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**TEXTILE AND CLOTHING INDUSTRIES IN CMEA COUNTRIES:
PLANS AND TRENDS OF RESTRUCTURING**

**The study prepared by S.Petukhova, Cand.Sc.(Econ.),
Institute of Economics of the World Socialist System,
USSR Academy of Sciences**

Moscow - 1985

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INTRODUCTION

The growth of the textile and clothing industry output and a further satisfaction of popular demand is a fundamental objective for a long-term development of national economies of the CMEA member countries in the 80-s. Meeting it will greatly advance a successful fruition of the social programme to raise material and spiritual well-being of the working people adopted by Congresses of the Communist and Workers parties of the socialist countries.

The textile and clothing industry of the European CMEA member states occupies the leading position in light industry's internal branch structure. Substantial structural diversification within individual sub-branches imposed by scientific and technological progress ensues structural ramification in micro-branches emergence of new sub-branches and productions, of "small-scale" sub-branches specializing in producing individual items or even semi-finished articles.

The European CMEA member countries community has attained a high degree of self-sustenance in textile and clothing product. The textile and clothing industry development is characterized both by a home production and by mutual exchanges within the framework of the community which permits to meet the major part of demand in these commodities.

Thanks to various forms of inter-state cooperation including foreign trade, industrial, scientific and technological cooperation, all the community states have reached high absolute standards in producing basic textiles and clothing which enables them to meet the internal consumer demand and to be stable exporters. The textile and clothing industry /TCI/ of

these countries is sufficiently developed and has a wide-range branch structure. For the last 20 years the output of these products in the socialist countries has averaged a 2,5 folds rise.

The un surge in the textiles and clothing industry production in the CMEA member countries has made it possible to substantially expand their share in the world output. Thus in 1982 the CMEA member countries share constituted 37,5 per cent of the global output in all types of textiles (vs. 13.7 per cent in 1960) including 23.5 per cent of cotton textiles (13%), 38,2 of woollen textiles (13%) and 41.1 per cent of clothing.

The advances made by the CMEA member countries in the field of textile and clothing industry are determined by an interaction of basic structural factors of major importance: the labour (availability and qualification of manpower resources), raw materials, investment policy (volume and structure of capital investments in the branch), scientific and technological progress, consumer demand and fashion, international division of labour. In the face of the growing shortage of manpower and a high degree of wear of fixed assets in individual branches of the textile and clothing industry and a shortage in raw materials along with their growing costs, the intensive factor for the development of branches that is an acceleration of scientific and technological progress becomes decisive. In this context the community began introducing target-oriented programmes of cooperation in the field of priority directions to develop the consumer goods output.

The prospective objectives facing the CMEA member countries are planned to be met by a wide-scale introduction of up-to-date technology and resources-saving technology comprising the means

of automation, micro-electronics and robotics. To offer the population a wider supply of superior-quality textiles and clothing the CMEA community countries take joint actions to consolidate raw materials stocks, modernize and technologically reequip the branches. They develop cooperation and mutual exchanges and strengthen economic links with other regions of the world including the developing countries.

The last decade is characterized by a more active participation of the CMEA member states in the international economic relations and the path towards a priority development of mutual cooperation does not limit at all any possibility of mutually beneficial exchanges with other groups of states. The developing countries are the producers and suppliers to the world market of numerous textiles and clothing the CMEA member countries are interested in, therefore potentially they may be partners in foreign trade agreements. In the Comprehensive Programme for the Development of the Production of Consumer Goods and the Sphere of Services adopted in the USSR in October 1985 foreign trade ties and those with the developing countries occupy a privileged position.

This work examines the phenomena that took shape in the 70-s and early 80-s in the sphere of production development and in the textiles and clothing commodities trade between the CMEA member countries, the participation of the Community countries in the international division of labour and the fundamental prospective trends for the development of the CMEA member countries textile and clothing industry.

I. EUROPEAN CMEA COUNTRIES IN WORLD PRODUCTION AND TRADE IN TEXTILES AND CLOTHING

§1 Comparative analysis of regional development of the textile and clothing industry

The basic particularity of the textile and clothing industry development in the 70-s and early 80-s was a declining growth rate in producing textile semi-finished goods and clothing in the developed capitalist countries and an increasing pace of this production in the developing countries. At the same time the textile and clothing industry of the first group of countries fluctuated whereas in the newly-free countries the production was marked by great dynamism. Declining business activity was caused by aggravating economic difficulties and by increased textile and clothing imports.

The clothing production in these countries remains labour-intensive, the introduction of new machinery to the clothing production runs at a slow pace since within this branch there exists a lot of small companies unable to invest in perfecting the technology of production. As a result the competitiveness of their output declines offering a favourable situation for suppliers making use of cheaper labour. Thus the South European countries have succeeded in raising the textiles and clothing production level and in increasing their sales.

The leading position in textiles and clothing output among the developing countries and territories is held by

the "great trioka"- Siangan (Hong-Kong), Taiwan and South Korea, the impact of the ASEAN countries is also growing. The total output of textile enterprises of these countries has risen 2,5 times within 1970-1981.

Despite the progress made, the textile industry of the developing countries lags behind that of the capitalist world in the level of machinery and equipment. Lagging behind is also notable in competitiveness of clothing produced in the developing countries: having a low payroll potential the companies of these countries are behind the manufacturers of the leading capitalist countries in such departments as the quality of commodities, fashion designing, speed of production and delivery, customers servicing.

The textile commodities foreign trade in the capitalist countries has registered a pronounced upward trend. In 1971-1981 the cost expression of exports of these commodities has risen over 4,5 times (the annual growth rate amounted to nearly 15%) which was caused by the sky-rocketing prices in the world market.

In the 70-s and early 80-s a further priority growth of semi-finished products and ready-made goods constituted a characteristic feature of exports development. In 1971-1981 the average annual growth rate in costs of textile raw materials exports amounted to about 11% whereas that of yarn and fabrics -14 and clothing -19%. Another characteristic feature of textiles export development was a further increase in exporting chemical fibres and their products, mostly synthetic and staple filaments, yarn, fabrics and clothes. The growth rate of chemical fibres fabrics was 1,5 times higher than the corresponding figure for cotton fabrics. However it is note -

worthy that in the 70-s the exports of chemical fibre fabrics slowed down versus that of the preceding decade when the trade in cotton fabrics developed at a faster pace especially since the second half of the 70-s. It was caused largely by declining production costs following the introduction of highly effective methods of producing fabrics and ameliorating their quality.

§2. The CMEA member countries in world production and trade in textiles and clothing

The textile and clothing industry of the CMEA member countries fulfils an important social and economic task participating in material satisfaction of the ever-growing paying capacity of the population and occupying the leading position both in the gross output costs in individual countries and in the number of the employed.

In the European CMEA member countries the share of textile (including knitwear) and clothing branches averages from 6,2 to 9,4 per cent of the gross output, in the USSR- 13,3 per cent correspondingly.

As a result of great labour intensity in the textile and clothing branch its employment share in the structure of the whole industry in all the countries is higher than the same value in gross output and amounts to 10.0-14.3 per cent in the European CMEA countries. /Appendix, Table 8/.

Despite the fact that in absolute terms the share of

the textile and clothing industry-employed personnel of the CMEA member countries has increased by a little over 2 per cent in the majority of countries (excepting German Democratic Republic and Czechoslovakia), there is still a tangible shortage of manpower. In this connection steps are being taken to rationalize working hours and cut down the expenses paid from the cost of a production unit. In 1983 (vs. 1970) the textile and clothing industry productivity indexes were higher than the average in the German Democratic Republic, Poland, Romania and Czechoslovakia (Appendix; Table 9). The average equipment potential of a worker in the socialist industry of different countries has registered an increase within the range of 118-122% for the last three years of the current five-year period.

The share of the textile and clothing branch in the fixed capital cost is lower than that of the majority of other branches. Despite considerable, in absolute terms, capital investments in the textile and clothing industry, particularly in the early 70-s, their share in the structure of capital funds of the whole industry declines; the share of the above branches in investments of the whole industry has also averaged a drop from 5,1 in the mid 70-s to the current 2,6%. In the USSR the share of capital investments in the textile and clothing industry has remained basically the same - 3% (Appendix, Table 10). Let us note that in the last decade the cost of fixed capital of the textile and clothing industry the world over has registered a substantial rise owing to increasing costs of the latest generation equipment (electronics, lasers, robotics) and to a growing rate of updating the basic machinery. Thus in the CMEA member states this trend is cur-

rently not very explicit despite the reconstruction and modernization set upon.

The importance of exports in the textile and clothing industry commodities making up the bulk of the whole light industry exports is especially great in Romania, Hungary, Czechoslovakia and the German Democratic Republic (from 16% to 14,1 of gross exports)

In recent years the clothing industry of all the CMEA member states is developing at an accelerated rate which is closely connected with the changes occurring in the structure of popular demand and with an increased demand for ready-made clothing. During 1981-1983 the growth of the clothing industry gross output amounted to 6%. In most European CMEA member countries the clothing industry consumes from 40 to 55% of home-manufactured fabrics (Hungary makes an exception owing to the lack of close intr-branch cooperation between textile and clothing branches and the latter consumes mostly imported fabrics as a basic material, including those supplied on terms of cooperation agreements with foreign companies

Table 1 features the main development indications of the textile and clothing industry.

Table I
Textile and clothing industry share
in the structure of all industrial
production of the CMEA European
member states in 1983.

/ % /

Share	PRB	HPR	GDR	PPR	SRR	USSR	CSSR
Gross output	7,6	6,2	7,4	9,4	10,9*/	13,3	6,7
Manpower involved	14,3	11,2	10,0	11,8	17,1	-	11,7
Volume of capital investments in the branch	2,2	2,8	2,0**/	3,4	2,0	3,0	3,2
Export costs ***/	9,9	15,7	14,1	11,8	16,8	1,8	16,2

*/ for 1982

**/ share of textile industry only

***/ export of all industrial consumer goods

Thus the trend of TCI development in the CMEA member states as such corresponds to the fundamental world tendencies in light industry where the textile industry share in the gross production is equally decreasing and constitute 7-8% in the market economy developed countries and 20-30% in the developing countries¹⁰/ In detail ref. Appendix, Table 1/

Source: Calculated following the data of the "Annual statistical record of the CMEA member states", 1984, p. 65,116;

119,135-143.

II. PRESENT STATE AND TRENDS IN TEXTILE AND CLOTHING INDUSTRY IN EUROPEAN CMEA COUNTRIES.

§I. Dynamics of production in the textile and clothing industry of the CMEA member states.

Initially the commodities production in the textile and clothing industry /TCI/ in different European CMEA member countries were on unequal levels. This was a result of various degrees of differentiation and nationalization in the industry, production concentration, technology, qualification of manpower, structure, volumes and quality of production.

The CMEA member states TCI branches developed depending on internal production demand, on traditions and available resources to meet primarily the home demand and to develop and broaden the export. Different forms of cooperation between interested parties have gradually developed and come to fruition. A considerable development in producing the TCI commodities has been reached in the wake of this in the CMEA states.

A major feature in the TCI development in 60-70-s was an increase in the TCI production on the basis of large capital investments with an increase in the share of fixed capital funds' active part in the conditions of ample manpower and natural raw materials. In late 70-s and early 80-s TCI rates of development become more moderate.

A new situation emerged at the turn of 70-80-s in the TCI development was caused by the course taken by a number of countries to intensive economic performances and the exhaustion of extensive growth sources, by a sharp aggravation of raw materials and energy problems and the necessity of

TCI equipment basis rapid modernization and a shortage in manpower. The decisive factor for the intensification of production is accelerating scientific and technological progress which is expressed in many forms but mostly in the modernization of the existing industrial potential and in constructing new enterprises with high technological and economic parameters. Productivity goes up entailing an increase in production volume along with a relative staff cut. The above trend has become reality - primarily - in the countries where the branches involved had highest growth rates. For instance in mid 70-s the textiles production was growing continuously while the number of workers decreased. The clothing industry followed the same trend.

Under the influence of scientific and technological progress, fashion fluctuations and consumer demand the production structure also changed mostly via rapid development of new resources-saving sub-branches and industries permitting to save raw materials, step up productivity and turn out commodities with a better consumer appeal. Since late 60-s the production of knitwear, non-woven fabrics, silks and synthetic fibers and synthetic-natural mix fabrics, synthetic leather and materials clothes and garments combined with natural stuffs has registered a priority growth. If within 1960-1983 the gross volume of textiles output grew by 17,6%, silks registered a 155% growth, knitted outerwear rose 3,5 times, linens - 2,2 times, non-woven fabrics/1970-1983/- 4,5 folds. /Ref.Tables 11-17 in Appendix/.

The development trends of the TCI of the CMEA member countries bear witness to a leveling of the branch structure. At the same time the share of individual countries in the total volume of the TCI output is changing (Table 2, Appendix). The Soviet Union's share in producing all types of commodities remains high and stable. In the foreign European countries the TCI develops at a fast pace making noticeable strides forward. Towards the early 80-s due to an accelerated-rate development the share of Bulgaria and Romania has grown consistently, though in the 60-s a production level of these countries in these branches lagged behind its counterpart in such industrially developed countries as GDR and CSSR. The GDR and CSSR share has declined correspondingly. (Table 2).

The absolute production growth (Appendix, Tables 11-17) leveling up production output create a basis for elaborating proposals for a broader mutual exchange in the TCI commodities among the European CMEA states to promote a further and more effective branch development to provide a better satisfaction of popular demand in high-quality and larger assortment goods.

The larger part of country's inner market demand is met with home-produced commodities. The per capita commodities output in the textile and clothing industry is leveled up in all types of productions and the ratio between the extreme values / countries with the highest and lowest production levels per capita/ decreases. (Tables 3/

Table 3

Industrial commodities production per capita

Commodity	European CMEA countries, average value			Extreme values ratio	
	1960	1970	1980	1960	1980
Textiles					
total, m ²	31,3	36,9	40,5	1:2,6	1:1,3
including					
cotton	22,5	25,9	27,3	1:3,0	1:1,3
wool	2,7	3,2	3,6	1:5,3	1:2,3
silk	2,8	4,1	5,4	1:4,7	1:1,7
knitted					
outwear/pieces/	0,9	1,5	2,6	1:6,4	1:3,5
knitted					
underwear/pieces/	2,6	3,9	5,1	1:6,1	1:1,8

Source: Calculated following the data in "USSR National Economy in 1980", Moscow, Finansy i statistika, 1981, p.72-73; CMEA member states statistics year-book, 1983, p. 114.

Towards the beginning of 80-s the CMEA member countries market was quantitatively saturated by the TCI principle commodities, therefore in the first three years of the current five-years period there has been a certain decrease in some commodities output with an exception of cotton and woollen fabrics. In 1983 the annual per capita textiles production in the CMEA member countries averaged 40,0 m², including cotton textiles -26,9, woollen -3,2, silk - 6,5m², knitted outwear and underwear - 7,5 pieces. The assortment and quality of goods requirements have been raised considerably

Table 2

Changing share of individual CMEA member states
in principle TCI commodities production

	PRB		HPR		GDR		PPR		SRR		USSR		CSSR	
	1970	1983	1970	1983	1970	1983	1970	1983	1970	1983	1970	1983	1970	1983
Textiles														
total	2,7	3,2	3,3	2,7	5,6	4,8	10,1	7,7	4,6	6,6	66,9	68,0	6,2	6,0
Cotton fabrics	3,1	3,5	3,4	2,9	4,9	4,3	9,4	7,4	4,8	6,5	67,9	68,6	5,7	5,3
Woolen fabrics	3,3	5,5	3,3	2,6	11,1	7,5	12,3	11,7	5,2	9,2	57,5	55,7	7,2	7,5
Silk fabrics	1,3	1,7	3,5	2,2	7,1	7,2	9,5	6,1	2,9	4,4	69,9	73,9	5,8	4,0
Non-woven materials	2,7	5,0	4,9	2,1	41,6	20,1	7,3	7,4	4,3	5,0	27,3	40,5	12,0	11,3
Knitted outdoor	4,1	5,7	3,2	3,6	5,3	5,3	11,1	15,5	6,1	13,8	61,5	47,9	6,4	7,0
Knitted underwear	3,5	4,2	3,7	2,0	10,7	10,2	11,9	14,3	6,2	7,5	58,5	64,1	4,3	3,7

Source: CMEA member states statistical year-book, 1984, p.100, 101.

these last years.

It should be emphasized that in certain countries the textile and knitwear commodities production per capita of population in 1983 has decreased against 1970. In HPR and PPR the whole textiles production has diminished and in HPR there has been equally a decrease in knitted underwear production. This situation was caused by the internal market being saturated with the above-mentioned commodities./Ref., Table 7, Appendix/

The European CMEA countries TCI branches development rate is inferior to that of the whole industrial production. Thus if the development growth rate of gross industrial output has doubled against that of 1970, the textile and knitwear industries have registered only a 1,6 times rise, and the clothing industry - a 1,8 times rise. A slowing down of the TCI development growth rate has caused its transfer in the general volume of industrial production. As a result within the 1960-1982 period Bulgaria's TCI has been transferred from the 2nd to the 5th position in the general volume of the country's industrial production, HPR - from 5 to 7, PPR from 3 to 5, CSSR - from 5 to 6. PRB's clothing industry - from 5 to 10, HPR - from 8 to 10, GDR - from 10 to 12, SRR - from 8 to 10, CSSR - from 12 to 13 position .

This situation is basically caused by:

- a growing shortage of raw materials and manpower exhausted as the principle extensive production growth sources.

- decreasing possibilities of capital construction in TCI branches with a diminishing share of capital investments for the construction of new enterprises occurring in the CMEA member countries industry.

- a relatively high wear of fixed industrial assets in all the TCI branches (not just machinery and equipment but also industrial buildings and premises need a complete overhaul)

- a saturation of the CMEA member countries market by traditional textile and clothing commodities.

Along with a general textiles and clothing production growth, the growth-rate of traditional production (cotton, linen and silk fabrics, hosiery, knitted underwear) is inferior to that of commodities produced following the up-to-date progressive technology: the knitting industry and non-woven materials. The domestic-use materials production growth-rate has increased against that of clothing textiles to which new properties of materials and up-to-date effective machinery and technology of weaving have greatly contributed.

The major fabrics producers of fabrics among the CMEA member countries are CSSR, PRB, SRR and GDR. At the same time a certain specialization of states in individual textiles production is observed. Thus the PRB and CSSR are major cotton fabrics producers. The same kind of situation emerges in the production of woolen fabrics. The GDR is leading in the silk fabrics production. PRB dominates in knitwear.

With higher production growth rate of non-woven fabrics their share in the general fabrics production in the majority of the CMEA member countries is still modest; in 1983 in the PRB it amounted to 13,0%, HPR - 6,5, PPR - 7,9, SRR - 1,4, USSR - 5,8%. The non-woven fabrics production is relatively more developed in the GDR and CSER where their share in the total volume of fabrics production constituted 34,1 and 15,4% correspondingly.

§2. Particularities of textile and clothing
industry production in individual CMEA
member countries

The level of development, as well as in the textile and clothing industry, their structural particularities make it possible to conditionally break the European member countries into the following countries groups.

The first group of countries incorporates states with a highly developed textile and clothing industry possessing a diversified structure and a high or medium saturation rate of the internal market with the branch-produced commodities. It comprises the GDR, HPR, CSSR, the countries with highly developed textile and clothing branches of the industry. Presently these countries are active in re-structuring their TCI, discarding the productions with a high share of raw materials and energy consumption as well as labour-intensive branches and even transferring them to other countries on term of cooperation. The TCI is developing by way of introduction of scientific and technological progress highlights accompanied by a drastic reduction of manpower. In this context the GDR, CSSR and HPR specialization within the CMEA framework will grow increasingly while producing more complicated; high-quality and fashionable items on the basis of a high production level per capita of population attained; a relatively high rate of the textile and clothing industry material base chemization especially in the GDR having high-rate scientific and technological potential as well as the experience of cooperation with the West. In their cooperation with the USSR this group of countries are

greatly interested in the development of International Production Specialization and Cooperation in the sphere of artificial raw materials, resources-saving technology and engineering (primarily wastes and returns utilization), up-to-date labour and energy saving technology and also participate in the reconstruction of TCI enterprises in the USSR.

The structural pattern of the group is similar to that of Bulgaria equally rather limited in material resources and manpower for the textile and clothing industry but its industry is less export-oriented.

The second group is made up of countries with a developed textile and clothing industry and with a medium availability of raw materials and manpower, that is Romania and Poland. Their textile and clothing industry structure is characterised by medium-degree raw materials base ^{chemicalization}, medium or, in a number of sub-branches, high labour intensity. These countries inter-branch restructuring is carried out on the basis of home raw materials for the needs of all the CIEA member countries.

In these countries the increasing TCI commodities production is connected with the use of temporarily idle capacities in conditions of giveaway raw materials exports from other fraternal countries. Thus the current five-years period sees the realization of a USSR-PPR-signed agreement on producing viscose fibre in Polish enterprises out of Soviet pulp glass fibre out of Soviet special raw material; additional exports of Soviet low-grade cotton in exchange ^{for} non-woven fabric produced in the PPR are also envisaged. In accordance with similar agreements between Poland and GDR and Hungary commodities made of customer's raw material are produced at tempor

rily idle Polish TCI capacities (cotton underwear, knitwear for the GDR, cotton and viscose lining and semi-woolen fabrics for the HPR)^{17/}.

Having at its disposal a developed material and technical basis, powerful scientific and technological potential, diversified structure of the textile and clothing industry as well as a raw materials base of its own, the USSR is traditionally a major TCI ready-made commodities importer. The USSR TCI distinctive feature is its orientation to meet the internal home demand. The possibilities of a further growth in high-quality TCI commodities extorts from the CMEA member countries as well as of perfecting the branch, technological and product structure of the USSR TCI reside in a further development of an intensive scientific, technological and production cooperation with the other CMEA member countries both within the TCI and in mechanical engineering and chemistry branches servicing them.

§ 3. World trends and production structure in the textile and clothing industry in the CMEA region

Scientific and technological progress entails a tangible diversification in the branch structure as a whole and in individual sub-branches which, as witnessed by the world practice, leads on the one hand to a closer relationship between countries' microstructures (in obligatory set of branches) and to a stabilization in the textile and clothing industry share in the whole industry both as to the volume of gross output and the number of workers employed, and on the other-to an ever growing "stemming out" of the structure micro-branches specializing in producing either individual production items

or even semi-fabricated items.

The process of diversification has largely affected the European CMEA member countries textile and clothing branches.

The textile and clothing industry structural singularities and its departmental subordination in individual countries make it difficult to correlate them structurally on a country-to-country level. The Hungarian textile industry incorporates six sub-branches: cotton, linen and hemp, woolen, silk, haberdashery and knitwear and hosiery ones. The textile industry of Poland structurally unified with the artificial fibres production (unified Ministry of light and chemical industry) incorporates as many as eight sub-branches (apart from those of the HPR, it also includes decorative fibres and felt items production). In the GDR four large-scale sub-branches which are component parts of the textile industry, detached from light industry to form an independent large-scale branch on the basis of statistics, correspond organizationally to four big industrial associations: the cotton, woolen and silk, knitwear and hosiery and technical fibres ones.

In this connection in our opinion it is worthwhile to compare the TCI microstructures in the CMEA member countries with a relatively unified, allegedly "median" under the influence of scientific and technological progress world productive structure, that is a correlation of various types of principle production turned out in a TCI branch. The production types inter-branch structure is comparable for different countries and it reflects rather objectively a level of branches technological development as a factor of structure formation.

Scientific and technological progress in the textile industry the world over leads to a further fading of border line between sub-branches traditionally formed following the principle of raw material involved (cotton, wool, silk etc.) via chemicalization of raw materials balance in all branches and a wide use of knitting along with weaving mode of commodities production and that of various chemical and physical proceedings for producing non-woven fabrics out of fibres omitting the spinning and weaving stages. As a result a new textile production inter-branch structure is formed characterized by a correlation of the three principle production types: fabrics; knitwear and non-woven materials. Towards the second half of 70-s the world textile industry has already stabilized proportions between different modes in producing textile items: textiles take up around 70%, knitwear - 22, non-woven fabrics - 8%. 18/

Due to a shortage in raw materials these proportions are not to be rapidly modified since the knitwear and especially non-woven fabrics production is very prominent in high raw material consumption, although in the latter case low-grade raw materials and wastes could be made use of. Besides, in their consumer appeal non-woven fabrics may not properly substitute textiles in clothing.

Comparing the textile production structure of the CMEA member states in correlations of the principle types of production notable differences between individual European CMEA countries and the USSR are emerging. Thus, the share of non-woven fabrics is most substantial in the GDR (34%), in HPR and Poland it is closer to the world average values (6,5-7,9%);

the knitwear production is prominent in such countries as the GDR (ovr 1/2), PRB and CSSR (around 30%) whereas in the PPR and SRR this sub-branch constitutes around 1/4 of the gross textile output. In the USSR the non-woven fabrics-like material constitute 5,8% of the overall textile output and the knitwear-around 15%.

The structure of the fabrics proper output is characterized by an accelerated-rate production of fabrics made of multipurpose synthetic fibres (clothing, draperies, decorative etc) occasionally still included in the silk fabrics statistics group. Such dynamics are conditioned by scientific and technological progress and by chemicalization of the textile industry raw materials stock. At the same time the CMEA member countries stabilize their production of woolen fabrics. The GDR, PPR, CSSR have the greatest share in the textiles production, GDR, PPR and HPR are the leading exporters, the SRR, HPR and PRB are curtailing the growth rate in producing cotton fabrics prominent in the structure of textile production, and HPR and HPR and CSSR - in their exports. The flax textiles are extensively produced by the USSR, CSSR, PPR, SRR and HPR textile industries, that is in the countries having their own raw materials (Appendix, Tables 11-15)

In general the structural analysis of various textiles produced in the CMEA member countries indicated that in accordance with the world trend the output of natural fibres decline particularly taking into account the great dependence of the European CMEA member countries on raw materials imports for the textile industry (cotton and wool - from 75 to

100%), at the same time the synthetic fibres-based production is being expanded.^{21/} The textile production structure reflects the availability of home raw materials base in a country (primarily that of linen and partly - of wool), textile production traditions and the world market situation.

§4. Restricting and favourable factors of development in the textile and clothing industry of the CMEA member countries.

In early 80-s the CMEA member states textile and clothing industry confronted a number of difficulties such as raw materials deliveries, natural raw materials costs growth, manpower and up-to-date technology shortages. It is difficult to meet an ever-growing demand mostly in high-quality goods at the present-date stage and even more so in future just by involving great material, labour and financial resources /though this éventuality is not altogether excluded/. The best way to follow is to raise the effectiveness of production, to make a better use of created productive potential. Rational use of raw materials, TCI's structural modification to benefit high capital investments and labour saving types of production constitute an objective of producti. structural transformation.

The TSI commodities production faces two principle problems that is an engineering and technological one and a raw material one. The first problem is common for all the CMEA member countries whereas the second one involves mostly the European CMEA member countries because their TCI is marked by a high

volume of raw materials imports.

An engineering and technological level is characterized primarily by the development of branches and productions determining scientific and technological progress and based mainly on artificial raw materials, by a degree of using progressive technology and engineering, by the state of machinery. The technological development is aimed at a possible rapid adaptability of production to constantly changing fashions. Thus the share of fully automated equipment constitutes 20-25% in spinning and 40% in weaving productions.

The problem of providing sufficient raw materials to meet the TCI needs is solved by natural raw materials' rational use, a speedy raw materials base chemicalization, wide-scale utilization of returns and wastes. The CMEA member states have amassed great experience in wastes' utilization. At their expense around 36 million m³ of timber and over 1 mln. t. of natural and chemical fibers were saved in the USSR in 1982. . It is high time to overcome such a serious fault in raw materials use as recurring to natural raw materials in producing technical commodities such as package materials, technical fabrics, cables, ropes etc., which is extremely irrational due to a shortage in natural fibres. A more rational use of material resources in the TCI will permit to expand branches raw materials resources by over 22% annually. In the GDR annual savings related to the use of wastes amounts to 400 thousand marks and in the CSSR - 498 thousand crowns . In this context decreasing the share of raw materials-based and material-intensive productions and technologies

and raising the quality of natural materials treatment and improvement becomes one of the major directions in the economic strategy in developing the TCI branches complex.

The examination of the CMEA member states TCI branches problems indicates that a prospective growth of consumer goods output and improving their quality depends directly on a common effort to be exerted by the CMEA member countries to accelerate scientific and technological progress developing in the following fundamental fields: chemicalization of the raw materials base, introduction of progressive resource-saving technology and corresponding equipment systems, producing new materials and commodities on the basis of up-dated technology. Their practical implementation requires not only a mobilization of all national productive forces, but also a larger involvement of scientific, technological and productive potentials of the CMEA member countries in the sphere of integrated cooperation, common and affective use of scientific achievements and that of production base available within community's framework. The Socialist Community countries have all the necessary prerequisites including the traditional forms of productive, scientific and technological cooperation. to successfully resolve all these problems.

III. PRODUCTION, SCIENTIFIC AND TECHNOLOGICAL COOPERATION OF THE EUROPEAN CMEA COUNTRIES IN TEXTILE AND CLOTHING INDUSTRY

§ 1. Raw materials and equipment

A fundamental condition for the development of the textile and clothing industry in the countries of Socialist Community is providing it with all necessary raw materials. The countries resolve this problem by a close cooperation within the framework of the community and by a further development of cooperation with other social system states.

The raw materials exports from the USST have been and still is of major importance for the CMEA member countries TCI principle commodities production. The deliveries of natural textile raw materials from the USSR to the European CMEA countries is a vitally important factor for their light industry development. The Soviet Union share constitutes 99% of overall raw cotton production and the same amount of staple cotton, around 84% of linen, 75,5 of wool, 37% of hemp in the region under consideration. The other countries produce natural textile fibers on a low scale owing to the lack of corresponding climatic conditions and their textile industry especially the cotton branch, largest in it, is obliged to be fully imports-oriented. Only Bulgaria satisfies a quarter of its demand in cotton with home-produced stuff. The UDDR is the net-exporter of cotton fibre. as well as a traditional supplier in flax fiber, hemp and some types of wool to these countries. There were 439,0 thousand tons of cotton fibre, 6,9 t of flax fibre exported to these countries in 1983.

The leading purchasers of Soviet cotton are Poland, German Democratic Republic and Czechoslovakia. The demand of the European CMEA member countries in cotton fibre is met by exports from the USSR: in 1960 - by 65%, in 1970 - by 66, in 1975 - by 65,9, in 1983 - by approximately 69,1%. The total amount of all types of deliveries in the USSR textile raw materials cover from 80 to 100% of fraternal countries needs. Equally important are the petrochemical basic materials deliveries from the USSR permitting to produce artificial raw materials /artificial and synthetic fibres, filaments/ for the TCI. Owing to a growing shortage of raw materials in our country the possibilities of a further increase in natural raw materials are restricted. In this context the problem faced is to achieve a maximum use of other types of natural raw materials in such countries as Bulgaria and the USSR, as well as Hungary having considerable wool resources, the rest of the countries meet their needs at the expense of home production approximately by half.

/Ref. Table 4/.

Table 4

Share of home wool production

/washed wool/ in visible consumption (in %/)

	! 1976-1980	! 1981	! 1983
Bulgaria	100,0	97,5	94,9
Hungary	59,3	59,7	74,1
German Democratic Republic	52,3	48,7	51,1
Poland	55,2	53,4	44,1
USSR	97,1	74,1	71,9
Czechoslovakia	45,3	50,5	50,0

Reference: Compiled following the data of the CMEA member

states national year-books for corresponding years.

The question of producing more natural raw material resources merits a special consideration since the demand for commodities made of cotton wool and flax is on the upsurge and the supply lags behind. This resulted in a certain strain in supplying these productions with basic materials /Ref. Table 21., Appendix/. There exist considerable reserves for increasing the synthetic materials use in the CMEA member countries: Within the current five-years plan /1981-1985/ the CMEA member countries plan to raise the share of chemical fibres use in the overall balance of light industry to 50-55% compared with 37-40% in 1980 and towards 1990 - to 60-65%. At the same time a certain differentiation in chemicalization levels will remain in the countries: Bulgaria - up to 60% in 1985 and 65% in 1990; Hungary 55-60% to 1990; German Democratic Republic - 75% towards 1990; Poland - 62% towards 1990; Romania - to 60-62% towards 1990; USSR - up to 37-40% towards 1990; Czechoslovakia - 57% also towards 1990.

The assortment exchange by chemical fibres is developing quite successfully which is promoted by countries' specialization in producing individual types of fibres. The range of synthetic and artificial fibres produced in the world is quite wide. At the same time the absolute volume demand in some type of chemical fibres for each country is rather small and there are difficulties in meeting them by home production which would require creating small and consequently low effectiveness capacities. The international specialization in producing chemical fibres permits to the CMEA member states to resolve

this contradiction. For instance Hungary produces Polyacrylnitril fibre, Poland - polyester (Elana- type), Bulgaria - viscoses (artificial) Czechoslovakia - polypropylen fibres and so forth. The 1975-founded "Interchimvelokno", the CMEA member countries-sponsored organization active in the field of chemical industry grouping in its membership Bulgaria, Hungary, German Democratic Republic, Poland, Romania and Yugoslavia promotes the development of international specialization in this branch. Within its framework the countries cooperate in producing some types of chemical fibres that are in short supply. At the present time a campaign to perfect assortment specialization in producing principle large-tonnage and low-scale use chemical fibres nears fruition. Then the exchanges are conducted on a bilateral footing. Thus, Hungary exports 6 thousand tons of polyacrylnitril (PAN) fibre and sliver to Poland annually in exchange for 7 thousand tons of polyester silk and "Elana"-type threads from Poland per year. Such exchanges are also practiced between Poland and Romania: Poland exports polypropylen to Romania and gets polyacryl fiber in return. An agreement on assortment exchanges of Hungarian PAN fibre for polyester silk is in force between Hungary and Czechoslovakia.

Along with the assortment exchanges by chemical fibres the so-called interrelated deliveries when natural raw materials are traded for synthetics or semi-manufactured articles for the TCI represent a certain source for increasing basic materials resources for the TSI commodities production. For the first

time in the practice of mutual cooperation such deliveries have begun between USSR and Bulgaria, USSR and German Democratic Republic, USSR and Czechoslovakia in the current five-years period, when in exchange for cotton fibre the countries deliver synthetic fibre and filaments and mixed yarn for soviet light industry. At the present stage such deliveries are mutually beneficial owing to different levels of light industry's raw-materials base chemicalization and of available natural raw materials.

One of the most prospective roads for resolving the raw materials problem is a further development of international specialization and cooperation in the chemical basic materials production. A bilateral agreement on specialization and cooperation in producing chemical basic material for the TCI is in force between the European CMEA member states (other than USSR). Due to a trend for a further chemicalization in raw materials balance of the TCI leading branches, international specialization and cooperation will apparently go on developing.

Progressive technologies of raw materials and basic materials treatment, a better wastes and returns utilization, decreasing the norms of resources used in production constitute a substantial reserve for solving the raw materials problem. The task of economic and rational use of material resources assumes primary importance for the CMEA member countries TCI. Practical cooperation between socialist states bears witness to a tremendous effect produced by the introduction of material saving technologies into the TCI.

Besides, textile wastes utilization contributes to curtailing hard currency spendings to purchase valuable imported basic materials. The economic effect of using wastes is 4-5 times as great as the expenditures to import the corresponding amount of basic materials. The CMEA countries have scored a great deal of success in using textile returns

The use of returns resources is of great importance for the wool industry owing to its high specific consumption of materials. Thus, in the USSR wool industry the annual economic effect in replacing the raw materials by industrial wastes constituted 36,1 mln roubles in 1980, whereas in 1985 and 1990 it is planned to reach the volume of 36,1 and 39,0 mln roubles correspondingly. In 1980 10,8 thousand tons of raw yarn were produced out of processed wastes mixed with chemical fibre, the same amount is forecast for 1985 and 11,5 thousand tons for 1990. At the same time 6,42 thousand tons of wool and 37,7 million roubles worth of nitron fibre was saved in 1980 and the corresponding amounts of 6,4 thousand tons and 38,3 mln roubles are planned for 1985 and for 1990 - 6,8 thousand tons and 40,4 mln roubles.

In Bulgaria the wool industry wastes are used for producing an eye-catching "Prenolit" fabric following the "Prato" technology.

Non-woven materials production is the most rational sphere of wastes use. In the USSR the production wastes constitute 46,1% in the balance of raw materials used for their manufacturing but towards the end of the current five-years period this value will hopefully be decreased to 38,1% by expanding the non-woven materials production.

The trend to a growing non-woven materials production will remain unchanged. They will be substituting fabrics and knitwear, new spheres of their application will be rapidly mastered, for example the production of light-weight non-woven disposable fabrics, packaging and wiping materials, medical and sanitary articles. Specific structural singularities of non-woven linen, their possible use in various branches of industry and for domestic needs, progressive technology involving few operations are the advantages contributing to their expanding production.

In the recent years growing production effectiveness is connected with an introduction of technological novelties permitting to produce commodities at the lowest expenditures-rate possible. Thus, at the Karl Marx Statdt cotton mills (German Democratic Republic) over 30% of all textiles were produced following rational technologies in 1981 against 17% in 1971. The "Malimo" knitting and threading technology, the technology of manufacturing warp-knitted textiles, the "Liripol" technology and the "Metap"knitting and weaving proceeding occupy a prominent position in textile manufacturing. When the above-mentioned technologies are consistently used in producing textiles the productivity rise averages around 260%. The greatest share among textiles is taken up by the knitting and threading "Malimo" articles: When using the "Malimo" (including the "Malivat and Maliflis" types) the process of spinning is omitted. As compared to weaving this technology saves 5-8% of materials and considering the time that would have been spent on producing the yarn a possible productivity growth might reach 550%. The use of scientific and technologi-

cal break-throughs and the rational manufacturing proceedings employed has helped the GDR's light industry save considerable resources.

In prospect the CMEA member countries envisage to tangibly activate their cooperation in this very direction, to spare no efforts in seeking new forms of cooperation of scientific and technological as well as industrial bodies in developing progressive types of raw materials, materials, new types of articles produced and resource-saving processes.

A specific form of bilateral cooperation in producing the TCI commodities resorted to owing to a shortage in raw materials is a so-called cooperation on giveaway raw materials. Nowadays it is widely-used both in relations between the USSR and the European CMEA countries and individual foreign European socialist countries including Yugoslavia. The giveaway-based cooperation develops following the scheme: a country possessing materials but short in manpower gives them over to another country and gets ready-made commodities in return. In a number of cases the materials are processed at the local industry small-scale enterprises in those regions with surplus manpower. With this form of cooperation the manufactured commodities producer country expands its exports potential at the expense of getting short raw material resources and makes better use of its production capacities.

The giveaway materials-based bilateral cooperation is currently successfully developing between Hungary and Romania: synthetic sewing threads are produced in Romania of Hungarian giveaway materials delivered at a later date

to meet the needs of the hungarian clothing industry. For Hungary experiencing an acute shortage in manpower particularly in the textile industry such form of cooperation is definitely beneficial. An agreement between the USSR and Bulgaria pertains to the same form of cooperation. According to its terms the USSR delivers 2 thousand tons of cotton per year for manufacturing cotton fabrics in Bulgaria. Then 5 million poplin shirts are made to be exported to the USSR.

In the current five-year period a number of giveaway operations are under way between Poland and some CMEA member countries (USSR, German Democratic Republic, Hungary) offering an opportunity to make use of temporarily idle capacities of polish light industry enterprises. Thanks to additional Soviet materials deliveries the polish TCI was supplied on the giveaway terms with cotton, wool, chemical fibre. 50% of commodities manufactured out of these raw materials was consumed by the home market.

An agreement was signed between Hungary and Poland on treating in polish enterprises of around 4 mln t of cotton and 2 mln t of lining textiles from Hungary and on subsequent production of 150 thousand man and teenager suits and 110 thousand shirts. Hungary supplies Poland with yarn, all necessary materials and accessories on giveaway terms.

One of the forms in production cooperation contributing to the resolution of the problem of raw materials is the construction of mutually-owned enterprises such as constructing large-scale spinning factories. The first TCI mutually-

owned enterprise is already operational. It is the "Friendship" spinning factory in the town of Zeverche (Poland) producing 12,5 thousand tons of cotton yarn yearly for the industry of the two member countries. The factory has been designed and constructed by Poland and German Democratic Republic which jointly manage it.

The final analysis of the problems related to assuring raw materials supply for the TCI commodities production in the context of mutual cooperation permits to trace the most prospective ways for the cardinal solution of the question. Firstly, this is a creation of a powerful basis providing chemical materials for the TCI (preserving optimal proportion in the structure of balance of natural and artificial basic materials); secondly - a growing use of wastes and returns, regenerated fibres and technological wastes by introducing a progressive technology of their treatment and utilisation; thirdly - the development of raw materials resources where it is feasible. In this connection scientific, technological and production cooperation of the CMEA member countries in designing, mastering and wide-scale introduction into all the TCI sub-branches of high-grade artificial substitutes and resource-saving processes constitutes the most important production target.

§ 2 Engineering and technological level of development of the CMEA member countries textile and clothing industry

The necessity of the textile and clothing industry technological renovation proceeds from the objective inevitability

tability of following the intensive path of economic development. For the last decade the technical level of the CMEA member countries- produced machines for the textile and clothing industry has risen. This is a fruit of continuous re-equipment, cardinal changes in producing textiles and clothing. A major trend in the development of corresponding machine-building branches is departing from constructing individual machines to design and produce their systems, mechanized complex flow-lines.

The CMEA countries machine- builders efforts are aimed at constructing the most progressive means of engineering assuring complex mechanization and automation of production, mastering wasteless technologies in the framework of fully automated enterprises, at producing automated control systems handling the operation of equipment and the quality of output and at a large-scale use of electronics and robotics. In the textile and clothing industry such machinery permits to drastically raise productivity, ameliorate consumer and aesthetic commodities appeal, relieve the personnel of labour intensive subsidiary and servicing industries. For example in the German Democratic Republic towards the beginning of 1984 the clothing and weaving factories were equipped with over 400 various mechanical and automatic devices most of which had been designed at rationalization centers operating within factory's framework. The German Democratic Republic light industry enterprises make use of 3,6 thousand various robots and manipulators

Among the CMEA member countries-produced technological novelties the German Democratic Republic-made equipment rea-

ching the world level in certain types is particularly noteworthy. For example the "Textima" works produce FR- type series fang flat-knitting automatic machines hitting world's greatest productivity (up to 20 pullovers per hour) and knitting quality. The "Liropol" nap threads knitting machine when producing terry towels reaches the productivity 6,5 times higher than an ordinary loom.

The hungarian experts have produced a whole family of computer and lazer beam-controlled cutting and sewing machines. Hungary has delivered 30 thousand cutting machines, 20 thousand stitching and thousands of sewing machines, around 18 thousand pressing boards and hundreds of complete set lines.

At the same time despite undisputable success scored by the CMEA member states particularly in the textile engineering these countries possess a sufficient amount of reserves in the sphere of light industry automation. The level of automation in light industry is still relatively low. Thus the share of automated looms in the overall amount of looms constituted from 50 to 60 per cent and in cotton production - from 12-17 to 35 per cent. For the time being the level of light industry automation in individual countries constitutes: 65% in Bulgaria, in Hungary -50% in spinning and around 76% in weaving. In the USSR the share of shuttleless looms has reached 20% in the cotton industry, 60% in the silk industry and nearly 100% in the wool industry, in Bulgaria -30,50 and 70% correspondingly.

The desired growth-rate in modifying the light industry engineering basis has not been reached.

The CMEA member countries production cooperation in consolidating the textile and clothing industry engineering basis is developing mainly along the following lines: 1. international specialization and cooperation in producing machines and equipment including that on the basis of common research and project ventures, unification, type-designs and standardisation of equipment; 2. the exchange of services and technologies between the countries in the process of reconstruction and modernization of the textile and clothing industry enterprises.

The textile and clothing industry-oriented international production specialization and cooperation goals are to insure high economic effectiveness in producing special technological equipment on the basis of international division of labour; to reduce the range of machines and equipment produced simultaneously in the CMEA member countries; to raise quality and competitiveness of production.

Currently the international specialization and cooperation develops most successfully in textile engineering partly due to the efforts of the 1978-founded CMEA member states international economic association named "Intertextilmach" uniting industrial enterprises, research institutes and project designing institutions of Bulgaria, Hungary, German Democratic Republic, Poland, Romania, USSR and Czechoslovakia and conducting the coordinating and economic activities aimed at furthering specialized and cooperated machines and equipment production for the textile, knitting and clothing industries. The USSR is an active member of the "Intertextilmach". The share of its equipment for the textile industry in the CMEA member countries mutual trade by the engineering production con-

stitutes 80 per cent .

In the preceding five-year period the international specialization and cooperation in producing the textile and clothing industry equipment developed on the basis of three agreements (in force for 1972-1975) on the international specialization and cooperation in producing highly productive technologies and machinery. These agreements cover over 75 per cent of nomenclature of the branch-related machines and equipment. The most important of them refers to the production on cooperative terms of STB-type high-speed shuttleless looms. Bulgaria ("Pobeda" machine-building works, Poland ("Palmatex"), Hungary ("Kaev"), USSR (the Cheboksary textile machine-building works) and Czechoslovakia ("Elitex") participate in the agreement. Since 1972 the European countries-co-signers of the agreement on the basis of bilateral treaties with the USSR supply the Soviet Union with units and spares for the Cheboksary works-assembled looms. For 1972-1980 their production has increased 5 times over reaching 30 thousand looms half of which are exported and not only to the CMEA member countries. The STB looms are a principally new type of textile equipment permitting to raise labour productivity 1,5-2 times against traditional cotton shuttle textile looms and 2,5-3 times in the wool and silk industry productions.

The STB looms production cooperation multilateral agreement is extended till the end of 1985. Along with the production cooperation member country's research and design institutions conduct joint ventures to perfect the shuttleless looms design, enhance its productivity and reliability, expand the

the assortment of items produced. A serial production of modernized STB looms superior to those of the pre-1980 generation has already begun.

Since 1976 the USSR and the German Democratic Republic co-produce cotton-combing machines. The USSR supplies the German Democratic Republic with two important units for the combing machines and the German Democratic Republic produces the machines to meet the needs of all the CMEA member countries. The "Textima" works (German Democratic Republic) and the Penza textile machine-building works (USSR) are directly involved in the agreement. For 1976-1980 the deliveries of machines have quadrupled permitting to meet the CMEA member countries demand in them without additional capital investments.

International specialization and cooperation in production equally contributes to enhancing inter-state specialization and concentration of production. Thus following an agreement with the CMEA principle partners the "Textima" works produce on the footing of specialization 80 per cent of all types of production means which produces a favourable effect on their quality.

Continuous deliveries from Czechoslovakia to the USSR of unit and spares for the BD-200 spindleless (pneumatic) spinning machines also pertain to the cooperation production. The largest textile machine-building works "Elitex" cooperate with the soviet Penza machine-building works. For the last five years mutual deliveries in spinning equipment have risen

nearly 6 times .

Until now the cooperation in the field of textile engineering has been based mainly on a bilateral footing with the Soviet Union playing the leading role owing to its powerful scientific, technological and industrial potential in the branch. The ready-made commodities production is concentrated in our country whereas individual units and spares are manufactured in cooperating countries. The prospective tendencies indicate that along with a bilateral cooperation in this sphere a multilateral cooperation will gain in importance.

The current bilateral agreements on the international specialization and cooperation in production have been extended to 1981-1985 and on the other hand new multilateral agreements on producing up-to-date types of equipment have been equally signed including two agreements within the framework of international economic association "Intertextilmach". Among them an agreement on producing needles and knitting machines platings envisaging a reconstruction of operating machine building capacities in the German Democratic Republic, Czechoslovakia, USSR and Romania.

Highly productive flow lines to produce ready-made articles in the clothing industry have been created by a common effort of experts from Hungary, German Democratic Republic, Poland, USSR and Czechoslovakia. These are the equipment complexes incorporating special machines and semi-automated devices for producing men's overcoats, suits, trousers, shirts, women's

dresses, raincoats and overalls.

The choice of priorities in international specialisation and cooperation of production in the textile and clothing industry engineering is based on common methodological principles such as an analysis of world trends in scientific and technological progress of the branches in question, a possible production and scientific and technological basis potential of individual countries, creating conditions for expending the machine building production exports to other CMEA member countries and for a common say on the third parties markets. The most prospective paths related to the CMEA member countries cooperation in the textile and clothing industry engineering in the decade to come will be automation, electronization, robotization, computerized controls for monitoring continuous technological processes, creating technological flow lines with complex mechanization in the textile and clothing industry creating equipment systems introducing resource-saving and totally wasteless technologies favouring labour conditions and harmless for the environment into all the branches. The creation of manipulators and industrial robots to serve the technological equipment will become a prospective direction in the textile engineering multilateral cooperation. The technological development in the clothing industry is aimed at perfecting the proceedings of formation, gluing and heat treatment of clothing articles and pieces, at automation of preparation and cutting shops via computerization, at perfecting clothing flow-lines by using semi-automated devices and

Prospective broadening and deepening of the existing engineering is on the agenda . Thus, for example the German Democratic Republic will specialise in producing machines for the knitting industry, for non-woven materials, rugs, sewing equipment and synthetic fibre production; Poland will produce wool-weaving equipment and the flax industry machines, non-woven materials; Czechoslovakia will specialise in multibranch textile engineering (spinning, knitting weaving equipment production) Hungary will specialize in producing the clothing industry equipment; Romania - in producing the equipment to manufacture synthetic fibre. Such specialization of the countries may be referred to while determining the most effective directions and forms of bilateral cooperation between the European CMEA member countries and the USSR taking care of the textile and clothing industry commodities production.

Table 5

The textile and clothing industry equipment exports
from the CMEA member countries (in million roubles

	Years	Textile industry equipment	Clothing industry equipment
Bulgaria	1980	21.3	...
	1982	29.0	...
Hungary	1980	18.9	14.6
	1982	20.3	22.5
German. Dem. Republic	1980	204	25.0
	1982	237	38.3
Poland	1980	74.4	...
	1982	82.3	...
USSR	1980	155	...
	1982	109	...
Czechoslovakia	1980	288	61.8
	1982	430	65.5

Source: The CMEA member countries statistical year-book. 1983. Moscow, p. 323-371.

The greatest producer of the up-to-date equipment is the Soviet Union having large-scale capacities in the spinning production - 16 million spindles towards the beginning of 1983. (world's fourth position). As a whole the CMEA member countries share numbers 30 million spindles and around 50 per cent of world's spindleless machines fund. The USSR is also the greatest exporter of equipment for the CMEA member states light industry. For the last five-year period the mutual exchanges of such equipment have registered a near double increase whereas in the clothing industry they have grown 1.3 times, which have made it possible to better satisfy the countries demand in up-to-date machinery.

As a whole the current five-year plan will see the production of 12,5 thousand spindleless pneumatic spinning machines, of over 60 thousand shuttleless looms. In the twelfth five-year plan it is envisaged to begin producing over 1200 items of equipment and to raise the share of ready machines deliveries /at the present time it amounts to 17%.

Bilateral interstate agreements with the German Democratic Republic and Hungary dealing with the reequipment of over 40 soviet enterprises in the basis of new engineering and technology, progressive experience of labour management were signed in 1982. Among the reconstructed enterprises are 11 clothing factories and other knitwear, silk and cotton producing industrial enterprises. In accordance with the USSR-GDR agreement

over 20 enterprises, shops and sections are to be constructed, reconstructed and reequipped. . It is expected that in the wake of reconstruction and modernization of basic machinery in the cotton-spinning production, 45 per cent of production are to be manufactured by the spindleless method and 20% - making use of new methods of spinning. . The spinning and weaving wastes treatment shops will be built in Lutsk, Naman-gan, Orenburg and Lisitchansk .

In connection with a prospective notable decrease in constructing new enterprises of the socialist countries textile and clothing industry, the importance of cooperation in reconstruction and modernization of production capacities, of a more economic use of material resources including wastes will grow. This direction is seen as one of prospective breakthroughs in the field of perfecting the CMEA member states production basis and its rapid modernization.

The reconstruction creates favourable opportunities for establishing at a later date direct ties between production enterprises counterparts due to "leveling up" their technical capabilities, close technological parameters of the output, similar materials used, that is thanks to the unified standards so important for the cooperation and also thanks to the close contacts established between representatives of staffs.

§ 3. Research and development basis

The CMEA member countries prospective cooperation objectives in the field of the textile and clothing industry related to the introduction of the latest achievements in scientific and technological progress into the production

are indicative of great importance attributed to scientific and technological progress. This mutual cooperation is currently developing on the basis of inter-government and inter-department agreements and direct treaties (contracts) concluded with the purpose of cooperation or for conducting joint research design or experimental works. The CMEA countries are active in over 50 scientific research projects included in the "Prospective plan of cooperation in conducting scientific and technological research for the period till 1990". Most subjects are developed with the participation of the USSR, which frequently coordinates the joint research work.

The textile and clothing industry-related subjects researched in the period till 1990 are wide-ranging. At the same time attempts are undertaken to pool efforts to solve the fundamental issues. According to the resolutions of the XXXVI session of the CMEA (1982) complex cooperation programmes comprising the whole "science-technology-production-marketing" cycle including the questions of unification and standardization will be worked out. At the 39th session of the CMEA Permanent Commission on cooperation in light industry in October of 1982 a decision was taken to develop two such problems:

- 1) "Cooperation in developing the production of high-quality artificial fur (on knitted base) including that of different shrinkage fibres";
- 2) "Development of an automated system of preparation to cutting out and cutting out textiles making use of computer technologies".

The first subject is currently developed on the basis of cooperation between Bulgaria, Romania, USSR and Czechoslovakia valid till the end of 1985. With the

view of creating a prospective assortment of artificial furs, raising their exploitation quality and perfecting the production technology. In the wake of the development of the second subject a highly efficient technology for manufacturing mass production clothes (overcoats, suits, raincoats etc) making use of automated flow lines and computers.

Greatly important for the development of a long-term strategy in scientific and technological cooperation are branch-oriented scientific and technological forecasts elaborated by the CMEA member states permanent light-industry, engineering and chemical industry commissions taking into consideration the world scientific and technological trends and assessing the demand and production potential of the countries in the field of assimilating new types of materials, articles, technological processes, machinery and equipment systems. Scientific and technological cooperation is conducted both on a bilateral and multilateral basis.

In the decade to come the CMEA member countries common effort will be focused on developing and rapid adoption in industry of new high-productivity resource-saving technologies and equipment for the textile and clothing industry, on the development and production of new types of textiles, new assortment of clothes and other commodities with higher appeal. The development of shortened technological processes, automation and mechanization of labour-intensive and auxiliary operations; introduction of microelectronics and robotics are also among the most important directions of multilateral cooperation. The research and forecasting of popular demand for the textile and clothing industry commodities is an important and independent goal in multilateral scientific coopera-

tion.

In the long-term prospect scientific and technological cooperation will come increasingly to the forefront though the importance of assortment exchanges in raw materials, ready-made commodities, of cooperation in producing technological equipment will remain unchanged. The world practice leads one to believe that with the principle textile and clothing industry commodities flooding the internal market, the quantitative production growth-rate will slow-down and a rapid assortment renovation within the principle commodities groups will take place. In this connection the priority directions of the CMEA-member countries scientific and technological cooperation will become designing new types of commodities and new technologies, modelling, constructing, industrial designing and also a joint forecasting of demand and fashion.

The practice emphasises the importance and effectiveness of multilateral campaigns to promote scientific and technological cooperation especially those that are inculcated in industry. A number of works of major importance for the USSR and other CMEA-member countries textile and clothing industries have already been completed. Several dozen of joint inventions have been patented or pending in various countries : since 1977 selling licences for joint scientific and technological research works to the third parties is planned and accomplished. The inculcation of results of joint works in the industry has permitted to gain an important economic effect for the national economy.

Notable successes have been scored in bilateral scientific and technological cooperation. Thus the USSR and German Democratic Republic cooperate in producing equipment and elaborating technological processes for a radiation and chemical modification of textile fabrics to better their properties. Cooperating on the basis of division of labour and mutual use of experimental facilities has practically halved the period of research whereas the mutual utilization of experience and possibilities of the countries when designing and producing pilot production lines for treating knitted web will permit to create them 3-5 years earlier than if designed by the soviet machine-builders only.

The USSR and Bulgaria conduct joint research in the field of non-woven fabrics using liquid and foamed binders (modification of the gluing method); the USSR and czechoslovak experts are developing technology, equipment and assortment of non-woven goods on the basis of chemical and mechanical methods of bonding fibres and non-spinnable (short fibres) production wastes. An increase in quality, savings in materials, reduction in production costs and consumers savings amounting ^{to} over 6 million crowns have been obtained in Czechoslovakia due to a large-scale introduction of insular and fire-proof non-woven textile materials. Scientific and technological cooperation between the USSR and Czechoslovakia incorporates the development of new technological processes and equipment for the textile and clothing industry. Such a form of cooperation as grouping soviet and czechoslovak experts on a temporary basis for a joint solution of the current scientific and technological problems such as perfecting the jointly

produced BD-200 spindleless spinning machines.

The USSR and Poland jointly develop progressive technology for producing non-woven technical-purpose fabrics making use of low-quality basic materials and bast fibre treatment wastes. Since 1978 both countries' enterprises use the research results. For instance jointly developed technology has made it possible to manufacture non-woven fabric for the "Lada" car at the Kazan flax factory (USSR). A pilot lot of domestic use fabrics of short-fibred flax yarn has been produced at the Panevezhsk flax factory (the Lithuanian SSR) following soviet-polish technology. Formerly non-spinnable fibres had been dumped to the waste-box. In Poland 13 million zlotys have been saved apart from better labour conditions achieved as a result of manufacturing non-woven textile fabrics and producing 1 million formerly imported breathers (dust protection semi-masks).

The European CMEA member countries are active in perfecting the scientific and technological control mechanism to resolve the problems of raising productivity on the basis of science technology and progressive experience. The steps aimed at perfecting science and production interaction forms are of major importance among them. The emergence of specialized liaison agencies in a number of countries (Bulgaria, Hungary, USSR) was a new phenomenon in this sphere.

It is noteworthy that the majority of problems in the textile and clothing industry are of a complex inter-branch nature. Therefore the countries propose to consolidate still further the united effort of the fraternal countries light chemical and machine-building industries experts. It is also

proposed to form international economic associations with joint design sections and research institutes of their own within the textile and clothing industry branches. A growing and consistent use of programme and purpose approach in shaping directions, resources and stages of research as well as their results to consecutive production application will contribute to expanding cooperation till all the production process is covered and creating condition necessary for a mass-scale introduction of scientific achievements into the production and finally to uplifting the technical level, quality and competitiveness of the CMEA member countries textile and clothing industry. Such a target may only be reached by forming a coordinated scientific and technological policy for the CMEA member countries including that on the branch level and merging scientific and technological and production potentials. At the present time the countries search for such ways that would accelerate resolving the tasks facing them and would contribute to integrating science and production.

4. International specialization and cooperation of production

At present the CMEA member countries as a general rule exchange their surpluses in the textile and clothing industry commodities through foreign trade and also by assortment exchanges; the specialized production manufactured on the basis of the international specialization and cooperation in production agreements constitute a small share in mutual exchanges. The textile and clothing industry-related international spe-

cialization and cooperation agreements cover the servicing production branches (artificial basis materials and semi-manufactured goods, equipment production) to a greater and the ready made commodities production - to a smaller extent.

The CEEA member states have signed and began realizing agreements on the specialized production of furniture fabrics (USSR, Bulgaria, Czechoslovakia, Romania, Mongolia and Poland are among the co-signers) envisaged in the Long-term purpose-oriented programme of cooperation in producing consumer goods.

There are great unused reserves for the development of international specialization and cooperation in the short-term use consumer goods production including those produced by the textile and clothing industry. Despite the fact that the share of exported production in the gross output is increasing in many CEEA member states the textile and clothing industry is still mainly the branch catering for the internal markets needs; each country strives to develop the greatest possible number of home branches and productions in the framework of the textile and clothing industry. Difficult development of international specialization and cooperation in production is sometimes theoretically attributed to the specific nature of the textile and clothing industry and particularly to such features as:

- too broad assortment of articles, their short-time longevity, mode variations which might be readily accounted for in mutual deliveries by the partner countries;

- mass consumption of the majority of the TCI products enabling each country to create domestic production facilities of different size and optimal capacity simultaneously lowers benefits resulting from a greater mass-scale of production of the basic finished products in the case of the IPSC and from their manufacture with the account of demands of other CMEA countries.

At the present stage a great effect can be attained from specialization in the manufacture of special-purpose goods (not mass-consumption products), i.e. of goods of a rather broad range, but produced on a relatively small scale, as well as consumer goods intended for satisfaction of specific demands of individual categories and groups of population. Especially important is the international specialization in the production of science-intensive kinds of commodities (technical fabrics, non-woven materials, sports goods, medicinal overalls, dressing aids, therapeutic textiles, artificial fur and the like articles).

In the course of implementation of long-term cooperative programs the CMEA countries have signed multilateral agreements on the international production specialization in non-woven materials such as tissues and synthetic-base artificial fur. There are broad opportunities in the CMEA count-

ries for the development of specialization of some countries at the spinning stage of the textile and tricot manufacture, followed by processing of the yarn by other countries and exchanges for finished fabrics and knitted articles. The advantages of the division of labour are enjoyed in a similar manner in the stages of finishing and printing of fabrics. In socialist countries there are also examples of such cooperation (between Czechoslovakia and GDR, GDR and Hungary, Hungary and Yugoslavia, Hungary and Romania), but they are not numerous. This area of the international specialization and cooperation has good prospects of development, especially in the textile and tricot industry.

A vast market of the CMEA countries (especially in view of nearly 300 mln. population of the USSR) provides an opportunity for specialization in production of some mass-demand goods in large lots for a sufficiently long period (3-5 year on the basis of corresponding IPSC agreements. These can be such mass-demand articles which indeed are of a large-scale consumption and substantially do not depend on the mode, since they retain the "classic" style: everyday working clothes, knitted underwear, sports clothing for youth, etc.

The division of production programs according to IPSC agreements among CMEA countries is also stipulated in the manufacture of sets of winter and summer sporting clothing, upper clothes and summer dresses, etc. These agreements will contribute to improvement of quality of the mass and sufficiently inexpensive clothes for a "statistically average habitant" of the CMEA countries, to the provision of a so-

-called complex wardrobe which, in our opinion, is more important than the problem of the "de luxe" class articles oriented on a narrow group of consumers.

At the present time the cooperation in the TCI is being developed on a bilateral basis in the form of manufacture of articles from so-called "donative" raw materials. By means of this form of cooperation the CMEA countries successfully solve the problems of raw materials supply for temporarily unloaded enterprises and deficits of the manpower. (For more details see Chapter III, § 1).

§ 5. Firm-to-Firm Relations and Direct Ties in the Sphere of Production

An important reserve of intensification of cooperation in the sphere of production of the TCI articles resides in the development of the most profound form of the division of labour, namely intraindustry cooperation underlined in the documents and resolutions of the recent meetings of the CMEA Sessions, the materials of the Economic Summit Meeting of the CMEA Member-Countries (Moscow, 1984).

The socialist integration stipulates close relations between industries, including direct production ties between individual enterprises. Long-term direct economic ties are efficient first of all under conditions of a stable production and stable consumption of the manufactured products.

Direct ties can cover different areas: the manufacture itself, R&D, design and engineering jobs, exchange in prototypes, parts, assemblies, as well as professional training. In view of the problem of intensification of the public pro-

duction and economic cooperation, the main area of the direct ties becomes the production specialization and cooperation. The form of direct ties reveals broad opportunities for a more effective production specialization and cooperation on the level of the primary economic unit for which there are already necessary preconditions and a growing interest.

Significant reserves are concealed in expansion of direct production ties based on the principles of deliveries of "donative" raw materials to enterprises of the socialist countries possessing temporarily unloaded production capacities. Additional detalization and adjustment of special quality characteristics of starting products and materials with the consumer also contributes to a better quality of the products supplied within the framework of direct ties.

Certain positive results have been achieved in the assortment exchange, especially owing to trading organizations and partly production-economic associations with participation of foreign-trade organizations. The experience of application of these forms of international cooperation has been also acquired by production-economic associations of the textile industry of Czechoslovakia, especially with partner organizations in GDR and Hungary (for example, exchange of fabrics for working clothes available from Czechoslovakia for counter deliveries of dress and underwear fabrics and men's shirts tissues from the GDR. With Hungary there is an exchange of mattress fabrics for flaxen yarn, etc.).

Due to the fact that the production specialization and cooperation is the most promising and economically efficient

area of direct ties, to a certain extent this is also associated with restructuring and modernization of production, i.e. with rationalization of the socialist production (for more details see Chapter III, §2).

The development of direct relations in the production and exchange of TCI articles is effected both on the basis of multilateral and bilateral agreements of individual organizations and on the level of ministries, production and research organization as well.

The direct ties on the ministerial level have proven to be highly instrumental at different stages of the development of international cooperation and are still of importance for creation of favourable terms of cooperation on the level of lower economic units.

Direct contacts between production and R&D organizations are indispensable for detalization of proposals on the areas and forms of cooperation, as well as for a more precise definition of cooperation tasks and determination of its effectiveness. This has been proven, above all, by particular practical contribution of such contacts in the sphere of science and technology. Besides, a direct assortment exchange in finished products of the TCI is carried out on a broad scale between ministries of internal trade of CMEA countries including the provision of a network of shops for selling national goods produced by individual countries, frontier trade, exchange between large department stores, etc. (for more details see Chapter IV, §1).

**§ 6. Long-Term Purpose-Oriented Programme
of Cooperation in Industrial Consumer Goods
and Its Role in Development of the Textile
and Clothing Industry**

The growth of demands, their diversity, new conditions of the development of industries shaped on the verge of the 70's and 80's make the problem of a comprehensive long-time economic and scientific and technological cooperation within the CMEA framework very urgent. Prospects of such cooperation of socialist countries are associated with a joint solution of a number of problems among which the most urgent is the problem of improving technical level and quality of the manufactured goods, as well as of mastering the manufacture of a novel assortment of goods on the basis of acceleration of scientific and technological progress. This imperative in the development of the output of products intended for the population's consumption is expressed in the Long-Term Purpose-Oriented Programme of Cooperation in satisfying rational demands of the CMEA member-countries in industrial consumer goods (LPPC ICG) jointly elaborated by the socialist countries and adopted in 1979 at XXXIII Session of the CMEA in Moscow.

In elaboration of the LPPC there has been summarized and widely employed the experience of a multilateral cooperation in implementation of the provisions of the Comprehensive Programme of the socialist economic integration, outlined major perspective targets in the manufacture of industrial consumer goods, as well as the ways of reaching these

targets. In other words, the LPPC has defined a coordinated strategy for the development of a mutual cooperation of the fraternal countries in one of the most important spheres of their national economies.

The major task of the LPPC ICG intended for implementation up to the year of 1990 is to more fully satisfy the rational demands of the population of the CMEA countries in basic consumer goods such as fabrics, clothing, footwear, furniture, durable goods, new household electronic appliances through realization of concerted measures in cooperation with the account of science-based rates of consumption. These measures envisage increased output volumes, expansion and renovation of the assortment, improved quality of goods and increased scale of mutual deliveries of them.

The Programme has outlined the priority areas of the multilateral cooperation in the light industry and in the manufacture of household appliances: cooperation in the supply of raw materials; strengthening of the mechanical-engineering base of the industry on the new R&D achievements; scientific and technological cooperation in the development and reduction to practice of advanced technologies for the manufacture of consumer goods; improvement of quality of the already produced articles and mastering of principally new kinds of household appliances. Therefore, the LPPC ICG, like wise other long-term purpose-oriented cooperation programmes is substantially comprehensive programme that concentrates the primary efforts of the partner countries on a number of top priority issues of the development of the whole range of consumer goods.

As to its structure, the LPPC includes, first of all, the conceptual clause enlisting the main principal provisions and, secondly, subprograms made up on their basis. The latter subprograms cover particular measures of cooperation in the solution of major problems to be realized through a system of multilateral and bilateral agreements.

The subprograms included in the LPPC ICG (five of them altogether) are arranged according to the industry branch principle (fabrics, clothing, footwear; furniture; household/radio electronics; household machinery and appliances of a higher quality). With the account of a very high dependence of implementation of the Programme on the development of related industries, mechanical engineering in the first place, as well as chemistry, whereinto the gravity centre of solution of the raw-materials and technological problems is being shifted, the LPPC ICG also incorporates a mechanical-engineering subprogram intended for the provision of the CMEA countries with machinery and equipment for the light industry. Within the framework of this subprogram it is stipulated to concentrate efforts of the partner countries on the development of the most advanced and deficient, in CMEA countries, equipment on the basis of the forecast demands of the light industry.

The LPPC includes 56 major projects altogether which are to be implemented both by way of signing agreements and in other forms such as by making up proposals for cooperation, first of all in the R&D sphere, as well as in working out recommendations on unification, typization and standard:

zation of certain parts, assemblies, units and machines. A specific feature of this LPPC is a low proportion of agreements on IPSC in the entire number of agreements on cooperation. As by January 1, 1984 there were signed 16 multilateral agreements and 5 more are planned to be signed in the near future.

In implementation of the LPPC all European CMEA countries as well as Republic of Cuba and Mongolia participate. The Soviet Union is an active participant of all projects of the Programme and a coordinator of a number of them.

Prospects of the socialist economic integration in the area of industrial consumer goods up to the year 1990 are linked, to a great extent, with implementation of the LPPC ICG. A meticulous preliminary work has been carried out by the countries, as well as by respective organs and Standing Commissions of the CMEA in preparation and signing of multilateral agreements translating the LPPC into the language of a concrete business partnership. A number of important projects are already under way.

The measures in the field of the textile and clothing industry are dealt with in the first subprogram. A special emphasis in the LPPC ICG is given to measures for cooperation in the provision of these industries with certain kinds of raw materials, semi-finished products, dyestuffs and auxiliary materials.

Within the LPPC framework an agreement on cooperation in the development of IPSC in the manufacture of non-woven materials of the tissue type was signed in June, 1981 stipulating

ing division of the production programs according to the principle of different processes for the manufacture of such materials. The agreement can contribute to expansion of mutual derivatives of needle-felt floor carpets, furniture webs, glued clothing auxiliary materials of the "flizelin" type and other non-woven materials. The agreement on specialization in the manufacture of non-woven tissue-type materials makes it possible for the participant countries to ensure a more efficient utilization of the available scientific and technological reserves in this area, as well as of the high-productivity equipment and secondary textile raw materials and production wastes.

The agreement on scientific and technological cooperation in the development of a high-quality fur on a synthetic base signed in Moscow in February, 1981, is a prerequisite for elaboration and implementation, in 1986-1990, of the proposal on a multilateral specialization and cooperation in the manufacture of an artificial fur. The countries-parties to the agreement: USSR, Bulgaria, Romania and Czechoslovakia intend to achieve a comprehensive solution, during the cooperation, of the problem of manufacture of a high-quality synthetic fur replacing an expensive and hardly available natural fur by the light industry, beginning from the stage of R&D and ending with the manufacture and exchange. This agreement is one of the first in the series of subsequent agreements on cooperation in the entire cycle "science-technology-production-marketing". Its implementation will make it possible to develop processes for the manufacture of a perspective assortment

of a synthetic fur, initial specifications for raw materials chemicals and equipment so as to provide further opportunities for cooperation directly in the process of manufacture. Also stipulated is the formation of a perspective assortment of a high-quality artificial fur for outwear and head-dress, as well as toys and footwear with improved consumer and exploitation properties.

An extensive program of scientific and technological cooperation to be carried out within the LPPC framework is directed to the provision of a new assortment and of high-productivity, labour- and material-saving technologies for the manufacture of fabrics, knitted wear and clothing. A great attention is paid to the problem of environment pollution and improvement of labour conditions at the TCI enterprises where women are predominantly employed.

Therefore, the present stage of implementation of the LPPC ICG is characterized by a further detalization of the cooperation conditions, arrangement of the measures specific by the subprograms into a system of multilateral and bilateral agreements.

An important feature of the LPPC, including the TCI goods, is its integral relationship with national plans of the development of national economies, with attainment of the socio-political goals set by the parties and governments of the socialist community.

IV. MUTUAL TRADE OF EUROPEAN CMEA COUNTRIES IN TEXTILES AND CLOTHING

§ 1. Dynamics and structure of the mutual trade

The foreign trade in the TCI goods in all stages of the development of the socialist community has been playing a leading role and for the time being it still remains a major form of interaction of socialist states in this particular sphere. At the same time, at the present stage new trends are being shaped in the foreign trade in textiles and clothing connected with a general change in the terms of mutual deliveries.

An expansion and a qualitative improvement of the assortment of the TCI products in the retail trade of the CMEA countries is being linked to a greater extent with exchanges of these products in the international market. During the 70s the turnover of trade in these goods between CMEA European countries considerably increased. Thus, total exports over the decade (1970-1980) increased by 3-3.5 times and imports by 1.5 times respectively. In 1983 the trade in these goods increased by 6 per cent as compared to 1980.

The structure of foreign trade in the TCI products is caused, to a considerable extent, by changes in the structure of the consumer's demand which corresponds to the world-wide trends. These changes are characterized by a stabilization or even decrease of the share of trade in cotton and wool fabrics simultaneously with increasing demand for finished clothing knitted goods in the first place. At the same time, owing to

the growth of incomes the demand for fancy goods is also increasing.

In the exports of consumer goods of all CMEA countries clothes occupy the first place accounting for nearly 35 per cent of the total exports of the finished products of the light industry.

The share of exports of cotton fabrics is noticeably reduced. The maximum drop in exports of fabrics is noted for the USSR over the period of 1970-1982 (by 3 times), Bulgaria (by more than 2 times) which is explained by expansion of the manufacture of clothing in the countries and increased exports of finished clothes, underwear and tricot goods from other CMEA countries: by 3-4 times over 1970-1982. Especially high growth rates of exports of these goods are characteristic for Hungary, Poland, Czechoslovakia - by 5 times, Bulgaria - 4 times and GDR - by nearly 2 times.

An increased share of the TCI products in the structure of imports is noted for Poland and Hungary, since their share previously has been insignificant, with reducing imports from the USSR, Czechoslovakia and some other countries (Table 30 of the Appendix). Within 1970-1982 the highest average growth rates were characteristic for absolute volumes of imports of finished clothes and underwear by CMEA countries - by 3.1 times. The imports of cotton fabrics by CMEA countries have increased only by 1.7 times, those of wool fabrics - by 1.4 times, silk fabrics - by 1.6 times (calculated on the basis of the data presented in Tables 30-35 of the Appendix).

The analysis of mutual exchanges in the TCI products shows that two groups of countries can be revealed: net-exporters and net-importers. The main exporters are GDR, Hungary, Czechoslovakia. They account for about 70% of the total exports of the TCI products. The major^{net-}importer of the TCI products is the Soviet Union.

The mutual trade of foreign CMEA countries in the TCI goods is characterized by similarity of structures of imports and exports, i.e. by the prevailing role of the intraindustrial exchange. This reflects, above all, the similarity of natural conditions and production structure of the TCI of the foreign European CMEA countries. The process of nearing of the levels of their economic development has also contribute to a predominant development of the intraindustrial division of labour between them. In the textile and clothing industry an assortment exchange in finished goods is prevailing.

At the present time in CMEA countries a wide range of goods in sufficiently great amounts is produced (in Czechoslovakia - about 400,000 items, in Romania - 165,000). For this reason, imported TCI goods in the domestic consumption of the European CMEA countries are still insignificant. For example, on the inner market of Czechoslovakia their share is 5-7 per cent, in Bulgaria and Hungary - about 20 per cent on the average.

The Soviet Union is a net-importer of the TCI goods from CMEA countries; it accounts for about 65 per cent of the total imports of these goods by the CMEA countries. In 1982 the USSR accounted for 38 per cent of the total imports of

wool fabrics by the CMEA countries, 78.8 per cent of clothes, 68 per cent of silk fabrics. The Soviet Union imported from the CMEA countries altogether 426.3 mln. roubles worth of fabrics, 1,104 mln. roubles worth of clothing articles, 597.3 mln. roubles of knitted articles which substantially elevates the share of imported goods in the retail trade turnover of this country: about 15 per cent of the finished clothes are delivered from the fraternal socialist countries. At the same time, the USSR is a major and stable supplier of raw materials for the textile and clothing industry on a long-term basis. This is illustrated by the data of Table 6.

Table 6

Share of the USSR in the total imports of cotton fibres by individual CMEA member countries (%)

	1960	1970	1975	1980	1981	1982	1983
Bulgaria	59,8	76,8	82,3	73,6	73,6	67,9	55,4
Hungary	62,1	51,0	57,2	49,5	...	80,8	60,6
G D R	79,9	92,7	90,3	87,4	90,8	86,1	74,3
Poland	60,5	68,7	70,1	73,4	86,3	88,2	84,4
Romania	61,3	39,4	28,3	38,4	49,2	29,8	67,8
Czechoslovakia	47,7	63,1	56,6	42,9 ^x)	58,7	63,9	63,9
Total of CMEA countries	62,0	66,7	59,1	...	...	...	69,1

*) Averaged for 1976-1980.

Source: Statistical Yearbook of CMEA member countries, 1984, pp. 98, 305-360.

Exchanges of man-made fibres and wool is also successfully developed which is demonstrated by the data of the following Tables 7 and 8.

Table 7

Foreign Trade of CMEA Countries in Wool
(based on scoured wool) in 1983

	Total ex-ports, thous. t	Including to CMEA countries	to IDCs*	Total im-ports, thous. t	Including from CMEA countries	IDCs	Balance in trade with IDCs (ex-ports-im-ports)
Bulgaria	0,3	-	0,3	1,2	0,1	1,1	-0,8
Hungary	2,9	-	2,8	2,9	0,5	2,1	+0,7
G D R	8,7	-	8,7	34,6	0,5	32,7	-24,0
Mongolia	15,0	14,8	-	-	-	-	-
Poland	-	-	-	23,0	6,5	16,1	-16,1
Romania	-	-	-	1,9	-	...	...
U S S R	4,2	3,3	0,9	149,5	10,1	103,9	-103,0
Czechoslovakia	0,5	-	0,5	20,7	1,4	15,4	-14,9
TOTAL	31,6	18,1	13,2	233,9	19,2	171,3	-158,1

* IDCs - industrially developed countries

Source: calculated from the data of the Statistical Yearbook of the CMEA Member Countries and national statistical yearbooks of the CMEA countries

Table 8

Foreign Trade of CMEA Countries in Man-Made Fibres in 1983

	Total ex-ports, thous. t	Including to CMEA countries	IDCs	Total im-ports, thous. t	Including from CMEA countries	IDCs	Balance in trade with IDCs (ex-ports-im-ports)
Bulgaria	5,3	2,0	1,1	2,8	0,5	0,8	+0,3
Hungary	11,4	3,4	3,9	33,0	18,1	14,3	-10,7
G D R	77,7	32,6	43,3	23,6	4,2	19,4	+23,9
Poland	15,8	11,8	1,1	39,7	16,7	21,5	-20,4
Romania	...	4,4	...	11,5	11,1	...	...
U S S R	24,3	23,2	-	124,3	8,3	113,2	-113,2
Czechoslovakia	35,8	22,5	11,1	33,5	22,0	7,6	+3,5
TOTAL	170,3	99,9	60,5	273,9	86,4	177,1	-116,6

Source: See Table 7.

The raw-material resources and vast capacity of the domestic market of the Soviet Union constituted and still constitute a sound base for the development of the textile and clothing industry of the CMEA countries. Continuously expanding external relations provide a positive effect on the general progress and structure of the TCI, enrichment of the assortment of goods. The large-scale orders from the Soviet Union contribute to a higher efficiency of production, aesthetic level and quality of the products delivered by the other CMEA countries. The opportunities of structural shifts in commodity exchanges in the TCI are linked with the growth of mutual interrelated deliveries of raw materials for the TCI, equipment, with an extending practice of "donative" transactions, development of diverse forms of the assortment exchange including expansion of chains of shops for selling national goods of individual countries, frontier trade, etc.

The quantitative expansion of international exchanges in goods is effected along the line of not only foreign trade but of domestic trade as well, consumer cooperative trade, exchange between department stores and big shops, between trading and production organizations of CMEA countries. These forms of exchanges exist since 1969. From 1972 started its activity the Conference of Ministers of Domestic Trade - an authority within the CMEA intended for cooperation with the view to develop direct exchanges of products (textiles, clothing) and to create proper conditions for enhancing specialization and cooperation in the manufacture of these products, for unification of terms of exchanges in similar goods.

Such exchanges make a better acquaintance of buyers with the assortment, especially through organization of "weeks" of sale of national goods, with the achievements of individual countries in the production of mass-demand commodities. An average annual growth rate of commodity exchange in the domestic trade of the USSR over the period of 1976-1980 was 14 per cent. In 1981 the growth of trade on the whole reached 23.4 per cent vs. 1980 and exchanges between department stores - 41 per cent. The total trade exchanges amounted to 256 mln. transferred roubles. In the Soviet state department stores 536 weeks of sale of commodities from CMEA countries were held in 1981.

The volume of trade between big shops increased by more than 44 per cent over 1980-1982. The exchange of commodities in the frontier trade increased by more than 60 per cent over the same period.

In perspective it is envisaged to extend the practice of the frontier trade, weeks of national state department stores trade fairs, season sales of cheap goods, expanded network of shops for selling national commodities of CMEA countries.

The assortment exchanges of commodities also grow owing to direct ties between trade organizations and in the sphere of production. The problem of a better functioning of domestic shops are closely connected with expansion of direct contacts with manufacturers and suppliers, as well as with elaboration of special terms of deliveries, amendments in national systems of planning and management. One of possible ways of

increasing imports, to the Soviet Union, of the TCI goods from socialist countries is expansion of the network of national shops in this country. At the present time 19 shops for selling goods from CMEA countries function in Moscow.

The experience shows that in order to increase sales and elevate the proportion of such shops in the retail trade turnover it is necessary to enlarge direct ties with suppliers of the TCI commodities.

An important precondition of the growth of the share of TCI products in the mutual trade is an improvement of their quality. The arrangement of collections of modern fashion products enables a more purposeful orientation of the TCI of CMEA countries to the manufacture of export goods, to a better organization of both foreign and domestic trade. In this connection the countries intend to enhance cooperation in the area of standardization and unification, use of higher national standards, more strict requirements to mutually delivered products as important means for improving their quality.

§ 2. Export Specialization of European CMEA Countries

The foreign trade is regarded as an important means in solving the problem of the assortment of the TCI products, satisfying the demand for high-quality fashion goods in domestic markets and as a factor for shaping an export specialization.

Many of foreign CMEA countries carry on a stable production of various commodities for satisfaction of not only their own demands, but the demands of other countries of the socialist community. Thus, Bulgaria is specializing in the

manufacture and exports of textiles and clothing; Hungary - in products of cotton, silk and clothing industries; GDR - silk fabrics, clothes, underwear; Poland - wool fabrics and clothes; Czechoslovakia - knitted goods and clothing.

The export-oriented specialized subindustries of the TC occupy the leading place in the commodity structure of export of goods from the countries under consideration; exports cover a considerable portion of the gross output value of corresponding subindustries. For example, in Hungary the share of the tricot and clothing industry in the entire exports of consumer goods in 1981-1983 amounted to nearly 70 per cent, while in its cost value it exceeded a half of their gross output; the same ratio is observed in Czechoslovakia in respect of the tricot and clothing industry.

Quite illustrative is the indicator of export specialization (share of exports in production) of CMEA countries in the production of the TCI goods (Table 9).

The largest exporters of cotton fabrics to the market of CMEA countries are Czechoslovakia, GDR, Hungary (above 55 per cent of the total exports). The major suppliers of clothing articles and linen to the CMEA market in 1981-1983 were Hungary, GDR, Poland and Czechoslovakia which accounted for 90 per cent of all deliveries of these products. Knitted goods are delivered mainly by Hungary, GDR, Poland and Czechoslovakia - nearly 90 per cent of all deliveries.

At the end of the 70's the growth rates of the foreign trade in the TCI products were behind the growth rates of their manufacture. This is due to the fact that all countries

Table 9

Share of Exports in the Manufacture of Some Kinds of the
TCI Products in CMEA Countries in 1983 (%)

Country	Fabrics total	I n c l u d i n g		
		Cotton	Wool	Silk
U S S R	0.9	1.2	-	0.5
European CMEA countries (without the USSR)	14.2	16.6	9.1	17.9
of which:				
Bulgaria	5.9	6.0	6.0	7.4
Hungary	27.0	24.4	29.0	48.5
G D R	23.6	24.9	10.6	30.5
Poland	6.6	7.8	5.7	7.0
Romania	11.9	17.8	-	-
Czechoslovakia	17.8	23.2	19.3	19.3

Source: Statistical Yearbook of the CMEA Member Countries, 1984, pp.99-101, 305-360.

manufacture a very broad range of goods and, as a result, they produce commodities not always in economically reasonable amounts and on a sufficiently high quality level. Moreover, due to dissipation of the scientific and technological potential the manufacture of competitive style-and-fashion goods on the level of world standards is delayed and the possibilities of translating the scientific and technological progress achievements to practice become limited.

The opportunities for an increased foreign-trade turnover in the TCI commodities between CMEA countries are linked

with establishment of international firms for a commercial activity in the area of exchanges with these products (on the basis of large-scale specialized associations), carrying out joint measures on investigation of the market, drafting forecasts of the demand which is directly associated with amelioration of the foreign-trade policies, strengthening of the export potential of CMEA countries, its modernization on the up-to-date technological basis, improvement of the economic mechanism of cooperation. This will make it possible, already in the near future, to increase deliveries of the TCI products from CMEA countries without any additional pressure on the raw-material industries of the USSR using merely a structural rearrangement of the bulk of exports of the TCI products from CMEA countries.

V. RELATIONS OF CMEA COUNTRIES WITH OTHER GROUPS OF STATES

§ 1. Trade and Cooperation with Other Socialist Countries

The relations with socialist countries of the non-European region have not still obtained a large-scale development in the production and exchanges of the TCI commodities which can be explained by particular features of the structure of their economies, geographic position, as well as by a narrow intraindustrial structure and a limited export base. Out of this group of countries there should be mentioned, in the first place, the relations of European CMEA countries with the CMEA member countries of the non-European region:

Vietnam, Mongolia and Republic of Cuba. Despite high rates of growth of the output of the textile and tricot industries in these countries, their share in the total industrial output of the CMEA countries is but insignificant. Thus, in 198 these countries accounted, in the total volume of production of the CMEA countries, for: in fabrics and socks-stockings, knitted outerwear - about 1 per cent, cotton fabrics - 0.75 per cent, less than 1 per cent in silk and wool fabrics. For knitted underwear this figure was 2.4 per cent. In less developed non-European CMEA countries there is shortage of the basic TCI products, since these branches of industry are characterized by a "narrow" intraindustrial structure, a low level of saturation of the domestic market with these goods. The non-European CMEA countries steadily concentrate their efforts on purchasing the TCI products at the world socialist market. The trade exchange of the TCI products between the European CMEA countries and these countries is not high; the USSR acts here as an exporter of the TCI goods (in contrast to cooperation with European CMEA countries). An urgent problem for them is a rapid quantitative expansion of the output of the TCI at the account of new construction and modernization of existing production facilities, an all-round development of their own base of raw materials. At the present time European CMEA countries promote a foreign-trade cooperation with this group of countries (exports of finished goods and a small-scale imports of raw materials, mainly from Mongolia take part in loading of the available production capacities on the principles of granting "donative" raw materials, ren-

der technical assistance in construction of the TCI projects play a great role in vocational training of personnel and transfer of the operation experience. The European CMEA countries have the opportunity of "redeployment" of a portion of labour-intensive industries in these countries by assisting them in the creation of the material-and-equipment basis. This very approach is practically implemented by GDR, Czechoslovakia, Hungary and Bulgaria.

Mongolia produces more than 10 kinds of wool every year mainly sheep wool, as well as a considerable quantity of leather raw materials. It attained a positive balance in trade in clothes and linen. The enterprises built with the assistance of other CMEA countries such as a plant for processing of hides for fur articles (built with the aid of the USSR), sheepskin-fur factory in Darkhan (with the aid of Bulgaria), clothing factories (with the aid of Hungary) play an important role in the Mongolian light industry.

Vietnam has a vast potential - abundant labour force. The facilities for the manufacture of the TCI products available in different sectors of the economy are underloaded due to shortages in raw materials, energy, materials, spare part qualified manpower. Provided that these problems are solved, Vietnam might become a major exporter of the TCI products to the CMEA market. There are examples of processing of the "granted" or "donative" raw materials (cotton) from other CMEA countries and counter exports of fabrics, clothing, linen. Forms of utilization of the labour force can be most

diverse - in particular, operation of Vietnamese enterprises on "granted" raw materials, orders for the manufacture of labour-intensive kinds of articles for European CMEA countries. At the present time a program of organization of new economic regions is under way in Vietnam, as well as projects of development of virgin and idle lands to increase areas for food and technical crops (in rural areas of northern provinces, in seaside provinces of the center). In implementation of this program a large-scale international cooperation is being effected with the USSR, Czechoslovakia, Bulgaria and GDR. This is one of the methods for solving the problem of building-up the export potential of the country.

In the southern and central provinces of the socialist Vietnam large-scale state-owned cotton plantations are being created. By the beginning of the 90's cotton plantations of the Republic will amount to more than 30,000 ha. This will mean a considerable contribution to satisfaction of the country's demands in raw materials, to development of the textile industry.

In Republic of Cuba several major enterprises were put on line for the manufacture of cotton and synthetic fabrics, socks-stockings, clothes and linen. For example, in June, 198 the first stage of big textile combine works was put into operation in Santjago-de-Cuba which after completion of construction will produce 80 mln.m² of fabrics and 2,000 t of yarn annually. The Cuban foreign trade faces very difficult external conditions, wherefore its trade policy is oriented mainly on the socialist market due to the fact that the output

of these products is still insufficient in comparison with the demand for them. Cuba imports substantially all kinds of the TCI products. In some years, when possible, small lots of goods for enlarging their assortment were purchased in the third countries - Spain, Japan, Hong-Kong. Recently clothing articles were imported to Cuba from Nicaragua.

Therefore, the main routes of cooperation of the European CMEA countries with the non-European countries of the socialist community (Vietnam, Mongolia, Republic of Cuba) are

1. Rendering technical assistance on the part of European CMEA countries in reinforcement of the production base of the TCI of these countries including:

(a) industries for a primary processing of raw materials and manufacture of semi-finished products for the TCI on the product-buy-back basis for the purpose of using local raw materials in those countries where appropriate resources are available for importation of spent raw materials and necessary intermediates;

(b) manufacturing industries (textile, tricot and clothing ones) with the view to continuously reducing of exports of finished TCI goods from the European CMEA countries.

2. Expansion of "granting" transaction, i.e. transfer of a portion of raw materials to the countries having unloaded production facilities in the TCI and free labour force (mainly Vietnam) for processing.

3. Production cooperation in clothing industry arranged according to the technological type (stage-by-stage) using local manpower for the manufacture of a simple assortment of

clothes. The foreign European CMEA country have already been widely practicing such cooperation by the principle of "order clothing" in relations with Vietnam (by orders placed by Hungary and Czechoslovakia Vietnam produces men's and children's shirts, working outfit).

4. Construction of joint enterprises on the share input principle for obtaining additional resources of raw material (cotton, wool, silk) for meeting the domestic demand.

5. Establishment of joint trade-marketing enterprises for exportation of the local produce, including joint-ventures to the markets of the third countries.

The European CMEA countries expand relations in the manufacture of the TCI products with the Korean People's Democratic Republic, as well as with Laos and Campuchia. The KPDR does not have resources of raw materials for the manufacture of the TCI products. The cooperation is effected on the principles of "granted" raw materials, as well as in the field of development of the production of man-made fibres which account for 60 per cent in the total balance of the textile raw materials of the KPDR. Also widespread is the cooperation in the form of order clothing on the product-buy-back basis, as well as participation in modernization of Korean enterprises. Laos and Campuchia have opportunities for planting cotton. The cooperation with CMEA countries is directed to the assistance to these two countries in creation of enterprises for a primary processing of raw materials (in particular, construction of a cotton-ginning plant in Laos), as well as to the provision of them with the finished TCI goods.

Extensive foreign-trade relations in the textile and clothing industry are maintained by the European CMEA countries with Yugoslavia which has a well-developed textile and clothing industry. The Soviet deliveries of raw materials for the TCI of Yugoslavia are of great importance; at their expense she satisfied in 1983 54 per cent of her requirements in cotton. The Soviet orders play a considerable role in a fuller loading of the production capacities of Yugoslavian enterprises. The Soviet Union has opened for Yugoslavia its vast and stable market for commodities in selling of which Yugoslavia is especially interested. In considerable quantities SFRY is exporting a wide range of finished clothes, knitted goods, haberdashery articles of the TCI. In 1984 from Yugoslavia knitted goods were imported for more than \$120 million worth, clothes - for \$88 million. One of the most important forms of cooperation is rendering of technical and economic assistance by the Soviet Union in implementation of the TCI projects.

A number of product-buy-back agreements are under way for which the Soviet Union delivers the required equipment and renders technical assistance, especially in carrying-out land-improving and irrigation jobs, as well as some other projects aimed at improving conditions for the production of natural raw materials. Furthermore, subject to the plan of development of scientific and technological contacts several agreements have been signed on a comprehensive cooperation in carrying out R&D, creation of prototypes, specialization, coproduction and mutual deliveries of the finished products

of mechanical engineering for the TCI, as well as on a joint solution of the problems of automation of the production processes.

With other socialist countries Yugoslavia maintains mainly foreign-trade relations in the TCI. SFRY also participates in a bilateral cooperation on the basis of "granted" raw materials with Hungary; under the agreement underwear knitted goods are manufactured in Yugoslavia from Hungarian raw materials (synthetic yarn) which are then partly exported to Hungary. Yugoslavia is a member of an international economic organization of CMEA countries in the chemical industry - "Interchimvolokno". The country also actively participates in the development of new kinds of textile raw materials.

During recent years foreign-trade relations with the China People's Republic have been considerably expanded.

The CPR intends to carry out modernization of textile and clothing enterprises built in the mid-50's with the help of some CMEA countries, in particular USSR and Poland. Furthermore, a considerable revival is noticed in foreign-trade relations, especially with the Soviet Union. Thus, the scale of deliveries of cotton fabrics from CPR over 1983-1984 increased by 50 times and the share of China in the import demands of the USSR elevated from 0.3 per cent in 1983 to 14.3 per cent in 1984; the volume of deliveries of silk fabrics increased by nearly 4 times and its share raised from 2.4 to 8.3 per cent. The deliveries of knitted goods increased by more than 3 times thus bringing the share of China in satisfying import demands of the USSR from 1.3 to 3.2 per cent.

Deliveries of overcoats and upper dress (except for leather and fur ones) increased by more than 2 times; deliveries of towels have grown by 5 times. In its turn, the Soviet Union increased deliveries of refrigerating cabinets by more than 7 times and over 3 times of other household appliances to China.

Some European CMEA countries (GDR and Czechoslovakia) maintain foreign-trade relations with Albania which has available raw-material resources for the textile and clothing industry (short-fibred cotton and wool; long-fibred cotton is imported from Egypt), unloaded production facilities and free labour force. In 1984 Albania produced 46 mln.m of cotton fabrics, 12.4 mln. m of wool fabrics, 10.5 mln. pcs of knitted goods. Textile and clothing articles are exported only to socialist countries; in 1982 exports of textiles was about 10 per cent of the total exports of the country, in the assortment - cotton fabrics (velvet, cotton web) and clothing (jeans and working outfit).

§ 2. Trade and Firm-to-Firm Relations of CMEA Countries with Market-Economy Developed Countries

The CMEA countries maintain different forms of cooperation in the TCI with developed capitalist countries. In the development of trade and economic relations cooperation forms of interaction acquire a growing importance during the recent decades. They cover a whole complex of joint or concerted efforts in the sphere of production, R&D, transfer of technology and marketing; such cooperation is effected on the basis

of both simple agreements on coproduction on sub-contract terms or specialization and agreements on establishing joint ventures and multilateral complex projects with participation of partners from both socialist and developed capitalist countries stipulating a more profound division of labour. They make it possible to derive greater advantages and economic benefits from the international division of labour through production specialization and cooperation, cooperation in the sphere of R&d; they contribute to putting the economic interaction onto a long-term basis and serve as a precondition of a more dynamic and balanced growth of commodity turnover between them.

The cooperation of the TCI enterprises of CMEA countries with Western firms is effected mainly within the framework of product-buy-back agreements with participation of foreign companies in creation of new industrial projects, frequently on the "turn-key" conditions, modernization and technical re-equipment of the existing enterprises with payment for services and equipment by the products manufactured at these enterprises. This is legally fixed in so-called "frame" agreements setting forth the list and scope of mutual deliveries; they serve as a base for contracts, mainly with large companies, on particular subjects and commodities.

The most active interaction between socialist and capitalist countries is effected in the technology and equipment for the TCI, purchases of some raw materials, auxiliary agents and dyestuffs, as well as certain kinds of finished products. During recent years a high share of these countries is noted

in deliveries of machinery and equipment for the textile and clothing industry.

The above-mentioned trends are proven by the data regarding the share of mutual trade/and trade with developed capitalist countries in the total volume of imports of machinery and equipment for the light industry by CMEA countries.

Table 10

Share of mutual trade and of trade with developed market-economy countries in imports of machinery and equipment for the light industry by CMEA countries (%)

C o u n t r y	1980		1982		1983	
	I m p o r t s f r o m					
	CMEA co- untries	IDCs*	CMEA co- untries	IDCs	CMEA co- untries	IDCs
	Equipment for the textile industry					
Bulgaria	75	25	74,6	25,4	72	26,4
Hungary	36,6	63,1	26,6	73,2	24,4	75
G D R	59,5	39,9	56,4	41,7	54,6	42,4
Poland	76,3	23,5	87,7	12,3	76,6	23,4
U S S R	87,4	12,6	89	10,9	92,3	7,5
Czechoslo- vakia	63,2	36,3	53,8	43	60	35,2
	Equipment for the clothing industry					
Bulgaria	82,6	17,4	56,9	43,1	43,1	56,9
Hungary	34,3	65,7	32,9	67,1	36,2	63,8
G D R	55,8	44,2	62,5	37,5	82,6	17,4
Poland	77,7	22,3	94,1	5,9	64,8	35,2
U S S R	78,5	21,5	75,2	24,8	78,1	21,9
Czechoslo- vakia	58,0	40,6	34,5	60,9	59,6	33,0

Source: Calculated from the data of national statistical yearbooks for respective years; "Foreign Trade of the USSR in 1984", Moscow, "Finansy i Statistika" Publishers, 1985, pp.35, 52.

Note: *IDCs - industrially developed countries.

The developed market-economy countries are for the CMEA member states a major source of supply of dyestuffs and auxiliary agents for the TCI. They account for nearly 40 per cent of the total imports of these products by the CMEA countries

Table 11

Share of mutual trade and trade with market-economy developed countries in the total imports of organic and synthetic dyestuffs and natural indigo in the total imports by CMEA countries (%)

Country	1980		1982		1983	
	I m p o r t s f r o m					
	CMEA co- untries	IDCs	CMEA co- untries	IDCs	CMEA co- untries	IDCs
Bulgaria	56,5	43,5	58,6	41,4	54,8	45,2
Hungary	35,3	64,7	31,0	69,0	33,3	66,7
G D R	29,7	70,3	27,6	72,4	29,6	70,4
Poland	32,0	68,0	50,0	50,0	40,0	60,0
Romania	12,5	-	15,4	-	20,8	-
U S S R	61,2	34,0	71,4	23,6	64,9	31,6
Czechoslo- vakia	...	...	33,3	66,7	34,3	65,7

Source: Calculated from the data of national statistical yearbooks for respective years; "Foreign Trade of the USSR in 1984", Moscow, "Finansy i Statistika" Publishers, 1985, pp. 39, 88.

The foreign trade in textile and clothing articles is actively developing. The socialist countries are mainly exporters of the finished textile and clothing products. At the end of the 70's the trade of CMEA countries with capitalist states slightly revived owing, to a certain extent, to the development of cooperation in the manufacture of the TCI

products (see Tables 12 and 13). A specific feature of the structure of exports from CMEA countries to the states of this group is a considerable increase in the share of finished goods of the TCI in exchange for a deficient modern process equipment, raw materials of a high degree of processing finishing agents, spare parts and accessories (see Table 14). Thus, in the beginning of the 80's these countries accounted for nearly 60 per cent of the total exports of textile and clothing goods by Hungary and Romania. A dominant role in exports to capitalist markets is played by fashion high-quality consumer goods with a high content of imported materials obtained mainly for freely convertible currency and produced by the up-to-date technology non-infrequently under cooperation agreements with the Western companies.

Besides, CMEA countries, USSR in the first place, supply certain kinds of raw materials including natural ones to the capitalist countries. Thus, the most essential shift in the distribution of imports of cotton to the Western Europe was due to increased its deliveries from the Soviet Union: over the period of 1970/1971 to 1980/1981 they increased by more than 4 times (from 50,000 t to 201,000 t) while its share in the total imports of the Western Europe raised from 4.3 to 21 per cent, including (%): France to 48, West Germany - 27, Great Britain - 24.

Table 12

Share of mutual deliveries and deliveries to market-economy developed countries in the total exports of knitted underwear and outwear (in %)

Country	1970			1980			1983		
	CMEA countries		IDCs*	CMEA countries		IDCs	CMEA countries		IDCs
	Total	Incl. USSR		Total	Incl. USSR		Total	Incl. USSR	
Bulgaria	98,2	89,2	0,9	85,6	80,5	12,9	86,5	84,1	12,6
Hungary	71,5	64,8	20,0	64,2	56,7	32,4	68,0	60,1	31,0
G D R	79,3	41,1	18,1	63,3	48,3	33,4	72,5	59,5	25,8
Poland	72,0	64,0	21,2	58,8	47,1	30,0	71,1	55,3	22,0
Romania	56,8	44,6	38,6	42,8	34,9	-	46,7	37,9	-
Czechoslovakia	70,3	62,7	26,5	60,4	52,0	34,9	75,5	63,3	21,2

Source: Calculated from the data of national statistical yearbooks of CMEA member countries for respective years; "Foreign Trade of the USSR", 1970, 1980, 1984, p.35-85.

Note: IDCs* - industrially developed countries.

Table 13

Share of mutual deliveries and deliveries to market-economy developed countries in the total exports of clothes and linen by the CMEA countries (in %)

Country	1970			1980			1983		
	CMEA countries		IDCs	CMEA countries		IDCs	CMEA countries		IDCs
	Total	Incl. USSR		Total	Incl. USSR		Total	Incl. USSR	
Bulgaria	95,1	87,8	3,9	79,2	73,1	15,1	87,0	79,6	9,9
Hungary	74,9	61,7	20,6	39,2	33,0	55,3	40,4	34,2	55,0
G D R	72,2	53,6	25,8	56,0	46,4	39,1	62,3	53,0	35,4
Poland	80,6	71,2	14,2	63,1	55,1	31,8	65,5	56,6	30,9
Czechoslovakia	63,7	53,1	30,1	62,1	51,3	33,6	71,4	56,6	24,9

Source: Calculated from the data of national statistical yearbooks of CMEA member countries for respective years; Foreign trade of the USSR, 1985, pp.35-88.

Table 14

Share of market-economy developed countries in the total imports of synthetic staple fibres by individual CMEA countries (in %)

Country	1970	1975	1980	1983
Bulgaria	89.4	24.5	50.0	29.6
Hungary	-	13.7	66.2	74.2
G D R	100	100	56.8	79.9
Poland	86.7	86.7	54.1	56.7
Romania	94.4	55.8	-	-
Czechoslovakia	90.6	78.9	57.0	31.0

Source: Calculated from the data of national statistical yearbooks of CMEA member countries for respective years.

In 1981-1982 the world economic situation continued to deteriorate which resulted in reduction of exports of essential consumer goods from CMEA countries to the capitalist market. In view of this phenomenon, in 1983 some countries (Hungary, Czechoslovakia) developed a wide range of measures for ensuring growth of the production efficiency and exports of finished goods to these countries. Grace credits are envisaged for expansion of the manufacture of consumer goods for export. The primary objective is to produce TCI goods which would be competitive at any market of such goods. A long-range task is to improve effectiveness of exports, as well as to ensure a trouble-free provision of the population with consumer goods.

The analysis of trends of the world market of the TCI goods at the beginning of the 80's shows that in perspective exports from CMEA countries to the markets of developed industrialized countries will be even more complicated.

§ 3. Trade and Cooperation of CMEA countries with Developing States

The profile of developing countries in the international division of labour is defined first of all by clothes and textiles which in the early 80's accounted for slightly over a half of the deliveries of ICG. In exports of the majority of developing countries ordinary fabrics prevail, grey fabrics as a rule; in this category developing countries hold up to 50-60 per cent of the entire world exports, while in fabrics of a higher degree of manufacture - about 20 per cent. Major suppliers are Hong-Kong, Pakistan, South Korea, Brazil, Singapore, Egypt, Thailand.

On the verge of the 80's developing countries had an annual positive balance of about \$10 bln. worth in the trade in clothes and linen; their share at the capitalist market exceeded 40 per cent. The main "export workshop" of the world has become Asia, namely Hong-Kong, South Korea, Taiwan, Makao, Singapore, India. Clothing companies of developing countries from the very beginning arranged their manufacture with the view to marketing their products abroad, since their own population did not constitute a wide market for a mass-scale domestic trade. In the early 80's 93% of fabrics and 88 per cent of clothes of the total exports of these goods from developing countries originated from Asia.¹¹³ Countries

of Latin America export these goods in small quantities, though their share in the world production is slightly higher. African states remain net-importers, but some countries of the continent raise their exports of textiles and clothing commodities (Egypt, Maroc, Senegal, Tunisia, Ivory Coast).

CMEA countries purchase in developing countries large quantities of cotton (long-fibred in the first place), wool, petroleum, man-made fibres, dyestuffs, finishing agents, accessories, etc. As regards the trade in finished TCI articles, their imports to the European CMEA countries from developing states is not so great in absolute figures and still smaller in visible consumption. With the progress of industrialization and outcome of the national industry on the world market an evergrowing share of finished goods is becoming characteristic for imports of CMEA countries from developing states. At the beginning of the 70's the trade in the TCI goods with newly free states expanded at a rapid pace, but by the end of the decade these rates decreased. Since 1981 the share of the TCI products in the imports from developing countries started to rise again. At the present time developing states account for 5.5-7 per cent of the entire trade of CMEA countries in consumer goods.

Most actively imported from developing states to CMEA countries are cotton fabrics, clothing and knitted goods. The share of developing countries in exports of clothes and linen from CMEA countries does not exceed several per cent, but is quite noticeable in exports of cotton fabrics (above 30 per cent) and wool fabrics (15-20 per cent).

The general pattern of the trade is considerably shaped by the Soviet export-import. While before the war and during the first post-war decades the USSR delivered the TCI goods to the Oriental countries, by the beginning of the 70's the flow of these goods from developing states considerably surpassed the value of counter deliveries. The negative balance of the USSR is increasing with time, since import demands of this country in consumer products increase and opportunities for buying goods in developing states in repayment for the technical and economic assistance rendered to them have broadened.

The analysis of the Soviet foreign trade shows that more or less substantial transactions in imports are carried out with 10-12 developing states and all of them, except for Brazil and Argentina, are located in Asia and Africa. India is a traditional supplier of large lots of goods to the USSR. During many years the Soviet Union purchases products of the Indian textile industry, cotton fabrics, knitted goods; their imports in 1984 amounted to 141 mln. roubles. Also bought in big quantities are such goods as clothes and underwear from cotton fabrics, bed linen and table cloth, towels and carpet goods.

Syria started to play an important role in the Soviet imports of the TCI products since the mid-70's. As regards its share in the Soviet imports of silk and synthetic fabrics (over 10 per cent) Syria ranks third after Japan and Poland. Syrian knitted products are successfully commercialized on the Soviet market.

Textile and clothing goods account for a major portion of imports of consumer goods from Pakistan; for many years the Soviet Union buys in that country cotton fabrics and, during recent time, clothes, bed linen, table cloth, towels. Pakistan is the second, after India, supplier of cotton fabrics to the USSR.

Among other suppliers of the TCI commodities to the Soviet Union there should be mentioned Turkey, Iran, Lebanon, Cyprus which deliver clothes, knitted products, bobbinet articles, various fabrics and other commodities.

Hungary holds the second place in imports of the TCI commodities from developing countries. Purchases in developing states by the end of the 70's constituted mainly by women's outerwear (95 per cent), women's slacks and skirts (94 per cent), men's cotton underwear (50 per cent), men's trousers (64 per cent). According to some estimates, Hungary meets up to 1/3 of import demands for clothing articles through imports from developing countries. Owing to this Hungary substantially enlarges and refashions the assortment of the TCI products.

The Hungarian trade in the TCI commodities with developing countries is combined with the production cooperation and frequently results from the latter. With the aid of Hungary numerous textile and clothing enterprises have been built abroad and now they manufacture products intended for the Hungarian market. The major portion of the Hungarian foreign trade with newly free states rests with big countries and petroleum-extracting states such as Iran, Iraq, Libya, Brazil.

India, Pakistan, Egypt, Saudi Arabia. The same countries are also importers of the Hungarian goods.

In the German Democratic Republic the TCI is traditionally on a high technological level drawing mainly upon its own processes and equipment. The GDR is a leading exporter of the TCI goods to CMEA countries. Only a small percentage of exports of textiles, clothing and knitted goods is intended for deliveries to developing countries. The GDR has traditional trade contacts with countries of North America, Middle and Near East, Latin America, some African states (Algeria, Angola, Ethiopia).

Imports of consumer TCI goods from developing states are rather modest which is due to the difference between the structure of import demands of the GDR and export possibilities of developing countries: GDR purchases abroad mainly modern style-and-fashion goods of the top quality grade.

Czechoslovakia is an exporter of a wide range of the TCI commodities. As regards the value of exports of the TCI goods to developing countries, Czechoslovakia ranks second, after Hungary, among CMEA countries. At the end-70's the TCI accounted for about 18 per cent of the Czechoslovak exports to this group of countries. Czechoslovakia supplies to developing countries fabrics from various fibres, clothes carpet goods. The main buyers are Iraq, Jordan, Kuwait, Lebanon, Nigeria, Yemen Arab Republic, Katar; in lesser amounts - Brazil, Bolivia, Venezuela, Mexico. In the commodity structure of imports from developing states cotton and other fabrics can be mentioned, clothes and linen.

Poland is an exporter of fabrics from all types of fibres, clothes and linen to developing countries. Main buyers are Libya, Iraq, Syria, Jordan, Kuwait, Algeria. With the view to saving foreign currency at the beginning of the 80's Poland sharply reduced purchases of the TCI commodities on the non-socialist market. The value of imports decreased and hence, the share of the TCI articles in the Polish imports from developing states dropped too. The purchases in developing countries play an important role in satisfying import requirements in cotton fabrics - by 65 per cent (including those from Brazil - 40 per cent).

In Bulgaria during recent years there is a trend of growing exports of the TCI commodities to developing countries, mainly clothing, knitted goods and textiles. Traditional marketing zones - Mediterranean region, Middle East, North and West Africa. Thus, small lots of cotton fabrics were delivered in 1982 to Iran and Nicaragua, clothing goods - to Yemen Arab Republic, Lebanon, Kuwait, Egypt, People's Democratic Republic of Yemen, Ethiopia, Saudi Arabia. The value of imports of consumer goods from developing countries is insignificant. A delivery of cotton fabrics from Pakistan (4.2 mln.m) was recorded, as well as from India, Turkey, Syria, socks-stockings from India, Cyprus and Turkey. Stable import relations with developing countries still have not been established by Bulgaria in the trade in the TCI goods. The share of developing states in the total imports of the TCI commodities by Bulgaria is only about 6 per cent.

From the beginning of the 70's Romania has been active

pursuing the policy of expanding economic relations with developing countries. Exports from Romania to developing states consist by more than 50 per cent of finished goods including consumer ones (cotton fabrics, knitted products, mainly clothes). Exports of the TCI commodities to developing countries considerably surpass their imports from this region. The main partners of Romania are Iraq, Iran, Libya, India, Egypt, Lebanon, Syria, Turkey, Nigeria, Brazil.

The developing countries play a noticeable role in the provision of the TCI of CMEA countries with raw materials which is illustrated by the data of Table 15.

An essential portion of import demands for textile fibres (up to 30 per cent for cotton, including over one half of the long-fibered one) is covered by purchases in developing countries. In some cases textile raw materials are supplied from developing countries in payment for deliveries of equipment and other manufactures from CMEA countries, as well as for the rendered economic and technical assistance. CMEA countries also buy in developing states semi-finished products, e.g. yarn from Egypt. Therefore, in the trade in TCI commodities with developing countries the Soviet Union is a net-importer, whereas European CMEA countries export consumer goods to them in an amount surpassing, as to its cost value, the amount of imports by several times. At the beginning of the 80's a shift was noted towards expansion of trade exchanges with developing countries and elevation of their share in export-import of the TCI commodities.

The cooperation with developing countries in the manu-

facture and exchange of the TCI products is not reduced to only trade operations. Its another important form is rendering a technical and economic assistance to newly free states which is aimed at strengthening of the national independence of developing countries, helping them to create self-sustaining economic structures, establishing sound mutually beneficial relations between both groups of countries.

Table 15

Share of Imports from Developing Countries in the Total Imports of Cotton Fibre by CMEA Member States (in %)

Country	1970	1975	1980	1981	1982	1983
Bulgaria	17.5	10.5	25.8	18.9	28.7	40.8
Hungary	40.8	41.7	29.8	23.4	18.1	34.4
G D R	7.9	9.2	6.8	10.4	11.7	16.1
Poland	23.5	18.9	18.3	9.7	5.6	11.7
Romania	32.9	50.1	...	-	-	-
Czechoslovakia	32.8	37.8	72.7	13.4	25.6	26.0

Source: Calculated from the data of national statistical yearbooks of CMEA countries for respective years.

The outset of assistance to newly free states in the light industry dates back to the 30's. At that time a cotton-ginning factory was built with the aid of the Soviet Union in Afganistan. The construction of two textile factories in Turkey (Kaiseri /1935/ and Nazilli /1937/) enabled the production of up to 70 per cent of the country's output of cotton fabrics by the end of the 30's and made it possible to considerably reduce its dependence on imports.

During the 60's the Soviet Union rendered technical assistance in construction and supply of the equipment for textile factories in Egypt, Iraq, Turkey, Pakistan, as well as clothing enterprises in Iraq and Uganda.

The Soviet Union also takes part in training of personnel for the TCI of developing countries. This training is effected at the construction sites, at vocational centers created with the help of the USSR in the territory of developing countries, as well as at the Soviet institutes and special high schools. An example of such cooperation is the national Institute of Light Industry in Bumerdes (Algeria) for education of 2,500 students and a textile college for 500 students under the Institute. Vocational centers for training specialists for the textile industry have been created in Egypt and some other countries where corresponding projects were built.

From the beginning of the 60's other European CMEA countries started their economic cooperation with newly free states. Owing to a high quality and technical level the equipment for the TCI available from European CMEA countries enjoys high renown at non-socialist markets, in particular those of developing countries. This was a precondition for a further development of a technical and economic assistance. The significance of TCI industries in the entire volume of the assistance rendered by European CMEA countries is rather great. By the beginning of 1981 in the light industry of developing countries 239 projects were built or were under construction with the assistance of CMEA countries (including

the USSR). Bulgaria, for example, rendered technical and economic assistance in furnishing of textile factories with modern equipment in Pakistan, Algeria, Nigeria, Uruguay. Hungary cooperated in creation and equipment of factories for the manufacture of clothing products in India, Egypt, Pakistan, Syria. The assistance rendered by the GDR was concentrated mainly in the textile industry, namely in construction of cotton-spinning factories in Egypt, India, Bangladesh, Indonesia, Iraq, Pakistan, Syria, Sri-Lanka, Algeria, Brazil, Mexico, Uruguay, Columbia; factories for the production of knitted articles in Egypt, clothing factories in Egypt and Tunisia. The cooperation is partly effected on the product-buy-back basis, i.e. a portion of cotton yarn and fabrics is delivered to the GDR.

A major portion of technical and economic assistance rendered by Czechoslovakia is focused in the textile industry. Over the past 20 years Czechoslovakia exported to only Arab states 19 textiles factories. Out of 32,000 looms available in Egypt 12,000 were delivered by Czechoslovakia. Cooperation in this industry was also effected with Iraq, Iran, Syria, Turkey, Soudan, Sri-Lanka, Tunisia. With the assistance of Poland a wool-spinning factory in Afganistan, a plant for the production of dyestuffs in Turkey were built. Polish organizations took part in construction of a large textile factory in Paraku (Benin) where 6,000 persons are employed. In Ethiopia, also with Polish assistance, a factory for the manufacture of blankets and a textile factory were built.

Romania rendered technical assistance in construction of textile factories in Sudan. For the credit granted by Romania the first factory for the manufacture of synthetic materials for outwear and linen was built in Kongo; its capacity is 3.85 mln.m of fabrics a year. Its products are intended for both domestic consumption and exports to other African countries. Within the recent 20 years a particular specialization of CMEA countries has formed in rendering assistance and in deliveries of machinery and equipment for the TCI to developing countries. Thus, in the development of the textile industry an active cooperation is effected by Czechoslovakia, GDR, USSR, as well as Poland, Bulgaria, Romania; in the clothing and tricot industries - Hungary and GDR.

Apart from a direct assistance in the manufacture of the TCI products CMEA countries maintain a broad cooperation with developing countries in other sectors of their economy indirectly related to the TCI. This is, first of all, reinforcement of the raw-material base of the textile industry which takes the form of projects on irrigation, water-supply, electroenergetics, planting respective farm crops. The construction of major hydroenergetic projects enabled an additional irrigation of lands and a higher yield of cotton in Syria, Iraq, Egypt and other countries.

There is still another aspect of technical and economic cooperation in the production of the TCI commodities. Some developing countries are capable of rendering assistance in the manufacture of such goods to Vietnam and Cuba. Thus, there are projects of assistance of Mexico and Argentina to

Cuba in different industries; these countries might be also invited to assist in increasing output of the TCI products. Indian companies already possessing a considerable experience in the manufacture of textile and clothing goods could render technical and economic assistance to Vietnam. Such interaction is possible on the cooperation basis, since enterprises existing in Vietnam are underloaded due to shortages of raw materials, fuel, spare parts. Under the condition of normalization of a political situation the companies of the ASEAN countries could participate in such projects (including processing of "granted" raw materials at Vietnamese factories).

The cooperation of CMEA countries with developing states in the manufacture and exchange of the TCI products has a marked influence on the economies of both developing and CMEA countries; it also exerts a positive effect on the general progress of economic interaction between these two groups of countries. First of all, the structure of the gross output is changing in favour of the manufacturing industries; certain changes occur in solving the problem of employment; the domestic market of developing countries is expanding and shortages in the provision of the TCI goods are being overcome; exports from developing countries are getting stabilized. A certain effect is also produced through exports of the TCI products from CMEA countries to developing states, since exported are mainly mass-scale consumption goods intended for wide strata of the population.

The trade with developing countries does not still have any decisive effect on shifts in the production structure of

CMEA countries: this influence is limited mainly to the sphere of circulation. However, imports of the TCI goods to the USSR makes it possible to save certain resources for their use in other industries. From the standpoint of production costs importation of many TCI goods and semi-finished products for their manufacture is more effective than expansion of national production facilities; in some cases one may raise a question of refusal from a part of production and shifting to imports. Certain steps in this direction have been already taken by Hungary where some kinds of clothing production are closed and the corresponding goods are imported from developing countries.

A further development of this trend conceals considerable potentialities for enhancing cooperation between the two groupings of states in the TCI.

It is evident that both sides will pay much attention to the creation of export-oriented production to intensify flows of commodities in both directions, to impart a stable character to the trade in textile and clothing articles on the basis of international division of labour. Now the share of developing countries in imports of consumer goods by the market-economy states is above 20 per cent; a similar figure for CMEA countries is 6-8 per cent, including about 9 per cent for the USSR.

For the time being the technical assistance is being rendered to newly free states for the development of production in the interests of their domestic market in the first place, not for exports to CMEA countries. In this assistance

a great attention is paid to some least developed countries which are still not properly involved in the international division of labour in the production of textile and clothing goods.

VI. DEVELOPMENT OF TEXTILE AND CLOTHING INDUSTRY IN EUROPEAN CMEA COUNTRIES: PROSPECTS, PLANS AND TRENDS OF RESTRUCTURING

The practice of the development of the world TCI shows that the problems of assortment, its rapid renovation, quality of goods and their aesthetic properties are solved first of all in the sphere of a continuous modernization of the technological and engineering base of the production, a wide implementation of advanced scientific and technological ideas into commercial manufacture of consumer commodities. CMEA countries intend to develop, at higher growth rates, the production of advanced equipment for the manufacture of man-made fibres, knitted articles, dyeing-finishing apparatus, i.e. the equipment enabling a high quality (especially aesthetic characteristics) of the manufactured goods. This will necessitate a certain rearrangement of the technical and engineering base of the machine-building industry, an increased output of the machinery with improved technical and economic characteristics, including fully and semi-automated equipment, programmed tools and machines.

One of important areas of enhancing cooperation in the manufacture of the TCI products is the transition towards a multilateral interindustrial cooperation combining in itself:

the manufacture of the TCI articles and corresponding branches of mechanical engineering and chemical industry within the framework of a coordinated economic policy. Such cooperation stipulates a more profound coordination of the production programs in the mechanical engineering with the TCI demands for particular kinds of equipment, mutually accorded specifications of the manufactured products, volumes and terms of mutual deliveries, service and the like.

The planned process of the formation of a rational structure under the integration conditions simultaneously contemplates its development in two directions. On the one hand, it is necessary to ensure an accelerated growth of "advanced" industries defining the scientific and technological progress with the account of the world trends and, hence, a similar structural orientation during the 80's-90's which will give rise to a further nearing of the intraindustrial structures, modernization of the material and technological base and strengthening of the scientific potential of the TCI. On the other hand, it apparently stipulates a deeper specialization of other industrial complexes with the account of specific conditions and prerequisites of development in a particular country.

The analysis of concepts and forecasts of the TCI development in European CMEA countries to the period of 1990-2000 makes it possible to reveal general trends in their structural orientation. The first one resides in the course for acceleration of the scientific and technological progress in the TCI approved in national-economy plans through mastering of

new technologies and outrunning development of science-intensive production having lesser demands for raw materials, intermediate products, energy and manpower. All European CMEA countries plan to ensure an accelerated output of knitted products, non-woven household and engineering articles, artificial fur, tufting floor coatings. In connection with the housing construction, it is planned to substantially increase the output of the "interior textiles" (carpets, curtains, furniture tissues, textile plaster, etc.). In view of this, the importance of such forms of multilateral scientific and technological cooperation as development of new articles, modelling, designing, engineering, styling, as well as joint forecasting of the fashion and demand trends will become even greater in perspective (especially after 1990). Thus, already in the forth-coming five-year period European CMEA countries plan to slightly increase the output of fabrics due to widening and renovation of the assortment.

In technical and engineering goods natural fibres will be replaced to a maximum extent by man-made ones, while fabrics - by non-woven tissue-type materials.

The tasks set for the perspective in CMEA countries are to be accomplished at the account of technical re-equipment of the TCI enterprises through a fuller use of new machinery and resource-saving technology including means of automation, microelectronics and robotics.

Another general trend of restructuring can be traced in plans of the TCI development, especially in European CMEA

countries for the period of up to the year 1990; it resides in a greater attention paid to the development of industries based on domestic resources of raw materials with simultaneous reduction of their imports. For example, a program for the development of the flax industry has been made up in Poland on the basis of domestic raw materials which is designed up to 1990. Poland also envisages to develop the production of textiles from domestic raw materials to a greater extent also in the tricot and silk industries. The orientation on the maximum use of internal raw-material resources including secondary raw materials can be found in the programs of development of the flax, hemp, silk and tricot industries of Romania ; manufacture of non-woven materials in the GDR; tricot industry in Bulgaria. Such specialization on the whole seems to be the most expedient from the standpoint of the interests of the entire socialist community, especially taking into consideration an acute character of the problem of raw materials.

In perspective the structural policies of CMEA member countries in the textile and clothing industry can involve, in our opinion, as an integral element the possibilities of cooperation with developing countries. This conclusion is proven by the analysis of external trends in the international division of labour on the world-wide scale, as well as of particular economic conditions in countries of the socialist community.

C O N C L U S I O N

Improvement of the provision of the population with the goods manufactured by the textile and clothing industry is in the focus of the social and economic policy in all CMEA countries. The principal ways for the solution of this problem are the development of domestic production and mutual exchange within the framework of the socialist community so as to satisfy the major part of demands for these articles. CMEA countries envisage to continue improvement of already existing forms of cooperation and to implement the Comprehensive Programme of scientific and technological progress in the manufacture of consumer goods. The following guidelines appear to be the most rational:

- creation, where it is possible and reasonable, of production complexes ensuring a more profound technologically integrated processing of the starting materials;

- increasing the share of technology, technical assistance in modernization, services of the "engineering" type in cooperation;

- coproduction and various forms of processing of the "granted" raw materials including those on the "product-buy-back" basis;

- expansion of the firm trade (creation of international trade firms on the principle of reciprocity).

CMEA countries are interested in expansion of cooperation with developing countries, wherefrom they obtain a considerable amount of raw materials and finished goods.

The market of CMEA countries features a great demand for many articles of the textile and clothing industry which are manufactured and exported by developing countries. With the account of opportunities and demands of CMEA countries in the forthcoming decade imports of such goods can be essentially by 2.5-3 times - increased. This can be done in two ways: enlarged purchases on conventional commercial terms and purchases in repayment of the technical and economic assistance rendered by CMEA countries to developing states.

It seems real to expand buying of textile-clothing goods on commercial terms in countries possessing necessary potentials: cotton fabrics in India, Pakistan, Egypt, Brazil, Mexico, Turkey, Thailand, Columbia, Syria, Peru; clothes - in India, Singapore, Turkey, Philippines, Tunisia, Marcc, Brazil, Pakistan, Columbia.

In the trade with developing countries the CMEA member states have an annual positive balance for a number of years however, with the majority of the above-mentioned potential partners in exports of textile and clothing commodities the trade of socialist countries is of a balanced character or frequently has a passive balance. For this reason, in the majority of cases it is necessary to find additional foreign exchange reserves for expansion of imports at the expense of growing exports and enlarged scope of economic and technical assistance. A certain role can be played by a partial replacement of imports of raw materials for the textile and clothing industry from developing countries with imports of goods of a higher degree of manufacture.

The second opportunity for expansion of imports from developing countries resides in rendering them technical and economic assistance both directly in the textile and clothing industries and in other sectors of production. It is expedient to ensure a more intimate relationship between construction of textile and clothing projects and exports of a portion of their products to the market.

The assistance in expansion of export-oriented output of textile and clothing commodities will be effected to a greater extent in respect of big developing countries (Egypt, India) and, where it is economically justified and reasonable for political situation motives, the states of the socialist orientation (Syria, Afghanistan, Ethiopia, Nicaragua and the like). The share of the textile and clothing industry in the sectoral structure of the assistance does not exceed several per cent, while its elevation would contribute not only to a fuller satisfaction of domestic demands of developing countries, but to the growth of deliveries to CMEA countries.

Developing countries are capable of facilitating the solution of the problem of raw materials for the textile and clothing industry which is now especially acute for European CMEA countries. Imports of textile and cellulose raw materials can be increased as a result of implementation of product-back schemes (for example, projects of cotton planting development in Syria, Angola, Afghanistan, Mozambique, Benin, Tanzania).

In contrast to the USSR, interests of European CMEA

countries in the trade in textile and clothing commodities with developing countries rest mainly with their exports. In turn, exports from CMEA to developing states can be slightly increased, provided that the products are to be continuously improved as regards their quality, assortment, new modern and more sophisticated kinds of articles are designed. CMEA countries are interested in intensification of commodity flows in both directions including assortment exchanges of goods based on a steady progress of the international division of labour.

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Table 1

World capitalist trade in basic industrial consumer goods including textiles and clothing products (export PCB) (in billion roubles)

UN SITC code		1970	1980	1981
Total	-	29,4	174,2	168,0
Short-term use commodities including clothing and under-wear	-	20,8	112,2	109,8
cotton fabrics	84	5,4	35,2	35,2 ²
man-made fibre textiles	652	1,4	6,7	6,2
other fabrics	653	4,0	9,5	9,5
knitted fabric	654		2,8	2,3
	655		2,4	2,0

1. Exports of travel articles, ceramics and china are also included in the sum-total.
2. Source: calculated from - 1980. Yearbook of international trade statistics. 1980, N.Y.; UN, 1982

Table 2

Growth indexes for light industry and its share in the industrial output of various groups of countries

Branch	Years	All countries	CMEA countries	Developed capitalist countries	Developing countries
<i>Index production</i>					
	1975	100	100	100	100
Light industry ¹	1979	117,9	117,3	117,5	121,0
	1982	119,4	125,4	113,7	134,8
	1975	100	100	100	100
textile industry	1979	113,2	115,8	111,5	113,8
	1982	109,0	117,2	102,6	113,1
	1975	100	100	100	100
Clothing and footwear industry	1979	112,5	118,3	108,8	111,2
	1982	111,0	127,7	97,6	122,3
	Share in total industrial output (%)				
	1975	18,0	19,0	18,7	13,1
Light industry	1979	17,4	18,3	18,1	12,6
	1982	16,9	17,8	17,5	12,4
	1975	4,5	5,7	3,8	5,2
Including textile industry	1979	4,1	5,3	3,4	4,9
	1982	4,0	4,9	3,3	4,6
	1975	3,8	5,7	3,4	2,6
clothing and footwear industry	1979	3,5	5,4	3,0	2,4
	1982	3,4	5,5	2,8	2,5

¹Including the foodstuffs industry

²The European CMEA countries only

Calculated from: Monthly Bulletin of statistics. N.Y./ UN, 1983

August, pp. XIV-XIX.

Table 3

Gross output indexes for the textile, tricot
and clothing industry

(1970 = 100)

	1975	1980	1981	1982	1983
The textile and knitwear /tricot/ industry					
Bulgaria	142	181	191	199	204
Hungary	122	136	140	136	138
German Dem.Rep.	129	155	159	163	166
Poland	147	171	149	133	137
Romania	178	295	314	321	...
USSR	126	144	147	147	149
Czechoslovakia	133	158	163	165	166
The clothing industry					
Bulgaria	144	165	174	175	172
Hungary	127	143	149	145	137
German Dem.Rep.	124	143	144	150	162
Poland	173	208	197	190	197
Romania	222	335	355	365	...
USSR	125	160	166	166	168
Czechoslovakia	129	153	157	159	161

Source: The CMEA member countries statistical yearbook,
1984, p. 61

Table 4

Output Growth in the Textile and Tricot Industries of the CMEA countries for 1971-1982

(1970 = 100)

Country	Textile and tricot in- dustry	Fabrics without lace	Cotton and cot- ton-type fabrics	Woolen fabrics	Silk and part- silk fabrics	Flax fa- brics	Non-wo- ven ma- terials	Socks and stock- ings	Knitted outwear	Knitted under- wear
Bulgaria	199	137	130	160	207	111	815	173	202	163
Hungary	135	96	102	101	100	42	181	141	188	73
G D R	163	103	101	74	155	73	215	173	145	128
Poland	133	87	87	99	94	68	472	126	153	135
Romania	321	178	105	184	235	248	496	173	380	170
Czechoslovakia	165	116	109	111	138	138	407	0,98	122	114
U S S R	147	120	116	115	159	96	735	133	111	142

Calculated from the data of Statistical Yearbooks of CMEA member countries,
1975 and 1983.

Table 5

Growth of Per Capita Output of Textile and Tricot Products in the CMEA
Countries for 1971-1982 (1970 = 100)

C o u n t r y	Cotton fabrics	Fabrics total	Woolen fabrics	Silk and part-silk fabrics	Underwear knitted goods	Outwear knitted goods	Socks- and- stockings
Bulgaria	124	130	152	198	165	186	156
Hungary	93	93	97	96	136	181	71
G D R	103	112	75	159	176	148	130
Poland	m	78	88	84	112	136	121
Romania		160	162	205	156	341	156
Czechoslovakia	111	108	109	109	91	112	105
U S S R	105	108	108	141	120	100	127

Sources: Calculated from the data of statistical yearbooks of the CMEA member countries, 1975-1983.

Table 6

Share of gross output of the textile, knitwear and clothing industries in the total gross production (%)

Countries	1970	1975	1980	1982	1983
Textile and knitwear industry					
Bulgaria	9,2	7,8	7,4	5,8	5,7
Hungary	5,4	4,8	4,4	4,1	4,1
German Dem.Rep.	6,7	6,4	5,9	5,7	5,6
Poland	8,2	7,4	6,9	6,2	6,0
Romania	7,2	6,8	8,2	7,8	...
USSR	10,0	10,4	9,8	9,8	9,5
Czechoslovakia	5,4	5,2	5,0	5,0	5,0
Clothing industry					
Bulgaria	4,8	3,6	3,1	2,0	1,9
Hungary	2,8	2,6	2,4	2,2	2,1
German Dem.Rep.	2,1	2,0	1,7	1,7	1,8
Poland	3,1	3,3	3,3	3,4	3,4
Romania	4,2	5,0	3,6	3,1	...
USSR	4,7	4,2	4,4	3,9	3,8
Czechoslovakia	1,9	1,7	1,7	1,7	1,7
Total gross output of the textile knitting and clothing industries					
Bulgaria	14,0	11,4	10,5	7,8	7,6
Hungary	8,2	7,4	6,8	6,3	6,2
German Dem.Rep.	8,8	8,4	7,6	7,4	7,4
Poland	11,3	10,7	10,2	9,6	9,4
Romania	11,4	11,8	11,8	10,9	...
USSR	14,7	14,6	14,2	13,7	13,3
Czechoslovakia	7,3	6,9	6,7	6,7	6,7

Source: The CMEA member countries statistical yearbook, 1984,
p. 65

Table 7
Annual Average Growth Rates of the Gross Output of the Textile, Tricot
and Clothing Industries (in %)

	Bulgaria		Hungary		G D R		Poland		Romania		U S S R		Czechoslovakia	
	Average for 1976- 1980	1981- 1983	1976- 1980	1981- 1983	1976-1981- 1980 1983	1976-1981- 1980 1983	1976- 1980	1981- 1983	1976- 1980	1981- 1983	1976-1981- 1980 1983	1976-1981- 1980 1983	1976- 1980	1981- 1983
Textile and tricot in- dustry	5,0	4,1	2,2	0,5	3,9	2,2	3,0	-7,2	10,7	4,3	2,7	1,1	3,5	1,9
Clothing industry	2,8	1,4	2,5	-1,5	2,8	4,3	3,7	-1,7	8,5	4,3	5,0	1,7	3,4	1,7
Industry, total	6,0	4,4	3,4	2,0	5,0	4,0	4,6	-2,9	9,5	1,8	4,4	3,5	4,6	2,0

Source: Statistical Yearbook of the CMEA Member Countries, 1984, p. 54, 55.

Table 8

Number of Employed in the Textile, Tricot and Clothing Industries (thous. persons)

Country	Total number of employed in the industry on the whole			Including in the textile and tricot industries			In the clothing industry			Share of employed in the textile and clothing industries of the total number of employed in industry on the whole %		
	1970	1980	1983	1970	1980	1983	1970	1980	1983	1970	1980	1983
Bulgaria	1087	1271	1312	112	124	125	58,5	63,4	62,8	15,7	14,7	14,3
Hungary	1790	1684	1566	141	116	106	74,6	77,7	69,2	12,0	11,5	11,2
G D R	2843	3209	3239	168	228	217	55,1	105	106	7,8	10,4	10,0
Poland	4115	4783	4546	427	429	349	169	201	187	14,5	13,2	11,8
Romania	2064	3327	3646	223	387	416	119	203	207	16,6	17,7	17,1
U S S R	31593	36891	37830	-	-	-	-	-	-	-	-	-
Czechoslovakia	2470	2670	2687	215	219	215	107	102	99,1	13,0	12,0	11,7

Source: Statistical Yearbook of the CMEA Member Countries, 1984, p. 116, 119.

Table 9

Labour Productivity Growth Indexes (1970 = 100)

		Bulga- ria	Hunga- ry	G D R	Poland	Romania	U S S R	Czecho- slovakia
In industry on the whole	1980	179	169	162	178	189	156	164
	1983	198	191	179	176	197*	170	173
Textile and tricot industries	1980	162	165	176	170	182	140	163
	1983	182	182	193	167	199*	146	175
Clothing industry	1980	145	132	160	177	197	151	170
	1983	154	141	189	181	217*	159	183

* 1982

Source: Statistical Yearbook of the CMEA Member Countries, 1984,
pp. 125, 127, 128.

Table 10

Structure of Capital Investments into the Textile and Clothing Industry
of European CMEA Countries (mln., national currency)

Country	Capital investments into industry			Textile and trikot industry			Clothing industry			Share of capital investments into the textile and clothing industries in the total volume of capital investments, %		
	1970	1980	1983	1970	1980	1983	1970	1980	1983	1970	1980	1983
Bulgaria	1607	3013	3467	92,6	58,8	64,7	9,7	8,0	12,6	6,4	2,2	2,2
Hungary	34232	70153	71876	1273	1681	1585	148	524	402	4,2	3,1	2,8
G D R	18396	29629	31272	646	751	639	-	-	-	3,5*	2,5*	2,0*
Poland (bln. nat. currency)	104	487	329	5137	11549	8155	539	2437	3067	5,5	2,9	3,4
Romania	37721	106893	111330	1388	4279	2107	204	275	385	4,2	4,3	2,2
U S S R	28526	47631	53727	755	1253	1455	121	141	150	3,1	2,9	3,0
Czechoslovakia	35136	60320	55916	2286	2186	1488	245	286	280	7,2	4,1	3,2

* Share of the textile industry only

Source: Statistical Yearbook of the CMEA Member Countries, 1984, p.135, 143.

Table 11

Output of fabrics in the CMEA member countries
(mln. m²)

Countries	1970	1980	1981	1982	1983
Bulgaria	355	458	474	487	505
Hungary	439	450	439	422	412
German Dem.Rep.	734	749	755	756	760
Poland	1327	1499	1318	1150	1218
Romania	603	1085	1076	1074	1059
USSR	8774	10418	10529	10507	10730
Czechoslovakia	810	908	929	939	949
CMEA countries, total	13121	15727	15697	15489	15788

Source: The CMEA member countries statistical yearbook, 1983, p.104
1984, p. 99.

Table 12

Output of cotton fabrics in the CMEA member countries
(mln. m²)

Countries	1970	1980	1981	1982	1983
Bulgaria	279	340	355	364	371
Hungary	304	332	320	310	307
German Dem.Rep.	445	486	445	450	453
Poland	847	944	839	740	790
Romania	437	732	718	723	695
USSR	6152	7068	7171	7145	7286
Czechoslovakia	518	548	559	565	564
CMEA countries total	9058	10607	10579	10433	10627

Source: The CMEA member countries statistical yearbook, 1983,
p. 104; 1984, p.99

Table 13

Output of woolen fabrics in the CMEA member countries
(mln. m²)

Countries	1970	1980	1981	1982	1983
Bulgaria	37,2	59,6	57,3	59,6	70,1
Hungary	36,7	39,3	40,7	37,2	33,5
German Dem.Rep.	124	107	90,3	92,4	95,6
Poland	138	182	160	137	149
Romania	58,3	95,9	95,4	107	117
USSR	643	762	768	745	707
Czechoslovakia	80,9	90,0	92,6	94,2	953
<u>CMEA countries, total</u>	<u>1119</u>	<u>1337</u>	<u>1306</u>	<u>1274,3</u>	<u>1269,5</u>

Source: The CMEA member countries statistical yearbook,
1983, p.104; 1984, p. 99

Table 14

Output of silk and part-silk fabrics in the CMEA
member countries
(mln. m²)

Countries	1970	1980	1981	1982	1983
Bulgaria	20,7	39,1	42,0	42,9	44,6
Hungary	56,6	57,0	59,2	56,8	55,0
German. Dem.Rep	117	118	184	181	183
Poland	47,6	109	112		112
Romania	1146	1769	1806	1821	1884
UDDR	94,6	99,5	101,0	101	102
Czechoslovakia	155,3	183,8	161,0	145,0	155,0
<u>CMEA countries, total</u>	<u>1640</u>	<u>2377</u>	<u>2486,9</u>	<u>2362,4</u>	<u>2549,6</u>

Source: The CMEA member countries statistical yearbook,
1983, p.105; 1984, p. 100

Table 15

Output of non-woven textiles of the tissue type
in the CMEA member countries

(mln. m²)

countries	1970	1980	1981	1982	1983
	7,6	38,4	43,3	55,4	65
Bulgaria	14,0	25,0	27,7	25,4	26,7
Hungary	119	261	257	256	260
German Dem.Rep	20,9	108	78,6	98,6	95,8
Poland	12,1	52,0	54,0	60,0	64,2
Romania	78,0	328	422	573	627
USSR	34,4	138	135	140	146
Czechoslovakia					
CMEA countries, total	286	952	1026	1216,1	1293,0

Source: The CMEA member countries statistical yearbook,
1983, p. 105; 1984, p.100

Table 16

Output of outwear knitted goods (including sports
knitwear) in the CMEA member countries

(mln. pieces)

countries	1960	1970	1980	1981	1982	1983
Bulgaria	10,1	27,4	47,6	55,3	53,3	56,9
Hungary	14,5	21,3	42,5	43,0	40,0	36,1
German Dem.Rep.	24,2	35,9	53,2	54,4	52,2	52,8
Poland	48,4	74,6	145	122	114	137
Romania	17,2	41,0	141	147	156	154
USSR	112	415	479	477	460	474
Czechoslovakia	43,7	56,6	79,4	73,2	69,0	69,5
CMEA countries, total	274	675	993	979	953,6	989,9

Source: The CMEA member countries statistical yearbook, 1983,
p.106; 1984, p.101.

Table 17

Output of Knitted Underwear in the CMEA Member Countries
(mln. pieces)

Country	1970	1980	1981	1982	1983
Bulgaria	48,2	75,8	75,3	78,5	77,4
Hungary	52,1	41,4	45,4	38,2	36,4
G D R	149	183	188	191	186
Poland	166	292	275	224	262
Romania	86,3	138	149	...	...
U S S R	814	1144	1169	1152	1171
Czechoslovakia	60,1	75,5	74,9	68,2	63,1
CMEA countries, total	1392	1970	2000	1777,3	1826,1

Source: Statistical Yearbook of CMEA Member Countries, 1984,
p. 101.

Table 21

Per Capita Output of Silk Fabrics (m²)

Country	1960	1970	1980	1982	1983
Bulgaria	1,1	2,4	4,4	4,7	5,0
Hungary	2,8	5,5	5,3	5,5	5,1
G D R	4,0	6,9	7,0	11,0	11,0
Poland	3,5	4,8	5,2	4,5	4,2
Romania	1,4	2,4	4,9	5,0	5,0
U S S R	3,2	4,7	6,7	6,7	6,9
Czechoslovakia	5,2	6,6	6,5	6,6	6,6
CMEA countries, total	2,8	4,1	6,2	5,5	6,5

Source: Statistical Yearbook of CMEA Member Countries, 1984,
pp. 7, 100.

Table 18
Per capita output of fabrics (without bast fibre fabrics)
(m²)

Countries	1960	1970	1980	1981	1983
Bulgaria	28,0	39,7	51,7	51,1	56,6
Hungary	30,6	38,4	42,0	39,2	38,5
German Dem.Rep.	36,7	40,2	44,7	43,0	45,7
Poland	27,5	34,9	42,1	32,3	33,3
Romania	16,5	26,8	48,9	41,4	46,1
USSR	27,8	32,7	39,2	36,4	39,4
Czechoslovakia	43,8	48,4	59,3	49,1	61,6
The CMEA countries, total	31,3	36,9	40,7	40,3	40,0

Source: The CMEA member countries statistical yearbook, 1984, p. 97.

Table 19
Per capita output of cotton fabrics
(m²)

Countries	1960	1970	1980	1981	1982	1983
Bulgaria	23,6	32,9	38,3	39,9	40,8	41,5
Hungary	24,7	29,4	31,0	29,9	28,9	28,7
German Dem.Rep.	24,2	26,1	29,0	26,6	27,0	27,4
Poland	20,4	26,1	27,0	24,0	19,1	21,6
Romania	13,5	21,6	33,0	32,1	32,2	30,8
USSR	22,6	25,3	26,6	26,8	26,5	26,7
Czechoslovakia	33,2	36,2	36,5	36,5	36,6	36,6
The CMEA countries total	22,5	25,9	27,3	27,3	26,6	26,9

Source: The CMEA member countries statistical yearbook, 1984, p. 109.

Table 20

Per Capita Output of Woolen Fabrics (m²)

Country	1960	1970	1980	1981	1982	1983
Bulgaria	3,3	4,4	6,7	6,4	6,7	7,8
Hungary	3,1	3,6	3,7	3,8	3,5	3,1
G D R	8,5	7,3	6,4	5,4	5,5	5,7
Poland	3,7	4,3	5,1	4,4	3,8	4,1
Romania	1,6	2,9	4,3	4,3	4,7	5,2
U S S R	2,0	2,6	2,9	2,9	2,8	2,6
Czechoslova	5,4	5,6	5,9	6,1	6,1	6,2
CMEA countr total	2,7	3,2	3,6	3,4	3,3	3,2

Source: Statistical Yearbook of CMEA Member Countries, 1984,
p. 109, 7.

Table 22

Per Capita Output of Outwear and Underwear Knitted Goods
(including sports ones), pieces

Country	1970	1980	1981	1982	1983
Bulgaria	8,9	13,9	14,7	14,8	15,0
Hungary	7,1	7,8	8,3	7,3	6,8
G D R	10,8	14,1	14,5	14,6	14,3
Poland	7,4	12,3	11,0	9,3	10,9
Romania	6,3	12,6	13,2	13,6	13,5
U S S R	5,1	6,1	6,1	6,0	6,0
Czechoslovakia	8,1	10,1	9,5	8,9	8,9
CMEA countries total	5,6	7,7	7,6	7,4	7,5

Source: Statistical Yearbook of CMEA Member Countries, 1984,
p. 7, 101.

Table 23

Output and Consumption of Textile Raw Materials in the CMEA Member Countries in 1983
(thous. t)

Country	Cotton fibre			Consump- tion	Wool (scoured)			Consump- tion	Man-made fibres			Consump- tion
	Output	Exports	Imports		Out- put	Ex- ports	Im- ports		Out- put	Ex- ports	Im- ports	
Bulgaria	6,3	27,3	88,4	67,4	15,1	0,3	1,2	16,0	105,0	5,3	2,8	102,5
Hungary	-	35,5	81,0	45,5	3,8	2,9	2,9	3,8	27,1	11,4	33,0	48,7
G D R	-	44,9	104,8	59,9	11,1	8,7	34,9	37,3	306,0	77,7	23,6	251,9
Poland	-	-	129,9	129,9	20,5	-	23,0	43,5	229,0	15,8	39,7	252,9
Romania	-	...	62,8	62,8	...	0	1,9	1,9	172,0	...	12,9	184,9
U S S R	2586,0	773,3	176,7	1988,8	369,0	4,2	149,5	514,3	1353,0	24,3	124,3	1453,0
Czechoslovak	-	-	118,7	118,7	19,0	0,5	20,7	39,2	186,0	35,8	33,5	183,7
Total	2592,3	881,6	797,8	2508,5	438,5	16,6	234,2	656,1	2381,7	170,3	275,3	2486,7

Table 23 (continued)

Country	Flax fibre (output)	Consumption of raw materials				Per capita consumption of raw materials, kg	
		Natural raw materials		Chemical raw materials			
Bulgaria	0,4	186,3	83,8	(45,0%)	102,5	(55,0%)	20,8
Hungary	2,2	100,2	51,5	(51,4%)	48,7	(48,6%)	9,4
G D R	-	349,1	97,2	(27,8%)	251,9	(72,2%)	20,9
Poland	27,9	454,2	201,3	(44,3%)	252,9	(55,7%)	12,4
Romania	...	249,6	64,7	(25,9%)	184,9	(74,1%)	11,1
U S S R	365,0	4321,1	2868,1	(66,4%)	1453,0	(33,6%)	15,9
Czechoslovakia	9,0	350,6	166,9	(47,6%)	183,7	(52,4%)	22,7
Total	404,5	6055,8	3569,1	(58,8%)	2486,7	(41,1%)	15,4

Calculated from: Statistical Yearbook of the CMEA Member Countries, 1984,
pp. 7, 98, 92, 307-311, 328, 342, 346, 349, 351, 355, 359;
national statistical handbooks of European CMEA countries, 1984.

Table 24

Output of man-made fibres in the CMEA member countries

A - artificial fibres

S - synthetic fibres

(thous. t.)

Countries		1970	1980	1981	1982	1983
Bulgaria	A	-	40,6	42,8	43,1	42,7
	S	23,1	55,5	58,6	62,1	61,9
Hungary	A	4,0	8,4	7,5	7,6	6,1
	S	5,6	20,6	21,6	20,3	21,0
German D.R.	A	167	154	152	153	156
	S	47,3	139	146	149	151
Poland	A	84,3	88,8	65,7	65,4	75,0
	S	53,8	163	139	135	154
Romania	A	34,3	49,6	...	48,3	49,5
	S	23,6	102	...	108	122
USSR	A	456	606	604	581	645
	S	167	570	609	655	708
Czechoslov.	A	69,2	54,9	55,1	54,6	57,0
	S	31,4	110	114	125	129
The CMEA countries total	A	817	1007	937	956	1035
	S	352	1165	1088	1254	1347

Source: The CMEA member countries statistical yearbook, 1984, p.92-93.

Table 25

Output of machinery and equipment for the textile and
clothing industry of the CMEA member countries
(pieces)

Countries	1970	1975	1980	1981	1982	1983
		Spinning machines (pieces)				
Hungary	129	502	58	11	6	6
Poland	357	606	231	144	144	135
Romania	223	293	...	...	...	...
USSR	4027	5329	4572	4826	4334	3328
Czechoslovakia	419	1062	1074	1115	1160	1215
		Weaving looms (pieces)				
Bulgaria	676	-	-	-	-	-
Hungary	352	2	6	10	15	-
German Dem. Rep.	3084	2209	2385	2150	1962	970
Poland	2005	2270	622	539	478	436
Romania	2170	3169	...	...	...	...
USSR	19753	31288	21812	22579	22189	21388
Czechoslovakia	5041	7595	8737	9014	8818	6945

Same; p.75

Table 26

Exports of cotton fabrics from the CMEA member countries
(mln. m²)

Countries	1970	1980	1981	1982	1983
Bulgaria	48,7	34,3	21,2	19,2	22,4
Hungary	108	93,1	82,5	82,3	74,8
German Dem. Rep.	64,1	95,1	85,2	81,5	114,0
Poland	107	75,7	75,8	54,8	61,3
Romania	83,7	89,0	99,6	68,2	124,0
USSR	307	124	89,8	95,8	85,9
Czechoslovakia	113	145	135	130	131,0
<u>CMEA, total</u>	<u>831</u>	<u>656</u>	<u>589</u>	<u>531,8</u>	<u>613,0</u>

Same, p. 306-360

Table 27

Exports of woolen fabrics from the CMEA member countries
(mln m²)

Countries	1970	1980	1981	1982	1983
Bulgaria	0,1	4,6	3,3	4,7	4,2
Hungary	3,3	7,9	8,0	9,8	9,7
German Dem.Rep.	5,6	15,0	7,7	9,2	10,1
Poland	7,0	27,7	17,5	16,0	8,5
Romania	-	-	-	-	-
USSR	-	-	-	-	-
Czechoslovakia	6,2	3,4	6,4	15,7	18,4
CMEA total	22,2	58,6	42,9	55,4	50,9

Source: same, pp 307-311, 326, 342, 346, 349, 351, 355, 359

Table 28

Exports of silk fabrics from the CMEA member countries
(mln; m²)

Countries	1970	1980	1981	1982	1983
Bulgaria	0,5	4,0	5,4	4,9	3,3
Hungary	23,2	34,0	29,5	25,9	26,7
German dem.Rep.	17,7	38,8	48,7	50,3	55,9
Poland	23,9	20,5	15,9	11,0	10,9
Romania	4,2	0	...	...	...
USSR	3,3	7,1	5,1	7,2	9,2
Czechoslovakia	21,2	24,6	20,1	18,4	19,7
CMEA total	94,0	129	125	117,7	126

Source: same

Table 29

Exports of clothing and underwear from the CMEA
member countries

(mln. roubles)

Countries	1970	1980	1981	1982	1983
Bulgaria	102	168	185	188	214
Hungary	86,5	402	414	445	455
German Dem.Rep.	245	339	367	426	480
Poland	123	498	430	434	320
Romania	-	-	-	-	-
USSR	-	-	-	-	-
Czechoslovakia	67,2	272	328	351	362
CMEA total	627	1699	1749	1874	1866

Source: same

Table 30

Exports of knitted goods from the CMEA member countries
(mln. roubles)

Countries	1970	1980	1981	1982	1983
Bulgaria	11,1	41,1	44,8	48,9	54,2
Hungary	16,5	85,0	86,8	89,1	84,0
German Dem.Rep.	68,6	77,3	91,5	109	129
Poland	18,9	135	119	105,0	88,3
Romania	-	-	-	-	-
USSR	-	-	-	-	-
Czechoslovakia	18,5	49,0	80,8	91,5	88,2
CMEA total	134	387	423	443,0	444

Source: same

Table 31

Imports of the Textile and Clothing Industry Products to the CMEA countries in 1982

	Bulga- ria	Hunga- ry	G D R	Po- land	Romania	U S S R	Czecho- slovakia	CMEA total*
Cotton fabrics (mln. m)	13,8	36,6	25,9	10,4	12,5	268,8	10,1	483,5
Woolen fabrics (mln. m)	1,9	48,0	0	3,3	2,1	13,7	1,4	36,3
Silk fabrics ^{1/} (mln. m)	3,3	9,2	0,8	1,2	0,7	129,7	1,2	189,9
Clothes and under- wear (mln.roubl.)	38	184	121	96	...	2083	109	2643
Knitted products (mln. rouble.)	15,8	72,2	10,7	33,4	...	597,2	28,1	761

^{1/} Also fabrics of the silk type including fabrics from synthetic fibres.

* Including Cuba and Mongolia

Source: Ibidem, pp.305-360; Foreign Trade of the USSR, 1983, pp.323-378.

Table 32

Imports of cotton fabrics to the CMEA member countries

Countries	1970	1980	1981	1982	1983
Bulgaria (mln. m ²)	50,1	14,8	16,9	13,8	10,3
Hungary (mln. m ²)	28,8	23,0	30,3	36,6	36,1
German Dem.Rep (mln. m ²)	84,3	18,7	2,7	25,9	44,2
Poland (mln. m ²)	40,2	88,7	48,0	10,4	101,0
Romania (mln. m ²)	29,6	34,3	18,2	12,5	4,6
USSR (mln. m)	-	-	-	-	-
Czechoslovakia (mln. m)	5,7	11,3	11,4	10,1	11,6

Source: The CMEA member countries statistical yearbook, 1984, p. 305-36

Table 33

Imports of woolen fabrics to the CMEA member countries

Countries	1970	1980	1981	1982	1983
Bulgaria (mln. m ²)	0,9	0,9	1,2	1,9	1,3
Hungary (mln. m ²)	1,5	3,0	4,7	4,8	4,9
German Dem.Rep (mln. m ²)	1,7	0,9	0,1	0	0,1
Poland (mln. m)	1,3	4,4	3,6	3,3	6,8
Romania (mln. m ²)	3,9	2,7	1,6	2,1	1,0
USSR (mln. m)	12	12,5	15,4	13,7	6,9
Czechoslovakia (mln. m)	2,4	0,7	1,1	1,4	1,1

Source: same

Table 34

Imports of Silk Fabrics to the CMEA Member Countries

Country	1970	1980	1981	1982	1983
Bulgaria (mln.m ²)	2.9	4.6	2.9	3.3	2.1
Hungary (mln.m ²)	7.2	6.7	7.5	9.2	8.5
G D R (mln.m ²)	2.5	3.8	1.5	0.8	0.3
Poland (mln. m)	2.6	5.9	1.9	1.2	4.6
Romania (mln. m ²)	2.8	1.9	1.4	0.7	0.4
U S S R (mln. m)	81.8	157	139	130	153
Czechoslovakia (mln. m)	2	2.5	0.7	1.2	0.8

Source: See Table 33

Table 35

Imports of Clothing and Underwear to the CMEA Member Countries (mln. roubles)

Country	1970	1980	1981	1982	1983
Bulgaria	6.6	20.3	34.2	37.5	31.4
Hungary	16.3	122	166	184	192
G D R	32.7	148	151	121	148
Poland	28.6	98.5	82.2	95.9	139
U S S R	699	1,670	2,029	2,083	2,041
Czechoslovakia	59.1	111	94.5	109	136

Source: See Table 33

Table 36

**Imports of Outwear and Underwear Knitted Goods to the
CMEA Member Countries (mln. roubles)**

Country	1970	1980	1981	1982	1983
Bulgaria	3.6	5.9	10.3	15.8	11.8
Hungary	7.9	48.3	58.7	72.2	68.4
G D R	6.1	21.8	19.4	10.7	17.1
Poland	18.3	41.5	38.9	22.8	36.8
Romania	-	-	-	-	-
U S S R	-	-	-	-	-
Czechoslovakia	34.8	39.9	28.7	28.1	38.2

Source: Statistical Yearbook of the CMEA Member Countries,
1984, pp. 305-360.

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