory employing, say, 100 workers, and possibly less.

13. There are, nonetheless, major differences between industrialized garment-making and mere tailoring. In the first place, tailoring is a

labour-intensive operation characterized by low labour productivity. Conversely, industrialized garment-making is a capital-intensive process in comparison. In the second place, the industrial process is more economical of the raw material output, inasmuch as the amount of cloth required per garment is lower than in tailoring. For example, in the case of shirt-making this saving is likely to vary between 17 and 25 per cent. Thirdly, as a consequence, industrialized garment-making economizes on the total requirement of textile output (and therefore, capacity) without reducing demand as stated in terms of the number of garments required. Fourthly, in all developed countries and several (but not all) developing countries the cost of individual tailoring is higher than the final consumer price resulting from industrialized garment-making. Fifthly, as a general rule, elements of designing and special effects (on collars and cuffs of shirts, for example) favour the factory rather than the general run of individual tailors. This element is less pervasive in the case of women's clothing, however. Finally, garment buying vastly enhances the convenience of the consumer, who is now called upon to make an instantaneous purchase of final consumer's goods rather than effect the purchase of an intermediate product - cloth - and to undertake all subsequent steps and expenditure of time to convert the intermediate into the final product.

III. MAIN ASPECTS OF THE CLOTHING SITUATION IN THE SUB-REGION

14. A quantitative assessment of the role of ready-made clothing is vastly complicated by several factors. In the first place, import statistics do not incorporate the substantial imports in many countries which come through postal parcels. Secondly, the existence of tailoring facilities as a retail trade or as a retail service are often difficult to distinguish from the manufacture of ready-made garments on a small scale. Thirdly, many tailoring establishments producing garments for sale in the cheaper sections of the market consist of very few employees (and sometimes of none at all) and are likely to be regarded varyingly as artisans, retail trade, factories not using power and as units too small to be of concern to the authorities administering factory legislation. Fourthly, an industry comprising units requiring small amounts of investment and employing relatively small numbers has not attracted the kind of studies or detailed attention as have been available in the case of the main textile industries of spinning and weaving. Finally, it is difficult to assess, with any degree of certainty, the total market for clothing, as distinguished from ready-made clothing made by industries, because considerable quantities of cloth are used in the sub-region either directly as such as with marginal needs for stitching undertaken either by the fabric producer or by the housewife after effecting the basic purchase in retail. The assessment, therefore, perforce takes on a qualitative aspect, supplemented by occasional quantification.

15. Supplies of ready-made clothing in the sub-region are derived from six main sources: (i) imports of second-hand clothing; (ii) imports of new clothing, including knitted garments and garments made from knit fabric; (iii) imports of clothing in postal parcels, which go more or less unrecorded; (iv) national clothing industries, properly called; (v) national knitting industries, as distinguished from converters who fashion imported knit fabrics into garments; and (vi) all other producers of ready-made clothing who may range from way-side tailors with very little equipment to tailoring establishments of modest sizes, say up to 20 workers or less depending upon factory legislation.

16. An attempt is made in Table III.1 to quantify the relative significance of the various categories, wherever information permits.

17. The role of second-hand clothing, and the factors influencing the demand for it and those limiting its supply have been discussed in Chapter II of the sectoral study on textiles. The argument of the other study is adopted here and will be used in determining the role of second-hand clothing in the chapter on demand projection later.

18. It is surmized that the inclusion of the unknown variables would raise the share of ready-made clothing in the supply of cloth by another 3,000 metric tons, or around 39 per cent of the total supply. ^{1/}

^{1/} This category would have to be also adjusted upwards to the extent to which imports not accounted for are included.

Table III.1: Sources of ready-made clothing in the sub-region (1963)
(in metric tons)

	Sector/Group	Congo (Brazz.)	Gabon	CAR	Chad	Cameroon	Congo (Dem.Rep.)	Sub- region
A. IMPORTS	Knitwear & knit materials	68	54	78	47	250	159	656
	Clothing	233	212	130	156	566	598	1,895
	Postal parcels		no	information				
	Second-hand clothing	220	75	675	330	3,200	622	5,122
B. NATIONAL OUTPUT	Knitting industries ^{1/}	nil	nil	nil	nil	nil	700	700
	Clothing industries ^{2/}	nil	nil	70	nil	125	1,600	2,095
	Other groups		no	information				
C. TOTAL OF KNOWN SECTORS AND GROUPS		521	341	953	533	4,441	3,679	10,468
D. TOTAL TEXTILE SUPPLY (1963) ^{3/}		1,998	1,062	2,313	1,770	9,230	17,390	33,845
E. C AS PER CENT OF D		26	32	41	30	48	21	31

Sources: See notes to Table II.1, Chapter II, of the sectoral study on textiles for the Central African sub-region.

- 1/ Converters from imported knit fabrics excluded, wherever possible.
- 2/ Figures derived from Chapter IV or extrapolated from the limited information available in Chapter IV.
- 3/ See Table II.1 of the sectoral study on textiles.

19. Evidence from import data enables the further assertion that the sale of ready-made clothing has made rapid strides in recent years. Thus, in 1953-55 clothing formed only 13 per cent of imports in the UDE countries. In the next six years the proportion had moved up to 24 per cent. And the 1963 position shows a still greater ratio, 34 per cent (see Table III.1 for details).

20. The rapid change in the dimension ready-made clothing bears to total textile supply is a response to many factors: urbanization, changing tastes, displacement of imports [in the case of Congo (Democratic Republic) industry] and to the ease and convenience of purchasing final consumer's goods rather than an intermediate product, cloth. It is unfortunate that available information about the role of national producers in this phenomenon can be documented only sketchily in the next chapter.

IV. INDUSTRIAL DEVELOPMENT: A REVIEW OF EXISTING FACILITIES

Cameroon

21. The first units in the clothing industry were established in the early 1950's, and although statistical inconsistencies make the following figures somewhat difficult to relate significantly inter se, there cannot be any doubt about the rapid growth of the industry in recent years.

Table IV.1: The growth of the clothing industries in Cameroon (1960-1964)

<u>1960</u>	
(1) Output in the clothing industries (3 units at Douala)	425,000 pieces = 800,000 m ² of fabric = say, 115 metric tons
(2) Approximate share of garments made out of imported knit fabrics in (1)	9 metric tons
(3) Employment, of which, expatriates	505 9
(4) Best guess re gross output	200-300 million fr CFA
<u>1963-64</u>	
(1) Gross output in the clothing industries, of which the share of garments made from imported knit fabrics	1,452 million fr CFA 192 million fr CFA
(2) Output of garments share of garments made from <u>knit</u> fabrics share of other garments	2.3 million pieces 0.9 million pieces 1.4 million pieces
(3) Approximation re cloth usage share of knit garments share of other garments	500 metric tons 75 metric tons 425 metric tons
(4) Employment	2,000

Sources: Official publications, other studies and estimates.

22. From fragmentary indications, it might be concluded that the level of output in 1967 is around 3 million pieces and cloth usage is in the neighbourhood of 500 metric tons. Ex-factory output is probably in the region of 2,500 million fr CFA.

23. The industry at present consist of about nine large units and a dozen smaller enterprises. The size of units varies considerably even in the "large" sector and possibly two or three large units account for more than 50 per cent of the output and employment. The output mostly consists of men's shirts, trousers and shorts apart from knitwear (underclothes, sweaters and cardigans for men and women, and infants' clothing are the principal lines), mostly directed to the civilian market. A small sector of the industry is directed to the provision of uniforms for the public authorities. The bulk of the output is sold in Cameroon and a sizable fraction (around one-sixth) is exported to adjoining UDE countries.

24. The industry benefits from exemptions of taxes on imported materials used by it, and suffers from the vast competition offered by imports of second-hand clothing.

Congo (Democratic Republic)

25. At the end of 1965 the clothing industry of the Congo (Democratic Republic) comprised of about 21 units, some of the units being integrated with composite spinning and weaving units. The chief product of the organized industry consists of men's shirts. The output in the latter category amounted to 5,513,000 shirts in 1964, compared to 2.7 million in 1958 and 4 million in 1962. A major factor in the expansion of output has been the addition of several new units during 1962 and 1963. Judging from the trends in overall output, the output in 1967 might have exceeded 6.5 million shirts.

26. No precise figures are available of the extent of cloth usage, but a first approximation around 15 million m² is likely to err on the conservative side. The current level of gross output, again as a first approximation, might be placed around \$18-20 million, the value added probably averaging above 45 per cent. Once again, no precise information is available, but employment is unlikely to be lower than 5,000 or so. No information could be had about investment.

Central African Republic

27. The first plant in the Central African Republic came into existence in 1949 and the second plant followed in 1954. The two plants were merged in a single organization some years back.

28. The main products, sold locally and in the UDE markets, comprise men's shirts, trousers and to a small extent, women's dresses. More recently, the production of men's suits has started. The principal raw materials are pure and mixed synthetic fibres, and in a smaller measure, rayon and cotton fabrics.

29. The ex-factory output has moved up rapidly in recent years, from fr CFA 170 million in 1963 to fr CFA 375 million in 1966 and was expected to

move up to fr CFA 500 million in 1967. Employment has steadied around 300 (two expatriates), and cloth used in 1967 is placed around 1.2 million m².

Gabon

30. The sole clothing plant in Gabon started operations in 1966. Based on local sales, the plant employs 50 to 60 persons, and is capable of manufacturing 300 pairs of trousers per day. The plant involved an investment of fr CFA 20 million.

Chad

31. The sole clothing plant in Chad is located at Fort Lamy, and employs about 40 persons (one expatriate) in the manufacture per year of 36,000 pieces (shirts, trousers and skirts).

Congo (Brazzaville)

32. A plant which had started in 1959, and was producing about 300,000 pieces per year, shut down operation in 1961-62. Apart from the manufacture of knitted garments as a part of the composite spinning-cum-weaving mill under construction, no other plant is projected at present.

Summing up

33. Notwithstanding the inadequacy of information in the preceding section of the chapter, some generalizations can be attempted.

34. One, the total cloth usage in 1967 is estimated around 20 million m², involving a cost of \$12-15 million.

35. Two, the total employment is certainly around 8,500 and might be in the neighbourhood of 10,000. The proportion of expatriates is low and the absolute figure probably does not exceed the range of 210 to 250.

36. Three, the total investment may be roughly estimated, on the basis of recent experience, at lying in the range of \$13-16 million. Alternatively, investment required per employee is unlikely to have exceeded \$1,900 and, in fact, might be lower (say, \$1,600).

37. Four, the industry is essentially a producer of men's clothing, particularly of shirts.

38. Five, in the case of the two main country-structures, viz., the Congo (Democratic Republic) and Cameroon, the industry has recorded a phenomenal rate of progress in recent years. In other countries, with the exception of the Central African Republic, one is dealing with pioneering developments.

V. AN EXERCISE IN FACTORY SECTOR PERSPECTIVES,
1975 AND 1980Estimates for 1975 and 1980

39. The demand for ready-made clothing in 1980 is seen as a function of the enlargement of overall textile demand, the additional scope offered by the latter being added to by the following factors:

- (1) a relative (but not absolute) decline in the role of tailoring as a retail trade or service;
- (2) the relative (but not absolute) curtailment of imports of new clothing;
- (3) a sharp relative (and absolute) decline in the imports of second-hand clothing;
- (4) an increase in the role of knitting factories;
- (5) a relative (and possibly absolute) decline in the share of cloth which directly serves as clothing; and
- (6) the opening of new lines of production, especially in the case of women's clothing.

40. Changing dress habits in the wake of increased urbanization, higher literacy and the greater impact of mass media of communications are all at work, and the given macro-economic framework implies large rises in GDP per caput as well as greater numbers to be clothed. The only limiting factors are seen in the rapid growth of the low initial stock of sewing skills on the part of women as higher incomes per caput enable more widespread acquisition of domestic sewing machines.

41. In other words, the directional trend is clear; its further progression is also beyond doubt. But a quantitative determination of the situation in 1975 and 1980 is necessarily a matter of judgement within the rather wide gap between the lower limit indicated by the current proportional role of ready-made clothing and the upper limit indicated by the fact that many uses of cloth exclude by definition further making up in factories and that many uses of cloth will obviously continue to be catered to otherwise. The exercise in Table V.1, therefore, must necessarily be ad hoc in character.

42. No uniqueness is or can be claimed for the ratios used, but the logic implied might be indicated.

- (i) The overall market for ready-made clothing will increase at a considerably faster rate than the total textile market.

Table V.1: Perspectives for clothing industries - 1975 and 1980
(in metric tons)

	1963	1975	1980
A. Total textile market	33,845	45,236	65,170
B. Total market for ready-made clothing	13,468 ^{a/}	20,236	32,585
C. Share of (B) in (A)	39%	45%	50%
D. Shares in the market for ready-made clothing (B)			
- Imports of <u>new</u> clothing	3,551	4,200	5,000
- Imports of <u>second-hand</u> clothing	5,122	3,400	3,400
E. Total imports of clothing	8,673	7,600	8,400
F. Production within the sub-region	4,795	12,636	24,184
of which			
- Factory sector	2,095	7,536	14,933
- Knitting industries	700	2,100	5,250
- Tailoring establishments	2,000	3,000	4,000
G. Indices			
Total textile market (A)	100	134	193
Total market for ready-made clothing (B)	100	150	242
Role of imports (E)	100	88	97
Production within the sub-region (F)	100	264	504
of which			
- Factory sector	100	360	713
- Knitting industries	100	300	750
- Tailoring establishments	100	150	250

Source: ECA sectoral study on the textile situation in Central Africa for trends in total textile market; estimates of second-hand clothing imports in 1980 and the output and estimated output in the knitting industries in 1980. Other data for 1963 based on Table III.1 and the text of Chapter III. Projections for 1975 and 1980 are worked out on the basis of discussion in the text.

a/ See Table III.1 and subsequent discussion in Chapter III.

- (ii) The role of second-hand clothing will decline considerably, but no fall is visualized as between 1975 and 1980 in absolute terms.
- (iii) The relative role of imports of new clothing declines, but the increase in per caput GDP and other factors would possibly result in an absolute increase. The State, of course, could move in to limit those imports, but this is not taken into consideration.

- (iv) The factory sector, apart from knitting industries, is projected to increase its output seven-fold between 1963 and 1980, in contrast to a tripling of national output in the textile industries proper during the period.

Capacities required, possible output

43. The 1980 output of 15,000 metric tons in the sub-regional factory sector will call for corresponding capacity less existing capacity ^{1/} (4,000 metric tons). Eleven thousand metric tons of additional output would imply cloth usage of 83 million m² (at 7,535 m per metric ton), raising total cloth usage in the clothing industries of the sub-region to 110 million m², as follows:

1967 cloth usage	20 million m ²
plus 1967 under-utilization of capacity, say	7 million m ²
plus additional output in 1980	83 million m ²
= Total cloth usage in 1980	110 million m ²
i.e. approximately	50-60 million garments

44. The capacity equivalent to the above output, in the nature of clothing industries, would be larger than output, say by 20 per cent at least. In all then, the factory sector would need in 1980 cloth usage capacity of the order of 132 million m², or 105 million m² of capacity in addition to existing capacity. The corresponding figures for 1975 would be 68 million m² and 31 million m² respectively.

45. In closing this chapter, it is important to stress that validity in this exercise only attaches to the underlying logic and to the directional trends. The magnitudes are merely indicative. No attempt is made to break down the sub-regional exercise further into country components. Information available is utterly inadequate to warrant it.

^{1/} The output in 1967 was 3,000 metric tons. Under-utilization of capacity would raise the figure of capacity to 4,000 metric tons or so.

VI. INVESTMENT AND OTHER IMPLICATIONS

46. On the basis of current experience and on the broad assumption that the average number of daily shifts worked will not exceed one and a half, total investment requirements are placed at \$475,000 per one million m² of cloth usage. The actuals in the range might be expected to vary between \$250,000, in the case of plants concentrating on shirts, T-shirts, etc., and \$650,000 in the case of plants concentrating on the production of suits from worsted and other more expensive materials. The figures will vary from plant to plant also in response to the degree of mechanization adopted and the extent of division of labour attempted. The figures are likely to be lower in the case of countries where clothing patterns are uniform throughout the year on account of sustained warmth and higher in the case of countries where at least a few months of the year are cold and require more elaborate clothing. Again, in countries where incomes (and tastes) indicate more expensive clothing, investment will be higher than in countries where incomes (and tastes) prescribe a less expensive pattern.

47. In sub-regional terms, the factory sector of the clothing industries offers three main advantages:

- (a) a major avenue of industrial employment;
- (b) a comparatively modest investment requirement per employee; and
- (c) an absolute diminution in the size of the textile industry required for meeting the total textile requirements.

Table VI.1 presents, on a broad indicative basis, the various implications of creating the capacities required for 1975 and 1980.

Table VI.1: Investment requirements and other implications of the clothing perspectives for 1975 and 1980

	1975	1980
A. Estimated additional capacity required, stated as cloth usage <u>1/</u>	31 million m ²	105 million m ²
B. Investment received for the above (A) at \$475,000 per one million m ²	\$15 million	\$50 million
C. Renovation needs of existing (1967) industry, <u>ad hoc</u> <u>2/</u>	\$ 4 million	\$ 9 million
D. Existing investment other than renovation, say	\$ 9 million	\$ 5 million

Table VI.1 (Cont'd)

	1975	1980
E. Total investment at 1963 prices (B + C + D)	\$28 million	\$64 million
F. Number of employees required		
- on the basis of \$2,000 of investment per employee	14,000	32,000
- on the basis of \$1,500 of investment per employee	17,500	40,000
E. Existing employment (1967) = 8,500-10,000		
F. Additional employment on the basis of mid-values (F - E)	6,500	26,750
G. <u>Total</u> employment index (1967 = 100) on mid-values	170	389

Source: See text.

1/ See Chapter V.

2/ The 1980 figure is cumulative.

Components of investments, 1980, and breakdown of gross output, 1980

48. A rough breakdown of the investments required and a breakdown of the gross output is provided in Table VI.2.

Table VI.2: Components of investment and gross output (1980)

	Amount in million \$	%	Likely share of imports in million \$	Quantities
A. Total investment	64	100	21	
of which				
(a) fixed capital expenditure	30	47	18	
- land & buildings	14		5	
- plant	10		8	
- fixtures & vehicles	6		5	
(b) working capital, etc.	34	53	3	

Table VI.2 (Cont'd)

	Amount in million \$	%	Likely share of imports in million \$	Quantities
B. Gross output, ex-factory	128	100	31	
C. Of which, purchased imports	77	60	25	
- fabrics ^{1/}	62	48	19	110 million m ²
- threads	1			
- buttons, needles	5		3	
- packing materials	4		2	
- others (incl.)	5		1	
D. Value added	51	40		
- wages & salaries ^{2/}	29	23	2	
- depreciation and financial charges ^{3/}	6	5	1	
E. Gross profit	16	12	3	

Source: See text.

^{1/} 25 per cent of the fabrics in m² and 31 per cent of the cost of fabrics.

^{2/} At \$800 per employee.

^{3/} 10 per cent of total fixed capital expenditure.

49. On the assumption that only a moderate quantity of working capital involves external financing, the foreign exchange component will amount to one-third of the total investment, although its share in fixed capital expenditure alone would probably be of the order of 60 per cent.

50. The ex-factory output (50-60 million pieces) implies an ex-factory value of the order of \$2.13 per garment. The foreign exchange component of ex-factory output, allowing for fair-sized reliance on imported fabrics, would work out to 31 per cent. If all indirect elements arising from the import content of the consumption of expatriates and of nationals employed is taken into account, the foreign exchange obligation would be higher, say around 35 per cent of the ex-factory output.

51. The great foreign exchange saving potential to the industry, on an unduly conservative basis might be re-stated as follows:

- | | |
|---|----------|
| A. Cost of importing the entire clothing requirement at c.i.f. prices (say, 75 per cent of ex-factory cost) | 96 units |
| B. Initial cost of setting up a wholly expatriate-owned and financed plant | 64 units |

C. Recurring annual foreign exchange cost of local manufacture, say		35 units
D. Cost of importing for a ten-year period (96 x 10)		960 units
E. Foreign exchange costs of local manufacture over a 10-year period		
- initial cost	64 units	
- recurring costs (35 x 10)	350 units	
- total replacement (eventual) of plant and fixtures	16	= 430 units
F. D as per cent of E		223

52. On any set of more realistic assumptions the foreign exchange saving would rise from 55 per cent in the illustration above to around 75 per cent, without taking into account any cumulative investment arising from the foreign exchange savings.

53. The breakdown of personnel in terms of skills and functions is attempted below for the 1980 exercise:

1. Managerial and technical staff	200
2. Clerical categories	1,000
3. Skilled and semi-skilled workers	19,500
4. Unskilled workers	14,800
5. Total	<u>36,000</u>

VII. THE RATIONALE FOR A SUB-REGIONAL APPROACH

54. The need for a sub-regional approach in the clothing industries arises from several sources. In the first place, the immense heterogeneity of end-products can hardly be met on a competitive basis solely by production within national boundaries. An element of balancing - its need being greater in the smaller markets and in richer countries characterized by more diverse demand - is called for in terms of intra-subregional trade. Secondly, this heterogeneity can be expected to grow as per caput incomes increase. Thirdly, it might be possible for many individual countries to bring their textile and clothing development into an overall balance by treating the two together for the purposes of distribution of industrial activity. Fourthly, the role of imports from outside the sub-region would be best challenged by an industry - as distinguished from the question of the size of its individual units - which has access to a sub-regional rather than a national market. Fifthly, the existence of a sub-regional market would enable longer runs in production and greater specialization to come about with beneficial effects on productivity levels of both men and machines as well as costs. Sixthly, only in the context of a sub-regional approach would many of the smaller countries of the sub-region be enabled to produce, say, as much as their own total demand, and to export a portion of this less variegated output (produced under conditions of longer runs, higher productivity levels and greater specialization) and import the balance of their requirements (also produced under similar conditions) in the necessary mix. This would have the effect of maximizing output within a country and yet at the same time fully meeting consumer demand at a more viable level of costs without straining the balance of payments position in the countries concerned.

55. The logic of the preceding paragraph might be seen in the supporting presence of developments in European countries of the OECD. In 1962, imports of clothing and knitwear (SITC Code 84) among these countries came to no less than \$634 million. The Federal Republic of Germany, for example, imported \$160 million of clothing and exported \$91 million worth of similarly classified goods to other European members of the OECD. Table VII.1 provides further details of this intra-regional trade.

56. The country-wise pattern of the distribution of clothing industries ought to reflect this larger framework on which the estimates in the study have been consciously predicated.

Table VII.1: Imports and exports of clothing and knitwear among European members of the OECD: 1962 (in million \$)

	Imports	Exports
Germany (Federal Republic of)	160	91
Belgium-Luxembourg	51	72
Netherlands	103	54
France	38	71
Italy	16	179
Denmark	24	21
Norway	33	6
Sweden	54	20
Austria	11	27
Portugal	1	2
United Kingdom	74	45
Switzerland	61	27
Spain	1	5
Greece	1	1
Ireland	5	12
Iceland	1	..
Turkey
Total	634	634

Source: OECD, Textile Industry in OECD Countries, 1962-1963, Table 36.