



WOOL

**A Review of the Past
as an aid
to the
Study of the Future**

Prepared and Presented by :

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FOREWORD

IT would be difficult to exaggerate the importance to all the members of the British Commonwealth of Nations, and more especially to Australia, New Zealand and South Africa and the wool growers in these countries, of wise decisions regarding the many problems that arise in connection with the future of WOOL.

Our interests are so closely allied with the well-being of pastoralists in these countries that we have felt encouraged to attempt the difficult task of collecting and summarising in a connected but compact and, we believe, accurate form the more important facts and statistics regarding production, marketing and consumption of wool.

If any incentive were needed to stimulate our desire to do what we can towards maintaining the prosperity of the Wool Trade, upon which the well-being of Australia, New Zealand and South Africa so largely depends, it would surely be found in our gratitude for the splendid help which they have all given to our common cause in this war.

Our Memorandum is intended primarily for the public, but it is hoped, that even those in the Trade may find it helpful to have facts and statistics previously published, now collated and arranged in a convenient form for reference.

The Memorandum shows how production of wool has been increasing and it enables some comparison to be made between the fluctuations which have taken place in the price of wool and in the prices of other products, with notes regarding some of the principal political and financial events affecting these prices.

No attempt has been made to put forward any particular solution of the problems which must arise after the war, nor has any attempt been made to summarise or criticise such suggestions as have been made by others. Our object has been rather to try to assist correct appreciations and decisions for the future by an examination of the past and a frank statement of some of the difficulties which must be faced in the future.

We have endeavoured to avoid allowing our interest in the prosperity of the growers of wool to bias our selection or manner of presentation of the facts.

We gratefully acknowledge assistance which we have received from many friends in the preparation of our Memorandum and more especially from Messrs. Mallett and Co. and from Dr. Blau, of the International Wool Secretariat.

New Zealand Loan & Mercantile Agency Coy., Ltd.,

HAROLD G. BROWN,

Chairman.

Dated 15th January, 1944.

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VARIETIES OF WOOL

Wool—by which we mean the fleece of the sheep—may be divided into three main categories, namely :—

	<u>Trade designation</u>
Merino	60's—100's
Crossbred	36's—58's
Carpet	22's—34's

The numbers relate to the fineness of the individual fibres—the higher the number the finer the individual fibre.

One bale of wool of any given quality (say 64's Merino) may differ from another bale of the same quality, and fetch a higher or lower price, on account of a great number of factors other than the fineness of the fibre such, for instance, as length of fibre (staple), colour, strength, yield, condition, handle, etc., etc.

This has given rise to many difficulties peculiar to the Wool Trade, and is illustrated by the fact that in Australia, under the Appraisal Scheme now in operation (see page 4), there are no less than 1,500 recognised grades or qualities which form the basis of the valuation of Australian wool for the purposes of the scheme.

This Memorandum will deal mainly with merino and crossbred wools, which represent about 90 per cent. of the total production of the five principal wool exporting countries—Australia, New Zealand, South Africa, the Argentine and Uruguay. Such wools may be described as apparel or clothing wools, suitable for use in the wool textile industries of the chief wool consuming countries, as distinct from the coarser types of wools (mainly produced in India and Asiatic countries and known in the Trade as “carpet wools”), used principally in the production of carpets, tapestries and other non-apparel fabrics.

For the sake of brevity and to avoid confusion, merino and crossbred wools are referred to in this Memorandum as “apparel wools.”

The total production of wool in the five exporting countries named, represents just over half the world's total production of wool, and together such countries produce about 60 per cent. of the total apparel wools of the world.

SYSTEMS OF MARKETING RAW WOOL

Prior to the outbreak of the present war there were two main methods by which wool was marketed :—

- (a) by public auctions at central marketing points
- (b) by private sale or at local auctions.

Wool produced in Australia, New Zealand and South Africa was marketed almost entirely by method (a), while in the Argentine and Uruguay wool was, and still is, sold by private contract in the central markets at Buenos Aires and Montevideo.

The indigenous production of wool in the U.S.A., the United Kingdom and other European countries was also mainly sold under method (b).

By far the greater part of wool from the five main wool exporting countries was therefore sold by public auction, and the prices realised at the wool sales, which took place at regulated intervals at the principal ports throughout Australia, New Zealand and South Africa and also in London, may consequently be taken as reflecting the world value for raw wools.

It is of interest to note that originally auction sales for wool were confined to the Wool Exchange in London, at which all the principal world buyers attended. Gradually, however, as production increased and changes took place in centres of consumption, the system of auction sales was extended to Australia, New Zealand and South Africa. In recent pre-war years no less than 90 per cent. of Australian, New Zealand and South African wool was sold in the countries of origin.

The different systems are fully discussed in "The Marketing of Wool," by the late Mr. A. Foster du Plessis, who was the South African representative on the International Wool Secretariat. Within the limits of this Memorandum it is impossible to do more than direct attention to a few of the principal points.

The main features of the central auctioning system may be said to be :—

- (a) the collection of large quantities of wool of various grades and qualities at convenient focal points, thereby attracting the principal world buyers, facilitating inspection, ensuring genuine competition among buyers and making anything in the nature of a ring on their part difficult, if not impossible ;

- (b) at relatively low cost, it places at the disposal of the small producer highly skilled advice and assistance, and enables small clips to be classed, graded and amalgamated, thereby attracting a class of buyer who would not be interested in small, individual, unclassed lots ;
- (c) it assists growers (especially the smaller growers) to obtain finance against their wool clips ;
- (d) it encourages a spirit of healthy competition among growers to class and grade their clips to the best advantage, with a view to attracting the highest possible price ;
- (e) it helps producers of wool to keep in constant touch with current wool prices, as the prices realised at the auction sales are broadcast in the Press and on the radio ;
- (f) the free publicity given to the auction sales throughout the world is a valuable advertisement for wool.

There can be little doubt that in sales by private treaty, the small producer is largely in the hands of the buyer, as competition is restricted and a combination of buyers against any producer is facilitated and indeed almost encouraged.

Quotation of Wool Prices

The price of raw wool is quoted either as "greasy" or "clean scoured." Greasy wool contains anything from 25 to 70 per cent. of natural grease and foreign matters, which have to be extracted before the wool can be used in the subsequent processes of manufacture.

In making comparisons between the price of greasy wool and prices quoted for cotton and other fibres, which may be regarded as competitive, it must be kept clearly in mind that the greasy wool price has to be largely increased, in most cases at least doubled, in order to get a true comparison.

Long practice and skill enable an expert to estimate within remarkably close limits what is known as the "yield" (i.e. the amount of clean wool after scouring). A great deal depends on the buyer's judgment. Any serious error in the estimate would greatly affect the real cost of the wool in its clean scoured state. When small quantities of ungraded wool have to be dealt with it is much more difficult to estimate the yield, and naturally a buyer will try to keep on the safe side in the price which he is willing to bid for small ungraded lots.

APPRAISEMENT SCHEME

When in September 1939 war broke out with Germany, the British Government agreed with the Governments of Australia and New Zealand to acquire the entire wool clips of those countries for the duration of the war and for one full year after the cessation of hostilities.

In the case of Australia the price agreed was a fixed average of $10\frac{3}{4}$ d. sterling or $13\frac{7}{16}$ d. Australian per lb. greasy basis. The British Government further agreed to share equally with Australia, any profits made on the re-sale of such of its wool as is sold for use outside the United Kingdom.

The British Government agreed in addition to pay $\frac{3}{4}$ d. per lb. to cover costs from Brokers' wool stores to shipboard, so that the grower might receive the agreed purchase price free from expenses. This $\frac{3}{4}$ d. per lb. has to cover the cost of inspecting and valuing the wool, administration of the scheme, and all incidental expenses from wool store to shipment.

To facilitate the distribution of the agreed average price equitably between the growers and over the many different grades of wools, committees representative of all the interests involved, prepared agreed tables of limits on a clean scoured basis. These tables made provision for over 1,500 different types and descriptions of wool, and fixed prices therefor on a basis estimated to secure as nearly as possible that the total sum payable by the British Government for each year's clip, when valued in accordance with those tables, would average out at the agreed figure of $13\frac{7}{16}$ d. Australian per lb. of the wool purchased.

All wool is inspected and valued in accordance with these tables of limits by experts whose decision is final.

Payment of 90 per cent. (increased in 1940 to 95 per cent.) of the agreed value is made within fourteen days of the closing date of each appraisement series. The balance is retained until the result of the appraisement of the whole clip is known.

If the total payable by the British Government for any year's clip when so appraised is found to be more than the agreed price, the difference can be adjusted out of the retention money.

If the total payable is found to be less than the agreed price (which has so far always been the case) the retention money plus the difference between the total appraisalment and the agreed price is distributed *pro rata* to the growers participating in the scheme, usually in July or August following the close of the season.

Provision was made in the agreement whereby manufacturers in Australia can select and purchase at fixed prices such wools as they require for processing locally.

From July 1st, 1942, the British Government agreed to increase the average price by 15 per cent., to 12.3625d. sterling or 15.4531d. Australian per lb. greasy.

Up to the close of the 1942/43 season a total of 14,275,930 bales of Australian wool had been dealt with under this scheme, involving an aggregate payment by the British Government of £252,916,315 sterling.

It is generally agreed that the scheme has worked smoothly and to the satisfaction of growers, very largely because the prices agreed to be paid by the British Government have been reasonable, and because the British and Australian Governments have utilised the services of organisations and persons representing the growers, the wool brokers and buyers, and the wool manufacturers in Australia, to formulate the details of and to operate the scheme.

The agreement and arrangements with the Government of New Zealand were similar to those above indicated, except that the agreed price differed by reason of the fact that the New Zealand clip consists mainly of crossbred wools.

Similar arrangements were made by the British Government at a later date also with South Africa.

In July 1940 the British Government made arrangements to take over the entire domestic wool clip of the United Kingdom (including Northern Ireland), and in April 1943 the United States Government made somewhat similar arrangements regarding the domestic clip of the U.S.A.

It is generally accepted that the main reason for these arrangements was the experience gained in the Great War of the importance of controlling at the source a raw product forming a vital munition of war, thus ensuring ample supplies for the Allied Nations while curtailing supplies to the enemy.

Argentina and Uruguay are, therefore, the only important wool exporting countries whose clips are not yet controlled.

It is not possible in this Memorandum to give even a summary of the arrangements which have been made in the United Kingdom for wool control beyond that of raw wool. It is, however, obvious that its complete control of supplies of raw wool enables the Government to impose such control as it thinks necessary in connection with all subsequent processes.

WOOL PROCESSING

Before raw wool is in a condition to be used by man it has to be put through a sequence of complicated and highly technical processes, which involve the provision of expensive machinery and skilled and trained management, supervision and labour, and the locking up of large amounts of capital.

There are two main divisions in the wool textile industry—Worsted and Woollen. In the Worsted section, the bulk of the products are—or were until recently—all-wool, and the various processes as a general rule were carried out by separate firms, specialising in one or more of these processes.

On the other hand, a Woollen manufacturer generally bought wool and carried out the whole sequence of processes from the raw wool to the finished yarn. Moreover, he consumed not only virgin wool but also the by-products of the Worsted section (noils laps and wastes), re-worked wools—commonly known as “shoddies”—and also a fair amount of cotton in fabrics of cotton warp and woollen weft (“Union” fabrics).

As very few people outside the Trade realise the number and variety of operations through which wool passes between the sheep’s back and the retailed article, a more detailed explanation of the various processes involved will be of interest.

The following list of processes and their functions in the manufacture of (a) worsteds (b) woollens (in language as non-technical as possible) is therefore submitted for the information of the general reader :—

(a) Sequence of Worsted Processes

<u>Name of Process</u>	<u>Effect of Process</u>
(1) Sorting	Separation of fleeces into defined qualities.
(2) Blending	Association of different types of wool for distinctive fabric effects and price.
(3) Scouring and cleansing	Removal of the natural impurities by washing and cleansing processes.
(4) Drying	Elimination of superfluous moisture.
(5) Carding	(a) Separation of fibres and forming the material into a long continuous rope of separated fibres, free from twist, termed a sliver. (b) Elimination or crushing of burrs and vegetable matter by mechanical devices.
(6) Backwashing	Completes the cleansing of the material and applies oil to lubricate the wool.
(7) Intermediate Gilling	Parallelisation of fibres by mechanical means.
(8) Combing—alternative machines :	(a) Removes the proportion of short fibres not serviceable for worsted goods. The short fibres removed are termed "Noil" the retained long fibres are termed "Top." (b) Effects complete parallelisation of the "Top" fibres.
(i) the Noble Comb— involving punching operation.	
(ii) the Square Motion Comb.	
(iii) the rectilinear Comb.	
(9) Finishing Gill Boxes	Forms the sliver into a "Top" ball of standard weight and length in proper condition and regular in thickness and weight per unit of length.

<u>Name of Process</u>	<u>Effect of Process</u>
(10) Drawing—alternative systems : (i) Open drawing (ii) Cone drawing (iii) Porcupine drawing	By a series of operations regularises and gradually reduces the thickness to a thread suitable for spinning to the required counts.
(11) Spinning—alternative systems : (i) Cap spinning (ii) Ring spinning (iii) Flyer spinning (iv) Mule spinning	Forms a thread of the required counts and turns per inch per unit length (the final attenuating operation).
(12) Yarn Preparation— Twisting	Combining single thread into two or more fold yarn.
Winding	Placing single or folded yarns on to bigger carriers for more economic working in subsequent operations.
Reeling	Putting yarn into hanks of predetermined length.
Warping	Placing yarns in longitudinal order as warp.
(13) Preparatory Weaving Processes—dressing, twisting, looming	Drawing warp yarns through the healds and reeds of loom in regular and predetermined order for correct weaving.
(14) Weaving	Interlacing weft and warp yarns to form cloth.
(15) Burling and Mending	Inspection of cloth and removal by manual labour of minor defects or extraneous substances.
(16) Cloth Finishing	Treatment of the fabric to produce the required finish and handle.

In addition, there are dyeing processes which may be applied at different stages.

(b) Sequence of Woollen Processes

<u>Name of Process</u>	<u>Effect of Process</u>
<u>All-wool goods</u>	
(1) Blending	} (See notes under Worsted processes.)
(2) Scouring (cleansing)	
(3) Drying	
(4) Carding { Carding Intermediate Condensing	
(5) Mule or Ring Spinning	
(6) Yarn Preparation { Twisting Winding	
(7) Preparation for Weaving { Warping Beaming Looming	
(8) Weaving	
(9) Dyeing and Finishing	
<u>Union goods</u>	
(1) Pulling	
(2) Blending	Mixing in proportions required such components as noils, shoddy, mungo, cotton, and artificial silk wastes.
(3) Carbonising	Extracting vegetable matter from wool wastes by the use of chemical agents.
(4) Willowing	Shaking and opening out fibres by the willow machine which removes sand, dust, extraneous vegetable impurities, etc.
(5) Carding	} (See notes under Worsted processes.)
(6) Mule or Ring Spinning	
(7) Yarn Preparation	
(8) Preparation for Weaving	
(9) Weaving	
(10) Dyeing and Finishing	

The main difference between the worsted and woollen processes is that in the former, after carding, the wool is combed (this process removing the short fibres or "noils" which are not serviceable for worsted goods) before commencing the spinning process, whereas in woollens the yarn is spun directly after carding, without any combing.

WOOL PRODUCTION—STATISTICS

Statistics with regard to wool production are sometimes given in bales and sometimes in pounds. As the weight of a bale varies in the different producing countries it has to be noted that :—

In Australia a bale (prior to the present war) represented approximately	300 lbs.
In New Zealand the average weight was	340 lbs.
In South Africa it was	300 lbs.
In South America it was	920 lbs.

(NOTE : During the 1942-43 season the weight of an Australian bale was increased to about 312 lbs.)

In order to avoid confusion, statistics in this Memorandum are given as far as possible in pounds.

(a) **Apparel Wools.** The following figures, supplied by Messrs. Mallett & Co., Bradford, show the principal countries producing apparel wool and the approximate production in the last pre-war year (1937-38) :—

	<i>Merino</i>	<i>Crossbred</i>	<i>Total</i>
	(in millions of lbs.)		
Principal Wool-Exporting Countries—			
Australia	833	182	1,015
New Zealand	12	285	297
South Africa	241	5	246
Argentina	53	322	375
Uruguay	15	101	116
Principal Wool-Importing Countries—			
United Kingdom	—	107	107
Rest of Europe (excluding European Russia)	47	352	399
United States	227	227	454
Rest of American Continent	—	94	94
Total production of apparel wool, say	1,428	1,675	3,103

(NOTE : Of the crossbred wools included in the above totals a small part grown in South America is not used for clothing purposes.)

These figures indicate that approximately 75 per cent. of the world's supply of merino wool was grown in Australia and South Africa and about 16 per cent. in the United States.

Production in the Continental countries was well distributed and was not important in any one country; in Germany the total was 43 million lbs., in France 55 million lbs., and in Italy 28 million lbs. Like the wool clips of the United States and the United Kingdom the production of Continental countries was mainly consumed locally.

(b) **World's Total Wool Production.** The total wool production of the world was estimated by the Imperial Economic Committee to be 3,893 million lbs. in 1937-38, which leaves about 790 million lbs. to be accounted for. The production in Soviet Russia was estimated to be 259 million lbs., and in Asia 201 million lbs.

Accurate statistics are not available but probably not more than about 60 per cent. of the 790 million lbs. above referred to would be apparel wool. On this basis, the total world production of apparel wool may be estimated at about 3,500 million lbs. per annum.

MANUFACTURE IN PRINCIPAL EXPORTING COUNTRIES

Prior to the present war, processing of apparel wool and manufacturing of textiles was carried on to a limited extent only in the main wool-exporting countries.

In Australia during the inter-war period there had been considerable development, and immediately prior to the outbreak of hostilities the wool textile industry in that country was capable of supplying the greater part of the clothing required for the population. Even so, Australia was using only some 10 per cent. of her production.

The war has led to still further development in this industry and Australia is now requiring about 475,000 bales of her own production for local manufactures. However, she is still only consuming about 15 per cent. of the wool she produces.

As a consequence of the war there has also been considerable development of this nature in the Argentine. Up-to-date figures are not available but the proportion used locally in 1937 was about 16 per cent. of her total production.

The requirements of the wool textile industries in New Zealand, South Africa and Uruguay are still negligible compared with their total production.

The chief wool manufacturing countries in the Northern Hemisphere produced varying quantities of apparel wool, most of which they consumed themselves.

The United States in peace time imported on the average about one third only of her total needs. During the present war consumption has so increased that total requirements in the U.S.A. have been about equally balanced between imported and domestic wools.

In the United Kingdom the pre-war home production of apparel wool was equal to about one-sixth only of normal needs of the textile industry.

On the Continent of Europe, in the principal countries other than Russia, the quantities of apparel wool produced were small in comparison with the needs of the wool textile industries of those countries, which had to rely mainly on imports from the five chief wool-exporting countries.

Japan produced no wool worth mentioning and during the inter-war period had become an increasingly important customer of the exporting countries.

Retained Raw Wool in Principal Manufacturing Countries

The following figures, taken from the records of the Imperial Economic Committee, indicate balances of raw wool available for manufacture in each of the countries named, after adding the total domestic production to the total imports and deducting the total re-exports :—

	<i>Greasy Basis in Millions of lbs.</i>			
	<u>1928</u>	<u>1932</u>	<u>1935</u>	<u>1938</u>
United Kingdom :				
Domestic Production ..	114	119	109	111
Imports	779	918	864	882
	<u>893</u>	<u>1,037</u>	<u>973</u>	<u>993</u>
Re-exports	387	359	339	299
Retained	<u>506</u>	<u>678</u>	<u>634</u>	<u>694</u>

(See notes on page 16)

Greasy basis in Millions of lbs.

	<u>1928</u>	<u>1932</u>	<u>1935</u>	<u>1938</u>
United States :				
Domestic Production ..	384	440	453	458
Imports	242	58	200	103
	<u>626</u>	<u>498</u>	<u>653</u>	<u>561</u>
Re-exports	—	—	—	—
Retained	<u>626</u>	<u>498</u>	<u>653</u>	<u>561</u>
France :				
Domestic Production ..	58	54	53	56
Imports	504	447	385	390
	<u>562</u>	<u>501</u>	<u>438</u>	<u>446</u>
Re-exports	56	37	48	49
Retained	<u>506</u>	<u>464</u>	<u>390</u>	<u>397</u>
Germany :				
Domestic Production ..	34	32	36	44
Imports	377	316	273	306
	<u>411</u>	<u>348</u>	<u>309</u>	<u>350</u>
Re-exports	24	13	3	—
Retained	<u>387</u>	<u>335</u>	<u>306</u>	<u>350</u>
Belgium :				
Domestic Production ..	—	—	—	—
Imports	144	147	235	217
	<u>144</u>	<u>147</u>	<u>235</u>	<u>217</u>
Re-exports	35	58	117	76
Retained	<u>109</u>	<u>89</u>	<u>118</u>	<u>141</u>
Italy :				
Domestic Production ..	52	42	30	28
Imports	107	159	116	76
	<u>159</u>	<u>201</u>	<u>146</u>	<u>104</u>
Re-exports	8	3	1	2
Retained	<u>151</u>	<u>198</u>	<u>145</u>	<u>102</u>

(See notes on page 16.)

Greasy Basis in Millions of lbs.

	<u>1928</u>	<u>1932</u>	<u>1935</u>	<u>1938</u>
Poland :				
Domestic Production ..	10	9	11	13
Imports	30	29	41	50
	<u>40</u>	<u>38</u>	<u>52</u>	<u>63</u>
Re-exports	2	—	—	—
Retained	<u>38</u>	<u>38</u>	<u>52</u>	<u>63</u>
Czecho-Slovakia :				
Domestic Production ..	3	2	2	—
Imports	37	32	37	25
	<u>40</u>	<u>34</u>	<u>39</u>	<u>25</u>
Re-exports	3	1	1	—
Retained	<u>37</u>	<u>33</u>	<u>38</u>	<u>25</u>
Russia :				
Domestic Production ..	360	129	158	303
Imports	76	56	70	66
	<u>436</u>	<u>185</u>	<u>228</u>	<u>369</u>
Re-exports	—	—	—	—
Retained	<u>436</u>	<u>185</u>	<u>228</u>	<u>369</u>
Canada :				
Domestic Production ..	20	21	19	19
Imports	14	9	15	16
	<u>34</u>	<u>30</u>	<u>34</u>	<u>35</u>
Re-exports	8	4	8	4
Retained	<u>26</u>	<u>26</u>	<u>26</u>	<u>31</u>

(See notes on page 16.)

Greasy basis in Millions of lbs.

	<u>1928</u>	<u>1932</u>	<u>1935</u>	<u>1938</u>
Japan :				
Domestic Production ..	—	—	—	—
Imports,	115	204	243	117
	<u>115</u>	<u>204</u>	<u>243</u>	<u>117</u>
Re-exports	—	—	—	—
Retained	115	204	243	117
	<u><u>115</u></u>	<u><u>204</u></u>	<u><u>243</u></u>	<u><u>117</u></u>

(NOTE : Re-exports include exports of Domestic wool.)

In addition to the above, France imported from 60 to 70 million lbs. annually of wool on sheepskins ; Germany from 16 to 18 million lbs. and the United Kingdom from 10 to 14 million lbs.

Germany imported the following quantities of wool yarns in each of the four years :—
50.4 million lbs. in 1928 ; 18.5 in 1932 ; 18.9 in 1935 ; and 13.3 in 1938.

Italy is throughout this Memorandum treated as an enemy country.)

The total retained wool dealt with in the above Table for the year 1938 was 2,850 million lbs., of which 1,655 million lbs., or say, 58 per cent., was retained by Allied Nations, and 42 per cent. by enemy controlled countries.

The figures given in the above Table deal only with raw wool. Some of the countries named also imported and/or exported important quantities of manufactured or partly processed wool in the form of tops, yarns or textile fabrics. Some of the figures regarding such exports for the years 1936, 1937 and 1938 will be found on pages 21-22.

It may be interesting to compare the amount which the retained raw wool represents per head of the population in some of the principal countries referred to above.

The figures given are approximate only, as exact statistics of populations for 1938 are not available.

<u>Country</u>	<u>Population</u> <u>(Whitaker's</u> <u>Almanack 1938)</u>	<u>Retained Raw</u> <u>Wool per head</u> <u>based on 1938</u> <u>figures, say</u>
United Kingdom	47,500,000	14.6 lbs.
United States	137,000,000	4.1 lbs.
France	42,000,000	9.4 lbs.
Germany	66,000,000	5.3 lbs.
Belgium	8,250,000	17.0 lbs.
Italy	43,300,000	2.4 lbs.
Japan	98,000,000	1.2 lbs.

THE FOLLOWING CHART SHEWS IN GRAPHIC FORM THE DISPARITY BETWEEN PRODUCTION AND APPARENT CONSUMPTION OF RAW WOOL (INCLUDING CARPET WOOL) IN SPECIFIED COUNTRIES, AVERAGE 1934-1938.

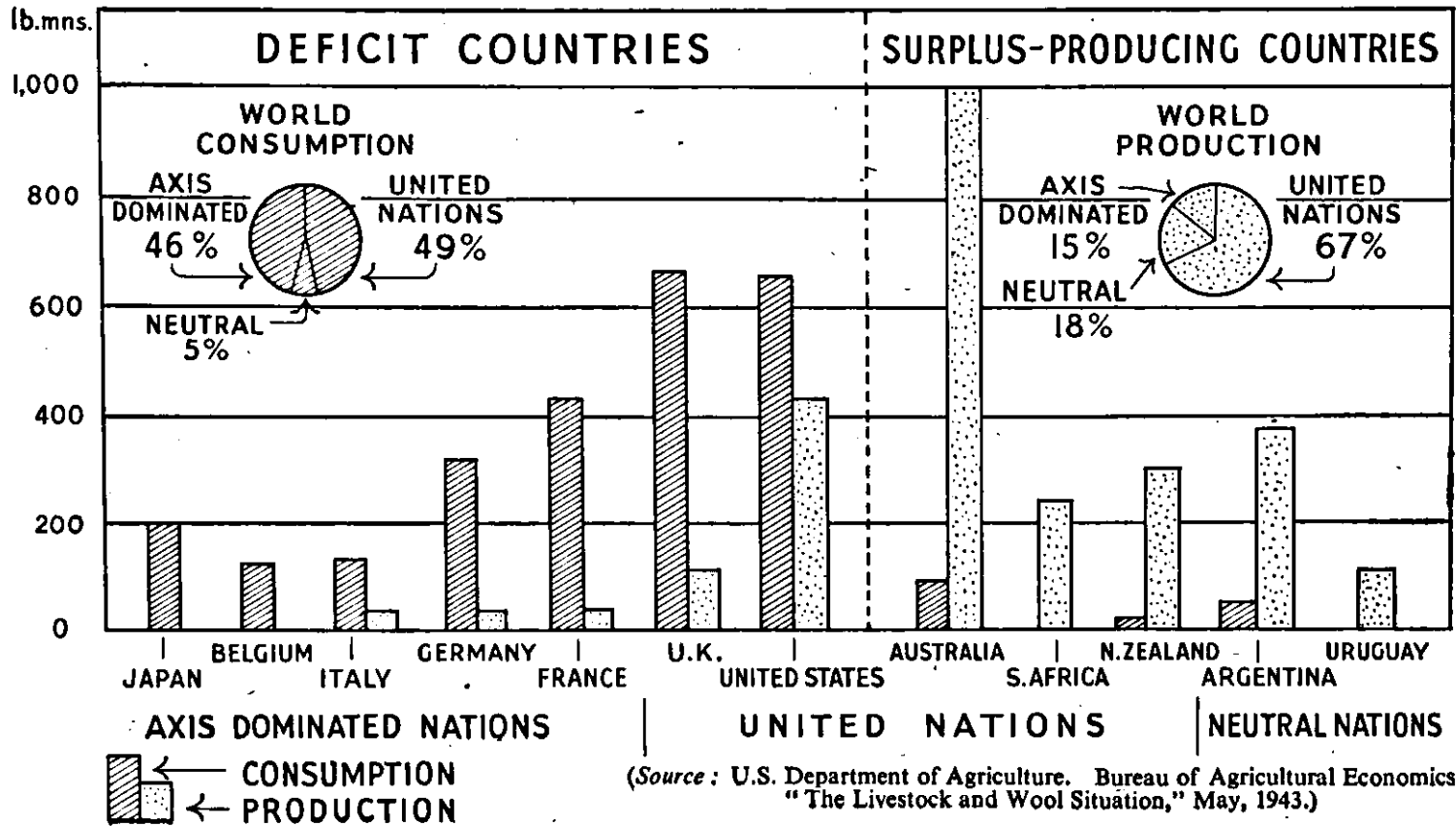


CHART.

INCREASE IN WOOL PRODUCTION

There has been a continuous and considerable increase in wool production since the 1914-18 war, particularly in Australia and New Zealand.

In the following tables the published figures in bales have been converted to lbs. at the rate of 300 lbs. to the bale for Australia and 340 lbs. for New Zealand :—

Production for the five years immediately after the last war :

	(in millions of lbs.)					Average
	1920/21	1921/22	1922/23	1923/24	1924/25	of 5 Years
Australia ..	536	612	575	534	615	574
New Zealand ..	181	181	198	200	202	192
South Africa ..	200	205	180	175	180	188
Argentina ..	225	230	240	250	260	241
Uruguay ..	100	100	100	110	100	102
Total ..	1,242	1,328	1,293	1,269	1,357	1,297

Based on Dalgety's Annual Wool Review.

(NOTE : Owing to lack of data some of the figures for South Africa, Argentina and Uruguay have been estimated, but it is believed that they may be accepted as approximately correct.)

Average Annual Production 1925 to 1937 (in millions of lbs.)

Australia ..	..	..	..	..	..	936
New Zealand ..	..	..	..	..	..	255
South Africa ..	..	..	..	..	..	256
Argentina ..	..	..	..	..	..	326
Uruguay ..	..	..	..	..	..	112
Total ..	..	..	..	..	..	1,885

Based on Imperial Economic Committee's Reports.

Production for the last five years for which figures are available :

	(in millions of lbs.)					Average of 5 Years
	1937/38	1938/39	1939/40	1940/41	1941/42	
Australia ..	1,015	971	1,120	1,044	1,108	1,051.6
New Zealand ..	297	314	303	321	336	314.2
South Africa ..	246	236	260	255	250	249.4
Argentina ..	375	375	384	400	473	401.4
Uruguay ..	116	125	122	115	115	118.6
Total ..	2,049	2,021	2,189	2,135	2,282	2,135.2

Based on reports by Dalgety's and Trade News Services.

In the following table the average production for the five years 1920/21 to 1924/25 is compared with that for the five years 1937/38 to 1941/42 :—

<u>Country</u>	<u>5 years to</u> <u>1924/25</u>	<u>5 years to</u> <u>1941/42</u>	<u>Increase</u>	<u>% of</u> <u>Increase</u>
	(In millions of lbs.)			
Australia ..	574	1,052	478	83
New Zealand ..	192	314	122	64
South Africa ..	188	249	61	32
Argentina ..	241	401	160	66
Uruguay ..	102	119	17	16

The increase in production in all five countries combined was about 65 per cent. over the period of 22 years.

Effect of Seasonal Fluctuations

Variations both in quantities and qualities, as between one season and another, will be produced by climatic and other conditions—drought will cause a decrease and a rainy season an increase—but it will be seen, from the figures already given, that the fluctuations in production from season to season were not great, although the cumulative effect over a period of about twenty years is in the nature of 65 per cent.

Although—taking all five countries together—these seasonal fluctuations were not greater than 10 per cent. of the preceding year's clip, they represent large amounts of wool, and undoubtedly have been one of the factors which influenced prices, especially when they have happened to coincide with other factors operating the same way.

ECONOMIC IMPORTANCE OF WOOL TO THE CHIEF PRODUCING COUNTRIES

The importance of wool in the economies of the five principal producing and exporting countries is indicated by a comparison between the value of their exports of wool and of other commodities. The table given below shows the relative value of wool to the total exports (excluding precious metals) for the last three pre-war years.

EXPORTS

	<u>All Domestic Produce (excl. Gold, Silver and Specie)</u>			<u>Wool</u>			<u>Proportion of Wool to Total</u>		
	<u>1936</u> (in £A)	<u>1937</u> millions)	<u>1938</u> ns)	<u>1936</u> (in £A)	<u>1937</u> millions)	<u>1938</u> ns)	<u>1936</u>	<u>1937</u>	<u>1938</u>
Australia :	146	139	120	63	47	43	43%	34%	36%
New Zealand :	55	65	57	13	19	12	24%	29%	21%
South Africa :	27	37	26	10	13	9	37%	34%	34%
Argentina :	1,656	2,311	1,400	151	171	154	9%	7%	11%
Uruguay :	90	99	96	42	45	42	47%	46%	44%

(NOTE : From the " Official Year Book " of the Governments of Australia, New Zealand and South Africa, and from " Industrial Fibres " (issued by the Imperial Economic Committee) in the case of Argentina and Uruguay.

The wool figures exclude wool on exported skins.)

In Australia, the largest producing country, wool was actually the chief factor in its pastoral wealth and that nation's prosperity has, in the past, been largely dependent upon a satisfactory sale of its clip.

A rise or fall of 1d. per lb. in the average price of the 1937/8 clip would have meant an increase or decrease of the following amounts to the five countries concerned.

Australia	..	..	..	£4,229,166
New Zealand	...	..	..	£1,237,500
South Africa	..	..	..	£1,025,000
Argentina	..	...	..	£1,562,500
Uruguay	..	..	..	£483,333

ECONOMIC IMPORTANCE OF EXPORTS OF WOOL MANUFACTURES TO THE CHIEF MANUFACTURING COUNTRIES

The importance of the export trade in wholly or partially manufactured wool products (namely, tops, woollen and worsted yarns, tissues, re-exports, etc.) is shown below :—

	<u>1936</u>	<u>1937</u>	<u>1938</u>
United Kingdom :	(in thousands of £)		
Total Exports ..	501,374	596,525	532,491
Wool Goods ..	54,101	59,649	46,090
Proportion.. ..	10½%	10%	9%
France :	(in thousands of Francs)		
Total Exports ..	15,491,820	23,938,653	30,585,730
Wool Goods ..	1,215,843	2,177,551	2,332,251
Proportion.. ..	8%	9%	7½%
Belgium :	(in thousands of Francs)		
Total Exports ..	18,719,187	24,299,389	20,446,946
Wool Goods ..	1,657,007	2,031,472	1,566,603
Proportion.. ..	9%	8%	8%
Germany :	(in thousands of Reichmarks)		
Total Exports ..	4,659,643	5,788,045	5,256,944
Wool Goods ..	110,632	128,130	100,310
Proportion.. ..	2½%	2½%	2%
Italy :	(in thousands of Lire)		
Total Exports ..	5,542,148	10,433,583	10,379,075
Wool Goods ..	139,371	471,925	492,734
Proportion.. ..	2½%	4½%	4½%

	<u>1936</u>	<u>1937</u>	<u>1938</u>
Poland :	(in thousands of Zloty)		
Total Exports ..	1,026,246	1,195,488	1,184,712
Wool Goods ..	22,126	28,565	22,735
Proportion.. ..	2%	2½%	2%

	(in thousands of Yen)		
Japan :			
Total Exports ..	2,641,489	3,131,542	2,678,520
Wool Goods ..	61,269	70,290	66,205
Proportion.. ..	2¼%	2¼%	2½%

(Sources : "Foreign Trade and Commerce" (Board of Trade). (Committee on Industry and Trade).)

The fact should not be overlooked, when considering the importance of the wool industry in these countries, that the above figures relate to the export trade alone, while at the same time the populations of those countries (totalling about 357,000,000) had to be clothed. The following figures show the numbers employed in the wool industry in each country :—

	<u>Approximate Number</u> <u>of Persons employed</u> <u>in the Wool Industry</u>
United Kingdom	240,000
France	} 190,000
Belgium	
Germany	160,000
Italy	75,000
Poland	50,000
Japan	50,000

(Source—Report on the Textile Industries (Committee on Industry and Trade).)

WORLD'S TEXTILE MACHINERY

Ability to utilise wool depends upon the amount and condition of machinery available and the number of hours it can be worked. The following Table has been compiled, with the latest information available, from "World Consumption of Wool," published in 1939 by the Imperial Economic Committee :—

	<u>Combs</u>	<u>Spindles</u> (in 1,000's)	<u>Looms</u>
Allied Nations—			
United Kingdom	2,800	5,600	98,000
United States	2,613	3,676	50,756
Soviet Russia	199	434	11,917
Australia	220	361	4,299
New Zealand	41	76	539
Canada	23	94	1,997
India	—	75	1,595
Total	5,896	10,316	169,103
Enemy or Enemy Occupied Countries—			
Germany	3,553	5,637	96,313
France	3,000	2,742	40,000
Belgium	700	826	7,500
Italy	946	1,171	19,500
Poland	458	799	13,700
Japan	1,355	1,249	29,421
Others	485	1,794	27,415
Total	10,497	14,218	233,849
Neutral Countries—			
Spain	365	391	11,900
Sweden	—	277	3,900
Switzerland	160	210	3,600
Eire	9	60	916
Argentina	60	150	2,800
Portugal	92	165	2,156
Turkey	44	46	1,000
Total	730	1,297	26,272

It will be seen that pre-war considerably more than one-half of the world's wool textile machinery was located in countries which are now enemy or enemy controlled. If it were possible to adjust these figures for operational efficiency and for working hours, the probability is that the capacity of enemy controlled countries would be still further increased though, as their combs were mainly "rectilinear," their combing capacity was considerably less than that of the Allied Nations, whose combs were largely Noble type.

ANNUAL CARRY-OVER

Under normal conditions the amount of wool left unsold at the sources of supply varied from season to season. The following figures published by the Imperial Economic Committee, indicate the extent of these "carry-over" stocks for the last seven pre-war seasons:—

	END OF SEASON STOCKS							Average of 7 Years
	(in millions of lbs.)							
	1931/32	32/33	33/34	34/35	35/36	36/37	37/38	
Australia ..	46	13	65	26	23	14	71	37
New Zealand ..	84	59	26	64	17	11	24	41
South Africa ..	17	2	24	3	6	4	8	9
Argentina ..	44	9	42	13	22	24	41	28
Uruguay ..	5	—	11	10	11	3	21	10

In considering these figures it must be remembered that each year's figure includes the carry-over from the previous year; thus in Australia in the year 1932/33 the carry-over was 13 million lbs., but as the carry-over in 1931/32 had been 46 million lbs., it follows that in 1932/33 the quantity of wool disposed of was equal to the whole of that year's clip plus an additional 33 million lbs.

The average carry-over for the seven-year period represents the following percentages of the average clips over the same period.

Australia	...	..	..	3.67	per cent.
New Zealand	..	..	..	14.28	„
South Africa	..	..	..	3.28	„
Argentina	..	..	..	7.51	„
Uruguay	..	..	..	9.17	„

These figures are important as showing that, notwithstanding the upward trend of production, under the systems of marketing then in force the various clips were being regularly cleared.

FLUCTUATIONS IN PRICES

Before commenting upon fluctuations in prices it will be desirable to have the facts not only regarding wool but also other products clearly stated.

With this object in view two Tables have been prepared and are set out on pages 26-27 and 28-29.

Table I deals with wool and cotton and Table II with certain other commodities.

Table I gives highest and lowest average prices realised at the London Wool Auctions, as recorded monthly by Messrs. Kreglinger and Fernau, for two typical qualities of wool for each year 1919 to 1938.

This Table also gives highest and lowest prices each year, recorded in Bradford and taken from the Weekly Wool Chart, for 64's combed Merino Tops and for 56's Combed Crossbred Tops, which are generally recognised as standard grades of Tops.

Both of these Tables give prices for the nine years prior to 1914 and for the inter-war years 1919 to 1938. Table I also shows the average exchange value of the Australian £ and U.S.A. dollar as compared with Sterling. A footnote on each Table gives some of the more important political and financial events which took place during the years in question.

It may be suggested that many of the commodities dealt with in Table II are not comparable with wool, and that the prices may well have been affected by conditions peculiar to those commodities. Nevertheless, it is clearly desirable, when considering fluctuations that have taken place in wool prices, to have before one the extent of the changes in the prices of other products during the same periods.

TABLE I—WOOL

The percentages in this table show the relation that the difference

Year	64's TOPS (Combed Merino Wool) per lb. spot Bradford			64 '67's RAW WOOL Prices Clean Scoured Basis per lb. London			56's TOPS (Combed x bred Wool) per lb. spot Bradford		
			% of Highest Lowest Fluctn.			% of Highest Lowest Fluctn.			% of Highest Lowest Fluctn.
1906	d.	d.	8%	It has not been found possible to obtain the necessary information for the years 1906-14, but prices and fluctuations during that period are believed to have followed closely those of 64's Tops.			d.	d.	14%
1907	29½	26½	12%				26½	22½	13%
1908	26½	21½	18%				23	17½	24%
1909	29	25½	12%				23	20½	12%
1910	29½	27	8%				23½	22½	4%
1911	27½	25½	7%				21½	19½	10%
1912	29	24½	15%				23	19½	15%
1913	30½	27½	10%				24	21	13%
1914	32½	26	20%				28	21½	24%
	WAR						YEARS			OMITTED
1919	156	71	54%	95	76	20%	102	54	47%
1920	168	48	71%	155	90	42%	102	32	69%
1921	54	36	33%	44	30	32%	34	23	32%
1922	64	48	25%	56	45	20%	36	27½	24%
1923	65	59	9%	63	54	14%	44	33½	24%
1924	81	70	13%	77	67	13%	55	46	17%
1925	80	49	38%	55	50	9%	54	32	40%
1926	51	46	10%	48	44	8%	33	31	6%
1927	53	46½	12%	49	46	6%	40	32½	18%
1928	56½	46½	18%	50	44	12%	43½	34	22%
1929	47	31	34%	45	30	33%	35½	25	30%
1930	31	22	29%	27	22	19%	24½	15½	37%
1931	25½	20	21%	23	16½	28%	19	14½	24%
1932	24	20½	15%	21½	18	16%	19	16½	14%
1933	38	21½	43%	31½	19½	38%	27	17	40%
1934	41½	23½	43%	34	22	35%	31	18	42%
1935	32½	23½	28%	29	21	27%	20½	17	17%
1936	36½	31	15%	34	30	12%	27	20	26%
1937	39	27½	30%	39	27	31%	30	21½	28%
1938	30½	24½	20%	30½	24½	20%	23	19	17%
Source :	" Weekly Wool Chart " Quotations			Messrs. Kreglinger & Fernau			" Weekly Wool Chart " Quotations		

The following are some of the principal political

- 1907 Financial Crisis in U.S.A.
- 1914 War with Germany. Britain went off Gold.
- 1921 German default on Reparations.
- 1923 Funding of U.K. Debt to U.S.A. De-valuation and collapse of the German Mark.
- 1925 Britain returned to Gold Standard.
- 1929 Financial Crisis in U.S.A.

AND COTTON PRICES

between the highest and lowest prices each year bears to the highest.

56's RAW WOOL Prices Clean Scoured Basis per lb. London % of Highest Lowest Fluctn.			COTTON Middling American Spot Cash per lb. L'pool. % of Highest Lowest Fluctn.			EXCHANGE RATES AGAINST STERLING Approximate Average Rates for the Calendar Years Australian £ U.S. \$		Year
It has not been found possible to obtain the necessary information for the years 1906-14, but prices and fluctuations during that period are believed to have followed closely those of 56's Tops.			d.	d.	% of	Par	4.86	1906
			7.52	5.31	29%	"	"	1907
			7.57	5.16	32%	"	"	1908
			6.92	4.80	31%	"	"	1909
			8.50	6.77	20%	"	"	1910
			8.42	6.57	22%	"	"	1911
			7.53	4.92	35%	"	"	1912
			7.19	6.05	16%	"	"	1913
			7.96	6.20	22%	"	"	1914
			6.50	4.25	35%	"	4.91	
WAR			YEARS			OMITTED		
65	61	6%	—	—	—	Par	4.42	1919
86	60	30%	27.32	6.38	77%	Par	3.66	1920
23	22	4%	15.21	8.22	46%	1% Dis.	3.85	1921
36	26	28%	17.13	12.10	29%	Par	4.51	1922
44	36	18%	21.64	13.25	39%	1½% Prem.	4.58	1923
57	44	23%	18.18	12.11	33%	2½% "	4.38	1924
34	30	11%	13.63	9.17	30%	1½% "	4.81	1925
30	29	3%	10.36	6.30	39%	½% "	4.86	1926
37	32	14%	12.67	9.17	28%	Par	4.86	1927
41	34	17%	11.14	9.72	13%	½% Dis.	4.87	1928
37	23	38%	10.66	7.27	32%	¾% "	4.86	1929
20	13	35%	7.54	4.56	40%	6% "	4.86	1930
16	10½	34%	6.02	3.60	40%	£A.128/10s.	4.53	1931
16	12	25%	7.20	4.61	36%	£A.125	3.50	1932
24	13½	44%	7.20	5.06	30%	"	4.30	1933
28	16	43%	7.42	6.25	16%	"	5.04	1934
19	16	16%	7.66	5.99	22%	"	4.90	1935
25	19	24%	8.14	6.12	25%	"	4.97	1936
28	20	28%	6.20	4.20	32%	"	4.94	1937
20	17½	12%	5.91	4.68	21%	"	4.89	1938
Messrs. Kreglinger & Fernau.			The Manchester Cotton Association Ltd.			Lloyds Bank Ltd.		

and financial events which took place during the period:—

- 1931 Britain went off Gold.
- 1933 U.S.A. went off Gold.
- 1934 U.S. Dollar de-valued.
- 1937 Coronation King George VI.
- 1938 Munich.

TABLE II —

The percentages in this Table show the relation that the difference

Year	COPPER Prices to nearest £			TIN Prices to nearest £			MEAT N.Z. Canterbury Lamb 28/36 lbs. per lb. London		
	Spot Cash per ton London			Spot Cash per ton London					
	Highest	Lowest	% of Fluctn.	Highest	Lowest	% of Fluctn.	Highest	Lowest	% of Fluctn.
	£	£		£	£		d.	d.	
1906	108	77	29%	215	161	25%	7½	4½	43%
1907	111	55	50%	200	115	43%	5½	5	15%
1908	65	56	14%	147	118	19%	6	5½	12%
1909	64	54	15%	154	123	20%	5½	3½	39%
1910	62	53	15%	177	143	19%	5½	4½	26%
1911	64	53	16%	233	170	27%	6	4½	27%
1912	80	61	24%	233	184	22%	7	5½	21%
1913	77	62	20%	232	166	28%	7½	5½	24%
1914	66	49	26%	188	120	36%	7	5½	24%
	WAR YEARS OMITTED			WAR YEARS OMITTED			WAR YEARS OMITTED		
1919	117	73	37%	342	204	40%	Government Controlled Government Controlled		
1920	122	70	43%	419	195	54%			
1921	75	65	13%	210	148	30%	14	7½	46%
1922	66	57	14%	188	139	26%	12½	8½	32%
1923	77	59	23%	240	176	37%	12½	10½	14%
1924	69	60	12%	298	201	33%	13½	9½	26%
1925	68	59	13%	290	229	21%	13	10½	19%
1926	61	56	5%	321	261	19%	11½	8½	20%
1927	61	53	11%	320	257	20%	10½	9½	21%
1928	75	60	20%	266	206	23%	10½	9½	13%
1929	98	66	32%	230	174	24%	10½	8½	20%
1930	75	41	45%	181	105	42%	10½	8½	24%
1931	48	28	42%	142	100	29%	8½	6½	26%
1932	43	25	41%	158	102	35%	7½	5	31%
1933	39	27	30%	227	141	38%	7½	5½	31%
1934	34	26	26%	244	222	9%	7½	6½	14%
1935	36	26	28%	245	208	15%	8	6½	20%
1936	49	34	31%	245	175	28%	7½	7	11%
1937	78	36	54%	311	181	42%	8½	7	14%
1938	48	33	33%	217	153	30%	8	7½	11%
Source :	Quin's Metal Handbook and Statistics, 1941.			Quin's Metal Handbook and Statistics, 1941.			Imported Meat Trades' Association Ltd., and W. Weddel & Co. Ltd.		

The following are some of the principal political and

- 1907 Financial Crisis in U.S.A.
- 1914 War with Germany. Britain went off Gold.
- 1921 German default on Reparations.
- 1923 Funding of U.K. Debt to U.S.A. De-valuation and collapse of the German Mark.
- 1925 Britain returned to Gold Standard.
- 1929 Financial Crisis in U.S.A.

COMMODITY PRICES

between the highest and lowest prices each year bears to the highest.

RUBBER				BUTTER						WHEAT						Year
per lb. spot London				Monthly Av. Prices N.Z. Quality I per cwt. landed ex store London						Weekly Av. Prices of "English" per qr. of 480 lbs.						
Highest	Lowest	% of		Highest	Lowest	% of		Highest	Lowest	% of						
s. d.	s. d.	Fluctn.		s. d.	s. d.	Fluctn.		s. d.	s. d.	Fluctn.						
Fine				WAR YEARS OMITTED						WAR YEARS OMITTED						
Hard Para				Government controlled						Government controlled						1906
6 3	5 5½	13%		119 6	101 0	16%		30 5	25 9	15%		1907				
5 9	3 8	36%		121 6	100 0	18%		36 3	26 0	28%		1908				
5 9½	3 0	48%		142 6	111 0	22%		35 6	30 5	14%		1909				
9 3	5 3	43%		121 0	102 6	15%		44 9	31 4	30%		1910				
12 9	5 7	56%		126 6	109 6	13%		33 9	29 0	14%		1911				
7 3	4 6	38%		134 0	107 0	20%		33 4	30 0	10%		1912				
5 9	4 1	29%		135 0	111 6	17%		38 10	29 10	23%		1913				
4 6½	2 0	56%		129 6	114 6	11%		34 3	30 0	12%		1914				
3 0	1 11½	35%		139 0	111 6	20%		44 4	30 11	30%						
Plantation Best Crepe				WAR YEARS OMITTED						WAR YEARS OMITTED						
2 11				Government controlled						—						1919
2 10½				Government controlled						90 11 72 6 20%						1920
1 3½				Government controlled						89 4 44 0 51%						1921
1 2½				226 0 138 6 39%						56 3 37 9 33%						1922
1 6½				224 0 158 0 29%						49 3 37 6 24%						1923
1 8				227 6 166 0 27%						56 1 41 5 26%						1924
4 8				229 6 172 0 25%						59 3 43 11 26%						1925
3 8				179 6 152 6 15%						62 2 47 6 24%						1926
1 8½				185 0 159 0 19%						54 8 42 2 23%						1927
1 7½				187 6 165 0 12%						48 2 38 11 20%						1928
1 1½				190 0 168 0 12%						52 6 39 8 25%						1929
0 8½				162 6 115 6 29%						41 0 25 4 38%						1930
0 4½				126 6 111 0 12%						29 3 19 3 34%						1931
0 3½				115 0 91 6 20%						28 2 22 6 20%						1932
0 4½				106 6 73 6 31%						29 3 18 11 35%						1933
0 7½				84 0 72 6 14%						23 11 18 7 23%						1934
0 6½				123 6 81 0 34%						26 5 18 11 29%						1935
0 11½				122 6 90 6 26%						40 8 25 8 38%						1936
1 1½				143 0 92 6 35%						43 11 36 1 18%						1937
0 8½				134 0 113 0 16%						35 8 18 2 49%						1938
"The World's Rubber Position"— W. H. Rickenson & Sons				Agricultural Statistics Board of Agriculture & Fisheries						"The London Grain, Seed & Oil Reporter," 1943						

financial events which took place during the period:—

- 1931 Britain went off Gold.
- 1933 U.S.A. went off Gold.
- 1934 U.S. Dollar de-valued.
- 1937 Coronation King George VI.
- 1938 Munich.

What are the principal points to be noted in the foregoing tables ?

- First.* Fluctuations in prices of wool and the other commodities dealt with (except meat) were greater during the inter-war years than in the pre-war years.
- Second.* These inter-war fluctuations were such as to render business difficult and unduly hazardous.
- Third.* Wool in this respect does not compare unfavourably with other products.
- Fourth.* There is nothing in these Tables to lead one to suppose that the system of wool marketing was responsible for the price fluctuations in that commodity.
- Fifth.* The financial and political events of the period, only some of the more notable of which are set out at the foot of the Tables, are alone sufficient to account for the disturbed state of all markets during the inter-war period.

The following Table, summarising in percentage form some of the figures in Tables I and II, illustrates the first three points made above :—

Average of Annual Percentage Fluctuations

	64's Tops	64/67's Raw Wool	56's Tops	56's Raw Wool	Copper	Tin	Cotton	Meat	Rubber	Butter	Wheat
1906-14 ..	12%	—	14%	—	23%	27%	27%	26%	39%	17%	20%
1921-38 ..	24%	20%	25%	23%	26%	28%	31%	22%	47%	23%	30%

*Relation that lowest price during the period bears to highest price,
expressed as percentage of highest price*

	64's Tops	64/67's Raw Wool	56's Tops	56's Raw Wool	Copper	Tin	Cotton	Meat	Rubber	Butter	Wheat
1906-14 ..	65%	—	63%	—	45%	50%	50%	47%	16%	70%	58%
1921-38 ..	25%	22%	26%	26%	27%	31%	17%	36%	3%	32%	29%

(Note : In calculating averages the years 1919-20 are omitted, as prices during these immediate post-war years were too inflated to reflect a true value and should not, therefore, be included in any figures forming a basis for calculation of averages.)

It is of particular interest to note that in the case of the Wheat quotations (which are for English grown crop) the percentages of fluctuation are not dissimilar from those shown in the case of the other commodities, all of which represent imported produce. From this it may be deduced that fluctuations which apply both to domestic and imported produce are due to extraneous influences.

The exceptionally violent fluctuations during 1919-20 in prices of Merino wools in London Auctions and in prices of tops in Bradford seem to have been due to panic buying by manufacturers of wool goods, who wished to get back into civilian production as soon as possible after the war, and were willing to pay almost any price for tops, as they were able, or expected to be able, to dispose of their finished products at correspondingly swollen figures.

Several of the commodities listed were, during the periods enumerated, subject to various forms of control either as regards price or production, and, notwithstanding such controls, fluctuations still continued on much the same scale as in the case of wool.

In wool there was no control of any kind outside the war periods. The methods of sale for wool before the 1914-18 war and during the inter-war period were substantially identical.

No attempt has been made to tabulate events or conditions likely to affect wool prices in particular, such as drought or other weather conditions in countries of production, or events like the trade dispute between Australia and Japan. To do so would necessitate consideration also of similar events and conditions in reference to each of the other products, and this would have been outside the compass of a Memorandum such as the present.

WAR CONSUMPTION

Having now considered the pre-war and inter-war production and consumption of wool and fluctuations in prices during those periods, it will be of interest to turn for a moment to the question of war consumption and stocks.

The extent to which the movement of wool from the sources of supply to the consuming countries must have been affected by war conditions—quite apart from the problem of shipping facilities—will be evident from a study of the statistics of imports (pages 13-16) and of the wool textile machinery which was available in the various consuming countries (page 23).

The figures clearly show

- (a) that pre-war, nearly half of the raw apparel wool was retained for manufacture in enemy and enemy controlled countries.
- (b) that pre-war, more than one-half of the world's textile machinery was located in such countries.

It is well known that the movement of supplies from the producing to the consuming countries under enemy domination has virtually ceased. Comparatively small quantities have been shipped, from South America to Continental neutral countries, but for all practical purposes shipment of wool to the Continent of Europe (excluding the U.K.) may be said to have ceased during the war period.

It is apparent that if there had been no increase in wool consumption in the Allied countries during the war, about half the world's exportable wool supplies would have been left unused.

It must be remembered that a part of the wool imported by or produced in the United Kingdom was exported without further processing or manufacture (mainly to various parts of the Continent).

Unfortunately, complete information regarding the war years as regards imports to the chief Allied countries is not available, but some conclusions can be drawn from figures that have been published and from what is known about the activity of the wool textile industries.

The United Kingdom consumption in 1938 was 694 million lbs. greasy. Imports during 1939 are known to have been exceptionally heavy and it is likely that they continued to be high during the first year of the war. During the peak period of production of military clothing in 1940 and 1941, and before civilian rationing began, con-

sumption of wool must have reached a high total in the United Kingdom. It may not be unreasonable to estimate that it was for a time at the rate of somewhere near 900 million lbs. per annum. The urgent need for export trade (to pay for imports of essential commodities) was relieved by the United States Lease-Lend Legislation, and civilian demand was reduced by rationing. Furthermore, the withdrawal of workers for the Services and for munitions, and transport difficulties, had an increasing effect, until in 1943 production of wool textiles must have fallen probably to about 50-60 per cent. of a pre-war average figure. Production for home civilian requirements must have come down to about a fifth of pre-war home trade turnover. If consumption in the United Kingdom is averaged out over the first four years of the war period, it may not show any increase on a corresponding number of pre-war years. If the war goes on much longer, average consumption in the United Kingdom may show a decrease as compared with pre-war averages.

In the United States, on the other hand, there has been a well-maintained increase in the consumption of wool for both military and civil needs. Over the years 1934-38 the average annual consumption was about 578 million lbs. (greasy). Under the stimulus of war requirements, consumption in the States quickly advanced to a record figure of 1,127 million lbs. for 1942. This was made up of 589 million lbs. of domestic wool and 538 million lbs. of imported wool—whereas in 1938 only 103 million lbs. of foreign wool was imported. On available information it looks as if the 1943 consumption in the U.S.A. will somewhat exceed that for 1942.

There has also been a general increase in wool consumption in other countries in which wool textile activities have not been adversely affected by war conditions. In the Argentine and to a lesser extent in Uruguay and Brazil, the wool textile industry has been expanded to supply a demand that could not be satisfied by imports from Europe.

The Argentine has developed an export trade in wool yarns and fabrics with other Latin-American countries and with South Africa. Latest information available is to the effect that during the 1941-42 season, the Argentine consumed in its local mills about 100 million lbs. of wool, which is equal to over 300,000 bales of the Australian size. This represents 80 per cent. over and above the pre-war consumption and in quantity represents more than 20 per cent. of the total Argentine clip.

Latest reports from the United States Department of Commerce state that during the 1943-44 season, Uruguayan wool textile mills are expected to consume over 10 million lbs. of wool (about 9 per cent. of the production) as compared with a pre-war ten-year average of 5 million lbs. per annum, i.e., an increase of 100 per cent.

Canada's wool textile industry has been appreciably expanded under war conditions and there has been a further increase in wool consumption by the Australian mills. In 1937-38 the Australian manufacturers consumed 332,179 bales, but their total requirements are now believed to exceed the rate of 475,000 bales per annum.

It has been estimated recently that the quantity of wool now consumed in the mills of the five principal wool exporting countries (i.e., Australia, New Zealand, South Africa, Argentina and Uruguay) is between 800,000 and 900,000 bales per annum, which, based on the 1941-42 production figure, represents about 13½ per cent. of their joint production.

When the temporary loss of markets for wool in enemy countries due to war conditions is set against the increases known or estimated in other countries, there can be little doubt that consumption will on balance show an important decrease. Part of this will be made up by losses due to enemy action and the balance will be represented by accumulations at the sources of supply and in the strategic reserves held in the United States.

WAR ACCUMULATIONS—POST-WAR STOCKS

No recent figures regarding wool shipments from or accumulations in Australia have been issued, but the Chairman of the Central Wool Committee, in a statement issued in January, 1942, said that shipments to the United Kingdom and elsewhere for the two years to the 30th June, 1941, totalled 4,471,543 bales. Local consumption in Australia was then about 400,000 bales per annum. Total shipments and local consumption for two years, therefore, amounted to about 5,300,000 bales. That is, after two years of war, out of a total Government purchase of about 7,250,000 bales, approximately 1,950,000 bales represented accumulations in Australia.

At this rate of accumulation stocks in the Commonwealth at the end of the 1942/43 season would have been in the region of 3,900,000 bales. If accumulation continues at the same rate, by the end of the 1944/45 season the surplus in Australia alone might then be nearly 6,000,000 bales or, say, 1,800 million lbs.

Stock accumulations in South Africa and New Zealand are likely to be substantial by the end of the 1944-45 season, though probably not in the same ratio as Australia.

It has been announced that the British Government's Strategic Reserve in the United States has been stabilised at 3,000,000 bales or, say, 900 million lbs. The extent of American owned reserves in the United States has not been disclosed, but they are believed to be considerable and may now possibly include part of the British Government's Strategic Reserve.

A recent report by the U.S. Department of Commerce states that the carry-over in the Argentine at the end of the 1942/43 season—that is, on September 30th, 1943—was approximately 380 million lbs. This figure, compared with the pre-war average carry-over of 28 million lbs. (page 24), shows an excess of about 350 million lbs. It should be noted that over one half of this surplus is coarse wool, mainly suitable for the carpet trade.

Accumulations in Uruguay have been kept down by bulk transactions with the U.S. Government. Stocks in that country on June 1st, 1943, were recorded at 23 million lbs., as compared with 63 million lbs. for the previous year and an average of 10 million lbs. in pre-war years (page 24).

Consideration of the available information, which is admittedly incomplete, leads to the conclusion that the balance of unsold wool at sources of supply and in the United States, by the end of the 1944-45 season, will certainly exceed 3,000 million lbs. and may even exceed 3,500 million lbs.

It would help to clarify the position if the Governments concerned would reconsider, in the light of present conditions, the question of publishing accurate and up-to-date particulars regarding present accumulations. It is difficult to see how such information could be of any substantial assistance to the enemy, while it would undoubtedly be of value at a time when schemes in connection with post-war planning are being devised and investigated.

Nature of the Accumulations

These war-time accumulations of raw wool, whatever their size, are likely to form an ill-balanced stock. As was the case at the end of the last war, a disproportionately large part of the accumulation will probably be inferior merino or crossbred wools. The trend of demand has been towards the finer grades. This, as far as civilian consumption is concerned, is no doubt due partly to the coupon system limiting purchases, and partly to the increased and dammed-up spending power of the civil population. It has been strikingly illustrated by the lack of demand for lower quality clothes under the United Kingdom utility clothing scheme. The public has shown little interest in the cheaper types of clothing and has insisted upon the better grades—so much so that special consideration has had to be given to ways and means of disposing of accumulations of the cheaper grades.

Disposal of Accumulations

At first sight the task of disposing of an accumulation of something like 3,500 million lbs. of wool, simultaneously with the annual inflow of new clips, looks like being a difficult and delicate operation. The first inclination is to compare it with the position after the last war.

The Government purchase scheme then came to an end on June 30th, 1920, and the British Australian Wool Realisation Association (BAWRA) came into being on January 1st, 1921, for the purpose of the disposal, in conjunction with new clips, of a balance of 2,691,765 bales (say 800 million lbs.) of Government-owned wool, of which about 1,000,000 bales were merino and the remainder crossbreds. The offerings were spread out so as not to interfere unduly with the marketing of the new clips and the last bale was sold on May 2nd, 1924. It took $3\frac{1}{2}$ years to clear that comparatively small total of war-time accumulations.

If it took $3\frac{1}{2}$ years to clear the accumulations after the last war, how long will it take to dispose of accumulations probably about four times as great, after the present war? It is an obvious question to ask, but in endeavouring to find the answer it has to be noted that conditions will almost certainly be far different from what they were in 1919-1924. During the 1914-18 war the whole of Holland and Scandinavia was outside the grip of the enemy and Italy and Japan were Allies. The wool textile mills in those countries had been kept supplied with wool throughout the war and their populations continued to be normally clothed. Most of France also was outside, although the most important textile regions were in enemy hands. In the United Kingdom there had not been any rationing of civilian clothing, though prices had been high and supplies were low.

There can be little doubt that the world's wool requirements will be on a much larger scale than they were after the last war.

When the present war ceases there will be a vast vacuum in Europe and the Far East waiting to be filled with wool, and many millions of people urgently in need of wool clothing. One factor which cannot now be assessed is the condition of the wool mills in those countries. To what extent will the machinery have been damaged, or put out of commission, either by bombing or by dismantling in order to use the metal for munitions? Some time may elapse before the machinery can be put in working order or replaced, but in any event the countries will be hungry for wool and wool goods. Stocks of both must be very small.

The greater part of the wool accumulations of the five principal wool exporting countries, at the end of the war, will be controlled by the British Government and a substantial part of the stock will be located in the United States. The South American accumulations will presumably be disposed of independently. Sooner or later the

wool textile industries now under enemy domination will resume their normal functions. If they are to start from zero it will require at least a three months' supply of wool, or about 300 million lbs. merely to "clothe" the machinery. That is the quantity of wool normally going through the processes of manufacture in the machinery before there is anything ready for the making of wearing apparel.

Under peace conditions the United Kingdom and the U.S.A. were the most important wool-consuming countries in the world. Stocks in the United Kingdom are believed to be on the light side and large imports will probably be necessary to bring them up to a normal level.

The President of the Board of Trade (Mr. Hugh Dalton) in February, 1943, told an audience of wool textile trade representatives at Bradford that what he termed "relief exports" would be a first demand on the industry after the war.

Then the requirements of the millions of men and women who will be demobilised from the Allied armed forces and auxiliary services may be expected to make a bigger demand upon the industry than that which followed the last war. They will all require refitting with civilian clothing, when stocks are low.

Another point stressed by the President of the Board of Trade on his visit to Bradford was the urgent need that will arise after the war for a quick expansion of the United Kingdom export trade. The country will need the greatest possible volume of exports to pay for imports. Exports of wool textiles and machinery are capable of playing a leading part in this direction.

In the past probably not more than one-third of the world's population was wool-minded, even to the extent of using some wool, whether for clothes, blankets or carpets. For this third of the world's population, present world production of all kinds of wool, including carpet and other types, represents only about 5 lbs. greasy per head per annum, or on a clean scoured basis about 2 to 3 lbs. of wool, which is less than would be required for one suit or even a blanket.

STABILITY OF PRICES

The probable trend of prices, in view of the vast amount of new and accumulated wool that will have to be marketed after the war, is a matter of keen interest to every section of the industry. Most people agree that some measure of control, national or international, will be desirable and possible during the immediate post-war period—the length of which it is impossible now to determine—while war-time accumulations are being distributed concurrently with the disposal of the incoming clips.

In the absence of some agreement, the price of raw wool would be largely governed by the price which the British Government might be willing to accept for the accumulated stocks of wool owned by it, until such stocks had been disposed of or very greatly reduced.

The production of cotton can be regulated by increasing or decreasing the acreage under cultivation, and the output of mechanically or chemically produced fibres can be controlled, but it is an old and true saying that wool will continue to grow on the sheep's backs, and production could only be reduced gradually. In any event a policy of restricting production is a policy of despair and should not be contemplated.

A new factor as affecting price stability at the conclusion of the present war will be the existence of a large strategic reserve stock of wool in the United States, from which deliveries could quickly be made to the consuming centres of the Northern Hemisphere. Other important factors will be the early settlement of workable plans for (a) the finance and development of International Trade and settlement of Exchange balances and (b) the provision of full employment and social security, not only in the United Kingdom but in other parts of the world. In the absence of such plans, it is difficult to see how impoverished nations will be able to pay for the wool which they will certainly require.

When considering the question of price fluctuations in wool, one must remember

- (a) that a large part of the world's wool supply comes from dual purpose sheep where wool is not the only marketable product produced ;
- (b) that production cannot easily or quickly be adjusted to demand or consumption ;
- (c) that in times of depression, one of the first items to be economised are new clothes, blankets, etc., and that when prosperity returns, the clothing deficiency is one of the first items to be made good.

LABOUR SUPPLY

Approximately 100,000 workpeople have been withdrawn from the wool textile industry of the United Kingdom alone for the Fighting or Auxiliary Services, or for munition work, and this represents about two-fifths of the total normally employed. Obviously machinery will not produce cloth without an adequate supply of skilled labour, and the ability of the industry to consume wool, in meeting the urgent post-war call that will be made upon it, will depend to a large extent on the quickness with which wool textile workers are demobilised, and on the proportion of them who are willing to return to the mills. This may prove to be a serious problem in the post-war period and it will no doubt engage the attention of the Wool Textile Reconstruction Committee, which has been appointed to examine all post-war problems affecting the textile industry.

RAYON AND RAYON STAPLE

When considering post-war wool questions it is essential to keep clearly in mind the development which has taken place in the production of rayon, rayon staple and the numerous varieties of synthetic fibres. War conditions and the inability of enemy countries to obtain substantial imports of wool must have caused a great expansion in the manufacture and use of clothing from all kinds of "substitute" fibres, such as Zellwolle and Lanital, the extent of which cannot be fully indicated by figures and is indeed not yet known.

The wool textile industry is chiefly interested in rayon and more particularly rayon staple, which is suitable for blending with fine wool. According to "Rayon Organon" (New York) the world production of rayon (including rayon staple) increased from 78 million lbs. in 1922 to 2,500 million lbs. in 1940.

The rapidity with which the world production of rayon staple has been expanding in the recent years can be seen from the following figures taken from "The Wool Year Book":—

				<u>lbs.</u>
1934	..	..	..	53,600,000
1935	..	..	..	140,700,000
1936	..	..	..	304,400,000
1937	..	..	..	639,850,000
1938	..	..	..	925,000,000
1939	..	..	..	1,082,000,000
1940	..	..	..	1,350,000,000

In 1940, therefore, production of rayon staple was not far short of a whole year's clip of apparel wool for the whole world on a clean

scoured basis. No doubt considerable further increases have taken place during the three years ended 31st December, 1943, particularly in enemy controlled countries.

Competition with Wool

It is a significant fact that in spite of this amazing growth in the production of a new textile fibre, the whole of the substantially increased world output of apparel wool was still being absorbed prior to the war. No doubt the most important factor was that wool has properties peculiar to itself which are absent *in toto* from any one other fibre ; its wearing properties, its retention of heat, its durability, elasticity and capacity to absorb moisture, are all factors which put wool into a class by itself. The adverse factors are that rayon staple can be produced with profit to the producer at a price which would spell bankruptcy to a producer of wool, and that it can be used in many mills with little modification of existing machinery, and to the extent that machinery is so used, it cannot be available for processing wool.

In June, 1943, in the United Kingdom, the price of viscose rayon staple (before combing) was 17d. per lb., which compares with the Wool Control issue price of 32½d. per lb. for a clean scoured 64's average combing wool.

There has been a tendency to exaggerate the competitive effect of rayon on wool, but the fact that prices of synthetic fibres are relatively very low, and that production is still rapidly increasing, and the quality being constantly improved, must in the long run have a restraining effect upon any possible upward movement in wool values, and is certainly a factor of great importance when considering the future of wool prices.

It is erroneous to describe rayon, rayon staple or any of the newer fibres as "wool substitutes." No synthetic fibre has yet been produced which reproduces the chemical and hygienic properties of wool.

The producers of wool would, however, be well advised to keep prominently before them the increasing threat of rayon, which is controlled by powerful and energetic interests both in Allied and enemy countries. Men with the highest scientific qualifications and with almost unlimited financial backing are working all the time to produce rayon staple having more and more the qualities and appearance of wool, and the result of their efforts is continually advertised and pushed on the markets of the world.

WORLD PRODUCTION OF COTTON

From a wool trade point of view cotton is a kindred rather than a competitive fibre, but it is useful to note the quantities produced, for comparison with wool. Cotton is, of course, the principal textile fibre from a quantity point of view. The total world production of cotton has been, in weight, some five to seven times greater than the world production of wool on a clean scoured basis, as will be seen from the following figures :—

		<u>Mill. lbs.</u>			<u>Mill. lbs.</u>
1920	..	10,205	1931	..	13,298
1921	..	7,634	1932	..	11,644
1922	..	9,225	1933	..	12,853
1923	..	9,569	1934	..	11,395
1924	..	12,026	1935	..	12,787
1925	..	13,499	1936	..	15,043
1926	..	13,824	1937	..	18,463
1927	..	11,897	1938	..	13,921
1928	..	12,849	1939	..	13,838
1929	..	12,839	1940	..	14,450
1930	..	12,538			

(Source : F. W. Tattersall, Manchester.)

A glut of cotton occurred in 1937 as a result of a record American crop and a record output in Egypt. The position from a grower's point of view was so serious that the American and Egyptian Governments took over supplies from the producers. In the following season the area under cultivation was restricted and an effort was made to balance supplies with world demand. The United States Government granted loans to farmers and at the end of the subsequent season there was a huge carry-over balance. In July, 1939, an agreement was reached between the British and American Governments whereby the British Government was to take 600,000 bales of cotton in exchange for a large amount of rubber.

Producers of cotton have plenty of troubles of their own, but a glut of cotton cannot be helpful to wool prices.

RESEARCH AND PUBLICITY

Much valuable research work has been done in the past by the Wool Industries Research Association, and also by pastoralists and manufacturers individually for which no figures or statistics regarding expenditure are, generally speaking, available. Apart from the Wool Industries Research Association, which was formed in 1918, it is only comparatively recently that there has been any serious concerted attempt to organise and finance research and publicity in connection with wool.

In January, 1937, there met in Melbourne representatives of the wool-growers of Australia, New Zealand and South Africa, to determine jointly how the interests of the wool industry might best be promoted. The three Governments agreed to impose a statutory levy on all wool exported (this at present is 6d. per bale in Australia and New Zealand and 1s. per bale in South Africa).

A permanent organisation was established, known as The International Wool Publicity and Research Secretariat, and out of the funds provided by the levy an annual amount of £50,000 was placed at its disposal.

The work of the Secretariat may be grouped as follows :—

- (1) Scientific and economic research.
- (2) Propaganda and publicity.
- (3) International co-operation.

During the two years of its activities prior to the outbreak of war much had been accomplished under all three headings, but the officials of the Secretariat would be the first to agree that much more could be accomplished.

The necessity for a continuance of this useful work is generally agreed, but the work calls for more financial assistance if it is to be adequately developed. At the present time, a levy at 6d. per bale represents only .0016 of the average value of a bale of Australian wool at prices ruling during the 1937-38 season. It is a matter for consideration whether a scheme cannot be applied to all sections of the industry and at the same time the growers' contribution be put on a percentage or sliding scale basis, as at present a bale worth £10 pays the same levy as one worth £30. Although no figures are available it is generally conceded that for every £1 spent on wool research and publicity the artificial fibre trade spends £50 or probably more.

DEFINITION OF WORD "WOOLLEN" AND PROTECTION FROM IMPROPER USE

In 1939 legislation was passed in the U.S.A. which requires that any product offered for sale in the U.S.A., whether home produced or imported, which is in any way represented as containing wool, must by a tag, label or in some other manner disclose separately the total weight of wool, re-processed wool, re-used wool and each other fibre (exceeding 5 per cent.) contained in such product. Heavy penalties are provided for infringement of these provisions.

No similar legislation has been passed in the United Kingdom or any other of the chief wool using countries.

The urgent necessity for some such safeguard has recently been emphasised by the issue by the Board of Trade of the "Consumer Rationing (Consolidated) Order 1943," wherein the following definitions appear :

" 'Wool' means fibre whether or not subjected to any process of manufacture or recovery from the coat or fleece of Alpaca, Camel, Goat, Hare, Llama, Rabbit, Sheep, Vicuna, Yak or *Horsehair* ; 'Woollen' in relation to any rationed goods means containing more than 15 per cent. by weight of wool."

Under these definitions a fabric or yarn will be considered as woollen, although in fact it may contain no real wool at all, provided it contains 15 per cent. of horsehair.

It is true that the order in question deals with the limitation of costs and prices and is not directed to the question of trade terms, but the fact that a Government Department can make public such definitions points to the urgent need for growers, manufacturers and the consuming public to press for some safeguarding legislation in the main countries of consumption, which will prohibit the use of the word "woollen" in connection with any material which does not contain an agreed minimum percentage of fibres from the sheep's fleece.

CONCLUSIONS

This Memorandum is in no way an attempt to decide for or against any scheme which is already under consideration either for controlling or decontrolling wool or for stabilising prices, nor is it intended to formulate any new plan.

The object has been to collect and present in a convenient form, some salient facts of the past to form a foundation for consideration of the future.

Before considering possible alternative policies and their implications, it will be convenient to summarise the information that has already been given. This may be done as follows :—

- (1) In the twenty years 1920 to 1939 the world production of apparel wool increased by about 65 per cent. By far the greatest increase was in Australia, where production in the same period more than doubled.
- (2) About 85 per cent. of the wool produced in Australia and a still greater proportion of that produced in New Zealand and South Africa has to find a market outside the countries of production.
- (3) The production of rayon staple in the seven years 1934 to 1940 increased from 53 million to 1,350 million lbs., and annual production is now almost certainly running at a rate equal to the world production of apparel wool on a clean scoured basis.
- (4) It is generally admitted that wool has important qualities which other textile fibres lack, but great improvements in the latter have been made and more must be expected in future. On a price basis wool cannot compete with rayon staple.
- (5) Notwithstanding the increase in production of both wool and rayon staple, each year's production of wool, in the pre-war period, was disposed of and taken into consumption at prices sufficiently high to bring about the increased production already mentioned.
- (6) This increased consumption was achieved in spite of unprecedented political and financial disturbances, tariffs, quotas, manipulated and blocked currencies, barter agreements and other hindrances of every sort and kind to international trade and exchange.
- (7) Wool was one of the few of nature's products in which there was, pre-war, no accumulation of unwanted surpluses.

- (8) The rate at which wool can be put into a consumable state is governed by the amount of plant and labour that is available for the purpose of treating it.
- (9) This plant and labour can without much difficulty be utilised for processing rayon staple or an admixture of wool and rayon staple. It follows from this that to the extent that such plant and labour are so used, the consumption of wool will be reduced.
- (10) At least one half of the available wool processing plant of the world was located in enemy or enemy-occupied countries.
- (11) Wool not only occupied a very important place in the economies of the chief producing and consuming countries, but it is a very important war requirement.
- (12) Fluctuations in the price of nearly all products during the inter-war period were much greater than during the eight years preceding 1914. These fluctuations were undoubtedly heavy and calculated to render business unnecessarily difficult and hazardous, but during the period there were hardly any three consecutive years in which there was not some major political or financial disturbance.
- (13) If one excludes the years 1919-1920, which admittedly were exceptional, fluctuations in wool prices compare not unfavourably with those in other products, although control in some form was found necessary in the case of many of these other products in an endeavour to maintain an economic price for the producers.
- (14) Although a rise or fall of 1d. per lb. will make a difference of over £4,000,000 on the total annual proceeds of the Australian clip, a change of the same amount will only make a difference of about 6d. in the cost of the raw wool in a suit of clothes sold at £5.
- (15) Consumption of wool in the past has been very small per head of the world population and, therefore, a large potential market remains to be developed.
- (16) There is reason to think that the war-time accumulations of raw wool may amount to as much as 3,000 or 3,500 million lbs.
- (17) There is reason to think that demand over the first few years of the post-war period will be on a scale hitherto unknown.

- (18) As the 1943-44 clip is now being dealt with it is obvious that even if the war were to finish before the end of June, 1944, the British Government's wool purchasing agreements will include the 1944-45 clip. This means that from the 1939-40 clip to the 1944-45 clip, the pre-war systems of wool marketing and distribution, as far as Australia, New Zealand and South Africa are concerned, will have been out of operation for a period of six years.
- (19) Although much useful work has been done by research and publicity, there still remains a large field for further concerted effort.
- (20) Except in the United States of America there is no statutory obligation on the vendor to disclose what percentage of wool is contained in goods described as "woollen."

Plans for a conference of representatives of the wool growers of Australia, New Zealand and South Africa have been initiated from Australia. There can be little doubt that by acting together the growers in these countries will be in a stronger position than if they act separately.

A considerable measure of control of the wool textile industry in the United Kingdom is foreshadowed during the period when it will be necessary to direct production into the desired channels so as to provide (1) for "relief exports," (2) commercial exports, and (3) home trade requirements, and control of raw material distribution will no doubt be a part of the plan. Many aspects of the whole post-war position indicate that premature relaxation of control might lead to chaos.

Since there is no justification for regarding the arrangement with the British Government as likely to be permanent, it seems clearly desirable that the growers should get together with their real customers, the processing and manufacturing industries or the Associations representing them, at an early date and endeavour to come to some agreed conclusions on the following points:—

- (1) How long is it desirable that the appraisal scheme (with or without the other wool controls) which has operated during the war, should continue, either with or without modification, and if with modification, what are the modifications necessary?
- (2) What is to take the place of these controls if and when they terminate?

It is the second of these questions which is likely to give rise to most controversy and it is in connection with that question that there are some points that merit careful consideration.

The alternatives, broadly speaking, appear to be two, namely :—

- (a) a return to some system of open sale in a world market operated and controlled by the Growers' Associations in consultation with the Buyers' and Brokers' Associations, more or less on the lines of the systems which operated in Australia, New Zealand and South Africa before the war, no attempt being made artificially to maintain prices beyond those justified by supply and demand, but possibly coupled with some arrangement to minimise price fluctuations, such as the fixing of minimum prices or the setting up of some form of buffer pool ;
- (b) some form of bulk purchasing arrangement with the main object of stabilising prices at a level which will produce a price satisfactory to the growers.

Whichever alternative be adopted, there is much that could still be done by intensified research and enterprise on the part of the Trade as a whole,

- (a) to cheapen production ;
- (b) to reduce manufacturing costs ;
- (c) to improve sheep, wool and pastures ;
- (d) to combat disease and parasites ;
- (e) to stimulate demand by eliminating the chief drawbacks to the use of wool (e.g. shrinkage, tickle, and liability to destruction by moths) ;
- (f) to develop new markets and stimulate old ones by judicious advertising and propaganda.

If money and energy devoted to these purposes are to produce full results it will be essential to obtain in the chief wool using countries some form of safeguard against the misleading use of the word "woollen" in manufactured articles.

In the International Wool Secretariat the wool growers of Australia, New Zealand and South Africa have already created an organisation which, if developed and sufficiently financed, might do a large part of the work that is required. In addition, with adequate finance and facilities, the International Wool Secretariat might join with others in securing, collating and publishing accurate and up-to-date statistics regarding all features of the Wool Trade and more especially regarding

the condition of stocks, whether raw or manufactured or partly manufactured. Publication of such statistics would probably help to minimise temporary fluctuations of price.

The paramount necessity of finding some method of facilitating and stimulating international trade and for clearing exchange balances arising therefrom is now generally recognised. Various schemes have been put forward and are under investigation but so far agreement seems a long way off. If some workable scheme can be formulated and put into operation and if schemes for "full employment," "social security" and for controlling the trade cycle after the war can be made operative in the principal countries of consumption, some of the chief causes of instability of prices would disappear.

If this could be done it might then prove to be unnecessary for growers of wool to take any special steps, beyond those which have been indicated above, to protect their own particular position. If workable schemes be not found and adopted the difficulties experienced during the years 1919 to 1939 will again arise, probably in an accentuated form.

Most people will agree that the best way, from the point of view of a producer, to stabilise prices on a satisfactory footing, is to increase the demand so that it will keep pace with increased production, while lowering the cost of production and improving the product offered.

If the second alternative is to be adopted and attempts are to be made to stabilise wool prices by an indefinite extension of bulk purchasing on the lines of the appraisal scheme now in operation, then there are certain fundamental considerations which may with advantage be set out quite frankly, so that those framing the scheme may face them and those asked to accept may have these points clearly before them before they take action.

- (1) Any such scheme to be effective must be compulsory and binding upon all growers in those countries which adhere to the scheme.
- (2) In view of the large number of small growers involved in all the principal producing countries, this means negotiation with and between the Governments of all the countries which are to be asked to adhere to the scheme, and the passing by their Legislatures of the necessary laws, without which compulsory action would not be possible in democratic countries.

- (3) As the bulk of the growers require to convert their clips into cash without delay, and cannot afford to carry their own wool or any substantial part of it for any length of time, finance on a large scale will be involved. The carrying of one year's clip of the five main exporting countries would require, at present prices, a sum of over £100,000,000 Sterling. This would seem to be the minimum amount of finance which would be necessary at the back of any scheme which was to have a reasonable prospect of success.
- (4) Finance of this magnitude can only be provided by, or with the assistance of, the Governments concerned. The figures would be much too big and the risks much too great for any association of growers and financial houses to handle.
- (5) Whoever finds finance on such a scale will obviously have to incur some risk of loss, and will want to be compensated in some way for so doing. The compensation, whatever it is, will either have to be added to the price of wool or will have to come out of the pockets of the growers. Those in control of the scheme will have a dominating position which, if abused, might have serious repercussions.
- (6) Those taking this responsibility will almost certainly require, sooner or later, control over the quantities and qualities of wool to be produced in each country which is a party to the scheme.
- (7) Any scheme to which several Governments are parties and which is to affect large numbers of the voters in those countries will take a long time to negotiate, in view of varying conditions and the different types of wool produced in the different countries.
- (8) The price of Government assistance is always (and probably rightly so) a large measure of Government control and interference. It is much easier to invoke this in the first place than it is to terminate it should it not be found desirable.
- (9) Unless substantially all the large exporting countries can be persuaded to adhere to such a scheme, those who do will in effect be guaranteeing prices to those who do not.
- (10) The producers of competing textile fibres will not be slow to take advantage of any openings for more intensive competition which any restrictions on the free sale of wool may give them.

- (11) Once any such scheme has been put into operation it would, in the event of it proving to be unsatisfactory or breaking down, be difficult to vary, in view of the many and probably conflicting interests which would be involved, or to revert to anything like the old pre-war system, all the machinery of which would either have ceased to exist or become obsolete.

If, instead of some bulk purchasing arrangement, it were determined to attempt to control price fluctuations by some other means, the two obvious ways of so doing are, either to fix minimum prices below which wool cannot be sold, or to establish some form of buffer or balancing pool.

It will be found on investigation that most of the considerations indicated above in connection with bulk purchase apply just as much to schemes for minimum prices or buffer pools. Moreover, the great variety of types of wool for which provision must be made, would give rise to many complications which do not arise in the case of products more easily standardised.

The real point is whether suggestions for minimising price fluctuations in the future are likely to achieve the desired object for more than a short period, and how much of their old freedom of action all those concerned will be willing to surrender.



