



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

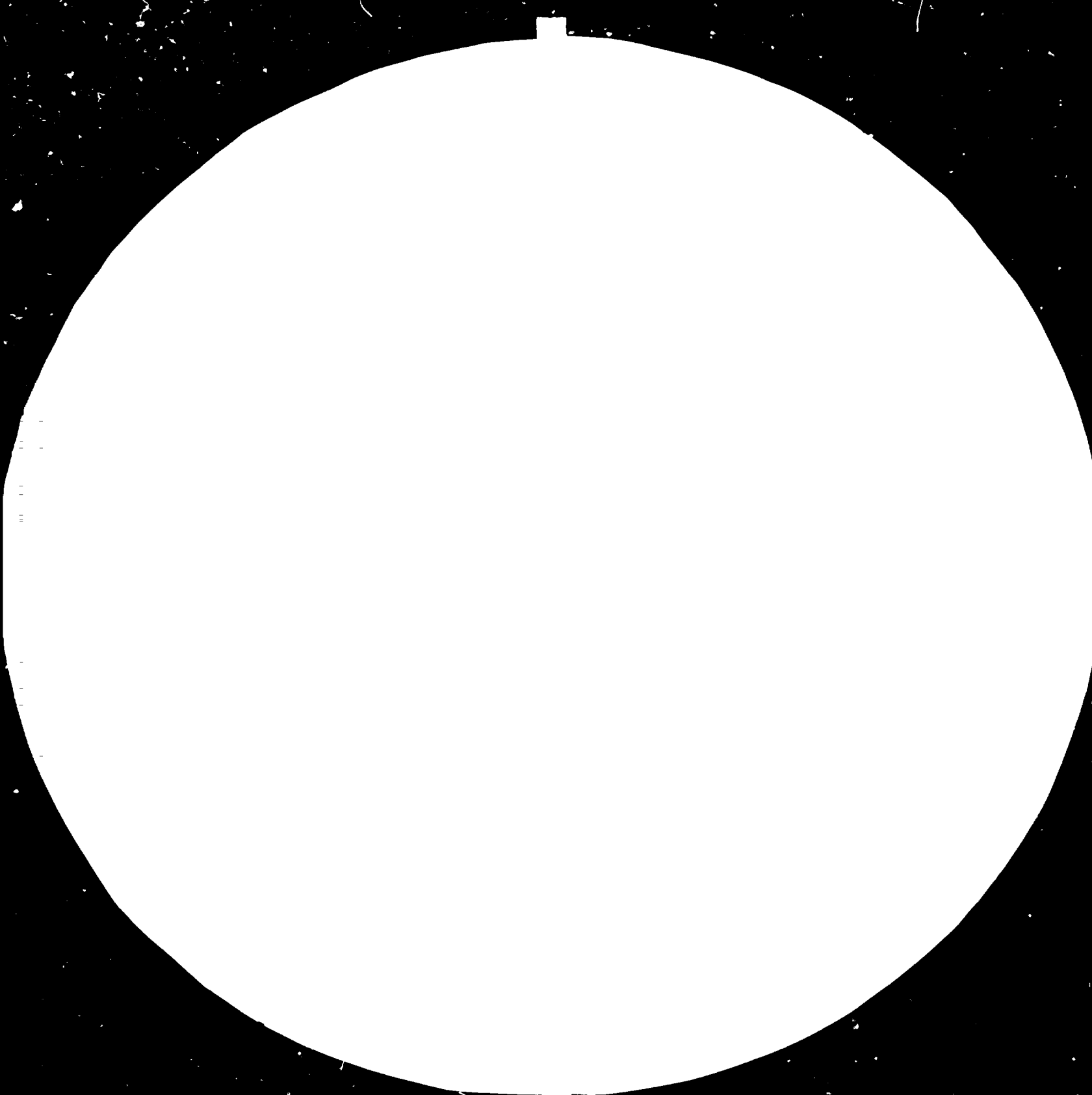
FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org





28

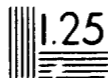
25

30



32

35



MICROSCOPY RESOLUTION TEST CHART

NATIONAL BUREAU OF STANDARDS-1963-A

U.S. GOVERNMENT PRINTING OFFICE: 1963 O 454997

5010-108-01-6011-6

Peru. Textile industry.

William F. CONROY

INDEX

14360

1984

ACKNOWLEDGEMENTS

I	Objectives of the study	
II	Introduction.....	page 1
III	Methods used for the study.....	page 5
IV	Characteristics of the Peruvian textile Industry...	page 6
	IV.1 Machinery installed.....	page 7
	IV.2 Labour Workforce.....	page 9
	IV.3 Raw materials.....	page 16
	IV.4 Consumption in the textile sector.....	page 23
	IV.5 Production.....	page 25
V	Markets - national.....	page 30
	V.1 International market.....	page 33
	V.2 Contraband.....	page 35
	V.3 Apparent local market.....	page 38
	V.4 Systems of commercialisation.....	page 43
VI	Competitiveness and cost structure in the industry.	page 43
	VI.1 Yarns.....	page 49
	VI.2 Fabrics.....	page 51
	VI.3 Garments.....	page 53
VII	Technology and capital investment.....	page 54
	VII.1 Finance.....	page 56
VIII	Analysis of the current crisis in the industry.....	page 57
IX	Andean Pact.....	page 61

RECOMMENDATIONS

Short term

Medium term

Long Term

I OBJECTIVES OF THE STUDY

The objectives of the study were to act in a consultative capacity visiting companies, discussing problems of quality, operatives, raw materials, production and productivity, markets both import and export, problems being experienced through contraband and illegal imports, costs and cost structures, incentives to industry and other problems in general. This with a view to making recommendations both short term, medium term and long term for the restructuring of the Peruvian textile industry. And also identification of new growth potential in the textiles and clothing sectors.

II INTRODUCTION

The object of the study was to gather information required for industrial restructuring policies and identification of new growth potential in the textiles and clothing sector.

It must be pointed out that the textile and garment industry is a significant component of the Peruvian manufacturing sector. The study covers the industry as indicated under code c.i.i.u 3211: Spinning, Weaving and Finishing, and also under c.i.i.u 3213, 3220, and 3513. The code c.i.i.u 3513 was included because the textile industry depends to a large extent on the manufacturers of synthetic fibres and vice versa. Excluding the synthetic fibre industry and confection. The latest number of factories according to the 1981 statistics of MITI in section c.i.i.u 3211 was given as 353.

The capacity in spinning was shown by MITI to be as follows:

Cotton Spinning	736,588	spindles
Wool or Acrylic long fibre	66,765	spindles
Open end	<u>6,872</u>	rotor
Grand total	810,225	spindles

In the weaving section the number of machines was given as follows.

Shuttle looms	8900
Shuttleless looms	<u>439</u>
Grand total	9,339

The finishing sector has a total capacity much greater than is needed for this amount of production.

Production recorded in 1982 was given as:

Wool and Cotton	65,000 metric tons
and	260,000,000 linear metres.

The number of personnel employed in 1982 was:

Line staff	4,946	people
Operatives	<u>18,432</u>	people
TOTAL STAFF and OPERATIVES	23,378	people

Source: ITINTEC. 1980

Salaries paid were	S 10,589,741,000=	US 4,663,030
Wages paid were	S 20,543,390,000=	US 9,045,966
Wages paid to temporary workers	<u>3,759,099,000=</u>	US <u>1,655,262</u>
TOTAL WITHOUT TAX	34,892,230,000=	US 15,364,258

Using the exchange rate US\$ 1 = S 2271.17 as of December 1983.

For reasons of commercialisation most of the companies are situated in the capital of Lima whilst others in the cotton sector are in Piura, Trujillo and ICA. In the wool sector there are companies in Arequipa, Tacna and Cuzco. These latter companies are placed near to the source of the raw materials but their commercial offices are in Lima.

Amongst the companies visited in the cotton sector were some spinners with most modern techniques and technology, producing fine count cotton yarns for export and could in fact compete in any type of world wide market. In fact more than 85% of their production is exported. Others in the weaving sector are equally well equipped and developed and are producing at a very high standard equal to European standards. Productivity is lower than in other countries due to the longer number of personnel employed. The age of machinery varied from between 3 and 30 years

In the wool sector things appeared much worse. Hardly any of the companies visited were very optimistic. It was indicated that one company is on the point of bankruptcy and another with machinery no more than 7 years old was working at about 10% of capacity not knowing what would happen next.

According to a recent study of the balance sheets and the profit and loss accounts of the industry in 1983 it was noted that between ten of the most important companies there had been lossing of some S/-72,000,000,000 whilst the total losses in the industry were estimated at S/-150,000,000,000. It was also noted that there had been a fall in production in 1983 of some 15% on top of a fall in production between 1980 and 1982 of a further 15%. This appears to reflect the loss of local markets to contraband dumping and under valuing along with the loss in purchasing power of the population in general.

The general debt of the textile industry in foreign currency is approximately US\$ 150,000,000 which indicates the effort made by them to modernise the industry

Something must be done very urgently to remedy this situation otherwise the industry will wind up with problems the same as what had occurred in Argentina, Chile and other countries.

PRODUCTION OF FIBRES:

In 1982 Peru exported	45,000 tons of raw cotton
	20,000 tons of yarn and fabrics
Internal consumption	<u>25,000 tons of cotton goods</u>
TOTAL PRODUCTION	90,000 tons of cotton
Wool and Alpaca exports	2,600 tons
Internal consumption	<u>4,200 tons</u>
TOTAL PRODUCTION	6,800 tons of wool and alpaca
Synthetic and Artificial fibres	10,300 tons exported
Internal consumption	<u>21,700 tons</u>
TOTAL PRODUCTION	32,000 tons (MITT ESTIMATE 1982)

SHORT TERM RECOMMENDATIONS

- Creation of lines of credit with preferential interest rates.
- Restriction of imports of fabrics and made up goods.
- Recovery of contraband using better control methods.
- Studies rimed at increasing the cultivation of cotton.

MEDIUM TERM RECOMMENDATIONS

- Formalising the informal sector
- Setting up of control laboratories in the customs areas of Callao and Iquitos.
- Setting up a central control laboratory like those existing in other countries in the world.

LONG TERM RECOMMENDATIONS

- Implement economic/financial help for the textile industry
- Convert the foreign debts of the textile Industry into local currency
- Creation of a higher level technical school or college
- Increase the level of horizontal organisations instead of vertical in all sectors.

These arguments will be discussed further in the chapter recommendations.

III METHODS USED FOR THE STUDY

The methods used for the realisation of the study were as follows:

1 Selection of factories

1.1 This was done on a purely random basis and included factories situated in Lima. Some factories were situated outside of Lima and due to the lack of time were not visited, however the head offices of these companies were visited.

2. Collection of data.

By personal visits to factories in the synthetic fibre manufacturing industry, cotton spinning, weaving and finishing Wool combing, spinning weaving and finishing. Including Alpaca. Knitting, dyeing and finishing, making up (confection) suits, skirts, sports wear, ladies wear and underwear. All the goods covered under the codes:

CODE 3211 - Yarns, fabrics and finished cloths

CODE 3213 - Knitted fabrics

CODE 3220 - Making up (Confection)

CODE 3513 - Synthetic fibres

During our field work in Peru in April and May 1984 we visited 26 companies:

- 4 Synthetic fibre manufacturers = 100% representative sample
- 11 Cotton companies Yielded a representative sample in
- 5 Wool Producers = terms of employment in sector c.i.i.u 3211
of about 51%
- 4 Confections = 14% sample
- 2 Knitters = 26% sample

The companies visited do not represent a very large percentage in terms of the total number of companies, but in terms of employment would represent a large proportion of people employed in the industry as several of the companies visited were amongst the big 10.

Contrary to what happens in most other countries in the world, the data available is not broken down sufficiently into sectors and codes 3216/17/18 are all included under code No 3211. Therefore it is not possible to separate cotton spinning from wool or synthetics nor is it possible to separate woven cloth from carpets or blankets. It would be more beneficial if this data were all separated to be able to calculate the consumption per capital divided into sections such as woven, knitted etc.

IV CHARACTERISTICS OF THE PERUVIAN TEXTILE INDUSTRY

IV.1 GENERAL

The following table gives a list of the number of companies working in the various sectors of the Peruvian textile industry:

Table 1

<u>Code No</u>	<u>1976</u>	<u>1977</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
*3211	279	304	318	340	353
3213	322	383	344	356	374
3220	718	764	799	868	937
**3513	5	5	5	5	5

- * Code number 3211 includes all registered companies whether industrial or artisan with more than five operatives.
- ** Code number 3513 includes companies making synthetic resins, plastics materials and synthetic fibres, therefore only the 5 known companies producing synthetic fibres are included.

Source: M.I.T.I.

Table shows an increase in the number of companies from 1976 to 1981 but not the size of companies.

3211 Include wool/cotton synthetic spinning weaving etc.

3213 Knitting

3220 Garment manufacture

3513 Synthetic fibre manufacturers

Machinery installed

The latest statistics available regarding the machinery park in Peru dated back to 1980. The figures shown at this stage were as follows:

Table 2
Machinery park in 1980

	Cotton Sector	Worsted and Woollen Inc Synthetics	Total
Cotton ring Spinning	736,588		736,588
Open end spindles	6,872		6,872
Worsted and woollen spinning		66,765	66,765
Total Spinning	743,460	66,756	810,225
Shuttle Looms	439		
Shuttleless looms	<u>8,990</u>		
TOTAL LOOMS	9,339		

The break down between looms in the cotton and wollen industry was not given.

Source: ITINTEC

Table shows number of spindles and number of looms in the various sectors of the industry.

In a more recent study done in 1983 by SOMEA of Rome the number of shuttleless looms in the woollen and worsted sector was given as 78. This figure is far from accurate as during our field survey we saw at least twice this amount producing worsted cloths and can only estimate that the figure is now close to 180. The age and state of machinery varies across a wide panorama and is somewhere between 5 and 40 years old.

Table NO.3 gives an indication of the age of the machinery percentage wise in the industry and it will be seen that about 50% of the machinery

installed is of 20 or more years old. This does not detract from the fact that some of the companies producing medium fine wool cloths on these looms are doing so quite well. For the most part it was noted that practically every company with modern and old type machinery were in fact producing their cloths on the newest types of machine at the expense of the older machines with less productive capacity. The quality appeared to be of a good standard and there were not many menders to be seen in any of the factories. In fact one company had been able by means of improved quality to reduce the number of members employed from more than 100 to around 10.

In most companies it was found that where necessary the companies had in fact installed the latest electronic equipment to maintain or improve quality and that these installations were bearing fruit in improved quality. It should be pointed out that one imponderable which is very difficult to calculate is the cost and benefits of air conditioning. During our study we found a number of companies who had no air conditioning at all. Normally during days of high relative humidity in Lima these companies have to completely stop their spinning plants due to the bad conditions in spinning. Other plants have some type of air conditioning but have doors and windows open thus defeating the object of the exercise.

Where some companies have gone for full central controlled air conditioning they normally quote their spinning efficiency as being around 94 to 96% and some of the weaving efficiencies quoted as up to 98%. These figures compare with the best international standards.

Table 3
Machinery park in years as in 1982

MACHINERY	Fibres	0-5	5-10	10-20	over 20	Obsolete	% Total
Cotton ring spinning	C-s	14%	20%	18%	20%	28%	100%
Open end Spinning	C	65%	30%	5%	-	-	100%
Worsted/woollen spinning	W-S	10%	18%	15%	25%	32%	100%
Shuttleless looms	WCS	70%	25%	5%	-	-	100%
Shuttle looms	WCS	5%	25%	15%	25%	30%	100%

Abbreviations C= Cotton, W= Wool, S= Synthetic

Sources: International Textile Association(Latin-American Textiles 1983) and SOMEA.

IV.I LABOUR (WORKFORCE)

Most of the companies visited speak highly of the Peruvian textile worker. They are said to be quick to learn, eager to please in the initial stages but normally gregarious.

Law NO.22126 (Labour stability law)

1. On March 21, 1978 the Peruvian government issued the above law regulating the rights of all workers in the private sector. Workers in government owned enterprises organised as private companies (i.e. according to the law governing mercantile companies) as well as any other government bodies whose workers are subject to law 4916 and other regulating private company employees.
2. The law is applicable to all persons who work at least four hours daily for the same employer. Workers who had been employed for the 3 months trial period provided by law 4916 at the time law 22126 was passed and other workers who had not been employed for 3 months but who would qualify 3 months after joining an employer, are assured labour stability after 3 years continuous work for the same employer.

The worker can only be sacked for serious fault defined in the same law as follows.

- a. Unjustified lack of observance of the (job related) duties and orders received and/or failure to follow the internal work and safety regulations.
- b. Deliberate and repeated curtailment of the volume of work, unless such curtailment is the result of causes not attributable to the worker such as shortage of, materials, obsolete equipment or low quality raw materials.
- c. Utilisation or disposal of the companies assets or other goods given in custody to the worker, if such an action is for the benefit of himself or third parties.
- d. Giving secret process information to third parties or carrying out for his employers competitors work identical to that which he does for his employer.
- e. Working under the influence of drugs or alcohol if this would impair the nature of the work to be performed.
- f. Unjustified continued absence of more than three days. Or more than 5 days absence in any 30 day period or more than 15 days in a 180 days period.
- g. Violent acts or serious lack of discipline on the premises of the company, or outside if the acts are job related.
- h. To materially damage the buildings, installations, machinery or other assets of the company.
- i. Work stoppage of more than 3 months resulting from a court or ministry of labour decision.

3 In addition employers may apply to the ministry of labour for special dispensation to:

- a. stop operations temporarily, either partially or totally.
- b. reduce personnel
- c. reduce the number of shifts, the number of days worked or the number of hours.

- d. Cancel the contracts of all the workers by liquidating the company.

Note: In at least one instance a company has liquidated with the assets going to the employees. This was formed as a workers cooperative but our information was that the enterprise floundered.

4. In the case of lay offs, the full accrued social benefits must be deposited by the employer in Banco de la Nacion. Deposits must be made payable to each affected person. All deposits must be made not later than 48 hours after the required Ministry of Labour approval is issued. If, in the case of personnel reductions, the enterprise may require new workers at a later date, preference must be given to the layed off workers. For this purpose notice in writing must be sent to the worker's home and a copy sent to the Ministry of Labour. Some actions taken by an employer may be deemed to be hostile to labour. If a claim is presented by the worker(s) to the Ministry of Labour, the employer may have to pay indemnities amounting to 13-18 months wages or salaries, or he may be asked to stop the action taken after payment of a fine. Actions subject to be considered hostile are as follows:

- a. Failure to pay the employee on the agreed dates.
- b. Permanent change of position if it entails a lower category of work.
- c. Transferring an employee to a different location for the purpose of creating a problem.
- d. Imprudent orders which may affect the safety of operation or the health of the employees.
- e. Acts of violence against an employee.
- f. Deliberate and repeated lack of observance of legal or contracted duties.

6. Individual managers of companies who do not obey the decisions of the Ministry of Labour (related to dismissal of workers and payments to some) are liable to up to 3 years in prison. The employer or his representatives who illegally closes a place of work may face a 3 year term in prison. Decisions of the Ministry of Labour cannot be appealed against in the ordinary courts.
7. In any establishment no more than 10% of the labour force may be subject to the 3 months trial period and no more than 10% may be contracted for less than four hours work per day.

For companies, changing capacity of operation the Ministry of Labour may waive these limitations. No sub-contracting firm will be accepted for normal factory type labour except for maintenance, cleaning and security operations.

- 8 Operatives with more than 3 months service, must be notified of dismissal 3 months before the dismissal date or are entitled to 3 months pay. (Most firms choose the latter course to avoid problems).
- 9 Until March 21, 1981, all vacancies occurring since the labour stability law was enacted had to be filled by the employer within 30 days, except in cases described in paragraphs 2 and 3.
- 10 Union leaders enjoy job stability regardless of the length of service. The number of Union leaders who enjoy this dispensation should be determined by the Ministry of Labour.

The above law leads to a lot of ill feeling and discontent in the industry. In fact some employers in order to evade the consequences of the law, have isolated certain sectors of their production where the efficiency of the operation is not all important. In these sectors they then employ new labour and before the end of the three months trial period dismiss the operator or operatives employed in this operation and recruit new operatives.

This method eliminates having to keep a permanent operator and leads to a certain amount of instability and high labour turnover.

On the other hand when an employer has had an operator for over three months he finds it very difficult to move the operator from one job to another. The workers attitude is, "I was employed to do one job in one sector and not two different types of job." More than one employer said that in some instances where a union representative was a weaver on a certain set of looms and he was allowed to go on union business in accordance with the Ministry of Labour's rulings, this particular set of looms were stopped and could not be run until the union delegate returned to work. This practice is equally as damaging to the company as an operator refusing to change his place of work. On top of this iniquitous problem an employer cannot reduce personnel through natural wastage. If any savings can be made in the workforce, the operators refuse outright to do any extra work unless the full amount of savings in wages is shared between the remaining operators. And if such an agreement is reached it often renege on the idea after a few days.

Some other employers, (probably more far sighted) have eliminated these problems by giving their operatives staff status. They say that, giving their operatives staff status makes the operatives more reliable, trustworthy and much more flexible.

The Peruvian population is about 19,000,000 people. Of these approximately 5,997,000 are actively employed. The following table (N^o 4) shows the distribution of actively employed people by sector under code headings from 1 to 9.

Table 4

CODE	1	2	3	4	5	6	7	8	9	Year 1982 TOTAL
No. of wor- kers in 000'S %	2296	68	745	13	246	976	282	105	1245	5977
INDEX	38.4	1.2	12.4	0.2	4.2	16.3	4.7	1.8	20.8	100
1. Agrucultural			4. Electric+Water			7. Transport				
2. Mines			5. Construction			8. Financial Services				
3. Manufacturing			6. Commerce			9. Public Services				

Source: IANITEC/MITHACTIVE POPULATION STATISTICS. 1982

The following tables No. 5,697 show the sub-division of the personnel employed in the textile sector under the code N^o 3211 and others under codes 321 and 322. The % index shows the comparison with the manufacturing industry as a whole.

Table 5
Employment in the textile and confection sector

	SECTOR 3211	TEXTILE SECTOR 321	SECTOR CONFECTION 322
N ^o of Employees	23,512	28,325	6,857
INDEX % *	6.80	8.20	1.9

* Compared to manufacturing industries as a whole.

Source: I.N.E. 1982.

Sectors 321-322 and 3211 are the code numbers used by M.I.T.I. to represent different areas of the textile industry.

The above table shows number of people in agriculture full or part time related to textiles i.e. Cotton growing, picing - sheep farming etc. The index gives a percentage breakdown in textile sector only excluding Agricultural workers and also the percentage including agricultural workers.

Table 6.
Employment in the textile sector

	OPERATIVES	% INDEX	% INDEX
Agricultural sector	190,000 *	without agriculture	81.40
Code 3211	23,512	55	10.00
Others in Code 321	4,813	11	2.10
Confection Code 322	15,144	34	6.50
TOTAL	233,469	100	100.00

Source: INE 1980, MITI 1981

This table shows the number of people employed in the general textile sector and also making up (confection). 322/No 321/ is the knitting sector. Index shows percentage employment as compared to the whole of the working population.

NB: The 190,000 operatives shown as working in the agricultural sector are said to be estimated as the number of operatives working full or part time tending alpacas, llamas, sheep and working in the cotton growing sector.

Table 7

	Total N° of textile * factories including little industries and artisans	% Index	Total number of industrial factories (textiles)	% Index
ciiu 3211	343	17	177	33
ciiu 321	814	440	185	53
ciiu 322	872	43	48	14
TOTAL	2,029	100	350	100

* Source: INE 1980 STATISTICS

** Source: M.I T.I. 1981 STATISTICS

This table shows the number of industrial type plants expressed as a percentage of the 350 recorded and the number of plants and percentage including small industries and artesans.

The first column indicates all textile factories including those with only 5 operators.

Senati

(Servicio National, Aprendisaje, Tecnico, Industrial)

This is an institution to which all companies are obliged to pay 2% of their earnings yearly and which starts the initial teaching for the formation of operatives. Whilst an operative is in SENATI for training the company must also pay a half a salary to the selected operative to enable him or her to maintain themselves whilst studying. Unfortunately the school does not have the facilities to train the operator in the methods and on machines which are used in industry. Therefore each company is obliged to have a training school where they can carry on the education of the operatives and give them the industrial training necessary to fulfil their role in industry.

The importance of the Peruvian production is centred on the two finer qualities Pima and Tanguis. The two main regions for producing these two types of cotton are not without major meteorological problems. In 1983 the south for example suffered a drought in the regions of ICA, PISCO and TRUJILLO, whilst the zone of PIURA was flooded doing irreparable damage to the cotton cultivation and the surrounding housing area. These phenomena created a large problem in the textile industry by leading to a shortage of cotton. There was no way within the country which this shortfall could be made up and the government completely forbade the importation of cotton saying that importation would or could lead to the infection of the cotton growing area by the pest known as the Gusano Rosado or Red Worm.

In fact cotton which had been fumigated prior to importation would have caused no problem whatsoever to the Peruvian cotton growing area, because the larvae on the cotton would have been effectively destroyed. Fumigation and ginning could have been carried out and the industry permission to import cotton but even this was not allowed. It was suggested that the cotton needed to fill the Peruvian shortfall should even be processed as far as carding and then imported but again permission was not granted. This imposed great difficulties and restrictions on the textile industry due to the shortfall of some 20,000 tons in the Peruvian cotton crop.

It should be noted at this stage that the zone of Piura is already infected with a plague of Gusano Rosado and that its arrival cannot be attributed to the importation raw cotton. This pest can be carried on vegetable seeds and it is thought that the larvae have arrived in Peru in this manner. Steps are now being taken (under the direction of an American expert) to eradicate the plague in Peru.

This means that local specialists are having to be taught to identify and destroy the affected plants and FUNDEAL (Fundacion Para El Desarrollo Algodonera) say that if the plague is not brought under control very quickly then the plague Gusano Rosado will soon reach proportions worse than what was ever seen in Arizona and that the plague will be economically impossible to be kept under control.

The shortfall in the Peruvian cotton crop led to the industry having to use more synthetic fibres, change their types of production and look for more export markets. The shortage of cotton meant that many companies who had been producing heavy cotton type goods for the local market, were faced with big problems:

1. Insufficient cotton for their needs.
2. A market in Peru which was shrinking, due to lack of purchasing power.
3. A market with no potential for extra goods made from cotton/synthetics.

This meant having to find other markets for a different class of production to their standard which also means finding export markets for these goods which included fine cotton type goods and goods made from cotton synthetics.

Relating to the shortfall in the cotton crop the industry was asked to estimate what the requirements of the industry would be in 1983. The figure given was 40,000 metric tons and was in fact less than to what had been used in previous years.

In March 1983, it was estimated that the cotton available would be about 49,000 metric tons which meant that 9,000 tons could be exported. In May due to the climatic problems encountered the figure was then estimated at 37,000 metric tons and in July 1983 was estimated at 30,000 metric tons. This gave a shortfall on Peruvian textile industry requirements of 10,000 metric tons or a loss of 25% of total demand.

Owing to the lack of cotton many textile companies were forced to close down during the months of November and December 1983 and companies had to ask operatives to take early holidays to ease the labour situation.

This indicates that the internal and external commerce of cotton in Peru is not in any way free commerce, because before the industry would close down due to shortage of cotton they made strong representations to the ministry opposing the export of raw cotton.

Synthetic fibres

Whilst synthetic fibre production is basically classed as the chemical industry it is a very large supplier of raw materials to the textile industry that the two should really be grouped together. Most of the synthetic fibres used in the Peruvian textile industry are in fact produced in Peru. There are a few fibres not produced in Peru with special tenacities or special profiles which are imported.

Fibres produced in Peru are Nylon which is produced from imported chips. Polyester which is produced by two or three companies from imported chips and by another from basic raw materials bought on the world market and Acrylic fibre produced by one manufacturer from raw materials bought on the world market in Japan, England, Germany and U.S.A.

The synthetic fibres produced in Peru have accounted for about 80% of the needs of the industry. The government impose import taxes (of 40% AD VALOREM) on synthetic fibres to protect local industry. The constant devaluation of the Peruvian currency has made importation of fibres much dearer. For this reason the importation of synthetic fibres decreased in 1983 but to all intents and purposes there was an increase in the amount of contraband due to inadequate means of control.

Polyester filament

In Peru there are 4 important producers of continuous Polyester filament. The capacities installed as of January 1983 of these companies was as shown in the following table N° 8.

Table 8
Synthetic fibre manufacturers excluding Bayer

Company		Metric Tons/Year
Filamentos Industriales	S.A.	6,480
Manufacturas Nylon	S.A..	1,800
Manufacturas Del Sur	S.A.	1,200
Rayon and Celanese Peruana	S.A.	<u>1,800</u>
TOTAL		11,280

From 1972 to 1980 the demand increased by approximately 10% per year finally stabilising at 7,000 metric tons per year in 1981-1982. In 1981 the imports of polyester filament increased by 1,191 tons, the imports in 1982 were further increased by another, 1,100 tons. In 1981 - 1982 both Manglsa and Roycel imported filament yarns.

The importations of filament were attributed to low prices and the special profiles (trilobal) and tenacities which were not produced in Peru. These are yarns with special characteristics regarding X section tenacity DENIER etc which without a lot of costly changes on the machines and difference in blends of chemicals cannot be produced at present in Peru. To set up this procedure for small

It should be noted that the bulk of the filament produced in Peru is of 75 and 150 denier and that one company Filamentos Industriales almost controls the market producing 65% of the total production.

This company is currently increasing its capacity and installing machinery of the latest kind with the most modern technology and lowest labour utilisation.

Nylon filament

The market requirement for this type of product has remained stable since about 1972 and the two producers who supply about 90% of the local market are Manqlsa and Manufacturas del Sur.

Company		Metric Tons/Year
Manufacturas Nylon	S.A.	1,800
Manufacturas del Sur	S.A.	<u>1,200</u>
<u>TOTAL</u>		<u>3,000</u>

Polyester staple

This is the most used type of polyester used in blends with cotton. Between 1972 and 1980 the demand remained almost unchanged but between 1980 and 1982 the demand increased by 25% and in 1983 was even higher due to the shortage of cotton.

Acrylic

The only producer of Acrylic fibre in Peru is Boyer. They produce some 27,000 metric tons per year which are consumed at the rate of 18,000 tons internal and 9,000 tons for export into the other countries in the Andean Pact and Chile.

Wool Alpaca and Vicuna

These two fibres are the main source of raw material for the worsted and woolen sectors of the textile industry. The wool produced is only of medium fineness of about 56^S/58^S quality with about 10% being slightly finer around 64^S quality. (The number indicates roughly the maximum spinability of the fibre). The count of yarn normally spun in Peru is around 40^S metric count with several spinners going up to about 52^S metric. This seems to be the finest spun by any worsted spinner. Unlike cotton the Peruvian wool is considered rather poor because of poor uniformity. Peruvian tops sell at a discount compared with tops made in other countries such as Uruguay which produces about the same average fineness. Converting local tops into yarn takes considerably more time than other tops on account of the above mentioned facts. This of course means higher costs.

Alpaca produced in Peru is said to account for about 80% of world production. This fibre is more difficult to process in 100% form than wool and most Peruvian mills do not have the technology needed to produce 100% alpaca. Alpaca is special in that it has a very soft fine handle as compared to most other fibres. It is important to devote more time to improving technology on the production of this fibre in 100% form instead of exporting to other countries where the transformation in 100% form is carried out very commercially. On top of this lots of young animals are slaughtered at only 2 to 3 weeks old and their skins are used for making rugs, coats, bed spreads etc.

Vicuna

Due to the fear that this animal was feared to be becoming extinct the Peruvian government put a ban on the killing of the animal and the exportation of fibre. The government are said to be cultivating a large herd of vicuna which is expected at the first shearing to provide 400 tons of fibre, eventually building up to

1,500 tons. Licences are not given to process this fibre and one or more companies are said to have some of the fibre in refrigeration waiting for permission to process. Some of the fibre is however exported as contraband and used in factories in the developed countries where even there its cost is prohibitive. Vicuna is said to only grow in Peru and is considered to be the most luxurious fibre in the world.

IV.4 CONSUMPTION IN THE TEXTILE SECTOR

An analysis was done of the various items consumed in the textile sector and there were:

- Fibres (Raw materials)
- Dyes
- Auxillaries
- Electrical Energy
- Steam
- Water

In table number 9 (consumption in the textile industry) is illustrated the consumption which corresponds to 1982 production with the rate of exchange S/1731 to US\$1 as of July 1983. The countries which provide these goods are as follows:

- Fibres - Europe, U.S.A. Brazil, Andean Pact Countries and Japan.
- Dyes and Auxilliaries - Europe, U.S.A. Japan.

A very small amount of dyestuffs are produced in Peru, (roughly 10%). The production of these products is rather specialised and normally only produced by the large chemical companies in the developed countries. There is talk of setting up a unit to produce dyes in and for the Andean Pact countries whether this idea will ever bear fruit is a point for debate due to the size of the market, capital required to set up the production unit, technology and research needed to keep abreast of the market trends.

Table 9
Consumption in the textile industry 1982

Product	Imported		National		Value 000 ^S Soles (*)	Total Value U.S.\$
	Tons	Val kg.	Tons	Val kg.		
Fibres						
Cotton +			50,000	2,920	175,200,000	101,213,171
Wool and						
Alpaca			5,000	5,976	29,880,000	17,261,698
Tops and						
staple	1,500	3,000	7,500	3,675	32,062,500	18,522,530
Polyester						
Acrylic			13,000	4,150	53,950,000	31,167,000
Tops						
Viscose &						
others	1,500	2,720	3,500	2,900	14,230,000	8,220,681
Dyes	680	30,000	40	14,400	20,976,000	12,117,850
Auxillaries	3,000	7,200			21,600,000	12,478,336
Auxillaries			30,000	600	18,000,000	10,398,613
Petroleum			80,000	280	22,400,000	12,940,496
Products						
KNH						
electricity			320,000,000	69.28	22,156,800,000	12,800,000
Water M ³			22,500,000	++ 20	450,000	259,965
Total	6,680				543,536,500	618,385,894

(*) Exchange rate used = 1731 S = \$ USI as of July 1983.

(**) Washed basis and average price of fibres.

(+) Based on 30% long fibre 70% shorter fibre average.

(++) Average price of companies with own wells and generating capacity.

Source: ITINTEC & UNIDO Field Work April/May 1984.

Table shows consumption in metric tons of consumable items in the textile industry in 1982 both imported and national. Value per kg. or per unit. Value in national currency and converted into \$US. with the exchange rate S/-1731 to U.S.\$ 1. This exchange rate was in July 1983 but the table refers to goods consumed in 1982. Table clearly indicates the higher prices of Peruvian synthetic fibres to imported fibres.

Usually the time required for dyestuffs to reach Peru after order is about 4 to 5 months which means that companies must re-order when stocks are at about 6 months level. This is very costly and is a big burden upon the companies. These lead times do not permit companies to keep abreast of rapid changes in colours for fashions.

Water

Many companies with their own wells and generating plants have to pay to use their own water and this is said to cost more than 20% above the price of state owned supplies. Even though some companies have asked to be supplied with water by the municipal undertaking, the water is not available and they are still being penalised for using their own resources. More than one company have said that they are in danger of running out of water and this will then create more problems in the industry.

Energy (electricity)

The energy consumption works out at about 0.9 KWM per m² of cloth produced. This figure is considered to be rather high and in a later chapter we will discuss ways of reducing this figure.

IV.5 PRODUCTION

The following 2 tables No 10 and 11 will indicate the levels of productivity in various sectors. Utilisation of machinery and the shortfall in production due to under utilisation of the machinery. So as to be able to demonstrate this adequately the counts produced are all converted into 24/1 Ne.

Table 10

	Real Production	Production Converted to 24/1 Ne
Cotton Spinning Spindles	Tons 52,500	to 52,500
Open End Spindles	Tons 8,500	4,250
Woollen & Worsted Spindles	Tons 4,000	4,000
TOTAL SPINNING	Tons 65,000	100,750

As it is a common practice in the textile industry production is normally converted to the equivalent count of 1/1 Ne which is 24/1 English count. This is only a common practical method of expressing things in terms of one production type unit only.

		Average Width
Shuttleless Looms	M ² 52,000,000	
Shuttle Looms	M ² 308,000,000	1,65 MT
	M ² 360,000,000	1,40 MT
Dyed/Finished Cloth	(**)	
Finished Printed Cloth	(**)	
Bleach & Finished Cloth	(**)	
TOTAL FINISHED CLOTH	300,000,000	

* This quantity of yarn was not all woven, some 30% was sold as yarn

** Not available as separate items.

Source: I.N.E. M.I.T.J. I.T.M.F. Bulletin. UNIDO FIELD WORK.

Note: We feel that there are some errors in this information due to the difference in data presented by different sources.

24/1 English count means a single yarn of which 24 hanks or skeens each of 840 yards.

= 453 grammes or 1 lb.

or 18,439 metres weigh 1 lb.

or 41,488 metres weigh 1 kg.

Table 11
Utilisation machinery 1982

	% Utilisation of machines	Lost Production
Cotton Spinning Spindles	75	Tons 17,500
Open End Spindles	65	Tons 2,288
Worsted & Woolen Spindles	<u>60</u>	<u>Tons 2,666</u>
TOTAL SPINDLES	66.6	Tons 22,454
Shuttleless Looms Cotton	72	M ² 12,446,000
Wool & Synthetics	80	M ² 5,000,000
Shuttle Looms Cotton	74	M ² 87,837,000
Shuttle Wool/Synthetic	60	<u>M² 38,666,000</u>
TOTAL LOOMS	28.5	143,947,000
FINISHED GOODS	60	200,000,000

Source: MITI (Production calculated in base of 24/1 Ne).

This table is calculated from theoretical 100% production which can be produced at 100% capacity for the total number of working days in the year

Table Nº 12
Table of internal and export markets excluding
imports(textile goods) MT tons in 1982

Goods	Internal Mkt	Export	Total
Raw Cotton			
Cotton Yarns	37.59	42.73	80.32
Cotton Fabrics			
Wool/Alpaca tops			
Wool/Alpaca yarn	2.41	2.71	5.11
Wool/Alpaca Fabrics			
Synthetic Fibres	<u>10.93</u>	<u>12.43</u>	<u>23.36</u>
Synthetic Yarns			
<u>TOTALS</u>	<u>50.93</u>	<u>57.87</u>	<u>108.79</u>

Source: MITI and Comite Textil Estimated.

Table 13
Apparent local market in thousand metric tons

<u>Goods</u>	<u>Production</u>	<u>Internal Market</u>	<u>Export Market</u>	<u>Imports</u>	<u>Apparent Market</u>
Raw Cotton					
Cotton Yarns	80.32	37.59	42.73	6.5	44.09
Cotton Fabrics					
Wool/Alpaca Tops					
Wool/Alpaca Yarns	5.12	2.41	2.71		2.41
Wool/Alpaca Fabrics					
Synthetic Fibres	<u>23.36</u>	<u>10.93</u>	<u>12.43</u>		<u>10.93</u>
<u>TOTALS</u>	<u>108.8</u>	<u>50.93</u>	<u>57.87</u>	<u>10.2</u>	<u>61.13</u>

Table shows the apparent local textile market which is :
Production - Export + Imports = Apparent textile market.

V MARKETS - NATIONAL AND INTERNATIONAL

The local domestic production for the internal market is given as about 50,900 tons. On top of this are the exports of some 57,900 tons or 53.2% of the total production.

During 1983 the Comite Textil submitted a plan to the various ministries to stop for one year the importation of made up and other textile products. It was felt that owing to the lack of technical control in the customs that the suspension of imports would be a help in controlling illicit imports and that during this time it would be possible to set up control laboratories both in Calloa and Iquitos.

These laboratories should be equipped with technically skilled personnel who would examine a cut length of material from each batch of cloth in a container. Analyse both WARP, WEFT cloth structure, counts etc. and have a small computer available for calculating quantities, recording data regarding weights, lengths etc and using this data upon re-exportation of transformed goods. During 1982 it was said that the total volume of textile goods imported into Peru was no more than 6% of the total volume produced by the Peruvian textile industry. At this level there would be no cause for alarm. However, it is felt by all concerned in the industry that this figure can be multiplied many times due to the amount of contraband, under-declaration of the value of the goods and some measure of dumping. Most of these goods are of course channelled into the informal sector. The price of these goods is also artificially low because they do not carry the heavy duties of their country of origin and also have in their cost structure the subsidies and incentives for exportation. It is absolutely essential to combat the flow of contraband into Peru because this is one of the biggest problems which the Peruvian industry faces and contraband is imported in many ways. It is not unusual for goods imported under temporary licence to be converted into made up goods and then in fact find their way into the local market. This is done by under declaring quantities. Re-exporting an official part and selling the rest locally. It is also necessary to introduce an anti dumping claw which should permit some limit of

protection to the Peruvian textile industry. This is something Peru has not implemented which is a common basis of international trade according to G.A.T.T. (General Agreement on Tariffs and Trade)

The "Comite Textil" also asked for the implementation of licences before importation. (Something which has been done in other countries in the Andean Pact who also deposit before importation as is done by other countries in the sub-region). Licences are issued which are checked against the correct value and quantities of goods for the correct value. In the case of deposits, it is frequently requested that a down payment of 50% of the total value of goods is deposited on issuing the license. The other 50% to be paid on taking the goods from customs. It is reported that in many instances goods appear and disappear in the ports and customs are with no license being shown.

Declarations should also be made on import invoices indicating the type of cloth, width, structure and composition and any other technical specifications. This should be obligatory before any goods should be rebased and is a thing which is asked for by countries who buy Peruvian goods.

Customs duties should be on a much wider sliding scale with low duties being applied on spares, machines, dyes and other consumable items not produced in Peru. This could be offset by a higher duty on goods which are also produced in Peru, thus eliminating problems which arise through having a standard rate. For this could be done by reducing customs import duties by 10% on basic consumable items like dyes, spares etc. and putting 20% tax on yarns, fabrics, and up to 40% on made up goods (confection).

It must be pointed out that during the last 2 or 3 years the South American textile industry has suffered a major trauma due to the open market policies of different governments.

Companies like Texfin in Venezuela, Coltejer and Fabricato in Colombia, Yarur Sumar y Hirmas in Chile, Novo America in Brazil and Grafa in Argentina have suffered such great losses that their complete operations have been paralysed. This has necessitated help by the various governments at a late stage when the problem could have been avoided with measures being taken earlier.

Table 14
Recent changes in import duties for textile items %

Effective date Item	Jan. 1980	Mid 1980	Sept. 1980	Jan. 1982
Textile Fibres	60 + 10*	55	40	46
Yarn	70 + 10*	70	60**	69
Filament Yarn			40	46
Fabrics	100 + 10*	90	60	69
Garments	120+10**+20 ^X	100 + 20 ^X	60	69
	=150			

* Additional Tax

** Except Filament Yarn and Polyester

X Surcharge for Piece Goods

Table 15
Import duties for textile machinery %

	September 1980	January 1982
Spinning Frames	10	11.5
Looms	15	17.25
Warp Knitting - For Domestic Use	55	63.25
Warp Knitting - For Other Use	25	28.75
Circular Knitting for Domestic Use	25	28.75
Circular Knitting for Other Use	15	17.25
Auxilliary Equipment	15	17.25

Source: MITI

The tables show how the government altered the import tariffs on various types of goods during 1980 and 1982.

Table 15 is rather nonsensical in so far as there are 2 different rates for warp knitting and for circular knitting machines. Only one rate should apply because machines can produce the same type of cloth either for internal or export market. People importing machinery to

produce for export soon turn to internal production if export market are not there. This type of market is quite demanding and goods produced for export and found to be not up to standard are sold on domestic market

V.I. INTERNATIONAL MARKET

In January 1983 the Peruvian textile industry suffered a hard blow by the amount of import duty which was imposed on different goods by the UNITED STATES. The duties were fixed at 38% for yarns and 29% on cloths like sateens and bords.

During September the textile industry heard about the objection of the U.S.A., the high customs duty and the amount of compensation to be paid regarding these goods. In accordance with the mechanism established by the Department of commerce, the objection by the U.S. to payments of CERTEX (Certificado de Reintegro Tributario a las Exportaciones.) and FENT and the increase in tarrifs on certain goods 'had the effect' of effectively reducing these payments to 3% and 11% respectively. It is hoped by the industry that this anomaly can soon be rectified and allow the industry to maintain the flow of commerce to the U.S.A.. The amount is projected from previous years figures to be worth US\$ 72,000,000 during 1984. However, the textile industry is still preoccupied by the opposition of the Peruvian government to sign the G.A.T.T. agreement regarding subsidies, as there is no clear out policy regarding exports and the rules to be applied.

It should be noted here that on 30 January 1984 the U.S. Embassy verbally told the Peruvian Prime Minister that it was necessary to hold consultations regarding the quota of the amount of sailcloth (canvas) which could be exported from Peru to the U.S.A.. It was said that the amount being exported was causing distortions in the U.S. market and that it would be necessary to fix a quota of 15,000,000 yds² based on the flow of material between November 1982

and October 1983. Faced with the inflexible position of the U.S.A. to negotiate on this amount, the Comité Textil of the Sociedad Nacional de Industrias rebaked the call for consultations and has asked the Peruvian government to table a complaint to the Organo Vigilancia Textil quoting articles 3 and 6 of the multifibre agreement. During the months of March/April 1984 new cases have come to light regarding the Department of Commerce in the U.S.A. and the rejection of Peruvian textile goods. The first case referred to cotton floor maps, export compensation and the second case referred to quotas for cotton serge.

In front of these problems the industry is having meetings with FOPEX. International meetings with Prime Minister so as to present a *united front to international organisations like G.A.T.T., UNCTAD, UNIDO and others. Exportations to Europe are governed by the G.A.T.T. agreement. It is felt necessary to watch carefully these quotas and try to increase them wherever it is seen that Peru has a negative balance of payments with the country concerned.

At the end of 1983 it was found necessary to restructure the Peruvian debt with the U.S.S.R. which meant Peru could export US\$ 200,000,000 of goods which were not traditional. The textile industry has successfully negotiated (US 6,000,000 dollars of this business. Peru can in fact send up to US\$ 75,000,000 in non - traditional products between 1984 and 1985 so it is absolutely necessary for the textile industry to consolidate this market with frequent visits and communications with the export representatives of EXPORTLJON for yarns and cloths and RAZNDEXPORT for made up garments. According to the talks held so far it is hoped to implement a commercial flow of goods worth between US\$ 4,000,000 and S 6,000,000 per month, a situation which will help to strengthen the industry. As the textile industry is one of the largest exporters of non - traditional goods, and also * contains a high level of value added, it is felt in the textile industry that CERTEX should be increased in the form of a supplementary CERTEX.

* Source: Sociedad de Industrias Report April 1984

** Source: Field Reports - visits to various companies

One thing which does not help textile exports are the problems encountered for loans from FENT and the guarantees required to make viable this line of credit. Problems encountered in obtaining this line of credit and guarantees needed regarding pay back dates times etc., the government should look at the possibility of restructuring this line of credit.

A big help to reactivate the textile industry would be to increase non traditional exports by increasing from 90 to 180 days the pre loading time for FENT

V.2 COMPARAND

Much has been said and much more remains to be said about the problems which this one item creates for the Peruvian textile industry. *In May 1983 the Comité textil de la Sociedad de Industrias presented to the Ministro de Industria, Turismo e Integración a study which had been done by the textile industry regarding this problem. In fact in the aforementioned study it was estimated that in 1981 the customs duty paid was only about 20% instead of the official 50%.

The importation of registered textiles

The following figures were the figures given by the customs department for the years mentioned:

Year	Value in \$U.S. Dollars
1979	12,000,000
1980	29,000,000
1981	37,000,000
1982	43,000,000 estimated
TOTAL	121,000,000

* Source: Field Reports - Visits to various companies.

** Source: Sociedad de Industrias Report April 1984.

If these were the official figures and the unofficial figures are said to be 2.5 times as great than the true value would be \$302,500,000 U.S. dollars. At the exchange rate of S/575,28 \$U.S. 1 as of March 1982, this is equivalent to S/174,022,200,000. The problem of contraband could currently represent a loss of anything from 100,000,000M² upwards with the relative loss in taxes, value added, use of raw materials and employment in the Peruvian textile industry. When one thinks of the number of street vendors, clandestine workshops producing textile goods, contraband, etc it begins to look as though the illegal, informal sector is even larger than the legal formal sector and on top of this, this section is operating without paying taxes, contributions or any other form of payments to the government.

Table No 16
Imports and exports of fibres, cloths and made up
goods of Peru during years 1980 - 1982

<u>Exports FOB \$U.S.</u>				
<u>Year</u>	<u>Fibres</u>	<u>Cloths</u>	<u>Confection</u>	<u>Total Value</u>
1980	130,195,629	24,001,211	69,685,762	223,882,602
1981	133,293,457	27,100,009	65,487,316	225,890,782
1982	<u>104,411,686</u>	<u>27,524,721</u>	<u>113,255,275</u>	<u>245,192,682</u>
TOTAL	367,900,072	78,635,941	248,428,353	694,965,066

<u>Imports CIF \$U.S.</u>				
<u>Year</u>	<u>Fibres</u>	<u>Cloths</u>	<u>Confection</u>	<u>Total Value</u>
1980	737,503	20,225,663	15,903,742	36,866,908
1981	1,613,678	20,039,431	15,041,539	36,694,648
1982	<u>2,580,798</u>	<u>24,692,739</u>	<u>17,545,573</u>	<u>44,819,110</u>
TOTAL	4,931,979	64,957,833	48,490,854	118,380,666

<u>Analysis Export/Import General</u>			
<u>Year</u>	<u>Textile Products and Fibres</u>	<u>Confection</u>	<u>Total</u>
1980 IMP	20,963,166	15,903,742	36,866,806
EXP	154,196,840	69,685,762	223,882,602
Balance	138,750,357	50,445,777	189,196,134
1982 IMP	27,273,537	17,545,573	44,819,110
EXP	131,936,407	113,255,275	245,191,682
Balance	<u>104,662,870</u>	<u>95,709,702</u>	<u>200,372,572</u>
TOTAL			
BALANCE	376,646,901	199,937,499	576,584,390

V.3 APPARENT LOCAL MARKET

In table number 13 is illustrated the apparent local market relative to the year 1982. Figures for 1983 are either not yet available or are so distorted due to the problems encountered in the shortfall of cotton that they are even less reliable than the 1982 figures.

Table 17

Apparent local market for woven textile fabrics 1982

Total Production	M ² 360,000,000
Exported Cloth	M ² 50,000,000
Exported Made Up Goods	M ² 30,000,000
Exported Contraband	M ² 5,000,000
Legal Importation	M ² 8,000,000
Illegal Importation	
Imported Contraband	<u>M² 100,000,000</u>
TOTAL APPARENT LOCAL MARKET	M² 383,000,000

Source: Calculations based on information supplied by M.I.T.I. during field work.

This figure does not include knitted cloth which probably accounts for another 20-21% of production. It is thought that some of the exported made up goods are of knitted origin and therefore the table is not 100% accurate.

- (1) Import and Export of made up goods were reported to average about 2 M² per garment produced.
- (2) Illegal imports is intended to mean falsely declared in customs and can only be guesstimated (An estimated guess).

Table 18
Apparent textile consumption in the
Andean group and in the world

% Part of the world	Country	COMPONENTS OF APPARENT MARKET			Apparent market/tons
		Production	Exportation	Importation	
0.073	Bolivia	7,021	-	658	7,679
0.89	Columbia	86,008	54,280	55,200	86,928
0.19	Ecuador	18,160	790		17,370
0.63	Peru	60,750	23,900	22,540	59,390
0.27	Venezuela	26,217	1,018	52,325	77,524
	Total*				
2.054	Andean Group	198,156	79,988	130,723	248,909
11.46	E.E.C**	1,105,959	297,096	724,000	1,532,863
10.40	U.R.S.S.	1,004,000	15,100	27,600	1,016,500
0.97	Hongkong	93,405	59,895	102,029	163,785
23.84	China	2,300,000	85,000	***	771,362
1.895	Korea	182,875	23,890	4,800	163,785
8.09	Japan	780,229	44,927	56,060	771,362
12.75	India	1,230,000	62,000	***	1168,000
1.37	Egypt	132,542	18,400	***	114,142
21.15	U.S.A.	2,041,000	135,997	149,702	2,054,905
0.88	Argentina	85,410	***	3,028	88,348
1.77	Brazil	171,000	30,000	***	141,000
3.36	Mexico	324,000	5,000	***	319,000
100	The World	9,648,558	957,095	1,197,942	8,802,852

* Refers to knitted fabrics (1980)

** Refers to year (1981)

*** Not available or non existent.

These tables constructed from European statistics EUROSTAT M.I.T.I. and Association of Cotton Industrsies is meant to show the apparent textile markets of the countries named. It also shows the total of the Andean group and expresses as a percentage of the world market and the production of the various countries.

Note: This list is incomplete as other producers are not included e.g. Middle East, Philippines and others.

Source: EUROSTAT, MITI, Asociacion de Industrias Cotton

Table 19
Imports and exports of fibres, cloths and
made up goods of Peru during years 1980 - 1982

Exports FOB U.S.\$				
Year	Fibres	Cloths	Confection	Total Value
1980	130,195,629	24,001,211	69,685,762	223,882,602
1981	133,293,457	27,110,009	65,487,316	225,890,782
1982	104,411,686	27,524,721	113,255,275	245,191,682
TOTAL	367,900,072	78,635,941	248,428,353	694,965,066

Imports CIF U.S.\$				
Year	Fibres	Cloths	Confection	Total Value
1980	737,503	20,225,663	15,903,742	36,866,903
1981	1,613,678	20,039,431	15,041,539	36,694,648
1982	2,580,793	24,692,739	17,545,573	44,819,110
TOTAL	4,931,979	64,957,833	48,490,854	118,380,666

Analysis Export/Import General			
Year	Textile Products and Fibres		Total
1980 IMP	20,963,16	15,903,742	36,866,806
EXP	154,196,840	69,685,762	223,882,602
BALANCE	133,233,674	53,782,020	187,015,694
1981 IMP	21,653,109	15,041,539	36,694,648
EXP	160,403,456	65,487,316	225,890,782
BALANCE	138,750,357	50,445,777	189,196,134
1982 IMP	27,273,537	17,545,573	44,819,110
EXP	131,936,407	113,255,275	245,191,682
BALANCE	104,662,870	95,709,702	200,372,572
TOTAL BALANCE	376,646,901	199,937,499	576,584,390

Source: FOPEX

The table shows the breakdown of Peruvian textile exports FOB in U.S.\$. Breakdown is given as Fibres which includes yarns, cloths, and made up garments. Also the value of imports C.I.F. in U.S.\$ for the same items including total values.

The Cotton table shows the balance between export values and import values for years 1980-1981-1982 and the revenue earned by the textile industry in terms of U.S.\$ for the three years in question.

These three years were taken as being the most recent, representative years.

Table 20
Textile and confection imports and exports from 1980 to 1982
referring to country in order of importance in value

	1980	1981	1982
50	Alemania-Estados Unidos-Reino Unido:-Hong kong	Alemania-Italia-Estados Unidos-Reino Unidos	Alemania-Italia-Estados Unidos-Reino Unido
51	Estados Unidos-Japon-Espana-Finlandia	Esdados Unidos-Japon-Alemania-Italia	Estados Unidos-Japon-China-Chile
52	Francia-Japon-Estados Unidos	Japon-Francia-Nigeria-Estados Unidos	Japon-francia-Estados Unidos-China
53	Checoslovaquia-Estados Unidos-Belgica-Suiza	Checoslovaquia-Italia-Alemania-Reino Unido	Estados Unidos-Reino Unido-Checoslovaquia-Alemania
54	Chile-Reino Unido-Suecia-Alemania	Reino Unido-Chile-Irlandia	Estados Unidos-Reino Unido-Suiza-Chile
55	China-Estados Unidos-China R.-Panama	Estados Unidos-Corea-Colombia-China	Estados Unidos-Argentina-Panama-Corea
56	Estados Unidos-Alemania-Canada	Estados Unidos-Alemania-Canada-Japon	Estados Unidos-Japon-Canada-Alemania
57	Brazil-Ecuador-Estados Unidos-Mexico	Mexico-Estados Unidos-Brazil-India	China-Reino Unido-Estados Unidos-Brazil
58	Estados Unidos-Colombia-China-Alemania	Estados Unidos-China-Colombia-Venezuela	Estados Unidos-Panama-Alemania-Japon
59	Estados Unidos-Canada-Colombia-Alemania	Canada-Colombia-Estados Unidos-Japon	Estados Unidos-Colombia-Canada-Japon
60	Estados Unidos-Panama-Italia-China	Estados Unidos-Panama-Japon-China	Estados Unidos-Panama-Brazil-Japon
61	Estados Unidos-Panama-China-Alemania	Estados Unidos-China-Panama-Alemania	Estados Unidos-China-Panama-Reino Unido
62	Colombia-China-Estados Unidos-Alemania	Estados Unidos-Colombia-Japon-China	Estados Unidos-Panama-China-Reino Unido
63	Estados Unidos-Reino Unido-Suecia-Francia	Estados Unidos-Suecia-Belgica-Reino Unido	Estados Unidos-Reino Unido-Alemania-Suiza

N.B. Los cuadros países estan elencados para ordre de importancia como valor
Source: IOPEX

Table 21
 Import/export analysis by principal type of goods for years 1980-1981-1982

No	Description	Importation	Exportation	Balance	Importation	Exportation	Balance	Importation	Exportation	Balance
		\$ CIF	\$ FOB	\$	\$ CIF	\$ FOB	\$	\$ CIF	\$ FOB	\$
50	Silk and silk waste	99,458	19,480	-79,978	51,708	-	-51,708	83,773	-	-83,773
51	Filament yarns synthetic	7,787,210	893,423	-6,893,807	9,625,151	433,333	-9,191,818	9,907,642	64,063	9,843,577
52	Metallic yarns and textiles	29,735	1,394	28,341	78,535	-	-78,535	591,815	-	-891,815
53	Wool/hairs/vegetable fibres	230,927	50,730,706	+50,499,779	411,906	42,507,128	+42,095,222	437,445	23,850,298	+25,412,803
54	Linen and flax (baste fibres)	54,021	99	-53,922	61,796	2,205	-59,591	58,913	-	-58,913
55	Cotton	452,555	79,464,824	+79,012,269	1,139,976	90,784,124	+89,644,148	2,084,440	78,361,438	+76,476,993
56	Synthetic Staple	12,090,161	21,599,173	+9,509,012	10,108,160	25,944,278	+15,836,118	12,534,323	26,745,134	+11,210,831
57	Other textile and vegetable fibres	219,079	1,487,741	+1,268,662	175,877	732,398	+556,521	1,575,186	715,502	-859,684
58	Blankets and carpets	1,676,317	8,447,910	+6,771,363	2,234,675	3,519,085	+1,284,410	2,786,244	3,391,316	+603,072
59	Cotton felts - Hemp ropes	8,657,401	5,886,283	-2,771,118	6,340,674	5,318,783	-1,021,889	6,795,348	1,639,179	-5,156,169
60	Knitted goods	802,479	13,101,413	+12,298,934	1,348,684	10,846,094	+9,497,410	1,454,487	8,986,296	+7,531,809
61	Clothes and accessories	3,096,299	29,831,401	+26,735,102	3,612,496	41,926,832	+38,314,336	5,243,710	95,656,910	+90,413,200
62	Other articles from woven cloth	968,743	12,418,755	+11,450,012	1,327,933	3,876,020	+2,548,087	1,048,415	3,581,489	+2,533,074
63	Waste and rags	702,473	-	-702,473	177,077	500	-176,577	217,369	85	-217,284
	TOTAL	-36,866,908	+223,882,602	+187,015,694	-36,694,648	+225,890,782	+189,196,134	-44,819,110	+245,191,682	+200,372,572

V.4 SYSTEMS OF COMMERCIALISATION

Exports are carried out through international representatives as is the case in practically every other country in the world. It appears at present that most efforts of the industry are being orientated to increasing exports and export capability to earn more foreign currency for the country. The remaining part of the production is sold on the Peruvian textile market to wholesalers, confection companies and small retailers and shops.

It is worth noting here that one cotton spinning company considered amongst the most modern, technically advanced with practically no labour problems are exporting 100% of their production. Another on the same lines exports some 70-75%. A weaving company specialising in velours, upholstery fabrics and curtains is also exporting some 75% of their production. These companies are probably amongst the only 3 or 4 companies in Peru (textile sector) which made a profit in the year 1983.

Export incentives

The incentives through Certex has been covered earlier in another chapter but we think that supplementary CERTEX on goods with a higher value added component should be introduced for certain articles or in certain cases.

VI COMPETITIVENESS AND COST STRUCTURE IN THE INDUSTRY

In a study sponsored by the COMITE TEXTIL DE LA SOCIEDAD DE INDUSTRIAS DEL PERU and published in May 1981, comparing the costs of manufacturing some typical types of textile fabrics in Peru, Brazil and the South East Asian countries, the results were generally unfavourable to Peru.

The following components of cost used during the inquest were as follows:

Table 22
Cost structure

	%	
<u>Raw Materials</u>		
- Fibres	41.7	
- Chemical Products	4.1	Including dyes and sizing materials
- <u>Operator costs</u>		Direct and indirect labour.
- Spinning	9.2	Up to and including winding
- Weaving	9.2	Up to and including inspection
- Dyeing and finishing	2.4	
<u>Electrical Energy</u>		
- Spinning	0.8	
- Weaving	0.8	
- Dyeing and finishing	0.8	
- Water and Steam	2.4	
- <u>Industrial Cost</u>		
- Maintenance	5.9	Workshops-spares
- Administration costs	2.4	Factory services accounting etc.
- General costs	7.8	
- Amortisation	1.7	
- Financial costs	6.6	
- Sales costs	4.2	Commissions, salaries, promotion, publicity
	100.0	Despatch

The table shows a percentage breakdown of the components used in the cost structure in the Peruvian textile industry. Obviously this will vary with the type of article produced and factory to factory. This is an average based on some 4 or 5 factories.

Comparison tables No's 1 to 6 will be found in the appendix and these will show cost comparisons for the U.S.A. and West Germany.

Generally the costs in Brazil are higher, but compared to the Eastern countries the Peruvian industry appears to be competitive in only 2 areas shatings and drills. The direct labour costs per unit of product are significantly higher in Peru than in Asia. This is mainly due to two factors:

- 1) Higher effective wage level as compared with Asia.
- 1) Lower average level of productivity.

The comparisons made show that the Peruvian industry is functioning at a lower level of physical productivity with the differences, being greater in the weaving and not in the spinning sector.

Table 23
Peru-textile sector

Country	Productivity ^{1/} Spinning	Weaving
Peru	6.0	35.8
Brazil	8.2	31.2
Hongkong	10.4	68.5
Taiwan	9.4	61.8
South Korea	9.1	60.8
EEC	16.5	120.0
USA	23.6	183.0

Labour cost

Country	Wages ^{2/}	Per Kg. of Yarn ^{3/}	Per Km of Weft ^{4/}
Peru	2.18	0.36	0.061
Brazil	1.62	0.20	0.052
Hong Kong	1.64	0.16	0.024
Taiwan	1.34	0.14	0.022
South Korea	1.15	0.13	0.019
EEC	7.70	0.47	0.062
USA	6.37	0.27	0.035

This table is also in another part of the report with the interpretation.

^{1/} Kg. of yarn produced per man-hour adjusted to 20 Ne yarn count.

^{2/} Km of weft inserted per man-hour.

^{3/} In US dollars.

Sociological conditions play a significant role in this matter and motivation is probably one of the major problems. For sure the discipline in Asian factories is much more rigid than in Peru and the labour stability law in Peru does not lend itself to motivation. The amortisation costs in Peru are normally about the same as in Asia and this leads to the thought that generally the machinery in Peru is of an older vintage and that a higher replacement rate or installation of new equipment is more prevalent in Asia. Further to this specialisation with respect of product lines which are particularly important in the effect of productivity in the weaving sector. Even though Peru is a major producer of raw cotton, raw material prices are generally not any lower than in other countries. In fact the costs of cotton of all the fabrics in the sample taken, the costs of fibres in South East Asia were the lowest, followed by Peru. This is of course due to cotton being sold on a world wide basis and being unable to import inferior grades of cotton, Peru, is obliged to pay the high prices of their good grades of cotton. Synthetic fibres for the most part cost more in Peru due to inefficient production methods being used. In the case of blended paplin the difference in industrial costs between Peru and the U.S. is almost entirely accounted for by the difference in raw material costs (including dyes and auxiliaries) whilst for blended sheeting costs the difference in fibre costs is in itself equal to that in industrial costs.

Returning to the argument of cotton textiles, cotton prices in Peru are roughly equivalent to the international market level for cotton of equivalent quality. It should be noticed from the following 2 pages copied from cotton outlook indicate that other cottons which could be used for normal sheeting production can in fact be 10 or 12% cheaper than the Tanguis cotton which Peruvian companies are obliged to use. Prices given are average prices of similar type cottons of various origins and roughly reflects market price and over a period of weeks, the market trend..

The financial costs in Peru are significantly higher than in the Asian countries or in fact in the U.S.A. or West Germany, which probably reflects a higher level of debt. This may to some extent reflect the need to carry higher inventory levels of spare parts, dye stuffs, cotton etc.

VI.1 YARNS

The data representing the cost structure for the manufacture of cotton yarns refers to 30/1 Ne which is of medium fine variety. The total cost is F.O.B. approximately U.S.\$ 3.111 Kg.* in South East Asia whilst at present (April 13, 1984) the cost in the U.S.A. was quoted as 20/1 Ne ex-mill U.S.\$ 3.66 Kg. There was no quotation available for Peru. In May 1981, a cost comparison per kg of yarn 30/1 Ne was done by WERNER INTERNATIONAL and the following table illustrates quite adequately the cost disadvantage of Peru when compared to the South East Asian countries.

CUADRO V-7
Cost comparison by product/comparacion al costos por articulo

Product/Articulo: Hilado No. 30/1 - Algodon Cardado
 Fin. width/Ancho term: Gms per sq.mt/Gr.por mt2 :
 Warp/Urdimbre: Fiber/Fibra Count/titulo Ne Ends per 1"/Hilos por 1"
 Filling/Trama:

Cost component Componente de costo	Cost in US cents per xxxxxxxx KG Costo en US cents porxxxxxxxxxl					Index / Indice				
	Peru	Brazil	H.Kong	Taiwan	Korea	P	B	HK	T	K
Raw materials/Mat. primas	238.0	392.0	221.4	221.4	220.1	100	165	93	93	92
Direct labor/Mano de obra	28.0	79.5	22.5	20.5	18.1	100	284	80	73	65
Energy/Energia Elctrica	13.0	13.5	17.1	15.3	21.8	100	104	131	118	168
Steam & water/Vapor & agua	1.0	-	-	-	-	100	-	-	-	-
Mill overhead/Gastos fabrica	55.0	24.0	10.3	10.1	10.1	100	44	19	18	18
Depreciation/Amortizacion	47.0	5.0	5.9	5.8	5.8	100	10	13	13	13
Ind. cost/Costo ind'l	381.0	514.0	277.2	273.1	275.9	100	135	73	72	72
Finan. cost/Costo Financ.	90.0	98.0	6.6	6.7	6.7	100	109	7	7	7
Admin. cost/Costo adm.	13.0	23.5)))	100	181			
			14.6	14.4	14.5			37	36	36
Selling cost/Costo venta	27.0	15.9)))	100	59)))
Total cost/Costo Total	511.0	651.8	298.4	294.2	297.2	100	128	58	58	58

The table indicates the variations in cost between Peru, Brazil and South East Asian countries of producing a Ne 30/1 carded cotton yarn. Different figures indicate a difference in prices of different cost elements. Then using Peru as 100 the variations in costs are shown as a % age of Peruvian costs.

Differences in prices of raw material tend to indicate that the S.E. Asian countries are using a cheaper, inferior type of cotton. This type of cotton yarn 30/1 is certainly not the best to show Peruvian long fibre cottons to their best advantage.

The following table gives the average prices of some types of cottons and polyester used in Peru, Brazil and the South East Asian countries. These were the prices ruling at November/December 1980.

* Tipo	Peru	Brazil	HK	Taiwan	Korea
Am Middling 1 1/32	-	-	2.02	2.02	2.01
Am. slm 1	-	-	1.95	1.95	1.94
Pakistan 1"	-	-	1.90	1.90	1.91
Am Middling 1"	-	-	1.98	1.98	1.97
Poliester 1,5 d., 38 mm	2.84	2.76	1.50	1.47	1.45
Tanguis grado 3-1/2	2.05	-	-	-	-
Pima	2.77	-	-	-	-
Brazil meridional tipo 3/4	-	3.50	-	-	-
Brazil meridional tipo 6	-	2.30	-	-	-

Source: WERNER INTERNATIONAL

The above table shows that Peru, due to import restrictions of inferior grades of cotton is obliged to use cotton which is of a better quality and more expensive than those used in South Asia. Also that due to inefficiencies, inadequacies etc. the price of 1.5 Denier 38 m/m Polyester is also more expensive

The world bank study of 1982 indicated that the cost in the USA of producing a similar type 30/1 Ne yarn was approximately the same as in the S.E. Asian countries, whilst in Peru the cost was U.S.\$ 2.00/kg higher. This was partially accounted for by a 55 cents/kg difference in the cost of cotton fibre.

VI.2 FABRICS

The conclusions of the study commissioned by the SOCIEDAD DE INDUSTRIAS which compared the costs of some typical textile products produced in Peru, Brazil and three South East Asian textile countries were generally unfavourable to Peru. Details of this will be found in the tables in the appendix at the end of this study.

The direct labour costs per unit of production are consistently higher in Peru than in Asia. This is probably due to the lower levels of productivity in Peru and also the higher wage levels compared to South East Asia. The relevant table regarding this argument is to be found in the appendix (Table No. 7).

Table 24
Textile productivity in spinning and weaving

<u>Country</u>	<u>Spinning 1/</u> Kg/Op/Hr Ne 26	<u>Weaving 2/</u> Km of Weft/Op/Hr
Peru	6.0	35.8
Brazil	8.2	31.2
Hongkong	10.4	68.5
Taiwan	9.4	61.8
South Korea	9.1	60.8
EEC	16.5	120.0
USA	23.6	183.0

Labor cost

<u>Country</u>	<u>Wages 3/</u> U.S. Dollars	<u>Per Kg of Yarn 4</u>	<u>Per Km of Weft</u>
Peru	2.18	0.36	0.061
Brazil	1.62	0.20	0.052
Hongkong	1.64	0.16	0.024
Taiwan	1.34	0.14	0.022
South Korea	1.15	0.13	0.019
EEC	7.70	0.47	0.062
USA	6.37	0.27	0.035

- 1/ Kg. of yarn produced per man-hour adjusted to 20 Ne yarn count.
 2/ Km of weft inserted per man-hour.
 3/ 1980 in US dollars.
 4/ In US dollars.

Source: Gherzi Textil and Werner International, Consultants.
 Ne 20 = 20 Hanks or Skeins of a single yarn each 840 yds long to weigh 1 lb.
 Kg/OP/HR Ne 20 = Kilograms/Operator/Hour based on 20/1 Ne.
 Km/WFT/OP/HR = Kilometres of yarn put into fabric (across the fabric) per Op/Hr

This information indicates higher efficiencies speeds or work loads in each country as compared with Peru. These factors all affect the productivity levels and the labour stability law in Peru does not lend itself to increasing productivity.

Another factor which in the opinion of the mission is responsible for this anomaly is the labour stability law. This seems to be having an adverse effect in some instances providing employers with the possibility of avoiding their obligations by encouraging a high turnover of labour. Probably another important factor is lack of specialisation in product lines. It is nothing unusual in Peru in either worsted or cotton sector to see a different type of article on each separate loom. This in turn means more down time through loom changes, a wide difference in yarn counts and loom settings and always the possibility of getting the wrong yarn into the wrong cloth. During our field work we saw several instances of this and where companies were more specialised their weaving efficiencies were as good as anywhere in the world.

VI.3 GARMENTS (CONFECTION)

The cost of creating one work position in the garment sector is U.S.\$ 9,435 in the knitting industry and U.S.\$ 11,780 in the textile industry in general.

Further to this the training period is relatively short (about 6 weeks) and in many instances labour turnover is very high, consequently the labour stability laws for all practical purposes are not applicable. Many small units operate in this area maybe with 20 operators or less and many are family concerns which are not even registered under the laws governing small industries and do not comply with labour and/or fiscal conditions. A typical garment operation would normally employ from 200 to 400 operatives working on one shift and doing overtime as and when required. The cost per operative/hour in Peru including social charges is about U.S.\$ 1.28 per hour. In the garment industry as in other sectors of the textile industry the productivity is low being at about 65% of the U.S. level.

Inefficient methods and lack of incentivation due to labour stability law. Operator earns some wages for producing 1 garment or 100 garments. New methods new approach needed in this section of industry. Modern plants are much more automated.

This section of the industry is suffering probably more than the other from the effects of contraband and dumping. Many of the goods brought into the country are in the form of made up goods and consequently these goods find their way onto the informal market and are sold at very low prices, thus, undercutting the locally produced goods. Some companies in this section of the industry are producing suits, shirts and other goods to a very high standard whilst others appear to lack in expertise.

VII CAPITAL INVESTMENT AND TECHNOLOGY

The cotton and synthetic yarn manufacturing, sections are the most up to date parts of the Peruvian textile industry. Between 1968 and 1978 Peru increased its installed cotton spinning capacity by 129.6% in the number of spindles installed and increased weaving capacity by 79%. Of the total capacity installed as at 1980, the increase in productive capacity which was installed during 1980 was:

Table 25
Machinery installed during 1980

<u>Machinery</u>	<u>Total</u>	<u>Percentage</u>
Cotton spinning spindle	49,588	6.7
Open and spinning	1,672	0.22
Wool/Acrylic spinning spindle	<u>11,755</u>	1.6
TOTAL SPINDLES INSTALLED	736,588	

In weaving the newly installed capacity in 1980 was as follows:

Table 26
Machinery installed during 1980

<u>Machinery</u>	<u>Total</u>	<u>Percentage</u>
Shuttle Looms	0	0
Shuttleless Looms	439	<u>4.7</u>
TOTAL LOOMS	9,339	

Source: ITINIEC

The difference in the % increase between looms and spindles would to some extent indicate that more yarn than cloth percentage wise is being produced for export. The increase of only 1.6% in the installation of long fibre spindles seems to bear out the fact that most of the Peruvian Wool and Alpaca is exported as raw material or in *top form and not as yarn or woven cloth. Most of the equipment installed in the textile industry in Peru is of the conventional type, but as can be seen in table 8 below the increase in capacity of 0.22% for open end spinning is very low compared to the total number of spindles installed. If however it is compared to the total number of open end spindles it represents an increase of 24.3%. This indicates that companies are now tending to use the noils (combing waste) as the raw materials for coarser count yarns which are spun on open end (rotor) type machines. Obviously a big step in the right direction.

The value of fixed assets as of 31st of December 1979 was as follows:

Table 27
Value of fixed assets of 31st of December 1979

**	000 of Soles	U.S. \$	%
Machines and Equipment	S/-36,655,890	\$ 146,553,000	55
Land, Buildings, Installations	<u>S/-29,618,911</u>	<u>\$ 118,418,000</u>	<u>45</u>
TOTAL	s/-66,274,801	\$ 264,971,000	100

Exchange rate prevailing 1979 was S 250.12 = U.S.\$ 1.

These assets are for spinning weaving and finishing sectors. On this date there were 318 industrial companies registered.

* Top = is a ball of wool in sliver form and is used several stages before the spinning operation.

** Source: ITENIEC

VII.I FINANCE

In a confidential report made by the Banco Continental in 1978 it was reported that from 1978 to 1980 the annual reinvested profits of the major textile companies was 28%, 39% and 31% respectively. The bulk of this namely some 84% was accounted for by the investment programmes of two relatively new export-oriented companies namely EL PROGRESO and INDUSTRIA TEXTIL PIURA.

*The principal source of capital for the Peruvian textile industry in recent years has been Banco Industrial del Peru (B.I.P.), an increasing proportion of its total industrial lending has been going into the textile industry, primarily into spinning and weaving companies. Other financial institutions with exposure in the textile industry include Banco Popular, Banco Continental and Banco de Credito. Also COFIDE had increased its lending operations for the textile industry. The industry has relied upon the financial institutions for both investment finance and working capital, this latter seeing a greater involvement of foreign and commercial banks with their general preference for short term lending. Tent the fund for export financing, some financiers such as San Pedro, Peru Invest and Peruana have also been involved in term finance though on a smaller scale than the major banks. Evidence regarding this can be seen in table 8 to 14 in the appendix.

B.I.P. operation reveals a significant increase in export finances since 1978 and averaging 18-20% of the total credits to the textile industry in 1979-80-81. In line with the pattern of exports and growth of the industry in this period, around 80% of export credits have gone to exporters of yarns and fabrics. It was estimated that the 10 largest companies accounted for more than 50% of the bank credits outstanding in 1978. In September 1981 the ten largest clients of Banco Industrial accounted for 56% of its loan outstanding in the textile sector.

*Practically the whole of the share capital in the Peruvian textile industry is Peruvian owned. Mixed private enterprises must be Peruvian controlled with more than 50% of shares in Peruvian hands. There are a number of mixed private enterprises and several other companies have some

* Source: ITINTEC

foreign share capital up to about 7-8%. In the case of Bayer in the synthetic fibres industry the percentage is much higher. Industrial cooperatives play only a minor role in the textile industry with shares of about 2% in output and 3% in employment.

VIII. ANALYSIS OF THE CURRENT CRISIS IN THE TEXTILE INDUSTRY

The current crisis in the Peruvian textile industry is not a crisis which is being felt by Peru alone. In fact MITI and private sources indicate the following factors as being mainly responsible, but with varying degrees of importance.

- 1) The general recession in world markets especially in markets for textile goods in the major industrialised countries.
- 2) Import liberalisation policy pursued by the government since 1980, which has led to the flooding of the Peruvian market by goods produced in South East Asia.
- 3) The much lower purchasing power of the Peruvian people due to the continuing internal inflation rate which was said to have reached between 125-150% during 1983.
- 4) Reduction in the rate of cash incentives granted for exports.
- 5) The climatic factors which affected the cotton growing areas and which effectively reduced the cotton crop by almost 40% of its expected total.
- 6) High interest rates prevailing in Peru.
- 7) Strengthening of the U.S.\$ compared to the S/-Peruvian sale 135.% from December 1982 to December 1983. (See differences in tables 15-16-17 in the appendix)

* Source: Banco Central De Reserva Del Peru Date 1st March 1984

- 8) A sharp increase in the contamination of cotton by polypropylene from the material used for boling.
- 9) The problem of the large amount of contraband flowing into Peru.
- 10) The amount of dumping being done in Peru by other countries.
- 11) The latest import restrictions and quotas applied by the U.S.A.
- 12) The labour stability law.
- 13) Higher rise in the price of raw cotton in Peru compared to the rest of the world.

The general recession in world wide textile markets is well documented in many different sources and does not need any more coverage here.

The import liberalisation policy of the government is a real thorn in the side of the textile industry. Not only has the import of items previously prohibited been allowed, but the nominal tarrifs were also drastically reduced. As part of its economic development strategy the government has reduced the protection previously provided to domestic industry. Domestic industry, to fulfill its potential in sales needed a much larger market than was only available in Peru. Also the high rate of debt in the textile sector.

The decrease in the lack of purchasing power of the population in Peru is mainly attributable to the high inflation rate in the country. In any time of monetary crisis the first industry to feel the impact is the textile industry. Replacing clothing made from textiles is usually way down the list of priorities after food, transport, amusements etc

and where normally people would maybe buy new clothes each year they tend to leave the re-purchasing for next year.

Resentment is rather high in the industry over the reduction in cash incentives granted for export of manufactured goods. CERTEX*.

The effective rate was further reduced by the mandatory diversion of 2% of the payments to FOPEX**. Industry does not like the term subsidies to be applied to these payments, claiming that they are a repayment of taxes and other contributions. The nett effect of course is to compensate for the higher cost of production in Peru and to assist in making Peruvian goods more competitive on international markets.

The climatic factors which led to the crop of Peruvian Lima and Tanguis cottons in 1983 had a bad effect on the textile industry. Heavy floods in the north and too much dry weather in the south just about ruined the cotton crops. Some companies in fact (at the cost of other) bought up all the Lima cotton they were able to get hold of and covered their production needs for at least two years. This was to guard against any similar type disaster occurring in 1984. (First indications are that this will be a good year).

The results of some companies buying in this way led to other companies having to close down for several weeks and others taking extended holidays. The high interest rates prevailing means that stocks of raw materials, dyestuffs etc. which companies must carry to be able to produce are a heavy debt which costs a lot of money to service.

Since the Peruvian Sol is tied to the U.S. Dollar which can be seen by fluctuations in exchange rates. The competitiveness of Peruvian exports depends upon the dollar-Sol exchange rate and the relationship of the dollar to European currencies. These relationships have both moved in a detrimental manner to the export of Peruvian goods.

* Source: CERTIFICADOS DE REINTEGROS TRIBUTARIOS

** Source: FONDO DE PROMOCION DE EXPORTACIONES.

The sharp increase in the contamination of Peruvian cotton was attributable to the farmers re-using their fertiliser bags when gathering the cotton and the type of plastic material used for the baling of the cotton. At least two Peruvian companies employ extra labour to attempt to separate this plastic material, whilst others are providing the farmers with sacks made from cotton to try and avoid contamination. The view of export orientated companies is that if they have a claim for damages due to contamination they just go ahead and pay the damages without question. Companies normally carry insurance cover for this eventuality, it does appear that this problem is to some extent receding.

The problem of contraband flowing into Peru was well documented in a study sponsored by the Comite Textil. Sociedad Nacional de Industrias dated May 1983 and needs no further mention than this.

Dumping was also mentioned and dealt with in the above mentioned study.

The latest import and quota restrictions applied by the U.S.A. are the subject of high level diplomatic talks at the present moment.

The labour stability law has been dealt with earlier and should be revised and agreed between employers, unions and the various ministries concerned.

Cotton prices in Peru rose on average more than cotton prices elsewhere in the world. This makes Peruvian cotton at a premium for purchasing and does nothing to help the competitiveness of the Peruvian textile industry.

Most Peruvian textile plants normally work 3 X 8 hour shifts, six days per week, 48 weeks per year. This is equal to $3 \times 8 \times 6 \times 48 = 6,912$ hours per year = to 100%. Apart from 3 export orientated companies which are currently working at 100% of capacity, the rest of the industry according to plant visits made is currently operating at a much lower figure. The average appears to be between 60% and 70% with some

companies working as little as 30% of capacity.

IX. ANDEAN PACT

The Cartagena agreement during its 15 years of existence has not achieved the aims which were initially drawn up. The textile industry feels in general that member countries are too nationalistic in outlook. Whilst basically agreeing with the pact it is felt that the pact should be modified and strengthened for the good of all concerned. The ministers of the pact countries should examine very closely the obvious defects with a view to making the agreement work to the benefit of all concerned.

X. RECOMMENDATIONS

X.I. SHORT TERM RECOMMENDATIONS

X.I.I. Financial problems

The total value of Peruvian textile exports has in the past few years decreased, whilst at the same time the textile industry has in fact increased its exports and exports values as follows:

YEAR	VALUE IN \$ U.S.
1980	224,000,000
1981	231,000,000
1982	298,000,000

The year 1983 figures are not yet available and may probably reflect the problems which were encountered by the industry during 1983. The projected figure for 1984 is well in excess of U.S.\$ 310,000,000. In 1982 the total of U.S.\$ 298,000,000 accounted for 38% of the total manufactured exports of Peru. Bearing this in mind the government should, in order to reactivate the textile industry, adopt the following measures:

- a) Open a special line of credit for the textile industry, with preferential interest rates in Sales to a value of U.S.\$ 100,000,000 to be used for specific causes like paying for consumable items, paying salaries etc. This line of credit should be set up in the form of a current account and only used to help the poor cash flow situation which is to be found in the industry at present.
- b) Convert the outstanding foreign debts of the industry into local currency as it is done in most other countries. Also give a 3 or 5 years period of grace before the repayment of this debt.

c) Attempt to formalise the informal sector. In a study done in Peru in 1983 it was estimated that to formalise the informal sector in the textile industry in Peru would take about 7 months. This should be put into operation immediately. It would probably mean opening new, cheap, lines of credit to the informal sector. It is further estimated that the informal sector are currently paying up to 30% per month for clandestine credits. The legalising of this illegal sector (maybe through the law regarding small industries) would generate more money into the market, increase taxable revenues and distribute the burden of taxes more evenly. Official rate of interest is quoted at 10% per month. Small industries currently pay a single tax of Ca 16% to the government report read in M.I.T.I. (Formalising the informal sector).

X.1.2 Contraband and illegal merchandise

It has been said in various circles that the problem of contraband and illegal exports could represent a loss to the local textile industry of between 90,000,000 and 140,000,000 M² of cloth, with the relative loss of taxes, value added, use of raw materials and feasibility study in industry. We would estimate that as this amount represents about 33% of the total production in 1982 and to produce some 360,000,000 M² of cloth in 1982 would need 19,535 operators, then a conservative estimate would indicate that to produce this extra amount of cloth in Peru would mean something like 6,000 extra jobs.

X.1.3 Cotton

The industrial users of cotton are trying to persuade the cotton farmers cooperatives not to use bags made from Polypropylene or Polyethylene for the gathering of the fibre. This should be implemented forthwith so as to reduce the risk of contamination and reduce costs in spinning blow rooms where automatic loading can not be carried out without first checking the cotton for contamination.

Feasibility study

Study the feasibility of increasing the area of land utilised for the

production of types of cotton which are inferior in quality and price to the qualities Tanguis and Lima. This would permit the textile industry to specialise more with the types Tanguis and Lima, or export more of these two types at the higher price which they bring. On the other hand the local textile industry would have a cheaper raw material available for the production of lower quality goods, which would be more competitive in price on world markets.

X.I.4 Wool and Alpaca

Restriction should be placed on the exportation of greasy wool and alpaca. Exports should be made either in the scoured form or in tops and this would reduce the amount of idle capacity in the scouring and combing mills.

X.2 MEDIUM TERM RECOMMENDATIONS

X.2.1 Quality control section

This refers to a setting up of a section for checking the import and/or export of textile goods in the customs areas of Callao and Iquitos. This section as previously mentioned should have the facilities of a fully equipped laboratory, where they could take a cut length from every bale of cloth in consignment. Check for construction warp, weft, number of ends, counts of yarn and calculate the weight of cloth. They could also examine shipments of yarn for type, fibre, count, resistance, regularity ensuring that this was according to specifications. They could also be responsible for issuing export certificates which are needed in many importing countries. A logical follow up to this would be to establish a laboratory testing service based on the lines of the Bradford conditioning house, Shirley Institute etc whose findings are accepted for judgement in most countries in the world.

X.2.2 Advanced technical college

Thought should be given to the setting up of an advanced technical college which should fill the gap between SENATI and the Universities. This would permit the technical and some practical formation of technicians for the textile and other industries. The gap between SENATI and the Universities is far too great and the aim of a technical college would be to turn out individuals who are capable of doing machinery and production calculations, supervising a section or sections with the possibility of becoming junior line managers. The formula is well tried in the developed countries of the world and has enormous potential.

X.2.3 Air conditioning in factories

This is something which in most companies in Lima is considered as being not necessary. Many years ago the same ideas were carried on in England and most other countries in Europe. It has now got to the point where any new textile factory immediately installs air conditioning, even before installing machinery. It has been calculated over many years that under ideal spinning conditions higher spinning speeds can be obtained, the end break rate is lower, the working area is much cleaner and healthier, the amount of spinning waste is reduced and the yarn is better. A study on this theme should be done in order to give industry the information needed to weigh up the pros and cons.

X.2.4 Energy saving technology

Lots of energy saving technology has been developed in the textile industry with particular emphasis on dyeing and finishing. Dye bath liquor to cloth or yarn ratios, new drying technologies etc. This problem should be evaluated and results placed before the finishing sector of the industry. *In a study done for the Peruvian fish meal industry about 5 years ago it was estimated that saving of U.S.\$ 3,000,000 per year could be made with very little investment

* - Study done by WERNER (R. CONTE) in 1979/80.

X.3 LONG TERM RECOMMENDATIONS

X.3.1 Automation

The degree of automation in the industry should be looked at very carefully and where found to be lacking, investments should be made to bring reasonably modern machinery more up to date. This would include splicing apparatus on winding machines to replace automatic knotting machines. (knots in fabrics are frequently unsightly and in many instances cause problems and are worse than the defect which they replaced).

X.3.2 Synthetic fibre industry

Most of the companies in this sector are losing money and in fact apart from the manufacture of acrylic fibres by Bayer it is doubtful if in its present state the industry would be able to support a large increase in demand, if the textile industry were to start producing more yarns and fabrics requiring more synthetic fibres. Therefore another aspect of the restructuring of the textile industry would be the rationalisation of the synthetic fibre industry. Almost all polyester and nylon fibres are manufactured from imported chips. The cost of chips as compared with the cost of intermediate raw materials is about 35% higher. (Table 18 in appendix). Table No. 19 shows a comparison of World Fibre Trading Prices as of January 1984 and it should be noted that where quotations are given for Peru, prices are almost always higher than in other producing countries. It appears in the face of this evidence that it would be a step in the right direction by establishing polymerisation processing in Peru to overcome this price disadvantage. A plant for this type of processing was bought by MANYISA in 1976 but because of financial difficulties were not able to find the erection costs. A detailed study regarding this problem was done by Chemtex Fibres Inc. of New York, dated 8th July 1983. At this time the equipment was valued by Chemtex at only U.S.\$ 1,100,000 and it was said that if it was to be resold it would only fetch \$450,000 US dollars. This is due to the current depressed state of the market for Nylon and Fibre. At the same time it was suggested that to install the plant to produce polyester

with an off shoot of this producing plastic bottles of Polyethylene Terephthalate then the plant would be much more viable. The study also says that the production of polyester staple not filament does offer excellent possibilities of increase, stating that installed capacity at present is only enough to satisfy demand until 1984- 1985. Polyester indicated as the world's growth fibre is illustrated in detail in graphic form, easy to understand in the Chemtex report. Some of these graphs No's to are included in the appendix of this report.

Two companies in this sector have lost most of their capital, through poor trading, low productivity high costs etc. and are currently operated by Banco Industrial and Banco Continental. The productivity in these two companies as compared to another efficient company is about 1 to 10.

Whilst looking at the possibility of polymerisation it may be worth while to looking at the merging of these two companies on one site and doing a feasibility study on future possibilities.

X.3.2 Garments (confection)

This area should be given special attention because it is the area which could generate most jobs with least investment. There is a need for some specialised technical assistance and a market study should be done on the possibility of starting up new company specialising on ladies wear.

X.3.3 Wool

A detailed study should be done on the sheep farming methods used in Peru. It would obviously be better if Peruvian sheep farmers could raise animals which produced more uniform, finer types of wool than is currently being produced. This would eventually lead to Peruvian wools being sold at good market prices not discounted as at present and would permit the textile industry to produce finer cloths with a much higher value added than at present. This obviously would take many years of breeding and cross breeding.

Common knowledge is that the experiment was in fact carried out many years ago, but that, when the animals were larger and producing better quality wools then they were killed for human consumption thus ending completely the experiment.

