# A STUDY OF PRODUCTION AND CONSUMPTION OF CERTAIN FOODSTUFFS IN SOUTH AFRICA DURING THE PERIOD 1929-49, IN RELATION TO THE INCREASE IN POPULATION AND NATIONAL INCOME

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by



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# C O N T E N T S



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# G R A P H S

# INTRODUCTION

The Aim : South Africa has experienced an almost revolutionary change in her food position in the last 10 years, what was previously a "farm problem" of assisting the primary producer has now become a "food problem" and this is a study of the development of those factors leading up to such a change. It is an empirical study attempting to measure the production and consumption of certain selected foodstuffs and to compare them with changes observed in the population and the National Income.

The Treatment : The study has been divided into three sections; Section A, Production and Consumption which in turn is sub-divided into the five specific commodities in which we are interested; Section B, Consumption and Population and finally Section C, Consumption and the National Income. This has been done with the express purpose of bringing out the relationships between the quantities under discussion in as clear a manner as possible. There can be little doubt that any rigid division tends to introduce the danger of "missing the wood for the trees", so the writer would stress the importance of the summaries at the end of each chapter and of course the most important section of all - the Conclusion in which the threads of the arguments throughout the preceding chapters are brought together and shewn in their true perspective and importance.

The Period : The twenty years 1930-49 have been taken as the period under review in order to trace the development and effect of certain factors on the food situation in this country, factors such as the depression years, the period of the Second World War and its aftermath and generally to present the change in the supply and demand conditions in a precise and assimilable form without the necessity of becoming too involved in a discussion on the history of South African agriculture. It is a widely held view that late 1920's was a

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period of change in the agricultural scene, the beginnings of a commercialized farming community, and it is on this point of view that the writer decided to take 1930 as the starting point for the present inquiry.

The Commodities : The commodities chosen for this study are wheat, maize, dairy products, sugar and meat. The first two are the staple cereals of the population, wheat for the Europeans and maize for the Africans and it is as such that their importance in the food situation of the country can be considered as fundamental. Dairy products are included as representing the more expensive group of foodstuffs, highly necessary in the diet for their protective qualities, but relatively costly due to the greater utilization of economic resources in their production. The purpose of including Sugar was mainly in view of the present critical shortage of this product while the consideration of meat also one of the main foodstuffs at present in restricted supply, was essential in an attempt to present a representative a picture of the general food situation.

The Statistics : As an empirical study the acceptability of the arguments must in the end depend on the accuracy of the statistics. These have been gleaned from numerous sources but no matter how many the sources, the very important and to the research worker a very disheartening, fact remains - the paucity of statistical data concerning this country is alarming. The main sources have been the Industrial and Agricultural Censuses with many others too numerous to mention, and where statistics have not been available, estimates of the Division of Economics and Markets have been "put into the breach."

To recapitulate, this is an attempt to present the development of the present "food problem" with necessary emphasis on those factors most deserving of it and most important, always remembering that Agriculture is but one section of a highly interdependent and complex economic structure. If the writer can

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succeed in this, he will have fulfilled the primary aim of his research.

Chapter 1.

## WHEAT

Generally speaking, wheat is not a crop ideally suited to South African climatic conditions. Before 1929 but half of the Union's wheat requirements was produced locally, yet by 1936 the country was 90% self-sufficient;[1] for a country which, from an agronomic point of view, is not suited for wheat, such a sudden alteration in the supply situation requires some explanation. It is of course, correct that between these two dates occured the depression during which demand must have fallen off to some extent, but it is definitely not on the consumption side that the answer to this apparent anomaly is to be found. The main reason is the agricultural policy that was followed, a policy that was designed to assist a certain section of the community only, but which produced results probably never foreseen by its architects.

In 1929/30, when a large crop was reaped in the Union, the phenomenon was experienced that South African wheat prices declined below import parity at the beginning of the season.[2] This fact, coupled with a declining world price level, led to an increase in the Customs duty on wheat in January, 1930, from a minimum of 2/10 and maximum of 3/2, to 4/- and 4/4 respectively per bag, and only two months later to 5/4 and 5/8, while imports of flour and meal were placed under permit. Furthermore, special duties on a sliding scale were imposed to raise the minimum price at which wheat and flour could be landed at Union ports to 22/6 and 37/- respectively. It should not be inferred from this that the internal price was kept from falling below 22/6 in the case of wheat; the lower demand during the depression years was not sufficient to maintain such a level in the face of a greatly increased supply. What it did mean was that South

(1) Report of the National Marketing Council on the Marketing Boards 1938-46. U.G. 27-47 122.
(2) Report of the Wheat Commission. U.G. 38-41.

/African

African consumers had to pay more for their wheat than the price at which it could be obtained on the free world markets.(1)

However, it was not only that local wheat prices were being artificially maintained at levels far above the world market level; what was as important was the fact that the price relationship between different agricultural products was being completely put out of gear.

> "Comparatively speaking, wheat growing was, therefore, the most profitable branch of farming during the years when the depression was at its height. In addition, the psychological effect of a minimum import price ... led to a greater concentration on wheat growing."(2)

The extent to which the prices of different farm products changed during the years 1930-33 can be seen from Table 2 which shows that in those years the ratio of wheat prices to the producer, to prices of maize, oats and wool was consistently higher than in the years immediately prior to 1930.(3) The obvious result was that farmers should turn to wheat, the crop producing the greatest financial return.

It is significant that the majority of farmers who planted more wheat were those who had previously grown very little. It is true, as Dr. F.R. Tomlinson points in an article "Production and Prices of Wheat in South Africa"(4), that in the wheat belt, farmers tended to rely more and more on specialization, at the expense of sheep and mixed-farming in general, yet "very little virgin land was ploughed in the established wheat areas, but a larger proportion of the cultivated land was placed under wheat regularly; in the adjoining areas wheat became to be grown extensively; in areas where wheat growing had previously almost ceased, farmers again reverted

(1) See Table 1.
(2) U.G. 38-41.
(3) See page 28 .
(4) "Farming in South Africa", February, 1936. pp 67.

to it and the product was also introduced into entirely new areas."(1)

Irrigators put their land, which in normal times would have been regarded as being too valuable for that crop, under wheat; farmers in drier sections of the country resorted to wheat because of the fall in price of commodities, like wool and maize, which used to be their main source of income, and in an attempt to gain a quick cash return. "It was recognised by farmers that wheat production was a risky occupation, but notwithstanding the risk, local production was probably justified on economic grounds."(2)

Tables 3 A,B and C show how this protection of wheat prices stimulated production in certain areas of the Union.(3) Thus, while the production of wheat in the Western Cape, traditionally considered as by far the most suitable for this crop, increased almost twofold, production in other parts of the country, notably the O.F.S. and Eastern Cape, increased enormously. The figures for acerage which more adequately illustrate the response on the part of farmers to changed price relationships are even more revealing; while the increase in the case of the established wheat growing areas was regular and approximately 60%, that for the newer areas showed considerable variation and a far greater increase - nearly 350% and over 700% respectively in the case of the two areas of the O.F.S. and about 300% for the Eastern Cape. There were several years during which production in the O.F.S. actually exceeded that in the Western Cape.

That these areas were far less suitable for the production of wheat is evident from the yields per morgen given in Table 3 C. Yields in the newer areas were with few exceptions, below those recorded in the Western and South-Western Cape and a further significant fact is revealed

(1) U.G. 38-41
(2) Editorial, "Farming in South Africa", May, 1932.
(3) See page 29 .

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in this table, viz. the far greater variation in the average yields per morgen in the O.F.S. and Eastern Cape. The Wheat Commission showed that the percentage co-efficient of variation of wheat yields for the Eastern Cape was 35, for the two O.F.S. areas 32 and 38 respectively, compared with figures of 12 and 19 for the Western and South-Western Cape regions.(1) Actually the study of the average wheat yields provides an understatement since, under certain drought conditions, farmers do not even sow the wheat and this was more likely, and did occur in the drier areas. This no doubt largely accounts for the wide variations in acerage sown to wheat in the O.F.S. and Eastern Cape, whereas in the Western Cape the increase was steady changing to a slight fall from 1935 onwards.

Thus, not only did the artificial upset in the price relationships, resulting from the protectionist policy of the early 1930's, cause a considerable increase in production of wheat in the Union; it also introduced the highly significant factor of a far more variable output due to the extension of wheat farming in areas not suited to it, areas in which wheat was grown as a dry-crop, i.e. depending on the moisture retained in the soil from the previous summer season, and therefore a far more risky occupation than in the winter-rainfall region of the South-Western Cape.

The peak in production was reached in 1935-6 when European output amounted to 1,380,153,000 lbs., a figure never since exceeded. In the course of seven years wheat production had increased by over 200%. It is not entirely correct to maintain that the only cause was the changed price relationship; there was simultaneously a considerable improvement in the machinery available for wheat production and a consequent

(1) U.G. 38-41.

/reduction

reduction in the cost of the various activities relating to the growing of wheat, yet there can be no doubt that the increase was largely a result of the "disregard of the golden rule that an artificial disturbance of the price relationship between the various farm products gives rise to developments, usually unexpected, which are not in harmony with the underlying natural factors."(1)

In 1929 the Union was producing just over 50% of its wheat requirements but by 1936 and 1937 the importation had practically disappeared - less than one percent of total requirements. It was these circumstances which gave rise to considerable anxiety in official circles since it was considered that if the production of wheat was to continue to increase at the same rate as it had been doing, there would come a time when the Union's requirements would be exceeded. As early as November, 1934 it was said: "An uneasy time awaits South African wheat industry when this normal trend in production passes above our domestic consumption level. A different protective policy from the present one will have to be followed. That policy will undoubtedly be less workable, and it will be infinitely more difficult to obtain effective results."(2) These fears were by no means isolated; during the years 1935, 1936 and 1937 they continually appear in statements by Government officials.

"The indications are that, with the present rate of expansion of our wheat production, there will very shortly be an over-production of this crop which will necessitate the disposal of the surplus at a world price of less than half that ruling in this country. With this probability of a surplus production confronting us, it is necessary that we should consider very seriously the matter of further development in the production of wheat..... it is necessary to

(1) U.G. 38-41.
(2) "The Trend of our Wheat Production", by Dr. F.R. Tomlinson, "Farming in South Africa", November, 1934.

/accept

accept the fact that there are farmers in the Cape who are dependent on wheat for their livelihood.....(but) we should recommend the greatest caution in extending the area of wheat to other areas (where) many crops can be grown in addition to wheat".(1)

It was suggested that more wheat should be used as fodder especially in stock farming where it could form the basis of an intensive farming movement, How was it that the facts upon which these fears were based, never materialised? It was partly a result of imcomplete reasoning and neglect of certain important economic factors, and partly due to factors which in 1935 and 1936 could have been no more than vague possibilities, but which quickly became probabilities and later unpleasant but absolute facts.

We have seen how, in the early 1930's, the price of wheat was maintained at a comparatively high level by protective measures, but such a position could not continue in the circumstances which followed, circumstances which revealed the improvement and strengthening of the economic structure after the disasterous depression years. Table 2 shows how the ratio of wheat to other prices was far higher immediately after 1930 than before that date; but from about 1934 that tendency began to be checked by the improvement in general economic conditions.(2) Accompanying this relative improvement in the prices of other farm products went the "inexorable economic law, that production of the various products will be extended to the point at which the respective industries have the same level of profitability,"(3) thus providing a strong check to any further expansion of wheat production.

~~Also, during that period when wheat prices were so~~

(1) "Should we produce more wheat?" by H.W. Turpin in "Farming in South Africa", May, 1935, pp 191.
(2) See Table 3, page 29 .
(3) U.G. 38-41.

/Also

Also, during that period when wheat prices were favourable, it was inevitable that the capitilization of wheat land would be on a higher scale than other land, in which case the interest burden adjusted itself to the higher wheat prices and wheat farmers found themselves in very much the same position as that in which they would have been, had there been no protection. In this way, by 1936, the wheat industry had reached a new position of equilibrium, a position where costs of production were higher due to inferior land being put under wheat, a position which did not enocourage any further substitution of wheat for other products. However, this new equilibrium was a difficult one for many farmers who had extended wheat growing on marginal soils, entirely unsuited to wheat, and the yield on which is far more variable than elsewhere. Thus the Wheat Commission found that in the favourable season of 1938/39, 56% of the Union's crop was produced at a minimum profit of 2/- per bag, and 28% at no profit at all.(1)

The second reason why over-production never really materialised for any length of time(2) was the outbreak of war and the great increase in purchasing power that resulted from the sudden surge in activity throughout the country. In 1935 there could have been few pointers to the suddeness of this movement which was to change the whole nature of the wheat picture of this country.

It has already been pointed out that by setting the minimum price at which wheat could be imported, at 22/6 it was not possible to stabilize the internal price at that particular level firstly because it depended on the level of consumption which might or might not absorb the whole of the local crop at that price, and secondly because of the highly seasonal nature of the crop and poor facilities for storage.

(1) U.G. 38-41.
(2) In 1935/6 the actual crop was larger than consumption.

/Therefore

Therefore, the Wheat Industry Act, passed in 1935, aimed primarily at the storage problem; to even out production in "surplus" years to those in which there was a deficiency, as it would be "impossible"(1) to export wheat at the price ruling on the world markets, and to even out the seasonal production over the whole year in order to prevent, as far as possible, the depressed market conditions in the months November-February when 80%-90% of the crop comes on the market. The Wheat Industry Control Board, established under the Act, was assigned a levy of 1/- per bag of wheat milled, which was to be used to pay compensation on losses sustained in storing the crop.

The record crop of 1935/6 soon tested the efficiency of the scheme since it came at a time when there was already in storage at the end of August, 1935 some 1,250,000 bags of wheat. It was quickly obvious that the resources at the disposal of the Board were far from sufficient if prices to the producer were to be stabilised at the agreed level of 17/6 and so the Government was approached, the result being that

(a) the Land Bank was empowered to increase its advances to co-operatives from 11/6 to 15/6 on first grade wheat and appropriate amounts for other qualities,

(b) compensation be reckoned as the difference between 17/6 per bag, for first grade, and the price actually realised as formerly the compensation was merely reckoned at 2d. per bag per month plus losses due to weevils etc.

(c) the Government made a grant of £125,000 to the Wheat Board to finance the increased compensatory payments.

The following season provided further difficulties since the carry-over from 1935/6 was larger than ever(2) and the crop was expected to be another good one. The co-ops. requested to be allowed to sell the stored wheat in order

(1) Annual Report, Secretary of Agriculture 1935. "Farming in South Africa", 1935 pp 566.

(2) It was estimated that there was sufficient "old" wheat in the hands of millers, co-ops.and producers at the end of August, 1936, to meet the requirements until April of the following year. Report of the Secretary of Agriculture 1937. "Farming in South Africa" pp 501.

tomake room for the new crop but the Board remained determined that it should not be offloaded and so cause a depressing effect on the price level for the new crop. As it turned out however, the 1936/7 crop was considerably smaller than expected, so practically all the stored wheat was disposed of at 17/6 or more and that level was maintained when the new crop came on to the market.

The output for 1937/8 was very poor and it was soon clear that even including the carry-over from the previous season, there would not be sufficient for local requirements. Consequently prices rose all round; stored wheat was sold at prices between 19/- and 22/6; in the first few months of 1938 prices to producers rose as high as 25/6 (1). The Government, not being able to guage the final threshing returns earlier, necessarily had to delay the issue of import permits until March, 1938. Prices of wheaten products rose in sympathy (2) and, such difficulties being outside the scope of the Wheat Board, a conference was held between representatives of the Government, producers, millers, bakers and consumers at Cape Town in March of 1938. The agreement which followed was a forerunner to the comprehensive scheme introduced later in the same year. Millers agreed to maximum prices for meal and flour, in return for which the Government was to pay a subsidy of £300,000 for the period April-November; bakers agreed to fixed prices for bread, and while importation of flour and meal was not permitted, permits for the importation of wheat were granted. (3)

Thus while under the storage scheme, there was certain protection for the producer although it could never stabilize prices completely, it provided no safeguard for the consumer when the crop was short. The new scheme introduced for the 1938/9 crop attempted to overcome this major deficiency by

(1) All prices refer to first grade.
(2) In the Transvaal the price of bakers flour rose from 35/- in November, 1937 to 41/- in February, 1938.
(3) On April 27th permits were granted for 250,000 bags and on June 16th for a further 550,000.

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introducing sale through one channel, with grading definitions and fixed prices according to class and grade. Control was extended over the whole industry from production to the price of bread; millers worked on a given profit margin, being subsidized for any excess of the price which they had to pay for the wheat over the equivalent at which they were permitted to dispose of the flour and meal. Registration was enforced in order to curtail excessive milling capacity and to rationalize the industry in general. (1)

1940/9

When war broke out the Union was supplying over 90% of its requirements of wheat and flour, and it was not really until the poor crop of 1941/2 that any considerable difficulty was experienced in satisfying the local demand. The crop of 1939/40 was almost 500,000 bags less than that of the previous season due mainly to disappointing harvests in the South-Western Cape, yet there seems to have been no great difficulty in obtaining the 800,000 odd bags required to tide the country over until the next crop was harvested and marketed. With the introduction of marketing through one channel, the importation of wheat was accomplished through the Board and not as previously, by issue of import permits to private individuals.

The 1940/1 crop, while an improvement compared with the previous one, was by no means sufficient for local requirements, having regard to the considerable increase in consumption of flour, meal, bread and other wheaten products. It was in this year that the subsidization of consumption started in earnest. It was found by the National Marketing Council that for the 1940/1 crop production costs had risen by approximately 2/- per bag which, if passed on to the consumer, would have amounted to ¼d. per loaf of bread. (2) Such a

(1) Registration was extended by an amendment in August, 1941, to bakers and other processors of wheaten products.
(2) Report of Secretary for Agriculture, 1941. "Farming in South Africa" pp 411.

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policy was possible under the wide powers granted to the Wheat Board by the new scheme. Due to the insufficienty of the local crop, authorisation was given for the importation of 1,000,000 bags (i.e. 200,000,000 lbs.) but lack of shipping space to remove supplies from Canada and Australia, left the final figure of imports far below this target. It therefore became necessary to take other steps to supplement the supplies available in face of the increasing demand.

There were three possible courses which might be pursued by the Board in these circumstances bearing in mind that it had pledged itself to a policy of subsidization. It could:-

(a) impose rationing of flour, meal and bread or

(b) impose a compulsory admixture to all wheaten flour and meal of a fixed percentage of the other meals e.g. mealie meal, rye meal and soyameal or

(c) prohibit the production of white flour and introduce some standard loaf from a meal of higher extraction.(1)

Rationing would involve considerable administrative expense and South Africa showed itself very reluctant to accept such measures throughout the war due to this economic factor and the difficulties which would arise from the racial composition of the population. The second course was discarded because of the prejudice against a fortified and "cheap" bread and so the third was the one adopted.

From April 23rd, 1941, the milling and sale of all grades of meal and flour except No. 1 unsifted meal was prohibited. Limited quantities of patent flour was available for confectionery, and various wheaten product and macaroni manufacturers were provided with limited quantities of other grades of flour and meal. From the beginning of May provision was made for the standard loaf, made from pure No. 1 unsifted meal; in addition "rolled or crushed" wheaten bread and a "standard mixed loaf" of wheaten meal with an admixture of

(1) A bag of 200 lbs of wheat when milled, would produce 140 lbs of bakers flour or 180-190 lbs of unsifted No. 1 meal.

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not more than 5% of mealie- or rye flour, or 2% of soya flour, were available to consumers[1].

"The outcome of (these) measures to conserve wheat was that consumption of wheat as compared with the last pre-war season viz. 1938/9, was reduced by 16% without causing the public any undue hardship worth mentioning"[2]. Thus, the amount of wheat required to satisfy the pre-war consumption would have dropped by 16% had the conservation measures been in force at that time.

It was in 1942 that the real difficulties arose in regard to the supply of wheat. The production figure for the 1941/2 season was finally estimated at 4,120,000 bags, a level mainly resulting from the disastrous failure of the crop in the O.F.S. and Eastern Cape. On top of this, whereas the Wheat Board had purchased 182,631 bags from Basutoland in 1940/1, only 22,069 had been received up to the end of August, 1942[3], furthermore, the difficulty in obtaining fertiliser, very important in the South-Western Cape, a shortage of labour, machinery, oil, grain bags and twine all combined in various degrees to create production difficulties.

Many of the difficulties experienced in this year in meeting the requirements of the country were caused by the reluctance on the part of South Africa, to accept shipments of flour. It is obvious that under conditions of shipping scarcity, it is far more economical to ship flour and meal than wheat since it occupies much less space. The reason for the reluctance was mainly that the standard loaf had only recently been introduced and the public induced to accept it. As it turned out however, this gamble on the part of the authorities, turned out fairly well as

(1) Little was produced but the fear of admixture tended to bring the "standard loaf" into disrepute so that the mixed grades were withdrawn in 1943.
(2) Report of Secretary for Agriculture, 1942 "Farming in South Africa" January, 1943.
(3) Report of Secretary of Agriculture, 1942 "Farming in South Africa" January 1943.

importation was effected from Australia, mainly in SARSHIPS, the extra 10 ships required to move the remaining cargoes, all being allocated by the Ministry of War Transport, and so by July, 1942 the Union's full requirements had been received.(1) Compared with the previous calendar year, imports of wheat, as such, rose by almost 170,000,000 lbs and this, together with a large increase in the imports of flour and meal which was mixed with 100% extraction wheat, meant that consumption was well maintained, despite the short crop.

Subsidization of the final products continued by the increased costs of producers, millers and bakers being met from the finances of the State and The Wheat Board; but an innovation in the marketing policy was forward pricing to encourage wheat production, in view of the especially small crop of 1941/2. The Government as early as March, 1942, requested the Wheat Board to fix prices for the 1942/3 crop at 30/6 and 30/- for Class A Grade 1 and Class B Grade 1, respectively.(2)

Production during the following two seasons increased to a level, which before the war, would have been more than adequate for the Union's consumption needs but which now was still insufficient even with the measures in force to conserve wheat supplies.(3) However, the amount required from overseas sources was reduced to levels which did not cause the same difficulty as was experienced in 1942.(4)

Wheat producers were able to obtain only 40% of their fertilizer requirements and realising the need of those in the Cape especially, the Government announced in March, 1943 that prices for the next season would be set at 36/6 and

(1) For a fuller discussion on the international planning and allocation of foodstuffs during the war years, see Appendix A , page 30 .
(2) The comparable prices for the 1941/2 season were 26/9 and 26/3.
(3) With 16% being saved through the conservation measures, while wheat consumption rose by only 10%, consumption of flour and meal increased by 33%
(4) In 1943 the consumption of wheat was stimulated by acute shortages of maize and rice.

/36/- for

36/- for A1 and B1 wheat respectively. The large increases were granted in an effort to prevent any switch to production of other farm products, but subsidization was continued in order to maintain the price of 6½d. per loaf, delivered to the consumer.(1)

It should be mentioned here that the prices fixed were based on the cost of production survey conducted by the Wheat Commission in 1941, allowances being made for the increase in cost of the constituent items in the total cost. However, while the Government adhered fairly strictly to production costs, an additional inducement was given to producers to increase output by means of a "contingency allowance". For the 1943/4 season this was set at 2/2 per bag, while for the previous year no allowance had been made.

The crop of 1944/5 was the smallest since the 1937/8 season; once again it was in those areas not naturally suited for the production of wheat, that the greatest failure occured. First of all the dry autumn over the major part of the O.F.S. persuaded many farmers not to sow at all and then plant lice caused havoc among the crops. In the Transvaal frost during the critical flowering stage was the cause of the loss of an appreciable quantity.

It was realised long before the end of 1944 thatthe crop would be very small but just how small was never appreciated until very much later. In September of 1944, for instance, the Union's import requirements as presented to the London Food Council, amounted to 54,000 tons (i.e. 120,960,000 lbs) whereas in June of the following year, as the crop estimates dropped and dropped, the application was for 100,000 tons. Originally it was decided to obtain the requirements from Australia, for it was obviously in the interest of the

(1) To enable this price being maintained, the price of No. 1 unsifted meal was set at 38/1, hence the price of B1 wheat to millers had to be 28/6. The subsidy was therefore 7/6 (i.e. 36/--28/6) of which the Wheat Board paid 9d. Later it was decided to pay a special subsidy of 1/- per bag to bakers on No.1 unsifted meal during period November 1943-October 1944 for all areas except the Cape Peninsula where it was fixed at 2/6, and the Rand where it was 1/10

Allied war effort to reserve the Canadian crop, which before the war had been the Union's main source of imports, for the United Kingdom, but the Union was advised in October, 1944 that no surplus was available in Australia due to a very poor crop. Shipping from Canada was extremely difficult in the early months of the year because of the frozen St. Lawrence and terrific congestion at the Atlantic ports of the United States.(1) These shipping difficulties meant that the Canadian wheat would not arrive until about June and with wheat consumption increased by the short maize crop, there was an urgent need for supplies to tide the country over until these imports were received. Fortunately it was possible to import some 40,000 tons from the Argentine in SARSHIPS and neutral vessels since had it not been for this "conditions would have been bad indeed."(2)

In view of the short crop and the difficulty experienced in obtaining shipping space for imports, it was impossible to relax the measures for husbanding wheat immediately after the war ended and, in fact, efforts had to be made to effect further economies. From 1st January, 1945 the limited quantities of domestic flour and self-raising flour which had formerly been supplied to the public was withdrawn and only persons suffering from serious stomach ailments were entitled to 10 lbs. of flour per month. It was estimated that by this measure, about 3,400,000 lbs would be saved per annum.(3)

To encourage the production of wheat instead of other winter cereals, which are more important as stock feed, the practice of forward pricing was continued as was that of subsidizing the consumer, although with the increase in the

(1) The west coast ports were impracticable due to the distance from the wheatlands and the elevator system and the lack of shipping on the route to South Africa.
(2) Report of Secretary of Agriculture, 1945 "Farming in South Africa", March, 1946.
(3) Report of Secretary of Agriculture, 1945 "Farming in South Africa", March, 1946.

/price

price of bread from 6½d. to 7d., the amount of the subsidy naturally fell.(1)

The season closed very pessimistically since it was expected that the following crop would be small due partly to the continued shortage of fertilizer but primarily to the unfavourable climatic conditions, with the O.F.S. and North-Eastern Cape receiving insufficient rains and the South-Western Cape too much; also the carry-over at the end of August, 1945 was the lowest at that date for many years. However, there was one bright hope for the future; with the war against Germany over, it was to be expected that shipping difficulties would be far less severe than in the previous two short years (viz. 1941/2 and 1944/5).

All these fears were realised when the result of the crop became known. According to the final official estimate it would have amounted to 3,400,000 bags, but the actual production was soon revealed by the threshing returns to be far lower. It was less than one half the Union's requirements and created a most serious problem, made worse by the fact that the carry-over at the end of September, 1945 was enough for only two months consumption.(2) As a result of the strict rationing of maize, the demand for bread increased enormously especially in those areas carrying a large native population who had replaced mealie meal in their diet with bread. On the Rand, for example, bread consumption during January, February and March of 1946 showed increases of 47%, 43% and 31% as compared with the same months of the previous year. In the Cape peninsula demand increased by 9%, 11% and 14% for the same months.(3) "As a result...

(1) It fell from 7/6 per bag in 1943/4 to 5/7 in 1944/5 of 9d. was again financed by the Board.
(2) Report of Secretary of Agriculture, 1946 "Farming in South Africa", February, 1947.
(3) Report of Secretary of Agriculture, 1946 "Farming in South Africa", February, 1947.

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the Union had to import wheat on a scale unprecedented in its history."(1)

Unfortunately the world shortage of fertilizers, the general dislocation in Europe and rice shortage in the Far East, arising from the war, all combined to produce a situation in which it was impossible that South Africa's full requirements could be met by importation. There was once again the difficulty that much of the allocation by the Combined Food Board, superceded in 1946 by the International Food Board, was in the form of flour of 72% extraction. This meant that the Union, instead of receiving 100 lbs. of wheat which could be milled into 96 lbs of meal received 72 lbs of flour which then had to be mixed with 100% wheat, and then remilled.

Once again with the small carry-over from 1944/5,(2) and the difficulty of obtaining wheat from Canada before their spring, meant that the Union was forced to live from hand to mouth, but it was evident that further measures were needed in order to ensure that the available supplies were equitably distributed, Consequently it was decided that, as from January 1st, 1946, the use of No. 1 unsifted wheaten meal for confectionery and biscuits and the use of rye flour for cakes, be prohibited with the view of rendering more meal and rye flour available for bread. However, this measure really only scratched the surface of the problem and further measures were essential.

From the beginning of April, the monthly quotas to millers were reduced by 25% as compared with the average over the previous three months and from the 1st of May the following further measures were instituted:-

(a) The use of bread between 3 p.m. and 4 a.m. and the making of toast, was prohibited.

(b) The use of bread other than for consumption by human beings was prohibited.

(1) Report of Secretary of Agriculture, 1946, "Farming in South Africa", February, 1947.
(2) In his report for 1946, the Secretary for Agriculture states that crop carry-over would only last until April, 1946

(c) The use of unsifted meal for purposes other than the making of bread was prohibited.

(d) The sifting of unsifted meal and the sale of sieves for this purpose, was prohibited.

(e) Any action leading to bread wastage was prohibited.

(f) The sale of unsifted meal by millers was prohibited except under permit issued by the Board, thus extending control to ensure the success of the quota system. Provision was made for reserves out of which areas such as those with an increased population, could be supplied.

(g) The existing quotas of flour and sifted meal to biscuit manufacturers was reduced by 50% and those to confectioners and macaroni manufacturers by 62½%.

(h) The weight of the standard bread loaf was reduced from 32 oz. to 29 oz. as from May 1th - the price being proportionally reduced from 7d. to 6½d.

An extensive propaganda campaign for the saving of bread, opened by the Minister in a radio talk, was initiated. The press, radio and bioscope were employed and "thanks to general co-operation these measures had the desired effect and succeeded in reasonably satisfying the bread requirements of all, in spite of the reduced quantity of wheat."(1)

It is significant that although the amount of wheat milled commercially showed a marked decline, the quantity of flour and meal available for consumption within the Union remained at approximately the same level as for the previous season. The reason is obvious when one notices that the production of wheaten meal showed an increase of over 10,000,000 lbs since (a) less wheat was milled into flour and (b) of that ground into meal a far greater proportion was unsifted.(2) Similarly the production of bread showed no decrease, in fact it rose by about 6%, while that of biscuits decreased markedly, due to the economy measures designed to

(1) Report of the Secretary for Agriculture, 1946, "Farming in South Africa", February, 1947, pp. 100.
(2) See ~~Table~~. Appendix B.

/discriminate

discriminate against the more luxury type of wheaten products.(1)

The season again closed on a pessimistic note, the Secretary for Agriculture in his Report stressing the fact that the Union, even if the most sanguine expectations as regards the 1946/7 crop were realised, would still have to import wheat which, bearing in mind the low world stocks and increased requirements resulting from greater purchasing power throughout the world, would not be something easily achieved. He expressed the warning that "the Union will still have to keep a vigilant eye on her wheat supplies".(2)

In view of the shortages of the past two seasons, the price announced for 1946/7 in April, 1946 was 41/- for A1 and 40/6 for B1 wheat, an increase of 3/- per bag, while the margin for contingencies was fixed at 2/8.

Although production did increase considerably in the 1946/7 season, it was smaller than was first expected mainly due to losses in the O.F.S. occasioned by frost and later drought and paradoxically, in other areas, by hail. The very drastic measures imposed during 1946 were partially withdrawn and the quantity of No.1 unsifted meal that could be sold by millers was increased by 10% in January, 1947. It was nevertheless realised that production by no means covered the local demand and import requirements were set at 2,000,000 bags or 400,000,000 lbs. However, as a result of the critical grain position throughout the world, the Union could not expect the full shortfall to be allocated by the International Food Council, and in actual fact the level of imports during 1947 fell considerably from the level attained in the previous year.

The intention had been to increase supplies by 20% during the winter months (i.e. May-September), when a bigger

(1) See Appendix C.
(2) Report of Secretary for Agriculture, 1946 "Farming in South Africa", February, 1947.

/demand

demand for wheat exists,[1] but because of the difficulty in obtaining wheat from overseas and the general uncertainty the position was left unimproved, but not unchanged since it was soon evident that with the stocks on hand plus expected imports of wheat and flour, there would not be sufficient to meet the demand until the beginning of December, when the new crop comes onto the market. As a result, it was announced that the quantity of meal released monthly would be decreased by about 10% as from September, 1947 by which means it was hoped to stretch the supplies until the third week of September. The position was made even worse by the early summer rains in certain parts of the country which delayed the marketing of the crop and, as it was, had there not been a timely arrival of imported wheat and flour in October and December, the position would have been precarious indeed.

Disappointing results in the O.F.S. was once again the cause of the final crop being less than the estimates,[2] and the quota system had therefore to be retained by the Board for the first six months of 1948. However, the excellent maize crop left a substantial surplus which could be exchanged for wheat, so that the shortfall in supplies could be made up by heavy importation in the later months of the year. This resulted in supplies adequate to meet all reasonable demands for meal for bread purposes and the quota system was accordingly abolished, but not so all the other conservation measures. Also, for the first time since before the war, the end-of-season stocks were more than sufficient to carryover the country until the following crop.

This healthy state in the stock position at the end of 1947/8 plus the production of some 5,320,000 bags and vastly improved prospects as far as importation was concerned, rendered possible the end of the conservation measures first

(1) Report of Secretary for Agriculture, 1947, "Farming in South Africa", December, 1947.
(2) Estimates were reduced from 6,320,000 bags in September, 1947 to 5,229,000 in January of the new year.

/applied

applied in April, 1941 and tightened in subsequent years. From the 1st of November, 1948 the 2 lb white loaf of bread flour of 80% extraction became available,(1) together with the brown loaf of 90% extraction meal. The new types of flour and meal(2) also all became in free supply, the price in each case being fixed by the Wheat Control Board.

There was an immediate rush to buy the new products and millers and bakers worked to fullest capacity until April when the trade reported normal conditions.(3) The quantity of wheat milled in 1949 was far in excess of any previous level, although it was to be exceeded during each of the two succeeding years(4), the quantity of flour produced increased from 18,500,000 lbs to 687,700,000 lbs and the amount of bread produced commercially by almost 20% in one year !(5)

SUMMARY

The period under review can conveniently be divided into three phases on the basis of comparative increase in the two factors, production and consumption.

The first is from 1929 to 1935; a period during which production increased at a considerable rate due largely to a favourable price relative to other farm products resulting from the protective tariffs granted to the wheat industry. Consumption increased, but far more sedately; actually during the years of depression there is evidence that consumption of certain wheaten products such as bread and flour ruled at lower levels than in 1929. The combined effect was a considerable fall in importation necessary to make up the deficiency between local production and consumption. Imports fell from 370,000,000 lbs in 1929 to 3,000,000 lbs in 1935. However,

(1) This is not as refined as the pre-war loaf, made from flour of 70% extraction.
(2) Cake flour - 70%; bread flour 80%; sifted meal 90% and unsifted meal 100%.
(3) Report of Secretary of Agriculture, 1949, "Farming in South Africa", December, 1949.
(4) Wheat milled in the Union.

| | |
|---|---|
| 1949/50 | 1,430,600,000 lbs |
| 1950/1 | 1,541,200,000 lbs |

Source: Annual Reports of W.I.C.B.

(5) See Appendix C .

/it was

it was inevitable that this tendency would be checked, for it had never been in accord with the natural and basic economic factors and further the very nature of the increase in production was against a continued steady increase.

The second phase comprises the four seasons between 1935 and 1939. Here the rate of increase in production began to decline, the dangers of over-production, real in 1935 and 1936 characterised by a marked increase in the stocks held, disappeared later when with production dropping from the 1936 level, consumption continued its steady rise. The fears of over-production are revealed in the Wheat Industry Control Act of 1935,; the disappearance of those fears by the Wheat Scheme under the Marketing Act under which a new emphasis was placed upon the necessity to check any increase in consumer prices in those years of a deficient local crop.

The war years provided the very antithesis to the story of the 1929-35 period. Production was marked not by any increase but by its extreme variability due in some measure to the lack of fertilizers, labour and machinery, but mainly to the lack of sympathy between wheat and the natural controls, a set of circumstances due very largely to the inheritance from a past State policy. On the other hand consumption increased by leaps and bounds; the demand for bread, in most societies the staple food of the poorer classes, increased enormously. This was actually in direct contrast to certain conditions in this country since for the most part, the source of starch for the native population was mealie meal, while that for the Asiatic was rice. However, there was at many times a shortage of maize among the Natives who therefore, increasingly turned to bread, and in the case of the Asiatics, rice was nearly always in short supply meaning that he too, was forced to change his dietary habits.

But, besides this substitution of wheaten products for others, there was an increase in demand from Europeans and in no year during this period was production sufficient to meet

/the

the consumption requirements.

More important was the fact that due to wartime conditions, importation of wheat was never an easy matter and so faced with a position in which importation was vitally necessary but in which at the same time, it was at times impossible to achieve, the obvious result was a curtailment of consumption by restrictive measures. Hence from April, 1941 to November, 1948, the consumption figures are not what they would have been, had there been the wheat to consume. The consumption no longer remained a function of income since on the one hand there was not the physical quantity to meet the demand at the ruling prices, and on the other, prices were kept down by subsidization throughout this period in an attempt to restrict inflationary forces.(1)

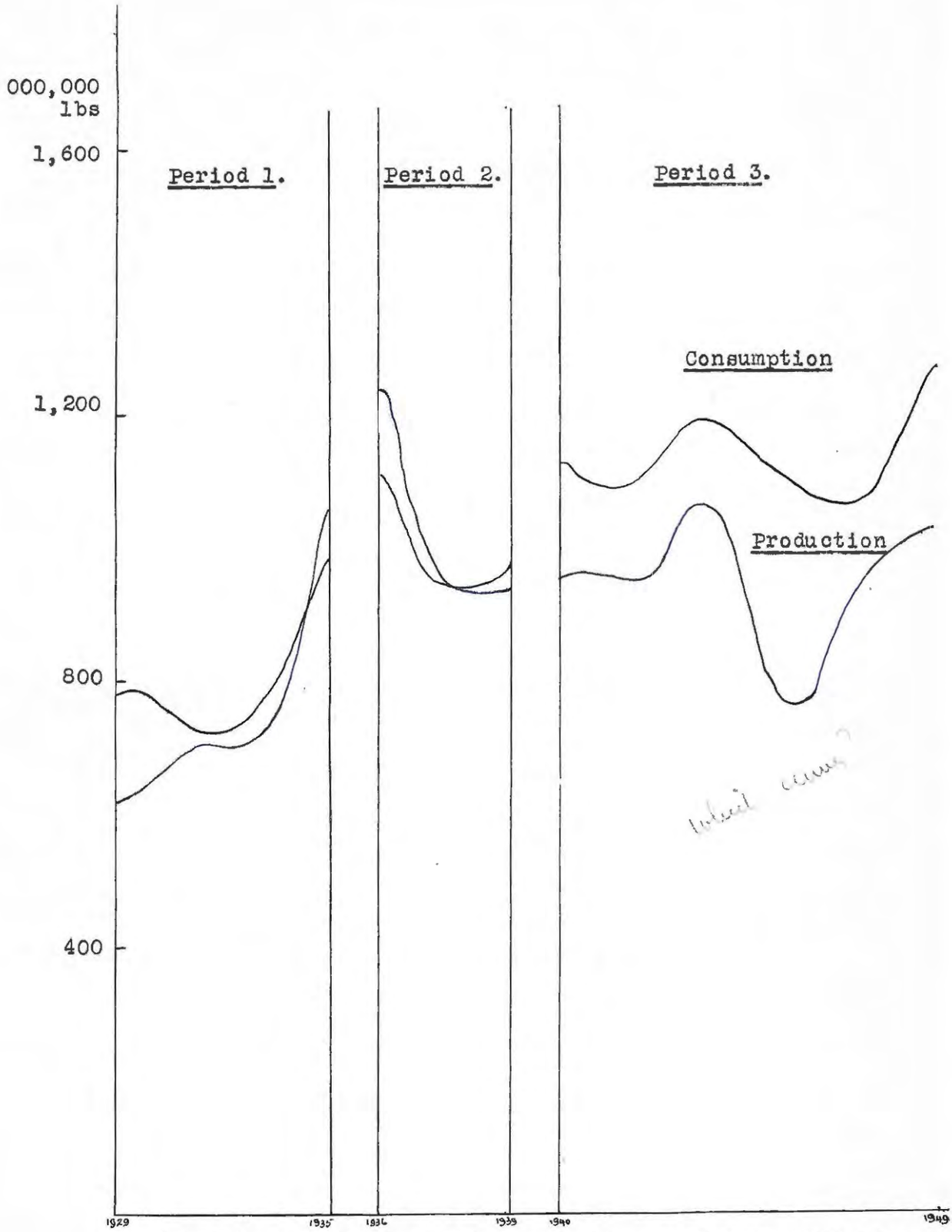
The writer has attempted to show the general trend in production and consumption of wheat during the period, 1929-49, and the development of the present position, on Graph/. The figures on which the graph is based are to be found in the Appendices to this chapter, but it must be stressed that this graph is meant to illustrate nothing more than the rough trend in the quantities considered.

(1) The amounts paid out as subsidies on wheat and wheaten products were as follows:-

| | Government Expenditure | Board's Expenditure | Total |
|---|---|---|---|
| 1939/40 | £ 85,799 | £ 173,900 | £ 259,699 |
| 1940/1 | 196,777 | 196,771 | 393,548 |
| 1941/2 | 1,167,621 | 328,130 | 1,495,751 |
| 1942/3 | 1,024,821 | 187,286 | 1,282,107 |
| 1943/4 | 1,554,912 | 171,245 | 1,724,157 |
| 1944/5 | 1,091,646 | 120,603 | 1,212,249 |
| 1945/6* | 2,642,500 | 124,500 | 2,767,000 |

* estimate

Source : U.G. 27/47.




Graph 1: Production and Consumption of Wheat, 1929-1949

Table 1.

Price of Wheat on the world market as compared with South African.

| | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 |
|---|---|---|---|---|---|---|---|---|---|
| London "spot", for Australian f.a.q. | s d<br>22 11 | s d<br>21 1 | s d<br>20 2 | s d<br>15 5 | s d<br>11 0 | s d<br>11 10 | s d<br>10 8 | s d<br>10 5 | s d<br>10 9 |
| South Africa | 25 6 | 25 3 | 22 3 | 20 2 | 21 8 | 20 11 | 17 7 | 21 1 | 18 2 |
| Premium | 2 7 | 4 2 | 2 1 | 4 9 | 10 8 | 9 1 | 6 11 | 10 8 | 7 5 |

Source : Report of the Wheat Commission. U.G. 38/41.

Table 2.

Indices of the price-rations of certain products. 1929-1933
(1927-9 = 100)

| | Wheat Maize | Wheat Oats | Wheat Wool |
|---|---|---|---|
| 1929-30 | 91.9 | 135.2 | 115.1 |
| 1930-31 | 159.2 | 107.0 | 146.7 |
| 1931-32 | 144.6 | 124.1 | 209.3 |
| 1932-33 | 169.4 | 93.1 | 159.3 |

Table 4.

Indices of price-ratios of certain products, 1933-39.
(1927-9 = 100)

| | Wheat Maize | Wheat Oats | Wheat Wool |
|---|---|---|---|
| 1933-34 | 90.5 | 89.8 | 91.9 |
| 1934-35 | 118.4 | 103.6 | 118.5 |
| 1935-36 | 99.0 | 85.1 | 75.3 |
| 1936-37 | 70.6 | 88.7 | 64.0 |
| 1937-38 | 123.0 | 91.8 | 108.4 |
| 1938-39 | 111.1 | 107.0 | 118.4 |

Source: Both tables 2 and 4 are compiled from data in the Report of the Wheat Commission, U.G. 38/41.

## TABLE 3 A, B, C.

A. Production of wheat in certain areas of the Union, 1925-38 (bags 200lb.)
B. Acerage sown to wheat in certain areas of the Union, 1925-38.
C. Yields per morgen in certain areas of the Union, 1925-38 (bags)

| Year | Western Cape | South-western Cape | O.F.S. Area I | Eastern Cape | North-western Cape | O.F.S. Area II |
|---|---|---|---|---|---|---|
| Average 1925-29 | 648,866 | 383,664 | 251,286 | 159,081 | 164,390 | 49,050 |
| 1929-30 | 790,575 | 551,211 | 431,680 | 320,662 | 264,274 | 107,290 |
| 1930-31 | 682,777 | 569,202 | 276,897 | 232,668 | 161,042 | 62,446 |
| 1931-32 | 871,502 | 982,805 | 566,901 | 408,323 | 251,471 | 124,307 |
| 1932-33 | 916,431 | 887,489 | 147,074 | 168,889 | 200,394 | 22,389 |
| 1933-34 | 1,126,119 | 1,222,744 | 57,262 | 74,198 | 234,898 | 26,029 |
| 1934-35 | 946,511 | 963,581 | 1,278,232 | 326,184 | 260,057 | 239,315 |
| 1935-36 | 1,267,900 | 1,468,887 | 1,054,513 | 775,005 | 478,355 | 407,852 |
| 1936-37 | 948,231 | 794,735 | 738,279 | 401,893 | 332,220 | 356,368 |
| 1937-38 | 1,131,501 | 745,750 | 183,021 | 27,646 | 285,764 | 52,594 |
| Average 1925-29 | 118,779 | 61,773 | 62,073 | 25,627 | 39,128 | 13,911 |
| 1929-30 | 123,000 | 67,500 | 104,759 | 40,736 | 49,673 | 19,531 |
| 1930-31 | 136,282 | 87,754 | 134,123 | 44,674 | 38,081 | 22,869 |
| 1931-32 | 145,351 | 97,124 | 235,855 | 63,778 | 52,678 | 55,768 |
| 1932-33 | 151,136 | 113,671 | 136,979 | 44,761 | 55,104 | 33,332 |
| 1933-34 | 163,899 | 139,708 | 43,270 | 22,122 | 58,802 | 12,510 |
| 1934-35 | 176,452 | 161,523 | 206,458 | 67,145 | 67,431 | 50,264 |
| 1935-36 | 173,648 | 179,833 | 267,492 | 102,624 | 80,713 | 98,123 |
| 1936-37 | 173,878 | 163,356 | 235,749 | 75,298 | 66,146 | 89,178 |
| 1937-38 | 172,061 | 136,520 | 101,417 | 8,321 | 61,509 | 27,168 |
| Average 1925-29 | 5.5 | 6.2 | 4.0 | 6.2 | 4.2 | 3.5 |
| 1929-30 | 6.4 | 8.2 | 4.1 | 7.9 | 5.3 | 5.5 |
| 1930-31 | 5.0 | 6.5 | 2.1 | 5.2 | 4.2 | 2.5 |
| 1931-32 | 6.0 | 10.1 | 2.4 | 6.4 | 4.8 | 2.1 |
| 1932-33 | 6.1 | 7.8 | 1.1 | 3.8 | 3.6 | .6 |
| 1933-34 | 6.9 | 8.8 | 1.3 | 3.4 | 4.0 | 2.1 |
| 1934-35 | 5.4 | 6.0 | 6.2 | 4.9 | 3.9 | 4.8 |
| 1935-36 | 7.3 | 8.2 | 3.9 | 7.6 | 5.9 | 4.2 |
| 1936-37 | 5.5 | 4.9 | 3.1 | 5.3 | 5.0 | 4.0 |
| 1937-38 | 6.6 | 5.5 | 1.8 | 3.3 | 4.6 | 1.9 |

APPENDIX A.

PRODUCTION AND CONSUMPTION OF WHEAT IN SOUTH AFRICA, 000lbs.

| Year | Production | | | Imports | Opening Stock | Exports | Closing Stocks | Utilization | |
|---|---|---|---|---|---|---|---|---|---|
| | European | Native | Total | | | | | Seed | Consumption |
| | A | B | | C | D | E | F | G | |
| 1929-30 | 637,532 | 16,400 | 653,932 | 114,532 | 102,800 | 5 | 137,000 | 248 | 734,011 |
| 1930-31 | 557,804 | 14,200 | 572,004 | 191,858 | 137,000 | 10 | 124,000 | 304 | 776,548 |
| 1931-32 | 822,791 | 21,200 | 843,991 | 64,741 | 124,000 | 219 | 221,000 | 403 | 811,110 |
| 1932-33 | 637,617 | 16,400 | 654,017 | 3,718 | 221,000 | 5 | 268,000 | 413 | 610,317 |
| 1933-34 | 689,498 | 17,900 | 707,398 | 53,199 | 268,000 | 8 | 188,600 | 311 | 839,678 |
| 1934-35 | 982,475 | 25,400 | 1,007,875 | 3,016 | 188,600 | 252 | 252,400 | 444 | 946,395 |
| 1935-36 | 1,380,153 | 35,700 | 1,415,853 | 1,940 | 252,400 | 129 | 320,600 | 504 | 1,348,960 |
| 1936-37 | 935,290 | 24,134 | 959,424 | 1,066 | 320,600 | 58,940 | 316,000 | 473 | 905,677 |
| 1937-38 | 625,996 | 16,200 | 642,196 | 157,074 | 316,000 | 97 | 227,600 | 376 | 887,197 |
| 1938-39 | 1,017,742 | 26,300 | 1,044,042 | 10,856 | 227,600 | 83 | 241,800 | 413 | 1,040,202 |
| 1939-40 | 918,501 | 19,600 | 938,101 | 170,224 | 241,800 | 64 | 200,800 | 434 | 1,148,827 |
| 1940-41 | 969,800 | 20,500 | 990,300 | 88,614 | 200,800 | 2,121 | 208,000 | 460 | 1,069,133 |
| 1941-42 | 824,000 | 17,500 | 841,500 | 256,712 | 208,000 | 57 | 324,000 | 470 | 981,685 |
| 1942-43 | 1,248,800 | 26,200 | 1,275,000 | 43,117 | 324,000 | 29 | 326,400 | 480 | 1,315,208 |
| 1943-44 | 1,076,800 | 22,700 | 1,099,500 | 22,952 | 326,400 | 82 | 284,200 | 485 | 1,163,687 |
| 1944-45 | 684,800 | 14,400 | 699,200 | 228,027 | 284,200 | 28 | 163,200 | 490 | 1,047,709 |
| 1945-46 | 608,693 | 12,962 | 621,655 | 424,901 | 163,200 | 72 | 55,800 | 500 | 1,153,384 |
| 1946-47 | 964,073 | 20,300 | 984,373 | 23,170 | 55,800 | 252 | 232,800 | 500 | 829,791 |
| 1947-48 | 1,076,886 | 22,900 | 1,099,786 | 316,106 | 232,800 | 1,019 | 299,800 | 500 | 1,347,373 |
| 1948-49 | 1,065,188 | 22,600 | 1,087,788 | 449,566 | 299,800 | 37 | 464,800 | 500 | 1,371,817 |

Notes : A From the Agricultural Censuses except for years 1931-3 and 1940-4 when no census was taken and the final estimates of the Division of Economics and Markets are shewn.

B Native production has been estimated as follows. For the period 1930-9 the 1937 Agricultural Census figure for native production has been used as base and it has been assumed that native production varies directly with European. For the period 1940-9 the base year has been taken as 1946 for which year the Census included a figure for native production.

C Refers to calendar years.

D Refer to stock held at 1st September of first year stated except in the case of 1930 and 1931 when they are as at the 1st January of second year. They have been obtained from the Office of Census and Statistics until 1946 after which the source is the Wheat Industry Control Board.

E Refer to calendar years and include re-exports.

F Refer to stocks held at 31st August of second year stated except for $193_0$ and 1931 when they are as at 31st December. Their source is the same as for D.

G For the period 1930-9 from the Report of the Wheat Commission (U.G. 38/41), thereafter from the Wheat Industry Control Board.

APPENDIX B.

## PRODUCTION AND CONSUMPTION OF WHEATEN PRODUCTS IN SOUTH AFRICA, 000lbs.

| Year | Consumption of wheat | Wheat milled | Materials produced | | | Imports | Exports | Ships' stores | Consumption |
|---|---|---|---|---|---|---|---|---|---|
| | | | Flour | Meal | Total | | | | |
| | A | B | B | B | B | D | E | F | |
| 1929-30 | 781,140 | 777,166 | 244,002 | 358,528 | 602,530 | 40,016 | 12,722 | 417 | 629,407 |
| 1930-31 | 778,270 | - | - | - | - | 9,601 | 12,844 | 343 | - |
| 1931-32 | 847,590 | - | - | - | - | 1,149 | 7,462 | 140 | - |
| 1932-33 | 612,500 | 760,638 | 219,602 | 372,154 | 591,756 | 1,147 | 7,154 | 162 | 585,587 |
| 1933-34 | 802,980 | 836,192 | 230,174 | 418,372 | 648,546 | 2,132 | 7,735 | 236 | 642,607 |
| 1934-35 | 982,570 | 947,824 | 238,130 | 419,444 | 657,574 | 1,343 | 7,000 | 228 | 651,689 |
| 1935-36 | 1,348,910 | 891,472 | 266,624 | 418,238 | 684,862 | 1,567 | 7,653 | 211 | 678,565 |
| 1936-37 | 905,890 | 929,378 | 271,666 | 441,616 | 713,282 | 910 | 9,712 | 401 | 704,079 |
| 1937-38 | 886,020 | 916,814 | 248,192 | 451,764 | 699,956 | 1,154 | 9,469 | 418 | 691,229 |
| 1938-39 | 1,031,830 | 970,462 | 322,894 | 431,338 | 754,232 | 997 | 9,260 | 729 | 745,240 |
| 1939-40 | 1,145,750 | 983,142 | 434,006 | 326,260 | 760,266 | 6,536 | 10,258 | - | 755,744 |
| 1940-41 | 1,053,700 | 981,832 | 361,140 | 433,252 | 794,392 | 23,747 | 12,180 | - | 805,159 |
| 1941-42 | 992,210 | 869,598 | 51,730 | 757,770 | 809,500 | 35,850 | 12,790 | - | 831,760 |
| 1942-43 | 1,371,610 | 1,001,948 | 36,542 | 912,682 | 949,224 | 14,959 | 10,245 | - | 953,138 |
| 1943-44 | 1,193,610 | 1,060,636 | 39,920 | 964,446 | 1,004,366 | 17,879 | 10,121 | 5,478 | 1,006,646 |
| 1944-45 | 1,057,810 | 1,051,986 | 20,416 | 971,308a | 991,724 | 17,979 | 13,937 | 3,380 | 992,386 |
| 1945-46 | 1,097,380 | 1,037,528 | 9,852 | 981,856a | 991,708 | 18,660 | 13,697 | 2,872 | 993,779 |
| 1946-47 | 954,550 | 870,434 | 5,756 | 844,896a | 850,652 | 18,147 | 12,783 | 920 | 855,096 |
| 1947-48 | 1,072,840 | 969,108 | 18,516 | 924,602a | 943,118 | 15,816 | 13,468 | 897 | 944,569 |
| 1948-49 | 1,542,820 | 1,331,378 | 687,730 | 425,278a | 1,113,008 | 1,577 | 15,019 | 783 | 1,098,783 |

Notes : A Consumption adjusted for years 1930-40 and 1946-9 to put imports and exports on a seasonal year basis. The adjustment has been made from figures in the Monthly Abstract of Trade Statistics.
B From Industrial Censuses and refer to any annual period ending in the second year mentioned.
C Refer to calendar years.
D Refer to calendar years and include re-exports.
E Refer to calendar years, figures for 1940-3 not available.
a It is interesting to note how the production of meal was made up during the period 1945-9 :

| | Sifted | Unsifted |
|---|---|---|
| 1945 | 24,244 | 947,064 |
| 1946 | 16,862 | 964,994 |
| 1947 | 9,154 | 835,742 |
| 1948 | 18,526 | 906,076 |
| 1949 | 111,676 | 313,602 |

APPENDIX C.

## CONSUMPTION OF WHEATEN PRODUCTS IN SOUTH AFRICA, 000LBS.

| | Total consumption of flour and wheaten meal | Industrial Consumption | | Production of wheaten Products | | | Consumption of flour by final consumers |
|---|---|---|---|---|---|---|---|
| | | Flour | Meal | Total | Bread | Biscuits | |
| | A | B | B | B | B | B | |
| 1929-30 | 629,407 | 168,302 | 34,124 | 202,426 | 243,177 | 9,536 | 426,981 |
| 1930-31 | - | - | - | - | - | - | - |
| 1931-32 | - | - | - | - | - | - | - |
| 1932-33 | 585,587 | 149,602 | 36,372 | 185,974 | 222,401 | 7,942 | 399,613 |
| 1933-34 | 642,607 | 173,430 | 40,508 | 213,938 | 244,942 | 9,306 | 428,669 |
| 1934-35 | 651,689 | 174,784 | 41,702 | 219,486 | 255,026 | 9,315 | 432,203 |
| 1935-36 | 678,565 | 179,286 | 47,630 | 226,856 | 278,044 | 10,241 | 451,709 |
| 1936-37 | 695,552 | 187,460 | 52,310 | 239,770 | 296,961 | 11,476 | 455,782 |
| 1937-38 | 682,451 | 207,096 | 56,630 | 263,726 | 307,373 | 11,621 | 418,725 |
| 1938-39 | 745,240 | 198,536 | 63,688 | 262,224 | 311,372 | 11,442 | 483,016 |
| 1939-40 | 755,744 | 208,010 | 73,478 | 281,488 | 322,854 | 17,861 | 474,256 |
| 1940-41 | 805,159 | 137,480 | 176,466 | 313,946 | 367,924 | 37,683 | 491,213 |
| 1941-42 | 831,760 | 21,910 | 320,704 | 342,614 | 420,328 | 23,466 | 489,146 |
| 1942-43 | 953,138 | 16,618 | 367,978 | 384,596 | 485,682 | 30,132 | 568,542 |
| 1943-44 | 1,006,646 | 12,628 | 404,216 | 416,944 | 511,358 | 29,812 | 589,702 |
| 1944-45 | 992,386 | 14,806 | 406,096 | 420,902 | 521,083 | 30,299 | 571,484 |
| 1945-46 | 993,779 | 10,132 | 399,438 | 409,550 | 551,911 | 22,037 | 584,229 |
| 1946-47 | 855,096 | 7,374 | 396,692 | 404,066 | 578,320 | 20,568 | 451,030 |
| 1947-48 | 944,569 | 26,858 | 372,800 | 399,658 | 572,091 | 21,411 | 544,911 |
| 1948-49 | 1,098,783 | 353,228 | 180,746 | 533,974 | 686,264 | 24,333 | 554,809 |

Notes : A From Table II.
B From Industrial Censuses.

Chapter 2.

## MAIZE

An examination of the consumption of maize is made an extremely difficult task because it is necessary to divide the total consumption into that consumed by human beings and animals. In the majority of countries maize, or corn, is considered more important as a stock feed than as a commodity for human consumption, but in South Africa to the vast number of natives residing in the Reserves it is their staple foodstuff. This becomes less extraordinary when it is remembered that in any community living at a low standard, cereals in some form, constitute the major item in the diet and whereas in the more developed countries wheaten products supply the need for cereals, among the Africans maize, kaffir-corn and millet form the foundation of the diet. There is however, a noticeable tendency for urbanised natives to replace maize (or mealie-meal as this is the form in which maize is consumed by location dwellers) by bread in conformity with the higher level of civilization with which they have come into contact.

The difficulty however, remains. The most reliable answer to the problem is to employ the estimates of the Division of Economics and Markets and so although the writer does not wish to place too much emphasis on estimates at this stage of the discussion, in the absence of other and more reliable data, he has had to use them as the best available.

During the period 1923-7, the average production of maize was approximately 3,400,000,000lbs of which about 1,000,000,000 was exported, mostly to be used as stock feed. The review period begun then with approximately 1/3 (one-third) being exported, and of the quantity retained for consumption within the Union less than 25% was fed to animals. The yield per morgen was extremely

low (1) the principle reasons being the inadequate and badly distributed rainfall; the infertile soil, mainly due to a deficiency of phosphates and humus; the use of poor seed varieties; poor agricultural methods; and pests.

The world market for maize had been in a depressed condition for several years due to over-production in the Argentine and countries of the Danube basin. It was estimated that the Argentine alone could in favourable years, supply sufficient to meet the demands of the world, (2) and with South Africa's high unit production costs resulting from poor yields, she could not compete with foreign countries. It was therefore inevitable that in order to maintain the return to maize farmers at a stable, and in the prevailing circumstances, a high level, the price on the domestic market had to be maintained by exporting part of the crop, even at the unremunerative prices which prevailed.

Such a policy was necessary because the quantity of maize delivered for sale by farmers was greater than the level of the demand at a price considered remunerative to the producers. There could be three answers to the problem: the state could impose restrictive measures upon the production of maize, a step which was never really considered as it was regarded as contrary to the independent outlook of the farming community; it could persuade the farmers to retain a greater portion of the crop on the farms to be used as stock feed which would then reduce the quantity to reach the markets; or it could export part of the crop which was in effect restricting not production, but supply available to meet the local consumption level. The actual policy followed was a

(1) In 1930 it was 5 - 6 bags ( 200 lbs ) per morgen compared with Argentina's 16.
(2) "Farming in South Africa", 1934.

/combination

combination of the latter two but whereas the second (i.e., more to be used as stock feed) could be persued only by means of propaganda by the Department of Agriculture, the third was far more amenable to legislative action and the introduction of the export quota system whereby, on the basis of estimated production, a certain percentage quota was determined which had to be exported.

Faced with the decreasing prices on the export market, it was recognised that the export of maize was far from being an economic proposition and the emphasis on the need of increased feeding of stock became stronger and stronger. The essence of the legislation was to stabilize prices to the producer yet one of the main reasons for the fluctuation in prices was the fact that such a large percentage of the crop was exported and sold at prices far below the domestic level. It was pointed out that "we produce barely sufficient maize and other feed to keep our livestock in good condition all the year round..... Heavy annual losses are sustained by our livestock industry as a result of poverty-stricken stock after the winter, less wool per sheep, deterioration in the quality of our wool, less milk, unsuitability of slaughter stock for market, lack of condition in draught animals and in some cases death due to poverty etc." (1) (2)

(1) "Overproduction of Maize" by T.F. Cronje, "Farming in South Africa", March 1932, pp 514.

(2) During 1925-9 maize to the value of £14,000,000 was exported while about 3,000,000 head of cattle and 19,000,000 sheep died of starvation. Assuming each head of cattle was worth £5 and sheep 15/-, and taking 2/3 as the number which could have been saved, the loss was about £20,000,000. From "Mixed Farming in the Summer Rainfall Area" by J. du Toit, "Farming in South Africa", September, 1933.

/Various

Various reasons as to why it would pay the producer to feed more to his stock, were put forward. Many were based on the tacit assumption that the increased production of meat which would result from such a diversion of supplies, would have to be exported and stressed the fact that the export of maize in the form of beef or mutton would reap a far greater financial return than the continued export of the cereal itself. Representatives of South Africa in continental countries pointed to the vast surpluses of maize held in the Danube basin, and were adamant that "there is not the least prospect of selling their maize at a profit on the continent" (1) but on the other hand "I have to pay as much as 2/6 per lb for fresh beef and many of the poorer classes cannot afford meat, it being regarded practically as a luxury article" (2). It was also stressed that European countries tended to give preference, in their food policies, to foodstuffs rich in protein, fats, and vitamins and import less containing a high percentage of carbohydrates, such as the cereal group.

The official point of view, as exemplified by publications of the Department of Agriculture was a little less emphatic and it was pointed out that there were many other economic considerations which had to be borne in mind. It probably felt that the circumstances of the times were abnormal and a sudden change in the utilization of maize might be foolhardy in the light of circumstances that might prevail when conditions reverted

(1) Stated by Dr. Heymans, Secretary to the Legation of the Union in Rome, and quoted in "Exporting maize in the form of Meat" by G.J. Bosman, "Farming in South Africa", January, 1933, pp 16.

(2) Stated by Mr. B. Pienaar, the Union's Minister-Plenipotentiary in Italy, and quoted in same article as footnote (1) above.

/to normal

to normal. It nevertheless seems that taking the long view, "there seems to be no doubt that our policy should be directed towards a more extensive utilization of maize in the feeding of our livestock..... Broadly the Department advocates that at least portion of the crop should be utilized on every farm in fostering the live-stock industry, and that this portion should steadily increase..... So that we are no longer dependant upon the export market to any great extent". (1)

On the basis of the estimates of the Division of Economics and Markets which appear in Appendix B (2), the result of this propaganda campaign cannot be said to have been greatly successful. These figures show that there seems to have been no tendency for the consumption of maize by animals to rise, if anything there is a likelihood that the quantity fell. However, much we emphasize that these figures are estimates and nothing more, the fact remains that the export of maize had to continue and the quantities that were exported did not reveal any tendency to decrease. One of the answers to the maize problem then had not been the success initially hoped for, and the other, the limitation of supplies for local consumption through enforced exportation, had therefore, to be pursued with a stronger purpose than ever.

For the marketing years (3) 1931-2 and 1932-3 the quota percentages declared by the Mealie Control Board

(1) Editorial "farming in S.A." September 1933 pp 327. This policy did not take an altogether realistic view of the situation for the main maize areas did not coincide with the most important cattle regions. What the Department was in fact trying to do was encourage the division of the rearing of slaughter cattle into two distinct functions, viz. pure ranching and fattening for the market which would coincide with the principle maize areas.
N.B. Maize farmers and cattle farmers are usually different people and located in different parts of the country.

(2) See page...67.

(3) A marketing year starts on 1st May so the marketing year 1931-2 is crop year 1930-1 in so far as production is concerned.

quota percentages declared by the Mealie Control Board were 33⅓ and 50 respectively but in the next year the very small crop resulted in the machinery designed to limit supplies on the Union market and thereby maintain a higher price to producers (1), being temporarily lifted. The conditions essential for the efficacy of the quota system could not be countenanced as practical policy since the crop estimates were not altogether reliable; the quantity of maize which the producers would retain for consumption on the farms and the quantity which they would offer for sale to the trade for local consumption and export, all depended to a very large extent on climatic conditions, notoriously difficult to forecast in this country. Furthermore as the size of the following year's crop was subject to a high degree of uncertainty, it was essential to guard against over-export and to allow for a considerable carry-over into the new season. Under these circumstances, the export quota had necessarily to be determined on a conservative basis.

During these years the quota determined was based upon an estimated local consumption of between 2,400,000,000 and 2,600,000,000 lbs (2) so that when the crop for 1932-3, to be sold in 1933-4, fell to 1,600,000,000 lbs, it was clear that there would be no "surplus" for export. Arrangements were made at the beginning of August for 20,000,000 lbs to be placed at disposal of drought-stricken farmers under a credit

(1) During the 2nd half of 1932 the average price for grade 2 mealies on the local market was 5/9 as compared with an export price of 2/9 per bag.

(2) Annual report Secretary of Department of Agriculture 1934 "Farming in South Africa" December 1934.

/scheme

scheme (1). In October, the Government brought 16,200,000 lbs of yellow mealies for stock feed, from the Argentine, but almost immediately the shortage of white mealies for human consumption became acute. The Central Agency (2), which supplied the requirements of the mines under contract, and the millers who had assisted the Government previously, now themselves applied for assistance and the result was that some 20,000,000 lbs were imported from Kenya, of which 12,000,000 was allocated to the Central Agency to enable it to fulfill its mine contracts, 6,000,000 lbs to millers, and the remaining 2,000,000 lbs to farmers. South Africa in this 1933-4 marketing year was then on balance a net importer of maize.

The quota system introduced initially for the 1931-2 marketing season, made it compulsory for all persons buying maize in quantities of more than 25 lbs, (in the case of "bona-fide" farmers making purchases from maize farmers the limit was 300 bags), to export a certain percentage of the amount purchased. However the introduction of export certificates made it possible for the merchant who concentrated on the export trade, to export in excess of the actual percentage gazetted and he would then sell the export certificates for the excess to traders who had not wholly fulfilled their export requirements. In the early days of this scheme there was considerable speculation, and this together with the fact that the export quota system could not alone ensure a reasonable price to the producer - which was of course the main aim of the legislation -

(1) In districts declared "draught-stricken" farmers attained maize on the security of their wool or stock itself, but this was later changed to repayment in 3 equal yearly payments.

(2) This body was liquidated after this short crop.

constitute the main disadvantages of the scheme.

The 1933-4 crop upon which the quota percentage for the 1934-5 season was based, was estimated at 3,900,000,000 lbs (1) and upon this estimation the percentage to be exported was set at 50. The actual production as revealed by the Agricultural Census was approximately 1,000,000,000 lbs more than estimated and this fact combined with a fall in the overseas quotations due to the anticipated heavy harvest in Argentina, resulted in a considerable fall in the price to producers from January, 1936. (2) The reasons expressed for this vast discrepancy between estimate and actual production was the lack of reliable production figures because of the absence of the Agricultural Census since 1929-30.

A slight digression on the method of crop forecasting would be appropiate in view of its importance in the whole system of export quotas. The basis was a percentage comparison between the previous and the current season's area of cultivation or yield, given in morgen or bags, bales or lbs. As the principle of the "law of averages" was relied upon, only sample reports were required from each district upon which to base the total estimate. Each correspondent was asked to report on the previous season's average or actual yield and the current season's average or expected yield. Figures for correspondents in the same area were then compared and the average percentage change applied to all farmers in

(1) One earlier estimation put the crop at an even lower figure. viz. 3,740,000,000 lbs.

(2) Price of Grade 2 Maize per bag Dec.1935 - Aug.1936.

| c.1934 | Jan.1935 | February | March | April | May | June | July | August |
|---|---|---|---|---|---|---|---|---|
| /4½ | 7/8½ | 6/7½ | 6/6 | 6/6 | 7/6 | 7/1½ | 7/0½ | 6/8½ |

/that

that area. This obviously depends on a very reliable figure for the previous season's yield and if, as happened in 1934-5, the only figures available were themselves estimates, the position is rendered extremely difficult to forecaste with any reasonable degree of accuracy.

In view of the price decline in January, 1935, and "having regard to the fact that maize producers had experienced an extremely difficult time during the depression" (1) the Government considered it necessary to institute a special measure and accordingly the Minister announced that traders would be redeemed to the extent of 3/6 per bag on all surplus quota certificates they might have on hand at the end of the year provided that export had been affected before the end of May, 1936. The immediate effect was a rise in internal prices but it was not sufficient to counteract the effect of the continued fall in overseas levels so that in August the internal level had fallen almost to that ruling before the measures instituted in May. Accordingly the price at which the Government agreed to buy up the certificates was increased to 5/- in order to maintain a domestic level of about 7/- per bag.

How did this guarenteed purchase price for quota certificates affect the internal price level and therefore the incentive to produce ? There were two variables to be taken into account viz. the export value (or c.i.f. quotations on overseas markets less freight and other charges,) which was in effect made up of 2 variables, and the percentage to be exported. Four arithmetical examples have been constructed in Appendix on page ^ to show the effects of these variables. It is obvious that an increase in the percentage to be

(1) Annual report Secretary of Department of Agriculture 1936. "Farming in South Africa" 1935 pp 494.

/exported

exported with other factors remaining constant will cause a fall in the price paid to producers, while consumers price will remain the same. A fall in export value caused either by lower prices on overseas markets or an increase in freight or customs charges will cause a decrease in both prices, both to the extent of the fall in the export value. A rise in the price at which the Government guarenteed to purchase the quota certificates increases the producers price by the increase in the price export quota while the consumers price is increased by the whole amount.

Hence: Producers price= export value + (guarenteed price x export quota)

Consumers price = export value + guarenteed price per bag.

It is also clear that the introduction of this guaranteed price could not stabilize the internal price level at any desired level without being constantly altered so, when prices began to fall again in August the guarenteed price was immediately raised to 5/- thereby increasing the price to producers by 9d. and that to consumers by 1/6. The need for this increase was caused by three main factors viz. the reduction in export parity by between 1/- to 1/6 per bag, the rise in freight from 13/- to 16/- per ton and the fall in overseas prices following the realization of expectations regarding the Argentine crop (1).

The drought conditions towards the end of 1935 retarded the planting considerably and the area reaped from the 1935-6 crop was 10% lower than the previous season (2). The expected short crop resulted in a general rise in maize prices to the levels of 12/7½ and

(1) Annual Report of Secretary for Department of Agriculture, 1936 "Farming in South Africa" 1935 pp 522

(2) See Table / page 64 .

/16/- to

16/- to producer and consumer respectively and in order to afford some protection to the consumer the guarentee was withdrawn on the 25th March. The final estimate of 2,920,000,000 lbs was only slightly above the estimated consumption so that once again the quota machinery was suspended and market conditions were regulated by the free operation of supply and demand functions. However, the prospects for the 1936-7 crop appeared excellent and prices began to decline to about 8/9 ex elevator for grade 2 by May, and despite the fact that an export quota of 66⅔% was declared, prices continued to fall slightly. The main reasons for this were once again due to the international factors of falling prices and increasing freight charges. (1) In order to assist the producers the Government reintroduced the so-called guarentee system in respect of surplus quota certificates. On the 14th June a guarentee of 3/- was announced bringing the local price to 1/- above export parity but shortly afterwards it was increased to 4/6 and this maintained the internal price to the producer between 7/- and 8/-. Despite the high export quota percentage that was declared, export proceeded very rapidly, so much so that by the end of 1937 the Government, fearing a poor crop for the 1937-8 selling season, removed the guarentee on the 14th December and export was prohibited. So ended the reign of the export quota system.

In 1936 a sub-committee of four members was appointed to consider the marketing of maize and in their subsequent report the following were the main recommendations (2).

(1) The 1937 Annual Report of the Secretary for Agriculture states that freight costs rose 1/7½ to 3/3½ per bag or from 16/3 to 32/10 per ton, during thisperiod.

(2) "Fixation of Maize Prices", "Farming in South Africa" June 1936 pp 228.

/1. That

1. That each year the Maize Board fix a minimum price at which it is prepared to purchase maize, based on crop prospects.

2. The compulsory export quota be discontinued and export of the surplus be regulated by the Board.

3. The diversion of the "surplus" to industrial and stock feeding purposes.

4. Retention of approximately 1,000,000 bags (i.e. 200,000,000 lbs) as a reserve.

5. A levy of not more than 4/- per bag to finance the subsidy paid on export maize. The minimum price to the producer, the exportable surplus and levy to be determined at the beginning of each season.

6. Consumers' price would then be -

Minimum price + storage + levy and handling costs, the latter to be fixed by the Board to protect the consumer interests.

7. A maximum price to the consumer which if exceeded shall result in immediate discontinuation in export.

8. Handling and storage charges not to exceed 2/6 per bag. Therefore the maximum difference between producers' and consumers price would be levy + 2/6.

The 1938-9 marketing season was marked by an interim scheme in which the export quota and compensatory payments disappeared to be replaced by a levy and subsidy scheme. On each bag purchased a levy of 1/- was payable and on each bag exported a subsidy of 2/3 was paid so that the export value was increased from the parity level of 8/- at the beginning of the season to 10/3 - the same price as the consumer had to pay on the local market. Such a scheme which like the previous one was aimed primarily at stablising the internal price at a level remunerative to the producer, was however once again at the mercy of the world price level. Thus when the latter level fell to 7/- and the producers' price

/to

to 8/3, the co-operative societies were left storing considerable quantities of grain on which advances of 9/- had been given. Whilst the National Marketing Council condemned the reticence on the part of the societies to dispose of their stocks at the beginning of the season in the hope of an improved price later on, it nevertheless recommended that the proposals of the Mealie Industry Control Board for increase in both levy and subsidy to 1/6 and 3/3 respectively, should be favourably considered.

In planning for the disposal of the crop, 3,000,000 bags had been set aside for export and of this permits for 750,000 were taken up on the basis of the subsidy of 2/3 per bag and a further 1,530,000 when the subsidy was increased. However these plans had been based on an estimated production of 3,820,000,000 lbs so that when the figures of the Agricultural Census became available the Board proposed that a further issue of permits for 120,000,000 lbs be made but the Government refused to sanction such a measure so that no more than 20,000,000 lbs from the reserves of the Board itself were exported. Thus the war started in circumstances in which the Union was still exporting a considerable portion of its output, and in circumstances in which control was practically complete.

"The new (maize marketing) scheme abolished the system of export compensation entirely, and the producer receives the world market price instead of a price which has been established artifially by means of a compensation to exporters. To the price, however, there is later added a supplementary payment derived from a levy.....on all maize and maize products received.from or delivered by a producer after the 30th April, 1939, as a result of a purchase either before or after that date"

or after that date" (1). (2) In effect the scheme, provided that after an amount equal to the levy had been refunded to exporters of maize and maize products, all residual moneys derived from the levy was to be paid on a scale to be determined by the Board, as a supplementary payment to those who had sold maize to a registered trader. The export of maize was to be made under permit only.

However the effect, if not the actual machinery, of the new scheme was materially the same as the previous one. By means of the levy the internal price was raised above that level at which it would have settled had there been no control and by means of the subsidy an artificial encouragement was provided for the export of maize and the consequent reduction of supply to the local market; artificial in the sense that it was not based upon the existing physical conditions. The new scheme in granting the Mealie Industry Control power to limit the exportation of maize through the permit system, was however, expected to be far more suitable to obtain the desired results.

There were also embodied in the scheme two provisions designed to promote increased consumption within the Union. Both were however not to effect the direct consumption by human beings since the first provided for a rebate of 2/- per bag on maize purchased on authority of a permit issued by the Board for stock feeding and the second was a series of special concessions including a rebate of 1/-, on

(1) Annual Report of Secretary for Department of Agriculture 1939. "Farming in South Africa" December 1939 pp 496.

(2) As regards native producers; any person buying maize from producers in native areas was to pay a levy of 2/6 per bag, the balance being paid by the Department of Native Affairs to the Board. The supplementary payment was then to be paid to the producers at the end of the season through the Native Affairs Department.

maize purchased in excess of 100,000 bags by the Starch factory and the National Maize Products Co. which manufactures and alcohol, both of Germiston. There was however one measure by which individual consumption benefitted and that was the railway rebate which was claimed "to have been instrumental in raising the export price by 9d. per bag above export parity." (1)

The 1939 crop was a record one and based upon an estimate of 3,200,000,000 lbs, the exportable surplus was considered as 2,600,000,000 lbs. Provisional authorization was therefore granted for the exportation of 2,000,000,000 lbs but meanwhile the expectation of a large crop naturally led to depressed prices and in view of this the Government decided to make an advance supplementary payment, of 1/6 per bag on the first 500 bags sold by a producer. Of this 6d. was contributed by the Government being in affect a direct subsidy payment.

It has been stressed above that insofar as South Africa's export markets were concerned, maize was used almost exclusively as a stock feed. This fact had a very important bearing on the position since the demand for maize during wartime is dependant upon the extent to which feeding of livestock is continued, extended or curtailed. owing to the fact that the whole continent of Europe was soon rendered non-existent as effective markets, Great Britian was left as the only importer of any magnitude. It was only natural that Britian's demand should have diminished appreciably since the feeding of livestock no longer played the role which it had in normal times. In order to place as little extra weight upon the already over-burdened supply line of foodstuffs owing to the shortage of shipping and the operations of U-boats in the

(1) Annual Report of Secretary for Department of Agriculture 1939. "Farming in South Africa" December 1939.

/Atlantic

Atlantic, it was inevitable that the British policy would be to deliberately aim at curtailing supplies of stock feed in favour of more essential supplies. Nevertheless for the 1939-40 crop, from which there was expected to be a surplus of 1,000,000,000 lbs, the British Government undertook to purchase all that was available at fixed prices. (1) This made the Control Board's aim of stabilizing prices far easier to attain since it was repeatedly proved under the export quota scheme that stabilization was extremely difficult to achieve while the export value showed great fluctuations.

In circumstances where South Africa was producing a surplus the contract with Great Britian was a decided advantage but it nevertheless introduced a difficulty in regard to the storage of the crop. Under ordinary conditions it was the custom of the maize farmer to deliver all his mealies to the trade or co-operative society as soon as he had completed threshing operations. (2) The trader or co-op would then in turn take steps to ensure that the surplus was removed within a few months and for the rest would meet local demand by drawing upon stocks. Under wartime conditions however, export was a matter of waiting for shipping space and exportation was expected to extend over the whole season. Storage facilities in the country were designed for speedy removal of the crop and could not accommodate both the surplus awaiting shipping space plus the reserve for local requirements;

(1) The prices fixed for the 1939-40 crop were as follows:
Mealies in Bulk:

| | |
|---|---|
| Grade 2, 4 | 17/- per 480 lbs f.o.b. |
| Grade 6 | 17/3 per 480 lbs f.o.b. |
| Grade 3 and 5 | 16/9 per 480 lbs f.o.b. |
| Grade 7 and 8 | 16/6 per 480 lbs f.o.b. |

The price for Grade 2 amounted to approximately 5/9 per bag (200 lbs) f.o.r. sellers' station compared with the Boards price of 8/-.

(2) This was a point which had caused considerable discussion during the period when the export quota system was in force since especially in the Native Reserves, where the custom described is general, the trader was under an obligation to export a certain percentage of a quantity which he was in actual fact storing for the producer.

/therefore

therefore farmers were urged to store as much of their own requirements as possible.

The most outstanding feature of the first two years of the war was the considerable increase in consumption. In his Annual Report for 1941, the Secretary for Agriculture attributed this phenomenon to a more feed-conscious farming community and other temporary causes such as the shortage of rice and wheat both being replaced by mealie meal. The estimates of the Division of Economics and Markets (1) confirm the fact that a greater quantity was being used for animal consumption, rising by 360,000,000 and 300,000,000 lbs in the 1940-1 and 1941-2 selling seasons while their figures for consumption by human beings do not reveal comparable increases. If one examines the consumption of mealie meal it is obvious that the claimed increase in consumption by human beings did occur especially in the year 1941-2 when the rise was almost as much as 20%.(2) Here it should be stressed that the consumption figures in regard to mealie meal are far more significant than the estimates of the Division of Economics and Markets since the former take into account the exportation of mealie meal which, as can be seen from Appendix B,(3) was fairly considerable up to the beginning of the war period.

The 80% increase in annual consumption of maize needs further explanation. It is probable that the rebates on maize granted to stock feeders was to some extent responsible, but a far more important factor must have been the greater profitability in stock-farming relative to pure maize production. In short it seems that what had been attempted in the early 30's by means of propaganda and had failed, had now come about through the operation of the economic machine by

(1) Appendix B Page 67 .

(2) See Appendix B Page 67 .

(3) See Chapter 10, Appendix B, page 267.

/means

means of comparative prices. (1)

The extent of this increase in local consumption is revealed in the planned disposal of the 1939-40 crop. (2)

| | |
|---|---|
| Estimated production | 4,140,000,000 lbs |
| plus carryover | 400,000,000 lbs |
| | 4,540,000,000 |
| Consumption + carryover | 3,540,000,000 |
| Exportable surplus | 1,000,000,000 lbs |

In actual fact only 550,000,000 lbs were exported during the selling season and the Secretary for Agriculture considered that the consumption "must now be put at between 19,000,000 and 20,000,000 ~~lbs~~ bags per annum" compared with "barely 15,000,000 during the years immediately preceding the war." (3)

With this appreciable increase in consumption, prices rose and the Board had to institute special measures to maintain the consumers' price at a level approximating to that agreed upon at the beginning of the season. The reduction in export meant a smaller financial burden in respect of export subsidies so that the Board was able to maintain a stable price of 8/- for grade 2 ex-elevator plus the supplementary payment on the first 500 bags delivered, out its own revenue from the 2/6 per bag levy less the rebate of 1/6 on maize purchased for stock feed, without Government assistance:

Although the 1940-1 crop was greater than the previous, it was at the end of the selling season of this crop that the first economy measures were introduced in respect of maize. Drought measures resulted in a greater demand for stock feed and with prospects for the next year's crop very poor, prices

(1) Indices of wholesale prices (1936/7 - 1938/9 = 100)

| | Summer Cereals | Slaughter stock | Dairy Produce |
|---|---|---|---|
| 1937-8 | 86 | 105 | 112 |
| 1938-9 | 94 | 106 | 102 |
| 1939-40 | 84 | 106 | 105 |
| 1940-1 | 107 | 111 | 108 |
| 1941-2 | 117 | 135 | 131 |

(2) Annual Report, 1941 of the Secretary for Department of Agriculture, "Farming in South Africa" December, 1941 pp 410.

(3) Annual Report, 1941 of the Secfetary for Department of Agriculture, "Farming in South Africa" December, 1941 pp 410

rose steeply, especially the price of white mealies. Consequently the Control Board in consultation with the Department of Agriculture introduced:-



1. Prohibition of exportation
2. Discontinuation of the 1/6 rebate on stock feed in respect of white mealies.
3. Fixation of maximum consumer prices. (1)
4. Prohibition of manufacture of mealie meal from white mealies alone but a mixture of white and yellow was permitted.

These proved inadequate to deal with the position as the end of the marketing season approached and under war measure No. 20 of 1942 the powers of the Mealie Industry Control Board were extended to:-

1. Take over all surplus supplies from traders and millers at fixed prices.
2. Prohibit sale of maize other than to the Board at fixed prices.
3. Cancel the rebate on all mealies for stock feed. (Allocation of stock feed was made on a carefully worked out basis aiming at the most profitable utilization of maize).

The 1942 crop was the lowest since 1936. A severe drought prevailed until mid-summer, the area sown was less than normal and many fields were planted so late that they were never reaped. (2) In view of the expected low yield, the Food Controller announced in Parliament that a basic price of 15/- a bag for grade 2,4 and 6 would be assured to growers and that

(1) Consumer Prices up to 31.8.42. (F.O.R. Senders' Station)

| QUANTITY | GRADES 2,4 & 6 | 3,5 & 9 | 8 |
|---|---|---|---|
| | s d | s d | s d |
| over 100 bags | 15 7 | 15 5 | 15 3 |
| 21 - 99 bags | 15 10 | 15 8 | 15 6 |
| 6 - 20 bags | 16 1 | 15 11 | 15 9 |
| 2 - 5 bags | 16 4 | 16 2 | 16 0 |
| 1 bag | 16 7 | 16 5 | 16 3 |

After 31.8.42 all prices were increased by 1d. per bag.

Maximum prices of maize products (f.o.r. buyer's station), for quantities of 2 - 5 bags.

| | s | d |
|---|---|---|
| No. 1 fine granulated mealie meal | 19 | 0 |
| Unsifted granulated mealie meal | 18 | 6 |
| UnSifted, ungranulated mealie meal | 18 | 0 |
| Sifted crushed mealies | 18 | 3 |
| Unsifted crushed mealies | 18 | 0 |
| Samp | 24 | 6 |
| Mealie rice | 24 | 6 |
| Germ meal | 12 | 6 |
| Hominy Chop | 11 | 0 |

(2) See Table / , page 64 .

/the

the spread would be reduced in view of the compulsory admixture of yellow maize in 2's and 6's. In view of the fact that export was negligible the levy was reduced to 3d. per bag on delivery to traders and 3d. per bag when delivered to the miller, or where the grain was delivered direct to the miller, a single payment of 6d. per bag.

To safeguard the supplies and ensure an equitable distribution until the next crop, the permit system was instituted by proclamation in a Government Gazette Extraordinary on the 3rd June, 1942. Under this system, bona fide farmers could obtain 25 bags of mealie meal or other maize products per month without a permit until the end of June after which the quota was reduced to 10 bags. Any quantity in excess of this quota, whether for human consumption or animal feed, could be obtained only on production of a permit. No householder was allowed to purchase more than 2 bags per month without a permit whether for human consumption or otherwise.

The figures in Appendix A in respect of this 1941-2 crop are very misleading insofar as with imports shown as 2,000 lbs It might be construed that no importation was attempted, an assumption very far from the truth. As early as April of 1942 before the crop was harvested, the Union Government was in consultation with the British Authorities, the Ministeries of Food and War Transport, regarding the provision of freight for the shipment of at least 400,000,000 lbs from the Argentine between June '42 and March, 1943. This amount would have required some 25 ships in addition to those required for the importation of wheat and rice.

The British Ministry of War Transport was far from happy about using Argentine vessels to convey maize to the Union, as had been suggested, as they would displace British ships at the already congested Durban harbour and constitute a further drain on bunker coal supplies. The British authorities therefore offered the Union 100,000,000 lbs of Kenya maize the balance to be supplied from the Argentine. Later

/the

the Ministry for Food suggested that the actual essential requirements of the Union must have been less than budgeted for since the report of the Secretary for Agriculture had stated that the increase in consumption of maize was due to an increased "feed consciousness of farmers" and stressed the fact that the provision of shipping space to transport 100,000,000 lbs from the Argentine could only be made by diverting supplies from the United Kingdom where it would be all for human consumption. The Union authorities hastened to reply that increased stock feeding was by no means the only cause of larger requirements and pointed out the difference between the grazing qualities of the South African veld and the English pastures, following which 3 ships were provided, one each for October, November and December to convey 14,000,000 lbs each from the Argentine. When the South African Government heard that the freight charges would amount to £8 per ton, it decided that it could not accept the cargoes which would be landed at between 20/- and 25/- as compared with the local price of 15/- per bag. Subsequently the November and December cargoes were offered at a freight charge of 100/- per ton and accepted by the Southern Rhodesian Government but the whole matter could not but lead to unhappy repercussions since after such long months of negotiation, apparently financial and not physical needs were paramount and such a conclusion arrived at in England was hardly likely to engender a spirit of co-operation between the 2 countries.

To make matters even worse the Kenya crop turned out far less than estimated and the total surplus of 4,000,000 lbs was allocated to Northern Rhodesia. As the Union had relied upon this to tide it over the early part of 1943 until the new crop would be harvested, it was considerably embarassed, but good spring rains led the Authorities to take an optimistic view in granting the 2 cargoes to Southern Rhodesia (1).

(1) The first cargo was finally offered at a freight cost of 100/- per ton, the difference to be paid by the British Ministry of Food.

/When

When the position was reviewed at the end of 1942 the Union requested 5,000,000 lbs to cover March and April months but with shipping positions even worse, nothing was obtained.

The 1943 crop was a considerable improvement but as there was no carryover from the previous season farmers had to be encouraged to market their maize as soon as possible and with this in mind the prices for the new season were announced and came into force on the 17th March instead of as usual on the 1st of May. It was also decided to accept maize with a moisture content of more than 12½% at the beginning of the season until supplies reached a level sufficient to meet the demand. With a marketable crop estimated at 3,000,000,000 lbs storage facilities were far from adequate and it is hightly probable that the consumption figure is somewhat overstated since the large stacks in the open were exposed to rotting and mould especially as much of the grain already contained excessive moisture.

It is significant from Table 1 (1) that the area reaped for this 1942-3 crop was by far the greatest, over 240,000 morgen more than in 1940-1. This is probably to be accounted for by the increase in the price guarenteed to producers after the shortage of the previous season. For this crop the prices to the producer were increased by 1/- per bag with elevator maize 9d. less per 200 lbs.

Early in the year it was evident that the crop would not be very good not because less land had been sown to maize but mainly due to rains which were too heavy. Lands were often too wet to plough, plants were drowned and it was generally expected that the final crop would be a small one. To deal with this situation it was decided that as large a reserve as possible should be carried over to the 1944-5 selling

(1) See Page 64 .

/season

seasons and so a slight form of rationing was applied, with a result that a reserve of 600,000,000 lbs was maintained at the end of the season.

This abnormal carryover was in fact the cause of difficulties at the beginning of the next season for maize deliveries tended to be earlier than usual and so once again there were not adequate storage facilities. Furthermore the crop proved to be abnormal in its distribution (1) which also created difficulties in regard to storage and "the biggest losses occurred on a branch line in the Western O.F.S. where congestion was unavoidable and storage inadequate". (2)

In view of the experiences following the similar poor crop of 1942, it was evident that more drastic measures than those applied in the past would be necessary for regulating the flow of maize in order to ensure supplies for the whole season and to provide for so large a reserve to 1945-6 as possible. Previously the Board had regulated distribution through the medium of control over elevator maize and partly by arrangement with co-operative societies whereby a certain degree of control over the marketing of supplies was vested in the Board. Now a new scheme was introduced whereby the Union was divided into two areas, one, Area A, comprising of the main producing areas of the Union (3) and the other, the remainder of the Union. In area B marketing arrangements remained as before with only registered traders permitted to purchase maize while in A the trade was performed by agents, appointed by the Board, who were to sell maize only on the Board's permit and were to receive commissions in liew of profit. (4)

(1) This is revealed by the fact that in normal years about 2,000,000,000 lbs is retained on farms, whereas in this year the figure was estimated at 1,400,000,000 lbs. 1945 Report of the Secretary for Agriculture "Farming in South Africa" March, 1946 pp 151.
(2) UG 27/47
(3) The O.F.S., Transvaal and the districts of Mafeking and Vryburg.
(4) They were able to obtain permission from the Board to deal in certain quantities on their own behalf.

/With

With the abnormal carryover and early deliveries, it was essential that stocks be liquidated expeditiously if the storage of maize was not to develop into utter chaos. Prices of stored maize were therefore fixed at lower levels to encourage its sale and permit regulations were temporarily suspended. However the season which started with a surplus problem later developed into one of acute shortage for in December the consumption amounted to 300,000,000 lbs, a level which, had it been allowed to continue would have meant that supplies would have run out long before the end of the season. Drastic action was therefore needed to curtail consumption to ensure a carryover since the following crop was also expected to be poor. Consequently the first curtailment in issue of permits to consumers was made in February, initially in respect of stock feed only but later still more drastic curtailment became necessary and permits for consumption by human beings were also cut. Nevertheless the carryover to the 1945-6 marketing season was an extremely small one.

The expectation regarding the 1945 crop were only too well founded and early inquiries were made regarding the possibility of importing maize. The London Food Council informed the South African authorities that the Argentine had suffered from a very short crop but suggested that Angola might be able to supply some in addition to an allocation of 20,000,000 lbs from the Kenya crop. Importation from the Argentine was met with great difficulties; although even bartering with South African coal was tried it came to no avail and finally the British Ministry of Food agreed to loan a few cargoes to the Union in view of the desperate situation, thus initiating the importation of some 500,000,000 lbs of the most expensive maize so far purchased for the South African market. (1)

In view of the small carryover, concentrated at a few

(1) The Government subsidized the difference between the price at which the imported maize could be sold and the fixed consumer prices.

/co-operatives

co-operatives, and the scattered nature of the crop the Board offered a premium of 6d. per bag on maize delivered before the 9th June and also temporarily suspended the maximum moisture content of 15% during the early part of the season. Further arrangements were made to enable millers to take over the maize direct from agents without all the formalities normally necessary and these measures enabled the country to obtain sufficient supplies until the bulk of the crop came on to the market. However, in order to make the supplies last as long as possible, the control measures of the previous season were retained but far more severe rationing was essential.

A reduction of permit-free purchase in larger urban areas where other substitutes are available, was made and the manufacture of sifted mealie meal, samp and mealie rice was prohibited. (1) In the case of the latter two products the prohibition was designed to fall more heavily on the upper income groups who were considered to be the main purchases of, and who could afford other cereal foods. The shortage of white mealies was more acute and it was therefore necessary to impose a prohibition on the manufacture of mealie meal exclusively from white mealies and the manufacture of crushed maize except from yellow mealies. (2) The quantity of yellow maize which had to be incorporated was initially fixed at 20% but later raised to 60%.

The distribution of maize among the rural natives was rendered extremely difficult by the large number of illict sales among traders (3) so that while the total amount made available to traders in native areas was considered sufficient for their requirements, there was no method of checking the

(1) The prohibition was partially lifted later in the season and the removal of 7½% Bran permitted in the case of maize milled for producers. This was necessary because the smaller mills which cater mainly for producers, were not in a position to process the bran in such a way that the unsifted mealie meal could be used for human consumption.
(2) This shortage of white maize was not relieved by importation since the majority of imports were of the yellow variety.
(3) 1945 Report of the Secretary for Agriculture. "Farming in South Africa" March, 1946 pp 151.

/actual

actual distribution of that allocation, especially since no permit was required from the native purchaser. To overcome these difficulties local committees were appointed in the Reserve areas to regulate distribution among the traders and to supervise the sale of maize.

It has been pointed out previously that the Government subsidized the importation of maize during the 1945-6 marketing season but it should be noticed that this subsidization was not only confined to importation but applied to the whole crop entering the trade. In the early days of the levy-subsidy scheme Government assistance was given on the condition that a consumer price of approximately 10/- to 10/6 per bag was maintained. (1) However when it became essential to increase the producers' prices to allow for the increased production costs and to offer an incentive towards greater production, the Government decided not to allow the increase to be passed on to the consumer. Thus for instance in the 1945-6 season the price of grade 2 maize was 19/- to the producer but of this 2/6 was by way of Government subsidy so that the basis on which the consumer price was to be determined was 16/6. (2)

Despite the fact that the 1946 crop was slightly less than the final estimate of the previous one, the vastly improved conditions with respect to importation meant that supplies were, after two years of scraping and saving, very nearly adequate to meet the demand. Accordingly while the control over the marketing of the crop was retained by the Board, the permit system was repealed in February, 1947. It was, however, not possible to suspend the embargo on the manufacture of mealie meal and crushed maize exclusively from white maize due to the failure of the local white maize crop and the fact that once again imports were mainly of the

(1) This policy was probably partly responsible for the comparatively low maize prices in the years 1939-42.

(2) Determination of Consumers price (f.o.r. Sellers' station) 1943-46.

| Selling Season | Producers' Price Grade 2 | Subsidy | Consumers' Price |
|---|---|---|---|
| 1943/4 | 16/- | - | 18/7 |
| 1944/5 | 17/6 | 1/6 | 18/7 |
| 1945/6 | 19/- | 2/6 | 19/2 |

yellow variety. The position in fact became worse and the 60% compulsory admixture of yellow was increased to 100% later decreased first to 60 then 50 and finally in the 17th May, 1948, all provision in this connection were abrogated. The ban on the sifting of mealie meal remained in force as the supply position had not become so favourable as to permit of its suspension.

The effect of the suspension of restrictions on the use of maize as stock feed is clearly revealed in the estimates in Appendix A when in the marketing season 1947-8 the increase amounted to about 35%. The main difficulties during the last two seasons under review were related to the storage of the crop since consumption was now reckoned as about 4,600,000,000 lbs whereas it had in the thirties been considered as about 2,800,000,000 lbs.

The 1948 crop was by far the greatest ever reaped in South Africa, almost 800,000,000 lbs more than in 1937 and even after a considerable proportion of the crop had been exported,(1) a carryover of 1,200,000,000 lbs was achieved for the following season as it had become evident from the unfavourable climatic conditions during the summer planting months that that crop would be very much less. The enormous carryover once again caused considerable difficulties in the storage of the crop for with inadequate storage facilities, stacking in the open had to be resorted to and weevils and mould took a large toll of stocks. It was being painfully demonstrated that the effects of the variable climate went much further than being the cause of fluctuating crops. Storage had become the main difficulty in the marketing process - consumption had risen to such a level that the existing storage facilities designed to meet a speedy withdrawal for export could not cope with long storage periods of such a large quantity.

(1) A large amount was exported to the U.S.A. in return for wheat (see chapter on Wheat - page 23).

/SUMMARY

SUMMARY

The period under review begins with the export of approximately 1/3 of the total crop while about 25% of the quantity retained was used as stock feed. While it is true that in most countries, maize is used principally as an animal feed, the fact that more than 2/3 of the maize retained in the country was consumed by human beings is not so extraordinary as it would first appear, when one remembers that in all primitive societies cereals form the basis of the diet and the cereal must obviously be one suited to the natural controls of production. Thus while the European has for centuries found his source of cereals in wheat and the foundation of the Indian's diet is rice, the African has traditionally developed on a diet in which maize, kaffircorn and millet are of supreme importance.

The period also begins with the international position characterised by an over-supply of maize with large stocks being carried in the Argentine and Danube valley. In these circumstances it was inevitable that the world price level should decline and in an attempt to insulate the South African farmer from the effects of this falling price level, the Government introduced the quota system whereby on the estimates of the coming crop, a certain percentage was determined which had to be exported. At the same time however, it was recognised that this was not a policy which could be pursued indefinitely since prices continued to vary greatly with the quantity and world price levels, and so the authorities went to considerable lengths to encourage the feeding of maize to livestock as it was felt that the Union possessed all the natural requirements of a ranching country. The export of maize "on the hoof" became a watch-word during the depression years but the available statistics do not reveal any marked success in this propaganda campaign and apart from the 1933-4 selling season, substantial quantities had to be exported in order to maintain an internal price remunerative to the producer.

/In

In the middle thirties this export quota scheme became greatly refined but the principle of removing a certain amount of the crop in order to establish "remunerative" prices on the local market, remained. First there was the introduction of export certificates which meant that it was no longer necessary for each and every trader to export the gazetted percentage of his purchases - he could now enter the market for quota certificates and buy sufficient to cover his export obligations. When however, speculation in this market became rife, the Government agreed to buy and sell them at fixed prices which not only served to stop speculation but was itself an effective means of influencing the local market price, both retail and wholesale. Nevertheless, the price to the producer still remained largely at the mercy of uncontrollable external factors, so an interim scheme was introduced for the 1938-9 season prior to the introduction of a new scheme in the following season but if the machinery was different, the aims were not.

The outbreak of war found South Africa an export country and rather in fear of her export markets since not only were several of them soon overrun by the enemy, but it was to be expected that stock feed would not receive the same treatment as other more essential commodities by the importing countries. Nevertheless Britain agreed to take over the whole of the Union's surplus at fixed prices which also meant that one of the variables - the export parity level - was now reduced to a constant. South Africa was however, not able to take advantage of this for Graph 2, overpage, reveals that production began to decline from the beginning of the war, so it was not long before all fears of surplus maize requiring exportation, disappeared and from 1942-3 it became necessary to limit consumption by various means since it was impossible to import the deficiency between production and consumption. In the last three seasons under review production increased sufficiently to enable the restrictions

/on

on consumption to be withdrawn but the gap between the two factors had narrowed down considerably and South Africa's ability to provide sufficient to meet her maize requirements depended to a much greater extent than ever before on the climate - a notoriously variable element.

The consumption of mealie meal is also included on the graph in order to give some idea of the factors operating behind the total consumption of maize. It appears that during the depression years production showed a decline and it is obvious that in years of low productivity, the consumption of whole maize especially in rural areas such as the Reserves, would decline. Thus the consumption of mealie meal, mainly confined to the urban areas and therefore dependent upon purchasing power, appears to have fallen less than total consumption and again when production recovered in the period 1933-39 total production rose at a much faster rate than did the consumption of mealie meal. In years of good crops it is to be expected that more will be consumed in the whole form by both human beings and animals on farms and in the Reserves. From 1942-3 although rationing would seem to have noticeably checked the total consumption, that of mealiemeal continued to rise unchecked which would lead one to the conclusion that it was probably stock feed which felt the incidence of the ratbning devices most, a conclusion borne out by the estimates of the Division of Economics and Markets in the Appendixes.

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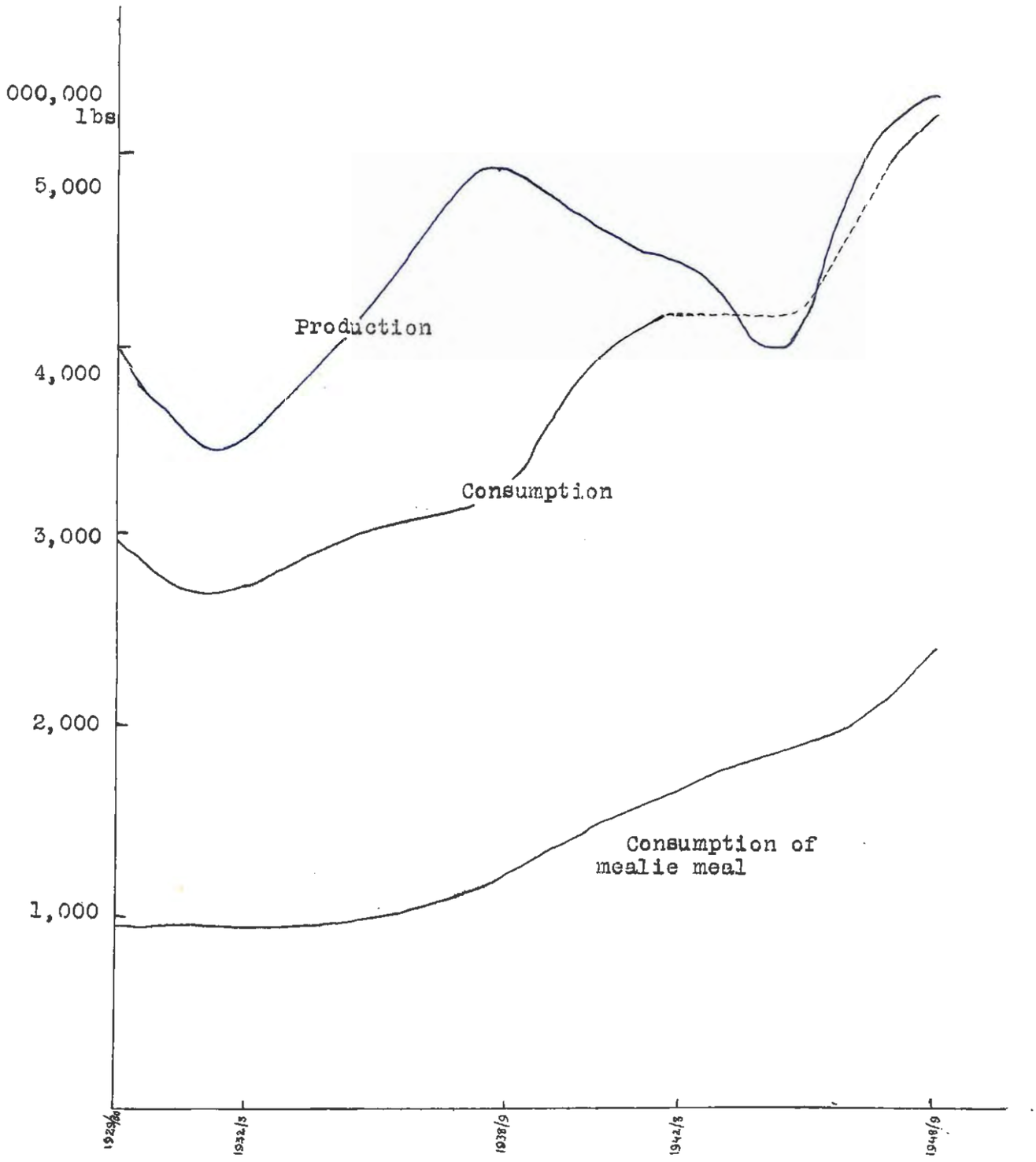
lbs

5,000 .....




Graph 2 : Production and Consumption of Maize in South Africa, 1930 - 49.

Table 1.

Area planted to maize, 1929/30 - 1947/8 (morgen).

| Year | Cape | Natal | Transvaal | O.F.S. | Total. |
|---|---|---|---|---|---|
| 1929/30 | 143,861 | 203,136 | 1,231,958 | 1,358,971 | 2,928,416 |
| 1933/4 | 213,200 | 193,377 | 1,155,843 | 1,231,383 | 2,793,803 |
| 1934/5 | 143,861 | 165,208 | 1,195,119 | 1,302,727 | 2,806,915 |
| 1935/6 | 131,168 | 161,023 | 1,045,851 | 1,102,673 | 2,440,715 |
| 1936/7 | 179,059 | 178,587 | 1,195,194 | 1,400,854 | 2,953,694 |
| 1937/8 | 169,607 | 174,646 | 1,102,937 | 1,174,461 | 2,621,651 |
| 1938/9 | 178,675 | 167,264 | 1,183,682 | 1,406,615 | 2,936,236 |
| 1939/40 x | 176,606 | 178,848 | 1,265,259 | 1,391,249 | 3,011,962 |
| 1940/1 x | 201,387 | 176,721 | 1,251,084 | 1,390,791 | 3,019,983 |
| 1941/2 x | 196,260 | 154,660 | 1,138,085 | 1,265,943 | 2,754,948 |
| 1942/3 x | 244,866 | 164,266 | 1,307,355 | 1,542,738 | 3,259,225 |
| 1943/4 x | 270,349 | 155,743 | 1,321,537 | 1,475,669 | 3,223,298 |
| 1944/5 | | | | | |
| 1945/6 | 206,296 | 169,387 | 1,277,721 | 1,352,125 | 3,005,529 |
| 1946/7 | 204,931 | 187,935 | 1,381,417 | 1,659,733 | 3,434,016 |
| 1947/8 | 211,378 | 155,823 | 1,384,193 | 1,706,642 | 3,458,036 |

x Estimates
Source : Union Year Books.

## APPENDIX

The following four examples have been prepared to illustrate the mechanism of the export quota system and the Government guarenteed price for quota certificates, and its effect on the local market.

Example 1. Suppositions : (a) 50% export quota.
(b) Export value = 5/6 per bag.
(c) Guarenteed price = 3/6 per bag.

Trader A.
sells 4 bags on the export market 22/-
sells 2 certificates 7/-
buys 4 bags on the local market @ 7/3 29/-

Trader B.
buys 4 bags on the local market 29/-
buys 2 certificates 7/-
sells 4 bags on the local market @ 9/- 36/-

Example 2. Suppositions : (a) 75% export quota.
(b) Export price = 5/6 per bag.
(c) Guarenteed price = 3/6 per bag.

Trader A.
sells 4 bags on the export market 22/-
sells 1 certificate 3/6
buys 4 bags on the local market @ 6/4½ 25/6

Trader B.
buys 4 bags on the local market 25/6
buys 3 certificates 10/6
sells 4 bags on the local market @ 9/- 36/-

Example 3.
Suppositions : (a) 50% export quota.
(b) Export price = 4/6 per bag.
(c) Guarenteed price = 3/6 per bag.

Trader A.
sells 4 bags on the export market 18/-
sells 2 certificates 7/-
buys 4 bags on the local market @ 6/3 25/-

Trader B.
buys 4 bags on the local market 25/-
buys 2 certificates 7/-
sells 4 bags on the local market @ 8/- 32/-

Example 4.

Suppositions : (a) Export quota 50%
(b) Export value - 5/6 per bag.
(c) Guarenteed price - 5/- per bag

| | | |
|---|---|---|
| Trader A. | | |
| sells 4 bags on the export market | 22/- | |
| sells 2 certificates | 10/- | |
| buys 4 bags on the local market @ 8/- | | 32/- |
| Trader B. | | |
| buys 4 bags on the local market | 32/- | |
| buys 2 certificates | 10/- | |
| sells 4 bags on the local market @ 10/6 | | 42/- |

APPENDIX A.

## PRODUCTION AND CONSUMPTION OF MAIZE IN SOUTH AFRICA, 000LBS.

| Year | Production (A) | | | Total | Imports | Exports | Consumption | |
|---|---|---|---|---|---|---|---|---|
| | European | Native | | | | | | |
| | | On farms | Reserves | | | | | |
| | | | | | B | C | | D |
| 1929-30 | 3,452,138 | 306,735 | 718,251 | 4,477,124 | 82 | 1,245,824 | 3,231,382 | 3,131,400 |
| 1930-31 | 2,753,000 | | 448,600 | 3,201,600 | 52 | 364,692 | 2,836,960 | 2,957,000 |
| 1931-32 | 3,324,600 | | 482,200 | 3,806,800 | 6 | 538,881 | 3,268,015 | 3,258,000 |
| 1932-33 | 1,305,200 | | 363,000 | 1,668,200 | 66,669 | 244,966 | 1,489,903 | 1,649,900 |
| 1933-34 | 3,709,443 | 376,577 | 737,778 | 4,823,798 | 27,211 | 501,596 | 4,349,413 | 3,929,400 |
| 1934-35 | 2,999,079 | 280,374 | 432,759 | 3,712,212 | 352 | 1,000,698 | 2,711,866 | 3,051,900 |
| 1935-36 | 2,480,717 | 268,815 | 247,217 | 2,996,749 | 1,854 | 36,842 | 2,961,761 | 2,841,800 |
| 1936-37 | 4,582,149 | 459,895 | 593,644 | 5,635,688 | 7,192 | 1,713,940 | 3,928,940 | 3,978,900 |
| 1937-38 | 2,972,668 | 355,268 | 521,526 | 3,849,462 | 1,252 | 443,939 | 3,406,775 | 3,406,800 |
| 1938-39 | 4,732,071 | 480,274 | 591,590 | 5,803,935 | 594 | 1,424,905 | 4,379,624 | 4,129,600 |
| 1939-40 | - | - | - | 4,141,800 | 92 | 941,490 | 3,200,402 | 3,500,400 |
| 1940-41 | - | - | - | 4,864,800 | 314 | 383,025 | 4,482,089 | 4,282,100 |
| 1941-42 | - | - | - | 3,268,800 | 2 | 70,870 | 3,197,932 | 3,447,900 |
| 1942-43 | - | - | - | 4,867,200 | 14 | 4,482 | 4,862,732 | 4,362,700 |
| 1943-44 | - | - | - | 3,674,000 | 618 | 12,220 | 3,662,398 | 4,162,400 |
| 1944-45 | - | - | - | 3,676,000 | 143,008 | 2,234 | 3,817,774 | 3,817,800 |
| 1945-46 | 2,791,430 | 353,489 | 486,640 | 3,559,558 | 821,962 | 2,186 | 4,379,334 | 4,379,300 |
| 1946-47 | 3,784,256 | 486,833 | 639,532 | 4,910,621 | 270,457 | 108,969 | 5,072,109 | 4,872,100 |
| 1947-48 | 5,101,554 | 552,912 | 769,433 | 6,423,899 | 29 | 672,531 | 5,751,397 | 5,051,400 |
| 1948-49 | 3,381,779 | 410,840 | 409,164 | 4,201,783 | 9 | 218,742 | 3,983,050 | 4,843,100 |

Notes : A From Agricultural Censuses except for years 1930/1 - 1932/3 when the final estimates of the Division of Economics and Markets have been used, and 1939/40 - 1944/5 when the figures have been obtained from the Official Year Books.
B Refer to calendar years.
C Refer to calendar years and include re-exports.
D Consumption adjusted to reflect changes in the level of stocks and in the amount of imports and exports when brought onto a seasonal basis.

APPENDIX B.

CONSUMPTION OF MAIZE IN SOUTH AFRICA, 000LBS.

| Year | Consumption | | | | Maize Ground at Mills | Direct consumption of maize by human beings |
|---|---|---|---|---|---|---|
| | Total | By Human Beings | By Animals | Seed | | |
| | A | A | A | A | B | C |
| 1929-30 | 3,100,000 | 2,400,000 | 600,000 | 80,000 | 1,386,266 | 1,013,730 |
| 1930-31 | 2,720,000 | 2,200,000 | 420,000 | 96,000 | - | - |
| 1931-32 | 2,800,000 | 2,200,000 | 560,000 | 40,000 | - | - |
| 1932-33 | 2,408,000 | 2,100,000 | 200,000 | 108,000 | 1,286,832 | 813,170 |
| 1933-34 | 3,140,000 | 2,500,000 | 540,000 | 92,000 | 1,356,776 | 1,143,220 |
| 1934-35 | 3,040,000 | 2,400,000 | 560,000 | 76,000 | 1,535,436 | 864,560 |
| 1935-36 | 2,900,000 | 2,400,000 | 360,000 | 140,000 | 1,418,534 | 981,470 |
| 1936-37 | 3,160,000 | 2,600,000 | 440,000 | 120,000 | 1,593,840 | 1,006,160 |
| 1937-38 | 3,080,000 | 2,500,000 | 460,000 | 120,000 | 1,723,326 | 776,670 |
| 1938-39 | 3,160,000 | 2,600,000 | 440,000 | 120,000 | 1,901,888 | 698,110 |
| 1939-40 | 3,660,000 | 2,700,000 | 800,000 | 160,000 | 1,880,048 | 819,950 |
| 1940-41 | 4,020,000 | 2,800,000 | 1,100,000 | 120,000 | 1,879,148 | 920,850 |
| 1941-42 | 4,040,000 | 2,800,000 | 1,100,000 | 140,000 | 2,111,918 | 680,080 |
| 1942-43 | 4,240,000 | 2,860,000 | 1,200,000 | 180,000 | 1,856,158 | 1,003,840 |
| 1943-44 | 3,980,000 | 2,800,000 | 1,000,000 | 180,000 | 2,214,450 | 585,550 |
| 1944-45 | 4,120,000 | 2,800,000 | 1,140,000 | 180,000 | 2,368,760 | 431,240 |
| 1945-46 | 4,100,000 | 2,860,000 | 1,060,000 | 180,000 | 2,133,240 | 726,760 |
| 1946-47 | 4,520,000 | 2,900,000 | 1,420,000 | 200,000 | 2,382,212 | 517,790 |
| 1947-48 | 4,960,000 | 3,000,000 | 1,760,000 | 200,000 | 2,908,452 | 91,550 |
| 1948-49 | 5,220,000 | 3,100,000 | 1,880,000 | 240,000 | 3,084,148 | 15,850 |

Notes : A Estimates of the Division of Economics and Markets.
B From Industrial Censuses.
C Obtained by subtracting maize ground at mills from the estimate of consumption of maize by human beings. This is based upon the assumption that all maize ground is intended for consumption by human beings, one obviously not correct but necessary in view of the absence of any statistical data enabling the writer to do otherwise. It is probable that since the lifting of restrictions on the feeding of livestock, the consumption of mealie meal and other forms of ground maize by animals has increased, a fact which would partly account for the sharp drop in these figures.

Chapter 3.

DAIRY

In this discussion on the production and consumption of dairy products in the Union butter and cheese will be dealt with in a certain amount of detail, but other products like fresh and condensed milk which would conveniently fall under this heading, will unfortunately receive only cursory treatment. This is made inevitable by the absence of reliable statistics on any dairy products other than butter and cheese and much as it was hoped to deal with fresh milk in particular in a detailed manner,(1) that has not been possible. It must be further stressed at this stage, that the discussion of both butter and cheese will be concerned mainly with the creamery and factory products, the reason once again being a paucity of statistical data. As can be seen from Appendix A (2) the production of farm butter was only recorded for the years 1929-30, 1933-39, and 1945-47 while the position of farm made cheese is roughly similar. It appears however, that the production of farm butter remained fairly constant between 1933-4 and 1938-9, during which period the output of creamery butter was doubled, although it is possible that the quantity of butter produced on farms has declined during recent years. In the case of cheese, the farm made product is insignificant when compared with the factory made product, it being only about 2% of the latter in 1945-6.

Before the 1929-30 season the Union had been on balance a net importer of both butter and cheese(3) and in its report on

(1) The best evidence relating to the consumption of fresh milk is that obtained from the Division of Economics and Markets (see page 98) In the case of condensed milk, production figures are not published.
(2) See page 967 .
(3) Balance of trade: Butter and Cheese 1923/4-1928/9. Net import (x), net export (-).

| | 1923/4 | 1924/5 | 1925/6 | 1926/7 | 1927/8 | 1928/9 |
|---|---|---|---|---|---|---|
| Butter | x 3137 | x 1100 | x 1090 | x 2254 | x 3640 | x 3580 |
| Cheese | x 895 | x 24 | x 2041 | - 82 | x 372 | x 432 |

Source: Report of N.M.C. on Marketing Boards, U.G. 27/47.

/the

the industry[1] the Board of Trade and Industries stressed that dairying was considered mainly as a subsidiary enterprise and as such the importance of winter feeding, of herd improvement and other important matters did not receive the attention they warrented. The majority of cows milked were of a very poor standard and average yields exceedingly low; in one district considered suitable for dairying, an informal inquiry showed an average yield of 2½ gallons per week, or 130 gallons per annum. The report also stressed the fact that costs in the manufacturing part of industry were exhorbitant and prevented the local creameries competing on the export market or paying improved prices for butterfat and cheesemilk. In 1925-6 the average output per creamery of the 73 creameries in the Union was only 190,000 lbs compared with 1,200,000 lbs for 42 creameries in Queensland while the position with regard to the manufacture of cheese was even worse.[2] In such circumstances as these it was inevitable that its cost structure would be far higher since the advantages of large scale economics would be lost.

Nevertheless the Board was convinced that the Union was a potential dairying country and expressed the view that many of the difficulties would be overcome were the country to develop an export trade of dairy produce - the form in which mealies should be exported. That was the view expressed in 1927 but when production did reach the level where a "surplus" appeared during the two excellent seasons of 1928-9 and 1929-30 prices on the London market had already begun to fall.[3] There was therefore, a twofold need for some

(1) The Dairy Industry : Report No. 81 of 1927.
(2) U.G. 27/47. pp 112.
(3) Price Indices of 1st Grade Australian and New Zealand Butter and Cheese - London.

| | Butter | Cheese |
|---|---|---|
| 1926/7-1928/9 | 100 | 100 |
| 1929/30 | 83 | 87 |
| 1930/1 | 66 | 63 |
| 1931/2 | 61 | 66 |
| 1932/3 | 49 | 52 |
| 1933/4 | 43 | 51 |
| 1934/5 | 52 | 52 |

/co-ordinated

co-ordinated form of marketing.

First in pursuance of the state policy of protecting primary industry (1) it was imperative that local prices of butter and cheese be not allowed to fall to the levels ruling on the London market which soon became the only free one in existence, and where prices were accordingly even lower because of dumping. There was further the view expressed by the Department of Agriculture that in the long run South Africa would be well advised to maintain a regular export trade in dairy products partly as a result of the world supply position of maize and partly because the existence of a "surplus" might mean the easier attainment of stability of prices on the internal market. In these circumstances a Dairy Industry Control Board was established by Act of Parliament in September 1930 (2), the primary aim being to combat the slump in dairy prices and to achieve stability in the general level of prices in the industry.

For this purpose the Board was empowered to enforce compulsory butter and cheese export determinations on a proportionate basis between factories and to subsidise exports from the proceeds of a levy on production of butter, butter substitutes and cheese. A total embargo on the importation of butter and cheese except through or with the consent of the Board was also introduced. While the Board had no power actually to fix prices to be paid to the producer, it was able by such means as withholding payment of subsidy to any factory considered to be paying unduly low prices, to maintain some level which, although not contrary to the falling general price level, was nevertheless appreciably higher than that ruling on export markets. (3)

(1) There already existed import duties designed to protect and retain the local market for the South African producer, although they did not apply to imports from South West Africa.
(2) Act No. 35 of 1930.
(3) In 1933/4 at the lowest point on the overseas market, the "premium" on the local market amounted to 10d per lb for butter and 9d for cheese.

/Although

Although the Dairy Board was never able to achieve complete stabilization of prices to the producer, which were broadly speaking dependent upon the percentage of the production to be exported annually and the prices on both export and local markets, it is obvious that by maintaining prices at levels higher than what they would have been had the free-play of the pricing system been allowed to operate, an incentive was given for the expansion of production at a time when the general level of economic activity did not encourage any rise in consumption. This movement of the two factors, production and consumption, in opposite directions was further intensified by the policies of the Department of Agriculture and its Division of Dairying aimed at improving the dairy herds of the country and remedying the position as found by the Board of Trade in 1927. In August-September of that year a revised mild-recording scheme was introduced, the whole aim and object of which was to eliminate the unprofitable cows and to "rid the country of any shadow of doubt that dairying does pay when it is properly carried on."(1) By establishing records of cows included in registered herds it was hoped that dairying would be rationalized and farmers would tend to regard it as a specialized branch of farming.

Two successive years of drought in 1932/3 and 1933/4 resulted in the Union being on balance an importer of butter. It should be stressed here however, that the perishable nature of the products makes it impossible to store them for long periods even in cold storage, and the fact that the production is so very variable makes any planning of disposal by some central body an extremely difficult task. Thus for example a dry spring in 1932 meant that it was necessary to import butter but with the sudden rains production increased so

(1) "Milk Recording Advances in the Transvaal", "Farming in South Africa", July, 1929, pp 187.

/enormously

enormously that within the space of a month, a surplus of production over consumption was recorded making export necessary.

After a peak was reached in February, production tailed off as quickly as it had increased at the end of 1932 and so from April 1933, all export of butter was prohibited. The position with regard to 1934/5 was strikingly similar - a low winter production, lower in fact than during the disastrous 1933 drought, importation from South West Africa to satisfy requirements over the spring followed by welcome November rains and a complete transformation with December production the highest on record for that month. In January export was recommenced and bearing in mind the lessons of the two previous years when in certain instances exportation and importation were almost simultaneous, the Export Executive Committee of the Dairy Board followed a conservative policy and at the end of August, 1935 stocks of butter in the Union amounted to almost 4,000,000 lbs.

There was considerable criticism from certain quarters levelled at this conservative policy but with the varying climate of South Africa the difficulties of a planned system of marketing were again exemplified. While it was recognised as financially unsound to incur heavy expenses in storing large quantities against some contingency likely to occur once during a number of years, the anomaly of exporting butter under a bounty and subsequently importing supplies to meet a shortage, could not be overlooked.

In the powers granted to the Dairy Board was that to impose a levy on butter and cheese manufactured by creameries or factories but whereas farm cheese also bore the 1d per lb levy in the case of butter made on farms the position was that only farmers selling more than 50 lbs per month were liable for the levy, and then only on the quantity sold in excess of the 50 lbs. Therefore not only did the farm butter maker (1) escape

(1) Defined as a person selling less than 50 lbs per month.

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the levy completely, and the maker of farm dairy butter[1] to a large extent, but neither was required to export, and thus escaped any share of the loss sustained through compulsory export by creameries.[2] Consequently they reaped the benefits of the scheme without contributing materially to the cost of bringing about such benefits. The Commission on Co-operation and Agricultural Credit[3] took a serious view of this discrimination, fearing that it would lead to a substantial increase in the production of farm butter to the detriment of creamery production, both in regard to quality and the amount to be exported. In actual fact however the production of farm butter seems to have remained fairly stable during the thirties with the possiblity of a decline during the war years.

Production during 1935-6 again showed a considerable increase and the percentage to be exported was set at 35.5 compared with 31.7 in 1934-5 and 13.1 in the year before that. The fact that this followed on another good season meant that the Board's limited funds were far from adequate to stabilize the price to producers. In 1934-5 for instance while the loss on export was estimated at 1.9d per lb over the total creamery production the Board was able to pay subsidies out of its current revenue plus accumulated funds to reduce this "gross loss" to 4d per lb. For the following year, however, the gross loss was estimated at 2.1d and with no accumulated funds the creameries had to bear a total loss, including the Board's levy, of 2.7d per lb meaning that the margin between butter and butterfat prices was correspondingly increased. Assuming the export parity and bounty to remain constant, the greater the amount exported the greater will be the gap between prices to the producer and the consumer.

As early as 1935 it was stressed by the Director of

(1) One selling more than 50 lbs per month.
(2) Export of farm butter was not prohibited but its generally inferior quality prevented it from entering into foreign trade.
(3) U.G. 16/34 pp 63-4.

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the Division of Dairying in his Annual report that the levy and bounty scheme could never be considered anything more than temporary and when the export quota rose to near 40% it could not work. Restriction of production was considered impracticable but he suggested that quotas be set for producers at prices related to the local market, but deliveries in excess of the quota which would necessitate export should be paid for on a basis related to levels ruling on the export market. In short it had become obvious that export could not be regarded as an aim in itself but part of a general policy whereby no encouragement be given to producers in form of inflated prices, to extend production far above the level of home consumption.

In October ~~&~~ 1935 a scheme for the subsidized consumption of dairy produce for those most in need of these protective foods was introduced, to be administered by the Dairy Board. The basic principle upon which it was founded was a diversion of so-called "surplus" to local consumption at specially reduced prices. It had been originally intended that the scheme be administered by local co-ordinating committees of charitable organisations but following a poor response from municipalities, who were first approached, the Dairy Board itself adopted the administration until 1940 when, following the report of the Departmental Committee, it was transferred to the Department of Social Welfare towards the end of 1944, and in February 1946 to the Controller of Food. Under this scheme milk and cheese ~~was~~ were issued free[1] to school and pre-school children and butter was made available to certain necessitious groups provided they continued to buy as much on the open market as they had previously.[2] Initially the

(1) Parents who could afford it were asked to pay 2/- per child per quarter.

(2) Butter was issued to charitable institutions on the basis of the difference between ½ lb per person per week and the amount previously purchased. As Regards distribution, certain standards were laid down:

1. Families consisting of 2 persons, whose total income did not exceed 6/- per day.
2. Families of 3 or more persons, whose total income did not exceed 8/- per day.
3. European railway workers who had to support families whose total income did not exceed 8/6 per day.

prices fixed for butter under the scheme were set at 9d, 8d and 7d for first, second and third grade respectively but while the distribution of milk and cheese to school children soon reached significant proportions the price fixed proved too high in the case of butter and it was not until it was reduced by 3d on all grades in December 1936, that the distribution of butter increased so much so that the maximum weekly ration per family was reduced to 2 lbs per family.

From the point of view of the producer there was no benefit under this scheme as the butter and cheese was supplied at export parity prices until the beginning of 1938 when the arrangement was modified to the effect that the Board was to supply the butter and cheese at export parity prices only during the months when output actually exceeded normal sales i.e. when there would presumably be a need to export. The cost of the scheme was borne by the Government, the Board itself and from 1937 the South African Railways and Harbours Administration.

It is evident from Table 1 (1) that the quantity of butter and cheese distributed under this subsidization scheme became quite considerable from about 1937 but while the amount of butter remained substantial until 1947-8 by which time in conformity with the Government Policy, it was gradually being replaced by margerine until June 1948 when its distribution was discontinued, the amount of cheese distributed under the scheme fell far sooner. The main reason would seem to be that the benefits to school children was likely to reach a point of saturation earlier than the distribution of butter, and secondly that it was later superceded by the National School Feeding Service so that only children of pre-school age remained under the "State aided" scheme. Also it must to some extent, have been substituted for by milk powder which was

(1) See page 94 .

/distributed

distributed in those areas where fresh milk was not available instead of cheese as was previously the case. The distribution of butter did in fact reach such proportions that in June 1939 the price at which it was supplied was increased by 2d per lb, and a reduction was made in respect of the income level of Coloureds able to receive butter under the scheme.(1) The latter step was important since Cape Town received 1/3 of the butter distributed under the scheme and of that amount 89% went to Coloureds.(2)

On the assumption that the total amount of butter and cheese distributed under subsidization would have otherwise had to be exported it appears that exports of butter are understated by about 4,000,000 lbs each year between the years 1938-9 to 1944-5 and the peak of "exportation" was reached in 1939-40 i.e. the first season of the war. In the case of cheese the peak coincides with that when subsidization was not considered. The importance of this scheme in the present discussion is mainly in the relationship between the value of the consumption of these dairy products and the level of National Income since it means that it is necessary to value the ordinary and the subsidized consumption at different prices. But of that more will be said at a later stage.

An interesting fact arose during the 1937-8 season when due to extremely poor rains over the spring months of 1937, production during the five months September - January, 1938 was 4,000,000 lbs less than in the previous season. Although production did recover later in the season total creamery output was lower than in 1936-7 to the extent of about 1,775,000 lbs whereas the production of factory cheese showed a rise of over 2,000,000 lbs. On this point the Director of Dairying stated "The increasing tendency amongst farmers to supply milk to cheese factories in preference to producing cream,

(1) For Europeans the limit was 6/- per day for families of more than two persons and 5/- for those of two persons: The limits for coloureds were reduced to 5/- and 4/- respectively.
(2) Annual Report 1939, Secretary for Agriculture. "Farming in South Africa", 1939 pp 489.

has probably been brought about by the relatively high price obtained for cheese as compared with that for butter, and consequently the apparently more attractive returns from selling cheese milk."(1) There does appear certain statistical support for this statement since the retail prices constructed by the Office of Census and Statistics show that whereas in 1929 the difference between the price of butter and price of cheese was approximately 6.5d (or 25% of the butter price) in 1936 the difference had dropped to 2.5d (or 15%). The prices for butterfat and cheesemilk also show a slight change in the same direction.(2) The significant point here is that it can be seen as the beginning of circumstances which brought considerable difficulties to the Dairy Board during the later war years when the relationship between production and consumption had been completely changed.

It is significant too to consider what had been affected in the decade 1929-39 as regards the efficiency of production both in the primary and secondary spheres. It has already been noticed how the Board of Trade condemned both in their 1927 Report; the revitalisation of milk recording attempted to improve the efficiency of the primary producer, and the system of registration of creameries and factories attempted to remove the second source of inefficiency. It appears that production figures have improved in regard to both registered and non-registered herds.(3) While the improvement is not so noticeable for registered dairy herds apart from a definite tendency for a rise in the total

(1) Annual Report of Secretary for Agriculture 1938, "Farming in South Africa" 1938 pp 543.

(2) Indices of prices of Butterfat and Cheesemilk (1936/7 - 1938/9 = 100)

| | Butterfat | Cheesemilk |
|---|---|---|
| 1936/7 | 88 | 91 |
| 1937/8 | 109 | 110 |
| 1938/9 | 103 | 99 |

(3) See Table 2 page 94 .

/butterfat

butterfat content, in the case of non-registered cattle the improvement is obvious. This would seem to point to the fact that there was a decided general improvement and not one confined to a few quality herds. An accompanying improvement is noticeable as far as technical efficiency on the manufacturing side is concerned for the average overrun on all grades of butterfats[1] increased from 19.5% in 1934-5 to 20.3% in 1938-9.

As far as the manufacturing industry was concerned, costs continued to be high due to the extremely variable deliveries between seasons forcing creameries and factories to maintain machinery, storage etc. to deal with the maximum deliveries. The Dairy Board had not been able to influence the seasonal production to any marked extent and also owing to its small financial resources it was not able to stabilize the incidence of the export loss and the creameries had still to bear the cost of exporting to a market where prices ruled at lower levels than those in South Africa. There was however, one indirect means in which the Board did influence the average manufacturing cost quite considerably viz. through the registration of creameries and factories, in which the Board usually adopted a conservative policy. It is obvious from Table 3[2] that the manufacturing and selling costs declined appreciably for butter and the reason must be primarily that the average output per creamery was increasing enabling more manufacturing concerns to attain the benefit of a lower average unit cost associated with large scale economies.[3] In the case of cheese the reduction is not so considerable, but remembering that prices in general were rising

(1) The percentage by which the quantity of Butter manufactured exceeds the Butterfat used in its manufacture.
(2) See page 84 .
(3) Average costs of manufacture of creameries and factories by size groups, 1944.

| Creameries: | Net cost per lb | Factories: | Net cost per lb |
|---|---|---|---|
| over 2,000,000 lb | 2.235 | over 300,000 lb | 2.271 |
| 1,000,000-2,000,000 | 2.499 | 100,000-300,000 | 2.871 |
| 500,000-1,000,000 | 2.872 | 50,000-100,000 | 3.243 |
| 250,000-500,000 | 3.112 | less than 50,000 | 9.161 |
| less than 250,000 | 5.895 | | |

Source U.G. 27/47 pp 125

/from

from about 1933-4 the fact that manufacturing costs showed no appreciable increase itself proves that the "real" cost of the manufacturing process was lower in 1937-8 than in 1930-1.

After the passage of the Marketing Act, and in view of the limited range of the 1930 Dairy Control Act, a scheme of considerably wider scope was introduced in August, 1939. Included in the new scheme was control over the sale and distribution of fresh milk in the main urban areas but when this section was declared ultre vires by the Supreme Court at the instigation of certain fresh milk interests, the old Board automatically came back in existence until October, 1940 when a further scheme was introduced under the Marketing Act. Under this Act the Dairy Board was granted control over factory cream, creamery butter, farm and dairy butter, cheese-milk, factory cheese, farm cheese, and factory cheese.(1) While the new scheme was based very largely upon the principles of the old one, it went much further in some respects. Prices of industrial milk and cream formerly indirectly stabilized between certain ranges, were fixed by the Board; agents were appointed on a commission basis to be the only channel for the distribution and sale of creamery butter and factory cheese; and finally the fixation of maximum retail prices. In order to equalize the incidence of losses on export or to the State-aided scheme, pools were to be operated for the sale of butter and cheese.

In an attempt to even out the seasonal fluctuations in deliveries to creameries and cheese factories the practise of paying a premium on butterfat during certain months of the year, introduced by the old Board in 1937 was continued and from 1942 the basic prices of cheesemilk and condensing milk were also increased.(2)(3)

(1) In February, 1941 condensing milk was included and in September of the same year condensed milk and milk powder were added.
(2) See Table 4 page 95 .
(3) Actually no winter premium was paid on condensing milk but its price was altered from time to time so as to be 1d above the full price for cheesemilk.

/Production

Production of butter and cheese continued to increase during the first two seasons of the war while according to the 1941 Annual Report of the Director of Dairying, the condensed milk factories processed a greater quantity than ever before. Consumption increased enormously in the case of butter by 13% in 1939-40 and 21% in 1940-1 and by .12% and 21% in respect of cheese. In the case of butter the local consumption had by 1940-1 caught up with the production, the level of export being accounted for by the fact that South Africa continued to import a large amount from South West Africa where production had increased enormously in the years before the war.(1) The reasons for these startling increases in the local consumption are largely to be found in the general economic condition of the times plus the needs of the fighting forces where it is highly likely that the per capita consumption of protective foodstuffs like butter and cheese is much greater than the same people would consume, on the average, in civilian life.

In 1941-2 butter production fell of by some 5½ million lbs, the reason being the drought which prevailed throughout the winter and spring months and secondly the fact that cheesemilk prices were fixed at more remunerative levels than those of butterfat during the seasons 1940-1 and 1941-2. The latter is also the main cause behind the fact that whereas butter production experienced the substantial decline that of cheese continued to rise. In terms of butterfat, the price of cheesemilk in the thirties was on the average about 2d higher per lb than cream. In 1940-1 the decrepancy had risen to 4.4d and in 1941-2 to as high as 6.9d and it seems that there must have been a definite encouragement for the producer to sell his milk to the cheese factory instead of to

(1) Output of creamery butter in South West Africa and the other protectorates increased from approximately 2,750,000 lbs in 1932-3 to 12,000,000 in 1939-40.

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the creamery despite the fact that the costs of producing cream would have risen to a lesser extent than production of cheesemilk since the former is more of an extensive form of farming hence less dependant on purchased feed. In terms of the milk equivalent the production of butter decreased by about 5% between 1940-1 and 1941-2 while cheese production rose by about 27%.(1) The fall in butter production necessitated the introduction of a mild form of rationing during the last few months of 1941 as it was not until mid-January, 1942 that production exceeded consumption. It should be pointed out here however, that the figure given in Appendix B(2) for the consumption of butter is probably too low since in its determination no adjustment has been made to allow for the fact that the trade figures refer to calendar years and the production and stock figures to the seasonal years, September - August. In view of this it is highly probable that consumption was in the region of 45-46 million lbs since the figures given for consumption in South Africa and neighbouring territories by the National Marketing Council(3) show it to be about 1,000,000 lbs higher in 1941-2 than the preceding year, in which case the consumption figure for 1942-3 would have to be correspondingly reduced to about 48,000,000 lbs.(4) It nevertheless remains that "there is no doubt that the consumption of both (butter and cheese) would have been much greater had supplies been available."(5)

A further important factor arising during 1942 was the

(1) Production of Butter and Cheese in terms of Milk equivalent 1935/6 - 1945/6 (000,000 gals.)

| | Butter | Cheese | | Butter | Cheese |
|---|---|---|---|---|---|
| 1935/6-1938/9 | 77.4 | 13.4 | 1942/3 | 100.6 | 18.5 |
| 1939/40 | 105.7 | 15.4 | 1943/4 | 98.4 | 17.0 |
| 1940/1 | 102.7 | 14.8 | 1944/5 | 90.2 | 17.8 |
| 1941/2 | 97.1 | 18.8 | 1945/6 | 79.9 | 16.2 |

(2) See page 97 .
(3) U.G. 27/47.
(4) In the Appendix this has not been done as there is no reliable means of checking the figures given by the N.M.C. and theirs for earlier years do no coincide with those produced by the writer.
(5) Annual Report of Director of Dairying, 1942 "Farming in South Africa" January, 1943.

/alteration

alteration in the amounts levied on sales of butter and cheese. The disadvantages of the levy system as applied to farm butter have been stressed above (1) and in 1939 the regulations were altered so that any farmer falling under the definition of "a farm dairy buttermaker" (i.e. selling more than 50 lbs per month) was to pay the levy of 1d per lb on all sales and not as previously only the amount by which the sales exceeded 50 lbs. Since 1942 however, export losses disappeared and so levy on creamery butter and factory cheese, reduced to 1d per lb in February 1940, were reduced still further to .04d and .05d respectively in 1942. However the Dairy Board continued to bear the losses of the State-aided scheme and with the possibility that export at a loss might re-occur, the levy on farm dairy butter and farm cheese was left unaltered at the 1d per lb level.

Production of butter recovered somewhat in the following season but the increase was by no means sufficient to meet the considerable rise in consumption, so that once again rationing was required to ensure an equitable distribution of the available supplies at retail prices which were not allowed to rise as much as they would have, had control been lifted. It was in the 1943-4 season that rationing began in real earnest.

Compared with a 1943 winter distribution of 85% of butter sold in the summer months of 1942-3, the rationing was intensified to 75% on the 9th September, but due to improved production during the spring the quantity available was increased to 87½% and a week later sales were allowed on an unrestricted basis. After the summer months the decline in production once again occurred and from 29th May 1944 butter supplies were distributed on the basis of 75% sales during February - March of 1944 and cheese supplies at 50%. So began the period

(1) See page 73 .

/of the

of the rationing of these two dairy products which was to last until November, 1947 in the case of butter and January, 1948 for cheese. In the Table (1) is shown the percentage of the consumption of butter and cheese during the base period, which was made available for consumption from June 1st, 1944 to the end of the 1948-9 season.(2) One of the most significant factors arising from this Table is that between the 1st July 1945 and 30th September 1947 it appears that cheese was in "freer" supply than was butter and therefore that the demand for cheese was being more fully met than was that of butter. On the other hand in fifteen months before and 2 years after that period there is every indication that the amount of butter available for consumption in relation to the level of demand, was greater than in the case of cheese. To explain these changes in relationship it is necessary to consider the pricing policy followed by the Dairy Board in these years.

We have examined the price relationship between butterfat and cheesemilk up to 1946/7 our finding being that the premium in favour of the latter in terms of pence per lb of butterfat increased to 7.6 in 1943-4 thereafter gradually declining to about 6d per lb in 1946-7. However in the last two seasons under review the decline was more rapid, in the summer months of 1947-8 it being only 4d and in 1947-8 only 2½d per lb. It would seem therefore that the premium of 6d was sufficient to counter-balance the greater increase in cost of producing cheesemilk in the season 1945-6 and 1946-7 but with costs of feed necessary in the more intensive cheesemilk areas still continuing to rise and the premium falling, it is obvious that the production of cream was becoming more remunerative to producers.

(1) See page 95 .
(2) The actual date on which rationing was introduced after the 1943/4 summer months was May 29th.
~~(3) See Table page~~ .

/In the

In the case of condensing milk we find that the premium over cheese-milk prices (in terms of butterfat content) decreased from an average of 6d per lb in the years 1936-7 to 1938-9 to 3d in the period 1942-3 to 1947-8 (1) and then showed a rise in the last season under review. The National Marketing Council maintains that "the diversion of milk from condenseries to cheese factories did not occur to any appreciable extent" (2) but even if this is so the fact remains that a smaller premium for condensing milk made producers tend to divert milk supplies from condenseries to the fresh milk market.

It is difficult to obtain any reliable data in connection with production and consumption of fresh milk in the Union yet most sources agree that the deliveries (i.e. production) of fresh milk increased to a greater degree than did production of either butter or cheese during the war. Remembering that the production of cheese-milk and condensing milk is more intensive than production of cream and therefore likely to be better situated in relation to the large urban centres it is evident that any diversion of supplies to the fresh market would have been at the expense of production of cheese and condensed milk. Prices to the producer of fresh milk rose considerably and the difference between them and condensing milk prices rose from 4d per gallon in 1938-9 to 11d in 1946-7. (3) In view of the fact that the price of condensing milk did not increase to the same extent as cheese-milk, the diversion to the fresh milk market was made at the

(1) Price fixation for condensing milk was introduced in 1942.
(2) U.G. 27/47 pp 121.
(3) Producers' prices of factory and fresh milk on the Witwatersrand 1938/9 - 1946/9.

| d. per gallon. | 1938/9 | 1939/40 | 1940/1 | 1941/2 | 1942/3 | 1943/4 |
|---|---|---|---|---|---|---|
| cheese-milk | 5.4 | 5.7 | 6.8 | 9.1 | 9.8 | 9.8 |
| condensing milk | 7.7 | 7.7 | 8.2 | 9.7 | 10.8 | 10.8 |
| fresh milk | 11.6 | 12.4 | 13.3 | 17.1 | 19.2 | 20.0 |

| | 1944/5 | 1945/6 | 1946/7 |
|---|---|---|---|
| cheese-milk | 11.0 | 11.9 | 12.0 |
| condensing milk | 12.0 | 12.9 | 13.0 |
| fresh milk | 20.5 | 22.0 | 24.0 |

/expense

expense of the production of condensed milk.

Instead of employing the price mechanism which would have been contrary to the policy of pegging prices and the cost of living, the authorities made arrangements for the diversion of milk from cheese factories to condenseries, compensation at first being paid by the Treasury and later by the recipients of fresh milk alone.(1) Neverthelesss the production of condensed milk fell considerably from 1942-3 and from the available evidence the lowest point would seem to have been in 1945-6 after which the greater production of milk and probably the improved relationship between condensing milk and cheese-milk prices, resulted in an increasing production.(2) During the years of extreme shortage of butter, cheese and condensed milk it is important to note that the consumption of fresh milk based upon the estimates of the Division of Economics and Markets, did not show any decline apart from 1944-5 while the urban consumption increased by about 23% between 1943-4 and 1946-7.(3) The position therefore seems to be that since total production of milk was not able to satisfy the demand for all purposes, fresh milk obtained first priority and after requirements for the fresh product had been met there was not sufficient to meet the full requirements of the manufacturing industries. The reasons for this phenomenon may be found in the fact that the sale of fresh milk is normally made on the contract basis, that is the producer, in order to obtain the best price is required to deliver a certain quantity per month and these producers, previously situated on the perimeters of the larger urban centres have now been extended through improved transport facilities, much further afield. For instance the

(1) It would seem therefore that during the years 1944-6, the comparative production figures for butter and cheese examined above underestimate the effect of the premium of cheese-milk prices over those for cream.
(2) See Table 4, page 95.
(3) See Appendix A, page 96.

/National

National Marketing Council remark:-

".....Most of the additional milk supply drawn into the Reef-Pretoria area has emanated from producers beyond the thirty mile radius. In the Cape Peninsula, there is also a definite shifting of the supply area to the Malmesburg region.....During the part two seasons (i.e. 1945-6 and 1946-7) the shortage of milk caused by drought, disease and scarcity of feedstuffs, has forced the Cape to draw milk regularly from factories as far away as Oudtshoorn and Robertson, while on the Rand and for military purposes in Pretoria almost every factory had to be tapped, from Bethal and Ermelo in the Transvaal, Ladysmith in Natal and Tweespruit and other centres in the Free State. In Natal there has been an even greater shift. Many supplies to the condensed milk factory at Escourt, which was formerly outside the fresh milk supply area, have become suppliers to the Durban milk market, most of the suppliers to the Donnybrook condensery have likewise shifted their patronage." (1)

The improved transport facilities and the more remunerative prices for fresh milk were then the major causes in extending the supply afea and tapping regions which had formerly produced cream or sold their milk to cheese factories or condenseries in the rural areas.

It is appropriate here to consider that product which has probably caused more disagreement between producers and consumers than any other, viz. margarine. As early as 1931 the following quotation appeared in "Farming in South Africa": "The greatest menace to the butter industry is the competition of margarine interests, since food margarine is often better in quality and cheaper in price than is bad butter." (2)

As long as there existed a "surplus" of butter, to be

(1) U.G. 27/47 pp 133.
(2) By B. Toens "Farming in South Africa", April 1931, pp 4.

/sold

sold on the export market, the dairy producers were safe from competition on the local market although it is stressed that on the overseas markets butter was being met by more and more substitutes. The argument of the economists and nutrition experts were based upon the fact that the "surpluses" were ones fixed not by any physical capacity to consume but merely by the purchasing power of the nation. Therefore, they continued, if margarine could be manufactured cheaper than butter, it was evident that it would fall within the means of more consumers. The arguments for subsidization of the dairy products, indeed all products which were being exported at prices less than the local levels, were based on the same assumption, but the attitude of the State seemed to be that while it was prepared to agree that a lower price would stimulate consumption, it maintained that the amount by which the price would have to fall in order that the whole surplus be taken up, would be too great. When for instance, the State Aided Scheme was in its infancy, it was found necessary to reduce the price of the first grade butter to 6d per lb (i.e. 1/1 less than the ordinary market price) before any appreciable amount was taken up.(1) It should be pointed out however, that consumption habits are notoriously slow to change and there might also have been a type of stigma attached to the purchase of "cheap" food on the part of the poorer, and generally highly sensitive classes. Nevertheless it is significant that as long as an export "surplus" did exist, the pressure of the dairy producers was strong enough to prevent the introduction of margarine into the South African market.

(1) The question of whether the cost of subsidizing exports was higher or less than the cost which would be incurred in disposing of the "surplus" on the local market at subsidized prices depends on the elasticity of demand on the local market. The State and producers were then assuming an inelastic demand for butter and cheese. Dr. J.N. Reedman in an article "State Policy and Nutrition" (R.R. Vol. VI No. 1, 1939 pp 32) points out that experience in England pointed to an elastic demand for Dairy products which are normally but little consumed by poorer families.

/when

When the supply position was reversed during the early years of the war, the margarine "controversy" once again came to the fore. The circumstances which then prevailed were hardly those in which the production of a commodity which could do much to relieve the malnutrition rife among the poorer classes, should be deliberately prohibited in the interests of the producer. Furthermore, the State-Aided Scheme which in the thirties had been using what would otherwise have been surplus butter at the ordinary price levels within the country, was during the war years, competing with the local market and diverting between 3,000,000 lbs and 4,000,000 lbs of butter per annum from unsubsidized consumption. It was obvious then that the continued prohibition of margarine could not be countenanced as being in the interests of the country, and so following recommendations of the National Nutrition Council under War measure 20 of 1945 the production of "interim" margarine commenced in November 1945 to be replaced on 21st July 1947 by "table" margarine to be made available in such quantities that it could be substituted for State-aided butter in the nine controlled urban areas. Finally the distribution of State-aided butter in rural areas terminated on June 7th, 1948. (1) The weekly ration to persons entitled to purchase margarine was 2 lbs per married couple plus ½ lb for each additional member and 1 lb for every single person. The price was originally fixed at 1/7 per lb but was gradually reduced until in June 1949 it was 1/4, 3d of which was Government subsidy.

(1) The following income groups were entitled to purchase margarine through registered "butter" distribution committees.
Europeans: Families with a combined income of less than £208 per annum and single persons earning less than £90 per annum
Coloureds: Families with a combined income of less than £108 per annum and single persons earning less than £48 per annum
Natives: No income scales were applicable.

/The

The attitude of the producers towards margarine had not changed however, and is crystalized in the following statement made in the Chairman's address at the 1947 General Meeting of the South African Creameries Association:-

"It is impossible to foresee what injury may be done to the country as a whole, and to agriculture in particular, if the Dairy Industry were compelled to compete with a rival undertaking such as is contemplated in the establishment of margarine factories.....It would appeal to those in authority to reconsider the position even at this late hour."(1)

Commenting on this address Dr. C.W. Abbott(2) stressed the fact that margarine was primarily intended to reach the poorer parts of the community where butter at 2/7 per lb was far too expensive,(3) and that free and unrestricted sale was not envisaged. From the estimates of the National Nutrition Council, he quoted the consumption of butter per head among Europeans as 1.2 oz per day - a figure very low for optimun nutrition. Taking 1.5 oz per day per person as a desirable ration the total requirements of the whole population was about 350,000,000 lbs so that the deficiency from a nutritional point of view amounted to approximately 300,000,000 lbs. It would be many, many years before this deficiency was ever bridged.(4) Margarine, he pointed out, was a complement to, and not a substitute of butter.

Before concluding, it is interesting to note that for the season 1948-9 the recorded milk production figures in regard to registered cows showed a decided improvement both

(1) Quoted in "Margarine", by Dr. C.W. Abbott, "Farming in South Africa" January, 1948 pp 7.
(2) Quoted in "Margarine", by Dr. C.W. Abbott, "Farming in South Africa" January, 1948 pp 7.
(3) In actual fact of course the market price did not fairly reflect the supply position as there was rationing of about 75% at the time.
(4) The production target of margarine under licence had been initially set at 7,000,000 lbs and was raised in January, 1949 to 12,000,000 lbs. Actual production in 1948/9 amounted to 11,400,000 lbs.

/in percentage

in percentage of butterfat and production of milk over the 1938-9 figures.(1)

SUMMARY

The period under review automatically falls into 2 sections, the first in which the Union was on balance a net exporter of butter and the second where the supply conditions were completely the opposite. The dividing line between these 2 periods is on the basis of plain figures, about 1941-2. If one however, takes into account the fact that since 1937-8 substantial quantities of butter had been distributed under the State-Aided Butter and Milk Scheme, and assumes that all consumed under this head would otherwise have been exported, the turning point becomes 1942-3. The position in regard to cheese is slightly different in so far as the export trade had never risen to such significance as had the exportation of butter. During the years when exports of butter were at their highest, the quantity exported was between 20-25% of total creamery production, the percentage of factory cheese exported very rarely rose above 15%. This was one reason why the change in the distribution pattern of dairy products is better revealed in the case of butter than it is for cheese.

If the Union was an exporter of butter and cheese, it did so under conditions where the price realized on the local market was higher than that received from export. Under the Dairy Control Act of 1930 a levy was imposed on all butter and cheese sold except that made by farm buttermakers, in order to pay a bounty on all exports. The local price was therefore maintained at such a level as to ensure producers of a reasonable price i.e. to encourage the maintenance of a level of production which was in fact not in

(1) A total of 4204 registered cows were tested, the average production figures being: 9228 lbs of milk: 3.955% of butterfat and 364.944 lbs of butterfat. C.F. Table 2 page 94 .

/line

line with the fundamental economic functions of supply and demand. The many criticisms of such a practise whereby such an essential protective foodstuff was being exported and sold at prices less than those at which local consumers could buy the product, found expression in the introduction of the State-Aided Butter and Milk Scheme in 1935-6 under which school children and the poorer classes received butter cheese and milk either free or at very low cost.

In 1940 a new marketing scheme came into force under the Marketing Act of 1938. Control was far wider and where under the old scheme prices to producers could only be indirectly affected, they were now fixed as were retail prices of all the dairy products apart from fresh milk, which following the decision of the Supreme Court of 1940, remained outside control.

During the period 1929-30 - 1940-1 the production of butter had increased by approximately 125% and cheese by just over 100% but with control over producer prices vested in a certain body it was inevitable that the prices for the different products would at certain times, be "out of gear". When one has taken into account the fact that cream production is more extensive than production of cheese milk, and therefore more dependent upon climatic conditions, it can only be an unfavourable price for cream in relation to cheese-milk prices that could result in a fall in the production of butter by over 40% between 1940-1 and 1946-7 while production of cheese fell by less than 15%. A study of the prices fixed by the Dairy Industry Control Board do reveal the fact that in the years 1940/1-1943/4 in particular cheese-milk prices were on a more favourable plane than prices for butterfat and it is significant that whereas the production of butter fell considerably in 1941-2 that of cheese continued to rise until 1942-3.

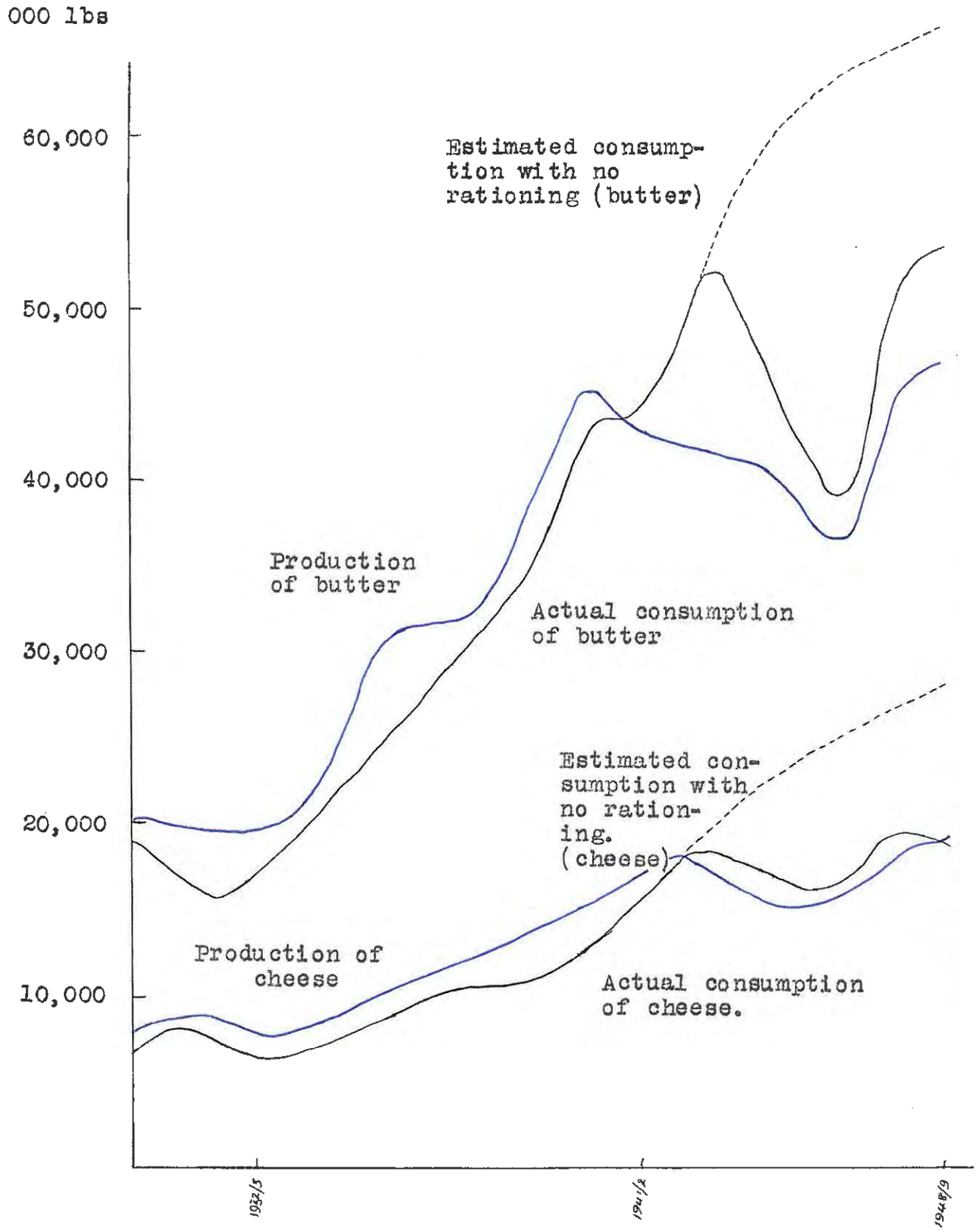
It must be admitted that lack of reliable statistics relating to the production and consumptiontof fresh milk

/detracts

detracts a great deal from the conclusions that can be reached from this discussion. It would appear however, ~~that~~ on the evidence of the estimates of the Division of Economics and Markets and certain Government Reports, that the actual total production of fresh milk did not decline in South Africa in these years, or if it did to a much smaller extent than did production of butter and cheese.(1) This is to be accounted for by the greater demand for fresh milk which was met from areas which had previously supplied milk for industrial purposes, and the greater premium offered by the uncontrolled fresh-milk prices over cheese-milk and other prices fixed by the Board. The combined effect of a continued increase in demand for butter and cheese and the diversion of milk from their production to the fresh milk markets resulted in a substantial gap appearing between supply and demand of these two and other products like condensed milk. The result was the imposition of rationing in 1942-3 which became most severe in 1946-7.

The complete reversal of the picture is revealed by the decision on the part of the Government in 1945 to allow the production of a certain quantity of margarine in the Union. This commodity had always been considered by the dairy producers as their greatest competitor and the prohibition over its production in the thirties and early forties had obvi ously been to their advantage if not to the advantage of the Union as a whole. To follow such a policy during circumstances of severe shortage could not be countenanced even in spite of continued opposition of dairy interests, and so prohibition was abandoned and the manufacture of 7½000,000 lbs of margarine, later increased to 12,000,000 lbs was permitted, most of it to be distributed, under Government subsidy of 3d per lb, to the poorer classes in place of butter.

(1) See ~~Table~~ Appendix A , page 98 .




Graph 3: Production and Consumption of Butter and Cheese, 1929 - 49.

Table 1.

Quantities supplied under the State-Aided Milk and Butter Scheme.
000 lbs.

| Year | Butter | Milk '000 gals | Cheese | Milk Powder | Margarine |
|---|---|---|---|---|---|
| 1935-6 | 191 | 474 | 221 | - | - |
| 1936-7 | 584 | 1,480 | 1,229 | - | - |
| 1937-8 | 2,583 | 1,486 | 1,189 | - | - |
| 1938-9 | 4,094 | 1,793 | 1,187 | - | - |
| 1939-40 | 4,156 | 1,912 | 1,119 | - | - |
| 1940-1 | 4,205 | 1,912 | 893 | - | - |
| 1941-2 | 4,058 | 1,467 | 177 | - | - |
| 1942-3 | 4,026 | 1,236 | 589 | 8 | - |
| 1943-4 | 3,709 | 1,263 | 468 | 9 | - |
| 1944-5 | 3,557 | 624 | 66 | 12 | - |
| 1945-6 | 3,198 | 282 | - | 22 | 228 |
| 1946-7 | 2,814 | 249 | - | 33 | x |
| 1947-8 | 1,399 | 237 | - | 31 | 2,807 |
| 1948-9 | 210 | 414 | - | 26½ | 6,488 |

x not available.
Source : Union Year Books.

Table 2.

Milk Production : 1932/3 - 1938/9.

| Year | Number of cows | Milk lbs. | Percentage Butterfat | Butterfat lbs. |
|---|---|---|---|---|
| Registered Herds: | | | | |
| 1932-3 | 1,244 | 8087.3 | 3.696 | 248.939 |
| 1933-4 | 1,449 | 8210.9 | 3.763 | 308.970 |
| 1934-5 | 1,838 | 8162.9 | 3.570 | 291.410 |
| 1935-6 | 2,485 | 7918.4 | 3.749 | 296.888 |
| 1936-7 | 2,495 | 8042.3 | 3.778 | 303.804 |
| 1937-8 | 2,473 | 8663.7 | 3.696 | 320.192 |
| Unregistered Herds: | | | | |
| 1932-3 | 10,466 | 5650.1 | 3.481 | 196.700 |
| 1934-5 | 9,558 | 5247.0 | 3.713 | 194.825 |
| 1935-6 | 10,274 | 5517.0 | 3.542 | 195.433 |
| 1936-7 | 10,562 | 5945.3 | 3.686 | 219.148 |
| 1937-8 | 10,706 | 6104.2 | 3.599 | 219.699 |
| 1938-9 | 12,527 | 6551.7 | 3.724 | 244.010 |

Source : Annual Reports of the Division of Dairying.

Table 3.

The number of creameries and cheese factories, average output, and average unit costs of manufacture and sale of butter and cheese.

| Year | No. of factories | | Output per factory | | Manufacturing Expenses | | Selling Expenses | |
|---|---|---|---|---|---|---|---|---|
| | Butter | Cheese | Butter | Cheese | Butter | Cheese | Butter | Cheese |
| 1929-30 | 70 | | 260 | | 2.74 | | 1.13 | |
| 1930-1 | 68 | 130 | 305 | 68 | 2.63 | 2.21 | .96 | 1.13 |
| 1931-2 | 66 | | 323 | | 2.47 | | 1.01 | |
| 1932-3 | 63 | 115 | 325 | 66 | 2.47 | 2.26 | 1.07 | 1.24 |
| 1933-4 | 60 | | 311 | | 2.53 | | 1.14 | |
| 1934-5 | 57 | 105 | 465 | 93 | 2.16 | 2.00 | 1.10 | 1.08 |
| 1935-6 | 56 | 105 | 575 | 104 | 1.98 | 1.99 | 1.29 | 1.22 |
| 1936-7 | 56 | 105 | 547 | 100 | 2.15 | 2.47 | 1.21 | 1.47 |
| 1937-8 | 54 | 105 | 577 | 121 | 2.24 | 2.21 | 1.29 | 1.19 |
| 1940-1 | 52 | 102 | 865 | 132 | 1.95 | 2.33 | .98 | 1.11 |
| 1941-2 | 51 | 98 | 793 | 166 | 2.09 | 2.19 | 1.06 | 1.15 |
| 1942-3 | 51 | 95 | 829 | 171 | 2.10 | 2.47 | 1.08 | 1.16 |
| 1943-4 | 50 | 91 | 854 | 173 | 2.33 | 2.64 | .95 | 1.14 |
| 1944-5 | 50 | 88 | 781 | 187 | 2.68 | 3.07 | 1.00 | 1.17 |

Source : U.G. 27/47 pp 130.

Table 4.

Weighted average annual prices of butterfat, cheese-milk and condensing milk, 1936/7 - 1946/7.

| Year | Butterfat | | Cheese-milk | | Condensing milk | |
|---|---|---|---|---|---|---|
| | Price per lb.[x] | (1) Index | Price per gal.[x] | (1) Index | Price per gal. | (1) Index |
| 1936-7 | 11.8 | 88 | 5.0 | 91 | 7.3 | 97 |
| 1937-8 | 14.6 | 109 | 6.0 | 110 | 7.3 | 101 |
| 1938-9 | 13.8 | 103 | 5.4 | 99 | 7.7 | 102 |
| 1939-40 | 14.3 | 107 | 5.7 | 105 | 7.7 | 102 |
| 1940-1 | 14.6 | 109 | 6.8 | 124 | 8.2 | 109 |
| 1941-2 | 18.5 | 138 | 9.1 | 166 | 9.7 | 128 |
| 1942-3 | 19.7 | 147 | 9.8 | 179 | 10.8 | 144 |
| 1943-4 | 20.5 | 153 | 9.8 | 179 | 10.8 | 144 |
| 1944-5 | 23.9 | 178 | 11.0 | 201 | 12.0 | 159 |
| 1945-6 | 27.2 | 204 | 11.9 | 218 | 12.9 | 171 |
| 1946-7 | 27.5 | 205 | 12.0 | 220 | 13.0 | 173 |

x includes all premiums.
(1) 1936/7 - 1938/9 = 100
Source:

Table 5.

Rationing of Butter and Cheese, 1/6/44 - 31/8/49.

| | Percentage of consumption during period February - March, 1944. | |
|---|---|---|
| | Butter | Cheese |
| 1/6/44 - 31/9/44 | 58 | 40 |
| 1/10/44 - 31/12/44 | 63 | 50 |
| 1/ 1/ 45- 31/ 3/45 | 75 | 51 |
| 1/ 4/45 - 30/ 6/45 | 72 | 68 |
| 1/ 7/45 - 30/ 9/45 | 60 | 64 |
| 1/10/45 - 31/12/45 | 40 | 55 |
| 1/ 1/46 - 31/ 3/46 | 54 | 44 |
| 1/ 4/46 - 30/ 6/46 | 75 | 66 |
| 1/ 7/46 - 30/ 9/46 | 67 | 70 |
| 1/10/46 - 31/12/46 | 40 | 70 |
| 1/ 1/47 - 31/ 3/47 | 60 | 60 |
| 1/ 4/47 - 30/ 6/47 | 54 | 60 |
| 1/ 7/47 - 30/ 9/47 | 50 | 60 |
| 1/10/47 - 31/12/47 | 73 | 60 |
| 1/ 1/48 - 31/ 3/48 | 100 | 87 |
| 1/ 4/48 - 30/ 6/48 | 100 | 100 |
| 1/ 7/48 - 30/ 9/48 | 83 | 75 |
| 1/10/48 - 31/12/48 | 75 | 62 |
| 1/ 1/49 - 31/ 3/49 | 71 | 60 |
| 1/ 4/49 - 30/ 6/49 | 72 | 60 |
| 1/ 7/49 - 30/ 9/49 | 95 | 60 |

Note : The periods indicated do not agree with the actual ration periods as determined from time to time. They have been based on quarterly periods to facilitate compasison.
Source : Until from U.G. 27/47, subsequently the writer's own calculations.

APPENDIX A.

## CONSUMPTION OF FRESH MILK IN SOUTH AFRICA.

| Year | Urban Consumption | Rural Consumption | | Total Consumption | Retail Price | Value of Consumption | |
|---|---|---|---|---|---|---|---|
| | | European Farms | Reserves | | d. per gal. | Urban | Rural |
| | 000gals | 000gals | 000gals | 000gals | | £000 | £000 |
| | A | A | A | A | B | | C |
| 1929-30 | 40,130 | 31,810 | 60,500 | 132,440 | 27.592 | 4,610 | 5,310 |
| 1930-31 | 41,900 | 31,880 | 58,750 | 132,630 | 26.408 | 4,610 | 4,990 |
| 1931-32 | 43,830 | 31,770 | 57,000 | 132,500 | 24.048 | 4,390 | 4,450 |
| 1932-33 | 45,790 | 31,660 | 55,250 | 132,600 | 24.224 | 4,620 | 4,390 |
| 1933-34 | 47,760 | 31,550 | 40,130 | 119,440 | 24.552 | 4,890 | 3,670 |
| 1934-35 | 49,750 | 31,450 | 41,180 | 122,380 | 24.416 | 5,060 | 3,730 |
| 1935-36 | 51,760 | 31,340 | 41,940 | 125,040 | 24.376 | 5,260 | 3,690 |
| 1936-37 | 48,750 | 31,240 | 55,900 | 135,890 | 24.160 | 4,610 | 4,390 |
| 1937-38 | 50,160 | 31,130 | 57,100 | 138,390 | 25.008 | 5,230 | 4,600 |
| 1938-39 | 53,100 | 31,020 | 59,500 | 143,620 | 24.724 | 5,470 | 4,660 |
| 1939-40 | 57,000 | 30,910 | 40,800 | 128,710 | 25.208 | 6,130 | 3,770 |
| 1940-41 | 57,000 | 30,810 | 49,400 | 137,210 | 26.160 | 6,210 | 4,370 |
| 1941-42 | 62,700 | 30,700 | 53,500 | 146,900 | 30.336 | 7,930 | 5,320 |
| 1942-43 | 68,400 | 30,570 | 57,500 | 156,470 | 33.376 | 9,510 | 6,120 |
| 1943-44 | 75,810 | 30,490 | 57,500 | 163,800 | 34.024 | 10,750 | 6,240 |
| 1944-45 | 79,800 | 30,380 | 39,100 | 149,280 | 35.608 | 11,840 | 5,150 |
| 1945-46 | 84,360 | 30,270 | 49,400 | 164,030 | 38.000 | 13,360 | 6,310 |
| 1946-47 | 92,340 | 29,210 | 65,600 | 187,150 | 39.072 | 15,030 | 7,720 |
| 1947-48 | 92,340 | 30,000 | 65,600 | 187,940 | 38.760 | 14,910 | 7,720 |
| 1948-49 | 99,730 | 30,000 | 39,100 | 168,830 | 39.488 | 16,410 | 5,690 |

Notes : A Estimates of the Division of Economics and Markets.
B From the Office of Census and Statistics.
C Valued at $\frac{1}{2}$ the retail price per gallon.

APPENDIX B.

## PRODUCTION AND CONSUMPTION OF BUTTER IN SOUTH AFRICA, 1930-49. 000lbs.

| Year | Production | | Imports | Opening Stock | Exports | Closing Stock | Consumption | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Creamery | Farm | | | | | Creamery | Adjusted | Ordinary | Subsidized | Adjusted |
| | A | B | C | D | E | F | | G | | | H |
| 1929-30 | 19,922 | 11,266 | 1,690 | 2,892 | 2,907 | 1,370 | 20,227 | 18,280 | 18,280 | - | - |
| 1930-31 | 20,950 | - | 1,244 | 1,370 | 4,527 | 1,485 | 17,552 | 18,510 | 18,510 | - | - |
| 1931-32 | 18,038 | - | 1,110 | 1,110 | 4,328 | 3,207 | 12,723 | 13,270 | 13,270 | - | - |
| 1932-33 | 20,476 | - | 2,640 | 3,207 | 2,513 | 2,186 | 20,497 | 18,000 | 18,000 | - | - |
| 1933-34 | 18,658 | 11,959 | 2,897 | 2,186 | 2,859 | 900 | 20,982 | 20,110 | 20,110 | - | - |
| 1934-35 | 26,444 | 14,276 | 1,947 | 900 | 9,010 | 3,918 | 16,463 | 20,690 | 20,690 | - | - |
| 1935-36 | 32,135 | 14,430 | 2,644 | 3,918 | 9,307 | 3,028 | 26,362 | 25,550 | 25,309 | 191 | - |
| 1936-37 | 31,800 | 12,995 | 5,825 | 3,028 | 7,315 | 1,372 | 31,966 | 27,730 | 27,146 | 584 | - |
| 1937-38 | 30,024 | 13,260 | 3,988 | 1,372 | 3,675 | 2,850 | 28,859 | 31,990 | 29,407 | 2,583 | - |
| 1938-39 | 36,460 | 12,458 | 2,571 | 2,850 | 7,128 | 3,860 | 30,893 | 33,060 | 28,166 | 4,094 | - |
| 1939-40 | 44,472 | - | 1,594 | 3,860 | 7,475 | 4,823 | 37,628 | 37,270 | 33,114 | 4,156 | - |
| 1940-41 | 45,366 | - | 6,310 | 4,823 | 7,038 | 3,380 | 45,081 | 45,080 | 40,875 | 4,205 | - |
| 1941-42 | 39,701 | - | 8,276 | 3,380 | 6,428 | 3,704 | 41,225 | 41,230 | 37,172 | 4,058 | - |
| 1942-43 | 43,463 | - | 12,175 | 3,704 | 4,724 | 2,543 | 52,075 | 52,080 | 48,054 | 4,026 | - |
| 1943-44 | 43,320 | - | 9,651 | 2,543 | 2,321 | 1,833 | 51,360 | 51,360 | 47,651 | 3,709 | 56,060 |
| 1944-45 | 38,948 | - | 6,622 | 1,833 | 452 | 3,041 | 45,910 | 45,910 | 42,353 | 3,557 | 62,280 |
| 1945-46 | 33,824 | 9,907 | 5,454 | 3,041 | 181 | 3,036 | 39,102 | 39,100 | 35,902 | 3,198 | 60,850 |
| 1946-47 | 33,543 | 10,696 | 5,495 | 3,036 | 329 | 5,229 | 36,516 | 36,520 | 33,706 | 2,814 | 66,090 |
| 1947-48 | 47,471 | - | 6,857 | 5,229 | 676 | 3,545 | 56,336 | 56,340 | 54,941 | 1,399 | 61,730 |
| 1948-49 | 46,343 | - | 8,089 | 3,545 | 444 | 5,774 | 51,759 | 51,760 | 51,550 | 210 | 66,100 |

Notes :
A. From Division of Dairying.
B. From Agricultural Censuses.
C. Refer to Calendar years.
D. From the Office of Census and Statistics and refer to the quantities held on the 1st September of the first year stated except for 1929/30 and 1930/1 when the date is 1st January of 1930 and 1931 respectively and for 1931/2 when it is 1st October, 1931.
E. Refer to Calendar years and include re-exports.
F. From the Office of Census and Statistics and are as at 31st August of second year stated except for 1929/30 and 1930/1 when the date is 31st December.
G. Consumption is here adjusted for the years 1929/30-1939/40 in order to bring imports and exports onto a seasonal basis. After 1940 the relevant data is not available.
H. Consumption adjusted for years 1943/4 - 1948/9 to reflect the rationing in force during those years, on the following basis :-

| | |
|---|---|
| 1943/4 | 85% |
| 1944/5 | 68% |
| 1945/6 | 59% |
| 1946/7 | 51% |
| 1947/8 | 89% |
| 1948/9 | 78% |

APPENDIX C.

PRODUCTION AND CONSUMPTION OF CHEESE IN SOUTH AFRICA, 1930-49 0001bs.

| Year | Production | | Imports | Opening stock | Exports | Closing stock | Consumption | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Factory | Farm | | | | | | | | |
| | A | B | C | D | E | F | | G | H | J |
| 1929-30 | 7,217 | 446 | 451 | 1,870 | 1,197 | 1,675 | 6,666 | 6,120 | 6,120 | - |
| 1930-31 | 9,311 | - | 311 | 1,675 | 2,206 | 1,360 | 7,731 | 8,270 | 8,270 | - |
| 1931-32 | 8,258 | - | 380 | 1,360 | 2,372 | 1,125 | 6,501 | 7,130 | 7,130 | - |
| 1932-33 | 7,210 | - | 393 | 1,125 | 1,343 | 972 | 6,413 | 5,210 | 5,210 | - |
| 1933-34 | 6,946 | 399 | 383 | 972 | 400 | 900 | 7,001 | 7,060 | 7,060 | - |
| 1934-35 | 9,775 | 493 | 433 | 900 | 2,728 | 1,976 | 6,404 | 7,570 | 7,570 | - |
| 1935-36 | 10,998 | 355 | 469 | 1,976 | 1,449 | 1,586 | 10,408 | 9,340 | 9,119 | - |
| 1936-37 | 10,498 | 405 | 626 | 1,586 | 1,694 | 1,317 | 9,699 | 9,600 | 8,371 | - |
| 1937-38 | 12,757 | 278 | 752 | 1,317 | 2,800 | 2,217 | 9,809 | 10,550 | 9,361 | - |
| 1938-39 | 13,878 | 300 | 751 | 2,217 | 4,395 | 2,435 | 10,016 | 10,090 | 8,903 | - |
| 1939-40 | 14,336 | - | 216 | 2,435 | 2,598 | 2,214 | 12,175 | 11,850 | 10,731 | - |
| 1940-41 | 14,971 | - | 180 | 2,214 | 1,304 | 1,746 | 14,315 | 14,320 | 13,427 | - |
| 1941-42 | 17,702 | - | 145 | 1,746 | 2,608 | 2,789 | 15,194 | 15,190 | 15,013 | - |
| 1942-43 | 17,778 | - | 375 | 2,789 | 1,236 | 1,811 | 17,895 | 17,900 | 17,311 | - |
| 1943-44 | 16,994 | - | 86 | 1,811 | 798 | 1,805 | 16,288 | 16,290 | 15,822 | 19,780 |
| 1944-45 | 16,300 | - | 25 | 1,805 | 758 | 3,520 | 13,872 | 13,870 | 13,804 | 23,790 |
| 1945-46 | 14,934 | 330 | 89 | 3,520 | 190 | 3,257 | 15,096 | 15,100 | 15,100 | 25,590 |
| 1946-47 | 15,985 | - | 420 | 3,257 | 216 | 2,811 | 16,635 | 16,640 | 16,640 | 26,410 |
| 1947-48 | 20,185 | - | 241 | 2,811 | 377 | 2,394 | 20,466 | 20,470 | 20,470 | 23,800 |
| 1948-49 | 18,101 | - | 50 | 2,394 | 220 | 3,592 | 16,733 | 16,730 | 16,730 | 27,880 |

Notes :
A From Industrial Censuses except for years 1930/1 and 1931/2 when the figures published in "Farming in South Africa" have been used.
B From Agricultural Censuses.
C Refer to Calendaryears.
D From Office of Census and Statistics. (For comments see "Production and Consumption of Butter", note 4)
E Refer to Calendar years and include re-exports.
F From Office of Census and Statistics. (For comments see "Production and Consumption of Butter", note 6).
G Consumption is here adjusted for the years 1929/30-1939/40 in order to bring import s and exports onto a seasonal basis. After 1940 the relevant data is not available.
H Total consumption less quantities sold under subsidization.
J Consumption increased to show the effect of rationing. The following percentages of "full requirements" were taken :-

| | | | |
|---|---|---|---|
| 1943/4 | 80% | 1946/7 | 63% |
| 1944/5 | 58% | 1947/8 | 86% |
| 1945/6 | 59% | 1948/9 | 60% |

Chapter 4.

## SUGAR

Although the period under review only begins in 1930, it has been decided, in order to trace the development of sugar production in this country, that a short discussion of the position before this date in both the Union and the world as a whole, is necessary. A further point of explanation is deemed appropriate at this stage; while the discussion is ultimately concerned with the position as it affects South Africa, it is impossible to divorce it from the wider international aspect and the writer would therefore explain at this stage that although the digressions on the international sugar situation may appear irrelevant at the actual point of discussion, it is hoped that their significance will become more and more obvious as the thesis is developed.

Sugar production was considerably affected by the first World War. With the centre of conflict in Europe, it was to be expected that the production of beet sugar would be severely curtailed in that region while, at the same time, the sustained demand for sugar in conditions highly enoouraging to the producer, resulted in large areas being put under cane on the other continents. It was, however, inevitable that some time after the cessation of hostilities, beet production would be resumed and there would not be sufficient total demand to warrant the current level of sugar production, at prices remunerative to the producer.(1) Thus it was that prices of sugar on the world markets after the severe drop in 1921 recovered up to about 1924-5 by which time the production of beet sugar in Europe had risen to its pre-war level, and then followed the severe decline in prices,(2)

(1) See Table 1, page 129, showing the production of cane and beet sugar during the years 1919/20-1939/40 as compared with the pre-war level.

(2) Raw Sugar Prices, 1920-34.

| | | 1920 | 1922 | 1924 | 1926 | 1928 | 1930 | 1932 | 1934 |
|---|---|---|---|---|---|---|---|---|---|
| (c.i.f.) | per sht. ton £ | 16.46 | 13.90 | 18.85 | 11.10 | 10.48 | 5.85 | 4.22 | 4.23 |
| (f.o.b.) | per lb cents. | 11.72 | 2.92 | 4.00 | 2.53 | 2.39 | 1.26 | .78 | .90 |

Source. S.A.S.Y.B. 1943-4.

/made

made even worse by the general reduction in purchasing power throughout the world during the 1931-33 depression years.

South Africa was no exception in this general picture of countries outside the actual theatre of war increasing production to take advantage of the temporary shortage of sugar on world markets. In the decade 1913-14 to 1923-4, production in the Union rose by just over 120%. In this "build-up" period, encouraged by a protective barrier of £3-10,(1) self-sufficiency was assured and South Africa began to develop as a minor exporter of sugar. In common with most other countries producing fairly considerable quantities of sugar, the South African industry found itself in difficulties when prices started falling and import duties were raised in order to protect the domestic industry. Thus in 1926 the Board of Trade and Industries reccomended to the Government that the tariff on imported sugar be increased by means of a suspended duty of £3-10 per ton, to £8. In the same year the Sugar Act gave legality to the Fahey Agreement the main points of which were that producers were to be paid according to the sucrose content of their cane, and not as previously merely by weight; that millers who were signatories to the agreement were to share in the export trade on a pro rata basis and that sugar was to be supplied to manufacturers using sugar as a raw material at lower prices so that they would be placed on favourable terms to meet competition from foreign countries.

During this period of surging economic nationalism, when most countries were interested only in the circumstances of the moment, South Africa was by no means the only one to protect its domestic sugar industry. The new outlook on economic factors was such that it tended to spread from one country to another, the barriers to international trade becoming thicker and more impenetrable as time went on. The sustained price of sugar in the Union obviously lead to an increase in production

(1) This was made up of the import duty of £4-10 per ton less the excise duty of £1 on all sugar manufactured.

/for,

for, as a protected industry in bad times, the point to which it was economic to increase production was extended. Simultaneously the lower purchasing power resulting from depressed trade conditions limited consumption so that the increased production had to be diverted to export, at prices far below those ruling on the domestic market.

The reverse side of the picture also affected the Union. Other countries experiencing similar conditions were obliged to find export outlets and several, ~~including the South African~~ among them the South African, resorted to dumping their sugar on foreign markets. This form of price discrimination meant that sugar could be landed at Union ports at a price which even when increased by the import duty, was lower than the local trade price. Representations as to the existence of the dumping of sugar were made by the Natal Sugar Millers' Association in August and October of 1928 but the Board of Trade, in considering the case stated: "although satisfied ...(that) dumping of sugar was taking place within the terms of the law, ... did not consider such dumping as sufficient menace to the local industry to justify the imposition of a dumping duty, which might in any case not be in the public interest under the circumstances at the same time, but left it to the industry to deal with the matter as it thought fit."(1)

The action taken by the industry was one of price discrimination wherever it was satisfied that dumping was occurring; thus, while the customary price of £24-10 per ton was maintained, in certain instances sugar was offered at lower prices in order to compete with the imported product.(2) These steps were by no means sufficient and the Sugar Association's finances were not large enough to enable

(1) S.A. Sugar Year Book, No. 1, 1930, pp 213.
(2) For example during November, 1928 10,000 tons of Natal sugar was sold at £22-10 per ton c.i.f. Cape ports to counteract the dumping. Imports during November and December totalled 5,900 tons as compared with 18,000 tons for the whole of 1928. S.A.S.Y.B., No.1, 1930 pp 213.

it to meet this so-called "unfair" competition as price quotations from Germany and Czechoslovakia fell to £12 per ton c.i.f. at Cape ports. Further representations were made for state interference to aid the local industry and, in view of the seriousness of the situation, the Board of Trade decided to initiate an investigation to determine to what extent dumping was actually taking place. The result of this investigation was conclusive proof of the existence of dumping,(1) and the Board in its subsequent report to the Government recommended the imposition of dumping duties on sugar imported subject to the provision that the wholesale price would not be increased above £24-10 per ton f.o.r. Durban, and that manufacturers in the Union should continue to receive the benefit of the lower price.(2) In August, 1929 the dumping duty was proclaimed on all imports from Germany and Czechoslovakia, the duty being the amount by which the domestic value (i.e. f.o.b. port of shipment) exceeded the export price (i.e. c.i.f. at Union ports less freight from port of shipment). On the 6th of the following

(1) The report gave the following data to support the existence of dumping.

| GERMANY, 9th March, 1929 | s. | d. | per 100 lbs |
|---|---|---|---|
| Current domestic price | 22 | 5 | |
| less Excise Duty | 4 | 7 | |
| | 17 | 10 | |
| plus freight to Hamburg | | 6 | |
| Domestic value f.o.b. Hamburg | 18 | 4 | |
| Export price c.i.f. Cape Town | 12 | 3 | |
| less sea freight (30/- per ton) | 1 | 4 | |
| Export price f.o.b. Hamburg | 10 | 11 | |
| Amount of dumping | 7 | 5 | |
| CZECHOSLOVAKIA, 12th March, 1929 | | | |
| Current domestic price | 30 | 2 | |
| less Excise duty | 11 | 8 | |
| | 18 | 6 | |
| plus freight to Hamburg | | 10 | |
| Value f.o.b. Hamburg | 19 | 4 | |
| Export price c.i.f. Cape Town | 12 | 0 | |
| less sea freight (30/- per ton) | 1 | 4 | |
| Export price f.o.b. Hamburg | 10 | 8 | |
| Amount of dumping | 8 | 8 | |

(2) Prices to manufacturers were to be based on the bona fide c.i.f. quotations at Union ports plus the old duty of £4-10 per ton except where goods were destined for export when there was a further rebate of £3-10 per ton.

/month

month the duty was extended to cover imports from the U.S.A. and later in the year to Canadian sugar.

Despite these measures, it was found during the 1929/30 season that importers were obtaining supplies from such sources as Cuba, Holland and Mauritius, yet the "Board (of Trade) was satisfied that this sugar does not at present come within the purview of our dumping legislation."(1) By the Sugar Act of 1926 the local industry had been granted a virtual monopoly of the Union market subject to certain conditions,(2) the fulfilment of which placed a financial burden upon all cane growers delivering cane to the mills. It was estimated by the Board of Trade in their Report No. 106, that the fulfilment of these conditions meant a cost of £2-10 per ton and this was the amount by which importers benefitted since there was no necessity for them to sell to manufacturers at a rebate or to export part of their supplies. The increase in the amounts of sugar imported merely meant that a greater proportion of the local crop would have to be exported and sold on the badly depreciated London market: so that while production in 1929/30 was only 4,000 tons more than in 1928/9, the percentage of the total crop exported was 43 whereas during 1928/9 it had been only 29.

Further, the increased supplies available for consumption obviously would lead to lower prices to the producer, the stabilization of which was the main aim of the 1926 legislation. In view of this "very grave situation ... the increase (in customs duty) should be sufficiently large as to virtually close the Union market to outside producers."(3) On this recommendation the Government increased the protection from £7 per ton (i.e. £8 less Excise) to £11-10 in

(1) Report 106 of the Board of Trade and Industries, 1930.
(2) To supply sugar to manufacturers at specially reduced prices and to pay the freight on sugar from Durban to the Cape ports' so that the f.o.r. Durban price would equal c.i.f. Cape ports' price.
(3) Report No. 106 of the Board of Trade and Industries, 1930.

/March

March, 1930 and in July of the same year the ordinary dumping duties were withdrawn as the necessity for their continued existence no longer remained.(1)

As pointed out above, the increased production had to be diverted to the export market where fortunately South Africa enjoyed the advantages of the British and later the Canadian, preferential tariffs. It was obvious to the Board of Trade in their report in 1932,(2) that the export of sugar was the "principle agent in the depression of cane prices" since the levies to meet manufacturers rebates etc., were of a very stable nature. It was recognised "that sugar exports are being carried too far, and, that if the Industry persists in following the lines upon which it is now working disaster will overtake it if the preferential rebates ... are withdrawn."(3) It had been previously suggested(4) that an Arbitration Court be appointed with powers to sanction or disallow the planting of new lands to sugar, but this was later abandoned in view of the administrative costs involved in such a scheme. Instead the Board suggested that the export of sugar be limited to 175,000 tons per annum. At the same time it was recommended that all millers be compelled to join the export pool since unless this was done, non-members would be sharing in the benefits (the higher price on the local market caused by the exportation of a certain percentage by millers who had signed the Fahey Agreement) while not paying any of the costs.

It is obvious from reading the reports of the Board of Trade, the impartial body, that the time had come for physical control of production. The suggestions actually put forward

(1) It can be seen from Appendix A, page 131, how the import of sugar fell following this legislation.
(2) Report No. 119 of Board of Trade and Industries.
(3) In report No. 119 of 1932 it was estimated that £3-15 of the local return on export (viz. £9-15) accrued from the preferential tariffs.
(4) Report No. 106 of Board of Trade and Industries, 1930.

/however

however, tended to attempt to cure the problem indirectly and not at the source, as for instance the international Chadbourne Agreement, had attempted. It was as if the disease was recognised but the cure was considered so drastic and unpopular as to cause even those who realised the need for it, to shrink from its imposition. Therefore, instead of restricting the actual production it was considered more desirable to follow the indirect course of imposing a limitation on export - the attitude seemed to point to a resigned acceptance of the loss on export as the cost of maintaining the local industry.

The Chadbourne Agreement, mentioned above, was one of international control of the world's sugar industry. Brought into operation following the Brussels Agreement in 1931, the scheme was essentially based on the restirction of production in the major producing countries. It was however, never likely to succeed due to the fact that only nine countries were signatories to the agreement. Thus, while Cuba agreed to restrict her 1931/2 crop to 3,122,000 tons - a reduction of 1,549,000 tons - and certain European countries (1) reduced their beet acerage by 19%, the fact that there were many producers and potential producers outside the control of the scheme, meant that by June, 1933, when the World Economic Conference met in London, although these countries had cut production by 6,617,000 tons in other areas there had been an increase of 3,117,000 tons so that the net outcome was a reduction not sufficient to check the disasterous fall in world prices.

However, the local industry was still by no means prosperous, even on the artificial basis upon which its whole structure was based. Quotations of overseas cargoes continued to fall; American sugar (2) was quoted at 7/6 per 100 lbs

(1) Germany, Czechoslovakia, Poland, Belgium and Holland.
(2) Usually Cuban sugar refined in the U.S.A.

/c.i.f. at

c.i.f. at Union ports, which amounted to £21 per ton landed as compared with the local price of £22-15 at the ports. The Board of Trade emphasized that the uncertainty and general lack of expected success in the Chadbourne Agreement had made matters worse since countries were doing all they could to get rid of surplus stocks, action which pulled prices down even further. In April, 1932 the Board stated that "a fresh menace to the local industry had now presented itself, the gravity of which is not yet possible to estimate."(1) It maintained that since the aim of previous legislation to reserve the domestic market for the local industry, had not been totally achieved, it was necessary to increase the customs duty from £9 to £12-10 per ton, which it duly recommended. In support of this recommendation it continued t-

"... there seems to be a better prospect of some control of production being attained if the industry is assisted to retain the South African market as the foundation of its activities, provided that local prices are not raised to further compensation for the loss on export."(2)

In all fairness to the Board it should be stated that two further recommendations were made, the first providing for the withdrawal of the suspended duty should "in the opinion of the Minister, the wholesale prices of sugar (be) unwarrantably increased,"(3) and the second that the maximum price of sugar to the consumer at the ports be decreased from 3¾d. per lb for refined and 3½d. for mill white to 3½d. and 3¼d. respectively, as protection of consumer interests. All these recommendations were given effect by proclomation 96 of 1932.

The lack of success of the Chadbourne Conference is revealed by the later developments at the World Economic Conference in 1933. Cuba submitted a scheme whereby for 10 years

(1) Report 119 of Board of Trade and Industries, 1932.
(2) Report 119 of Board of Trade and Industries, 1932.
(3) Report 119 of Board of Trade and Industries, 1932.

/contracting

contracting parties would

(a) not start the construction of any new factories,

(b) not increase the productive capacity of existing factories,

(c) not rebuild any factories which had ceased to produce,

(d) not grant any new subsidies, either direct or indirect, to production or export and

(e) not increase tariff duties above 70% ad valorem up to the beginning of September, 1935.

However, such a scheme was not acceptable to many countries either because it would mean abandoning a policy of self-sufficiency adopted by some, or because the degree of control was too wide. Remembering the lessons of the Chadbourne Agreement, no formal scheme was proposed but various countries gave assurances that by their policies they would not place any further quantities on world markets although many by admitting their aims of self-sufficiency, were in fact reducing the effective demand on the world markets. South Africa stated that she did not intend to increase her exports above the current level, though she was not prepared to subscribe to any formal limitation of production.

A further overseas development was the alteration in the British tariff affecting sugar. On April 20th, 1933 the British Chancellor of the Exchequer announced that a new preference scale had been granted to colonial producers by the introduction of two additional rates in the tariff schedule. The result was that on sugar of 96° polarization British levied a duty of 2s. 4.8d on what was called "Preference Certificated Colonial" sugar applying to a maximum of 275,000 tons p.a. allocated between the different colonial producers, one of 3s. 4.8d on any excess of this figure from Colonial sources one of 4s. 4.8d on sugar from Dominions and 8s. 1.6d on sugar from countries

/other

other than those of the Empire.(1) After these had been in force for one year they were replaced by a triple rate schedule whereby Colonial sugars received preference over dominion on a fixed quantity of 360,000 tons per annum, the new schedule to apply for three years.

The international aspects of the sugar "problem" had therefore not improved and South Africa still continued to supply about half of her crop as exports(2) the majority of which went to the United Kingdom and Canada, to be sold at prices far below the domestic levels.(3) In its report preliminary to the expiry of the Fahey Agreement in 1936, the Board of Trade formulated a new scheme in which provision was to be made for the protection of the small grower, in which all millers and therefore all growers, were to be members of the export pool; in which some equitable scheme for the determination of quotas was to be set out and in which some provision was to be made for the restriction of production. It was stressed that the existence of the £15 net protection should be sufficient inducement for the seperate interests

(1) British import duties on sugar before and after April, 1933

| per cwt. | Before April | | After April, 1933 | | |
|---|---|---|---|---|---|
| | Full | Preferential | Full | Dominion | Colonial | P.C.C.* |
| | s. d. | s. d. | s. d. | s. d. | s. d. | s. d. |
| 99° | 11 8 | 5 1.0 | 11 8 | 5 1.0 | 4 8.2 | 3 6.5 |
| 98°-99° | 11 8 | 4 9.2 | 11 8 | 4 9.2 | 3 8.2 | 2 7.2 |
| 97°-98° | 8 7 | 4 7.7 | 8 7 | 4 7.7 | 3 7.1 | 2 6.5 |
| 96°-97° | 8 4.3 | 4 6.3 | 8 4.3 | 4 6.3 | 3 6 | 2 5.7 |
| 95°-96° | 8 1.6 | 4 4.8 | 8 1.6 | 4 4.8 | 3 4.8 | 2 4.8 |

* "Preferential Certificated Colonial". Source: S.A.S.Y.B. No. 5 1934 pp 73-4

(2) The percentage of export to total sales was as follows during the years 1929/30 - 1935/6:

| | | | | | |
|---|---|---|---|---|---|
| 1929/30 | 43% | 1932/3 | 51% | 1934/5 | 35% |
| 1930/1 | 50% | 1933/4 | 50% | 1935/6 | 52½% |
| 1931/2 | 50% | | | | |

(3) Average price received on sales within the Union and on export, 1929/30 - 1935/6 (£ per ton)

| | Domestic* | Export | | Domestic | Export |
|---|---|---|---|---|---|
| 1929/30 | 14.11. 9 | 9.17. 6 | 1933/4 | 14.17. 2 | 7. 8. 8 |
| 1930/1 | 14.12.11 | 7.14. 4 | 1934/5 | 14.17. 9 | 6. 4. 1. |
| 1931/2 | 13.12. 0 | 7. 2. 3 | 1935/6 | 14.14. 7 | 6. 7. 9 |
| 1932/3 | 15. 0. 0 | 5.14.10 | | | |

* excluding refining margin and South African sugar Association levies.

/within

within the industry to arrive at some equitable and workable solution to all the problems. The great significance of this report is the ultimate decision to apply the very direct means of limitation of production as a cure for the troubles of the industry and the paradoxies of state policy towards that industry. It was as though the intricacies of the economic structure were at last appreciated and it was recognised as inevitable, that if one part of the economy is tampered with more and more interference is necessary. Although that interference may not be popular, unless it is applied the position is not solved and the equilibrium of the industry is no nearer attainment.

Before proceeding to describe the new agreement arrived at between representatives of millers and growers, it is necessary to consider the change that had come over the actual physical production of cane in Natal during the early 1930's. Previous to 1930 'Uba' had been the only variety of cane grown in Natal and in fact other varieties were strictly forbidden except in quarantine. Natal is really not ideal for cane growing because of its high latitude in comparison with the other main cane producing areas and it is actually only the presence of the warm Mozambique current just off the Natal coast that enables cane to be grown at all. Consequently a comparatively hardy type of cane suits the climatic conditions best where 18-22 months are required for the full growth of the cane compared with approximately a year in warmer and wetter areas. In the early years of cane production in Natal the suitability of 'Uba' was responsible for its general popularity. However, at the Mt. Edgecombe experimental station various canes had been under test and in 1930/1 five new varieties were released for commercial planting. These

/new

new types generally had a higher sucrose content[1] and gradually 'Uba' was replaced until in 1938 the area under other varieties exceeded that under the older type,[2] Thus, while the total area under cane increased by only 16%[3] between 1929/30 and 1935/6 the actual production of sugar increased by almost 40%. The increase in production was then primarily due to the planting of new varieties of cane and it was obvious to those who saw the need to limit production, that to do so on any basis other than a restriction of the amount of cane which each individual planter was to deliver to his mill, would be insufficient.

The first task which faced the conference between millers and growers was the restriction to be placed upon the total production of sugar in the Union. By the International Sugar Agreement of 1936, South Africa had been allotted an export quota of 224,000 tons per annum and so the production quota was determined using this figure in conjunction with the estimated consumption in five years time so as to allow some flexibility in planning and some compensation to those planters who had just begun.

The Sugar Industry Central Board of three members, the Chairman to have no financial interest in the sugar industry, was to be the final body of arbitration although provision was made within the agreement for the division of this total quota among the separate mills. In each mill provision was made for a Mill Group Board which had to divide the quantity of cane needed to produce the quota for the mill concerned.

(1) A trial of the different varieties was conducted over a period of 23 months at Mt. Edgecombe, the results being as follows:

| | Tons cane per acre | sucrose % | Tons sucrose per acre |
|---|---|---|---|
| P.O.J. 2725 | 32.66 | 17.20 | 5.618 |
| Co. 290 | 37.67 | 14.87 | 5.609 |
| C.H. 64/21 | 30.82 | 15.32 | 4.722 |
| Uba | 30.12 | 14.93 | 4.497 |
| P.O.J. 2727 | 26.96 | 15.70 | 4.233 |
| P.O.J. 2878 | 25.41 | 16.07 | 4.083 |
| P.O.J. 2714 | 25.10 | 16.00 | 4.016 |

(2) See Table 2, page 130 .

(3) I have taken area under cane owned by non-European as 30,000 in 1929/30.

/among

among producers supplying that particular mill. This was to be done by first dividing the amount of cane required between Europeans and non-Europeans based upon their average deliveries during the years 1931/2 - 1935/6. Not later than the 15th October the Board was to ascertain from each grower how much he had still to cut and in the event of any onegrower not being able to fulfill his quota, the deficiency was to be allocated to those with surpluses, pro rata to those surpluses, in the appropriate section.

In the case of both Europeans and non-Europeans the small grower was placed in a favourable position by being able to draw upon a special reserve allowed by the Mill Boards for "preferential assignments where it can be shewn that the financial commitments of individual ... growers as at 23rd March (are) such that special consideration is justified."(1) A further provision was made whereby a small European grower was entitled to a minimum quota of 3,500 tons as long as there was the likelihood of his being able to produce that amount. Smaller planters gained another advantage in the Equalization Fund financed by (a) specific annual amounts from mills, (b) a levy of ½d. per ton on all cane crushed including that produced by millers themselves and (c) and additional levy of ½d. per ton on cane belonging to miller-planters. This was to be paid to the South African Cane Growers' Association, the final payment to be worked out from a formula designed for the benefit of the small grower.(2)

In an attempt to restrict the growing tendency for millers to gain control over planters by producing cane themselves the agreement specified that in addition to the special payment by miller-planters to the Equalization Fund, their quotas were to be limited to the highest average delivery of any two consecutive years during the period 1931/2 - 1935/6

(1) South African Sugar Year Book No. 8, 1937, pp 171.
(2) The original formula was $\frac{15000 - Y}{7500}$ 10d. per ton where Y was the tonnage delivered but due to the increase in cane delivered by small growers the factor had to be reduced as follows: 1936/7 - 9.60302d. 1937/8 - 8.69874d. 1938/9 - 8.5d.

Hence only individual planters could obtain quotas in excess of their peak deliveries during those particular years.

Having defined the basis upon which production was to be limited, the remainder of the agreement was a continuation of the 1926 Fahey Agreement whereby millers agreed to export their respective quotas as determined by the Crop Disposals Committee of the Council of the South African Sugar Association and to pay certain levies in proportion to the amount of sugar produced for local consumption.(1)

The following statement sums up the aims of the new agreement which obtained force of law by the Sugar Act of 1936. "The reorganisation of the South African Sugar Association in 1936 marked the commencement of a period in the history of the industry in which it is confidentally expected will bee it established on a basis of a planned economy wherein provision is made for the intelligent use of the industry for the greatest good of the greatest number throughout the Union."(2)

It might be thought that the completeness of this 1936 agreement would have tied up the problem so well that no loose ends would remain but this was by no means so. Although the amount of cane which any individual planter could deliver to a mill was limited by quota, there was nothing to prevent him producing more than he was entitled to deliver and it was hardly likely that the authorities would stand aloof while planters produced in excess of their quotas and had therefore to allow the excess to rot on the fields. Consequently, it was decided in 1936/7, the season immediately following the agreement, that a supplementary agreement be formulated whereby further cane would be accepted provided that sugar produced from that cane had to be exported and so would not reduce

(1) There were two important changes, the first being that these conditions were to apply to all millers and secondly that no mill producing less than 10,000 tons was to be required to export more than half its total output.
(2) South African Sugar Year Book No. 9, 1938, pp 21.

/the

the domestic price level of sugar. In this way an additional 31,083 tons of sugar were produced from 301,038 tons of cane in 1936/7.

The danger of such a situation is well revealed in the following: "The extent of this surplus (estimated at 1,300,000 tons for the current season) indicates that up to the present producers have not appreciated the realities of the situation brought about by the adoption of quotas. For several years to come (the) industry's output must be limited to approximately the present figure, and the surplus cane at present in sight is more than it is likely there will be an accomodation for, for many years to come."(1)

The alacrity with which these supplementary agreements were agreed to seems to show a weakness of policy, a weakness which could only serve to blur the results so that theexact benefits of the scheme as a whole would not be discernable.

A further most important development out of this scheme was the introduction of a cheaper grade of sugar - popularly known as No.2 Grade "Government" sugar, which was to be of not less than 98° polarization. This was most important from the point of view of the whole industry since it aimed at increasing domestic consumption at the expense of exportation, which was the main reason for the continued distress in the industry. The price for this new grade was fixed at 2½d. per lb. at all points not more than five miles from any station, siding or halt. There is no need to look any further than the figures of sales of No. 1 refined and No. 2 grade in Appendix B,(2) to prove how popular this new grade became in the consumption pattern of South Africans. While in the period 1936/7 - 1948/9, the increase in sales of white sugar, both

(1) Annual Report of South African Sugar Association 1938, S.A.S.Y.B. No. 9, 1938, pp 27.
(2) See page 132 .

direct

direct to consumers and to manufacturers, was 86%, the consumption of "Government" sugar increased fivefold.

It was exceedingly unfortunate that almost as soon as the international sugar situation was so altered by the events of the war, the loss of Java, the Phillipines and other important sugar producing areas, South Africa should be hit by two successive years of deficient rainfall. In the sugar belt it is generally considered that the year can be divided into three phases. The first four months, with high rainfall and temperatures, constitute the principal growing period of the cane, the period May-August may be termed the ripening period with low rainfall and relatively low temperatures, and the third in which rains and temperature are both gradually increasing, the revival period. Although therainfall for the 1939/40 season was up to the average, it was very badly distributed and only 7.11" fell in the important revival period, during which the average was over 16". In 1940 the total again compared favourably with the average but almost 13" fell in the normally dry period and of the 17.32" which fell in the last four months nearly half occured in November.

In planning for the disposal of the 1940/1 crop, arrangements had been made for the sale of 263,000 tons to the British Ministry of Food, but owing to the short crop, and the increased local demand, the contract could not be fulfilled and the shortfall of 40,000 tons was to be made up from the following crop. When that was harvested there was only just sufficient to cover the shortfall carried over from the previous season without any further export to the United Kingdom, a set of circumstances which evoked considerable criticism in certain circled where it was felt that more could have been done in the Union to leave a greater quantity available for the U.K. where rationing had already become fairly severe. Especially was this criticism prevalent

/in 1943

in 1943 when the domestic consumption of sugar increased by almost 25% whilst the figure for exportt actually fell !

An important feature of the 1942/3 season was the reduction in the benefits granted by the industry to manufacturers using sugar as a raw material. In view of the increasing financial burden to the industry arising from these rebates, the Minister of Finance approved the abolition of the export rebate of £3-10 per ton, the reduction of the rebate on local products by £4-10 per ton except in the case of sugar used in the manufacture of jam and condensed milk,(1) and the abolition of the special reduction of £1 per ton granted to manufacturers of condensed milk.

The implication of this reduction in rebates was that the domestic and international markets for sugar had after so many years returned to some measure of equality. As long as the local price was maintained at levels higher than t those prevailing on the world market it was necessary to grant rebates to manufacturers to enable them to compete on equal terms with those in other couhtries. As soon as the demand for sugar increased sufficiently to raise the world price, and similarly there was the fall in the available supplies, it became no longer necessary to pay rebates on the same scale as previously since doing so merely placed the manufacturers in an extremely favourable position, but one hardly likely to foster a sound industrial development.

Furthermore, additional rebates had formerly been allowed on sugar which was used in the manufacture of commodities for export. Now, the financial burden placed upon the industry in order to fulfill this condition imposed by the Fahey Agreement, was not very great in the years before 1938/9 since the only countries providing a market were neighbouring states like South West Africa, the Rhodesias

(1) In the case of sugar for the manufacture of products other than jams and condensed milk, the rebate after reduction amounted to £4-15 (or trade price of £18 per ton). The selling price to manufacturers of the two exceptions was £14 per ton.

/and

and Portuguese East Africa where demand was limited by the low purchasing power. During the war years however, the increase in the world price of sugar left South African manufacturers in a relatively favourable position and not only were they able to take advantage of the increased demand in Southern Rhodesia and other African territories, but large quantities of products like jams, jellies and canned fruits were exported to overseas countries.(1) Taking the group of products "jams, jellies and marmalade" as an example, export increased from 1,734,000 tons in 1937/8 to 50,863,000 tons in 1942/3.(2) It was clear that continued payment of these rebates was beyond the resources of the industry; just as the considerable increase in the amount of sugar used in manufacturing made it impossible for the sugar industry to continue to meet the burden of ordinary rebate payments.

In 1943 a new Determination, published under clause 2 (1) (a) of the Sugar Act of 1936, was made, the principle changes being that growers' quotas were stabilized in order to allow for planning of production, previously hampered by the fact that growers had no guarentee that their quotas would not be cut. A further innovation was that quotas were to be based upon a weight of sucrose and not as previously on cane; also that growers were divided into categories (miller-planters, European growers, Indians and Bantus) so that if supplies of one particular group was short, their particular export quota would be correspondingly lower and price, under the prevailing circumstances, higher. Under the old scheme there had been a premium on surpluses since shortfalls by certain growers were redistributed among those with surpluses pro rata to the amount of those surpluses. The new agreement made the allocation pro rata not to the surpluses themselves but to the quotas of those with surpluses.

(1) For instance, export of Jams, Jellies etc. to the U.K. increased from 271,000 lbs to 98,903,000 between 1938 and 1944.
(2) See Table 3, page 130 .

The increase in the 1943/4 crop meant that a far greater quantity of sugar was available for export to the U.K. where the British Ministry of Food had agreed to buy all the sugar that South Africa could produce at prices fixed annually and "while it is a matter for regret that the tonnage available ... from the current crop will not come up to the amount expected ... this is due partly to the increase in South African consumption including the increased requirements of manufacturers. The latter are, however, supplying the Ministry (of Food) with large quantities of jam, canned fruits etc., containing a high percentage of sugar."(1)(2)

The desire of the Government to export as much as possible to the Allied countries engaged in the war effort took a more active turn in the 1944/5 season when the sale of sugar was subjected to a mild form of control. During the first six months of the season sales reached the figure of 260,664 tons, a level of demand which had it been permitted to continue unchecked, would have resulted in an increase of 18% in the course of one year. In view of its aim of exporting 100,000 tons, not including the 10,000 tons supplied under contract to Southern Rhodesia, the industry, with the Government's approval, limited the sales to the public during the second half of the year, to 70% of white sugar taken up during the first six months and 90% of No. 2 grade.

It was estimated that the world demand for sugar exceeded the supply by approximately 2,000,000 tons and most importing countries were obliged to impose severe restrictions on the consumption of this product. In the U.S.A. individuals who were not engaged in work demanding additional energy foods, were allowed only 4.7 ozs. per week, or 15 lbs. per year - less than ¼ of what they were consuming before the war.(3) Bearing these circumstances in mind and the fact that

(1) South African Sugar Year Book, No. 13, 1943/4, pp 73.
(2) The quantity of jams and jellies exported to the U.K. during the period 1938/9 - 1945/6 was as follows:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1938/9 | 870,917 | 1940/1 | 20,311,303 | 1942/3 | 45,107,201 | 1944/5 | 98,902,696 |
| 1939/40 | 1,340,460 | 1941/2 | 35,341,852 | 1943/4 | 41,591,926 | 1945/6 | 45,975,839 |

(3) South African Sugar Year Book, No. 14, 1944/5, pp 51.

/there

there was no indication that supply would be materially increased during the coming season, the Government announced that control of sugar distribution would be continued during 1945/6 and furthermore through the South African Cane Growers' Association encouraged planters to supply as much cane as they could, regardless of the quotas.(1) The millers also did much to help attain the record level for output by arranging to extend the season at certain mills and to divert such cane as was left over in afeas where mills had already closed.

If 1944/5 cannot be regarded as the exact year in which the relationship between production and consumption was completely reversed, because the restriction of sales was caused not by an actual deficiency of output; the years 1945/6 and 1946/7 cannot be regarded as anything but the beginning of a relationship completely new to the industry.

Sugar was one of the very few commodities whose price had not risen during the war years and at that fixed price consumption had increased to such an extent that production had been overrun. In 1945/6 under the policy of sales restriction, a total of 71,741 tons was exported of which 60,541 went to the U.K. whose Ministry of Food had, incidentally, prolonged their contract until 1949. At the 1944/5 rate of consumption the restrictions are estimated to have saved 37,541 tons in the space of six months; assuming no increase in demand during 1945/6, and assumption clearly false, the actual sales underestimate the level of demand at the fixed prices by approximately 75,000 tons, a figure greater by over 4,000 tons than the net exports of the Union. 1947/8 Illustrates the position even more clearly; South Africa had become a net-importer of sugar.

(1) Members of the South African Cane Growers' Association exceeded their aggregate sucrose quota of 349,975 tons by 13,625 tons in 1944/5 - S.A.SIY.B. No. 14, 1944/5.

The fact that the price of sugar had not been increased[1] is very important in this discussion since it must obviously have exerted a strong influence on consumption. In view of this it is not surprising that the industry should have appealed for release from the static prices at which it had disposed of its sugar. It is even less surprising when it is noticed how production fell away from the record level in 1944/5. Rainfall figures at the Mt. Edgecombe experiment station show that in 1943/4 42.77" fell, in 1944/5 36.12" and in 1945/6 only 25.57", and bearing in mind that cane in South Africa requires two favourable seasons, it was inevitable that production should decline and that expectations regarding 1947/8 should not be particularly bright.

As a result of these circumstances and the fact that manufacturers no longer required the rebates to ensure them of an equal advantage in disposing of their commodities, the rebates to manufacturers of products in which sugar was an ingredient, except jams, condensed milk and canned fruits,[2] was abolished as from the 31st October, 1945. This probably accounts to some extent for the fall in sales to manufacturers in 1945/6, but notwithstanding this legislation, payment of rebates placed a burden of £479,533 upon the industry and brought the total cost under this head since 1939/40 to £3,689,133[3]

In October, 1946 the Government approved a temporary increase of ¼d. per lb in the price of all sugars, the proceeds of which were to be applied for the relief of those growers whose annual harvesting based on peak deliveries between 1943/4 and 1945/6 did not exceed 15,000 tons. The

(1) Apart from the withdrawal of part of the manufacturers' rebates in 1942/3.
(2) Manufacturers of these commodities consumed 50,000 tons of sugar in 1945/6 - S.A.S.Y.B, No. 16, 1945/6.
(3) South African Sugar Year Book, No. 16, 1945/6, pp 27.

/increase

increase in revenue amounted to £2-1-8 per ton and was to be paid out as follows:

An increase of 6/- per ton to those harvesting 4,000 tons or less,

An increase of 4/3 per ton to those harvesting between 4,000 and 10,000 tons, and an increase of 8½d per ton to those harvesting between 10,000 and 15,000 tons.

Any deficiency between the increased revenue and the amounts to be paid out to growers under this scheme was to be borne by the Treasury.(1)

Towards the end of 1946 the Board of Trade began an inquiry into the state of the sugar industry and among its recommendations in its final report were:

(a) the abolition of the excise duty, introduced as a war measure in 1915, because "in the opinion of the Board it had served its purpose (and) its continuance is in conflict with the Government's endeavour not to increase the price of foodstuffs."

(b) the suspension of rebates to manufacturers since they "are still in a distinctly more advantageous position than their competitiors in other countries."

(c) the restoration of retail prices "to the levels ruling immediately before 1st October, 1946," i.e. the date from which the ¼d per lb increase had become operative.

The latter recommendation immediately came under severe criticism from the sugar industry:

"The record of fixed prices for our product is unique except for Australia, where the industry, like our own, is State controlled and where, also, urgent appeal is being made for relief. But the proposal that the price of sugar should revert to its pre-war level in the face of the

(1) It was estimated that the deficiency in 1945/6 would amount to £196,000.

/vastly

vastly changed economic and industrial conditions and the Government's own experience as a buyer of commodities during and since the war years, is almost Gilbertian."(1)

The only possible explanation for this recommendation would seem to be that it was considered that the benefits accruing from the other two, which would of course increase the price to the producer, would be sufficient to counteract the increase in costs and would at the same time be in line with the Government's policy of restricting the rise in the cost-of-living. However, while the first two recommendations were enforced the third was not, so the industry reaped a benefit of £3-15 per ton.(2)

The substantial carry-over from 1945/6 added to the original estimate for 1946/7 of 493,500 tons, led to the conclusion of an increased supply for domestic consumption and sales were made on this assumption. However, evidence of the crop's deterioration became increasingly emphatic and by September the industry was, with Government approval, compelled to reconsider its earlier decision and for the remainder of the year sales were cut by 10%.(3) In fact it was not until the beginning of 1948 that the restrictions on the distribution of sugar were withdrawn.

The 1947/8 crop, although a distinct improvement compared with the previous season, also revealed the effects of the prolonged drought of 1945-47 and, as mentioned above, the Union was on balance an importer of sugar. The industry was unable to supply sufficient to manufacturers for them to meet the demand for their own products so, to meet the deficiency, new manufacturing interests and some of those already established and unable to increase their output, appealed to the Government to relax the tariff restrictions on

(1) South African Sugar Year Book, No. 17, 1946/7, pp 19.
(2) Since a price increase of ¼d per lb meant a rise of £2-1-8 per ton, the value of the benefit from the other two recommendations must have been £1-0-0 for abolition of excise and 13-4 for suspension of manufacturers rebates.
(3) Thereby saving about 10,000 tons - S.A.S.Y.B. No. 17, 1946/7.

/overseas

overseas sugar, supplies of which had become available following the suspension of control by the International Food Emergency Council. This had occurred because of the world wide shortage of dollars and certain countries, notably European, although requiring the sugar could not afford it; therefore the allotments made but not taken up were offered to anyone able to pay the exporter, in this case Cuba, in its own currency. The Board of Trade after an investigation, recommended that refined sugar from overseas for manufacturing purposes should be permitted entry into the Union as a temporary measure, in such quantities as the Minister of Economic Development might determine, under rebate of the whole duty normally payable.

It was recognised by most people concerned with sugar that 1947/8 was a significant year. It was the year in which conclusive evidence had been established that quotas fitted only certain conditions and those had disappeared. It was recognised that the time for private enterprise had arrived and those who had been so favourably inclined towards Government assistance in the thirties now appealed to the Government to foster individualism among growers and millers alike. In official circles the recognition was one of the need to dispense with the restriction of production. With a variable output almost unavoidable and self-sufficiency still of strategical importance, it was necessary to encourage production in order to allow for some safety margin between production and consumption.

In discussions between representatives of the industry and the Government the long term policy was a goal of 725,000 tons of sugar to be reached within a period of five years. To give effect to the immediate and near future, it was decided that the existing quota system should be suspended and that, together with miller-planters, growers should be permitted to increase their production from registered lands i.e. the quota would automatically increase with deliveries.

/The

The allocation of new quotas was to be determined by the Ministers of Economic Development and Lands but with the provision for settlement of a large number of ex-service-men in the sugar belt, it was to be expected that the total area under cane would also increase.(1) In accordance with this policy the expansion of cane production in the Pongola district of Zululand was approved of in principle and as a temporary assistance the industry agreed to subsidize the transport charges to existing mills on cane reaped from lands under cultivation at that date. It was however, realised that the permanent development of that area depended not on any form of subsidization, but on the provision of railway facilities and mills.

The last year under review marked the re-entry of South Africa onto the export market but, as we know now, that reappearance was to be only temporary. Consumption increased considerably from a crop second only to the record breaking 1944/5 season but it was noticed "that this demand was not sustained during the last six months of the year ... and evidence is accumulating to show that the peak of national consumption, under existing conditions has been reached."(2) In planning the disposal of the crop, 561,328 tons were set aside for domestic consumption, a decrease of 6,580 but as it turned out, this was in accord with the facts for sales by the industry in 1949/50 amounted to 538,912 tons.(3) It is significant that total consumption during 1948/9 was greater than production in all but four years since the beginning of cane growing in Natal.

In considering the export prospects, it was fortunate that South Africa, as a member of the Commonwealth, had a

(1) In the Sugar Year Book for 1947/8 it was stated that in the past two years more than 130 new growers, mostly ex-servicemen, had commenced operations.
(2) This was but a temporary reverse for in 1950/1 sales reached a new record of 602,353 tons.
(3) Annual Report of South African Sugar Association, 1949 - S.A.S.Y.B., No. 19, 1948/9 pp 13.

/guarenteed

guarenteed market in Great Britian for although in physical terms there was no over-production of sugar, currency difficulties necessitating exchange restrictions to balance international accounts, meant that much potential demand never became effective. The British guarentee extended to 1952, by which time the industry hoped to be producing 725,000 tons, was at prices fixed anually in consultation with supplying countries. For 1949 the price fixed was £24-6-8 per short ton c.i.f. London, one which was considerably higher than that obtainable on the domestic market.(1)

SUMMARY

The story of sugar production in South Africa during the twenty years under review is very similar to that of the other products - beginning with production increasing enormously, encouraged by a State policy of protection. In an industry which fell under control far earlier than other agricultural enterprises, the degree of control was almost complete as early as 1926 when an agreement between millers and growers became legally binding upon signatories by the Sugar Act of 1926. The build-up period occurred earlier in the case of sugar than for other commodities, so from about 1930/1 the policy was not one of increasing production but of maintaining the level already reached. The aim as stressed over and over again was one of preserving the domestic market for the domestic industry, of price discrimination between different types of consumers, of overcoming geographical advantages by means of a special pricing policy. It was not a policy pursued by the Union alone; at a time when economic nationalism was the answer to all problems, most countries were advocating protection of certain interests and in general imposing

(1) The f.o.b. Durban equivalent of the c.i.f. quotation was £22-10. This was for 'raw' sugar i.e. of 96° polarization, The price on the domestic market would be £24-16-8 (the whole-sale price for 1st refined) less £4-0-0 (the refining margin) or £20-16-8.

/restrictive

restrictive measures designed to kill the aims of another age - "laissez faire".

However, as in any kind of planning, having interfered with the economy at one point, the State had to follow that with the adjustments at others. Having increased the customs duty to shut out foreign competition, it was necessary to peg the retail price, to limit production for producers had been encouraged to expand production following the more remunerative internal prices and this increased production had to be diverted to export where the price realised was less than half that ruling within the Union. Thus came the quota system for growers in 1936, but even that was not sufficient. Growers found themselves with cane in excess of their quotas and rather than see it rot on the lands, supplementary agreements were introduced whereby further quotas were diverted to the export market to be sold at prices which did not even cover the production costs.

On the consumption side, the fixed prices for sugar served as a stimulant as soon as the 1931-3 depression came to an end. At a time when most prices were rising that of sugar was remaining constant and demand was consequently increased by substitution for other foods. Furthermore, the introduction of the 2nd grade in 1936 served to stimulate consumption still further by falling within the means of the poorer sections of the community. This "Government" sugar soon became of great importance in the nation's consumption pattern, so much so that by 1948/9 sales of the brown sugar were more than half those of the refined product. Simultaneously manufacturers, benefitting from the fixed and extremely favourable price at which they could buy sugar, found increasing markets for their own products - both within the Union and overseas.

The net result of a consumption stimulated by a fixed price at a time of otherwise rising prices, and production strictly limited, was an inevitable narrowing of the gap between the two. From 1933/4 to 1946/7 the policy was one of

/consolidating

consolidating the level of production attained during the early thirties, a policy revealed by the figures for acreage under cane. In 1934 this was 391,000 acres, in 1947 it amounted to 379,000 and only from that year on did it begin to increase. What increase there was in production was not as a result of more widespread plantings but of technical improvements such as the introduction of new cane varieties and better processing methods, as is borne out by the increase in percentage of overall recover at mills. Between 1930/1 and 1944/5, the record year of the twenty year period production increased by 56% or about 4% p.a. - in the same space of time consumption rose by almost 160%. From the record level of exports in the 1939/40 season they fell heavily during the later war period, a time when the world demand for sugar far exceeded the available supplies, and during the last three seasons under review countries other than Southern Rhodesia, with whose Government the Union had a contract, received negligible quantities from South Africa.

The years 1945/6 to 1947/8 marked the turning point in the relationship between production and consumption. The rigidities of planning could not cope with such increased in consumption as occurred in years like 1941/2, 1942/3, 1944/5, 1947/8 and 1948/9. The time had come "to banish a ... all fears of a surplus; scrap forever the hateful, restrictive, uneconomical, nationally disgraceful idea of quotas, and go all out to produce in the fullest extent of which we are capable, encouraging the individual enterprise and initiative which is waiting to develop the future as their fathers developed the past."(1) What a far cry from the "planned economy wherein provision is made for ... the greatest good for the greatest number throughout the Union",(2) of 1936.

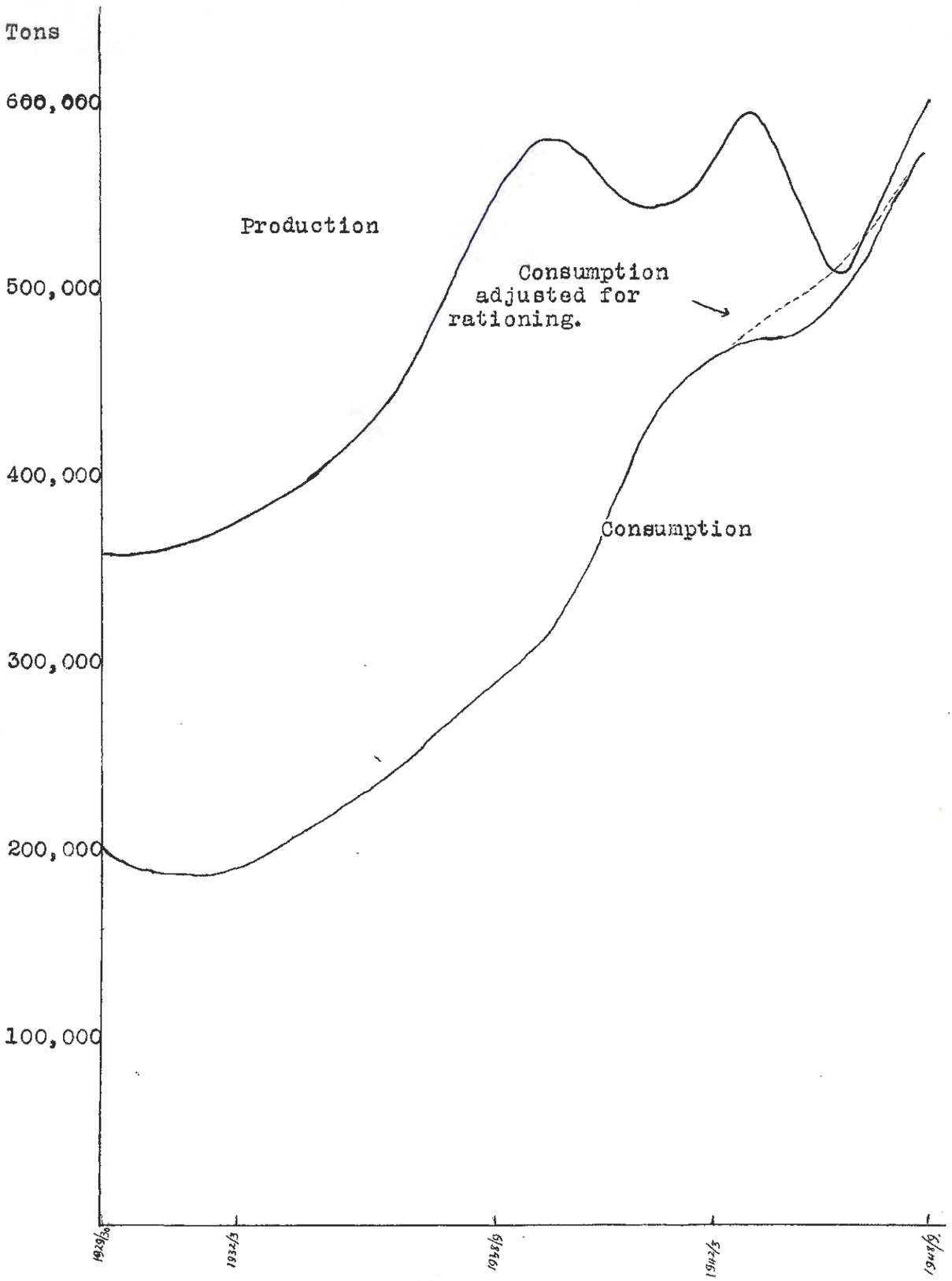
The general picture of the production and consumption

(1) Speech of Sen. the Rt.Hon. G.E. Heaton-Nicholls to the S.A. Technologists Association, 1948.
(2) See above, page 112

/of sugar

of sugar is well portrayed in the accompanying graph. The fall in consumption during the depression years, the sustained increase in production accompanied by consumption rising at a slightly slower rate and the consequent widening of the gap in the period, 1932/3-1938/9, are all revealed in the graph. Then, almost as if fate had taken a hand, production began to fall off just at a time when the consumption of sugar, promoted by the increased prosperity of the country and the fixed prices of sugar, entered a period of extremely rapid increase. Although the gap was not in danger of altogether disappearing, rationing was introduced in the 1942/3 season in an attempt to provide a greater export surplus for the severely rationed British people. The dotted red line illustrates what the course of consumption would have been had there been no rationing through the trade and is based upon figures and comments in the annual Sugar Year Books. The rationing, never extremely severe, was greatly relaxed in 1946/7 when the purpose of its imposition disappeared with the ending of hostilities, and the export surplus, which in the first season of the war, had exceeded 300,000 tons, now fell to merely 10,000 supplied to the Southern Rhodesian Government under contract.

The restriction of production was at an end but not the shortage, for it was to be expected that the increase in production necessary to meet the ever expanding consumption would take several years to materialize.




Graph 4: Production and consumption of sugar in South Africa 1929/30 - 1948/9.

Table 2.

Percentage of 'Uba' to total cane harvested.

| | |
|---|---|
| 1929/30 | 100.00 |
| 1930/1 | 100.00 |
| 1931/2 | 100.00 |
| 1932/3 | 99.96 |
| 1933/4 | 99.72 |
| 1934/5 | 96.68 |
| 1935/6 | 88.80 |
| 1936/7 | 63.77 |
| 1937/8 | 51.90 |
| 1938/9 | 28.04 |
| 1939/40 | 25.08 |
| 1940/1 | 19.28 |
| 1941/2 | 13.10 |
| 1942/3 | 8.99 |
| 1943/4 | 6.50 |
| 1944/5 | 4.25 |
| 1945/6 | 2.83 |
| 1946/7 | 1.91 |
| 1947/8 | 1.53 |
| 1948/9 | .72 |

Source: South African Sugar Year Books.

Table 3.

Production and Consumption of "jams, jellies and marmalades", 1929/30-1948/9. (000 lbs.)

| Year | Production* | Imports⊖ | Exports⊠ | Consumption | 3 year moving average of consumption. |
|---|---|---|---|---|---|
| 1929/30 | 18,883 | 512 | 1,641 | 17,754 | (17,754) |
| 1930/1 | - | 427 | 1,661 | - | - |
| 1931/2 | - | 232 | 1,283 | - | - |
| 1932/3 | 20,056 | 303 | 1,178 | 19,181 | (19,181) |
| 1933/4 | 22,461 | 400 | 1,361 | 21,500 | 21,525 |
| 1934/5 | 25,053 | 421 | 1,580 | 23,894 | 23,302 |
| 1935/6 | 25,481 | 573 | 1,543 | 24,511 | 25,082 |
| 1936/7 | 27,694 | 695 | 1,548 | 26,841 | 26,436 |
| 1937/8 | 29,148 | 543 | 1,734 | 27,957 | 27,878 |
| 1938/9 | 31,710 | 365 | 3,239 | 28,836 | 27,173 |
| 1939/40 | 46,408 | 406 | 22,091 | 24,725 | 30,526 |
| 1940/1 | 76,651 | 667 | 39,302 | 38,016 | 39,419 |
| 1941/2 | 104,412 | 42 | 48,939 | 55,515 | 46,728 |
| 1942/3 | 97,424 | 92 | 50,863 | 46,653 | 38,533 |
| 1943/4 | 129,322 | 41 | 115,933 | 13,430 | 36,693 |
| 1944/5 | 154,899 | 3 | 104,906 | 49,996 | 39,583 |
| 1945/6 | 137,806 | 188 | 69,241 | 68,753 | 63,573 |
| 1946/7 | 141,075 | 451 | 69,556 | 71,970 | 71,230 |
| 1947/8 | 175,992 | 233 | 103,259 | 72,966 | 65,062 |
| 1948/9 | 101,521 | 10 | 51,281 | 50,250 | - |

* From Industrial Censuses, refer to financial years of individual firms
⊖ Refer to calendar years - the second year mentioned.
⊠ Include ships' stores except for years 1939/40-1942/3 for which they are not available.

TABLE 1.

SUGAR CROPS OF THE WORLD, 1913/4 and 1919/20 to 1939/40.

(thousands of short tons)

| | 1913/4 | 1919/20 | 1921/2 | 1923/4 | 1925/6 | 1927/8 | 1929/30 | 1931/2 | 1933/4 | 1935/6 | 1937/8 | 1939/40 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CANE : | | | | | | | | | | | | |
| America | 5,601 | 7,320 | 7,692 | 8,319 | 9,760 | 9,142 | | 8,642 | 7,806 | 9,130 | 9,595 | 9,756 |
| Asia | 4,428 | 5,463 | 5,519 | 6,619 | 7,066 | 7,723 | 8,022 | 8,727 | 7,932 | 8,704 | 9,412 | 9,021 |
| Africa | 539 | 651 | 592 | 640 | 749 | 730 | 783 | 837 | 1,050 | 1,059 | 1,200 | 1,184 |
| Australasia | 402 | 254 | 417 | 335 | 698 | 659 | 673 | 771 | 882 | 877 | 1,064 | 1,190 |
| Spain | 8 | 6 | 15 | 9 | 9 | 10 | - | 29 | 18 | 22 | 14 | 14 |
| Total Cane | 10,978 | 13,694 | 14,235 | 15,942 | 18,282 | 18,264 | | 19,006 | 17,688 | 19,792 | 21,285 | 21,165 |
| BEET : | | | | | | | | | | | | |
| N. America | 747 | 750 | 1,041 | 890 | 937 | 1,111 | 1,156 | 1,202 | 1,707 | 1,239 | 1,345 | 1,723 |
| Europe | 8,924 | 2,917 | 4,491 | 5,665 | 8,348 | 8,996 | 9,120 | 8,359 | 8,814 | 10,118 | 10,783 | 10,717 |
| Total Beet | 9,671 | 3,667 | 5,532 | 6,555 | 9,285 | 10,107 | 10,276 | 9,561 | 9,891 | 11,357 | 12,128 | 12,440 |
| GRAND TOTAL | 20,649 | 17,361 | 19,761 | 22,497 | 27,567 | 28,371 | 30,000 | 28,567 | 27,579 | 31,149 | 33,413 | 33,605 |

Source : South African Sugar Year Book, No. 13, 1943/4.

(acknowledged to Messrs. Willett and Gray).

APPENDIX A.

PRODUCTION AND CONSUMPTION OF SUGAR IN SOUTH AFRICA, 1930-49. TONS.

| Year | Area under Cane | Cane crushed | Sugar Production | Imports | Opening Stock | Exports | Refining Losses | Closing Stock | Consumption |
|---|---|---|---|---|---|---|---|---|---|
| | A B | | | | | | | | |
| 1929-30 | 309,918 | 3,005,663 | 298,635 | 18,400 | 34,209 | 127,245 | 4,620 | 20,245 | 199,134 |
| 1930-31 | 289,053 | 3,803,883 | 393,205 | 5,886 | 20,245 | 193,326 | 5,580 | 35,176 | 185,254 |
| 1931-32 | 300,860 | 3,130,783 | 325,899 | 4,268 | 35,176 | 159,517 | 4,773 | 15,354 | 185,699 |
| 1932-33 | 372,189 | 3,489,960 | 358,905 | 490 | 15,354 | 179,322 | 3,880 | 10,114 | 181,433 |
| 1933-34 | 390,890 | 3,673,375 | 391,173 | 870 | 10,114 | 190,846 | 3,791 | 7,884 | 199,536 |
| 1934-35 | 383,463 | 3,874,215 | 358,738 | 1,226 | 7,984 | 121,194 | 4,468 | 25,861 | 216,423 |
| 1935-36 | 393,004 | 3,867,536 | 417,318 | 736 | 25,861 | 212,506 | 3,839 | 9,468 | 218,102 |
| 1936-37 | 395,268 | 4,181,973 | 446,409 | 1,298 | 9,468 | 169,599 | 5,385 | 30,759 | 251,432 |
| 1937-38 | 390,519 | 4,489,022 | 507,210 | 1,496 | 30,759 | 258,047 | 3,589 | 17,612 | 260,217 |
| 1938-39 | 388,544 | 4,658,962 | 522,732 | 1,697 | 17,612 | 223,811 | 5,249 | 29,477 | 283,504 |
| 1939-40 | 375,670 | 5,346,006 | 595,556 | 1,114 | 29,477 | 308,827 | 4,829 | 20,458 | 292,033 |
| 1940-41 | 369,392 | 5,309,227 | 572,880 | 1,295 | 20,860 | 234,025 | 5,638 | 25,242 | 330,130 |
| 1941-42 | 373,063 | 3,921,436 | 452,119 | 2,013 | 25,105 | 59,336 | 6,495 | 32,846 | 380,560 |
| 1942-43 | 373,603 | 4,704,430 | 524,975 | 1,062 | 32,822 | 60,826 | 6,060 | 35,215 | 450,758 |
| 1943-44 | 375,192 | 5,278,914 | 585,392 | 1,036 | 35,104 | 154,408 | 5,535 | 19,554 | 442,035 |
| 1944-45 | 371,829 | 5,351,945 | 614,158 | 1,360 | 19,530 | 111,990 | 6,752 | 31,159 | 485,147 |
| 1945-46 | 376,287 | 4,607,055 | 553,074 | 848 | 31,094 | 71,741 | 6,215 | 57,976 | 450,084 |
| 1946-47 | 378,921 | 3,990,017 | 474,769 | 780 | 57,891 | 10,000 | 8,139 | 72,961 | 442,340 |
| 1947-48 | 387,475 | 4,543,255 | 512,005 | 20,898 | 72,920 | 10,000 | 7,775 | 63,422 | 524,626 |
| 1948-49 | 406,160 | 5,216,144 | 607,845 | 10,905 | 63,422 | 15,024 | 7,500(i) | 81,275 | 578,373 |

Notes : All figures from Sugar Year Books.
A. Year ends on 30th April of second year.
B. From 1932/3-1948/9 for Europeans and non-Europeans, otherwise for Europeans alone.
Area under cane owned by Europeans for other years was as follows :

| | |
|---|---|
| 1932-3 | 336,500 |
| 1933-4 | 347,991 |
| 1934-5 | 355,714 |

(i) Estimate of the writer.

APPENDIX B.

CONSUMPTION OF SUGAR IN SOUTH AFRICA, 1930-49. TONS.

| Year | Consumption | Sales of white sugar | | Sales of Government Sugar | Total Sales | Industrial Consumption | | |
|---|---|---|---|---|---|---|---|---|
| | | For direct consumption | To manufacturers | | | Aerated Water | Jams etc. | Sweets |
| | A | | | | | B | B | B |
| 1929-30 | 199,134 | 156,516 | 24,217 | - | 180,733 | 2,300 | 6,071 | 11,497 |
| 1930-31 | 185,254 | 156,974 | 22,664 | - | 179,638 | - | - | - |
| 1931-32 | 185,699 | 158,038 | 23,279 | - | 181,317 | - | - | - |
| 1932-33 | 181,433 | 155,405 | 25,482 | - | 180,887 | 2,331 | 7,141 | 11,306 |
| 1933-34 | 199,536 | 175,559 | 23,803 | - | 198,362 | 2,699 | 7,696 | 13,062 |
| 1934-35 | 216,423 | 185,971 | 28,882 | - | 214,853 | 3,000 | 8,746 | 14,080 |
| 1935-36 | 218,402 | 185,482 | 31,697 | - | 217,179 | 3,671 | 9,315 | 15,905 |
| 1936-37 | 251,432 | 183,335 | 33,342 | 33,032 | 249,779 | 5,189 | 8,866 | 17,084 |
| 1937-38 | 260,217 | 179,640 | 34,414 | 44,667 | 258,721 | 5,040 | 10,443 | 17,577 |
| 1938-39 | 283,504 | 178,275 | 38,418 | 65,114 | 281,807 | 4,770 | 9,062 | 18,860 |
| 1939-40 | 292,033 | 168,469 | 43,773 | 78,677 | 290,919 | 5,361 | 16,252 | 18,038 |
| 1940-41 | 330,130 | 189,132 | 51,117 | 88,586 | 328,835 | 7,169 | 26,307 | 21,420 |
| 1941-42 | 380,560 | 197,446 | 72,543 | 108,558 | 378,547 | 8,557 | 34,373 | 24,414 |
| 1942-43 | 450,758 | 240,606 | 70,819 | 144,271 | 455,696 | 8,790 | 34,898 | 26,843 |
| 1943-44 | 442,035 | 212,057 | 78,430 | 150,512 | 440,999 | 10,008 | 46,671 | 28,704 |
| 1944-45 | 485,147 | 227,930 | 100,208 | 155,649 | 483,787 | 11,228 | 56,175 | 30,489 |
| 1945-46 | 450,084 | 204,488 | 88,500 | 152,598 | 445,586 | 10,724 | 51,757 | 27,882 |
| 1946-47 | 442,340 | 205,541 | 88,066 | 146,953 | 440,560 | 10,819 | 54,670 | 29,375 |
| 1947-48 | 524,626 | 246,295 | 98,423 | 159,010 | 503,728 | 12,283 | 66,846 | 29,967 |
| 1948-49 | 578,373 | 313,342 | 89,781 | 164,785 | 567,908 | 15,614 | 41,026 | 29,291 |

Notes : A. From Table I.
B. From Industrial Censuses.
all other figures from Sugar Year Books.

Chapter 5.

MEAT

The emphasis in this chapter will be on the production and consumption of fresh meat in general, for while an attempt will be made later to assess the degree to which the consumption of specific types of meat have changed during the twenty years under review, an inadequacy of data makes it impossible to follow the discussion along the lines of the different meats. It must also be stressed at this stage that imports consisted of livestock from adjoining countries to be slaughtered at Union abattoirs and also frozen and chilled meats from these and overseas sources. The figures for slaughterings will therefore, overstate thenumber of South African livestock by the imports of slaughter livestock from neighbouring countries like South West Africa, Bechuanaland, Swaziland, Basutoland and the Rhodesias.(1)

As in the case of some of the other products already discussed, the period under review opened with the emphasis being placed upon the export possibilities of the livestock industry of the Union. The geographical and climatic controls certainly seemed to be advantageous to the development of an export trade since the internal consumption, while quite considerable, was not sufficient to encourage ranching on a scale comparable with areas like the Argentine, Brazil, Australia and the U.S.A. which were the main producing countries. The Union had exported small quantities of frozen beef under contract to the military authorities of Italy but this had been confined to meat of an inferior quality. It was consistently stressed that South Africa could never hope to develop an export trade of any magnitude until the quality of her beef and mutton had improved in

(1) It is also true that certain of the livestock included in imports were strictly for the purpose of re-export especially a number of consignments from Southern Rhodesia between 1930 and 1937.

/such

such quantities as to ensure regular consignments so that the shipping companies could provide ships equipped with cold storage facilities. Frozen meat is transported at a temperature of between 10°- 20° Fahrenheit whereas the chilled product requires one of 28°-30° Fahrenheit. and costs become higher because the carcases must be hung and not stacked. The poor quality of the South African product meant that it could be frozen, as in the freezing process much of the flavour is lost, but was not at all suitable for chilled beef which was of course the commodity for which the higher demand existed on the London market.

The main reasons for the poor quality of the meat, applying to both beef and mutton, were on the one hand that the demand within the Union placed a dominant influence on meat of poorer quality and on the other that the quality of the livestock itself was greatly affected by the large proportion of native owned "scrub" cattle and the absence in many instances of a commercialized attitude towards farming by the European farmer himself. The nature of the demand function was in the main the outcome of the importance of the mine contracts and their influence of the general consumption pattern, an influence which resulted in a pattern of prices in which the relatively small premium for higher grade beef offered little inducement for improvement of quality. The fact that almost half the total number of cattle in the Union were owned by natives whose general attitude towards cattle resulted in their poor quality, exerted a strong influence upon the quality of the herd in general for in 1925 a survey of the Department of Agriculture showed that only 32% of European owned cattle were of an improved type. It was furthermore stated in 1934 that about 80% of the cattle entering the abattoirs every year were ordinary medium or scrub and "this position has a baneful effect on pastoral industries generally and on the

cattle industry in particular."(1)

The position as regards mutton was very similar. The sheep population of the Union was mainly of a Merino type reared for their wool qualities(2) and whilst the quality of their mutton and lamb was high enough to satisfy local requirements, it was hardly adequate to compete with the Australian and New Zealand products on the London market. Any attempts at export would necessitate considerable cross-breeding, and provision of ensilage, good hay and grain concentrate to augment natural grazing, the value of which is on the average in South Africa very poor.

The importance of the export trade was therefore two-fold. It could do much to improve the quality of the local livestock by increasing the demand for higher quality meat and thereby counteract the influence of the local market, and it would also, it was submitted, increase the income of the producer by being a substitute for the low priced maize and wool on the world markets. It has already been stressed in the discussion on maize,(3) how the world price of that commodity fell disasterously in the early 1930's due to the accumulation of stocks in the Argentine and Danube valley; at the same time it was rumoured abroad that there were signs of a shortage in the world production of beef as a result of droughts and the prevailing competition of rising wool prices in the late 1920's. In an article in Farming in South Africa in 1930(4) C.J. Uys maintained that as a result of a decrease in the number of cattle in the Argentine(5) (Britian's main source of supply) of 404,000 between 1927 and 1928 and a fall of 24% in the export of chilled and

(1) "Farming in South Africa", October 1934.
(2) About 12% of the total number of sheep were non-wooled breeds.
(3) See page 34 .
(4) "Meat Export of the Union" by C.J. Uys; "Farming in South Africa" May, 1930 pp 5.
(5) This was not confined to the Argentine for in the U.S.A. cattle decreased from 68 million in 1920 to 55 in 1928 and in Australia was about 20%

/frozen

frozen meat, Great Britian had become greatly concerned and it was suggested that South Africa could assist in meeting the meat shortage. The advisability of diverting the export of maize to stock feed and exporting the cereal in the form of beef have already been examined[1] and when the price of wool on the world market began to fall the export of mutton as a substitute for wool gained more and more support. The export of meat was however, in the nature of a vicious circle: it was one of the main means of improving the quality of stock but at the same time itself depended for its success and profitability on an improvement. In view of the fact that the South African product would not be able to compete with thebetter quality products from the Argentine; Australia and New Zealand, it was necessary to pay a subsidy on the export[2] and in addition an indirect subsidy was obtained in respect of the lower railage rates on meat destined for export. As a result of this propaganda and monetary incentives to export, the quantity of beef exported overseas (i.e. not including South West Africa and the Rhodesias) from South African cattle increased from about 1,500,000 lbs in 1928 to 22,000,000 lbs in 1933.[3]

An important factor in regard to the export of meat from South Africa was the outcome of the Ottawa Conference held in 1932 whereby certain restrictions were imposed by Great Britian on the importation of meats from foreign sources. In the case of chilled beef importation from foreign countries was not to exceed the 1931-2 level, the importation of frozen beef and mutton was to be reduced by 5% per quarter until a level of 65% would be reached in April - June 1934 with the proviso that Australia's export of mutton

(1) See above, page 36 .
(2) On frozen and chilled beef an export subsidy ranging from 35-20% on the former and 35-25% in respect of the latter was gazetted on 22nd July, 1932.
(3) Figures from the Official Year Books. Rhodesian and South West African cattle have been subtracted.

/and

and lamb to the U.K. was not to exceed the 1932 level. On the expectation that the United Kingdom's demand for meats would not fall, it was confidently expected that the reduction in the participation by foreign countries in this market, would be of considerable benefit to South African meat producers.

Within South Africa the main concern centred around the violently fluctuating prices of livestock to producers. While they were in some part inherent in the auction system and out-of-hand sales which predominated the local marketing, the highly variable and uncertain climatic conditions, which are typical over large parts of the Union, no doubt contributed materially in the instability of the slaughter stock markets. The practise of out-of-hand purchase on the hoof must have also been the cause of greater instability and the resulting uncertainty, combined with the widespread belief that auction sales were frequently manipulated by the stock dealers resulted in more and more stock being purchased by the wholesale butchers or speculators from the farmers direct or at the country auctions, which merely served to aggravate the position further.

With the seasonal variation in the numbers of livestock sent to the slaughter poles, it was inevitable that price fluctuations would be considerable and it was a fact of course that the very fluctuations should have tended to induce a greater measure of stability in the supplies by creating an incentive to producers to market their stock in "non-flush" periods. There can be little doubt that this did in fact occur but it was probably not the producers themselves who reaped the benefits but rather the speculators and others who bought the stock from the farmer direct and offered it when prices had improved in harmony with a temporary shortage of supplies. The speculators were in fact performing a highly useful economic function but the general disatisfaction on the part of the producer "added to the depressed conditions of the industry during the second half

of the twenties, and the subsequent drastic decline in prices during the 1929-33 depression (made) attempts to alleviate the situation ..... inevitable."(1)

Therefore, in addition to the substantial subsidies on the export of fresh meat under the Export Subsidies Act of 1931, an attempt at regulated marketing was made in 1932 by the establishment of a Meat Trade Board of three members under Emergency Act No.29 of 1932, with powers to determine the maximum number of cattle and sheep which could be sold during any particular period on any market as defined by the Board. As its powers were extremely limited it was superceded by a larger and more representative Board established under the Livestock and Meat Industries Act (No. 48 of 1934) which provided for the regulation of the marketing of slaughter stock on the major internal markets; for an imposition of a levy on all cattle slaughtered at abattoir poles for commercial purposes; for the payment of bounties on the export of meat from the proceeds of such levy and for the introduction of a Cattle Improvement Scheme.

The Board commenced operation on the Rand market where about 40% of the cattle and 22% of the sheep slaughtered in the Union were slaughtered on the assumption that if prices could be stabilized on that market the influence would spread to the other markets fairly quickly. In order to regulate the supply of slaughter stock onto this market the permit system was introduced, whereby no stock could be brought into the Rand controlled area from either the remainder of South Africa, or outside territories, except by permit. The permits were based on the estimated saturation level of demand at the desired price level. This form of control was extended to Cape Town in March, 1936 and Durban in October

(1) Report of National Marketing Council on Marketing Boards U.G. 27/47 pp 149.

1942.

In addition the Board did all it could to stimulate the auction system in preference to the selling of stock out-of-hand, since it believed that auctions would stimulate competition and restrict the operations of speculators. Thus in Cape Town, where private sales had always been more popular, the Board developed a well patronized auction market by granting preferential treatment in the granting of permits to those applicants who wished to bring supplies directly into controlled areas to slaughter for their own account. The permit system was never very successful because of the large number of applications to be dealt with at certain times of the year; because it was impossible to take into account the supply conditions of all the different regions in granting quotas although the Board did follow the policy of granting preference to drought-stricken areas, and most important because there was no means of ensuring that all permits issued would be taken up. In actual fact nothing like the number of permits issued would be taken up (1) and so while at certain times over 25,000 applications were made when the weekly quota was between 5,000 and 6,000 (2) it was quite possible that in issuing 6,000 only 4,000 would be used. All the permit system could really achieve was a slight ironing out of uneveness in the supplies during the peak months but without offering any extra incentive it could not hope to divert supplies on any substantial scale to the periods of short supply.

(1) Issue and use of permits on Johannesburg market.

| | Range in percentage use over 6 flush months. | |
|---|---|---|
| | Cattle | Sheep |
| 1939 | 54 - 70 | 68 - 82 |
| 1940 | 59 - 70 | 63 - 78 |
| 1941 | 44 - 69 | 50 - 67 |
| 1942 | 48 - 54 | 46 - 56 |

Source : U.G. 27/47 pp 150.

(2) U.G. 27/47 pp 150.

/Whenever

Whenever supplies appeared to be in excess of requirements on the controlled markets the Board arranged for the supplies to be taken off the market at agreed prices and exported. Thus in Johannesburg the Department of Agriculture was itself responsible for the preparations of several shipments of chilled beef[1] while monthly shipments were inaugurated through East London by the Cape Eastern Meat Export Association. To encourage the production of high grade slaughter-stock and to develop an overseas outlet the Board also subsidized, from the proceeds of the levy of 2/- per head of cattle, 6d per calf and 3d per sheep or goat, the export of high grade fat lamb and mutton to the British market. Nevertheless and despite the general propaganda on the part of the authorities to further the export trade, the quantity exported remained insignificant in comparison to slaughterings within the Union.[2]

In furthering their policy for the betterment of the livestock of the Union, there was included in the powers of the Livestock and Meat Industries Control Board a provision for the introduction of a Cattle Improvement Scheme. This was instituted by proclaiming Improvement Areas, at the request of the farming community, in which after a period of not less than 12 months and not more than 18, no bull might be kept or introduced without inspection. In conjunction with this scheme a Bull Subsidy Scheme was introduced whereby approved bulls could be bought on a Government subsidy up

(1) Between November, 1934 and May, 1935 the Department organised and prepared 17 shipments (3054 head of cattle) and between February and May there were regular weekly shipments apart from a fortnight break in March.

(2) Exports of Beef, Mutton and Lamb subsidized by the Livestock and Meat Industries Control Board.

| Year | Beef | | Mutton and Lamb | |
|---|---|---|---|---|
| | No. of carcasses | % of annual slaughterings | No. of carcasses | % of annual slaughterings |
| 1934-5 | 3,223 | .6 | - | - |
| 1935-6 | 17,707 | 3.0 | 740 | - |
| 1936-7 | 5,212 | .8 | 4,486 | .1 |
| 1937-8 | 3,182 | .5 | 29,977 | .9 |
| 1938-9 | 8,247 | 1.2 | 46,858 | 1.3 |
| 1939-40 | 8,474 | 1.2 | 80,769 | 2.1 |
| 1940-1 | 9,495 | 1.2 | 23,803 | .6 |
| 1941 -2 | 354 | - | - | - |

Source : U.G. 10/44.

/to

to £12-10 per bull and £25 per applicant, the latter increased to £50 in 1938.(1) The poor quality of the bulls previous to the introduction of this scheme is revealed by the fact that over half of those inspected were rejected. It was recognized that provision for the scheme was by no means adequate to ensure the development of a sound livestock industry and further steps were taken to assist in its development. For instance it was recognized that the offspring of the improved bulls would require better handling and feeding, so in 1936 a subsidy scheme for the erection of silos in maize producing areas was initiated by the Government in an attempt to encourage a system of mixed farming in the maize belt whereby the cattle reared on the ranches would be sent into the maize belt for fattening. Government assistance was originally limited to bona fide maize farmers in certain districts where the Department of Agriculture was convinced that a change over to mixed farming would be beneficial, but later extended over the whole Union, and amounted to 25% on final evaluation of silo or shed provided that prior approvement had been granted. A limitation of £50 per farm and £100 per farmer was set.

The drought of 1933 and 1934 affected the slaughterings of sheep to a far greater extent than cattle as is reflected in the figures in Appendix *B* on page *167*, but it also led to a marked increase in wholesale prices for sheep in 1933-34 when in comparison with cattle prices, they ruled at very high levels.(2) When climatic conditions reverted to nearer

(1) By August, 1937 there were 124 Improvement districts and £138,000 had been paid out in respect of 15,590 bulls or an average of £8-17-6 each. (Annual Report, Secretary of Agriculture, 1937).

(2) Indices of wholesale prices of cattle, sheep and pigs on the Johannesburg market. (1924/5-1938/9 = 100)

| | Cattle (Good medium and compound) | Sheep (Medium Merinos) | Pigs (Baconers and Porkers |
|---|---|---|---|
| 1929-30 | 98 | 90 | 118 |
| 1930-1 | 93 | 72 | 84 |
| 1931-2 | 81 | 56 | 67 |
| 1932-3 | 74 | 63 | 63 |
| 1933-4 | 94 | 109 | 105 |
| 1934-5 | 94 | 108 | 101 |
| 1935-6 | 99 | 93 | 90 |
| 1936-7 | 106 | 97 | 78 |

Source : U.G. 27/47 pp 148.

/the

the norm, and sheep supplies increased the prices once again fell into line with one another.(1) The discouraging feature of the market for beef viz lack of inducement to produce quality beef, unfortunate in view of the pressing need to improve the quality of livestock, remained and in fact the difference between first grade and compound beef prices declined as a result of the increased demand by the mines for their natives in 1935-36 but gradually the "premium" increased as the process of urbanisation continued and with increased purchasing power the demand for quality by Europeans began to influence the market against and the domination of compound requirements.(2) In an attempt to develop the market for quality in South Africa the National - Mark Scheme was extended to meat on local markets, the difference between the price for National-mark prime and compound beef on the Johannesburg market being between 14/- and 17/- per 100 lbs dressed weight. The extent to which the demand for beef by the mines dominated the total demand pattern is revealed by the fact that the grading of carcasses brought into the Johannesburg abbatoir during 1937-38 showed the following percentages of total supply of beef.(3)

| | 1937-38 | 1938-39 |
|---|---|---|
| Compound | 55.2 | 32 |
| Ordinary medium | 27.7 | 31 |
| Good mediums | 12.8 | 25 |

(1) The actual average realised price for medium grade mutton on the Johannesburg and Pretoria markets fell from 6.2d in January, 1935 to 4.8d in January, 1936, and for lamb from 6.3d to 5.3d.

(2) Prices of beef on the Johannesburg market.(dressed weight in shillings per 100 lb.)

| | Prime | Good Medium | Good Compound |
|---|---|---|---|
| July, 1935 | 30.5 | 26.5 | 23.2 |
| December, 1935 | 33.7 | 29.2 | 25.5 |
| June, 1936 | 31.0 | 26.7 | 23.0 |
| December, 1936 | 37.0 | 31.5 | 27.0 |
| June, 1937 | 34.0 | 29.75 | 26.0 |
| December, 1937 | 47.75 | 41.0 | 35.25 |
| June, 1938 | 38.25 | 33.5 | 29.5 |
| December, 1938 | 41.0 | 39.0 | 35.0 |
| June, 1939 | 37.5 | 34.5 | 29.75 |

Source : Annual Reports, Secretary of Agriculture.

(3) "Grading of Beef" by R. Hirzel; "Farming in South Africa", 1938 pp 173.

/Prime

| | | |
|---|---|---|
| Prime ..... | 3.9 ..... | 4.5 |
| Super ..... | .4 ..... | 2.5 |
| | 100.0 | 100 |

On the assumption that no compound beef was being consumed by Europeans and that non-Europeans consumed nothing but compound only 10% of consumption of beef by Europeans consisted of high quality meat. The improvement is reflected in the second column which shows the percentage during 1938-39.

The export of beef continued but on a declining scale although under Government propaganda and the payment of Government subsidies and the Board's bounties based on quality, the Natal Stock Owners Association commenced export from Durban and the Co-operative Meat Co. Ltd was formed in Kimberley for the same purpose. The Government announced that it would pay subsidies on the export of meat at the 1939 levels for a further 5 years after which they would decrease by 20% p.a. The Board however, gave the assurance that provided its finances and market conditions permitted it, the decrease in the amount of subsidy would be made up by increased bounty payments.(1) It would seem therefore that the official attitude was still that South Africa could and should develop an export trade in meat even at the cost of paying very substantial subsidies to encourage that development. This was the attitude which prevailed when war broke out in September, 1939.

When one examines the total production of beef, veal, mutton and lamb, in abattoirs and on farms, the increase between 1932-3 and 1938-9 amounts to approximately 20% (or 3.3% p.a) but it is significant to realize that the increase in respect of mutton and lamb between 1924-5 and 1936-7 was in the region of 11% p.a. There was first the drop in supply of

(1) The following were the rates of subsidy and bounty paid on the export of certain meats in 1937.

| | Subsidy | Bounty |
|---|---|---|
| Chilled Beef | | |
| Grade A | 1⅛d. | 1½d. |
| Grade B | 1 d. | 1¼d. |
| Grade C | ⅞d. | 1 d. |
| Frozen Beef | | |
| X - quality | ¾d. | ¾d. |
| Frozen Mutton | | |
| Grade A | ⅞d. | 1½d. |
| Grade B | ¾d. | 1⅛d. |
| Frozen Lamb | | |
| Grade A | 1⅛d. | 1½d. |
| Grade B | 1 d. | 1⅛d. |
| Grade C | ⅞d. | 1 d. |

mutton and lamb following the severe droughts of 1932-3 and 1933-4 after which slaughterings of small stock increased at a far greater rate than did slaughterings of cattle and calves, a state of affairs which the National Marketing Council maintains was evidence of the change over in many parts of the country, from wool to cattle farming.(1) An examination of the relative prices for wool and slaughter stock reveals that it was after the 1936-7 season that the change in favour of beef occurred, a change which was likely to induce substitution of cattle ranching for wool growing.(2) Furthermore the figures for the number of sheep in South Africa support the contention that it was after 1937 that the substitution must have occurred for up to that date the number of sheep had been increasing showing that slaughterings were less than the natural increase. It appears therefore that the substantial increase in slaughterings in the two seasons 1935-6 and 1936-7 was probably a natural outcome of the improvement in the climatic conditions for despite the fact that during this two-year period the increase amounted to about 11% p.a. in 1937-8 the production of mutton and lamb was only slightly above the level of 1932-3, before the effect of the drought was felt.

Slaughterings continued to increase considerably; in the first three seasons of the war the increase in total production of beef, veal mutton and lamb were 7%, 11% and 7% respectively while in the case of slaughterings at the abattoirs only, the increase was even greater. The demand for meat, possibly accentuated by an increased demand for stock for

(1) U.G. 27/47.
(2) Price Indices of Wool, Beef and Mutton prices. (1936/7 - 1938/9 = 100).

| Year | Wool | Beef | Mutton |
|---|---|---|---|
| 1935-6 | 100 | 82 | 91 |
| 1936-7 | 123 | 88 | 95 |
| 1937-8 | 98 | 104 | 109 |
| 1938-9 | 79 | 108 | 97 |
| 1939-40 | 117 | 105 | 105 |
| 1940-1 | 103 | 113 | 109 |

Source : U.G. 10/44, pp 14.

/speculative

speculative reasons, however, increased even more markedly and the result was that livestock prices rose enormously.(1) As the permit system operated under the Meat Board was primarily intended to deal with a surplus position, it was altogether inappropriate under the conditions of relative scarcity which developed, and was in effect suspended, although retained nominally. To ease the situation exports of meat to England were discontinued; apart from a few consignments during 1941 the aim of which was to retain a place on the British market; and to assist producer exporter organizations; the weight requirements and quotas on imports from the adjoining territories were withdrawn;(2) and in order to prevent as far as possible the purchase of military requirements from further encouraging the inflationary spiral of prices, the Food Control Organization took over the supply of meat to the military.

In their report on the position in 1943-4 the Meat Commission arrived at the conclusion that the increased slaughterings of cattle and sheep during the first three years of the war had not resulted in any serious inroad into the capital of the industry. It is important to remember that slaughterings may either be part of the natural increase or they may be from the actual livestock which are to produce the net increase in the future years. As long as the total livestock population was increasing, it was safe to say that the

(1) Indices of wholesale prices of Cattle, Sheep and Pigs on the Johannesburg market 1938/9-1942/3 (1924/5-1938/9 = 100)

| | Cattle (Good medium and compound) | Sheep (Medium Merinos) | Pigs (Baconers and Porkers |
|---|---|---|---|
| 1938/9 | 127 | 99 | 118 |
| 1939/40 | 124 | 108 | 107 |
| 1940/1 | 133 | 111 | 97 |
| 1941/2 | 162 | 136 | 113 |
| 1942/3 | 195 | 178 | 158 |

(2) Under a Trade Agreement the number of cattle introduced from adjoining territories had been restricted as follows:

| | |
|---|---|
| Southern Rhodesia | 5,200 per annum |
| Bechuanaland | 10,000 " " |
| Swaziland | 4,500 " " |
| South West Africa | No restriction |

In 1940 Southern Rhodesia discontinued to export livestock to the Union, but the increase in numbers from other territories is revealed in Appendix A .

/slaughterings

slaughterings came from the natural increase. In the case of cattle the population had risen fairly consistently from 1934 to 1939 whereas in the case of sheep the peak was reached in 1937 after which it had begun to fall due, as we have discussed above, to the increased relative profitability of cattle rearing over wool growing. No Agricultural Census had been taken since 1939 owing to shortages of staff, and so the findings of the Meat Commission were arrived at before the results of the 1943 census which covered rural areas only, were known. On the basis of an annual natural increase of 364,000 head of cattle per annum in the period 1935 to 1939, and having in mind that some 46,000 more cattle were being introduced every year from adjoining territories than in pre-war years, there still remained a substantial "margin" between slaughterings and the natural increase. The findings as regards cattle were proved by the results of the 1943 census of the number of livestock as the increase amounted to approximately 1,200,000 in the space of 4 years, or about 2.5% p.a. as compared with an increase of approximately 3% p.a. between 1934 and 1939.

The examination of the position in respect of sheep slaughterings did not result in the same optimism on the part of the Meat Commission. Approximately 1,000,000 more sheep were slaughtered in 1942 compared with 1939 and even allowing for the increase in small stock imported from neighbouring territories, "the Commission cannot avoid the impression that the census which is now being taken will show a reduction in the present sheep population when compared with that of 1939".(1) This conclusion was borne out by the 1943 census which revealed that the number of sheep in the Union had declined by approximately 400,000 While the Commission did note the possibility of a reduction in the sheep population,

(1) U.G. 10/44 pp 5.

/in other

in other words recognised that the increased production of mutton had in part been derived from cutting into the capital stock of the country, they regarded the probable decrease as so small as not to effect the general position to any substantial degree and therefore came to the conclusion that "the supply position in regard to cattle could be regarded as fundamentally sound (and as regards sheep that) as a result of the past two favourable lambing seasons, the position will right itself in the near future."(1)

While it concluded that the decrease in the livestock population of the Union would, if any at all, be negligible the Meat Commission did not attempt to argue with the fact that there had already appeared a scarcity of meat. The main factors causing the enormous increase in demand were considered to be the increase in the number of convoys on the Cape route following Italy's entrance into the war on the side of the Axis countries; the demand of the military where meat is the basis of the diet; the increased demand by evacuees and prisoners of war; the concentration of the population in urban centres and the generally increased purchasing power of the consumer.

It is difficult to provide evidence as to the increase in meat supplied to passing convoys as ship's stores since no figures were published in the Annual Reports of the Board of Trade and Shipping for the years 1940 to 1943 inclusive. Nevertheless from the figures for 1939 and 1944 it is evident that the increase must have been fairly considerable and in an attempt to bridge the gap of four years certain unpublished figures originating in the Department of Agriculture are included to provide some idea of the increase in the years 1941, 1942 and 1943 which were the busiest on the trade route around the Cape to and from the Far East. These figures show

(1) U.G. 10/44 pp 6.

/that

that in 1944 the quantity of beef, mutton and pork increased by almost 4,500,000 lbs but in 1942, the maximum year, the difference was more then 29,000,000 lbs. It is difficult to judge the reliability of the figures for the years 1941, 1942, and 1943 without any means of checking on them, yet it would seem that the quantity of beef mutton, veal and pork shipped as stores amounted to approximately .1% of the total production of these meats in the Union in 1939, approximately 3.6% in 1942 and .7% in 1944. It is probable that the unpublished figures are in excess of the actual quantity shipped, and while the quantity itself increased substantially, it nevertheless remained insignificant when compared with the total consumption.(1)

As far as the demands of the military are concerned, it is difficult to obtain data to prove how much this demand affected the supply position but in view of the fact that the requirements of the troops at the front were in the form of preserved and canned meats and the consistent statements appearing in official sources, to the effect that Union manufacturers were not taking advantage of the military demand for meat, it seems likely that the increase in demand must have been limited to the requirements of training troops within the Union. Since this in fact was not the creation of a new demand but merely the substitution of a military one for a civilian, the writer is inclined to the view that the increase arising from this factor was not as substantial as it has been made out to be.(2) Similarly the writer is inclined to the

(1) The increase in quantity shipped as stores amounted to 15% of the increase in total production of beef, veal, mutton, lamb and pork between 1939 and 1942 and only 4% between 1939 and 1944. See Table 1 page 154 .

(2) The writer does not dispute the fact that military requirements were substantial but this does not necessarily mean that the net increase in demand (i.e. when reduction in civilian demand due to enlistment is subtracted from military requirements) was as considerable. The only reason to suppose that military requirements increased the total demand lies in the proposition that non-Europeans troops were better fed in the army than in civilian life.

/view

view that the increase in demand caused by the influx of evacuees and prisoners of war has been grossly exaggerated in explaining the rise in demand for meat products during the war years.

The Meat Commission also stresses the importance of the shortage of tractors and its effect of a substitution of trek oxen for ploughing and other operations formerly performed by tractors, and the increased speculation in farms caused by business men putting their money into farms and stock as a stable form of investment, as an important cause in the shortage of meat supplies. Bearing in mind the fact that this would have occasioned an increase in the livestock population during the war years, which did not occur especially after 1943, the writer feels that once again too much emphasis has been placed upon certain factors and too little on the main causes of the increase in demand for meats viz. the increased prosperity of the country and to a lesser extent the greater concentration of demand in urban areas.

The conclusion arrived at by the Commission regarding the adequacy of supplies in the Union stressed that "were increased slaughterings ..... the only demand factor, supplies should be readily available to meet this demand, provided it showed no further substantial increase and supplies were not adversly affected by unfavourable natural conditions"(1). Since there were other demands however, like the need for trek oxen and the effects of speculation, which were in the nature of a cycle decreasing supplies to the market currently but which would supplement them later when the greater natural increase from a greater capital stock would appear on the market, the Commission accordingly advocated the imposition of wider control over the marketing of livestock. They did not envisage any need for a formal system of rationing with cards etc. but

(1) U.G. 10/44 pp 10.

/suggested

suggested that since the shortage was not expected to be considerable and since certain of the factors influencing demand were cyclical in nature, a form of rationing through the trade would be adequate to meet the circumstances. The practical difficulties of such a rationing scheme were well recognised and it was advocated that the non-European and poorer sections of the Europeans be encouraged to become regular customers of a certain butcher in order to ensure an equitable distribution of supplies among different income groups. Also "the Commission... wishes to emphasise that it considers effective price control as the "sine qua non' of any attempt at rationing."(1)

The applicability of the permit system to conditions of scarcity had never been considered - the whole system had been introduced in order to maintain a remunerative level of prices to the producer so that when prices began to rise enormously(2) reflecting the shortage of supplies in 1941 and 1942 the efficacy of the permit system was revealed as being very limited. Accordingly in October, 1942 maximum wholesale and retail selling prices, according to grade and cut, were introduced in the 4 major urban centres. At the same time "indicated" prices were published at which butchers were supposed to purchase their livestock from producers, and others in order to be able to sell at the fixed prices. Due to the growing scarcity of all types of meat(3) butchers found it impossible to obtain stock at the "indicated" prices because they were in competition with butchers in uncontrolled areas, and consequently the evasion of price regulations soon became

(1) U.G. 10/44 pp 12.
(2) As far as retail prices are concerned, data produced by the Office of Census and Statistics show a 20% increase in 1942 compared with the previous year in the case of beef and mutton and one of 17% for pork. The increase continued into 1943. Producers' prices show an equally substantial increase (see footnote 1 on page 145 ).
(3) It is significant to note that 1941/2 was a peak year for slaughterings of cattle, sheep and pigs and they showed a marked decline in subsequent years.

/widespread

widespread.

It was next sought to restrain consumption and accordingly quotas for butchers were introduced in respect of the Rand, Cape Town and Durban in July 1943, extended to Pietermaritzburg, Bloemfontein, Port Elizabeth, East London and Kimberley in October of the same year and still later to all abattoirs in the Union, the quotas being based upon the slaughterings during the first nine months of 1943. Even this extension of control did not prove sufficient to bridge the gap between a decreasing supply and increasing consumption so that following the report of the Meat Commission in 1944 a more comprehensive scheme of price control was introduced under which notonly wholesale and retail prices were fixed but also producers prices since even after the extended control introduced in 1943, the discrepancy between "indicated" and the actual open market price continued to prevail.(1)

It was realised that maximum selling prices for meat could only be made effective if butchers could obtain their supplies at prices which would enable them to work on the fixed selling prices. In order to ensure this, and to introduce a more enforceable system of rationing, it would be necessary to also obtain effective control over stock supplies and so all slaughter stock introduced into the nine large urban centres, which normally accounted for about 70 to 75% of the total urban consumption of meat(2) was purchased by the Meat Controller through appointed agents at the fixed producers prices and allocated according to the quotas to the different butchers in each area.

In fixing prices to the producer it was found impractiable in view of the even greater scarcity, to impose the l

(1) In fact, during the scarce months of 1943 it was greater than ever, especially for cattle, see Table 2 , page 165 .
(2) U.G. 27/47 pp 152.

/level

level of 1942 indicated prices and they were therefore determined on a slightly higher basis under the dressed weight and grade scheme also introduced in 1944. It was impossible however, to maintain one particular price over the whole year as the supply of cattle in particular is extremely seasonal so winter premiums on cattle were announced at the beginning of the season (about March or April) to increase at a given rate and later decline from about October. Since the supply of sheep and pigs to the slaughter houses are not nearly so seasonal, producers' prices remained constant throughout the year. It was also necessary to make allowance for premiums between the different urban centres since farmers who continued to bear the cost of transport to the market, naturally preferred the nearest centres. Such centres as East London, Port Elizabeth, Kimberley and Bloemfontein which are close to the important production areas cannot normally absorb all the stock produced in their areas, certain centres like East London would with no inter-centre premiums attract a great deal of mutton but relatively little beef, so it was essential that some form of price differentiation between the different urban centres be imposed. These premiums were however not rigidly enforced and were altered from time to time in conformity with the prevailing supply conditions.

The considerable fall in the number of cattle slaughtered in abattoirs in 1943 and 1944 is blamed on the misunderstanding on the part of farmers as to the exact purpose of the new scheme - many were disinclined to market their stock until they had satisfied themselves as to its effect. The scheme as it was originally introduced soon showed great setbacks especially insofar as it applied to the main urban areas alone. As the 1944 winter approached the supply position gradually deteriorated and gave rise to all kinds of undesirable practices. Meat was reaching the controlled areas on an ever increasing scale by the "back door". More and more townsmen began to draw their meat supplies from butchers

just outside the controlled areas. The business of these butchers expanded rapidly, and offered a growing market to producers and speculators who refused to abide by the fixed prices. It became clear that unless these and other tendencies were curbed, control would become seriously undermined. Thus in July, 1944 the maximum consumers' prices were extended to all districts, but the enforcement of such measures and others which were inevitable if the control was to achieve its purpose, was of course an extremely difficult undertaking in the rural areas.

Speaking at a Congress in October, 1944, the Minister of Agriculture said:-

> "Meat was short, partly because in the first four years of the war five years supply of cattle had been slaughtered. In the year 1942 to 1943 about 300,000 head of cattle had been supplied for military purposes alone and at the same time civilian consumption had increased. So great had been the drain of the Country's stock that the previous year's cows in calf had been slaughtered as well as many of the country's breeding animals. The shortage, therefore was inevitable."

In view of the fact that less than a year previously the Commission of Inquiry had come to the conclusion that the cattle position was fundamently sound and during 1943 and 1944 there were less cattle slaughtered than in the previous year, this statement is most surprising. It does however, show that the effect of the increased slaughterings were long delayed. It was not in the years 1940 to 1943 when the slaughterings were at their height that the shortage was greatest but during 1944 and 1945 which were the two most difficult years in respect of obtaining meat supplies by importation. Thus for instance the total importation of meats and meat products from overseas reached its maximum of 16,500,000 lbs in the years 1941 and 1942 to fall to just over 7,000,000 lbs in 1944. Exports which

/totaled

totaled over 6,500,000 lbs in 1941 dropped to 600,000 in 1944. The result was that the Unions demand on the world's short supplies reached its maximum in the years when those supplies were at their lowest ebb and when the Union itself was unable to contribute towards them.

From the middle of 1942 under the international food planning of Combined Food Board and London Food Council the British Ministry of Food was appointed as sole buyer throughout the world apart from North America and the United Kingdom. The first difficulty which arose was the unwillingness on the part of the Union Government to prohibit private importation of meat. As the whole success of the venture depended on the Ministry of Food's ability to obtain meat from the South American republics at reasonable prices, which in turn depended on it being placed in a monopolistic position as far as buying was concerned, the Union Government did finally submit to the argument of the International body.

The difficulties were not restricted to the mere availability of the meat products although this of course played a major role especially in 1944 and 1945 when the increased demand from the liberated peoples of Europe and other former occupied countries made the position even more serious. There was also the question of shipping which became more and more important as the war progressed until it reached its most difficult period in 1944 when with the preparation for the invasion of France and later the need for a continuous lifeline across the Atlantic, little could be spared for the route between South America and South Africa which as we have seen when discussing the maize position, was a major difficulty throughout the war period. There were however, other difficulties especially in regard to the importation of canned corned beef which was of course in demand for the front line troups. The U.S.A. had refused to allow corned beef to be used as ships stores and had requested other Allied Nations to do the same, yet the applications for meat products

/submitted

submitted by South Africa to the planning authorities continued to include corned beef to be supplied as ships stores. The United States had also introduced a limitation on the consumption of corned beef by civilians and Great Britian continually tried to persuade South Africa to accept other meat products like corned porks in lieu of the beef product since she felt that if the U.S.A. was prepared to make the sacrifice others should do the same. The South African authorities however stated that they could not accept products which were unknown in the country, an attitude which was maintained despite the critical position of 1944, but at the same time had to agree that no allocation to civilians would be made. The means of overcoming the crisis of 1944, whereby the Defence Authorities released 500,000 lbs of corned beef per week as long as the shortage lasted, were hardly likely to promote any feeling of co-operation between the Union and the London Food Council who immediately came to the conclusion that the Defence requirements had been grossly overated in order to allow for this "magnanimous gesture" on their part.

The attempt made by the Government to obtain meat and meat products from overseas sources proved that they were well aware of the shortage within the Union but many of these efforts ran counter to the essential purpose and workings of the international organization and therefore came to nothing. On several occasions it approached the London Food Council in connection with offers from South American packers, requests which could only be turned down if for no other reason than the principle involved in the British Ministry of Food being the sole buyer. It would appear that South American interests were attempting to break the monopoly hold of the International Organization and in their desire to augment the short supplies within South Africa, the Union Government was in danger of becoming their unwitting tool. Similar requests continued throughout 1945 and 1946 and the Food Controller attempted to obtain permission for the importation of such

/varieties

varieties as Vienna Sausages which did not directly come under the auspices of the Food Council, only to be informed that sanction of such a request would merely encourage the diversion of meat into the production of those articles which were far more of a luxury nature than tinned beef. While it was inevitable that a certain amount of misunderstanding should develop between the planning body and member countries it would seem that there were considerations other than purely economic, which influenced Government policy.

The allocation of supplies within the Union during these critical years of 1944 and 1945 has been partially explained above,(1) but it is time that the control measures were considered in a little more detail. Prior to the introduction of the 1944 scheme, the Meat Board was responsible for the regulation of supplies of slaughtered stock to the four main urban centres. As it had the necessary organization, it was decided that the Board should continue to exercise this function of issuing the permits for allocation to each urban centre, the allocation being worked out by the Meat Control Organization. In determining these quotas for the different urban centres, the level of consumption, immediately before the introduction of the scheme, was used at the outset but when circumstances permitted, saturation tests were conducted in the various centres in order to establish new quotas to take into account such factors as the increase in population between different centres and changes in consumers' habits. Due to the general scarcity of supplies such tests could not be carried out at the same time at all centres, nor could they be conducted simultaneously in respect of all types of meat. While they were therefore but a very crude means

(1) See page 151 et seq.

/of

of determining a basis on which to alter quotas from time to time, they did represent the fairest approximation that was possible. As far as the actual allocation of supplies in relation to full requirements is concerned, it is difficult to obtain any reliable information, but the Meat Commission stated that "at present butchers throughout the Union are limited to 80% of their killings during the period 1st January to 30th September, 1943"(1) while the National Marketing Council reported that "issues during the last 12 or 18 months (i.e. June 1945 to December 1946) have been equal to about 75% of the approximate full requirements."(2) The Meat Board was empowered to fix slaughter quotas to the outside butchers and to ration them on a basis corresponding to that applicable to butchers inside the controlled areas but this was obviously a far more difficult task than was control in urban areas since no possibility existed for the use of saturation tests and administrative control was far more cumbersome.

In considering the new scheme it is essential that it be examined in the light of three main factors:-

(a) the seasonality of supplies in general.

(b) the distribution of supplies between the controlled centres and

(c) the distribution of supplies between controlled and uncontrolled areas.

Under a system of auctions and free competition it was the automatism of the pricing mechanism which controlled the flow to the markets - obviously during flush seasons the market would tend to be depressed and would improve during the scarce winter months. With the introduction of the fixed prices for slaughter stock it devolved upon the system of winter premiums to even out supplies over the year. In the 1944 - 1945 season a total premium of 5/- was set,(3)

(1) U.G. 10/44 pp 11. "Now" being the end of 1943.
(2) U.G. 27/47 pp 154.
(3) Actually the premium paid was increased to about 8/6 by special premiums during November, 1944 and subsequent months of scarcity.

/increased

increased to 10/- in 1945 - 1946 and to 15/- in 1946 - 1947 when experience showed that 10/- was insufficient to draw adequate supplies during the "off-season". On this point the National Marketing Council reported: "Since the introduction of the meat scheme in May, 1944, there had been a pronounced increase in seasonality in the marketing of cattle despite efforts to counteract this by introducing seasonal price premiums in imitation of the open marked."(1) It appears that the premium has had a definite effect on marketing but the effect has not always been one of leveling out supplies between the flush and scarce seasons.(2) For the 1947 - 1948 season the full premium was fixed at 17/6 with the exception of Grade IV for which it was 12/6; for the following season however, the premium was reduced to 12/6 for all grades while the basic price of super, prime and Grade I were increased by 5/- per 100 lb dressed weight. The seasonality of the supply position still remained in 1949 although the peak periods then showed a marked tendency to fluctuate.

As far as the distribution of supplies between the various centres is concerned the inter-centre price pattern received constant attention in accordance with changing circumstances but the need to transport carcasses from one centre to another nevertheless remained. This cost the Directorate of Meat Supplies £97,631 in 1947-8 and £135,126 in 1948-9. In both 1946-7 and 1947-8 as many as 54,000 cattle unit carcasses had to be transferred between centres and on examination of the percentage of trade issues to trade quotas in different centres the maldistribution between

(1) U.G. 27/47 pp 157.
(2) The National Marketing Council in U.G. 27/47 (pp 160) stated: "the numbers of cattle sent to Johannesburg and Durban markets showed a significant decline between the months of May and June, when the fixed seasonal price premium had not commenced or was still small". In short the effect was often the complete reversal of the normal seasonal pattern due to fixed premiums instead of ones designed to meet the fluctuating natural conditions.

centres is still revealed although the range shows a marked decline in the last season under review. The constant low percentage in the case of Durban and Pietermaritzburg is to be accounted for by the fact that the large Asiatic population are non-beef eaters and as shall be shown later, mutton was in far shorter supply than was beef.(1)

As regards the distribution of slaughterings between controlled and uncontrolled areas, the main feature since 1940 has been the significant fall in the percentage of total slaughterings of sheep slaughtered in the controlled areas.(2) Mutton production had been decreasing since 1941/2 and it was to be expected that the greater portion of the decrease would be passed onto the controlled areas. The extent to which the supply of mutton fell is revealed by the fact that during 1946/7 and 1947/8 the actual slaughterings of mutton in controlled areas was below 40% of the quota of those areas. The main reason for this decline in the production of mutton and lamb was the considerable increase in wool prices immediately after the wartime control over that commodity had been lifted, which followed on the substantial decrease in the sheep population from 30,211,000 in 1943 to 24,331,000 in 1946 due to droughts and the slaughtering of capital stock. Of the other meats, the production of beef and veal was best maintained and once maize became available as stock-feed the production of pork showed a marked increase in the last two seasons under review although it was far from adequate to meet the level of demand increased by the substitution of pork for mutton.

So far little mention has been made of meat products other than in their connection with imports during the war period. The only products of which there is adequate data

(1) See ~~Table~~ Appendix B page 167 .
(2) See Table 4 page 164 .

/available

available to compute some figure of consumption with any reasonable degree of accuracy, are bacon and ham. An examination of these two meat products reveals that the quantity of pork used in their manufacture rose from approximately 15,000,000 lbs in 1929/30 to 44,000,000 in 1948/9 (i.e. by almost 200%), but as to the actual quantity manufactured, no reliable statistics have been found to include production on farms. As far as industrial production is concerned, the increase was approximately 200% but it is significant that part of this increase has been in the nature of a reduction in the net importations in pre-war years when the average balance on foreign trade amounted to approximately 400,000 lbs per annum. Since 1938/9 exports have consistenly exceeded imports even when no account is taken of ships' stores in those years when figures are not available. The Industrial Censuses also include the quantity of beef used industrially but no detailed division of the production of such commodities as tinned meats, is available. The only guide that can be obtained is by examining the imports and exports of certain meat products, an examination which reveals a steady increase in the imports of preserved meats and meat pastes although part of the rise has been offset by an increase in exports, many of them re-exports.(1) Nevertheless while in 1930 the net importation of preserved meats was 2,500,000 lbs, it had risen to 10,000,000 lbs in 1949 which must lead one to the conclusion that the production of meat products did not rise to such significant proportions as that of, for instance, bacon and ham, a factor which is due largely to the severe shortage of fresh meat during the last 6-7 years under review, a period when there was every incentive for greater production of preserved meats. etc.

(1) See table 5 page 165 .

/SUMMARY

SUMMARY

Having already dealt with four groups of agricultural products, it is not surprising that in the late 1920's and early thirties, the emphasis in official policy should be on the need for increased export from the Union. We have already seen how the export of maize was discouraged in official circles in favour of the conversion of "surplus" maize into beef and mutton, the export of which would, it was expected, be greatly to the advantage of producers. The export of mutton was further encouraged when the price of wool fell so drastically in the depression years, since almost 90% of the sheep in the Union are woolled types. There were however, several important barriers to the development of a sound and economic export of fresh meats. Since the development of refrigeration the demand on the European markets, apart from military and other contracts in which South African exporters usually obtained a share, had been almost entirely limited to the chilled and not the frozen product. The chilling process preserves the quality of the meat to a far greater extent than does freezing and the very poor quality of the Union's exports therefore meant that there was never sufficient quantities of chilled beef available to warrant a regular shipping service from the Union to the United Kingdom and European countries. There were two main factors accounting for the poverty in quality. First there was the very great influence of the Native owned "scrub" cattle both in the Reserves and on European farms, and secondly the domination of the demand for inferior quality meats to fulfil mine contracts etc. This domination over the general demand pattern obviously afforded no incentive to the producer for a widespread improvement of the herds.

In an attempt to overcome these disabilities of the local industry and to encourage exportation, the Government introduced certain measures such as the payment of export subsidies, later supplemented by the bounties offered by the

Livestock and Meat Industries Control Board set up in 1934, the Cattle Improvement Scheme, the payment of grants on schemes for the storage of maize and of course the controlled marketing scheme itself, all of which it was hoped, would put the local industry on a more economic footing than it then was. The main medium of control was the permit system whereby the number of animals entering dontrolled areas, at first limited to the Rand but later extended to Cape Town and Durban, was to be controlled to attain some pre-determined level of prices which, would then, by virtue of the importance of these markets on the general economy of the country, be transmitted to other areas.

During the first three seasons of the war period demand for slaughter-stock rose considerably due to a variety of factors such as the general improvement of economic conditions the continued concentration of the population in urban areas where the availability of meat in small quantities is an important factor in consumer habits, the demands of the military, requirements for ships' stores, the demands of evacuees and P.o.W's, the shortage of tractors necessitating the substitution of oxen and the increased investment in livestock; and prices rose all round. Under these circumstances the permit system, primarily designed as a restrictive measure, was useless, and so following the Report of the Meat Commission in 1944, a far wider degree of control was granted to the Control Board whereby retail, wholesale and later producers' prices were fixed, for the first nine controlled areas and then the whole of South Africa.

It was inevitable that there would be a time lag before the effects of the increased slaughterings of 1940, 1941 and 1942 would be felt and so it was that the supply position in the Union reached its worst state at a time when the International planning authorities found it virtually impossible to meet the requirements off the Union as stated in the latter's

applications. Not only had the world supplies decreased and demand increased to meet the requirements of liberated peoples, but shipping facilities had reached their lowest ebb as far as this country was concerned. In these circumstances it was not surprising that differences should arise between the local and the planning authorities, yet it would appear that South Africa was making a strenuous attempt to wage a war on a "business-as-usual" basis, one which more than once came into conflict with the wider interests of the Allied cause.

With the advent of peace and the almost fantastic increase in wool prices, the production of mutton which had been falling since 1942, continued to do so while that of beef and veal began to rise but pork was in extremely short supply owing to the restrictions on the use of maize as animal feed. The control over consumption had therefore to continue and it is probable that nor more than 80% of the country's requirements at current prices, was being made available during the years 1945-9, a truly remarkable state of affairs when one considers that only 15 years previously, the need for increased export was being so ardently stressed.

Table 1.

Fresh and preserved meats supplied as ships' stores, 1938-45.
000 lbs.

| | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
|---|---|---|---|---|---|---|---|---|
| Beef | 503 | 514 | - | 11,200 | 18,300 | 4,500 | 3,176 | 2,084 |
| Mutton | 121 | 112 | - | 4,800 | 8,300 | 5,400 | 1,223 | 833 |
| Pork | 28 | 62 | - | 2,100 | 3,300 | 2,700 | 728 | 494 |
| Bacon and Ham | 31 | 76 | - | | | | 648 | 569 |
| Other salted and cured | 99 | 127 | - | 8,300 | 14,800 | 3,805 | 1,165 | 662 |
| Preserved meats | 19 | 102 | - | | | | 822 | 299 |

(Table 2, overpage)

Table 3.

Quotas and percentage of quotas issued in controlled centres, 1946/9

| | 1946-7 | | 1947-8 | | 1948-9 | |
|---|---|---|---|---|---|---|
| | Quota | % | Quota | % | Quota | % |
| Bloemfontein | 11,136 | 82.3 | 11,069 | 84.4 | 11,344 | 88.5 |
| Cape Town | 71,491 | 91.5 | 71,794 | 92.6 | 81,347 | 84.5 |
| Durban | 45,994 | 77.1 | 52,784 | 77.6 | 55,608 | 79.5 |
| East London | 13,501 | 73.1 | 13,624 | 76.7 | 12,723 | 81.1 |
| Kimberley | 9,490 | 81.9 | 9,074 | 78.3 | 7,810 | 85.5 |
| Pietermaritzbg. | 8,108 | 80.3 | 8,581 | 77.9 | 8,648 | 79.4 |
| Port Elizabeth | 25,824 | 69.9 | 26,310 | 73.5 | 25,951 | 79.5 |
| Pretoria | 41,899 | 77.2 | 35,993 | 88.1 | 39,046 | 86.3 |
| Rand | 222,581 | 86.3 | 214,436 | 81.4 | 237,407 | 89.1 |
| Total | 450,024 | 83.7 | 443,665 | 82.6 | 479,883 | 86.0 |

Source : Annual Reports, Secretary of Agriculture.

Table 4.

Distribution of slaughterings between controlled and un-controlled areas.

| | Percentage of total slaughterings in controlled areas | | | |
|---|---|---|---|---|
| | Cattle | Sheep | Pigs | Calves |
| 1939 | 69 | 61 | - | - |
| 1940 | 70 | 63 | 68 | 86 |
| 1941 | 69 | 64 | 70 | 86 |
| 1942 | 70 | 65 | 66 | 89 |
| 1943 | 70 | 62 | 67 | 90 |
| 1944 | 69 | 56 | 63 | 90 |
| 1945 | 74 | 55 | 72 | 87 |
| 1946 | 76 | 52 | 63 | 81 |
| 1947 | 72 | 45 | 57 | 81 |
| 1948 | 70 | 42 | 64 | 81 |

Source : Annual Reports, Secretary of Agriculture.

Table 2

Average monthly open market prices and "indicated" prices of slaughterstock on the Johannesburg market.

| | Cattle (/- per 000lbs) | | Sheep (d. per lb) | |
|---|---|---|---|---|
| | Market | "Indicated" | Market | "Indicated" |
| 1942: October | 57.1 | 53.2 | 10.7 | 8.8 |
| November | 59.3 | 53.2 | 11.0 | 8.8 |
| December | 56.4 | 53.2 | 10.2 | 8.8 |
| 1943: January | 51.6 | 53.2 | 9.4 | 8.8 |
| February | 49.2 | 53.2 | 8.6 | 8.8 |
| March | 47.7 | 48.2 | 9.8 | 8.3 |
| April | 48.2 | 48.2 | 10.2 | 8.3 |
| May | 48.4 | 48.2 | 10.3 | 8.3 |
| June | 49.3 | 48.2 | 10.2 | 8.3 |
| July | 58.1 | 51,8 | 10.3 | 8.8 |
| August | 59.0 | 55.3 | 10.2 | 9.2 |
| September | 67.9 | 54.8 | 10.9 | 9.2 |
| October | 69.4 | 54.8 | 9.6 | 9.1 |
| November | 67.6 | 54.8 | 10.1 | 9.1 |
| December | 61.4 | 54.8 | 11.4 | 9.1 |
| 1944: January | 59.1 | 54.8 | 10.4 | 9.1 |
| February | 53.5 | 54.8 | 10.3 | 9.1 |
| March | 50.9 | 54.8 | 10.9 | 9.1 |
| April | 47.5 | 54.8 | 11.4 | 9.1 |
| May | 48.2 | 54.8 | 9.8 | 9.8 |

Source : U.G. 27/47.

Table 5.

Import and exports of meat products, 000 lbs

| | Imports | | | | | Exports* | |
|---|---|---|---|---|---|---|---|
| Year | Meat Pastes | Salted & Cured§ | Tinned Beef⊖ | Tinned Tongues⊖ | Other Preserved | Salted & Cured | Preserved |
| 1930 | 126 | - | - | - | 2,588 | 76 | 109 |
| 1931 | 105 | - | - | - | 3,035 | 11 | 39 |
| 1932 | 66 | - | - | - | 1,764 | - | 42 |
| 1933 | 107 | - | - | - | 3,393 | 33 | 28 |
| 1934 | 179 | - | - | - | 6,699 | 115 | 23 |
| 1935 | 174 | - | - | - | 8,854 | 39 | 56 |
| 1936 | 223 | - | - | - | 5,279 | 26 | 39 |
| 1937 | 225 | 157 | - | - | 7,746 | 89 | 199 |
| 1938 | 205 | 156 | 6,460 | 297 | 2,078 | 138 | 149 |
| 1939 | 248 | 172 | 5,672 | 358 | 2,586 | 206 | 148 |
| 1940 | 212 | 161 | 10,254 | 331 | 1,401 | 31 | 173 |
| 1941 | 381 | 285 | 8,628 | 599 | 3,985 | 165 | 1,625 |
| 1942 | 61 | 138 | 4,890 | 328 | 4,309 | 102 | 1,334 |
| 1943 | 302 | 52 | - | 668 | 5,062 | 10 | 4,146 |
| 1944 | 638 | 62 | - | 188 | 2,249 | 809 | 1,448 |
| 1945 | 433 | 71 | - | 79 | 10,331 | 420 | 766 |
| 1946 | 2,091 | 63 | - | 24 | 7,887 | 194 | 766 |
| 1947 | 310 | 52 | - | 284 | 10,013 | 196 | 404 |
| 1948 | 159 | 70 | - | 792 | 13,567 | 283 | 1,280 |
| 1949 | 269 | 91 | - | 17 | 12,585 | 405 | 2,589 |

* Does not include ships stores in the years 1940-3.
§ Other than bacon and ham.
⊖ Included in "other preserved" in years other than those stated.

APPENDIX A.

NUMBERS, OF CATTLE, SHEEP, AND PIGS IN THE UNION, AND IMPORTS OF SLAUGHTER STOCK. 1930-49.

| Year | CATTLE | | | SHEEP | | PIGS | IMPORTS FOR SLAUGHTER | |
|---|---|---|---|---|---|---|---|---|
| | European 000's | Non-European 000's | Total 000's | Wooled 000's | Non-wooled 000's | European owned | Cattle 000's | Sheep 000's |
| | A | A | A | A | A | A | | |
| 1930 | 5,172 | 5,402 | 10,574 | 43,912 | 4,446 | 495 | 61b | 53a |
| 1931 | - | - | - | - | - | - | - | 79a |
| 1932 | - | - | - | - | - | - | - | 101a |
| 1933 | - | - | - | - | - | - | - | 134a |
| 1934 | 5,210 | 4,777 | 9,987 | 30,257 | 4,754 | 408 | 96b | 103a |
| 1935 | 5,496 | 4,902 | 10,398 | 30,207 | 5,628 | 523 | 104+ | 109a |
| 1936 | 5,912 | 4,992 | 10,904 | 33,316 | 6,389 | 619 | 128+ | 76a |
| 1937 | 6,197 | 4,991 | 11,188 | 35,835 | 5,199 | 538 | 72+ | 126+ |
| 1938 | 6,305 | 5,102 | 11,407 | 32,796 | 6,206 | 449 | 101+ | 145+ |
| 1939 | 6,537 | 5,314 | 11,853 | 31,990 | 6,299 | 466 | 75 | 159+ |
| 1940 | - | - | - | - | - | - | 96 | 158+ |
| 1941 | - | - | - | - | - | - | 106 | 157+ |
| 1942 | - | - | - | - | - | - | 124 | 188+ |
| 1943* | 7,425 | 5,643 | 13,068 | 30,211 | 7,677 | 629 | 132 | 248a |
| 1944 | - | - | - | - | - | - | 115 | 168a |
| 1945 | - | - | - | - | - | - | 102 | 24a |
| 1946 | 7,511 | 5,082 | 12,593 | 24,331 | 6,501 | 530 | 151 | 6a |
| 1947 | 7,162 | 4,951 | 12,113 | 24,442 | 6,282 | 546 | 165 | |
| 1948 | 7,380 | 5,090 | 12,470 | 25,767 | 6,845 | 693 | 152 | |
| 1949 | 7,120 | 5,122 | 12,242 | 25,595 | 6,313 | 761 | 208 | |

A Agricultural Censuses.
* Rural Areas only, 15th November.
\+ From Report of the Meat Commission UG 10/1944.) Include animals slaughtered in the
a From Annual Report of Trade and Shipping. ) Union and exported as beef.
b "Farming in S.A." Refers to year ending 30th June, 1930.

APPENDIX B.

## PRODUCTION OF BEEF, VEAL, MUTTON AND LAMB, '000 LBS.

| | BEEF | | VEAL | | MUTTON LAMB AND GOATS MEAT | | TOTAL |
|---|---|---|---|---|---|---|---|
| Year | Abattoirs A B | Farms & Reserves E | Abattoirs A C | | Abattoirs A D | Farms & Reserves F | |
| 1929-30 | 291,000 | 78,000 | 2,100 | | 89,900 | 77,400 | 538,400 |
| 1930-31 | - | 78,000 | - | | - | 76,400 | - |
| 1931-32 | - | 79,600 | - | | - | 74,400 | - |
| 1932-33 | 245,000 | 79,600 | 2,100 | | 109,100 | 73,400 | 509,200 |
| 1933-34 | 272,000 | 79,600 | 2,200 | | 85,100 | 73,400 | 512,300 |
| 1934-35 | 274,500 | 82,500 | 2,300 | | 80,600 | 73,400 | 509,300 |
| 1935-36 | 316,500 | 82,500 | 2,500 | | 100,300 | 73,400 | 573,200 |
| 1936-37 | 334,000 | 82,500 | 2,800 | | 123,900 | 71,300 | 613,200 |
| 1937-38 | 326,000 | 85,600 | 3,000 | | 116,300 | 74,000 | 604,900 |
| 1938-39 | 327,000 | 85,600 | 3,100 | | 123,100 | 71,000 | 609,900 |
| 1939-40 | 360,500 | 85,600 | 3,300 | | 129,600 | 70,000 | 649,000 |
| 1940-41 | 399,000 | 99,100 | 3,900 | | 150,600 | 69,000 | 722,600 |
| 1941-42 | 428,500 | 111,500 | 4,100 | | 157,200 | 72,000 | 773,600 |
| 1942-43 | 425,500 | 113,000 | 4,200 | | 141,400 | 71,000 | 774,100 |
| 1943-44 | 371,000 | 103,000 | 4,300 | | 123,500 | 69,000 | 670,800 |
| 1944-45 | 404,000 | 104,200 | 4,700 | | 123,800 | 69,000 | 705,700 |
| 1945-46 | 498,000 | 139,200 | 5,000 | | 118,400 | 73,000 | 837,400 |
| 1946-47 | 545,500 | 106,900 | 5,800 | | 108,300 | 67,000 | 834,400 |
| 1947-48 | 554,000 | 117,500 | 5,600 | | 102,800 | 72,800 | 849,900 |
| 1948-49 | 586,000 | 117,500 | 5,400 | | 96,000 | 69,900 | 875,800 |

A. For years 1929-30 and 1933-34 the Office of Census and Statistics otherwise Meat Industry Control Board for actual number of animals slaughtered.
B. Obtained by multiplying number slaughtered by 500lb.
C. Obtained by multiplying number slaughtered by 50lb.
D. Obtained by multiplying number slaughtered by 34lb.
E. Obtained by multiplying estimates of Div. of Economics and Markets as follows:- Slaughterings on farms - 300lb. Slaughterings in Reserves - 250lbs.
F. Obtained by multiplying estimates of Div. of Economics and Markets as follows:- Slaughterings on European farms - 30lbs. Slaughterings in Reserves 20lbs.

APPENDIX C

PRODUCTION AND CONSUMPTION OF BEEF, VEAL, MUTTON, AND LAMB '000 LBS.

| Year | Total Production | Imports A | Exports AB | Used as Raw Materials in Industry C | Consumption | Adjusted Consumption D |
|---|---|---|---|---|---|---|
| 1929-30 | 538,400 | 320 | 30,916 | 4,787 | 503,000 | |
| 1930-31 | - | 395 | 22,854 | - | - | |
| 1931-32 | - | 104 | 16,837 | - | - | |
| 1932-33 | 509,200 | 31 | 22,262 | 3,925 | 483,000 | |
| 1933-34 | 512,300 | 1016 | 6,384 | 5,875 | 501,100 | |
| 1934-35 | 509,300 | 573 | 15,077 | 6,513 | 488,300 | |
| 1935-36 | 573,200 | 88 | 22,813 | 7,233 | 543,200 | |
| 1936-37 | 613,200 | 83 | 18,184 | 7,399 | 587,700 | |
| 1937-38 | 604,900 | 89 | 4,825 | 9,810 | 590,400 | |
| 1938-39 | 609,900 | 335 | 9,618 | 9,619 | 591,000 | |
| 1939-40 | 649,000 | 275 | 8,812 | 12,678 | 627,800 | |
| 1940-41 | 722,600 | 454 | 19,914 | 17,910 | 685,200 | |
| 1941-42 | 773,600 | 4959 | 29,174 | 16,812 | 732,600 | |
| 1942-43 | 774,100 | 7413 | 2,020 | 15,095 | 764,400 | |
| 1943-44 | 670,800 | (3457)a | 5,196 | 14,555 | 654,500 | 820,700 |
| 1944-45 | 705,700 | 7640 | 3,428 | 13,653 | 696,300 | 873,800 |
| 1945-46 | 837,400 | 1754 | 4,309 | 17,177 | 817,700 | 945,000 |
| 1946-47 | 834,400 | 6444 | 1,903 | 19,876 | 819,900 | 984,800 |
| 1947-48 | 849,900 | 266 | 2,446 | 21,172 | 826,500 | 992,100 |
| 1948-49 | 875,800 | 14 | 2,804 | 23,776 | 849,200 | 1,021,000 |

a Does not include imports from S.W.A. and Northern Rhodesia.
A Refers to calendar years.
B Includes ships stores except for years 1940, 1943, and 1944. For years 1941 and 1942 the figures for ships stores have been obtained from unpublished sources (see text page) otherwise from Annual Report of Trade and Shipping.
C From Industrial Censuses, mutton included from 1944-45 but is relatively insignificant.
D In view of the fact that since about 1942-43 supplies have not been sufficient to meet full demand requirements, consumption for the years 1943-44 to 1948-49 is here adjusted on the following basis.

1943-44 - 75%
1944-45 - 75%
1945-46 - 83%
1946-47 - 80%
1947-48 - 80%
1948-49 - 80%

of slaughterings in abbatoirs since it is assumed that it was only urban consumption which was restricted by the scarcity at the fixed prices. These percentages are not the same as those produced by the Director of Meat Supplies since it cannot be accepted by the writer that the quotas represent the actual level of demand at current prices.

APPENDIX D

## PRODUCTION AND CONSUMPTION OF PORK, BACON AND HAM, 000 lbs.

| Year | Production of Pig's Meat | | | Used in manufacture of Bacon, Ham Sausages etc. | Consumption of Pork | Adjusted Consumption of Pork | Bacon and Ham | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Abattoirs | Farms | Total | | | | Production | Imports | Exports | Consumption |
| | Ab | C | | D | | E | F | G | GH | |
| 1929-30 | 21,600 | 9,920 | 30,500 | 14,969 | 15,500 | | 7,678 | 615 | 478 | 7,800 |
| 1930-31 | - | 10,000 | - | - | - | | - | 570 | 537 | - |
| 1931-32 | - | 10,000 | - | - | - | | - | 364 | 224 | - |
| 1932-33 | 24,000 | 10,000 | 34,000 | 13,114 | 20,900 | | 6,455 | 366 | 127 | 6,700 |
| 1933-34 | 21,300 | 12,000 | 33,300 | 14,012 | 19,300 | | 6,823 | 786 | 117 | 7,500 |
| 1934-35 | 24,300 | 12,000 | 36,300 | 14,670 | 21,600 | | 6,984 | 565 | 67 | 7,500 |
| 1935-36 | 29,900 | 12,040 | 41,900 | 16,595 | 25,300 | | 7,601 | 427 | 50 | 8,000 |
| 1936-37 | 30,200 | 14,080 | 44,300 | 18,355 | 25,900 | | 8,043 | 395 | 95 | 8,300 |
| 1937-38 | 32,000 | 14,000 | 46,000 | 18,830 | 27,200 | | 9,528 | 367 | 177 | 9,700 |
| 1938-39 | 31,600 | 14,000 | 45,600 | 20,829 | 24,800 | | 9,495 | 288 | 314 | 9,400 |
| 1939-40 | 38,700 | 13,000 | 51,700 | 22,066 | 29,600 | | 11,565 | 59 | (525) | 11,100 |
| 1940-41 | 48,100 | 13,000 | 61,100 | 29,135 | 32,000 | | 15,233 | 149 | (706) | 14,700 |
| 1941-42 | 59,000 | 12,000 | 71,000 | 33,653 | 37,300 | | 19,365 | 245 | (418) | 19,200 |
| 1942-43 | 56,600 | 11,000 | 67,600 | 35,685 | 31,900 | 83,100 | 20,611 | 242 | (217) | 20,600 |
| 1943-44 | 58,700 | 11,000 | 69,700 | 34,966 | 34,700 | 88,600 | 18,747 | 226* | 939 | 18,000 |
| 1944-45 | 65,800 | 10,000 | 75,800 | 35,827 | 40,000 | 89,400 | 18,139 | 641 | 690 | 18,100 |
| 1945-46 | 54,900 | 10,000 | 64,900 | 30,781 | 34,100 | 101,500 | 15,477 | 559 | 548 | 15,500 |
| 1946-47 | 52,900 | 10,400 | 63,300 | 30,873 | 32,400 | 116,200 | 15,696 | 490 | 575 | 15,600 |
| 1947-48 | 68,100 | 10,000 | 78,100 | 38,039 | 40,100 | 107,300 | 18,001 | 388 | 549 | 17,800 |
| 1948-49 | 88,000 | 10,000 | 98,000 | 44,118 | 53,900 | 100,000 | 21,704 | 13 | 3,623 | 18,100 |

Notes :
A. Until 1943-4 from the Office of Census and Statistics, subsequently from the Meat Industry Control Board.
B. Converted on the basis of 110 lb per carcase.
C. Estimates of the writer using the Agricultural Census figures for the years 1929-30, 1935-6, 1936-7 and 1946-7, converted at 80 lbs per carcase. These figures refer to slaughterings on European farms only.

D. From Industrial Censuses - do not include pigs' meat used in manufacture of bacon and ham on farms.
E. Consumption figures for the period 1942/3-1948/9 have been adjusted to estimate the level of consumption at current prices with no rationing, on the following basis:

| | | | |
|---|---|---|---|
| 1942/3 | 75% | 1945/6 | 60% |
| 1943/4 | 75% | 1946/7 | 50% |
| 1944/5 | 85% | 1947/8 | 70% |
| | | 1948/9 | 80% |

F. From Industrial Censuses.
G. For Calendar years.
H. Do not include ships stores for period 1939/40-1942/3.
* Does not include imports from S.W.A. and N. Rhodesia.

## Chapter 6.

### SUMMARY

"The old order of agricultural economic conditions may be said to have passed away. We are ever seeking for our products wider markets beyond our borders."

This extract from the editorial in the January, 1930 number of "Farming in South Africa" is an apt description of the attitude of policy makers towards South African agriculture in the period which marks the beginning of the twenty years under review. The transition period coincided with a change in the international supply position as well for it was in the late twenties and early thirties that signs of over-production of the essential staple foodstuffs like wheat and maize began to appear and provided what could later be interpreted as signposts towards the Great Depression. It was recognised within the Union that there were many factors, both natural and in the character of many of its farmers, which would bar the way to an efficient agricultural industry yet it was generally accepted that this country possessed the requirements of an agricultural exporting community. If we were to divide the twenty year period in which we are interested, the first ten years would be synonomous with two words - control and export.

This emphasis on the need for export however, differed between the products. In certain cases the desire to build up an export trade was based on a long term determination to improve the quality of the produce by extending the market as in the case of beef the improvement of which had never received any incentive in the way of premiums on the local market due to the limited demand for quality grades. In other cases however, export was considered as an aim in itself and not as an integral part of a general agricultural policy. It was in these instances as for example the dairy products, that the principle behind the Government subsidization of exports was based primarily on the need to limit

/the

the supply to the local market and in such a way to increase the revenue to the producer. That these aims were often not considered as part of the general policy is revealed in the attempts to integrate maize and cattle farming, and in the policy towards wheat. In their attempt to improve the position of maize farmers, the Government introduced the quota system designed to limit supplies to the local market but which at the same time operated to the disadvantage of those farmers who purchased their requirements of maize for stock-feed. At the same time it was accepted almost without question that it would be in the interests of South African agriculture in general to encourage the feeding of maize to animals instead of exporting the so-called surplus to badly depreciated overseas markets and so until the introduction of a rebate on maize utilized as stock-feed, the two policies were in direct conflict with each other. In the case of wheat it would appear that policy makers once again were not sufficiently aware of the effects of artificial stimulation of production by means of favourable prices, on the general agricultural position in the country. Although it was plainly recognised that climatically the country was not suited to this cereal, the protection granted to producers had the inevitable effect of encouraging substitution of wheat for other types of farming on lands which from the point of view of wheat were extremely ill adapted.

The writer does not wish to convey the impression that Soth Africa alone adopted this policy of protection towards her agriculture - a proposition which would most certainly be false. It has often been said that the philosophy of "laissez faire" belonged to the nineteenth century and if this is so then the present century could aptly be described as the "revival of economic nationalism". Especially would this be true of the first five years of the fourth decade when the evils of an unfettered economic system were

blamed for the disasterous circumstances of the Great Depression and when the escape from the stranglehold of free competition and the dangers of uncontrolled capitalism was the main theme in economic policies almost throughout the civilized world. The practical expression of the new philosophy soon showed that economic nationalism could not mean insulation unless all international trade was discontinued since it was through this medium and the international flow of capital that the economic conditions of one country were transmitted throughout the trading world. This is well revealed in the case of sugar where the imposition of customs duties designed to keep out forgign competition raised the internal price at a time when consumption was tending to decline due to a decreasing purchasing power, this in turn left a greater exportable surplus which had to be disposed of in many cases, at prices below the cost of production in order to obtain admittance to other protected markets. This merely started the whole cycle over again. The South African authorities could therefore claim with certain justification that protection was necessary in view of the policies of other countries.

If the justification existed for the protection of the local industry from conditions which were considered temporary, it nevertheless remains that there seems to have been a notable failure on the part policy framers to appreciate the intricacies of the economic system. Protection meant higher producers' prices and higher prices to the consumer since the costs of protection were invariably passed on the latter. Higher selling prices to the producer obviously served as an encouragement for the extension of production while on the demand side the effect must have been to curtail expenditure. It is true that in certain cases protection did not lead to an increased production either because as in South Africa, the correlation between climate and production is greater than that between wholesale prices and

/output,

output, or because, as with wheat, the protection granted to one product was less than that granted to others.

The inevitable result was that production would increase at a greater rate than would consumption. If one examines the supply position of the individual products in the first five years covered by this survey,(1) it is immediately apparent that apart from wheat, the Union supplied sufficient to meet the direct requirements. When one examines the position in the second five-year period in all cases except fresh meats, the percentage of consumption to local production had fallen. The average annual consumption of wheat during the period 1934/5-1938/9 was only slightly above the average annual production, also the combined fall in the percentage of maize and mealie meal consumed at home is significant, and it was inevitable that fears of over-production should be voiced. As far as maize was concerned the emphasis had been for many years on the need to divert the surplus towards stock feeding yet in general this seems to have had a smaller effect than was anticipated. That there should arise fears as to the over-production of wheat seems amazing, and of course in the case of sugar the fears had for a long time been practically expressed in the control over the area planted to cane.

If the policy of protecting the primary producer could be justified, that of exporting a certain quantity in order to achieve some price considered remunerative to the producer was entirely another matter. The main criticism of economists and others was levelled against this practice of raising the price to the consumer in order to pay the producer a higher price. If the producer was to be assisted, and was thereby encouraged to increase output, it was surely right that the local consumer should receive the benefit of the increased physical supplies, instead of having to pay a higher price in order to foot the bill for increased payment to producers by way of export subsidies. What these

(1) See Table I page 182.

/experts

experts were in favour of was the subsidization of certain foodstuffs to the population which would in effect mean that the costs of protection would fall not directly on those consuming the products, and thereby tend to be regressive, but upon those most able to bear the burden as it would come from the proceeds of Income Tax revenue. The arguments revolving around subsidization of consumption within the Union instead of paying out large sums of money to make up for the difference between the locally "fixed" price and the export price, were probably the most important of the decade insofar as agricultural policy was concerned. In actual fact the difference between the subsidization of consumption by human beings and the granting of rebates on maize to cattle farmers, which as we have seen above was essential in view of the artificially increased price of maize, is really not very great yet it was consistently maintained in official circles that subsidization would not be justified by the costs of such measures and the dangers inherent in any scheme of subsidized consumption which was not absolutely perfect. Besides the fact that there was far from sufficient data on which to base a conclusion that the cost of subsidization would be greater than the benefits, or in other words that the total amount paid out would exceed the proceeds of the levies imposed by the various Control Boards, it was not correct to state, as was done, that because the price of butter distributed under the State-Aided Scheme had to fall to 6d. per lb before any appreciable amount was taken up, the same conditions were applicable to all foodstuffs. It is absolutely inconceivable that the price elasticity of demand and the consumer habits of different groups of the population should be the same for all commodities.

Why was it then that all these questions which had caused so much criticism in the thirties, and the fear of over-production, virtually disappeared in the second decade under review ?

The immediate effect of the war was the loss of certain export markets and the development of shipping difficulties after the beginning of the German U-boat offensive. The "phoney" war of the first few months of 1940 soon gave way to the successes of the German war machine in Europe and Africa and from then on the battle became one not confined to the actual scenes of conflict but covered many other aspects such as the provision of adequate food supplies for the military forces and the United Kingdom whose economy was based upon the importation of most foodstuffs. At a meeting in December, 1941 proposals were worked out for the establishment of a Combined Raw Materials Board and it soon became obvious that it was no less necessary in the case of foodstuffs following Japan's entry into the war. In March, 1942 a meeting of representatives of the Dominions, the Colonial Office, the British Treasury, the Dominions' Office and the Ministry of Food met in London and decided to appoint ad hoc committees for certain specific commodities. It was soon evident however, that a planning body was needed to fully and effectively allocate the foodstuffs in short supply and make the fullest use of the shipping facilities and so in May, 1942 it was agreed between the British and American Governments to establish a Combined Food Board to obtain the expeditious utilization of the food resources of the United Nations. The Dominions were kept informed and consulted, so while they were not actual parties to the discussions they were given ample opportunity of influencing the decisions reached and it was largely through this influence that the co-ordinating machinery took the form of two bodies - the Combined Food Board in Washington and the London Food Committee in London to look after the interests of the Eastern Hemisphere.

The London Food Committee collected the information relating to requirements of countries in their "sphere of influence" and made recommendations as to allocations to the Combined Food Board in Washington[1] although there was a

(1) In the case of certain commodities like cocoa, tea and rice the L.F.C. was the allocating body.

provision that should the final recommendations of the C.F.B. differ appreciably from those of the L.F.C., they should be referred back to the latter body. The Union was represented by the Senior Trade Commissioner. Towards the end of 1943 it was decided to change the L.F.C. into the London Food Council and to alter membership to one of ministerial standing so that from then on the Union's representative became the High Commissioner.

It is necessary to have some idea of the purpose and mechanism of the planning authorities for it was not long before the supply position within the Union was completely reversed and instead of being fearful concerning surpluses and export markets, the emphasis was now on where to obtain supplies to meet the ever increasing requirements of the Union.

The reversal in the whole supply position of all important foodstuffs can be acccunted for by forces which affected both production and consumption. On the production side the main factors were the severe shortage of fertilizers and machinery and on the consumption, the phenomenal increase in economic activity within the country.

The international authority in the case of fertilizers was a Joint Committee of representatives of L.F.C. and the Allied Raw Materials Board. Shipping difficulties were once again of paramount importance so that in the years 1943-5 the issue of permits for the purchase of fertilizers by South African farmers amounted to between 25 and 66% of total requirements as estimated by the Department of Agriculture as far as phosphatic fertilizers were concerned. It was officially stated in 1947 that South Africa's normal annual requirements of chemical fertilizers was some 450,000 - 500,000 tons of which 90% should be in the form of super-phosphates. Total supplies in 1948 appear to have been somewhat over 400,000 tons but still less than the estimated requirements.(1) In view of the difficulty

(1) Quoted in "A Survey of the Trade in Fertilizers" by the Commonwealth Economic Committee, 1950, par 150.

in obtaining fertilizers from overseas' sources, the production in the Union increased quite considerably but still remained but a small proportion of total demand.

The shortage of tractors and other machinery requisites was an important factor in limiting production of certain foodstuffs especially from about 1942 onwards. In 1943 about 7,300 tons of agricultural machinery was imported compared with estimated import requirements of 20,000 - 25,000 short tons (1) and while the supplies did improve in later years even in 1946 there was by no means sufficient to meet the accumulated demands of 4-5 years. As far as farm labour was concerned, the effect is of far more doubtful importance. It is true that South African agriculture has developed on an abundant supply of cheap, unskilled labour and it is probably true that during the war years enlistment and the drift to the towns did cause some form of shortage based on pre-war utilization of labour, partly eased by the employment of P.o.W's, but it is far more likely that it was the combined shortage of machinery tending to encourage a greater demand for native farm labour, that was the main cause of the claimed "labour shortage".

The reasons for the increase in consumption have been considered in the discussions on the specific commodities so that all that need be said here is to reiterate the opinion of the writer that too much emphasis has been placed on temporary factors such as military requirements, increase in ships' stores, the increased demand created by evacuees and P.o.W.s and the fundamental reason viz. the increase in purchasing power has in this way been partially lost sight of. The mere fact that the consumption showed no significant tendency to fall after the cessation of hostilities appears to bear this opinion out, viz. that the underlying causes were not temporary in nature.

(1) From Annual Reports of the Secretary of Agriculture.

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Such a fundamental change in the internal supply position, well illustrated in Table 1 (1) where the percentage of consumption to local production shows an increase for all commodities apart from jams and the meat group, obviously had a marked effect on the relationship between the Food Control Organisation in South Africa and the C.F.B. - L.F.C. planning body. It was inevitable that the narrow interests of a particular country would clash with the broader needs of the Allies for the successful pursuance of the war yet even making allowance for this, it appears that the Union authorities in certain instances did not quite appredate the gravity of the situation. It is significant that severe criticism was levelled against the sugar industry for not making more sugar available to the strictly rationed U.K., also that the Food Controller seemed to go to considerable lengths to obtain imports, sometimes directly against the purpose of international control as for instance when the Consul-General in Buenos Aires made purchases of rice, butter and canned meat without approval of C.F.B. - L.F.C. In his annual Report for 1942 the Secretary of Agriculture remarked: "While the war economy of most countries has made strict rationing of the principle articles of food absolutely unavoidable, the Union is today in a comparatively favourable position insofar as this matter is concerned ... so far ... maize, butter and cheese have been the only locally produced products where direct restrictive distribution measures have had to be applied." Countries like New Zealand and Australia, also producer countries, were waging a war under conditions of fairly strict rationing in order to supply the food importing Allied nations while the obvious conclusion in the case of South Africa must be that she was not prepared to sacrifice the support for the political party in power,

(1) See page 182 .

/though

though on this political issue there must be some justification bearing in mind the circumstances of the times, and therefore would not accept rationing unless all else had failed to ameliorate the position. As it eventually turned out, rationing was necessary.

Generally speaking, the dividing line between free and restricted consumption can be taken as 1942-3; in certain cases like wheat, butter, maize and cheese the change-over was slightly earlier, in others like sugar a little later. In some products like butter, cheese and the meats the supply position never improved sufficiently in the period under review, to enable the restrictive measures to be lifted although the improvement in the cereal crops and especially maize, in the last three seasons exerted an important favourable influence on the supply position. The relationship of maize to the other food products such as meats and the dairy products is so fundamental that an improvement in its production will soon lead to an increase in the output of these other foodstuffs. As the staples and foundation of the diet, maize and wheat are of major importance in the adequacy or otherwise of food supplies - when maize and wheat are together in short supply as in 1945/6 the shortage will be most severe, when maize is short, by means of importation it may be possible to obtain sufficient wheat supplies and that therefore the European section of the community will not feel the shortage to the same extent as the non-Europeans. A shortage of maize on the other hand will undoubtedly tend to affect the non-European and especially the Africans to a far greater extent. Maize is in fact the foundation upon which much of the agricultural industry is built and this fact illustrates one important defect in the methodology employed in this study - viz. the examination of the specific products in conditions of semi-isolation. To do so is dangerous for it is impossible to consider maize, meat and the dairy products as separate and unrelated comm-

/odities

odities but it was necessary in order to attain some systematic treatment of the subject. The object of this summary is therefore to draw together the separate threads and show how these threads are in fact merely untidy ends of the same tapestry.

Finally it is desirable to suggest some possibilities as to the future, at this stage concerning the ability of production to keep pace with consumption, assuming the latter to continue to increase at the present rate. It is probable that the agricultural potential of the Union is far from completely sapped and that improved methods especially the greater mechanization of farming, and a change from the traditional combination of the factors of production, i.e. abundant cheap, unskilled labour, would be instrumental in substantially increasing supplies. Most important in this respect are the Native Reserves the soils of which are generally of better quality than on the average in South Africa. It is imperative that practices in these areas be improved so as to take fullest advantage of the potential. Whether or not it is in the interests of the country as a whole to allow such relatively fertile land to remain in the hands of a people whose agricultural habits are notoriously poor, is of course not a matter for the writer to debate, but is one that will definitely have to be faced, probably in the not too distant future.

But basically the ability of producers to extend output to meet the increasing consumption requirements if this country is not permanently to be placed in a position where importation is necessary or where, and in the present circumstances this seems far liklier, consumption will have to be permanently curtailed by restrictive measures, must depend on one factor more than any other - WATER. Far seeing South Africans have for years stressed the fact that it is not the gold which will ultimately determine the level of civilization in this southern tip of Africa, but water; the writer is

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not competent to judge whether or not South Africa is in the throes of the fourth dry period in its history as certain scientists maintain, yet he is convinced that the key to tomorrow in this country is water.

The complete reversal of the agricultural scene can no better be described than by comparing the following statement by the Secretary of Agriculture in the 1948 Annual Report with that with which this chapter was introduced:

"Our aim should ever be the attainment of the optimum self-sufficiency, with due regard to all requirements of self-security and the maintainance and improvement of our sources of production."

TABLE 1.

Production of certain commodities in five-yearly periods. 000lbs.

| Period | Wheat | Maize | Mealie Meal | Sugar | Jams | Butter | Cheese | Beef, veal mutton & lamb | Pork |
|---|---|---|---|---|---|---|---|---|---|
| 1929/30-33/4 | 686,000 | 3,595,000 | 1,096,000 | 353,000 | 20,500 | 19,600 | 7,800 | 520,000 | 32,600 |
| 1934/5-38/9 | 1,014,000 | 4,400,000 | 1,336,000 | 450,000 | 27,800 | 31,200 | 11,600 | 581,000 | 42,800 |
| 1939/40-43/4 | 1,029,000 | 4,163,000 | 1,611,000 | 546,000 | 90,800 | 43,300 | 16,400 | 718,000 | 64,200 |
| 1944/5 -48/9 | 898,000 | 4,554,000 | 2,134,000 | 552,000 | 142,300 | 40,000 | 17,100 | 821,000 | 76,000 |

Consumption of certain commodities in five-yearly periods, 000lbs.

| Period | Wheat | Maize | Mealie Meal | Sugar | Jams | Butter | Cheese | Beef, veal mutton & lamb | Pork |
|---|---|---|---|---|---|---|---|---|---|
| 1929/30-33/4 | 754,000 | 2,985,000 | 943,000 | 170,000 | 19,800 | 17,600 | 6,800 | 496,000 | 18,600 |
| 1934/5-38/9 | 1,026,000 | 3,482,000 | 1,073,000 | 213,000 | 26,400 | 27,800 | 9,400 | 564,000 | 25,000 |
| ) 1939/40-43/4) | 1,136,000 | 3,951,000 | 1,543,000 | 318,000 | 35,700 | 45,400 (46,500)* | 15,100 (15,800)* | 653,000 (706,000)* | 35,100 (54,100)* |
| ) 1944/5-48/9 ) | 1,150,000 | 4,593,000 | 2,086,000 | 383,000 | 62,800 | 43,700 (63,400)* | 16,600 (25,500)* | 802,000 (963,000)* | 40,100 (82,900)* |

* Estimated consumption with no rationing.

Consumption as a percentage of local production in five-yearly periods.

| Period | Wheat | Maize | Mealie Meal | Sugar | Jams | Butter | Cheese | Beef, veal mutton & lamb | Pork |
|---|---|---|---|---|---|---|---|---|---|
| 1929/30-33/4 | 109.9 | 83.0 | 86.0 | 48.1 | 96.6 | 89.8 | 87.2 | 95.4 | 57.1 |
| 1934/5-38/9 | 101.2 | 79.1 | 80.3 | 47.3 | 95.0 | 89.1 (107.4)* | 81.0 (96.3)* | 97.1 (98.3)* | 58.4 (84.3)* |
| ) 1939/40-43/4) | 110.4 | 94.9 | 95.8 | 58.3 | 39.3 | 104.9 (158.5)* | 92.1 (149.1)* | 91.0 (117.3)* | 54.7 (109.1)* |
| ) 1944/5-48/9 ) | 128.1 | 100.9 | 97.8 | 69.4 | 44.1 | 109.3 | 97.1 | 97.7 | 52.8 |

* Estimated consumption with no rationing.

## Chapter 7.

## CONSUMPTION AND THE POPULATION.

We have already several times, and will do so still more, come up against the difficulty of the "paucity of statistical evidence" and even in such an important field as population statistics for South Africa in the twenty years under discussion only twice has there been conducted a census that covers the whole population. It would not be at all adequate to compare consumption and the population merely in the two years 1936 and 1946 since in the latter year most of the products with which the writer is concerned, were in restricted supply. In these circumstances such a comparison could not hope to trace the development of the relationship between these two factors and it has therefore been considered essential to use estimates of the population in the other years.

The demand for food, which is more than any other commodity limited by the "confines of a man's stomach", is obviously determined considerably by the population especially in so far as the upper limits are concerned. The relationship between these two quantities has exercised the minds and reasoning of men for many years although for almost a century nothing of any considerable importance was added to the realistic but pessimisstic thoughts of Robert Malthus who was responsible more than any other for the defeat of the theories of the "invisible hand" and the perpetual harmony within the economic system. The conclusions at which Malthus arrived were based primarily on the fact that he considered the demand for foodstuffs and the level of population as two synonomous terms and thus was able to compare the supply of food with the level of the population. The Malthus "spectre" was one in which the demand for food was continually pressing against the supply governed by the niggardliness of nature, due to the increasing gap between the rates of growth of population and the supply of foodstuffs. Yet within half

/a century

a century economists were announcing that the "spectre" was the product of a diseased mind, that the problem was no longer one of finding sufficient food to feed the population but one of finding markets for the products grown in ever increasing quantities in the "new world". Whether or not, we are any nearer the conditions which plagued Malthus and his colleagues is a question which will deserve our consideration at a later stage but what we should note here is the importance that has for many years been granted to the relationship between consumption, the level of population and the supply of foodstuffs. In the light of modern economic theory, the emphasis which was placed on the latter two factors was definitely too great but it nevertheless remains that there must be a certain correlation between the two.

The need to devote more space than mere mention to these factors is strengthened by the much more recent development in policies relating to food - the Nutritional Problem. This development, which can be identified with the more humane principles of modern thought, economic and others, has since the 1930's been extremely significant and the reduction of the nutritional gap has in most countries become one of the main foundations upon which food policies are being built. No longer is the "cruel mechanism" of the economic system allowed to operate where the very existence of men and women are concerned, the belief is now based upon the fact that each and everyone deserves the necessities of life in a similar way as another generation decided that education was something of which all should receive the benefit.

The present chapter will therefore be based to a large extent on the consumption of these particular foodstuffs in their relationship to the nutritional requirements of South Africa although it is important to note here that it will be impossible to say that the nutritional standards of the South African population are high or low merely on the evidence of six or seven commodities. On the other hand as far as these are representative of the total consumption of food, and

the writer believes them to be so, some very close approximations to the actual facts can be expected.

Before proceeding to examine the nutritional standards of the population as far as is possible in this discussion, it is interesting to note, in view of what has been said concerning the over-emphasis on population changes in determining the level of demand for food in the past, that in the period 1930/1 - 1941/2 one in which supply was unrestricted apart from measures to conserve wheat in the last season, correlation between the physical consumption and the level of the population was very weak in all cases except for flour and meal and fresh milk. In both cases however, there are other factors to be discussed when the effect of changes in income on the demand for specific foodstuffs is considered, which must have exerted far more influence on the consumption than did the increase in population.

It was stated above that the upper limits to food consumption are determined largely by the level of population; below that condition of optimum-consumption the main factors in the determination of food consumption will be the National Income. It is true that, as we shall see later, that as Income rises the fraction of that income spent on food tends to decline so that we should expect to find that at some critical level of the National Income the optimum per capita physical consumption has been reached and from that point onwards any increase in consumption will be determined by movements in the population assuming there to be no redistribution of the National Income. It must be obvious therefore, that the importance of population in determining the amount of foodstuffs consumed is slight and confined to a very special model, and this is realised in modern economic thought by the recognition that from an economic standpoint, malnutrition and poverty are synonomous. Dr. Karl Bremer, present Minister of Health, stated in 1939 that "everywhere the economic conditions ... determine the nutritional standards

/of the

of the ... population."(1)

In Graphs 5 and 6 are shewn the rise in consumption per capita for the various products under review for the twenty years 1929/30 - 1948/9.(2) The main fact which stands out in these graphs is that in every case except maize in its whole form and flour and meal, there has been a notable increasing trend in the quantities consumed per head of the population. On the assumption that this benefit was shared by the whole population, an assumption which will depend on the distribution of the National Income during those years and the correlation between income and food consumption, two considerations which will receive attention in the following Section, it means that the population must have been better fed in 1949

(1) "Nutrition of Europeans in Rural Areas" by Dr. K. Bremer, Race Relations Vol. VI, No. 1, 1939.

(2) It is not entirely satisfactory to use per capita figures when considering nutritional aspects or any other where comparison is to be made over a period of time for they do not take into account changes in the age and sex distribution of the population. In view of the fact that very little information is available concerning these aspects of the population, the writer has been obliged to use per capita figures throughout the following discussion. An examination of the census results for Europeans in the years 1926, 1931 and 1946 reveals a slight tendency for the European population to be becoming slightly older as the table below shows. There was no means of checking this tendency of change for the other racial groups but there would seem little cause to assume that the change in their case should be the same as for the more civilized European community, already possibly showing the signs of a declining population. It must be assumed therefore that there has been no change in the age and sex distribution sufficiently appreciable to affect the conclusions to be drawn from the per capita consumption figures.

Percentage distribution of the population by racial groups in certain age groups. (a)

| Group | European | | | Asiatic | Coloured | African |
|---|---|---|---|---|---|---|
| | 1926 | 1931 | 1936 | 1936 | 1936 | 1936 |
| 0-1 | 4.8 | 4.7 | 4.3 | 6.6 | 6.5 | 4.8 |
| 2-3 | 4.7 | 4.5 | 4.1 | 6.7 | 6.4 | 6.4 |
| 4-5 | 4.8 | 4.3 | 4.3 | 6.6 | 6.2 | 6.0 |
| 6-7 | 4.6 | 4.3 | 4.3 | 6.5 | 5.9 | 5.7 |
| 8-9 | 4.6 | 4.4 | 4.1 | 6.0 | 5.3 | 5.4 |
| 10-11 | 4.5 | 4.3 | 4.0 | 5.5 | 4.8 | 4.8 |
| 12-13 | 4.6 | 4.2 | 4.0 | 5.2 | 4.8 | 4.9 |

/than

than in 1930.[1]

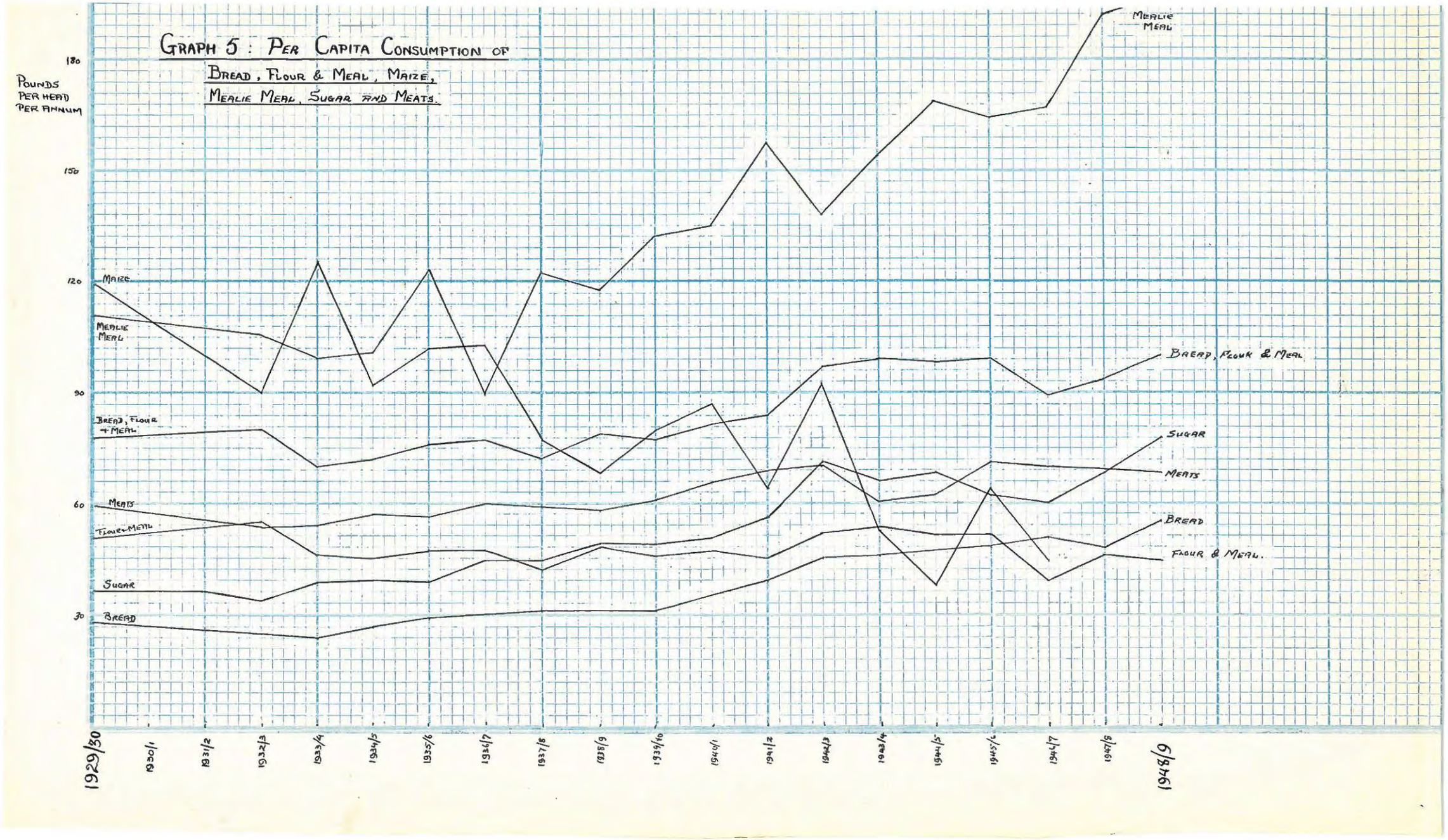
From Graph 5 it is noticeable that for most products the per capita consumption fell during the depression years, the only exception being flour and meal where, the writer suggests, the substitution of these two commodities for bread, might have exerted sufficient influence to lead to these circumstances. The same tendency for per capita consumption to fall is seen in Graph 6. If we neglect maize, mealie meal and fresh milk, the figures of which for certain reasons[2] the writer does not consider as accurate as the rest, the tendency from 1933 onwards was one of a general increase in the quantities consumed per head of the population. The check to this increase occurred at different times for the different products. In the case of butter a most significant drop occurred in 1943/4; for cheese the decline also set in about that year while the meat group appear to have begun to fall in the same year although the per capita consumption of pork had declined in the previous year due probably to difficulties in obtaining maize for feed purposes. As far as the wheaten group (bread, flour and meal) is concerned, the increase was not abruptly brought to a stop but appears to have tailed off into a static period although there appears to have been a decline in 1946/7 while the per capita consumption of mealie meal, the other staple cereal, declined in 1942/3, rose again in the next two seasons only to fall slightly in 1945/6 which apart from the doubtful accuracy of the figures, must be accounted

(1) At the expense of anticipating the results of the inquiry into the distribution of the National Income, the writer should state here that there appears to have been a tendency for a redistribution in favour of the lower income groups so that the conclusion must be that the general standard of food consumption has improved.

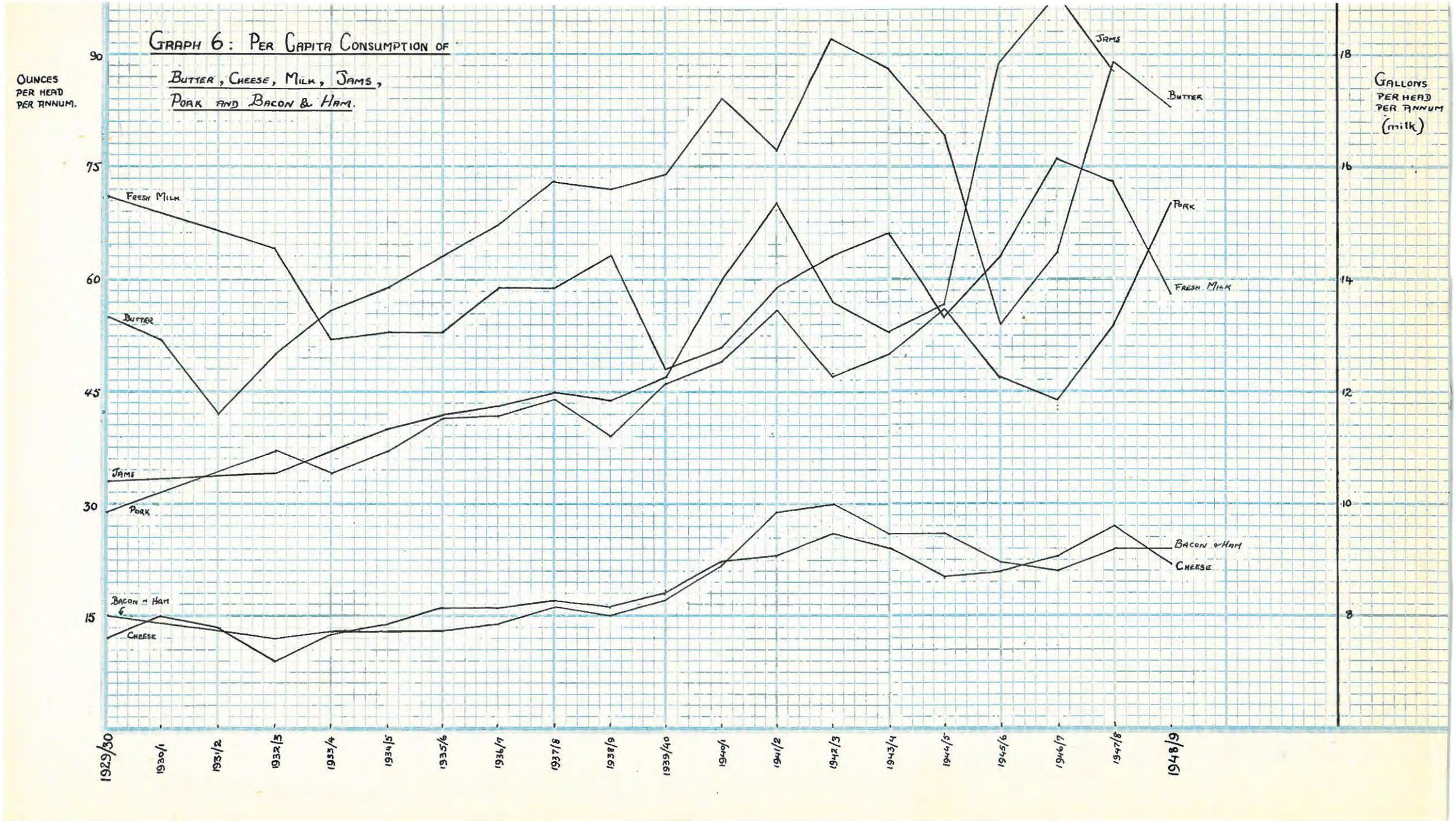
(2) These reasons are mainly inherent in the statistics themselves. For whole maize the consumption figures have been obtained by subtracting maize milled (figures from the Industrial Censuses) from estimates of the Division of Economics and Markets for human consumption; for mealie meal it has been assumed that all is consumed by human beings and no account has been taken of stocks; for fresh milk all figures are based upon estimates of the Division of Economics and Markets - in each case there are tremendous objections.

/for

# GRAPH 5 : PER CAPITA CONSUMPTION OF BREAD, FLOUR & MEAL, MAIZE, MEALIE MEAL, SUGAR AND MEATS.



# Graph 6: Per Capita Consumption of Butter, Cheese, Milk, Jams, Pork and Bacon & Ham.



for by the close correlation between production and consumption during the war years when importation was fraught with so many difficulties. The decline in the case of sugar, while not appreciable, occurred in 1943/4. The general conclusion must be that the period 1942/3 - 1946/7 represents one in which the general improvement in the supply of foodstuffs in relation to the population, a notable feature of the decade 1933-43, received a severe check although the per capita consumption of most products nevertheless remained above the level attained in the years immediately preceding the war.(1)

The recovery from this "trough" once again differs between the products, and even between the products within the groups. Thus for instance the per capita consumption of butter did not recover to the level of 1942/3, nor did the consumption of bacon and ham, while within the meat group the trend was a decreasing one for beef, mutton and lamb but for pork there was a considerable improvement. Of the other commodities mealie meal seems to have increased more than most while the wheaten group and sugar exhibited a slight improvement, but one which only left the per capita level of consumption of bread, flour and meal at approximately the same as in the period 1942/3-1945/6. It is difficult to ascertain the importance of the increase as regards mealie meal for besides the doubts already expressed as to the acceptability of the statistics themselves, there would appear to have been a very substantial substitution of mealie meal for whole maize. Thus in 1936/7 the total per capita consumption of both amounted to 192 lbs while in 1946/7, the last year for which the figures can be accepted as even approaching the facts, the combined amount is 211 lbs so that the indication is that an examination of mealie meal over-estimates the increase in per capita consumption of maize products as a cereal group.

(1) A notable exception was butter, the per capita consumption of which was in 1945/6 the lowest since 1932/3.

As has been stressed above, it is impossible to use these per capita figures in a nutritional study apart from saying that if the improvement was felt by all persons in the community, there appears every possibility that the general standard of nutrition has improved over the period under consideration. It is however, possible to employ statistics from various other sources which will throw a certain amount of light on the per capita consumption of different groups.

For instance it would seem that the optimum per capita consumption of sugar is approximately 100 lbs per annum,(1) which would mean that the direct consumption of sugar by Europeans, assumed to have reached the optimum which on the evidence of the 1936 inquiry into European expenditure, is reached at a relatively low income level, would be as shown below for the four years 1930, 1936, 1942 and 1946:

| | 1930 | 1936 | 1942 | 1946 |
|---|---|---|---|---|
| European Population (000's) | 1,800 | 2,000 | 2,200 | 2,400 |
| Non-European Population (000's) | 6,900 | 7,600 | 8,300 | 9,000 |
| Total consumption of sugar (000 lbs) | 314,000 | 371,000 | 535,000 | 714,000 |
| European consumption at 100 lbs per head | 180,000 | 200,000 | 220,000 | 240,000 |
| Non-European consumption (000lbs) | 134,000 | 171,000 | 315,000 | 474,000 |
| Non-European consumption lbs per head | 19.4 | 22.4 | 38.0 | 52.7 |
| Per capita consumption by Non-Europeans p.a. (lbs) | | | | |

On the assumption that the per capita consumption of sugar by Europeans has remained constant, one which seems fairly justifiable, in 1946 the per capita for non-Europeans appears to have almost trebled when compared with 1931, and in 1946 was approximately half the European level.

(1) This figure is quoted in the S.A. Sugar Year Books and is borne out by the examination of the consumption of sugar over twenty income groups as shewn in the inquiry into expenditure by European families, discussed in greater detail in Chapter 8. In this study the quantity of sugar purchased per man unit actually decreased from 9.78 lbs per month (or 117.36 lbs per annum) in the income group earning less than £125 p.a. to 7.25 lbs (or 87.00 lbs p.a.) in the £575-600 p.a. income groups.

/From

From figures published by the Directorate of Meat Supplies it is also possible to obtain some idea as to the per capita consumption of meat for different groups, in this case urban dwellers and others.

| | 1946/7 | 1948/9 |
|---|---|---|
| Total consumption of fresh meat (000 lbs.) | 854,000 | 903,000 |
| Ordinary Trade Issues in nine urban areas (000 lbs.) | 376,000 | 413,000 |
| Estimated population of nine urban areas (000's) | 3,100 | 3,400 |
| Per Capita consumption in nine urban areas (lbs. p.a.) | 122 | 123 |
| Consumption in other areas (000 lbs.) | 478,000 | 490,000 |
| Population in other areas (000's) | 8,300 | 8,900 |
| Per capita consumption in other areas (lbs. p.a.) | 58 | 55 |

It is of course not possible in this case to draw any inference from a disparity in incomes as it cannot be claimed with insufficient statistical proof, that the level of income in urban areas is necessarily higher than in "other" areas. On the other hand however, if one considers that the population in these "other" areas would be composed of European and non-European, the latter to a large extent resident in the Reserves, it is obvious that not only is the per capita consumption very much lower in the non-urban areas but within them the disparity must be very considerable with the vast majority of non-Europeans consuming approximately 40 lbs p.a.(1) per head or 1/3 of the per capita figure for urban areas itself affected by the disparity of incomes between Europeans and non-Europeans in those areas.

As far as the wheaten group of bread, flour and meal is

(1) This is a rough estimate based upon data supplied by the Division of Economics and markets concerning the production of beef, veal, mutton and lamb in the Reserves and estimates of the writer of the production of pork for the years 1946-48.

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concerned, the per capita figures show a marked tendency to remain stationery over the last eight seasons under review. The 1936 inquiry into European expenditure reveals that the physical saturation point is reached at a low income level,(1) and there is also a slight tendency for the consumption per man unit to fall as income rises so that the stationery nature observed in Graph 5 must be accounted for by the fact that non-Europeans in urban areas are more and more turning to the purchase of bread in place of his traditional cereal, maize.(2)

The rise in the per capita consumption figures for maize and mealie meal which persists even when the two are taken as one group, must be accounted for by the urbanization of the Native population in whose diet these two are most important. Within the group the apparent substitution of mealie meal for maize must also be put down to this urbanization as well as the fact that it is highly probable that Natives in the Reserves are turning towards the more refined product as their contact with the European level of civilization and customs through traders and the system of migratory labour, becomes closer.

As far as the dairy products are concerned, it seems probable that the consumption of butter and cheese among natives is insignificant in the total. Certainly budgetary surveys among urbanised Natives, discussed in Chapter 8, reveal that even in the "upper income groups" their importance in the diet is small. Assuming therefore that the consumption is limited to the European section of the population, the per capita consumption figures would have to be increased by approximately

(1) For a fuller discussion of this point see Chapter 8 page 209.
(2) See page 217 for further discussion on this point. It is also important to note that the European population in the period 1936-46 increased by 1.7% per annum which was slightly less than the percentage increase over the whole population (1.76) so that had wheaten products been consumed by Europeans only, we would have expected the per capita consumption to have declined.

/400% but

400% but the trend of change would not be substantially altered since the proportion of Europeans in the total population has remained fairly constant over the twenty year period under review. Concerning the consumption of milk, the estimates of the Division of Economics and Markets are themselves prepared from the standpoint of consumption assuming that the per capita figure for Europeans and non-Europeans on farms have remained constant,(1) and a highly variable consumption in the Native Reserves dependant on climatic conditions.(2) The per capita consumption of fresh milk among Natives in Reserves would be as follows in the years, 1936 and 1946 :

| | 1936 | 1946 |
|---|---|---|
| Population (000's) | 2,960 | 3,270 |
| Total consumption (000 gallons) x | 46,300 | 60,200 |
| Per capita consumption (gallons p.a.) | 16 | 18 |

x Average for three seasons of which 1936 and 1946 are the centre and assuming that there is no "export" or "import" of fresh milk from or into Native Areas

Urban consumption for these two years from estimates of the Division of Economics and Markets and population census figures work out as 16 and 20 gallons per head respectively compared with an estimate by the same institution of between 20 and 24 gallons for 1948/9. While the writer does not wish to place much emphasis on these figures for milk, the doubtful accuracy of which he has already stressed, they do indicate that greatest deficiency in regard to this product occurs not in the rural areas but among the non-Europeans in the towns as it would seem fairly reasonable to assume that the per capita consumption among Europeans would be about 35 gallons per

(1) The figures given are approximately 45 gallons per European p.a. and 2.5 gallons per non-European the latter being in the opinion of the writer, grossly under-estimated.
(2) As far as the Reserves are concerned, consumption is based upon an assumed production of 80 gallons per cow per annum where the number of cows in milk are taken as 14% of the total number, the same as for Europeans, and is adjusted to take into account climatic conditions by means of an index of maize yields.

/annum

annum[1] which would leave very little for the non-Europeans in urban areas.

We can now proceed to consider, within the limitations imposed by our statistics, both as to their accuracy and paucity, the implications of our findings as far as the nutritional standards of the country are concerned.

Malnutrition is a word which economically interpreted is synonomous with poverty so it is obvious that where the income of a community is distributed in such a way that discrepancies between persons are great, as in South Africa,[2] the incidence of malnutrition will be great in so far as the proportion of the population earning low incomes is significant or not. Nutrition therefore becomes dependant upon the level and distribution of the National Income, the population and the physical consumption of foodstuffs. At the expense of anticipating what will be said later in connection with the distribution of the National Income, the writer would state at this stage that the redistribution which has occurred in favour of the lower income groups especially during the war years must have improved the ability of those most needing it, to better their nutritional standards. Whether they have in fact done so will depend on the per capita consumption of foodstuffs in general and certain significant foodstuffs in particular.

The first question which we will consider is whether the total production of foodstuffs within the Union was at any time in the period under review, adequate to meet the nutritional requirements of the population since if the answer to this question is found to be yes, the whole problem becomes one of the distribution of the food, and hence the inequality of incomes

(1) The 1936 inquiry shows a range in per capita consumption from 6.3 to 33.5 gallons per annum with an average of approximately 25-30. Since total urban per capita consumption increased by almost 40% between 1936 and 1949, the writer is of the opinion that the figure quoted in the text is on the conservative side.
(2) For statistical evidence of this see Chapter 9.

/In 1939

In 1939 in an article "Food Resources of the Union in relation to the Nutritional Requirements of the Population",(1) Dr. O.G. Haylett considered this question in fairly considerable detail taking the age and sex structure of the population and food requirements relative to age into account, assuming everyone to be engaged in "moderately hard work" and using what he acknowledges as arbitrary "but ... based on the recommendations of a number of authorities" constituents of the calorific requirements of the adequate diet. He also based his conclusions on the fact that "biologically speaking, there is no reason why the standards (for the European) should not apply equally well to the entire population of all racial groups". The conclusions arrived at (2) were that the consumption of foodstuffs of plant origin exceeded the estimated requirements of all races, that there was sufficient meat, poultry, cheese and fish to provide for the European section but insufficient for the population as a whole and that the estimated supplies of dairy produce were not even sufficient to meet the needs of the Europeans, let alone the whole community. In general the shortfall of all foodstuffs of animal origin was considerable and unfortunately this groups covered most of those foods providing the protective elements in the diet. A similar study conducted by the Division of Economics and Markets in the

(1) Race Relations, Vol. VI No. 1, 1939 pp 17.
(2) The findings of Dr. Haylett can be summarised as follows:

Requirements and Supplies of food in South Africa, 1936.
(Megatherms . 1 megatherm = 10 Calories)

| | Requirements | Supplies | |
|---|---|---|---|
| Wheat, flour and meal | | 1,134 | |
| Maize Meal | 3,320 | 2,814 | 4,710 |
| Sugar | | 762 | |
| Other | 1,784 | 1,589 | |
| Total : Plant Foodstuffs | 5,104 | 5,299 | |
| Whole Milk | 1,641 | 143 | |
| Butter | 737 | 130 | |
| Cheese | | 19 | |
| Other | 420 | 240 | |
| Total : Dairy Produce | 2,798 | 532 | |
| Beef, Veal, Mutton, Lamb | | 457 | |
| Pigs' meat | | 47 | |
| Other | | 8 | |
| Total : Meats etc. | 1,231 | 512 | |

No estimates have been made for meats, milk and poultry produced and consumed in Native Reserves.

/same

same year, which included estimates of foodstuffs not considered by Dr. Haylett, revealed that while the total production was adequate in terms of all nutritional requirements other than calcium, the general conclusions arrived by by Dr. Haylett concerning the division between protective and energy producing foodstuffs were accurate.(1)

The writer has attempted to show in the table below the position as it existed in 1949 on the same basis of calculation as used by Dr. Haylett and assuming that there has been no alteration in the age and sex structure of the population other than the 28% increase between 1936 and 1949

Requirements and Supplies of food in South Africa, 1949.
(Megatherms . 1 megatherm = 10 calories)

| | Requirements | Supplies | |
|---|---|---|---|
| Wheat, flour and meal | | 2,010 | |
| Maize Meal | 4,250 | 3,924 | 7,664 |
| Sugar | | 1,730 | |
| Total : Plant foodstuffs | 6,533 | | |
| Whole Milk | 2,100 | 524 | |
| Butter | 943 | 214 | |
| Cheese | | 39 | |
| Total : Dairy Produce | 3,581 | | |
| Beef, Veal, Mutton and Lamb | | 840 | |
| Pigs' meat | | 101 | |
| Total : Meats etc. | 1,576 | | |

When compared with Dr. Haylett's figures for 1936 there seems little change in the general position apart from the fact that the inclusion of estimates here for consumption of meat and milk in the Reserves increases the calorific value of the consumption of those two items quite considerably. The supply of the group wheat, maize and sugar continued to exceed by far the requirements in this "ideal" and in fact the surplus appears to have increased, while in respect of the other two groups the position remains virtually unchanged.

The fact that these protective foods are usually relatively expensive means that the major portion of the community does not even consume such commodities as butter and cheese while their consumption of meat and milk is usually

(1) Race Relations, Vol. VI, No. 3, 1939 pp 125.

/hopelessly

hopelessly inadequate from the nutritional point of view. Dr. Fox in 1939 remarked in connection with the Native Reserves, "as with many other primitive peoples, a customary diet simple and monotonous though it may be, is quite capable of maintaining a satisfactory level of nutrition provided it can be obtained in sufficient quantity. However it has not the same elasticity as those based on broader foundations; hence changes which appear at first insignificant may bring about far more serious consequences ... The amount of malnutrition or disease that existed must be appalling,"(1) and explained that the apparent contradiction between his observations and the low rejection rates for mine recruits, a fact which was often used to vindicate the payment of low wages and the satisfactory nutritional standards in the Reserves, was partly to be explained "by the fact that the actual adult population represents a highly selected group, many of the less robust having died off in infancy or childhood."(2) But malnutrition is by no means restricted to the rural Natives nor indeed to the Natives alone although of course as the main body of the lower income groups, it is inevitable that they should be the main sufferers. In the urban locations the plight of the non-European is quite as bad as, if not worse, than, those who have not left their traditional homes, due to his contact with a much higher level of civilization than he is able to participate in with his very limited resources. In such circumstances it is inevitable that many should be attracted by the so-called "soft" foods like tea, sugar, highly refined mealie meal and white bread, all foods of low or negligible protective food value.(3)

Summing up what has been said concerning nutrition in its very broad aspects, two important features stand out.

(1) "Nutritional Problems Amongst the Rural Bantu", by Dr. F.W. Fox, Race Relations, Vol. VI, No. 1 pp 5.
(2) "Nutritional Problems Amongst the Rural Bantu", by Dr. F.W. Fox, Race Relations, Vol. VI, No. 1 pp 5.
(3) See also ~~page~~ Chapter 8 for further discussion.

/First

First the problem is not merely one of maldistribution of available supplies - the supplies themselves appear to be inadequate to provide a diet to each and everyone in the country which will satisfy certain basic requirements of quantity and quality. Secondly, and this is a problem which will become more obvious in the two following chapters, to the fundamental inadequacy of supplies must be added the wide disparity between income levels of different groups within the country and the abject poverty in which such a large part of the community live.

Finally it is interesting to make some international comparisons of the per capita consumption of certain of the foodstuffs with which the writer is dealing. Four commodities, meat but not including pork, butter, cheese and sugar have been chosen.(1) In the case of fresh meat while South Africa cannot compare with such countries as New Zealand, Australia and the Argentine, its per capita consumption had by 1949 equalled that of Canada and exceeded that in Great Britian where of course consumption is severely restricted. On page 190 above it was estimated that the per capita consumption of all fresh meats (i.e. including pork) outside the nine controlled areas amounted to 55 lbs p.a. and this will still be a substantial over-estimation of the figure for the vast majority of the people in the Union while a small few may be approaching the very high levels recorded in the three main exporting countries

If we were to assume that Europeans alone consumed butter, the per capita consumption figures would appear quite respectable alongside those for Continental countries, the U.S.A. and Great Britian since 1938, for in 1941 the per capita figure for Europeans alone would amount to 21.4 lbs p.a. and in 1946 to 15.3 lbs. One significant feature about this commodity is that while most countries show a marked tendency for their per

(1) See Tables 2 - 5 pages 201-4 .

/capita

capita consumption to decline, South Africa consumed more in 1949 per head than in 1930, a pleasing fact in view of the remarks made above in connection with nutrition and the protective foodstuffs. The consumption of cheese is low whether one assumes that all is consumed by Europeans or not, for in 1946 it would have only have amounted to 6.4 lbs p.a. per European inhabitant, although it is notable that this would have been higher than for both Australia and Canada, but much less than the European countries where cheese is a favourite food. For both butter and cheese the similarity between the figures for South Africa and Southern Rhodesia is noticeable when they are calculated purely on the basis of European population.

As regards sugar, the relative position of South Africa is better, from the statistical standpoint, than for the other three commodities. While the consumption per capita has declined in most countries since the early years of the Second World War, South Africa in the last year under review was consuming more per head than ever before. On the assumption that the direct consumption by Europeans amounted to 100 lbs p.a., the non-European we found would be consuming approximately 54 lbs in 1946 which, remembering the position of the other commodities, compares very favourably with most countries and in fact exceeds that of France, Eire and probably most European countries. The prediliction of the Native for sugar and his incorporation of this item into his diet often unfortunately at the expense of other more nutritious foods, is in the opinion of the writer the main cause for this state of affairs.

The conclusion must be that on the average, people consume less per head of most foodstuffs in South Africa than most other countries especially those such as the other Dominions with whose level of development so many in this country would compare the Union, although the writer suspects that were it possible to compare the per capita consumption of cereals, the conclusion might be very different. That however, would merely provide further evidence of a general low standard of living

in South Africa. At the same time "persons with adequate means are feeding far better than people even in food exporting countries such as Australia and New Zealand. It is unnecessary to say that in South Africa persons with money are feeding far better than people in Britian or on the Continent of Europe."(1)

(1) Report on the Distribution of Food Supplies by Sir Henry French G.B.E., K.C.B. U.G. 31/46 pp 9.

TABLE I.

## PER CAPITA CONSUMPTION OF CERTAIN FOODSTUFFS IN SOUTH AFRICA.

| Year | Population A | Bread lbs. | Flour & Meal lbs | Butter ozs B | Cheese ozs C | Milk gls | Beef etc. lbs | Pork ozs | Bacon & Ham ozs D | Maize lbs | Mealie Meal lbs | Sugar lbs | Jams etc. ozs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1929-30 | 8,536,400 | 28 | 50 | 55x | 12 | 15.5 | 59 | 29 | 15 | 119 | 111 | 36 | 33 |
| 1930-31 | 8,712,800 | - | - | 34 | 15 | 15.2 | - | - | - | - | - | 36 | - |
| 1931-32 | 8,892,300 | - | - | 24 | 13 | 14.9 | - | - | - | - | - | 36 | - |
| 1932-33 | 9,065,300 | 25 | 55 | 32 | 9 | 14.6 | 53 | 37 | 12 | 90 | 106 | 34 | 34 |
| 1933-34 | 9,243,100 | 24 | 46 | 56x | 13 | 12.9 | 54 | 33 | 13 | 124 | 99 | 38 | 37 |
| 1934-35 | 9,427,800 | 27 | 45 | 59x | 14 | 13.0 | 52 | 37 | 13 | 92 | 102 | 39 | 40 |
| 1935-36 | 9,589,898 | 29 | 47 | 63x | 16 | 13.0 | 57 | 42 | 13 | 102 | 124 | 38 | 42 |
| 1936-37 | 9,805,000 | 30 | 47 | 66x | 16 | 13.9 | 60 | 42 | 14 | 103 | 89 | 44 | 43 |
| 1937-38 | 9,988,000 | 31 | 41 | 73x | 17 | 13.9 | 59 | 44 | 16 | 78 | 122 | 44 | 45 |
| 1938-39 | 10,172,000 | 31 | 48 | 72x | 16 | 14.4 | 58 | 39 | 15 | 69 | 118 | 48 | 43 |
| 1939-40 | 10,355,000 | 31 | 46 | 58 | 18 | 12.4 | 61 | 46 | 17 | 79 | 133 | 48 | 47 |
| 1940-41 | 10,532,000 | 35 | 47 | 68 | 22 | 13.0 | 65 | 49 | 22 | 87 | 135 | 50 | 60 |
| 1941-42 | 10,718,000 | 39 | 45 | 62 | 23 | 13.9 | 68 | 56 | 29 | 63 | 159 | 56 | 70 |
| 1942-43 | 10,900,000 | 45 | 52 | 76 | 26 | 14.4 | 70 | 47 | 30 | 92 | 137 | 70 | 57 |
| 1943-44 | 11,084,000 | 46 | 53 | 74 | 24 | 14.8 | 59 | 50 | 26 | 53 | 155 | 66 | 53 |
| 1944-45 | 11,267,000 | 47 | 51 | 65 | 20 | 13.3 | 62 | 56 | 26 | 38 | 169 | 68 | 56 |
| 1945-46 | 11,418,349 | 48 | 51 | 69x | 21 | 14.4 | 71 | 47 | 22 | 64 | 164 | 62 | 89 |
| 1946-47 | 11,662,000 | 50 | 39 | 65x | 23 | 16.1 | 70 | 44 | 21 | 44 | 167 | 60 | 98 |
| 1947-48 | 11,890,000 | 48 | 46 | 76 | 27 | 15.8 | 70 | 54 | 24 | - | 192 | 68 | 88 |
| 1948-49 | 12,320,000 | 56 | 44 | 67 | 22 | 13.7 | 69 | 70 | 24 | - | 197 | 78 | - |

Notes : A From the Official Year Books; estimates except for years 1935-36 and 1945-46 when census figures are taken.
B Includes farm butter for years marked x, otherwise creamery only. Farm butter would increase the figures by about 18 ozs in earlier years to 13 ozs in the later.
C The amount of farm cheese made is so small as to make no difference to the figures.
D Does not include bacon and ham made on farms.

TABLE 2.

PER CAPITA CONSUMPTION OF BUTTER IN CERTAIN COUNTRIES, LBS.

| Year | Great Britain | U.S.A. | New Zealand | Austra-lia | Canada | Eire | Nether-lands | S. Rhod-esia A | France | Switzer-land | South Africa B | South Africa C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1930 | 18.7 | 17.3 | 39.7 | 28.9 | 30.6 | | 14.2 | 19.1 | | 13.3 | 16.7 | 3.5x |
| 1931 | 20.9 | 18.1 | 43.0 | 29.0 | 30.8 | | 16.0 | 21.3 | 12.0 | 14.3 | 16.1 | 2.1 |
| 1932 | 21.7 | 18.3 | 42.7 | 29.3 | 30.5 | | 19.0 | 20.2 | 11.8 | 14.3 | 15.9 | 1.5 |
| 1933 | 23.5 | 17.9 | 44.0 | 31.1 | 30.2 | | 16.7 | 21.5 | 12.0 | 13.9 | 15.7 | 2.0 |
| 1934 | 25.2 | 18.3 | 44.3 | 30.8 | 31.1 | 41.4 | 15.9 | 20.6 | 12.7 | 15.7 | 15.4 | 3.5x |
| 1935 | 25.2 | 17.3 | 41.2 | 32.8 | 31.8 | 41.9 | 13.8 | 21.2 | 12.7 | 15.2 | 17.0 | 3.6x |
| 1936 | 25.0 | 16.6 | 47.3 | 32.4 | 32.9 | 28.0 | 12.4 | 22.7 | 12.9 | 15.0 | 19.9 | 4.0x |
| 1937 | 24.8 | 16.4 | 40.0 | 33.8 | 32.3 | - | 11.2 | 22.0 | 12.3 | 13.9 | 21.2 | 4.1x |
| 1938 | 24.1 | 16.4 | 42.8 | 32.6 | 31.9 | 32.2 | 12.3 | 24.9 | - | 15.0 | - | 4.5x |
| 1939 | - | 17.3 | 42.2 | 30.3 | 30.7 | 34.3 | 12.3 | 24.9 | 11.0 | 14.8 | - | 4.5x |
| 1940 | 14.0 | 16.9 | 42.2 | 33.3 | 31.4 | 34.0 | 15.0 | 25.9 | 8.2 | 13.7 | - | 3.6 |
| 1941 | 10.2 | 15.9 | 42.9 | 33.3 | 31.2 | 34.4 | 18.3 | 28.2 | 7.1 | 11.2 | 5.1x | 4.3 |
| 1942 | 7.7 | 15.7 | 47.6 | 34.6 | 33.1 | 39.6 | 17.4 | 26.7 | 6.6 | 9.3 | - | 3.8 |
| 1943 | 7.6 | 11.7 | 47.7 | 27.5 | 28.5 | 40.6 | 12.1 | 21.6 | 7.3 | 9.7 | - | 4.8 |
| 1944 | 7.7 | 11.9 | 40.5 | 26.1 | 29.8 | 39.5 | 11.9 | 19.5 | 6.0 | 9.5 | - | 4.6 |
| 1945 | 8.5 | 10.8 | 31.3 | 25.9 | 28.8 | 39.7 | 8.4 | 16.0 | 6.0 | 9.3 | 5 .0x | 4.1 |
| 1946 | 10.9 | 10.2 | 30.5 | 25.3 | 25.6 | 40.9 | 11.9 | 16.7 | 7.5 | 10.4 | 4.4x | 4.3x |
| 1947 | 11.2 | 11.1 | 31.5 | 24.8 | 28.0 | 32.2 | 11.7 | 18.6 | 7.7 | 14.3 | 4.0x | 4.1x |
| 1948 | 12.5 | 10.2 | 30.9 | 24.3 | 28.7 | 37.1 | 11.9 | 16.9 | 9.3 | 10.6 | 5.8x | 4.8 |
| 1949 | 13.8 | 10.6 | 33.0 | 25.2 | 23.5 | 39.5 | 6.4 | 18.9 | - | 12.8 | 5.3x | 4.2 |

Notes : All figures apart from the final column have been extracted from the reports of the Imperial Economic Committee and the Commonwealth Economic Committee.

A. Europeans only.

B. Europeans only until 1942. The discrepancy between the figures marked x and those in the final column is accounted for by the fact that here it appears that some estimate has been made of the production of farm butter.

C. For all persons but covers only creamery butter except in years marked x when figures for farm butter are available. If the production of the latter is estimated at about 10,000,000lbs per annum, the per capita consumption figure for 1949 becomes 5.1 lbs. and the remaining figures all rise by between .8 and 1.0 lbs.

TABLE 3

PER CAPITA CONSUMPTION OF CHEESE IN CERTAIN COUNTRIES, LBS.

| Year | Great Britain | U.S.A. | New Zealand | Australia | Canada | Argentina | Netherlands | France | Switzerland | S. Rhodesia A | South Africa A | South Africa B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1930 | 10.2 | 4.6 | 7.4 | 3.8 | 3.6 | 3.2 | 12.2 | - | 15.5 | - | 4.3 | .8 |
| 1931 | - | 4.5 | 7.0 | 3.7 | 3.5 | 2.9 | 12.9 | 11.2 | 16.3 | - | 4.3 | 1.0 |
| 1932 | - | 4.4 | 6.0 | 3.8 | 3.3 | 3.4 | 11.5 | 11.0 | 17.2 | 5.0 | 3.8 | .9 |
| 1933 | - | 4.5 | 5.0 | 4.4 | 3.4 | 4.1 | 15.4 | 11.0 | 19.4 | 4.8 | 3.4 | .5 |
| 1934 | 9.4 | 4.8 | | 3.5 | 3.6 | 3.8 | 14.7 | 10.8 | 18.5 | 5.2 | 3.9 | .9 |
| 1935 | 9.1 | 5.2 | | 3.8 | 3.6 | 3.8 | 14.7 | 12.7 | 17.4 | 5.7 | 4.1 | .9 |
| 1936 | 8.8 | 5.4 | | 4.5 | 3.7 | 4.9 | 16.7 | 12.3 | 17.2 | 5.3 | 4.9 | 1.0 |
| 1937 | 8.6 | 5.5 | | 4.3 | 3.6 | - | 16.1 | 14.6 | 20.1 | 4.9 | 5.2 | 1.0 |
| 1938 | 8.9 | 5.8 | | 4.3 | 3.6 | 6.2 | 17.0 | - | 17.0 | | | 1.1 |
| 1939 | - | 5.9 | | 3.8 | 3.8 | 7.6 | 17.4 | 13.9 | 17.6 | | | 1.0 |
| 1940 | 8.2 | 6.0 | | 3.7 | 3.8 | 8.2 | 13.7 | 14.8 | 20.1 | | | 1.1 |
| 1941 | 8.3 | 6.0 | | 5.3 | 4.6 | 7.4 | 14.3 | 9.0 | 17.4 | | | 1.4 |
| 1942 | 14.0 | 6.3 | | 5.9 | 3.9 | 8.7 | 11.2 | 7.3 | 22.3 | | | 1.4 |
| 1943 | 15.5 | 5.0 | | 5.7 | 4.3 | 9.0 | 10.1 | 6.4 | 22.0 | | | 1.8 |
| 1944 | 10.3 | 4.9 | | 5.8 | 4.6 | 10.4 | 9.0 | 4.4 | 21.6 | | | 1.5 |
| 1945 | 9.7 | 5.9 | | 5.9 | 5.1 | 11.0 | 9.7 | 4.9 | 20.9 | | | 1.3 |
| 1946 | 10.0 | 6.9 | | 6.1 | 4.2 | 10.3 | 10.8 | 10.6 | 19.8 | | | 1.3 |

Notes : All figures apart from the final column have been extracted from reports of the Imperial and Commonwealth Economic Committees.
A. Europeans only.
B. For all races.

TABLE 4.

PER CAPITA CONSUMPTION OF SUGAR IN CERTAIN COUNTRIES, LBS.

| Year | United Kingdom | Australia | U.S.A. | Canada | Eire | India A | France | Denmark | Poland | South Africa | South Africa B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1930 | - | - | - | - | | - | - | - | - | - | 36 |
| 1931 | 105 | 102 | 108 | - | | 16 | 57 | - | 26 | - | 36 |
| 1932 | 104 | 105 | 105 | 98 | | 17 | 54 | - | 23 | - | 36 |
| 1933 | 100 | 106 | 103 | 90 | | 18 | 55 | - | 21 | - | 34 |
| 1934 | 104 | 104 | 99 | 93 | | 19 | 54 | - | 21 | 47x | 38 |
| 1935 | 107 | 106 | 103 | 97 | | 20 | 56 | - | 22 | 51x | 39 |
| 1936 | 107 | 107 | 102 | 96 | | 21 | 57 | - | 25 | 46x | 38 |
| 1937 | 112 | 111 | 96 | 101 | | 21 | 54 | 111 | 27 | 48 | 44 |
| 1938 | - | 113 | 95 | - | 62 | 18 | 51 | 112 | | 52 | 44 |
| 1939 | - | 112 | 98 | - | 65 | 13 | 55 | 123 | | 53 | 48 |
| 1940 | 72 | 119 | 95 | 99 | 68 | 14 | 58 | 97 | | 57 | 48 |
| 1941 | 67 | 125 | 104 | 103 | 56 | 19 | 29 | 95 | | 65 | 50 |
| 1942 | 69 | 159 | 86 | 80 | 43 | 15 | 32 | 97 | | 75 | 56 |
| 1943 | 68 | 144 | 80 | 77 | 35 | 16 | 30 | 75 | | 76 | 70 |
| 1944 | 71 | 149 | 89 | 84 | 41 | 17 | 33 | 74 | | 82 | 66 |
| 1945 | 70 | 134 | 74 | 69 | 39 | 18 | 26 | 61 | | 81 | 68 |
| 1946 | 76 | 131 | 75 | 72 | 39 | 17 | 31 | 71 | | 75 | 62 |
| 1947 | 80 | 130 | 92 | 88 | 40 | 18 | 35 | 72 | | 76 | 60 |
| 1948 | 81 | 139 | 96 | 89 | - | 17 | 36 | 68 | | 84 | 68 |

Notes : All figures apart from the final column and those marked x have been extracted from Reports of the Imperial and Comm onwealth Economic Committees. Those marked x were obtained from the S.A. Sugar Year Books.

A. Includes the sugar value of gur and includes Pakistan after the division.

B. Refers to direct consumption only. The writer has been unable to verify the reason for the discrepancy between his and the other figures quoted but it is probable that in their computations, the I.E.C. and C.E.C. have included sales to manufacturers. Adding sales to manufacturers to the writer's figures involves an increase of approximately 12% which will bring them much closer than they are at present.

TABLE 5.

PER CAPITA CONSUMPTION OF BEEF, VEAL, MUTTON AND LAMB IN CERTAIN COUNTRIES, LBS.

| Year | Great Britain | U.S.A. | Canada | New Zealand | Australia | Argentina | Eire | South Africa | South Africa |
|---|---|---|---|---|---|---|---|---|---|
| | A | A | A | | A | | | B | C |
| 1930 | 97 | 64 | 74 | 186 | 171 | 225 | | | 59 |
| 1931 | 98 | 62 | 65 | 252 | 171 | 200 | | | - |
| 1932 | 95 | 60 | 63 | 205 | 173 | 207 | | | - |
| 1933 | 97 | 65 | 62 | 196 | 199 | 217 | | | 53 |
| 1934 | 98 | 70 | 74 | 221 | 194 | 230 | | | 54 |
| 1935 | 99 | 68 | 72 | 246 | 198 | 240 | | | 52 |
| 1936 | 109 | 74 | 66 | 253 | 206 | 244 | | | 57 |
| 1937 | 80 | 70 | 73 | 200 | 218 | 194 | | | 60 |
| 1938 | 80 | 69 | 73 | - | 227 | 194 | 48 | 65 | 59 |
| 1939 | - | 69 | 69 | - | 216 | 195 | - | - | 58 |
| 1940 | 78 | 69 | 70 | - | 198 | 185 | - | - | 61 |
| 1941 | 65 | 75 | 74 | - | 226 | 185 | - | - | 65 |
| 1942 | 64 | 76 | 76 | - | - | 170 | 64 | 76 | 68 |
| 1943 | 59 | 67 | 86 | 196 | 216 | 164 | - | - | 70 |
| 1944 | 55 | 75 | 83 | - | 184 | 163 | - | - | 59 |
| 1945 | 59 | 78 | 82 | - | 172 | 168 | 71 | 67 | 62 |
| 1946 | 67 | 78 | 83 | 164 | 165 | 191 | 70 | 74 | 71 |
| 1947 | 66 | 85 | 82 | 168 | 179 | 209 | 68 | 77 | 70 |
| 1948 | 62 | 77 | 72 | 168 | 194 | 221 | 85 | 79 | 70 |
| 1949 | 60 | 76 | 69 | 184 | 198 | 226 | 83 | 77 | 69 |

Notes : All figures apart from the final column have been extracted from reports of the Imperial and Commonwealth Economic Committees.

A. Excludes military consumption except for Australia in 1947.

B. Excludes production in non-European areas and presumably does not include the Native population in the Reserves in the determination of the per capita figure.

C. The writer's calculations includes native production and consumption thereby showing the difference in per capita figures in respect of Europeans and Natives.

Chapter 8.

FOOD AND EXPENDITURE.

The subject in this chapter is an examination of the relationship between the level of income of a family, or some other economic unit, and the expenditure firstly on food, taken as one commodity, and secondly, the specific foodstuffs with which we are concerned in this study. The aim will be to find some functional connection between the level of income and the proportion of that income spent on certain foodstuffs.

A law, associated with the name of Engels, for, many years accepted as an integral part of economic theory states that as the income of a family, or any group of persons, increases the portion of that income spent on food will tend to decrease since food is one of the essentials of life. Most, if not all, studies in this field prove this proposition correct and Clark in his "Conditions of Economic Progress" finds no reason whatsoever of disputing it though he himself qualifies the law by stressing that "there are very great differences in ... consumption between families in different countries at the same income level."(1) We shall therefore consider this question in the light of the circumstances which are found in this country, and in order to do so we must immediately bear in mind that these "very great differences" may indeed apply with equal force between different groups within one country as between countries. Thus we must remember that consumption habits of the European may be very different from that of the Coloured or Asiatic, that the proportion in which income is spent by the urbanised native may differ considerably from that of a Native living in one of the Reserves, and so on. These questions will be our concern in the present chapter.

First, let us consider how the European's pattern of

(1) "Conditions of Economic Progress", pp 374.

/expenditure

expenditure changes as his income does. For this purpose the data drawn upon is that produced in the Report on the Inquiry into Expenditure of European Families in Certain Urban Areas in 1936.(1) It should be noted that it is not entirely satisfactory to base our discussion on a unit composed of a family since there are factors such as the size and age distribution which will influence the family expenditure on food.(2) To overcome this difficulty, it is usual to convert the numbers of a family into man-units according to some recognised scale.(3)

As income rose from the -£125 class through to the £576-600, the percentage of that income spent on

(1) U.G. 21 - 1937, hereafter referred to as the 1936 inquiry. This inquiry which covered 1,618 families earning between £100 and £600 per annum is by far the most comprehensive attempted in this country.

(2) Thus, for instance, in the 1936 inquiry the number of man-units per family varied between 3.14 in the -£125 group to 4.95 in the £551-575 group.

(3) That used in the 1936 report was proposed by the Health Organisation of the League of Nations and is as follows:

| Age | Co-efficient | | |
|---|---|---|---|
| | Male | Both Sexes | Female |
| under 2 | - | .2 | - |
| 2 - 3 | - | .3 | - |
| 4 - 5 | - | .4 | - |
| 6 - 7 | - | .5 | - |
| 8 - 9 | - | .6 | - |
| 10 - 11 | - | .7 | - |
| 12 - 13 | - | .8 | - |
| 14 - 59 | 1.0 | - | .8 |
| over 60 | - | .8 | - |

food[1] tended to decline from approximately 40 to 27 while expenditure on clothing remained fairly constant and that on "other expenses" rose considerably, relative to the increase in income.[2] This does not take into account the differences between families due to size and age distribution of members as mentioned earlier. Hence Table 2[3] has been compiled to show the percentage of total family income spent on food per man unit, converting persons into man-units according to the scale on page 206 . The result shows that the decrease is even more pronounced because the number of man-units per family rises with income.

(1) In this survey the actual money spent on food was accorded to the item "food" and not as is adopted by Clark, the wholesale value of food consumed, on the reasoning that included in the retail valuation is the value of services connected with the marketing process. It is highly probable that the higher income groups will consume a far greater portion of services in their actual expenditure on food items, in which case the fall in the percentage spent on food, as income rises, would be even greater, were the food to be valued at the wholesale level. This point is considered extremely important when considering the consumption of foodstuffs in relation to a changing income since if retail prices are used, as in fact they will be throughout this study, the increase in the consumption of foodstuffs will tend to be over-emphasised with the greater gap between retail and wholesale prices as remuneration for the more elaborate and expensive services. On the other hand there is of course, the supply side of the picture; the many developments in the marketing sphere (e.g. refrigeration etc.) provide cheaper marketing services, thereby reducing the gap. In the discussion which follows these complications will, however, not be taken into account, but are mentioned here in order to make clear that the writer is quite alive to the limitations of the facts and therefore the conclusions arrived at after a consideration of those facts. We shall be assuming then, that the supply and demand functions for the marketing services included in the retail valuation of the foodstuffs do not alter the position either between different income groups at a given date, nor during a period of time due to industrial developments. This does not necessarily mean that there is assumed no change in two functions; it includes the far more realistic assumption that a change in one will be counteracted by an equal change in the other, in the opposite direction. This assumption is necessary since the discussion is based upon the fact that it is possible to take data referring to a given moment of time and apply it over a period of time. That is to say we will be using the family budgetary figures, which show how the expenditure pattern changes as income rises between a number of families at a given date as being applicable to the case where income of a certain community rises over a period of time.

(2) See Table 1. page 223 .

(3) See page 223 .

/We must

We must note here that with the greater number of man-units per family in the upper income groups, it is very probable that the same food would be obtained cheaper through bulk-buying. However, when we consider a National Income over a period of time this complication no longer exists, unless there is some evidence of a general increase in the size of families. On the other hand, it is also a fact that as income of a family increases the quality of foods consumed improves and with it, the cost; therefore it is probable that these two tendencies will to some extent, cancel out each other.

While it is true that the percentage of expenditure on food to total income decreases as income rises, it nevertheless remains that the actual expenditure increases. In Table 2 (1) is also shewn the actual average expenditure on food per man-unit through the twenty/income groups as shewn in the 1936 inquiry, together with an index where the expenditure on food of the group earning between £126 and £150 is taken as 100. Although income rose by 300% (i.e. from the £126-150 group to the £551-575 group) the expenditure on food rose by just over 100%. (2)

Since we are not ultimately concerned in all food products but only specific ones, it is now time to consider these particular commodities in the light of the findings of the 1936 inquiry. We have already seen the disadvantages of using figures relating to families, so in the following discussion we shall confine ourselves to expenditure per man-unit first as an absolute quantity and then as a percentage of total income. It is not advisable to compare expenditure on a particular foodstuff with the expenditure on food in general since the latter is itself a varying function of income. (3)

(1) See page 223 .
(2) The average income per family in the £126-150 group was £138 and in the £551-575 group, £555.
(3) This method was employed by Dr. J.C. Neethling in an article "Inelasticity of Food Consumption", in "Farming in South Africa". but his figures will be increasingly over-estimated as income rises.

In Table 3[1] is shewn the actual expenditure on the specific foodstuffs in which we are interested, and other closely related products. From this it would appear that the expenditure on all the commodities examined, apart from wheaten flour and meal, mealie-meal, condensed milk and sugar, increased as income increased. In the case of mealie-meal the expenditure seems to have been fairly constant and for condensed milk there was a considerable decrease, it presumably being replaced by fresh milk in the upper income groups. The case of wheaten flour and meal is interesting since, taken in conjunction with bread, it would appear that the lower income groups purchase the flour and meal and bake their own bread while the more well-to-do families are content to purchase their requirements of bread and so spend far less on flour and meal. The figures for sugar are surprising in view of the fact that Clark maintains that "sugar consumption appears to rise rapidly and continuously with income",[2] the best possible explanation being that part of the sugar requirements are diverted into other sugar products like syrup and jams, and that even at the lower income groups a semi-saturation point has been reached.[3]

The increase in expenditure on bread is partly offset by the decrease in the case of flour and meal so that when taken together as one group, the percentage increase is but 15.5%, while income rose by 377.7%. Expenditure on fresh milk rises fairly constantly and to the extent of about 357.1%, but there must be some substitution between fresh and condensed milk as income increases. In studies on the

(1) See page 224 .
(2) "Conditions of Economic Progress", page 374.
(3) Clark allocates 50% by weight of "sugar products to sugar - on this basis the consumption of sugar would be 11.79 lbs per month per man unit for the lowest income group, or 141 lbs per annum which even when reduced to a figure per person (approximately 100 lbs) is very high in comparison with other countries.

/consumption

consumption pattern of non-Europeans, the fact that condensed milk contains such a large amount of sweetness is often stressed, so we cannot merely add the amounts spent on fresh and condensed milk together and regard it legitimately as one 'commodity'. Dividing the expenditure on condensed milk as 50% to milk and 50% to sugar, the increase in expenditure on milk falls slightly to 330.2%. The increase in the case of the other dairy products is also considerable; in the case of butter it amounts to 247.6% and for cheese, 350%. Fresh meat is by far the greatest item in the average family's budget and it is only to be expected that with the consumption so high in the lower income groups, the increase would not be so considerable since a semi-saturation point is reached earlier than for other products. This is shewn in Table 5 where the increase amounts to 40.7% while income doubles itself (i.e. from the -£125 group to £226-250), whereas over the whole range of twenty income groups the rise in expenditure on fresh meat is only 79.6%. Combining fresh and other meats, the increase is 89.3% showing that as income increases the demand for the comparatively more expensive tinned and potted meats becomes stronger, partly no doubt in substitution for the fresh product.

Broadly then, on the results of this examination it would seem that we could divide this group of commodities into four classes, the division depending on the extent to which expenditure rises as income does. In the first class would be the dairy products, the increase in expenditure on which was approximately .75 of the rise in income; in the second meat, the figure for which would be about .5; the third would be the combined bread-flour-and-meal, (.04), and in the fourth, mealie-meal and sugar where expenditure actually fell as income increased.

Let us now proceed to consider how income is spent between the various goods andservices in other income groups and for persons other than Europeans. It is important to

/bear

be ar in mind, in this respect, the difference in consuming habits between races, and the manner and extent to which these habits have become altered through the contact of a primitive people with a higher level of civilization. The examiniation of expenditure will therefore be considered in such a way as to show (a) how expenditure on food and specific foodstuffs varies with income for those non-Europeans resident in urban areas and (b) how this pattern of expenditure differs from that of the tural Native. In both these attempts, it is necessary to point out at this stage that many of the conclusions will be nothing more than rough estimates since there is no source of information comparable with the 1936 inquiry. In most cases the surveys have covered only a small number of families in a certain locality, in many only the broad division of expenditure is considered and specific food items are not mentioned, in all the basic defects of a family budgetary survey are magnified a hundred times. In spite of these and other disadvantages, it is essential that some attempt be made in this regard since without it, the whole discussion would loose much of its conclusiveness.

The survey covering the largest number of consumers was that undertaken by M. Janisch,(1) and conducted in Johannesburg during the period of January to November, 1940. After discussing the many difficulties facing the investigator into social conditions, "the reluctance and often the inability of the person questioned to divulge true information ... the reticence of the investigator to intrude too far upon the privacy of the individual human being,"(2) and the difficulty of aacurately assessing the true family income, Miss Janisch came to the conclusion that "there is no constant relation between the size of the family, the wage earned and the amount of food consumed."(3) Nevertheless, from data

(1) "A study of African Income and Expenditure of 987 families in Johannesburg", by M. Janisch published by City of Johannesburg, Non-European and Native Affairs Department, December, 1941.
(2) "A study of ... 987 families in Johannesburg", pp 2.
(3) "A study of ... 987 families in Johannesburg" pp 4

produced in Appendix VI of this study to show the percentage of total expenditure[1] spent on food for four different income groups, Table 4A has been constructed.[2] These figures relate to 182 five-person families none of whom had sub-tenants. The result is amazing in view of conclusions arrived at after the examination of the survey of expenditure on food by European families. Whereas in the latter case in accordance with "Engels' Law", there was a definite tendency for the percentage of income spent on food to fall as income itself increased, here exactly the opposite prevails. However, before we attempt to assess the causes of this phenomenon and its importance to this discussion, let us consider some of the other surveys in this field and see whether their results agree with those revealed above.

In a thesis published under the title "Rooiyard - a sociological survey of an urban Native Slum Yard", E. Hellman included several budgets of which 14 she regarded as "being fairly satisfactory".[3] This data is shown in Table 4B.[4] designed to show the relationship between the percentage of total expenditure spent on food and the level of total expenditure itself. The result points to the fact that there is no reason to suppose that food expenditure is a decreasing function of total expenditure since there are as many of those families earning relatively high incomes in the upper percentage groups as there are of the poorer families.

(1) Throughout the discussion relating to non-Europeans total expenditure is used instead of income because of the difficulties, stressed in all budgetary inquiries, of obtaining an accurate figure for income due to the reluctance on the part of subjects to divulge revenue from such sources as (illicit) beer-brewing or the many gambling games which are an integral part of Native life in the locations.

(2) See page 225 .

(3) Since the majority of these surveys were fundamentally sociological in character, it is probable that the economic side will not be as reliable as they might be.

(4) See page 225 .

/D.G. Bettison

D.G. Bettison conducted a budgetary survey among three Native families in Duncan Village, East London in July, 1949.(1) It aimed at obtaining relevant information from three broadly defined social classes and of the three families taken,

A ; was a house hold of well-educated, comparatively well-off Africans,

B ; a family, semi-educated (J.C.) and of slightly above the average health and

C ; a family almost illiterate, migrant, and whose income falls within the most numerous wage level of Africans.

The results of this investigation conform far more closely with those of the European inquiry and in connection with family B, Bettison had this to say:

> "The inaccuracy of data in respect of class B allows for few certain conclusions to be drawn, but judging from the results as they stand and from my experience of the subject and other similarly placed households, I venture to mention that it is likely that this class is actually cutting down on edible items in order to spend more on non-edible items. The factor in operation is probably social prestige."

However the evidence of a survey conducted over 157 African families in the Edenburg Location(2) does not support this contention, nor the findings of Miss Janisch. This evidence set out in Table 4C,(3) shows that the proportion of household income spent on food is plainly a decreasing function of income and that as the per capita income range rose the percentage spent on food fell from 142% where all

(1) The following figures have been obtained from the private files of the investigator:

| Family | Total Expenditure £ per month | Food £ p.m. | Percentage % |
|---|---|---|---|
| A | 54. 11. 5 | 26. 14. 4 | 49 |
| B | 15. 6. 7. | 6. 8. 7 | 42 |
| C | 2. 4. 7 x | 1.13.6½ x | 75 |

(x - per week).

(2) "Experiment at Edendale" by the Department of Economics, University of Natal, 1951.

(3) See page 225 .

/income

income was not stated, to only 29%. In regard to Indians, a similar position prevailed except that there appears strong evidence that they spend a greater proportion of their income on food than did the Africans.(1)

In view of the lack of comprehensive data on this subject, the wide differences between tribes, and the length of urbanisation of the native families, it is impossible to arrive at any defnite conclusion. It is probable that the family which has resided in an urban area for some time will tend towards the European pattern of expenditure, spending a lesser proportion of their income on food as their income rises,(2) whereas those who have just come into the towns will attempt to live at European standards on a far lower income, in which case they "eat according to the capacity of (their) pockets and ... food is usually the first item of expenditure which is marked out for special economy."(3)

There is however, definite evidence that the urbanised Native spends a greater proportion of his income on food than does his European counterpart.

The writer is inclined to place greater reliance upon the Edendale survey insofar as the statistical evidence is concerned, since it was conducted on an economic and not a sociological basis. This is not meant to detract from the importance of sociological surveys such as have been mentioned above, but it is considered that the statistical data in these surveys are not as reliable and valuable as the general observations of the investigators based upon their intimate contact with the non-European population. In view of this, it has been decided to consider the results of the Edendale survey in greater detail than the others which will be used to present the experienced views of the investigators rather than the actual budgetary figures.

(1) Africans spent on the average 66% of total income on food, Indians 74% although their average income was higher.
(2) Of the African families covered by the Edendale survey, 46% had lived at Edendale for more than 5 years and another 26% between 1 and 5 years.
(3) "Urban Native food in Johannesburg" by Dr. E. Hellman.

/In this

In this Edendale survey, it was found that, while the expenditure on all groups of food products in which we are here interested, rose, they did so in varying degrees. Unfortunately the food products are grouped together in such a way as to partly prevent any definite proof being claimed, since for instance wheaten products are grouped with maize and meat is included with fish and eggs. Nevertheless, the results do show that the percentage of per capita expenditure devoted to cereals fell steadily and noticeably, that on sugars remained almost constant, that on meat rose considerably while milk products began by increasing and then fell.(1)

There are several interesting points arising from this analysis of expenditure. Following the results of the 1936 inquiry into the expenditure pattern of Europeans, it was to be expected that cereals would attract a decreasing part of total income as that income increased; the results in respect of sugar also correlate very closely with the tendencies in the case of the Europeans although it is surprising that the consumption is not higher, bearing in mind the predilliction for sugar on the part of natives, a point mentioned in most of the sociological surveys.

It is in the case of the two remaining product groups that the surprises occur. In the European survey it was found that the expenditure on meat expressed as a percentage of income, tended to fall as the income of the family rose, yet here the tendency, and it is a strong one, is the exact reverse. It may be partly explained by the inclusion of other items in the group but a far more acceptable answer would seem to lie in the very great partiality that natives have for meat. It would seem then that among the very poor this liking that natives have for meat is suppressed by poverty and its purchase increases quite considerably as

(1) See Table 5 page 225 .

income rises. Nevertheless in view of other evidence in this connection, we should not be prepared to accept this considerable increase in expenditure on meat as a general tendency without examining some other budgetary surveys.

In terms of the actual amount spent on the groups the percentage increase is greatest in respect of meat where it amounts to approximately 750%, fairly substantial for "milk and milk products" (500%) and "Sugars" (300%) and comparatively small for the cereal group where it is only 150%.

In his "Bantu in the City",(1) R.E. Phillips made a study of the expenditure of 46 families whom he considered "a highly selective group." The heads of the families and the majority of the wives have been to school and they have become accustomed to European food. Yet, it is probably safe to say that the average location dweller, existing on his diet of mealie meal, bread and starchy foods, would follow fairly closely in the foodsteps of his educated brother were it not for the sheer lack of means."(2) Almost at the same time Dr. E. Hellman and Mrs. E.J. Krige were collecting material relating to expenditure of native families in Johannesburg and Pretoria. Dr. Hellman herself compared the findings of these two surveys with those of Phillips,(3) so it would seem legitimate to do the same in an attempt to verify the results of the Edendale survey.(4)

The results of this comparison are notable in sofar as they agree with the findings at Edendale in respect of the cereals group and sugar, but not for meat and milk. Whereas the Edendale survey showed a continuous rise in the percentage of income spent on meat,(5) in this case there is an actual drop of 4d. in the amount spent per man unit and a

(1) Published by the Lovedale Press in 1937.
(2) Published by the Lovedale Press in 1937.
(3) "The diet of Africans in Johannesburg" by E. Hellman, R.R. Vol. VI. No. 1, 1939 pp 8.
(4) See Table 6 page 226 .
(5) Note that the percentages in the Edendale survey relate to total income whereas in the other two surveys they relate to total food expenditure. They are therefore not comparable in an absolute sense.

marked decline in the percentage of total food expenditure devoted to meat. It would appear most likely that the discrepancies are due to differences in locality, the availability of meat in the locations and the fact that over 12 years separate the surveys. The results in respect of milk show a definite tendency for a greater part of total food expenditure, and therefore to a lesser extent of total income, to be spent on fresh milk as income rises, and a slightly lesser proportion on condensed milk. These results are far closer those of the survey into the expenditure by European families where the substitution of fresh for condensed milk as income rises, was noted.(1)

There is a very significant fact revealed in these figures, viz. while, within the cereal group, the expenditure on mealie meal, the basis of the diet, expressed as a percentage of total food expenditure, fell quite considerably, the percentage in the case of bread remained fairly constant. The importance of this is that a wheaten product is gradually being substituted for a maize one following the contact with the European standard of civilization where bread has been the foundation of the diet for hundreds of years.(2) In this respect it is interesting to note from the Edendale report, that the consumption of cereals by Indians is less dependent upon maize products than is the food habits of the African.(3) It is obvious that the Indian is much nearer the Europeans' pattern of expenditure on cereals.

(1) See above, page 210 .
(2) In her article "The diet of the African in Johannesburg", E. Hellman states that the consumption of bread was, like maize concentrated on the refined product - white bread. In one particular shop 60 loaves of white to 2 of brown, were sold.
(3) Consumption of cereals by Indians and Africans - Edendale 1949.

| | Indians % | | Africans % | |
|---|---|---|---|---|
| Mealie Meal | 27.2 | | 50.4 | |
| Samp | 1.4 | 54.5 | 10.6 | 73.6 |
| Mealie Rice | 25.9 | | 12.6 | |
| Boermeal | 24.4 | | 10.1 | |
| Bread | 19.2 | 43.6 | 14.2 | 24.3 |
| Rice | .7 | | [illegible] | |
| Kaffircorn | | 1.9 | 1.4 | |
| Other | 1.2 | | .7 | 2.1 |

Note: These Africans families were comparatively well urbanised. There was a severe shortage of rice at the time.
Percentages refer to combined weights

Finally there is the investigation made by D.G. Bettison into the expenditure by three families at different standards of living, which while subject to the criticism of being far too limited, is included in the discussion rather more for the observations of the investigator.(1) In this survey the percentage of total income spent on meat shows a definite decline, although it should be pointed out that in comparison with the other surveys, the actual expenditure is high which might account to some extent for the large fall in proportion of income devoted to meat purchases. Further evidence of the substitution of wheaten for maize products is revealed for the expenditure on mealie meal, samp and other maize products fell from 5/9 per man unit to 1/9 for the well-to-do family while for bread it increased from 1/6 to 2/10 in family 2 then falling to 2/2, a fall which was compensated by the fact that 3/4 was spent on flour and meal, so that the percentage of income spent in wheaten products exhibited a slight rise. The figures in respect of milk cannot be regarded by the writer as a true feflection of the general position among native location dwellers and will therefore not be considered. As regards sugar, the figures once again show a constancy in the amount spent, which can be explained by the fact that a saturation point has already been reached in its consumption, even in the

(1) Survey conducted in an East London location in 1949, and obtained from the files of the investigator. ~~See Table page~~ .

The following figures have been obtained from the private files of the investigator.

| | Family A | | | Family B | | | Family C | | |
|---|---|---|---|---|---|---|---|---|---|
| Income p.m. | £56. 11. 5 | | | £15. 0. 0. | | | £9. 0. 0. | | |
| No. of man units | 8 | | | 3.5 | | | 3.5 | | |
| Expenditure on: | s. | d. | %x | s. | d. | %x | s. | d. | %x |
| Bread | 2. | 2 | 1.6 | 2. | 10. | 3.3 | 1. | 5 | 2.8 |
| Wheaten meal | 3. | 4 | 2.4 | - | | - | - | | - |
| Mealie meal, samp | 1. | 9 | 1.3 | 4. | 4 | 5.0 | 5. | 9 | 11.1 |
| Fresh Milk | 7. | 6 | 5.5 | 6. | 5 | 7.5 | 9. | 0 | 17.5 |
| Condensed Milk | | 10 | .8 | - | | - | - | | - |
| Powdered Milk | 2. | 9 | 2.0 | - | | - | - | | - |
| Butter | 2. | 6 | 1.8 | - | | - | - | | - |
| Sugar | 2. | 11 | 2.1 | 1. | 2 | 1.3 | 2. | 4 | 4.4 |
| Meat | 7. | 3 | 5.3 | 8. | 7 | 10.0 | 8. | 3 | 16.1 |

( x - percentage of income )

/poorest

poorest family.(1) The African's predilection for sugar therefore exhibits itself in the point of saturation being reached far earlier than would otherwise be the case - sugar is almost as much an essential in the diet as is mealie meal.(2)

As far as food consumption in the Native Reserves is concerned the immediate difficulty with which one is faced is the fact that no detailed and reliable investigation has been made of the expenditure on foodstuffs. In his survey of economic conditions in the Keiskammahoek district in the Ciskei, Professor D. Hobart-Houghton collected material relating to the broad division of expenditure on food and other items and from this data, which has not been published, Table 8 has been constructed to show the relationship between cash income and expenditure on food.(3) It is evident that while the absolute expenditure on food rises as income does, when expressed as a percentage of total income it falls from 72% to 47% for the richer families.

As regards the actual composition of the diet,

> "The outstanding contrast between the urban Native diet and their rural diet is that the former is characterised by a predominance of meat, a lack of green vegetable foods, the practically total omission of fruit, and the paucity of fresh milk. The Native has always shown a marked predilection for fresh meat, and many women carefully explained to me that one of the advantages of urban residence is the facilities it offers for the daily purchase of small quantities of meat...(4) Fresh milk has

(1) In the case of Europeans, the expenditure on sugar per man unit varied between 2/3 and 2/8 per month.
(2) It is interesting to note that while Government sugar cost 3d per lb and white 4d per lb the African prefers the latter, reflecting the effect of Urbanisation on the food habits of the Native.
(3) See page 226 .
(4) The consumption of meat in the Reserves is being increasingly limited to festive functions.

been ousted from the daily diet of urban Natives, (since) not only does condensed milk keep longer but in its sweetened form serves the additional purpose of a substitute for sugar in tea, and for the Native, tea is only tea, when it is very sweet."(1)

SUMMARY.

Wheat: The consumption of wheaten products is not very great among the rural Native population as the cereal foundation of the diet has always been provided by maize, kaffircorn and other crops better suited to an area of summer rainfall. Among the urbanised Natives, however, there has been a definite substitution of bread, flour and meal for maize products especially among the younger generation. It is only to be expected that this will continue as it is one of the most important respects in which the original African diet differs from that of the European. The urban Native also shows a marked preference for white bread, once again due to his contact with the higher European level of civilization. As regards the European population, when wheat, flour and meal are taken as one group, the expenditure on that, expressed as a percentage of total income, shows a definite tendency to fall. The most striking point in this connection is the change within the group between bread and flour and meal. It would appear that as income rises there is a decided substitution of bread for flour and meal.

Maize: This was the foundation of the original African diet and remains as such today in the rural areas. Among the urban Native population, besides the fact that its place is gradually being taken by wheaten products, there is the significant fact that it is consumed in the more refined product - mealie meal. This is significant insofar as the maize equivalent of total consumption is obviously increased when consumption is diverted to the more refined product, and from

(1) E. Hellman, "Africa" 1936, Vol. 9 No. 2.

/the

the nutritional point of view it is an undesirable development as the germ of the meal is lost in the refining process. In the diet of the average European, maize is an insignificant item.

Dairy Products: The rural Native consumes little of these commodities, even the production of fresh milk and "amasi' has declined in recent years due to the poor type of stock. The consumption of fresh milk is probably still less among the location dwellers and is everywhere substituted by condensed milk which at the same time satisfies the Natives' demand for sugar. Consumption of butter and cheese is almost negligible among all but the very richest of urban Natives and even in the poorer section of the European population the comparatively high price result in little being devoted to their purchase. As income increases fresh milk tends to replace the canned product and the essential protective nature of this group begins to be appreciated as it falls within the means of the consumer. Dairy products reveal by far the greatest increase as income rises among the European community, and there is no reason to suppose that were the income of the urban non-European to be raised, the same would not occur.

Sugar: One of the most significant differences in food consumption between rural and urban Natives is the importance that sugar has achieved in the food habits among the latter. It is true that with an increase in cash income within the Reserves there is the probability that purchases of sugar from traders has occurred, but to the urban Native it has become an essential due no doubt to his well known partiality for all things sweet. So great is this prediliction that the amount spent on sugar purchases by even the poorer African families in the locations, is almost as much as that spent by Europeans. Among the latter too, there seems to be evidence that at the lower income levels a semi-saturation point has been reached in the consumption of actual sugar although that of sugar

/products

products (i.e. when account is taken of products like syrups, jams etc.) does show a rise.

Meat: This was one of the pillars of the original diet of the pastoral African people but with the complete change in their economy - a change resulting in a scarcity of land - and the continued significance of cattle in the economy of the Reserves meat, their quality showed a marked deterioration and the consumption of meat is now almost limited to festive occasions. Among the urban population the affinity towards meat remained and its availability in small quantities meant that it once again became, with maize, the backbone of the diet. As regards the European, the consumption is high even in the lower income groups, and while expenditure on meat and the quantity consumed do show an increase, there is a definite tendency for increased expenditure on canned and other preserved meats, a part of which must be in substitution for the fresh product.

Table 1.

Europeans: Percentage of Income spent on various goods and services, in 9 urban areas, for twenty income groups, 1936.

| Income Group | Food | Rent | Clothes and shoes | Medical expenses | Other expenses |
|---|---|---|---|---|---|
| £ | % | % | % | % | % |
| less than 125 | 39.8 | 24.4 | 9.0 | 2.1 | 24.7 |
| 126-150 | 38.7 | 24.9 | 9.7 | 1.8 | 24.9 |
| 151-175 | 38.2 | 26.3 | 10.7 | 2.5 | 22.3 |
| 176-200 | 37.5 | 23.3 | 11.8 | 2.0 | 25.4 |
| 201-225 | 35.5 | 24.1 | 9.4 | 2.8 | 28.4 |
| 226-250 | 32.5 | 22.6 | 9.2 | 2.8 | 32.9 |
| 251-275 | 29.8 | 23.7 | 9.8 | 3.2 | 33.5 |
| 276-300 | 31.1 | 22.0 | 10.0 | 3.2 | 33.7 |
| 301-325 | 30.0 | 21.9 | 9.5 | 3.4 | 35.3 |
| 326-350 | 29.0 | 21.1 | 9.5 | 3.3 | 36.1 |
| 351-375 | 29.4 | 21.2 | 8.7 | 3.3 | 37.4 |
| 376-400 | 27.3 | 21.8 | 8.6 | 3.6 | 38.7 |
| 401-425 | 28.0 | 21.8 | 9.0 | 3.4 | 37.8 |
| 426-450 | 27.8 | 20.8 | 8.7 | 3.4 | 39.3 |
| 451-475 | 26.8 | 20.8 | 8.5 | 3.1 | 40.8 |
| 476-500 | 27.6 | 19.9 | 9.2 | 3.6 | 39.8 |
| 501-525 | 26.2 | 20.1 | 8.6 | 3.7 | 41.4 |
| 526-550 | 26.9 | 19.3 | 8.9 | 3.6 | 41.3 |
| 551-575 | 26.6 | 20.2 | 9.0 | 3.0 | 41.2 |
| 576-600 | 26.9 | 19.2 | 9.8 | 3.3 | 40.8 |

Source: "Inelasticity of Food Consumption" by Dr. J.C. Neethling. "Farming in South Africa", May 1938, pp 176 (From U.G. 21/37.)

Table 2.

Percentage of family income spent on food, per man unit, and the actual expenditure in 9 urban areas, for 20 income groups, 1936.

| Income group | No. of M Us per family | Income spent on food | Expenditure on food | Index (£126-150 = 100) |
|---|---|---|---|---|
| £ | | % | £ | |
| less than 125 | 3.14 | 12.7 | 1. 5. 4 | 104 |
| 126-150 | 3.65 | 10.6 | 1. 4. 4 | 100 |
| 151-175 | 4.05 | 9.4 | 1. 5. 2 | 103 |
| 176-200 | 3.95 | 9.5 | 1. 9. 1 | 120 |
| 201-225 | 4.07 | 8.7 | 1. 10. 2 | 124 |
| 226-250 | 3.44 | 9.4 | 1. 17. 10 | 156 |
| 251-275 | 3.82 | 7.8 | 1. 13. 10 | 139 |
| 276-300 | 4.09 | 7.6 | 1. 16. 11 | 152 |
| 301-325 | 3.86 | 7.8 | 2. 0. 1 | 165 |
| 326-350 | 3.70 | 7.8 | 2. 4. 6 | 183 |
| 351-375 | 3.90 | 7.5 | 2. 5. 8 | 188 |
| 376-400 | 4.04 | 6.8 | 2. 3. 8 | 178 |
| 401-425 | 4.11 | 6.8 | 2. 6. 5 | 191 |
| 426-450 | 4.19 | 6.6 | 2. 8. 1 | 198 |
| 451-475 | 4.24 | 6.3 | 2. 8. 5 | 200 |
| 476-500 | 4.59 | 6.0 | 2. 7. 9. | 196 |
| 501-525 | 4.52 | 5.8 | 2. 9. 2 | 202 |
| 526-550 | 4.55 | 5.9 | 2. 11. 8 | 212 |
| 551-575 | 4.95 | 5.4 | 2. 9. 9 | 205 |
| 576-600 | 4.83 | 5.6 | 2. 13. 3 | 219 |

Table 4.

Expenditure on food as a percentage of total income or total expenditure - Non-Europeans.

A. From "A Study of African Income and Expenditure of 987 families in Johannesburg" by M. Janisch, 1940.

| Income Group p.a. | Average Income p.m. | Average expenditure on food p.m. | | Number of families |
|---|---|---|---|---|
| £ | £ | £ | % | |
| 25-50 | 3. 12. 9 | 1. 6. 1 | 35.7 | 20 |
| 51-75 | 4. 5. 11 | 1.15. 4 | 41.2 | 115 |
| 76-100 | 6. 11. 5 | 3. 6. 3 | 50.4 | 41 |
| 101-125 | 9. 15. 10 | 4.16. 8 | 49.6 | 5 |

B. From "Rooiyard - A Sociological survey of an urban Native Slum yard" by E. Hellman, 1934.

Distribution of families by the percentage of total expenditure spent on food.

| % of total expenditure spent on food | Total expenditure | | | | | |
|---|---|---|---|---|---|---|
| | £3-4 | £4-5 | £5-6 | £6-7 | £7-8 | £8 |
| 60% | 1 | | | | | |
| 50 -60% | 1 | | 1 | | | 1 |
| 40 -50% | 2 | 1 | | | 1 | 1 |
| 30 -40% | 2 | | | | | |
| 20 -30% | | 2 | | | 1 | |

C. From the Edendale survey by Department of Economics of the University of Natal, 1948.

| Per capita income range | Households | | Average Food expenditure | | As % of income |
|---|---|---|---|---|---|
| | No. | Average M.U.s | per capita | per M.U. | |
| | | | s. d. | s. d. | |
| Under 5/- | 44 | 4.75 | 4. 5 | 6. 3 | 142 |
| 5/- - 9/11 | 64 | 4.49 | 5. 3 | 7. 0 | 73 |
| 10/- - 14/11 | 26 | 3.85 | 6. 4 | 8. 0 | 51 |
| 15/- to 19/11 | 11 | 4.48 | 7. 6 | 7. 4 | 42 |
| 20/- and over | 12 | 2.80 | 8. 2 | 10. 0 | 29 |

Table 5.

Weekly expenditure on certain foodstuffs at different income levels

| xpenditure | Average weekly per capita expenditure on food | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3/- | | 4/11 | | 6/10 | | 8/9 | | 10/9 | | 14/- | |
| n: | d. | % | d. | % | d. | % | d. | % | d. | % | d. | % |
| ereals | 12.2 | 34.0 | 17.4 | 29.2 | 20.6 | 25.1 | 25.8 | 20.1 | 31.2 | 20.1 | 31.2 | 18.5 |
| igars | 2.5 | 6.9 | 4.2 | 7.1 | 5.5 | 6.7 | 7.7 | 7.3 | 5.7 | 4.4 | 10.2 | 6.1 |
| eat, fish, eggs | 8.7 | 24.1 | 14.2 | 23.8 | 21.4 | 26.0 | 26.2 | 25.3 | 39.8 | 30.9 | 73.5 | 43.7 |
| ilk products | 2.1 | 5.8 | 5.0 | 8.4 | 7.4 | 9.0 | 14.4 | 13.9 | 7.5 | 5.8 | 12.5 | 7.4 |

Source : Experiment at Edendale, page 202.

Table 6.

Monthly expenditure on certain foodstuffs of two income groups.

| Expenditure per man unit on: | | Group A | Group B |
|---|---|---|---|
| Bread | s. d. | 2. 1 | 1. 9 |
| | % of total food expenditure | 12% | 11% |
| Mealie meal | s. d. | 1. 5 | 1. 5 |
| | % of total food expenditure | 8% | 19% |
| Fresh Milk | s. d. | 1. 6 | 7 |
| | % of total food expenditure | 9% | 4% |
| Condensed Milk | s.d. | 4½ | 6 |
| | % of total food expenditure | 3% | 4% |
| Sugar | s. d. | 2. 3 | 1. 10 |
| | % of total food expenditure | 13% | 11% |
| Meat | s. d. | 3. 11 | 4. 3 |
| | % of total food expenditure | 23% | 28% |

Group A. Educated men's families with a medium income of £10 p.m. i.e. twice as much as the average location family, from, "The Bantu in the City" by R.E. Phillips.

Group B. Families at various income levels, but containing a majority of poor families from surveys conducted by E. Hellman and E.J. Krige. (Conversion to man units on the basis of 1 child = ½ man unit.)

Table 7.

Expenditure in a Native Reserve. - Keiskammahoek, 1949.

| Total Expenditure p.a. | No. of families | Average total expenditure p.a. | Average Expenditure on food p.a. | % of total expenditure | Expenditure on food per person |
|---|---|---|---|---|---|
| £ | | £ | £ | % | £ |
| less than 25 | 66 | 16.13. 8 | 11.19.4 | 71.7 | 2. 7.10 |
| 25-50 | 83 | 35.11. 1 | 23.11.2 | 66.3 | 3.14. 9 |
| 51-75 | 34 | 62.17. 0 | 36. 1.2 | 57.4 | 4.14.11 |
| Over 75 | 7 | 95. 9.10 | 44. 7.6 | 46.8 | 5.16. 9 |

Source : Unpublished data collected during the economic survey of the Keiskammahoek district by Professor D. Hobart Houghton.

TABLE 3.

Average monthly expenditure per man unit on certain foodstuffs, 1936.

| Income Group | Bread | Flour and Meal | Mealie Meal | Fresh Milk | Conden-sed Milk | Butter | Cheese | Sugar | Golden Syrup | Jams etc. | Fresh Meat | Other Meats |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| £ | s d | s d | s d | s d | s d | s d | s d | s d | s d | s d | s d | s d |
| -125 | . 9 | 4. 2 | . 5 | .11 | 1. 4 | 1. 7 | . 2 | 2. 7 | . 3 | . 5 | 4. 6 | . 2 |
| 126-150 | 1. 3 | 3. 7 | . 4 | 1. 2 | .11 | 1. 7 | . 2 | 2. 3 | . 3 | . 4 | 4. 5 | . 2 |
| 151-175 | .11 | 3. 9 | .3 | 1. 7 | .10 | 1. 9 | . 3 | 2. 6 | . 2 | . 5 | 4. 4 | . 1 |
| 176-200 | 1. 5 | 3. 3 | . 4 | 1.11 | .10 | 2. 0 | . 5 | 2. 6 | . 3 | . 6 | 5. 3 | . 4 |
| 201-225 | 1. 3 | 2.10 | . 3 | 2. 7 | .10 | 2. 4 | . 7 | 2. 4 | . 3 | . 7 | 5. 6 | . 2 |
| 226-250 | 2. 6 | 2. 5 | . 4 | 3.11 | . 8 | 3. 1 | . 7 | 2. 8 | . 4 | . 8 | 6. 4 | . 4 |
| 251-275 | 2. 3 | 2. 4 | . 4 | 3. 7 | . 5 | 2. 7 | . 7 | 2. 2 | . 3 | . 8 | 6. 4 | . 4 |
| 276-300 | 2. 7 | 2. 1 | . 4 | 4. 1 | . 6 | 2.11 | . 8 | 2. 5 | . 3 | . 8 | 6. 5 | . 5 |
| 301-325 | 2. 2 | 2. 6 | . 4 | 4. 4 | . 6 | 3. 1 | . 8 | 2. 3 | . 4 | . 9 | 6. 6 | . 6 |
| 326-350 | 3. 4 | 1.11 | . 4 | 5. 2 | . 5 | 3. 5 | . 8 | 2. 4 | . 4 | .11 | 6.11 | . 8 |
| 351-375 | 2.10 | 2. 2 | . 4 | 5. 2 | . 7 | 3. 9 | . 8 | 2. 3 | . 4 | .11 | 7. 2 | . 7 |
| 376-400 | 3. 6 | 1. 7 | . 4 | 4. 9 | . 5 | 3. 4 | . 8 | 2. 3 | . 4 | .10 | 7. 0 | . 7 |
| 401-425 | 3. 4 | 1.10 | . 3 | 5. 2 | . 3 | 3. 9 | . 9 | 2. 4 | . 4 | .11 | 7. 5 | . 9 |
| 426-450 | 3. 7 | 1. 7 | . 4 | 5. 7 | . 4 | 4. 1 | . 8 | 2. 4 | . 4 | 1. 1 | 7. 5 | . 6 |
| 451-475 | 3. 2 | 1.11 | . 4 | 5. 9 | . 3 | 3. 7 | . 8 | 2. 3 | . 4 | 1. 0 | 7. 8 | . 8 |
| 476-500 | 3. 3 | 1. 8 | . 4 | 5. 1 | . 3 | 3. 7 | . 9 | 2. 5 | . 4 | .11 | 7. 8 | . 9 |
| 501-525 | 3. 5 | 1. 8 | . 3 | 5. 7 | . 2 | 3. 9 | . 9 | 2. 3 | . 4 | 1. 0 | 7. 6 | . 9 |
| 526-550 | 3.10 | 1. 4 | . 5 | 5. 6 | . 2 | 3.11 | .11 | 2. 2 | . 3 | 1. 2 | 7. 8 | 1. 1 |
| 551-575 | 2.11 | 1. 7 | . 6 | 5. 3 | . 3 | 3.10 | .10 | 2. 5 | . 4 | 1. 1 | 8. 3 | . 9 |
| 576-600 | 4. 0 | 1. 7 | . 4 | 5.10 | . 2 | 4. 4 | . 9 | 2. 2 | . 4 | 1. 2 | 8. 1 | .10 |

Source : U.G. 21/37.

## Chapter 9.

## THE DISTRIBUTION OF THE NATIONAL INCOME IN SOUTH AFRICA.

Our Interest in distribution of the National Income in relation to changes in consumption, is due to the fact, as we have already seen, that as income increases the portion of that income spent on food does not increase in the same proportion; nor is the increase in consumption, either in terms of quantity or value, of one particular commodity the same as for all others. It is therefore by no means sufficient to relate consumption to National Income; we must consider whether there has been any redistribution of that income during the period under review. Should it be found from such an investigation that there is now greater equality of incomes, we would be justified in saying that consumption would be effected by (a) the general use in National Income and (b) the redistribution in favour of the lower income groups.

In other words, we would not be justified in stating that the consumption of any product had risen merely because the National Income had done so, since it is by no means inconceivable that the same increase could have been realized by the redistribution of a fixed National Income in favour of those persons more disposed to the purchase of that particular commodity.

In considering this aspect of the National Income, the following is the course that will be pursued: we shall first consider the division of the National Income between Labour and the other factors of production (viz. Capital, Land and Enterprise); then attempt to establish how the share of Labour has itself been redistributed between the different classes of employees over the period 1930-1950. A severe lack of suitable statistics makes this task extremely difficult,(1) and no more than a fairly well-founded estimate of a trend is claimed here.

(1) Report of Industrial Legislation Commission of Enquiry U.G. 62/51 pp 37.

/In a

In a memorandum submitted by Professor D.G. Franzen, of Stellenbosch University, to the Governor of the South African Reserve Bank, it was said that in 1945/6, salaries, wages and "supplementary labour income", constituted 65% of the National Income.(1) However, statistics are available in regard to the manufacturing and mining industries and the South African Railways and Harbours which show that while the percentage share of Labour (i.e. remuneration of employees) in the total income produced was fairly constant in the manufacturing industry, it rose considerably in the case of the other two occupations. Actually the figures show that for all three occupations, the share of Labour tended to decline until the beginning of the Second World War, when such factors as the introduction of cost of living allowances for non-Europeans, the constant price of gold combined with others to increase Labour's share.(2)

It is highly probable that Labour (i.e. the recipients of wages and salaries) constitutes the major part of the lower income group, while recipients of profits, interest and rent are the more well-to-do of the population. If this is so, then the increase in the percentage share of Labour, as far as is shewn by the figures produced, means that there has been a redistribution of income in favour of the lower income groups. It is only right to state here that these three occupations employed only 1/6 of the total working population of the Union in 1946, weighted, as it is, by the large number of Natives in the Reserves classified as working.(3) Nevertheless, it would seem justifiable to accept this evidence as proof of the trend in the redistribution of income in favour of Labour, at least for occupations other than farming.

We must now proceed to consider whether, within the share of the National Income earned by Labour, there has been any

(1) Report of Industrial Legislation Commission of Enquiry U.G. 62/51 pp 37.
(2) See Table 1 ~~(8) Included~~ page 243.
(3) Included in the 'working population' are all Natives in the Reserves of 10 years of age, or more, whereas for other races, the lower age limit is 15. Further all Reserve females are classified as working, while their European counterparts are called 'housewives', and not included in the working population.

further redistribution and if so, in whose favour. To do this it is necessary to divide the total labour force into classes in order to allocate a share of the total income accruing to Labour, to each particular class. Bearing in mind the broader interest in this division, the following groups have been chosen:- salaried employees and wage earners, in turn divided into European skilled and non-European unskilled. This division is not to be regarded as a rigid one; there is no doubt that there do exist Europeans who are not termed "skilled" and similarly non-Europeans who perform skilled work, but

> "the most outstanding characteristics of the occupational distribution of the population (in South Africa) is the close relation between occupation and race .... Professional supervisory and skilled work is performed mainly by Europeans, to a lesser extent by Coloureds and Asiatics, and to an almost negligible extent by Africans. This is true of all branches of economic activity: agriculture, mining, manufacturing, transport, public administration, and professional work with the exception of teaching, nursing and religious service where non-Europeans serve their compatriots."(1)(2)

The reasons for this close relationship are largely to be found in the economic development of the country, based on a relatively scarce skilled labour supply and the then seemingly inexhaustible pool of unskilled native labour; a state of circumstances perpetuated by convention, legal restrictions and a "civilized labour" policy instituted by the Government in 1924 and never completely relaxed.(3) On the other hand, the severe shortage of skilled and semi-skilled labour during World War II, due to the absence of many Europeans on military service, gave a chance to the non-European to enter the semi-

(1) The Handbook of Race Relations. "Labour" by S. v.d. Horst pp 109.
(2) See Tables 2(A) and (B) page 243
(3) S.E.E.C. Report No. 13 U.G. 53/48 pp 36.

/skilled

skilled grades. The wide acknowledgement by industrialists, of the efficiency of non-Europeans as machine operatives must have further reduced this strict relationship of recent years. Thus, for example, the Wage Board states in its report for 1948:

> "It appears that ... there is a tendency for Asiatics, and to a lesser extent Coloured, to infiltrate into skilled and semi-skilled work. Even in the case of Natives who to a greater extent are handicapped by lack of education, training or other disabilities, from performing work requiring any degree of skill, there is nevertheless a gradual movement towards their absorbtion in more highly paid employment."(1)

Once again, the only reliable statistics of average salaries and wages relate to manufacturing, mining and the S.A.R. & H,(2) and even in these there are certain deficiencies which must be mentioned. First, income-in-kind is only included in the figures for manufacturing, "in respect of which, the industrial census forms define salaries and wages as including the value of housing, boarding and rations," and for mining after 1946/7. Prior to that date, lack of complete information in respect of items other than food supplies, resulted in food being the only item of income-in-kind included. Further, the figures in respect of the S.A.R. & H. and mining for the war years are subject to a defect arising from the fact that permanent employees who enlisted for military service, were included as employees whereas only that portion of salaries and wages was included which was payable by the original employer i.e. the excess of the salary or wage which the employee would have received over remuneration paid by the Department of Defence.(3) However, if these figures are employed as evidence of a trend rather than actual earnings, they should not be the cause of much inaccuracy.

(1) Report of the Department of Labour.
(2) See Table 3, page 244.
(3) U.G. 62/51 pp 43.

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The figures in Appendix / show, firstly, that in both Manufacturing and the S.A.R. & H., wages to European employees increased by more than did salaries during the period 1929/30 - 1949/50; secondly, that average earnings of non-Europeans in manufacturing and on the railways increased to a greater extent than did wages of Europeans. Combining these two results, it is obvious that as far as the figures go, there has been a definite redistribution in favour of the lower income groups, both Europeans and non-European. On the other hand, the statistics as regards mining seem to point to a definite advantage accruing to Europeans, but as no subdivision of earnings of Europeans is available, nothing further can be said.

As mentioned above,(1) these three occupations employed only about $^1/_6$ of the total working population of the Union in 1946,(2) so they cannot be taken as conclusive evidence of any general trend. Unfortunately further statistics on wage earnings are difficult to find, and many of those that have been produced are little more than estimates; as for instance, those based on minimum wage rates. Nevertheless it will be necessary to examine some of them in order to determine whether they support the trends shewn in the figures examined above.

In the Official Year Books are published tables relating to the salaries and wages paid by Local Authorities, subdivided into European and "Other", from which it would appear that during the period 1929/30-1947/8 (data is not available subsequent to that date), the average earning per European increased by almost 90%. while earnings accruing to persons enumerated under "other" increased by over 130%. Furthermore, in 1929/30 the average wage of "others" was approximately 18% of the average earning of a European, whereas in the period 1942/3-1947/8, it varied between 21.6% and 24.7%.(3) It must be admitted that there is no means of testing whether European wages have risen

(1) See page 228
(2) See Table 4, page 245.
(3) See Table 3 (I) page 245 .

/by

by more than European salaries, as was the case in the manufacturing industry; in which case it is quite conceivable that the earnings of certain Europeans might have increased by more than 130%. Nevertheless, there seems to be the same definite trend in favour of the non-European as was shewn in the figures taken from the Report of the Industrial Legislation Commission of Enquiry.(1) These Local Authorities employed 105,275 persons in 1946.(2)

Also published in the Official Year Books are statistics maintained to be "fairly reliable", of the average wages paid to unskilled native labourers employed in various classes of trade, commerce and industry, in the chief urban areas. "The figures have been obtained from the wage returns collected by the Office of Census and Statistics, and include the estimated value of food and lodging, as well as any other benefits."(3) It should be pointed out that these figures will of course, to some extent, be a duplicate of those produced for manufacturing alone. However, in support of the maxim that too much evidence is better than too little, they are included in an adjusted form. They are published for each urban centre seperately and are here weighted on the same basis as has been used in compiling the retail price index since 1938.(4) The result follows very closely the trend already been in respect of the manufacturing industry, in that during the period 1929-1947 the percentage increase in average weekly earnings is 132.2%.(5) It is impossible to state how many of

(1) U.G. 62/51.
(2) Number of Employees of Local Authorities.

| | 1929/30 | 1935/6 | 1942/3 | 1947/8 |
|---|---|---|---|---|
| Europeans | 17,350 | 19,813 | 27,323 | 30,963 |
| Others | 42,386 | 51,181 | 59,697 | 80,689 |
| Total | 59,736 | 70,994 | 87,020 | 111,658 |

Source : Union Year Books Nos. 12 - 25.

(3) Official Year Book No. 25 1949, pp 318.
(4) Cape Town 11, Port Elizabeth 4, East London 2, Kimberley 1, Pietermaritzburg 2, Durban 6, Pretoria 5, Witwatersrand 27, Bloemfontein 2.
(5) See Table 5, page 245.

/the

the 72,033 natives classified under "Commerce and Finance" in the 1946 census, are covered by this evidence, but the similarity between these and other figures do show a remarkably close relationship between earnings of natives in different occupations.

According to the Report of the Industrial Legislation Commision of Enquiry there were 707,282 persons occupied as under "Personal Service" in 1946, of whom only 25,000 were Europeans. Since 1939 the Office of Census and Statistics has collected data of wages of domestic servants in connection with the annual rent census,(1) and from figures acknowledged to this source, Sheila van der Horst has shewn that during 1940-44 the average increase in wages of domestic servants for the four largest urban areas was between 29% and 37%.(2) While this increase is not as great as that recorded in the manufacturing industry during the similar period, (except for European salaries) it is on a par with increases in the other occupations examined. It would be impossible to maintain that this evidence, restricted as it is, should be regarded as a generalisation of conditions throughout the country, yet it seems to show that, at least as far as domestic service is concerned, the trend in earnings of Non-Europeans is not confined to those occupations for which more complete statistics are available.

Finally, we can obtain some idea of the trend, if nothing more, from an examination of the minimum wage rates and cost of living allowances laid down in Wage Board determinations. It is not correct to state, as some have done, that these minimum wage rates can be used in deriving conclusions involving absolute incomes,(3) but a comparison of changes in minimum rates to different classes of employees in a similar economic occupation is permissible, provided one always bears in mind the

(1) These figures are confined to 3-6 roomed houses constructed of brick, stone or concrete, rented furnished or non-furnished.
(2) See Table 6, page 246.
(3) " ... the lowest wage payable tends to become the highest wage paid." "The Cost of Living" by Ethel Wix. Institute of Race Relations. 1951.

/essential

essential limitations in the statistics. S. v.d. Horst has produced figures relating to commercial employees which show that during 1940-47 the minimum wage rate granted by the Wage Board to labourers over the age of 18, not specified as non-European but who, from the actual rates laid down, could certainly not be Europeans, has in general increased more than have grants in respect of male and female shop assistants and clerical employees.(1)

The stage has now been reached where it is essential that we acknowledge and attempt to bridge, an important gap in the whole discussion - viz. the income of the farming community who, in 1946, numbered just less than 50% of the total working population.(2)

Broadly those engaged in farming can be divided into three classes:- the farm owners outside the Reserves, predominantly European; the farm labourers, almost exclusively non-European and finally those natives resident in the Reserves at the time of the census.(3) No statistical evidence could be found as to the division of Natives between those employed on farms and those in the Reserves and classified as working, but using the same ratio as that in which the total native population was divided between those two areas, the 2,139,219 Natives occupied in farming would be divided as to some 1,200,000 in the Reserves and 900,000 on farms.(4)

Since no really reliable figures relating to the change in incomes of farmers could be discovered, it was reluctantly decided to disregard them in this discussion. As regards earnings

(1) See Table 7, page 246.
(2) At the time of the 1936 census all females of 10 years and older in the Reserves were classified as working - in 1946 a very large number of these were classified as 'housewives' The Industrial Legislation Commission of Enquiry has estimated this figure at 1,100,000 and thus their figure for the percentage of working population engaged in farming is 56.2%. Since it is not considered justified to include all females in the Reserves as working, the 1946 census figures have been adhereddto, giving a figure of 46.9%. This figure is still in excess since it includes natives in the Reserves from 10 years of age, whereas for the other races the lower age limit is 15.
(3) See Table 8, page 246.
(4) In 1946 the total native population in Reserves was 3,267,000 and on farms, 2,457,000.

of farm labourers, the most reliable data is that produced by the Division of Economics and Markets at various times during the period under review. The considerable difficulties attached to the valuation of certain items included in the average 'total' wage make these figures really little more than well-informed guesses. Furthermore ~~considering~~ in view of the fact that, in most cases, the 'total' wage includes some valuation given to food supplied by the farmer, it cannot be said that the consumption of foodstuffs by the labourers depends upon their income, but rather that income depends on the valuation given to food insofar as it is supplied by the farmer. Nevertheless these figures do show that in the areas examined, 'total' incomes of farm labourers have increased by approximately 70-80% between 1929 and 1950.(1)

In connection with the Native Reserves, it is most important to remember the significance of migrant labour in the whole economic structure of the family unit. True, there are other factors which urge the native to seek the "bright lights" of the city, but at the root of the migratory labour system is economic necessity - the need to supplement what income they can obtain from within the Reserves, by their present methods of cultivation.

> "The people of this District (Keiskammahoek) are seen to be dependant upon the earnings of emigrants for their very existence, and it is poverty which forces them out to work."(2)

The economic survey of the Keiskammahoek district carried out by the Department of Economics of Rhodes University, revealed that between 1/3 and 1/2 of the total cash income of the family unit, and approximately 1/4 of income-in-kind, came from outside the Reserve; furthermore that over 2/5 of the families drew the greater part of their cash incomes from remittances by

(1) See Table 9, post p.246
(2) "The Economy of a Native Reserve." by Professor D. Hobart Houghton.

/emigrant

emigrant workers.[1] On the assumption that the proportion of the earnings sent or brought home by emigrants, is a function[2] of the earnings of the emigrant himself, or herself, the connection between wages paid to natives in urban occupations and incomes of residents in the Reserves, becomes obvious. If average wages paid by industry, the railways and Local Authorities etc. have risen, as, in fact, we have seen they have done, it must be that the dependants of these emigrant workers have also benefitted by the redistribution of the National Income.

The economic survey of Keiskammahoek also revealed that between 1940-1 and 1947-8, the total sales to natives by traders increased from approximately £50,700 to £136,800, viz. almost 170%. The total cash income of the District is derived from wages from employment within the Reserve; value of produce sold and remittances from emigrant workers. Since the first was found to be fairly constant, and the second but a very small part of the total, 6.8%, the source which applied the wherewithal to finance the increased purchases, must have been the third.[3]

> "It seems probable that in explaining the increase of cash incomes in recent years greater importance should be attached to an increase in earnings (of migrant workers) than to a larger number of emigrant workers."[4]

The increase in income from sources outside the Reserves can also be explained by the fact that the migrant workers are being attracted more and more, by the higher paid occupations. For instance, while there appears to have been no decrease in

(1) The average total income of a family was made up of:-

| | |
|---|---|
| Cash Income from within the Reserve | £19. 9. 2. |
| Income-in-kind from within the Reserve | 5. 5. 3. |
| Cash income from without the Reserve | 11. 10. 5. |
| Income-in-kind from without the Reserve | 1. 11. 7. |
| Total | £37. 16. 5. |

"Family Income and Expenditure in a Ciskei Native Reserve" by Professor D. Hobart Houghton and D. Philcox. S.A.J.E. Vol. 18, No. 4, 1950.

(2) There are many complaints among natives in the Reserves, that the young people now-a-days do not send home as much as formerly, but spend their earnings upon themselves.

(3) "Family Income and Expenditure in a Ciskei Native Reserve". S.A.J.E. Vol. 18 No. 4 1950.

(4) "Trade in a Ciskei Native Reserve" by Prof. D. Hobart Houghton and B. Forsdick. S.A.J.E.

the number of emigrants, the percentage of South African natives employed on the mines, where cash wages are far less than elsewhere, has declined significantly in recent years.

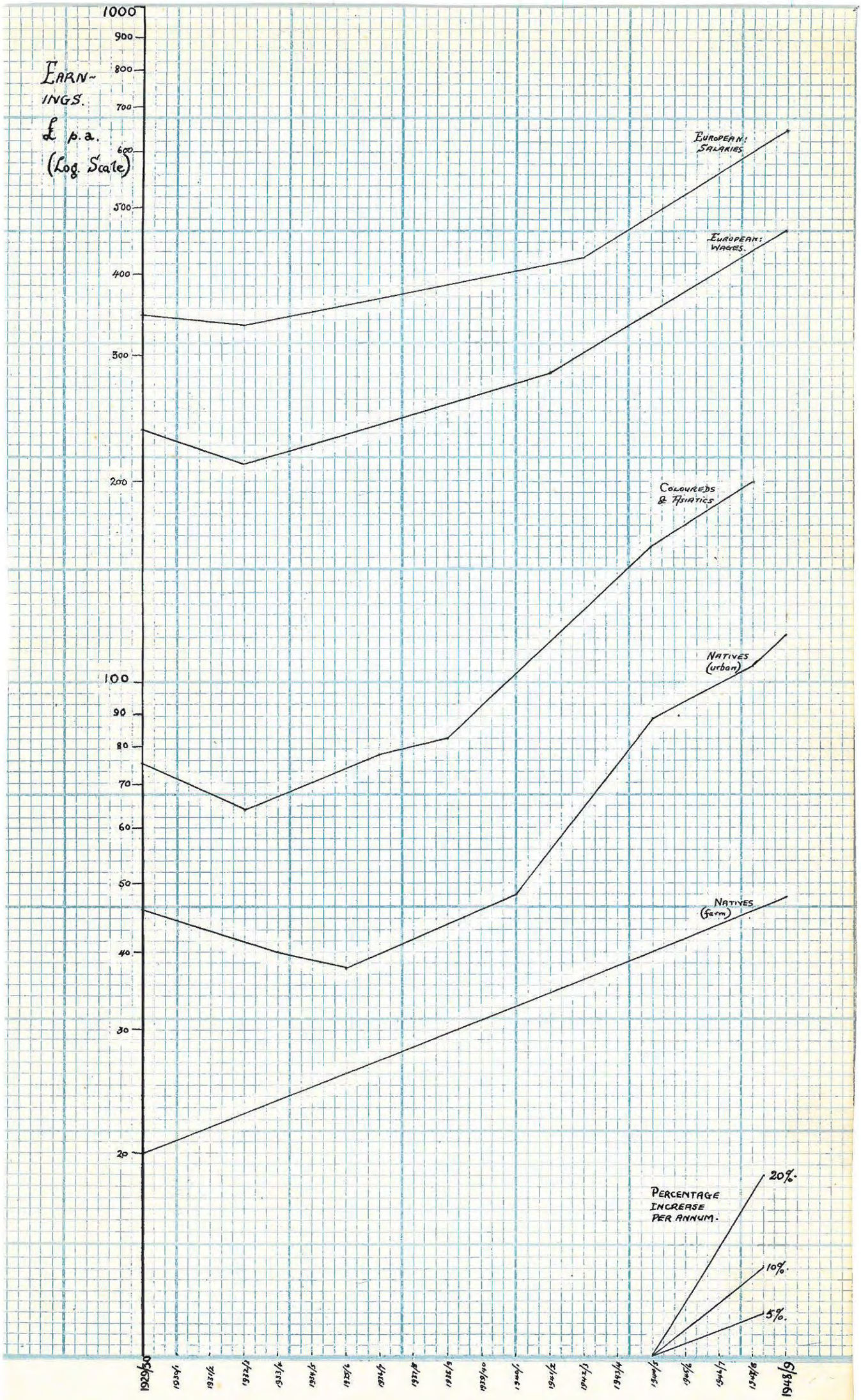
It is time that we paused for a while to consider how far we have progressed in this discussion. It was introduced in order to ascertain whether, during the period under review, there was any indication of a redistribution of the National Income, and if so, in whose favour this redistribution worked. From a comparison between the reward of Labour and that of other factors of production, there was found a definite trend in favour of the former; similarly there was strong evidence of a favourable redistribution to wage earners when compared with salaried employees, and finally the evidence with regard to comparative earnings of Europeans and the unskilled non-European was in favour of the latter. On the assumption that owners of factors of production other than Labour, are in higher income groups than employees, and similarly that salaried employees earn more than wage earners, the conclusion must be that the National Income has been redistributed to the benefit of the lower income groups, since there can be no argument that Europeans earn more than non-Europeans.

All this evidence is presented in Graph 7, (#) drawn on a semi-logarithmic scale in order to show the rate of increase of earnings to different income groups, or as we have seen, different races, in various occupations.

The beginning of the period is marked by a fall in earnings of all classes, more pronounced for the three lower paid groups, and, in the case of Natives, prolonged until 1935/6. From 1932/3, or 1935/6 for Natives, the rate of increase for all groups was about 5%, although it is noticeable that salaried employees seem to have benefitted to a slightly lesser degree. It would seem then that up to 1939/41 there was no important redistribution of the National Income, on the basis of income

~~(1) See page~~ .

/per head




GRAPH 7: TREND IN PER CAPITA EARNINGS OF DIFFERENT INCOME GROUPS.

per head, since earnings to the upper income groups kept pace with those of non-Europeans.

It was from 1939 that a noticeable change is apparent.. This is first seen in the case of non-Europeans and the change was considerable; for both Natives and Coloureds and Asiatics the rate of increase rose sharply to approximately 20% p.a. For Europeans, the change seems to have occurred some two years after the declaration of war, and it was by no means so sudden. From a rate of increase of just less than 5% p.a. between 1932 and 1941, it rose to about 8 - 10% so there seems to be fairly strong evidence of a considerable redistribution of income in favour of greater equality of earnings during the period, 1939-45. From 1945 to 1950, while the increase in earnings of the two European groups remained fairly constant, that for non-Europeans was somewhat checked, and appears to have dropped to a rate comparable to that of Europeans. There is, however, a certain tendency in the average earnings of non-Europeans in the employ of the S.A.R. & H. during the last few years under review, (1) which may point to a further redistribution of income, favourable to non-Europeans - a redistribution on the basis of average earnings per person.

It is however, not sufficient to show merely that the National Income has been redistributed by virtue of a greater increase in income per head for the lower income groups than for the more highly paid employees, since it might be that the total income accruing to any group has not moved in sympathy with the average income within that group. It is essential then, that we consider what changes there have been in the composition and occupation of the working population of the Union.

The first thing that strikes any investigator in this field is the considerable increase in the number of non-Europeans, Natives in particular, residing in urban areas. Between

(1) See Table 3, page 244 .

/1921

1921 and 1946 the number of Natives, classified as urban in the population census, rose from 587,100 to 1,810,500, viz. an increase of almost 210%, while the percentage increase in the case of Europeans was 105, for Asiatics 300,(1) and for Coloureds 118. This rural-urban movement is, of course, the outcome of the economic law that labour will find its most rewarding occupation, but in South Africa it should also be borne in mind, that a large proportion of natives classified as urban, are in fact migrant workers whose movement is greatly dependant upon the income derived from the Reserves themselves.

In the manufacturing industry the number of wage earning Europeans increased by 122% between 1930 and 1948 whereas in the same period employment of natives rose by 240% and Coloureds by almost as much. It should be noted however, that the increase in the case of salaried European employees was 237%, far in excess of that for wage earning Europeans, the reason being primarily that non-Europeans were filling certain of the semi-skilled positions and performing tasks formerly the preserves of the European wage earner.(2) The number of European salaried employees was still only 25% of wage earning Europeans so that the significance of the fact that total earnings of the former increased by so much more than the latter, in spite of a greater increase in average wages than salaries, should not be overemphasised. What is far more important is the fact that not only are non-Europeans receiving so much more per head in the way of earnings in the manufacturing industry, but also that the number of those affected by this increase in income has been more than trebled. In short, not only has income been diverted to the non-Europeans on the basis of average earnings, but the degree to which the total

(1) Asiatics classified as urban numbered only 201,800, so while the percentage increase was greatest, the actual figure is insignificant when compared with Natives.
(2) See Table 10, page 247 .

/redistribution

redistribution has in fact occurred is greatly increased by the greater rise in the number of non-Europeans employed, resulting in an increase of 650% in the total earnings of non-Europeans compared with 562% and 494% for salaries and wages paid to Europeans, respectively.(1)

The same trends are evident in the case of the S.A.R. & H. The increase in average wage of the non-Europeans combined with a 100% rise in number employed, results in the phenomenal jump of 796% in total earnings of non-European employees, whereas both classes of Europeans register increases of less than 300%.(2)

In mining, it has already been seen that average earnings of non-Europeans did not rise to the same extent as Europeans benefitted; in the analysis of the labour force the number of Europeans rose by more than did non-Europeans,(3) so the combined effect must be that income has been redistributed in favour of the former. But, here we must note that the composition of the non-European force, predominantly migrant as it is, has gradually changed so that now more than half are from non-Union sources. There has been a growing tendency among migrant workers to neglect the mines in favour of other occupations where wages are higher and the work less strenuous.

Thus, the trend here, although the opposite to that experienced in the manufacturing industry and the S.A.R. & H., will not concern us overmuch since income accruing to other than Union nationals is not included in the National Income figures.

Finally, as regards the other occupations, the best figures available are those showing occupations of working native males from the population censuses. This source shows that between 1936 and 1946 the greatest increase was in respectof Commerce and Finance and then the manufacturing industry.(4) When

(1) See Table 11, page 247 .
(2) See Table 12, page 247 .
(3) See Table 13, page 247 .
(4) See Table 14, page 248 .

/the

the figures are compared with the 18% increase in total native population during the same period, it is obvious that there has been considerable diversion from farming and mining to other and more remunerative occupations. Further, when compared with the increases in similar occupations of the other racial groups, it is clear that in the case of natives, more so than any of the others, there has been a marked redistribution of the population.(5)

In the absence of more conclusive evidence it is interesting to consider the data referring to the manufacturing more closely. Although the increase in native males employed in this occupation was greater than for other between 1936 and 1946, the writer considers that he is justified in considering the comparative increases in wages and employment for Europeans and non-Europeans in industry as indicative of the general trend for all occupations, other than farming and mining It is not suggested that the absolute increase in employment of any race would be the same in all occupations as in manufacturing, nor that because average wages rose by 130% for natives in the manufacturing industry, they must have done the same in each and all other occupations. Allthat is claimed here is that the movement of total earnings of different groups must have been very similar in most occupations. On this assumption we can see how the rate of increase differed during certain periods in the years 1930-48.

Dividing the period into 6 sub-periods of three years each and considering the percentage increase in total earnings, which will reflect the combined effect of changes in wages and numbers employed, for the different racial groups, certain important facts stand out immediately.(2)

Firstly, there seems no doubt that in the period 1930-33, there could have been no redistribution of the National Income favourable to the lower income groups. When considering the

(1) See Table 15, page 248 .
(2) See Table 16, page 248 .

/problem

problem purely from the income per head aspect, the conclusion arrived at was that it seemed likely that no re-distribution had taken place, but now it is evident that there was a distinct tendency in favour of the Europeans, and within this racial group to the salaried earners. However, this was completely reversed in the second period when the greatest increase in income accrued to the group whose average level of income was by far the lowest of the five and was almost twice as much as the increase recorded for salaried Europeans. The periods 1936-39 and 1945-48 do not seem to exhibit any marked redistribution in favour of either upper or lower income groups but the six years inbetween show a definite tendency favourable to the non-Europeans. Especially was this so in the first three years of the war period when all three non-European groups show increases which are more than twice those of the Europeans while the rather sudden rise in the case of European salaried employees from 27% to 60% is to be accounted for by the large increase in the number employed, relative to the other European group.

Summing up then, there are three periods which exhibit a redistribution of the National Income in favour of the lower income groups, the six years 1939-45 being of major importance; one, the first, in which the tendency appears to be the reverse and the remaining two in which it is impossible to arrive at any definite conclusion.

Table 1.

Remuneration of Employees as a percentage of total income produced in certain industries, 1929/30 - 1948/9.

| Year | Manufacturing | S.A.R. & H. | Mining |
|---|---|---|---|
| 1929/30 | 60.4 | 71.5 | 48.5 |
| 1933/4 | 59.5 | 61.5 | 40.7 |
| 1937/8 | 59.1 | 61.5 | 48.9 |
| 1941/2 | 55.8 | 64.0 | 43.1 |
| 1945/6 | 63.9 | 89.4 | 55.4 |
| 1948/9 | 63.9 | 89.2 | 60.2 |

Source : Report of the Industrial Legislation Commission of Enquiry. U.G. 62 - 1951. Table 35, pp 38.

Table 2 (A).

Classification of workers of each race according to skill.

| | Skilled | Semi-Skilled | Unskilled |
|---|---|---|---|
| | % | % | % |
| Europeans | 81.8 | 16.1 | 2.1 |
| Natives | 4.2 | 12.3 | 83.5 |
| Asiatics | 32.5 | 31.7 | 35.8 |
| Coloureds | 14.5 | 30.2 | 55.3 |
| All Races | 34.7 | 16.8 | 48.5 |

Table 2 (B).

Percentage each Race constitutes of Class or Skill.

| | Skilled | Semi-skilled | Unskilled | Total |
|---|---|---|---|---|
| | % | % | % | % |
| Europeans | 83.8 | 33.8 | 1.5 | 35.4 |
| Natives | 5.8 | 34.2 | 80.8 | 47.0 |
| Asiatics | 5.6 | 11.2 | 4.5 | 6.0 |
| Coloureds | 4.8 | 20.8 | 13.2 | 11.6 |

Note. These figures were obtained from those industries, trades or undertakings in respect of which wage determinations, for all skills, were made during the period 1937-48.

Source: Report of the Industrial Legislation Commission of Enquiry. U.G. 62 - 1951 Table 28.

MANUFACTURING, S

AVERAGE ANNUAL SALARIES AND WAGES (

| | Manufacturing. | | | | | South African Rail and Harbours | |
|---|---|---|---|---|---|---|---|
| Year | Salary | | Wage | | | Salary | Wage |
| | Europeans | Europeans | Natives | Asiatics | Coloureds | Europeans | Europeans |
| 1929-30 | 363.7 | 221.0 | 44.3 | 62.0 | 88.8 | 357.2 | 220.6 |
| 1930-31 | - | - | - | - | - | 358.2 | 218.3 |
| 1931-32 | - | - | - | - | - | 353.3 | 200.7 |
| 1932-33 | 325.9 | 183.9 | 39.8 | 53.1 | 73.3 | 329.2 | 182.7 |
| 1933-34 | 332.6 | 190.2 | 39.7 | 54.7 | 75.7 | 332.3 | 194.9 |
| 1934-35 | 335.4 | 202.9 | 41.0 | 56.4 | 78.7 | 329.8 | 202.8 |
| 1935-36 | 338.7 | 211.8 | 42.2 | 59.2 | 79.2 | 327.2 | 210.1 |
| 1936-37 | 349.0 | 216.5 | 44.2 | 62.8 | 82.5 | 327.6 | 214.7 |
| 1937-38 | 356.0 | 226.9 | 45.5 | 65.5 | 86.3 | 335.3 | 224.7 |
| 1938-39 | 366.5 | 228.9 | 46.3 | 68.4 | 86.2 | 348.6 | 238.7 |
| 1939-40 | 380.8 | 234.8 | 47.3 | 69.7 | 87.4 | 356.8 | 238.7 |
| 1940-41 | 392.7 | 247.9 | 50.4 | 77.1 | 92.3 | 315.0 | 237.8 |
| 1941-42 | 426.2 | 283.4 | 59.3 | 91.8 | 112.5 | 289.1 | 251.1 |
| 1942-43 | 463.4 | 307.5 | 69.9 | 109.7 | 125.4 | 310.7 | 268.3 |
| 1943-44 | 497.5 | 323.5 | 79.9 | 128.8 | 134.9 | 351.0 | 295.1 |
| 1944-45 | 540.1 | 340.7 | 91.0 | 144.6 | 149.5 | 378.4 | 329.2 |
| 1945-46 | 562.9 | 355.4 | 95.4 | 154.3 | 157.8 | 456.2 | 361.9 |
| 1946-47 | 597.1 | 379.8 | 99.2 | 166.6 | 166.5 | 531.6 | 416.0 |
| 1947-48 | 612.9 | 413.8 | 103.3 | 174.0 | 177.2 | 568.4 | 427.7 |
| 1948-49 | - | - | - | - | - | 615.3 | 459.5 |
| 1949-50 | - | - | - | - | - | 631.8 | 481.1 |

Source : Report of the Industrial Legislation Commission of Enquiry U.G. 62/

TABLE 3.

S.A.R. & H. AND MINING.

OF EMPLOYEES ACCORDING TO RACE 1929/30-1949/50.

| Lways | Mining | | | Average Wage As Percentage of Average Salary (Europeans) | | Average Wage of Non-Europeans as Percentage of that of Europeans. | | | |
|---|---|---|---|---|---|---|---|---|---|
| e | Salaries and Wages | | | | | Manufacturing | | | S.A.R.& H. |
| Non-uropeans | Europeans | Non-Europeans | Manuf-acturing | S.A.R. & H. | Natives | Asiatics | Coloureds | Non-Europeans |
| 45.8 | 300.6 | 29.1 | 60.8 | 61.8 | 20.0 | 28.1 | 40.2 | 20.7 |
| 45.2 | 309.0 | 29.5 | - | 60.9 | - | - | - | 20.7 |
| 44.6 | 327.3 | 30.5 | - | 56.8 | - | - | - | 22.2 |
| 38.1 | 311.7 | 29.7 | 56.4 | 55.5 | 21.6 | 28.9 | 39.9 | 20.9 |
| 36.0 | 323.0 | 29.9 | 57.2 | 58.7 | 20.9 | 28.8 | 39.8 | 18.5 |
| 34.2 | 341.1 | 30.5 | 60.5 | 61.5 | 20.2 | 27.8 | 38.8 | 16.9 |
| 34.5 | 354.5 | 31.7 | 62.5 | 64.2 | 19.9 | 28.0 | 37.4 | 16.4 |
| 38.5 | 368.7 | 32.3 | 62.0 | 65.5 | 20.4 | 29.0 | 38.1 | 18.0 |
| 40.3 | 378.3 | 32.9 | 63.7 | 67.0 | 20.1 | 28.9 | 38.0 | 17.9 |
| 40.4 | 383.7 | 33.2 | 62.5 | 68.5 | 20.2 | 29.9 | 37.7 | 16.9 |
| 40.5 | 391.6 | 33.4 | 61.7 | 66.9 | 20.1 | 29.7 | 37.2 | 17.0 |
| 45.5 | 406.1 | 33.7 | 63.1 | 75.5 | 20.3 | 31.1 | 37.2 | 19.1 |
| 50.4 | 422.8 | 34.1 | 66.5 | 86.9 | 20.9 | 32.4 | 39.7 | 20.1 |
| 59.6 | 434.4 | 35.1 | 66.4 | 86.4 | 22.7 | 35.7 | 40.8 | 22.2 |
| 76.3 | 451.1 | 40.5 | 65.0 | 84.1 | 24.7 | 39.8 | 41.7 | 25.9 |
| 91.3 | 478.6 | 42.5 | 63.1 | 87.0 | 26.7 | 42.4 | 43.9 | 27.7 |
| 97.3 | 527.5 | 43.0 | 63.1 | 79.3 | 26.8 | 43.4 | 44.4 | 26.9 |
| 102.2 | 554.7 | 43.5 | 63.6 | 78.3 | 26.1 | 43.9 | 43.8 | 24.6 |
| 111.4 | 587.7 | 45.3 | 67.5 | 75.2 | 25.0 | 42.0 | 42.8 | 26.0 |
| 123.5 | 649.4 | 46.9 | - | 74.7 | - | - | - | 26.9 |
| 136.5 | 712.0 | 51.2 | - | 76.1 | - | - | - | 28.4 |

51 pp 44.

Table 3 (i).

Average earnings of employees of Local Authorities, 1929/30 - 1947/8.

| Year | Average annual remuneration per person | | Average other as percentage of European. |
|---|---|---|---|
| | European | Other | |
| | £ | £ | % |
| 1929/30 | 238.0 | 42.4 | 17.79 |
| 1930/1 | 233.2 | 42.1 | 18.06 |
| 1931/2 | 235.2 | 41.8 | 17.78 |
| 1932/3 | 210.1 | 43.4 | 20.59 |
| 1933/4 | 236.6 | 40.4 | 17.15 |
| 1934/5 | 232.7 | 38.7 | 16.64 |
| 1935/6 | 245.0 | 37.4 | 15.30 |
| 1936/7 | 252.3 | 40.7 | 16.14 |
| 1937/8 | 262.1 | 40.7 | 15.49 |
| 1938/9 | 267.7 | 42.9 | 16.02 |
| 1939/40 | - | - | - |
| 1940/1 | 235.2 | 47.6 | 20.24 |
| 1941/2 | 254.9 | 51.4 | 20.17 |
| 1942/3 | 270.8 | 66.9 | 24.70 |
| 1943/4 | 242.1 | 54.4 | 22.47 |
| 1944/5 | 324.1 | 79.3 | 24.47 |
| 1945/6 | 386.5 | 88.3 | 22.82 |
| 1946/7 | 396.0 | 87.7 | 22.16 |
| 1947/8 | 453.5 | 97.8 | 21.56 |

Source : Union Year Books Nos. 12 - 25.

Table 4.

Distribution of working population among certain occupations, 1946.

| | Manufacturing | S.A.R. & H. | Mining(1) |
|---|---|---|---|
| Europeans | 138,537 | 74,859 | 53,557 |
| Natives | 259,582 | 62,968 | 442,578 |
| Asiatics | 17,564 | 611 | 601 |
| Coloureds | 62,582 | 9,606 | 2,724 |
| Total | 478,265 | 148,044 | 499,460 |

| | Total working Population | Percentage of working population engaged in Manufacturing, S.A.R. & H. and Mining. |
|---|---|---|
| Europeans | 588,181 | 30.1 |
| Natives | 4,943,585 | 15.5 |
| Asiatics | 79,170 | 23.8 |
| Coloureds | 348,769 | 21.5 |
| Total | 6,259,705 | 18.0 |

(1) Includes Quarrying

Source : U.G. 62 - 1951.

Table 5.

Average weekly earnings of unskilled native labourers in nine Urban areas, 1929-47.

| Year | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 |
|---|---|---|---|---|---|---|---|---|
| Wage | 19/- | 19/6 | 19/9 | 19/1 | 19/2 | 19/2 | 19/8 | 20/2 |

| 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
|---|---|---|---|---|---|---|---|---|
| 20/8 | 21/5 | 22/- | 23/9 | 26/1 | 30/4 | 34/11 | 40/8 | 41/3 |

| 1946 | 1947 |
|---|---|
| 42/9 | 44/2 |

Source : Official Union Year Books Nos. 12 - 25.

Table 6.

Percentage increase in wages to domestic servants, 1940-44.

| Centre | Male | Female | All |
|---|---|---|---|
| Cape Town | 33 | 38 | 37 |
| Durban | 32 | 38 | 35 |
| Pretoria | 23 | 31 | 29 |
| Johannesburg | 32 | 30 | 30 |

Source : Race Relations Handbook.
"Labour" by S. v.d. Horst pp 135.

Table 7.

Percentage increase in Minimum Wage Rates granted by the Wage Board.

| Town | Shop Assistant, and clerical employee | | Labourer over 18 years | Period |
|---|---|---|---|---|
| | Male | Female | | |
| Cape Town and Port Elizabeth | 12 | 23 | 36 | - |
| Johannesburg | 12 | 23 | 26 | - |
| Pretoria | 12 | 23 | 48 | 1.1.40- |
| Durban | 12 | 23 | 50 | 31.7.47 |
| Bloemfontein | 12 | 23 | 38 | - |
| Paarl, Worcester, Somerset West, Stellenbosch, Strand. | 33 | 38 | 67 | 22.9.41- |
| Vereeniging | 33 | 38 | 36 | 31.7.47 |
| Other small towns | 33 | 38 | 39 | - |

Source : Race Relations Handbook. "Labour" pp 136.

Table 8.

Distribution of those engaged in farming (1) by Races, 1946.

| European | Asiatic | Coloured | Native | Total |
|---|---|---|---|---|
| 167,822 | 13,691 | 97,453 | 2,139,219 | 2,418,185 |

(1) Includes fishing.
Source : U.G. 62 - 1951 as adjusted, see page 6, note 3.

Table 9.

Native farm wages, per adult labourer, 1928/9 - 1948/9.

| Area | Year | Total Wage |
|---|---|---|
| Maize : N.E. O.F.S. | 1928/9 | £ 20.7 |
| Maize : N.W. O.F.S. | 1947/8 | 35.9 |
| Wheat : Malmesbury | 1929/30 | 43.2 |
| Wheat : Malmesbury | 1948/9 | 78.2 |
| Tobacco : Transvaal | 1928/9 | 25.3 |
| Tobacco : Transvaal | 1948/9 | 46.7 |

Source : Official Year Books, Nos. 12 and 25.

Table 10.

Number of employees in the Manufacturing Industry, 000's.

| Year | European | | Natives | Asiatics | Coloured |
|---|---|---|---|---|---|
| | Salaried | Wage Earners | | | |
| 1930 | 12.0 | 73.2 | 90.5 | 9.5 | 27.2 |
| 1933 | 13.0 | 68.5 | 74.4 | 8.2 | 22.2 |
| 1936 | 18.2 | 103.4 | 131.7 | 10.7 | 30.9 |
| 1939 | | | | | |
| 1942 | 24.6 | 118.6 | 198.9 | 16.2 | 48.2 |
| 1945 | 31.1 | 128.1 | 245.5 | 17.5 | 58.7 |
| 1948 | 40.4 | 162.2 | 307.6 | 18.0 | 74.5 |

Source : Industrial Censuses.

Table 11.

Total Earnings in the Manufacturing Industry, £000's.

| Year | European | | Natives | Asiatics | Coloured |
|---|---|---|---|---|---|
| | Salaries | Wages | | | |
| 1930 | 3,743 | 11,306 | 3,612 | 578 | 2,224 |
| 1933 | 4,221 | 12,602 | 2,962 | 437 | 1,630 |
| 1936 | 6,175 | 21,970 | 5,563 | 635 | 2,463 |
| 1939 | 8,263 | 26,422 | 7,225 | 884 | 3,223 |
| 1942 | 10,509 | 33,603 | 11,802 | 1,492 | 5,443 |
| 1945 | 16,797 | 46,635 | 22,338 | 2,529 | 8,777 |
| 1948 | 24,761 | 67,118 | 31,775 | 3,132 | 13,201 |

Source : Industrial Censuses.

Table 12.

Number of employees in the S.A.R. & H. and total earnings.

| Year | Employees 000's | | | Earnings £000 | | |
|---|---|---|---|---|---|---|
| | European | | Non-European | European | | Non-Europeans |
| | Salaried | Wage Earners | | Salaries | Wages | |
| 1930 | 10 | 48 | 41 | 3,572 | 10,523 | 1,882 |
| 1933 | 9 | 41 | 27 | 2,799 | 7,454 | 1,032 |
| 1936 | 11 | 55 | 55 | 3,722 | 12,359 | 2,213 |
| 1939 | 14 | 63 | 54 | 4,163 | 16,044 | 2,712 |
| 1942 | 17 | 69 | 63 | 6,381 | 22,748 | 5,752 |
| 1945 | 19 | 79 | 84 | 10,743 | 33,874 | 9,993 |
| 1948 | 22 | 82 | 83 | 13,683 | 39,401 | 11,289 |

Does not include a small number of non-Europeans earning salaries.

Table 13.

Number of persons engaged in Mining, 000's.

| Year | 1930 | 1933 | 1936 | 1939 | 1942 | 1945 | 1948 |
|---|---|---|---|---|---|---|---|
| Europeans | 36.7 | 35.7 | 47.1 | 55.0 | 57.7 | 53.2 | 52.2 |
| Non-Europeans | 316.3 | 299.0 | 394.3 | 425.1 | 473.4 | 424.2 | 405.2 |

Source : U.G. 62/51 Table 26.

Table 14.

Working Native Males classified according to occupational Classes, 1936 and 1946, 000's.

| Occupational Group | 1936 | 1946 | Percentage Increase |
|---|---|---|---|
| Farming | 1,437 | 1,469 | 2.2 |
| Mining | 393 | 427 | 8.6 |
| Manufacturing | 210 | 368 | 75.0 |
| Transport and Communication | 90 | 116 | 29.0 |
| Commerce and Finance | 7 | 12 | 86.2 |
| Professions, Domestic Service etc. | 131 | 197 | 51.3 |

Source : U.G. 62/51 Table 20.

Table 15.

Percentage change in working population of Europeans and Asiatics and Coloureds by occupational Classes, 1936-46.

| Occupational Group | European | Asiatics and Coloureds |
|---|---|---|
| Farming | 7.4 | 2.8 |
| Mining | 14.1 | |
| Manufacturing | 43.1 | 63.7 |
| Transport and Communication | 57.5 | 22.1 |
| Commerce and Finance | 17.7 | 19.0 |
| Professions, Domestic Service etc. | 15.0 | 8.6 |

Source : Population Censuses.

Table 16.

Percentage increase in total earnings of different groups of employees in the manufacturing industry, 1930-48.

| Period | Europeans | | Coloureds | Asiatics | Natives |
|---|---|---|---|---|---|
| | Salaries | Wages | | | |
| 1930-33 | 13 | 11 | 27 | 24 | 18 |
| 1933-36 | 46 | 74 | 51 | 46 | 90 |
| 1936-39 | 34 | 20 | 31 | 39 | 30 |
| 1939-42 | 27 | 27 | 70 | 69 | 63 |
| 1942-45 | 60 | 30 | 61 | 70 | 89 |
| 1945-48 | 48 | 54 | 50 | 24 | 42 |

## Chapter 10.

## EXPENDITURE AND THE NATIONAL INCOME

In the present chapter we will be concerned with the relationship between the expenditure on the specific commodities which have been considered throughout this study, and the National Income. As we found when discussing the relationship between physical consumption and the population, this can be approached from two standpoints; we could pursue a factual examination of the movement of the two quantities over a period of time which will not necessarily produce any measurement of correlation between them as the expenditure will of course be affected by many factors other than the growth of in the National Income, or we could attempt to isolate the affects of the changing National Income on the expenditure on the products, in other words establish a definite statistical relationship between the two which can be used in estimating the movement in one with a given change in the other.

The second approach would be by far the better since we have already examined the effects of changes in the population on physical consumption, the effects of a redistribution in the National Income in our study of budgetary surveys and the ideal would be to follow these up by producing a factual measurement for each pair of quantities. Thus we might say that physical consumption will increase by the same percentage as population increases, other quantities remaining unchanged/that expenditure will rise by 80% of the increase in National Income with no redistribution of that National Income and so on. The whole success of this method of approaching the problem however, depends on the ability to calculate some fairly accurate measure of the income elasticity of demand, which is in fact isolating the income effect on expenditure. In order to do so it is essential to have considerable detailed statistical evidence regarding the expenditure of different income

/groups

groups within the community. From various studies for other countries it is obvious that for most foodstuffs and for food in general, the income elasticity of demand is a decreasing function of income, i.e. with equal proportionate increases in income from the lower to upper limits of the range in incomes, the proportionate increases in expenditure on any particular commodity will tend to fall. In South Africa however, it is impossible to calculate the income elasticity of demand by means of the budgetary survey for any income group other than those Europeans covered by the 1936 inquiry into expenditure, discussed in Chapter 8 above. The calculation of this elasticity measurement for other income groups is absolutely impossible on the basis of statistical data available so the writer has been forced, much against his intentions, to dismiss an attempt to isolate the income effect from this stage of this discussion and has therefore relegated it, mainly in order to show in what respects the deficiencies in data affect the position, to the Appendix at the end of this chapter.

There is another method by which the income elasticity of demand for the whole community might be calculated, viz. by examining the historical relationship between total expenditure on certain items and the National Income, but this assumes that it is possible to isolate other factors first. Among these factors would be the increase in population, changes in tastes, the redistribution of the National Income, the movement of the population between defined areas, an important factor in South Africa where the food consumption pattern of non-Europeans in rural areas differs appreciably from that of those residing in Native Reserves, and the length of urbanisation which also has an important influence on the composition of the diet. In view of the complex nature of these factors and the paucity of statistical evidence concerning most of them, the writer does not feel that any further examination of the problem along such lines

/would

would be fruitful and would not be likely to produce results which could be accepted as anything but rough estimates of the situation. He cannot consider that any conclusions based upon such very doubtful "facts" would be of any material consequence and might easily be interpreted too literally by others, if not by himself.

As a result of these difficulties the writer has come to the conclusion that the only discussion which might be at all revealing and yet at the same time remain basically in line with the facts and not a vast number of suppositions, would be to examine the changes in expenditure on the specific foodstuffs in connection with the National Income without attempting to arrive at any statistical measurement of the relationship. He will therefore merely show how expenditure on these commodities has moved in the twenty years under review, attempting to explain the reasons for any significant features arising from such an examination. In this discussion there will be repeated reference to Chapters 8 and 9 so that the summaries at the end of those chapters on pages 220 and 241 respectively are most important in this respect. Changes in the population other than its redistribution between different areas, will not be considered as the only figures available are estimates in whose compilation a constant rate of growth has been assumed, and which therefore would not affect the position to any significant degree.

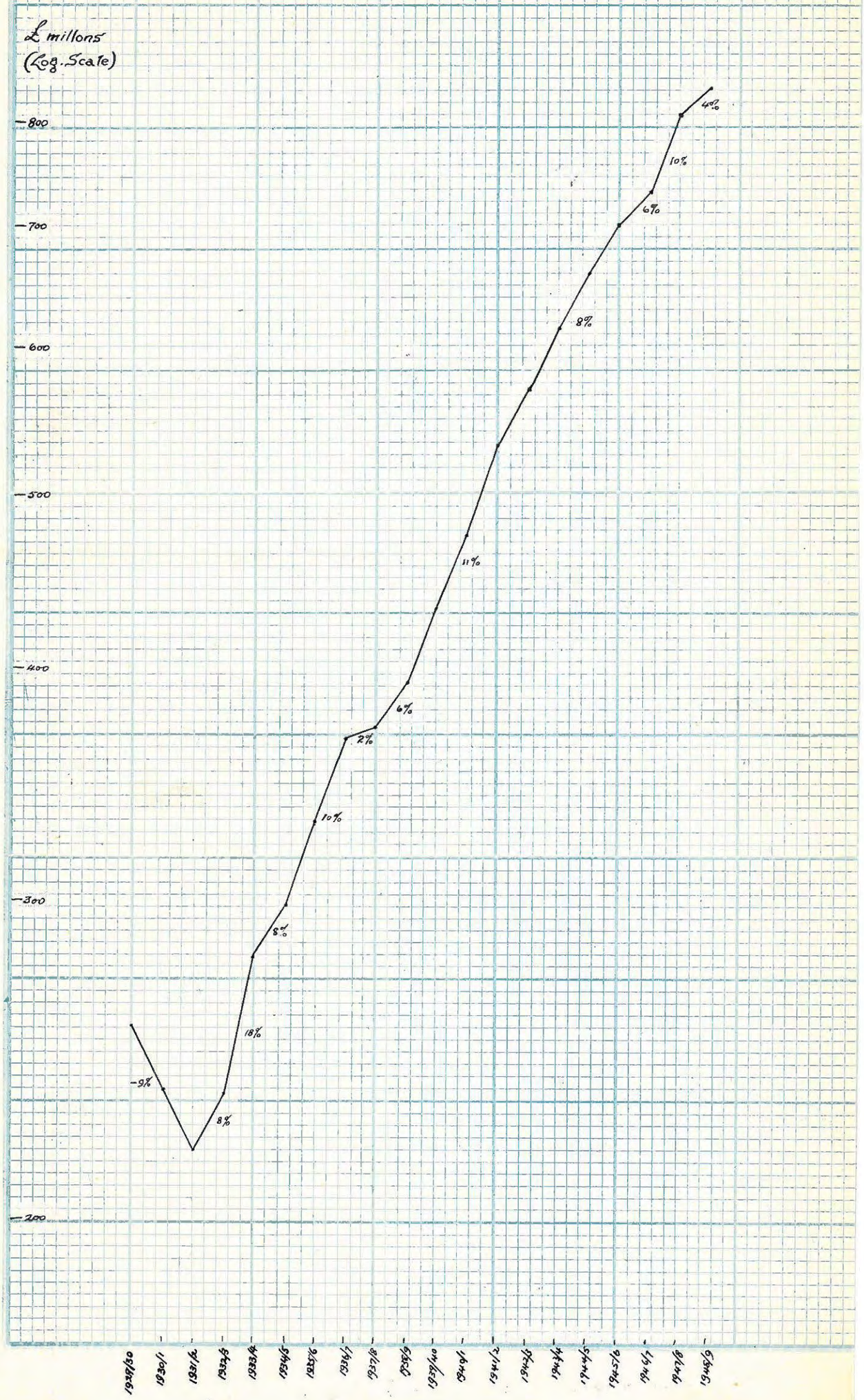
In Graph 8 is shewn on a semi-logarithmic scale the increase in National Income during the twenty years under review. It is drawn on the semi-logarithmic scale in order to show more clearly the changes in its rate of increase (or decrease) and so a constant rate of increase is portrayed by a straight line. The decline in the years 1930/1 and 1931/2 was one of approximately 9% per annum while it

/recovered

# GRAPH 8:

## THE NATIONAL INCOME, 1930-49.

[Percentages indicate annual rate of increase/decrease]



recovered fairly rapidly until 1936/7 after which there was a definite check in the rate of increase. At the time it was considered by many that the world was heading for another severe decline in business activity and the sharp drop in the rate of increase of the National Income from a steady 11% p.a. during 1934/5 -1936/7 to one of 2% between 1936/7 and 1937/8 served to increase these expectations. It however, recovered slightly in the following year probably due to the international situation and the purchasing of certain strategic raw materials, and from then onwards until the end of the period under discussion a steady increase was recorded with minor declines in the years 1944/5 and 1945/6 owing to an understandable relaxation after the war period, and again in 1948/9.

So much for the National Income as it was but what of its distribution during this period. Once again in view of the lack of statistical data and the inability on the part of the writer to calculate measurements reflecting the differences in income elasticities between different income groups, means that it is impossible to show clearly the effect which the amount of redistribution of the Income could be expected to have on the demand function for the specific commodities. We took, in Chapter 9, the total earnings of the different racial groups, also dividing Europeans into salaried and wage earners, in the manufacturing industry as indicative of the trend in the redistribution of the National Income, and doing so again it is obvious that in the first three years the effect of the redistribution would have been similar had the National Income itself fallen to greater extent than it actually did. The actual fall was in the first two years about 9% p.a. and then it rose in 1932/3 by 8%, so the average fall over the three years was approximately 5% p.a. Applying the redistribution in favour of the upper income groups, the effect would be the same had the National Income decreased by say 8-10% p.a.

/It was

It was decided in Chapter 9 that in the following three years there was a redistribution in favour of the non-European groups and the wage earning European employees so that the influence would be the same as a greater increase in the National Income, say from the increase of about 11% p.a. to 14%, while in the third three year period the conclusion arrived at was that no redistribution of any significance was apparent so that the increase in the National Income would require no adjustment. The war period was the one in which the trend in redistribution favouring the non-European groups was most noticeable and as such the adjustment required to the National Income figures in order to show the effect of this trend towards greater equality in incomes as a factor in the purchase of foodstuffs, must be quite considerable especially in the first three years of the war. During this period the actual increase was in the region of 10% p.a. and when account is taken of the very significant redistribution the increase might be estimated at as much as 20% while in the next three years the adjusted increase could be considered as approximately 14%.

These estimates must not be taken as intending to show anything factual yet the conclusion must be that the most significant income changes likely to affect the expenditure on foodstuffs, where redistribution on income is important in view of the fairly wide differences in income elasticities between different income groups, occurred in the period 1939-42 and then 1933-36 and 1942-45. The first three years under discussion showed a marked fall in income while between 1936 and 1939 there was an important check in the increase which could not be materially altered by any redistribution of that Income. In the last three or four years under review there appears to have been a slight slowing down in the rate of increase of Income which would become even more significant when it is taken into account that the trend in redistribution appears to have favoured the upper income groups, at

/least

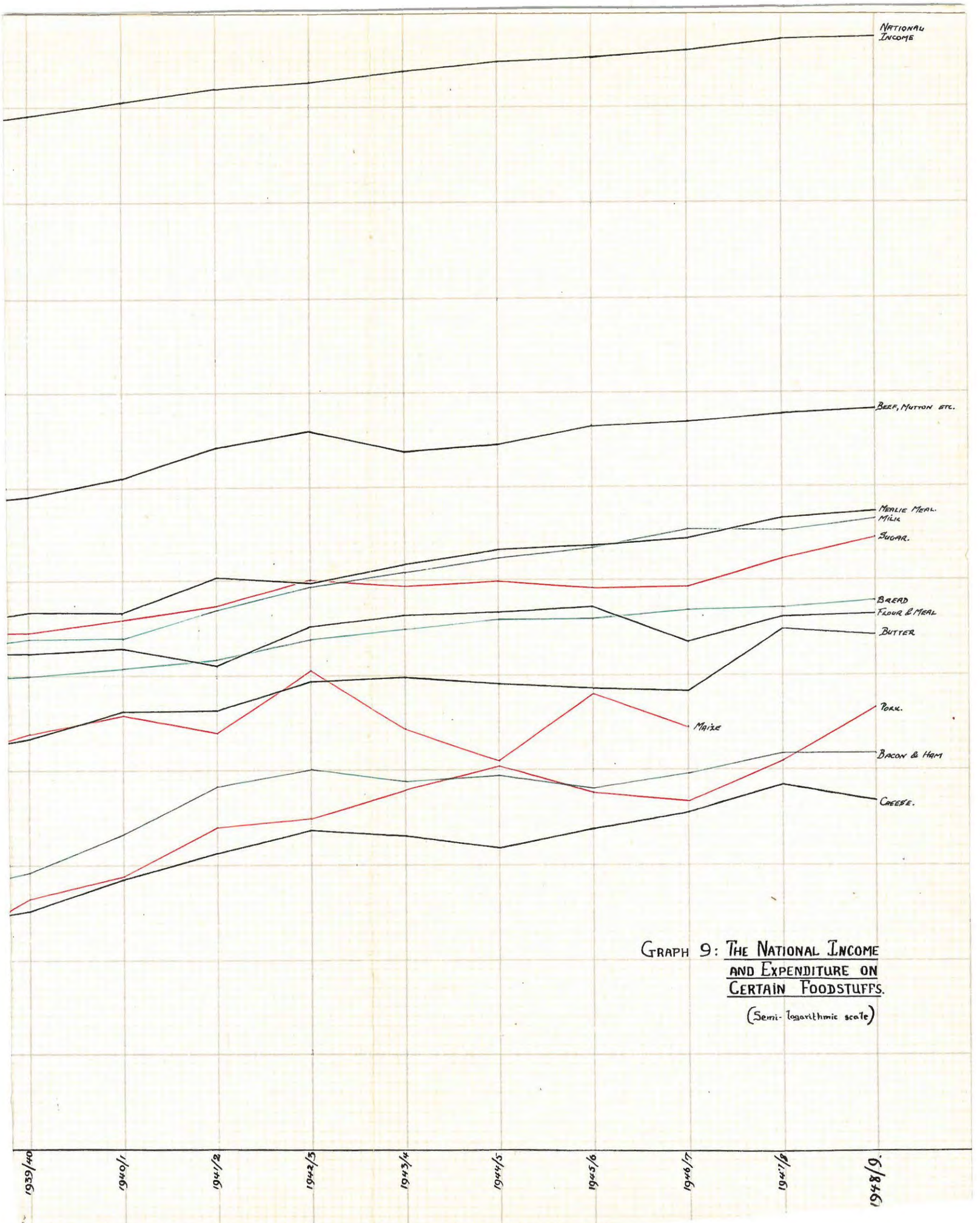
least as far as the division between Europeans and non-Europeans is concerned.

Having considered the actual rise in the National Income and the influence of changing trends in the distribution of that Income likely to affect the demand functions for the foodstuffs taken for examination in this study, we can now proceed to examine the value of consumption of these commodities and their relationship to the National Income.

These relationships have been graphically presented in the two accompanying graphs, the first, Graph 9, showing on a semi-logarithmic scale, since we are interested in the rates of growth and not so much the actual level of the value of consumption, the value of consumption of the various foodstuffs over the twenty year period, 1930-49. At this stage, and before we proceed to examine the graphs, it is very necessary to say something of the general principles employed in the valuation of the physical consumption of these commodities.

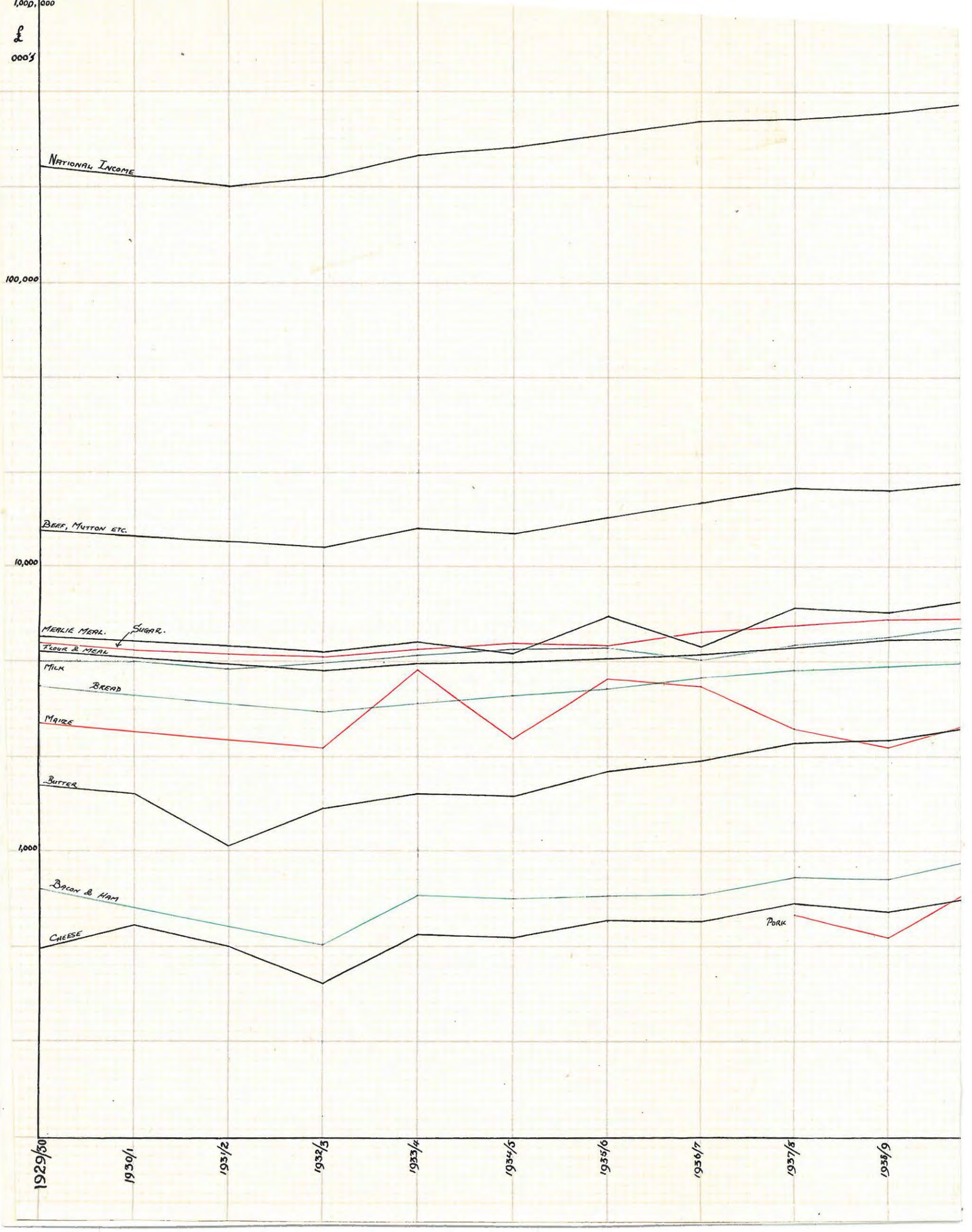
It has been generally assumed that processed products can be valued at a retail price obtained from the Office of Census and Statistics and which in actual fact refers to sales made in the nine most important urban areas. This immediately introduces difficulties for there is every possibility that prices will differ between the smaller and the larger towns due for instance to a factor which will receive more detailed attention below viz. the fact that in larger urban centres there is the probability that the retail price will contain a higher percentage of payment for more complex marketing services than in the peri-urban areas. As far as possible these retail prices have been taken for an average of the qualities sold but in certain instances such as butter and mealie meal it has been impossible to adjust the figures obtained from the Office of Census and Statistics in order to weight them according to grades other than 1st creamery and No. 1 refined respectively; in other cases as for bread

/and




GRAPH 9: THE NATIONAL INCOME AND EXPENDITURE ON CERTAIN FOODSTUFFS.

(Semi-logarithmic scale)


1,000,000
£
000's
National Income
100,000
Beef, Mutton etc.
10,000
Mealie Meal.
Sugar.
Flour & Meal
Milk
Bread
Maize
Butter
1,000
Bacon & Ham
Cheese
Pork
1929/30
1930/1
1931/2
1932/3
1933/4
1934/5
1935/6
1936/7
1937/8
1938/9

and wheaten flour and meal, the writer has made an attempt to adjust the value figures in order to take into account the fact that the retail price in certain years referred to the better grades only. While these adjusted figures will be nearer the actual expenditure on the commodities in question the degree to which the estimates agree or disagree is impossible to state. On the other hand if these figures are used in an attempt to draw conclusions from their movement and not their actual amount, the adjustment is a decided improvement as it means that the figures are comparable. But if these difficulties are at all important, those relating to the valuation of the products, unprocessed, consumed on the farms and in the Reserves are enormous.

Broadly speaking, the practice has been to value this consumption at the wholesale price level with no account being made for transport costs which will be the main cause for any differences between wholesale and producers' prices. In certain cases the determination of wholesale prices have not been very difficult as for whole maize in whose case figures are published in the Official Year Books, whereas in others there has been no difficulty at all since consumption of the "raw" product is impossible or sufficiently insignificant to be disregarded. This applies to wheat and sugar. In other instances, however notably as far as the meats and butter and milk are concerned, the difficulties were considerable. From a study of the relationship between retail prices for the different types of meat and the producers' prices, the retail prices were rather arbitrarily reduced although adjustment was made for the apparent increase in the share of the retail price accruing to producers in the later years under consideration. The value of consumption of farm butter was calculated on the basis of certain information obtained from the Office of Census and Statistics who warned the writer of their probable inaccuracies, and so he has decided to confine his attention, in what follows, to consumption of creamery butter alone. In view of the insignificance

of the production of farm cheese this has been completely neglected. As far as fresh milk is concerned, the writer has already acknowledged the doubtful purpose of their inclusion owing to the fact that they are purely estimates, and the valuation of rural consumption at the arbitrarily chosen price of 50% of the retail price recorded in the nine urban centres, only serves to detract further from their significance in the following discussion.(1)

Reverting to Graph 9, the most striking feature is the apparent close correlation between the value of consumption of the various commodities and the National Income. On first sight there appears no exception to the general increase in the value consumed in very much the same trend as the rise in National Income. It is apparent that the value of consumption of the "fresh meats" is by far the greatest of the individual foodstuffs under review and that the cereals and sugar are more important than the protective foodstuffs like butter and cheese although fresh milk occupies a relatively important role. It is notable however, that the increase in value of consumption is greater in such products as butter, cheese and milk and in fact it is only for these three foods that the percentage increase over the twenty years exceeded the percentage increase in the National Income as the following figures show. These percentage increases are merely rough guides as to the trend in the case of each product and do not necessarily equal the exact percentage increase calculated from the figures contained in the Appendices to this chapter.

| | Percentage Increase 1930-49 |
|---|---|
| National Income | 230 |
| Butter | 260 |
| Cheese | 260 |
| Milk | 250 |
| Bacon and Ham | 220 |
| Mealie Meal | 210 |
| Beef, veal, mutton and lamb | 190 |

(1) The percentage chosen is not quite so arbitrary as it might appear from the text for examination of the retail and producers' prices, where available, revealed 50% to be fairly accurate. No account has been taken of any improvement in the producers' share.

/Sugar

| | Percentage Increase 1930-49 |
|---|---|
| Sugar | 160 |
| Pork | 150 x |
| Bread | 60 |
| Flour | 30 |
| Maize | 10 z |

x For 11 years 1938-49.
z For the period 1930-47.

Apart from the figures for mealie meal and sugar, both of which are on the high side, these results are very much what was to be expected bearing in mind the expenditure patterns described in Chapter 8. Nothing more will be said at this stage in comment on these figures but in order to examine more closely the trends in regard to each specific commodity Graph 10 has been constructed to show the percentage of National Income spent on each commodity. The effect of the figures given above in this Graph is such that only the three commodities the percentage increase in the consumption of which exceeds the percentage increase in National Income, will show any rise at all.

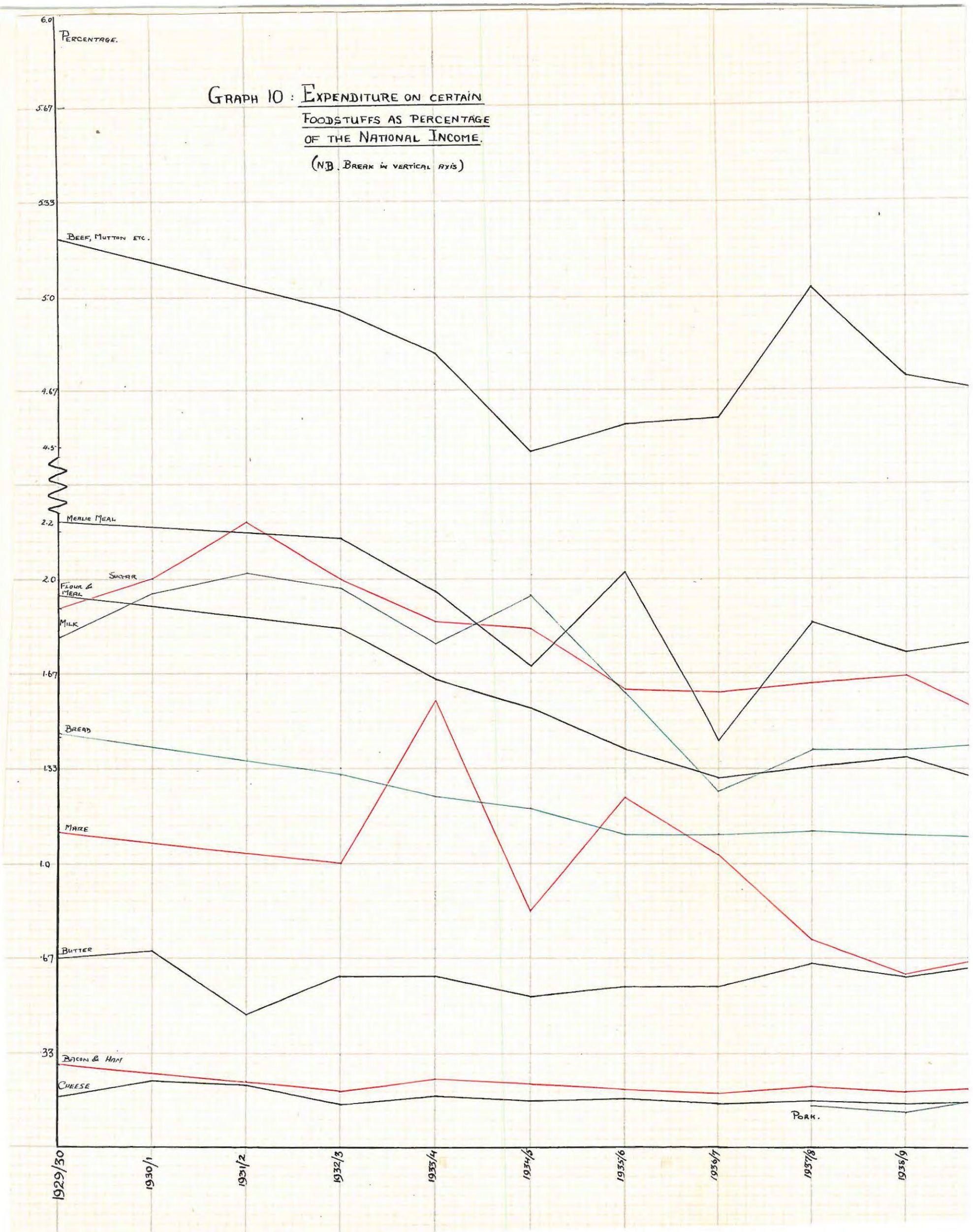
In the case of fresh meat (1) there was a significant decline in the percentage of the National Income devoted to their consumption from 1930 until 1935. In view of the falling Income this is rather surprising as it was to be expected that the income elasticity of demand for meats would rise as income fell, and therefore that the percentage of National Income "spent" on consumption would rise. The explanation must lie in the fact that at the same time there was the tendency for incomes among the poorer classes to fall to a greater extent than the richer noted above, together with the fact that it is highly probable, yet at the same time difficult to verify, that the urbanisation of non-Europeans would have been checked during the depression years. The importance of this rural-urban movement of the population on food consumption is very considerable as was stressed in Chapter 8

(1) The group beef, veal, mutton and lamb will hereafter be referred to as "fresh meat".

/especially

# Graph 10 : Expenditure on certain Foodstuffs as percentage of the National Income.

(N.B. Break in vertical axis)




Beef, Mutton etc.
Mealie Meal
Milk
Sugar
Bread
Flour & Meal.
Butter.
Maize
Pork.
Bacon & Hamm.
Cheese.
1938/39
1940/1
1941/2
1942/3
1943/4
1944/5
1945/6
1946/7
1947/8
1948/9

especially insofar as the purchase of meat is concerned and any check to the movement is likely to account for a lower expenditure because (a) rural Natives consume a smaller physical volume per head and (b) the price at which urban consumption is valued is much higher than the producers' price. From 1934/5 there was a slight increase in the percentage which then in 1937/8 showed a very marked rise. This is significant considering that the tendency in regard to the National Income was to decline in the years 1937/8 and 1938/9 and there furthermore appeared little reason to suppose that Income was redistributed in favour of the lower income groups to any marked degree. It is possible that the explanation might lie in the fact that the periods covered by the calculation of the National Income and that for the valuation of the physical consumption are not necessarily the same, but there is also another factor which might be the cause of this state of affairs, Consumption habits are notoriously slow to change - how often has this fact necessitated the theoretical economist to stress the importance of "in the long run" - and it is very probable that there will be certain time lag between the rise in Income and the resulting rise in the expenditure on some specific item, especially foodstuffs. Thus it could be argued that in the period 1933/4 - 1936/7 the rate of increase in the National Income was very considerable and was increased in terms of its effect on consumption by a tendency towards greater equality of income, but the value of consumption of fresh meat does not appear to have felt the stimulus from an increasing Income until 1934/5, i.e. two years after the decline in the National Income had been checked, and furthermore the check in the rate of increase of the National Income in 1937/8 was not transmitted to expenditure habits until the following year when there was a noticeable drop in the percentage of Income devoted to consumption of meats, a decline which persisted into 1939/40 although by then the National Income had recovered, stimulated by the

/war.

war. On the face of it then there appears to be considerable weight to such an argument.

From 1940/1 onwards the increase in the proportion of Income spent on meat (1) is remarkable and must be accounted for by the very significant redistribution of the National Income in favour of the lower income groups added to the demands of the military which are likely to have lead to a net increase in demand insofar as the non-European troops were better fed in the army than in civilian life, and the consequent bidding up of prices on, local markets. (2) From the peak in 1942/3 the percentage fell just as suddenly as it had risen but the reason for this can hardly be attributed to any natural consequences of economic factors - it can only be due to the introduction of control over retail and producers' prices while at the same time any increase in demand which would have occurred following the "pegging" of prices could not be met, which in turn meant the necessity for the introduction of quotas and all the other restrictive measures indicative of a situation where the pricing mechanism is not permitted to allocate the available supplies. This introduces a problem which is most difficult to overcome but thewriter has made an adjustment to the actual value of consumption on a similar basis as that in which the physical consumption was adjusted to show the effect of rationing. Assuming that approximately 80% of the demand at current prices was available for consumption in urban areas (i.e. slaughterings in abattoirs) during the years 1945/6 to 1948/9, the total value of consumption in those years and its percentage of the National Income becomes as follows:

(1) The term "spent" is used in this context to include the value of consumption of meats, and henceforth of other commodities, on the farms and which have not necessarily been purchased.
(2) The enormous rise in meat prices has already been examined in Chapter 5, page 145 , and was largely instrumental in the introduction of wider control to the meat industry.

| | £000's | % |
|---|---|---|
| 1945/6 | 42,540 | 6.07 |
| 1946/7 | 44,430 | 6.05 |
| 1947/8 | 47,420 | 5.88 |
| 1948/9 | 49,710 | 5.94 |

On this basis of calculation, it is obvious that the percentage of National Income spent on fresh meats would have remained fairly constant at the 1942/3 level although, as pointed out in the footnotes to Appendix E , page 270 , there is reason to suppose that the value of rural consumption is substantially understated in the later years under review when the producers' share in the retail price showed a marked increase. Taking this factor into account the percentage would therefore show a slight increase, again correlating very closely to the check noted in the tendency towards greater equality in incomes.

Generally very similar tendencies as those described above are discernable in the case of pork; a similar fall in 1938/9 but the next decline did not occur until 1945/6 owing to the very severe shortage in supplies at ruling price levels and it is to be expected that adjustment of the value of consumption figures would produce similar results as shewn above except that the writer tends to think that instead of the line tending towards a position parallel to the horizontal axis, it would continue to increase reflecting the increased demand for pork to replace mutton which, as described in Chapter 5, was in very short supply from 1943 onwards.(1) As a foodstuff demanded by the richer sections of the community, in substitution for mutton, the increase in the value consumed in the later years is not surprising while fresh meat even when adjusted remained fairly

(1) In fact according to various sources it appears that a shortage of pork developed from 1942/3 onwards which would have the effect of further increasing the percentage of Income spent on pork in that and the following two years. The percentage figures for the period 1945/6 - 1948/9 would be as follows when adjusted on the same basis as in Appendix D on page 169 .

| | |
|---|---|
| 1945/6 | .42% |
| 1946/7 | .44% |
| 1947/8 | .40% |
| 1948/9 | .54% |

/constant

constant, in view of the fact that the trend in redistribution of the National Income appears to have been slightly in favour of the upper income groups during that period.

Mealie Meal is also a very important item in the nation's diet although its importance is mainly derived from the fact that it is the staple food of the Native population and not through any predilection for it on the part of the European community. As such it is obvious that its position insofar as the percentage of Income spent on it is concerned will depend mainly on the economic conditions of one section of the community. Furthermore it cannot be considered apart from the consumption of whole maize which is being gradually substituted for by the more refined product. As staple foodstuffs it is to be expected that the decline in the share of the National Income devoted to the purchase of these two commodities in the period 1930-32 would not be very considerable, certainly not as considerable as for meat, and the fact that it declined at all must be explained by the tendency for the redistribution of the National Income to be in favour of the upper income groups. The writer has already questioned the accuracy of the statistics as regards maize and mealie meal,(1) so he would stress that the relatively wide fluctuations in both cases must be accounted for by this and also the fact that in the case of maize itself the valuation at wholesale prices is not strictly correct as much of the maize consumed in whole form does not reach the market. The value of consumption is therefore far too greatly affected by the actual physical production under the methods used in its calculation. From about 1933/4 to 1940/1 it appears that the percentage of Income spent on mealie meal remained fairly constant the main factor presumably being the movement of Natives from rural to urban areas as there is no evidence that the National Income was being diverted favourably to this class. At the same time however, in the case of whole maize there was a notable decline

(1) See Chapter 7, page 187 .

/which

which allowing for the substitution between the two, reveals that the combined maize group was experiencing a decline. ~~Nr~~ From 1940/1 onwards there is a definite increase in the proportion of the National Income spent on mealie meal once again illustrating a lag between the actual increase in incomes, since 1939-45 was the period in which there was most definite evidence that incomes of non-Europeans were rising faster than were incomes of the upper income groups, and this tendency continues until 1948/49 with a slight decline in 1945/6 when it was necessary to impose restrictions on the human consumption of maize and maize products. Besides the effect of redistribution of the Income in favour of those groups in whose diets mealie meal was the foundation, the continued drift to the towns must have exerted a strong influence on the increasing expenditure on mealie meal and the continued substitution of the meal for maize in the whole form.

The case of sugar is also very much dependant upon the economic conditions of the Natives whose fondness for this commodity is to be noted in most surveys on non-European family expenditure. This urbanisation also has a very important bearing on the value of this product consumed since it is one of the most significant differences between the diets of urban and rural Natives that the former consume far more sugar than the latter. Unfortunately there is no means of determining just in what periods this urban "drift" was most important, but it would seem justifiable to accept that there must be some correlation between it and industrial activity and also between it and climatic conditions within the Reserves especially insofar as migratory labour is concerned. As regards the percentage of the National Income devoted to the consumption of sugar, from 1931/2 to 1936/7 there was a marked decline to be explained by the factors mentioned above for the other specific foodstuffs, and very important in the opinion of the writer, the relatively high price of sugar, which undoubtedly led to other products such as condensed milk

/being

being substituted for it,[1] just as on the other hand its relatively stable price when others were rising after the war must have encouraged its consumption in substitution for other foodstuffs and thereby partly accounting for the very marked rise in the percentage of Income spent on sugar. In those years. Between these extremeties, the percentage remained fairly constant.

The most important fact as far as the wheaten group of foodstuffs is concerned is the difference between their behaviour and that of mealie meal. Whereas bread, flour and meal form the cereal foundation of the Europeans' diet, mealie meal is primarily limited, insofar as human consumption is concerned, to non-Europeans. The writer feels that it is indicative of the improvement in the economic circumstances of the non-European that the value of mealie meal consumed expressed as a percentage of the National Income showed a marked rise from 1940/1 onwards while in the case of bread and even more so for flour and meal the percentage has been falling steadily since 1930. There are of course factors such as the general level of European's incomes having already reached that level where the consumption of bread has become saturated notwithstanding the fact that the 1936 inquiry into expenditure by Europeans revealed the substitution of bread for flour and meal to be very important as income rises. This is discernible in the Graph for the value of bread consumed, much lower than that of flour and meal in 1930, in fact exceeded it in 1949. Then too, the urbanisation in the case of Europeans was not so significant as for

(1) Index retail prices for sugar and condensed milk.

| | Sugar | Condensed Milk |
|---|---|---|
| 1930 | 100 | 100 |
| 1931 | 97 | 93 |
| 1932 | 95 | 89 |
| 1933 | 92 | 86 |
| 1934 | 92 | 86 |
| 1935 | 90 | 84 |
| 1936 | 88 | 81 |
| 1937 | 89 | 81 |
| (~~Three Shares~~) | | |
| 1944 | 91 | 88 |
| 1945 | 93 | 93 |
| 1946 | 96 | 97 |
| 1947 | 105 | 107 |
| 1948 | 105 | 111 |
| 1949 | 105 | 111 |

From figures supplied by the Office of Census and Statistics

the non-Europeans, nor the differences between the consumption habits of Europeans on farms and in urban areas so important as far as wheaten products are concerned. The slight rise from about 1942/3 and maintained throughout the war period, is probably due to the increasing tendency for long urbanised Natives to replace mealie meal with bread and other wheaten products in their diets.

Finally as regards butter and cheese, two products almost exclusive to the European section of the community, the main feature was, as mentioned above, the fact that the increase in value consumed was more than for any of the other products considered. Taking butter as representative of both, because the movements are better defined, following the decline in the depression years, a decline which can be seen from Graph 9 to be greater relative to the actual level of consumption than the other commodities, the percentage of the National Income spent on butter soon recovered, ~~although the writer is unable to explain the drop in 1934/5 other than it is probable that the 1933/4 and 1934/5 figures could be evened out to obtain a truer reflection of the actual rise.~~ There is further proof of the lag in consumption habits in the slight decline in 1938/9 but that in 1941/2 and from 1943/4 onwards is to be explained in the shortage of supplies and control over prices. The extent to which the percentage of National Income spent on butter would have increased had there been sufficient to meet the demand at the current price levels, is estimated in the following figures where adjustment has been made to the value of consumption on the basis of data published by the Division of Dairying and quoted in Appendix A , of ~~this~~ Chapter. 3.

| | Value of Consumption | Percentage of National Income |
|---|---|---|
| 1943/4 | 5,270 | .85 |
| 1944/5 | 6,470 | .98 |
| 1945/6 | 7,070 | 1.01 |
| 1946/7 | 8,040 | 1.10 |
| 1947/8 | 7,600 | .94 |
| 1948/9 | 8,270 | .99 |

It is obvious that the percentage would have increased steadily and the writer submits, right up until 1949 for there

/is

is no reason to suppose that the demand for butter would suddenly tail off in the conditions which prevailed.(1)

As far as the general position is concerned, the writer considers that the main points brought out in this chapter have been the impossibility of any attempt to isolate the effects of specific factors on the expenditure on food from the data availability, the very interdependent nature of the factors here considered, the apparent lag of approximately 1 year in consumption habits and finally the very great importance of trends in the incomes of different sections of the community on the demand functions.

(1) It is very likely that the degree of rationing in the last two seasons under review has been understated in the published statistics.

APPENDIX A.

## CONSUMPTION OF WHEATEN PRODUCTS IN SOUTH AFRICA.

| Year | Retail Price | | Value of Wheaten Products consumed | | Adjusted | |
|---|---|---|---|---|---|---|
| | Bread d. per lb. | Flour d. per lb. | Bread £000 | Flour £000 | Bread £000 | Flour £000 |
| | A | B | | | C | D |
| 1929-30 | 3.762 | 3.222 | 3,810 | 5,730 | 3,740 | 5,020 |
| 1930-31 | 3.695 | 3.132 | - | - | - | - |
| 1931-32 | 3.624 | 3.035 | - | - | - | - |
| 1932-33 | 3.395 | 2.918 | 3,150 | 4,860 | 3,080 | 4,280 |
| 1933-34 | 3.419 | 2.921 | 3,490 | 5,220 | 3,420 | 4,570 |
| 1934-35 | 3.398 | 2.902 | 3,610 | 5,230 | 3,540 | 4,570 |
| 1935-36 | 3.372 | 2.868 | 3,910 | 5,400 | 3,830 | 4,720 |
| 1936-37 | 3.396 | 2.872 | 4,200 | 5,450 | 4,120 | 4,770 |
| 1937-38 | 3.518 | - | 4,510 | - | 4,420 | - |
| 1938-39 | 3.522 | 3.094 | 4,570 | 6,230 | 4,480 | 5,450 |
| 1939-40 | 3.527 | 3.163 | 4,750 | 6,250 | 4,650 | 5,490 |
| 1940-41 | 3.174 | 3.182 | 4,870 | 6,510 | 4,870 | 5,730 |
| 1941-42 | 3.033 | 2.479 | 5,310 | 5,050 | 5,310 | 5,050 |
| 1942-43 | 3.048 | 2.847 | 6,170 | 6,740 | 6,170 | 6,740 |
| 1943-44 | 3.112 | 3.075 | 6,630 | 7,560 | 6,630 | 7,560 |
| 1944-45 | 3.323 | 3.219 | 7,210 | 7,670 | 7,210 | 7,670 |
| 1945-46 | 3.110 | 3.261 | 7,150 | 7,940 | 7,150 | 7,940 |
| 1946-47 | 3.227 | 3.158 | 7,780 | 5,980 | 7,780 | 5,980 |
| 1947-48 | 3.285 | 3.260 | 7,830 | 7,400 | 7,830 | 7,400 |
| 1948-49 | 3.634 | 3.290 | 10,390 | 7,430 | 10,390 | 7,430 |

Notes :

A From the Office of Census and Statistics and refer to the calendar year : they have been compiled as follows:-
From 1930 to 1940 for white loaf, first grade.
From 1941 to 1945 for the standard loaf.
For 1946 and 1947 adjustment has been made for the reduction in the loaf from 32oz to 29oz.
From November, 1948 an average of white and brown.

B From the Office of Census and Statistics and refer to the calendar year: they have been compiled as follows:-
From 1930-40 for ordinary white in 25lb quantities.
For 1941 for both 10 and 25lb quantities.
From 1942 to 1947 for No. 1 unsifted meal, per lb in loose quantities.
For 1948 and 1949 for bread flour in 25 lb quantities.

C The adjustment has been made for the period 1930-40 in order to make allowance for the fact that in the retail price only white bread is included. An analysis of the sales of bread in 1948/49 has revealed that the amount of brown bread sold is about 10% of the sales of white and it would appear that the price of brown; when not subsidized, is approximately 15-20% lower than that of white bread. The value of consumption has therefore been reduced by 2% over this period.

D The adjustment has been made for the period 1930-41 to make allowance for the lower retail price of meal. During this period the production of meal amounted to approximately 60% of the total production of meal and flour and a study of their prices reveals that that of meal is about 80% of that of flour. The adjustment has therefore been made at 12½%.

APPENDIX B.

## CONSUMPTION OF MAIZE AND MEALIE MEAL IN SOUTH AFRICA.

| Year | Mealie Meal Production | Mealie Meal Imports | Mealie Meal Exports | Mealie Meal Consumption Industrial | Mealie Meal Consumption Direct | Wholesale price of maize | Retail price of mealie meal | Value of Consumption Maize | Value of Consumption Mealie Meal | Value of Consumption Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | 000lbs | 000lbs | 000lbs | 000lbs | 000lbs | s.d. | d. per lb. | £000 | £000 | £000 |
| | A | B | C | D | | E | F | | | |
| 1929-30 | 1,107,020 | 821 | 153,079 | 4,336 | 950,430 | 10 2.81 | 1.428 | 2,830 | 5,650 | 8,480 |
| 1930-31 | - | - | - | - | - | 10 2.22 | 1.330 | - | - | - |
| 1931-32 | - | - | - | - | - | 10 2.22 | 1.269 | - | - | - |
| 1932-33 | 1,061,304 | 1,547 | 96,943 | 3,682 | 962,230 | 10 5.91 | 1.253 | 2,330 | 5,020 | 7,350 |
| 1933-34 | 1,122,204 | 1,984 | 202,077 | 5,458 | 916,650 | 13 11.28 | 1.419 | 4,350 | 5,420 | 9,770 |
| 1934-35 | 1,258,642 | 3,902 | 296,636 | 6,014 | 959,890 | 10 5.69 | 1.249 | 2,470 | 4,990 | 7,460 |
| 1935-36 | 1,157,700 | 5,070 | 36,048 | 7,174 | 1,118,450 | 15 3.09 | 1.427 | 4,080 | 6,650 | 10,730 |
| 1936-37 | 1,309,998 | 5,080 | 436,870 | 7,358 | 870,850 | 13 11.63 | 1.433 | 3,830 | 5,200 | 9,030 |
| 1937-38 | 1,384,638 | 6,814 | 166,646 | 7,774 | 1,217,030 | 12 10.27 | 1.365 | 2,720 | 6,920 | 9,650 |
| 1938-39 | 1,569,212 | 5,386 | 368,166 | 7,692 | 1,198,740 | 12 4.97 | 1.360 | 2,360 | 6,790 | 9,160 |
| 1939-40 | 1,545,964 | 5,088 | 172,010 | 7,084 | 1,371,960 | 12 11.45 | 1.336 | 2,900 | 7,640 | 10,540 |
| 1940-41 | 1,494,028 | 8,418 | 72,292 | 5,568 | 1,424,590 | 13 10.40 | 1.279 | 3,470 | 7,590 | 11,060 |
| 1941-42 | 1,735,218 | 256 | 26,844 | 6,796 | 1,701,830 | 15 9.65 | 1.462 | 2,930 | 10,370 | 13,300 |
| 1942-43 | 1,527,690 | 790 | 26,976 | 2,980 | 1,498,520 | 17 8.84 | 1.583 | 4,860 | 9,880 | 14,740 |
| 1943-44 | 1,751,998 | 1,442 | 33,564 | 5,688 | 1,718,190 | 18 9.45 | 1.602 | 3,000 | 11,470 | 14,470 |
| 1944-45 | 1,931,754 | 5,776 | 24,607 | 4,192 | 1,908,730 | 19 5.82 | 1.635 | 2,290 | 13,000 | 15,300 |
| 1945-46 | 1,894,512 | 3,648 | 21,478 | 4,716 | 1,871,970 | 20 5.08 | 1.708 | 4,050 | 13,320 | 17,370 |
| 1946-47 | 2,014,680 | 1,091 | 58,543 | 10,334 | 1,946,890 | 21 7.95 | 1.737 | 3,060 | 14,090 | 17,150 |
| 1947-48 | 2,374,430 | 38 | 81,787 | 11,656 | 2,281,030 | 22 4.20 | 1.744 | - | 16,580 | - |
| 1948-49 | 2,455,410 | 18 | 23,801 | 9,962 | 2,421,650 | 22 6.05 | 1.736 | - | 17,520 | - |

Notes :
- A From Industrial Censuses.
- B Refer to calendar year.
- C Refer to Calendar years and include re-exports.
- D From Industrial Censuses.
- E For flat white mealies per 200lb bag; obtained from the Official Year Books.
- F From the Office of Census and Statistics and relates to the calendar year. For years 1930-7 and 1939-42 for quantities of 25 lbs, otherwise per lb, loose.

APPENDIX C.

## CONSUMPTION OF BUTTER AND CHEESE IN SOUTH AFRICA.

| Year | Butter | | | | | Cheese | |
|---|---|---|---|---|---|---|---|
| | Retail price d. per lb. | Value of Consumption Ordinary £000 | Subsidized £000 | Total Creamery £000 | Farm £000 | Retail price d. per lb. | Value of consumption £000 |
| | A | | B | | C | D | |
| 1929-30 | 22.419 | 1,710 | - | 1,710 | 860 | 17.817 | 450 |
| 1930-31 | 20.787 | 1,600 | - | 1,600 | - | 16.190 | 560 |
| 1931-32 | 18.666 | 1,030 | - | 1,030 | - | 15.389 | 460 |
| 1932-33 | 20.030 | 1,400 | - | 1,400 | - | 15.651 | 340 |
| 1933-34 | 19.795 | 1,660 | - | 1,660 | 810 | 17.222 | 510 |
| 1934-35 | 17.998 | 1,550 | - | 1,550 | 840 | 15.702 | 500 |
| 1935-36 | 17.935 | 1,890 | 7 | 1,900 | 840 | 15.057 | 570 |
| 1936-37 | 18.563 | 2,100 | 18 | 2,120 | 810 | 15.946 | 560 |
| 1937-38 | 19.294 | 2,360 | 65 | 2,430 | - | 16.810 | 660 |
| 1938-39 | 19.298 | 2,270 | 111 | 2,380 | - | 16.430 | 610 |
| 1939-40 | 19.299 | 2,660 | 139 | 2,800 | - | 15.754 | 700 |
| 1940-41 | 19.743 | 3,360 | 140 | 3,500 | - | 15.817 | 890 |
| 1941-42 | 21.378 | 3,310 | 135 | 3,450 | - | 17.350 | 1,090 |
| 1942-43 | 21.969 | 4,400 | 134 | 4,530 | - | 18.306 | 1,320 |
| 1943-44 | 22.489 | 4,360 | 124 | 4,480 | - | 19.007 | 1,250 |
| 1944-45 | 24.281 | 4,290 | 119 | 4,400 | - | 19.894 | 1,140 |
| 1945-46 | 27.074 | 4,050 | 107 | 4,160 | 1,220 | 21.461 | 1,350 |
| 1946-47 | 28.502 | 4,000 | 94 | 4,100 | - | 22.020 | 1,530 |
| 1947-48 | 29.682 | 6,800 | 47 | 6,840 | - | 22.267 | 1,900 |
| 1948-49 | 30.000 | 6,440 | 7 | 6,450 | - | 23.572 | 1,640 |

Notes : A From the Office of Census and Statistics and refers to first grade, creamery.

B Butter distributed under the State-Aided Scheme has been valued at the following prices :-

| | |
|---|---|
| 1935/6 | 9d. per lb. |
| 1936/7 | 7.5d. per lb. |
| 1937/8 | 6d. per lb. |
| 1938/9 | 6.67d. per lb. |
| 1939/49 | 8d. per lb. |

C Farm butter has been valued at the following prices which are based on data collected from the Office of Census and Statistics and other sources :-

| | |
|---|---|
| 1929/30 | 18.304 d. per lb. |
| 1933/4 | 16.245 d. per lb. |
| 1934/5 | 14.179 d. per lb. |
| 1935/6 | 13.392 d. per lb. |
| 1936/7 | 14.924 d. per lb. |
| 1945/6 | 29.452 d. per lb. |

D From the Office of Census and Statistics.

APPENDIX E.

## CONSUMPTION OF MEATS IN SOUTH AFRICA, 1930-49.

| Year | Beef, Veal, Mutton, Lamb and Goats' meat | | | | | Pork | | Bacon & Ham | |
|---|---|---|---|---|---|---|---|---|---|
| | Urban Consumption | Price (per lb) | Value of Consumption (Urban) | Value of Consumption (Rural) | Total | Price (per lb.) | Value of Consumption (Urban) | Price (per lb.) | Value of Consumption |
| | 000lbs | pence | £'000 | £'000 | £'000 | pence | £'000 | pence | £'000 |
| | A | B | | C | | D | E | F | G |
| 1929-30 | 347,600 | 7.665 | 11,100 | 2,490 | 13,590 | - | - | 22.377 | 730 |
| 1930-31 | - | - | - | - | - | - | - | - | - |
| 1931-32 | - | - | - | - | - | - | - | - | - |
| 1932-33 | 330,000 | 6.833 | 9,400 | 2,180 | 11,580 | - | - | 16.887 | 470 |
| 1933-34 | 348,000 | 7.699 | 11,190 | 2,450 | 13,640 | - | - | 22.305 | 700 |
| 1934-35 | 332,400 | 7.746 | 10,730 | 2,520 | 13,250 | - | - | 21.580 | 670 |
| 1935-36 | 387,300 | 7.722 | 12,460 | 2,510 | 14,970 | - | - | 20.576 | 690 |
| 1936-37 | 433,900 | 7.900 | 14,280 | 2,530 | 16,810 | - | - | 20.178 | 700 |
| 1937-38 | 440,800 | 8.680 | 15,910 | 2,890 | 18,800 | 10.761 | 590 | 20.140 | 810 |
| 1938-39 | 434,400 | 8.695 | 15,730 | 2,840 | 18,570 | 10.878 | 490 | 20.523 | 800 |
| 1939-40 | 472,200 | 8.749 | 17,210 | 2,840 | 20,050 | 11.041 | 760 | 20.611 | 950 |
| 1940-41 | 517,100 | 9.195 | 19,810 | 3,540 | 23,350 | 11.321 | 900 | 21.031 | 1,290 |
| 1941-42 | 549,100 | 10.981 | 25,120 | 4,620 | 29,740 | 13.184 | 1,390 | 23.708 | 1,900 |
| 1942-43 | 580,400 | 12.077 | 29,210 | 5,090 | 34,300 | 16.780 | 1,460 | 25.341 | 2,180 |
| 1943-44 | 482,000 | 12.043 | 24,190 | 4,750 | 28,940 | 18.339 | 1,810 | 25.949 | 1,950 |
| 1944-45 | 523,300 | 11.873 | 25,890 | 4,770 | 30,660 | 17.949 | 2,240 | 27.273 | 2,060 |
| 1945-46 | 605,500 | 11.689 | 29,490 | 5,680 | 35,170 | 17.776 | 1,790 | 28.629 | 1,850 |
| 1946-47 | 646,000 | 11.877 | 31,970 | 4,730 | 36,700 | 17.828 | 1,630 | 32.746 | 2,130 |
| 1947-48 | 636,200 | 12.653 | 33,540 | 5,520 | 39,060 | 18.468 | 2,320 | 32.990 | 2,440 |
| 1948-49 | 661,800 | 12.834 | 35,390 | 5,510 | 40,900 | 19.276 | 3,530 | 32.214 | 2,430 |

Notes :
- A. This is slaughterings at abattoirs plus imports, less exports and meats used industrially.
- B. Estimated from prices of beef and mutton obtained from the Office of Census and Statistics weighted according to the quantities of each meat produced from slaughterings at abattoirs.
- C. Rural consumption has been valued at 50% of the retail consumer price during the period 1929/30 to 1939/40 and subsequently at 55. An analysis of the consumer and producer prices has revealed that since about 1940 the portion of the retail price received by the producer has increased, and the value of consumption is therefore likely to be understated in the last few years under review. It would appear that the producer's share is greater in the case of mutton (about 80 in 1949) than beef (55-60).
- D. From the Office of Census and Statistics.
- E. No prices are available for the years before 1938 and owing to inadequate data, slaughterings and consumption of pork on farms and in the Reserves have not been taken into account. There is little reason to suppose that the value of this consumption would behave very differently from that of beef etc. consumed in rural areas apart from the fact that the price of pork appears to have increased to a greater extent than those of beef and mutton especially in the later years under review when the shortage of maize caused a general scarcity of pork in urban areas. (In 1946-7 the value of the 10,000,000lbs of pigs' meat consumed on European farms valued at 11.63d. per lb, a figure obtained from the Division of Economics and Markets, would be approximately £500,000, compared with about £340,000 in 1936-7).
- F. From the Office of Census and Statistics.
- G. This only refers to the consumption of bacon and ham produced in factories and does not include the products made and consumed on farms. Up until 1934 no combined price for bacon and ham was produced and so separate prices for each product have been used and weighted in the proportion of 5 : 1.

APPENDIX D.

## CONSUMPTION OF SUGAR IN SOUTH AFRICA, 1930/49.

| Year | Price of white sugar (per lb.) pence | Value of Consumption | | |
|---|---|---|---|---|
| | | White | Government | Total |
| | | £000 | £000 | £000 |
| | A | | B | |
| 1929/30 | 3.835 | 5,590 | - | 5,590 |
| 1930/1 | 3.775 | 5,120 | - | 5,120 |
| 1931/2 | 3.646 | 4,930 | - | 4,930 |
| 1932/3 | 3.560 | 4,840 | - | 4,840 |
| 1933/4 | 3.497 | 5,140 | - | 5,140 |
| 1934/5 | 3,483 | 5,430 | - | 5,430 |
| 1935/6 | 3.407 | 5,290 | - | 5,290 |
| 1936/7 | 3.362 | 5,170 | 690 | 5,850 |
| 1 937/8 | 3,432 | 5,180 | 930 | 6,120 |
| 1938/9 | 3.433 | 5,150 | 1,360 | 6,510 |
| 1939/40 | 3.427 | 4,840 | 1,640 | 6,480 |
| 1940/1 | 3.441 | 5,460 | 1,850 | 7,310 |
| 1941/2 | 3,487 | 5,800 | 2,260 | 8,060 |
| 1942/3 | 3.491 | 7,030 | 3,010 | 10,040 |
| 1943/4 | 3.495 | 6,210 | 3,140 | 9,340 |
| 1944/5 | 3.515 | 6,720 | 3,290 | 10,010 |
| 1945/6 | 3.572 | 6,110 | 3,180 | 9,290 |
| 1946/7 | 3.768 | 6,480 | 3,060 | 9,540 |
| 1937/8 | 4.049 | 8,310 | 3,480 | 11,790 |
| 1948/9 | 4.050 | 10,570 | 3,780 | 14,360 |

Notes : A. From the Office of Census and Statistics, adjusted to conform to the seasonal year of 1st May - 30th April.

B. The consumption of 2nd Grade sugar had been valued as follows:-

| | |
|---|---|
| 1936/7 - 1946/7 | 2.5d per lb. |
| 1947/8 | 2.625d per lb. |
| 1948/9 | 2.75d per lb. |

## APPENDIX F.

The writer set out on this research with the intention of attempting at some stage to isolate the income effect on the increase in the value of consumption of the foodstuffs which have been taken as the subject of the study. This is an extremely important point as it could be most helpful in suggesting lines along which future food policy could be followed based on certain assumptions as to the behaviour of certain factors such as the increase in the National Income, distribution of that Income, the urbanisation of the population and so on. It was not long before it was realised that with the data at his disposal, it would be impossible for the writer to arrive at any definite conclusions and while this has meant that the discussion could not very well be incorporated in the body of this study, it has been decided to present the question here, if only to stress the need for more complete knowledge of the fact in certain directions.

The best means of isolating the income effect over a period of time is to calculate the income elasticity of demand for the products concerned. The method employed here is that used by Allen and Bowley in their work "Family Expenditure" and is based upon a budgetary survey at a given date and applying the results to a given period of time over the whole population. From the study of family expenditure on certain items in relation to the changing income levels, some measure for the relationship between the two is found and called k, which will be the actual increase in expenditure on any given item divided by the increase in income. Quite obviously it is more than possible that there will be several statistical measurements of k for any one commodity since it would be difficult to conceive of a case where the expenditure on any particular item plotted against income would produce a straight line over the whole range of incomes found in the

/population.

population. To obtain one figure for k it is therefore necessary to draw some straight line which most closely follows the trend in the relationship between the two factors.

The income elasticity of demand for any particular family will be the rate at which expenditure on some product rises with income (i.e. k) divided by the fraction of the income of that family devoted to the purchase of the product (w). Substituting the community for the family, the income elasticity of demand for commodity x will be equal to $\frac{k}{w}$ where k is measurement of the line representing the relationship between expenditure on x and income over the community as a whole and w is the fraction of National Income spent on x.

We have discussed consumption habits and budgetary surveys in South Africa in Chapter 8 "Food and Expenditure" but while we can arrive at some fairly accurate value for k for Europeans between £125 and £600 per annum in 1936 from the survey of expenditure by European families in that year, the paucity of reliable and representative data relating to food expenditure by non-Europeans has resulted in the writer's intention being not fully fulfilled and the relegation of this discussion to an Appendix.

In Graph 11 is shown the expenditure on certain foodstuffs plotted against income as was revealed in the European Inquiry of 1936. In all cases except flour and meal it was possible to arrive at some rough trend thus enabling the production of straight lines but for flour and meal this was impossible so that two values from k will have to be used. w' is calculated from the value of consumption figures given in Chapter 10 and from these two quantities and income elasticity of demand has been calculated for the nine commodities in which we are interested, applicable to the particular economic, social and racial group covered by the Inquiry. The values of k, w' and n (the income elasticity of demand) are as follows:

/Meat

| | k | w' | n |
|---|---|---|---|
| Meat | .033 | .0455 | .735 |
| Butter | .020 | .0058 | 3.474 |
| Cheese | .005 | .0018 | 2.895 |
| Fresh Milk | .036 | .016 | 2.250 |
| Sugar | .003 | .0175 | .165 |
| Mealie Meal | .0007 | .0225 | .031 |
| Bread | .022 | .011 | 2.000 |
| Flour and meal | -.019 | .014 | -1.357 |
| | -.006 | | - .489 |
| Bread, flour and meal | .010 | .025 | .398 |

Next on Graph 12 is plotted the relationship between the actual value of consumption of the nine foodstuffs and the National Income on a double logarithmic scale in order to reduce the dispersion to manageable proportions. Then from the position in 1935-6 in each case has been drawn a line which reflects the relationship between total expenditure and National Income had the increase in income been the only factor to be taken into account, were the income elasticities of demand the same for all persons in South Africa as the group covered by the 1936 Inquiry and had price relationships remained the same as in 1936,. Since the first assumption is highly improbable; in view of the conclusions arrived at in Chapter 8, it is definitely untrue, the importance of the figures for income elasticities and hence the dotted lines, is immediately reduced

While it is impossible to come to any conclusions relating to measurement of the difference between the slopes of the two lines in each graph, there are nevertheless several interesting features which deserve comment.

In the first instance it is only in the case of butter, cheese, fresh milk and bread that the actual value of consumption has increased less than it would have done had the assumptions outlined above been satisfied. It is obviously the fact that income elasticities are not the same for all persons that causes the main divergence between the lines and it therefore means that, neglecting changes in price relationships, the income elasticity for persons other than that group covered by the 1936 Inquiry, must have been on the average less in the case of butter, cheese, milk and bread and more in the case of the other products.

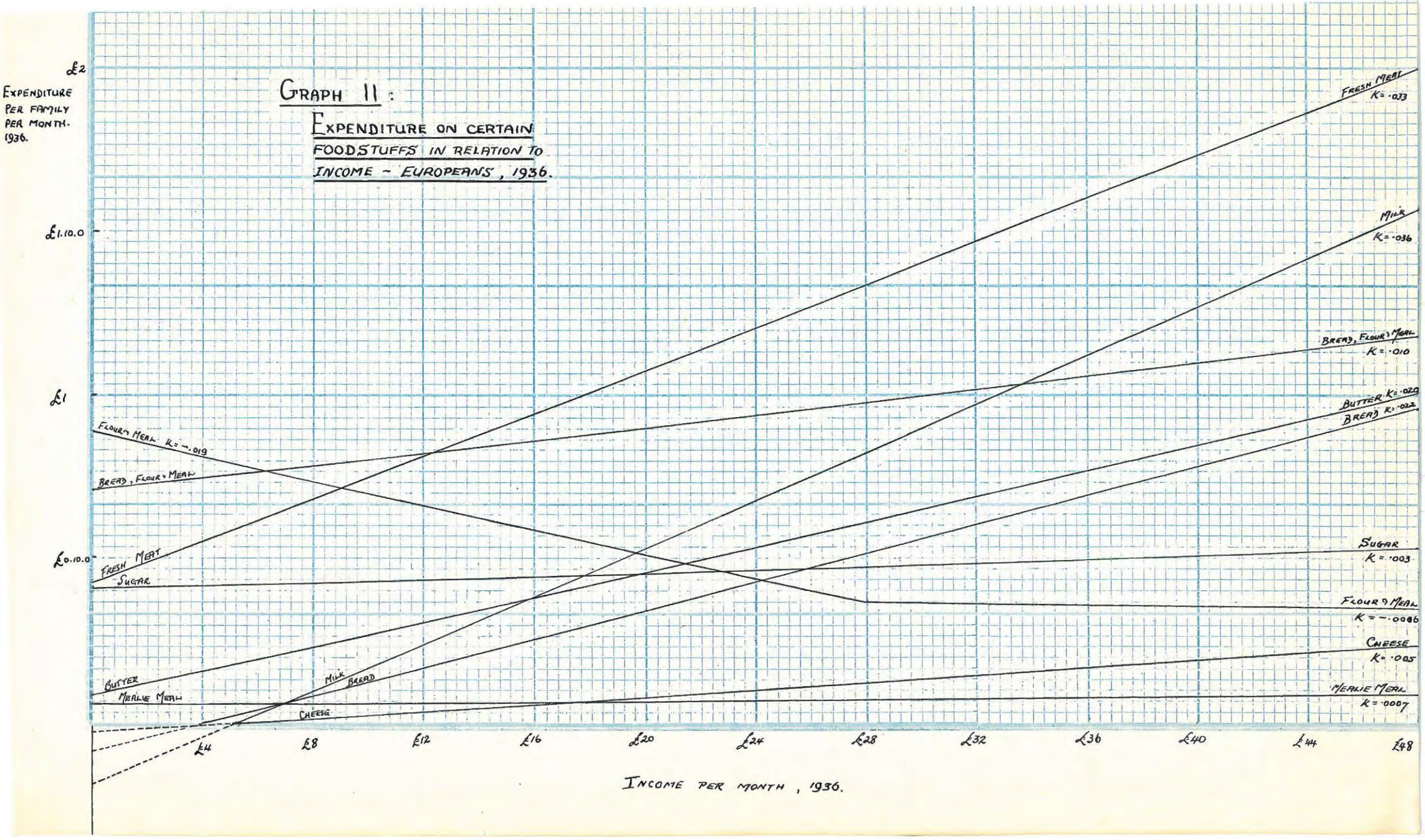
/The

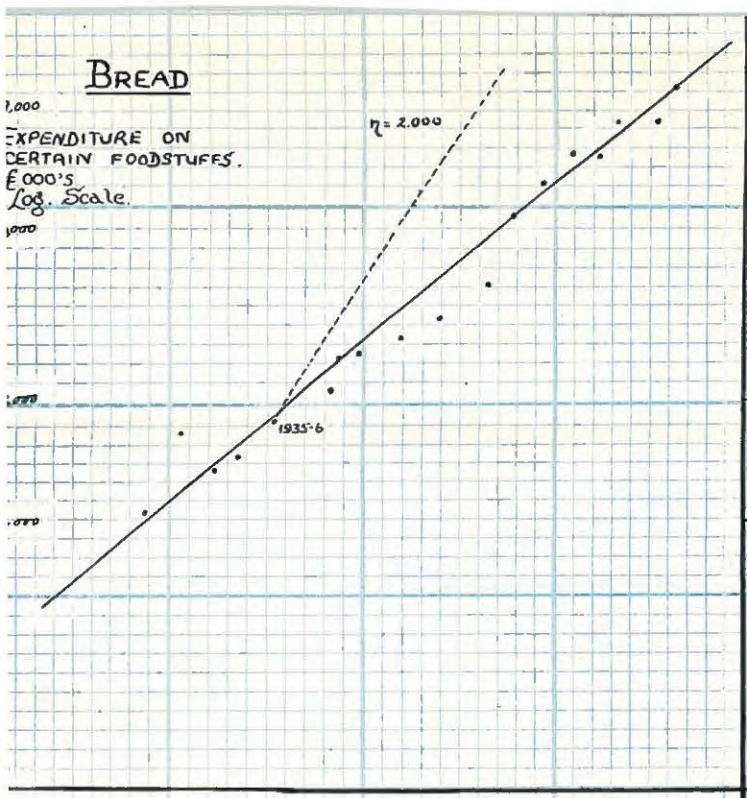
The most significant divergences occur for mealie meal which is little consumed by Europeans and is the staple foodstuff of the increasing number of non-Europeans resident in urban areas, and sugar where in addition to the fact that the income elasticity would appear to be greater for non-Europeans, the constant price of sugar at a time when most other prices were increasing, must have stimulated consumption quite considerably. The expensive nature of the protective foodstuffs (i.e. butter, cheese and fresh milk) results in their being little demanded by the non-European population in whose case the increase in income was greatest. The position as regards bread requires further comment since it is usually a commodity for which it is accepted that the elasticity of demand decreases as income rises. It would appear, bearing in mind what has been said on the subject in Chapter 8, that the significance of bread in the diet of the urban non-European was not as great as in the case of Europeans and of course in rural areas the staple is crushed and whole maize. The income elasticity of 2,000 in the case of Europeans is therefore balanced by the predominance of maize products in the diet of the non-European.

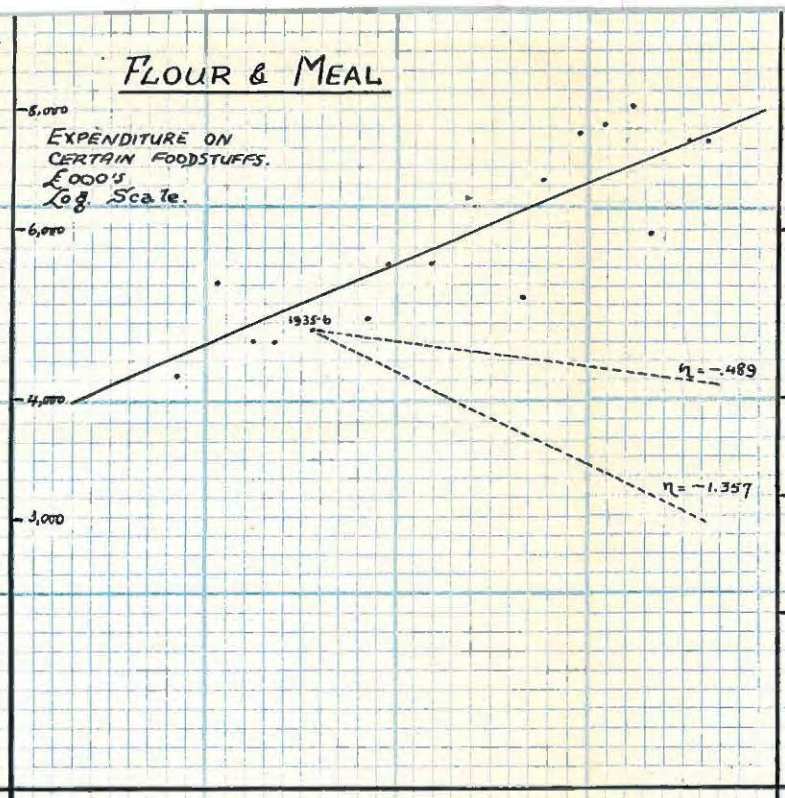
While much of the significance of this discussion is undoubtedly lost by the absence of any conclusiveness, the attainment of which would in the circumstances, be foolhardy to attempt, the writer believes that it is necessary if only to show how important it is to obtain far more empirical evidence pertaining to the expenditure habits of non-Europeans, both urban and rural.

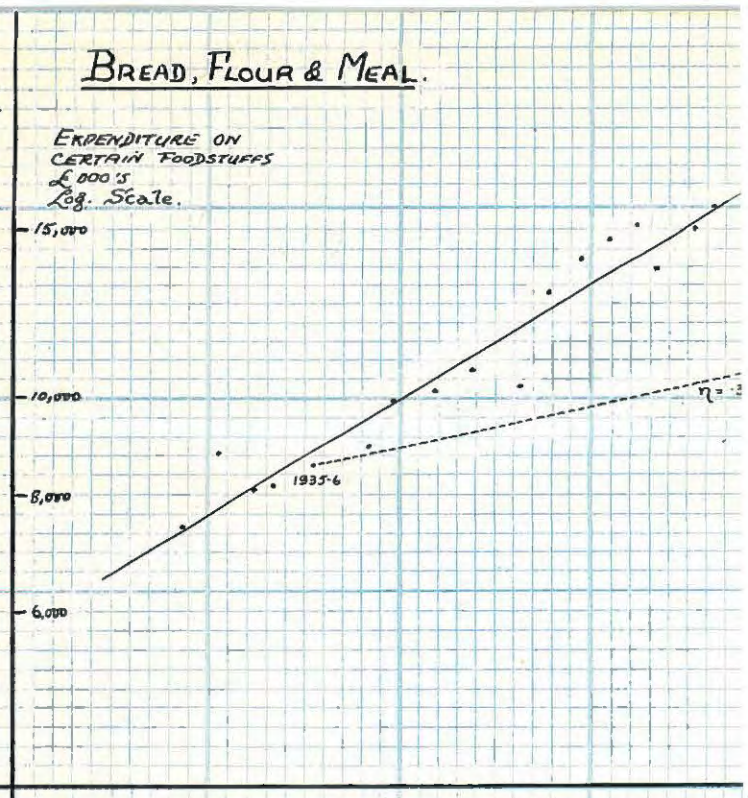
# GRAPH II:

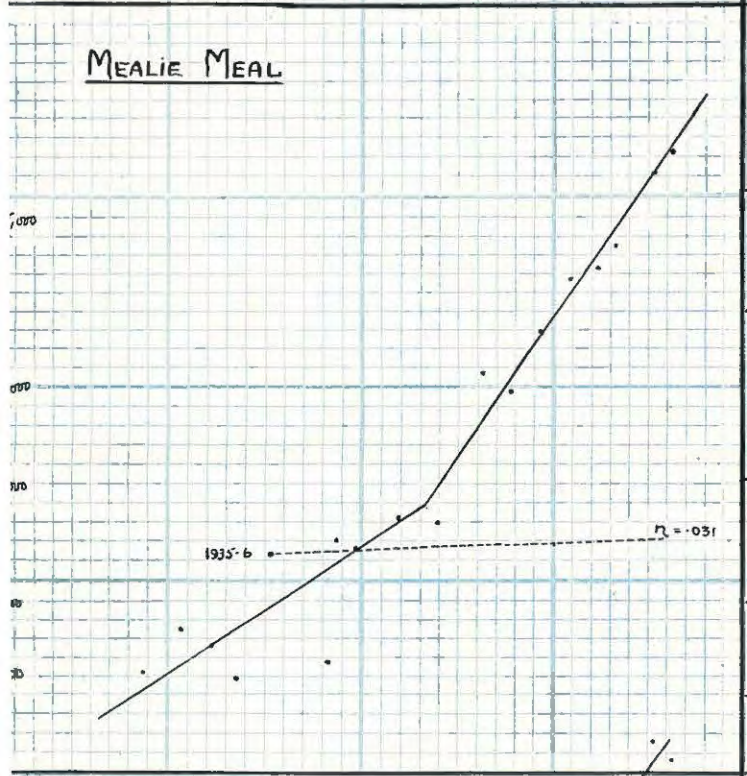
## EXPENDITURE ON CERTAIN FOODSTUFFS IN RELATION TO INCOME - EUROPEANS, 1936.

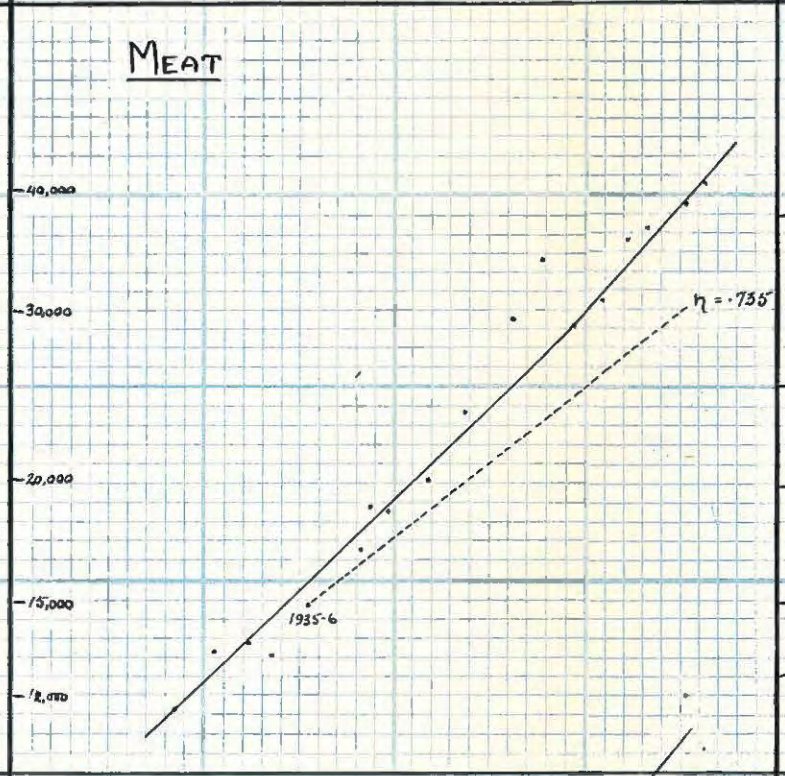


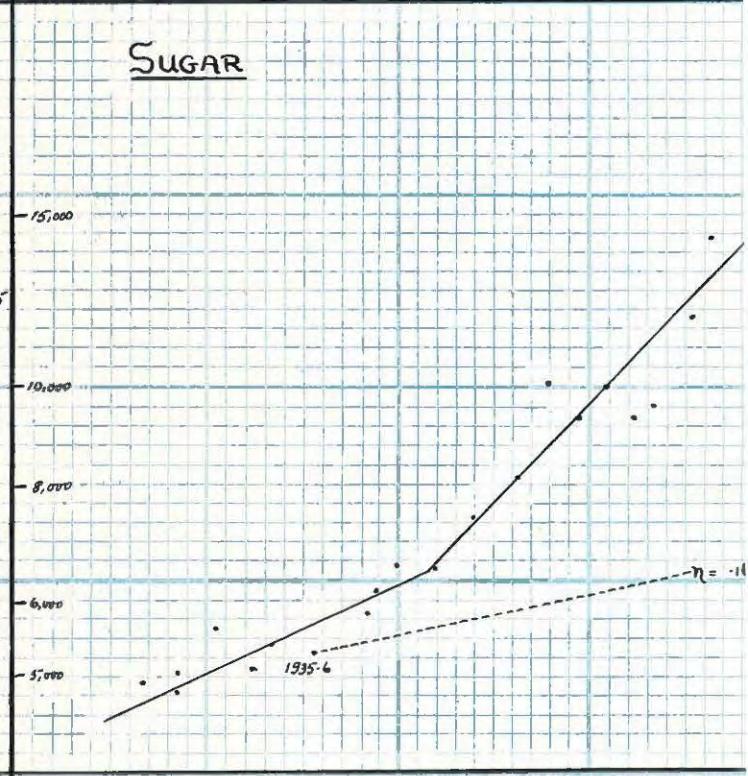


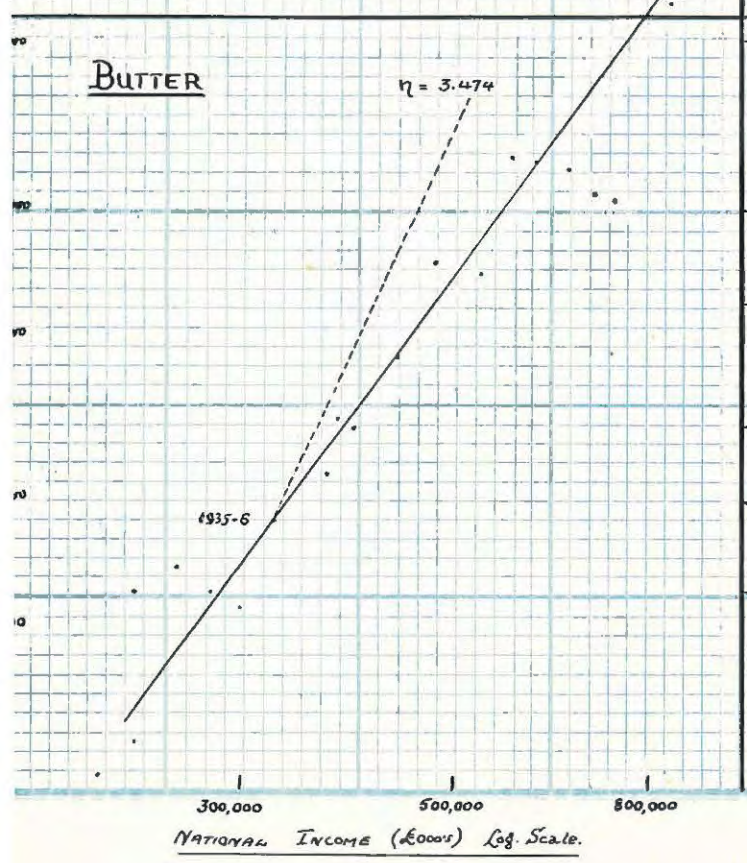



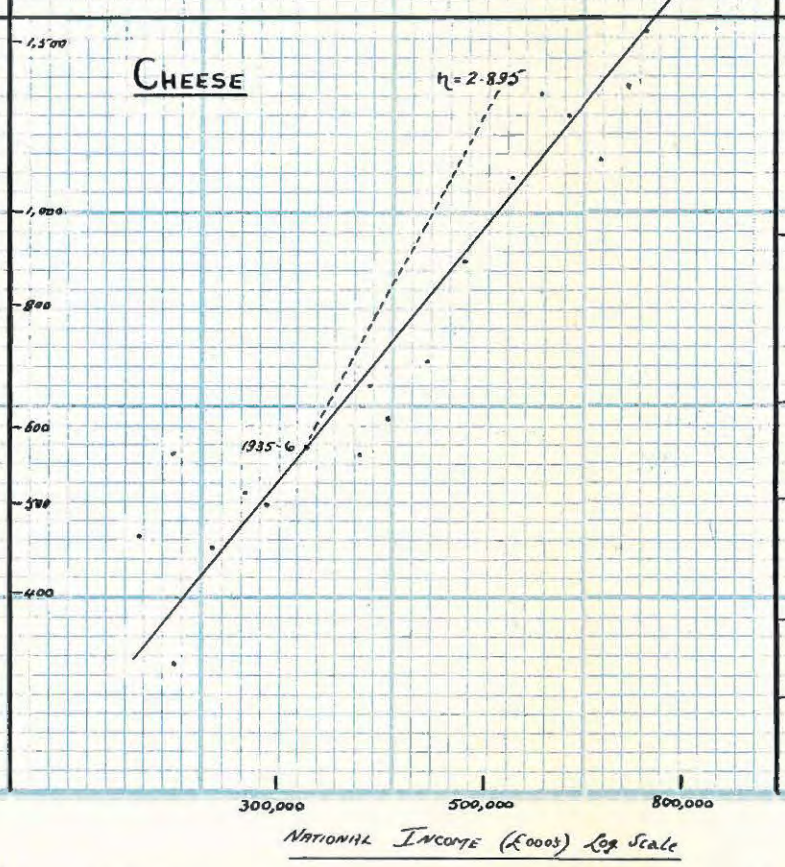



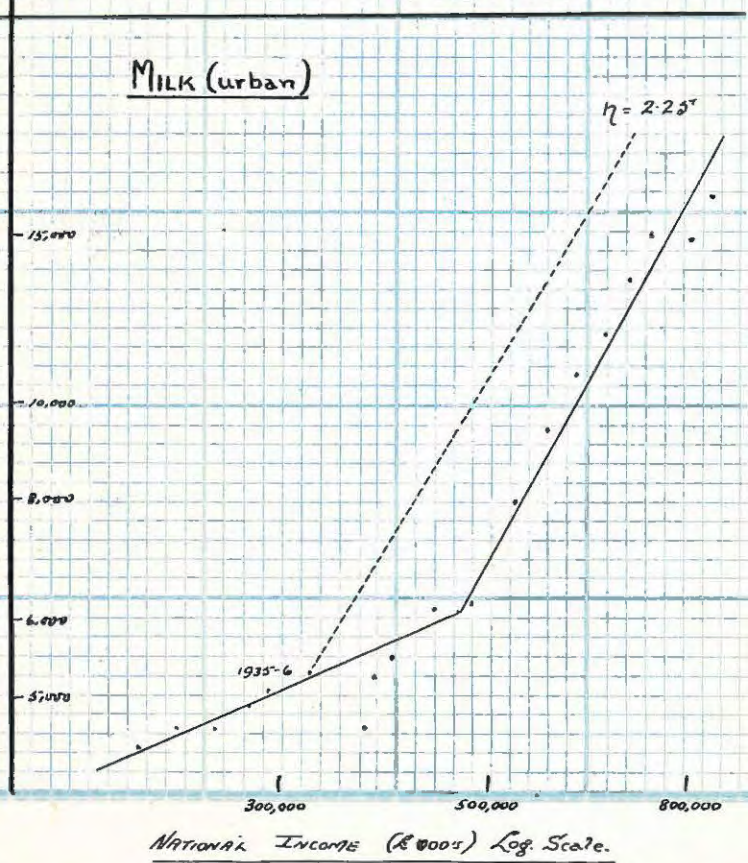




GRAPH 12 : CORRELATION BETWEEN THE NATIONAL INCOME AND EXPENDITURE ON CERTAIN FOODSTUF

Having shown the most important respects in which the consumption of food varied between the different groups of consumers, it was then necessary to examine the distribution of the National Income among those groups and any changes therein during the relevant period. Quite obviously as soon as one introduces groups in place of the whole community, it is necessary to continue with such a distinction and the discussion on the distribution of the National Income was therefore vitally necessary, just as that, cursory though it was, on the division of the total population among the groups.

What did this discussion lead to; what is the present food situation in South Africa; how is it likely to develop in the future? These are obviously the questions which need examination at this, the final stage of the argument.

As to the position at the end of the period under review, physical consumption at current prices in almost all cases exceeded what was being produced locally. This position in regard to the dairy products and meats was, however, only possible under conditions of rationing, i.e. where the pricing mechanism was replaced by physical restriction of consumption as the means of distributing the available supplies. In the 1948/49 season only 60% of cheese and approximately 80% of butter and fresh meats were available to meet the level of demand at the then existing price levels, and as we now know the position in respect of sugar quickly deteriorated. In this case, however, the long term prospects do not appear so distressing for that industry is in the throes of an important capital expansion programme following a long period of restricted acreage of cane. But the problem does not end here for if it did it would be a comparatively simple matter to allow prices to reach that level at which they would settle under conditions of a free market.

functions and the first section of the discussion was primarily concerned with the production side of the "pair of scissors". There can be no doubt that wartime conditions did seriously hamper production through its effect on the machinery available for agricultural purposes and on fertilizers which in the modern farming organization must occupy an ever increasing important place as less virgin land remains and as farming becomes ever more intensive. Important as these factors undoubtedly were, it is the demand function with which the writer, as an economist, is most concerned and so from the description of the development of the present situation, the discussion became concerned primarily with the consumption side of the problem.

Here the writer was concerned with two broad factors of major importance in the demand function for foodstuffs viz. the population and level of National Income. The findings point to the fact that population exerted a very minor influence on the consumption of the various foodstuffs although in view of the considerable interest taken in contemporary thought in nutritional problems, the relationship between consumption and population must remain of considerable importance. It is interesting to note here that the conclusions and gloomy predictions of Malthus based upon the relationship between the supply of foodstuffs and the level of population are quite possible, and from the present study even more than possible, when one considers the relationship between production and the level of real National Income, which in turn depends upon money incomes and the prices of commodities consumed. Finding that the level of population appeared to have exerted little influence upon the demand function, the other factor remained and Section C was therefor concerned with the relationship between food and income.

In this discussion several extremely important conclusions stand out. The first is the important need to bear in mind the essential differences in consumer habits between the different racial groups within the South African community. These groups, the two extremes being the European section and those Natives resident in the Reserves, are indeed living at different levels of civilization and therefore the importance of differences in consumption habits cannot, in the writer's opinion, be exaggerated. Somewhere between the extremes, slowly climbing the ladder of civilization, are those Natives who have foresaken their original existence for the European urban communities, attracted by higher wages, by the urge of adventure, by the need to supplement income from within the Reserves, and who therefore must be considered as a third broad group likely to exert an influence on the aggregate demand function.

The first task was then to examine the relationship between the level of family income and expenditure on the foodstuffs under review, for the different "social" groups. As is inevitable in any empirical study, there is a continual struggle to discover statistics either to bridge a gap in the argument or to verify suppositions, but it was in this part of the discussion viz. Chapter 8 that the greatest deficiency in evidence was found. It was possible to obtain fairly adequate statistical data as to the pattern of expenditure by Europeans on foodstuffs but evidence regarding non-Europeans, both urban and rural, was woefully inadequate so much so that one of the main aims of the study had to be dropped. This was to discover some functional relationship between the National Income and expenditure on the food items, i.e. to calculate the income elasticity of demand.

Having shown the most important respects in which the consumption of food varied between the different groups of consumers, it was then necessary to examine the distribution of the National Income among those groups and any changes therein during the relevant period. Quite obviously as soon as one introduces groups in place of the whole community, it is necessary to continue with such a distinction and the discussion on the distribution of the National Income was therefore vitally necessary, just as that, cursory though it was, on the division of the total population among the groups.

What did this discussion lead to; what is the present food situation in South Africa; how is it likely to develop in the future? These are obviously the questions which need examination at this, the final stage of the argument.

As to the position at the end of the period under review, physical consumption at current prices in almost all cases exceeded what was being produced locally. This position in regard to the dairy products and meats was, however, only possible under conditions of rationing, i.e. where the pricing mechanism was replaced by physical restriction of consumption as the means of distributing the available supplies. In the 1948/49 season only 60% of cheese and approximately 80% of butter and fresh meats were available to meet the level of demand at the then existing price levels, and as we now know the position in respect of sugar quickly deteriorated. In this case, however, the long term prospects do not appear so distressing for that industry is in the throes of an important capital expansion programme following a long period of restricted acreage of cane. But the problem does not end here for if it did it would be a comparatively simple matter to allow prices to reach that level at which they would settle under conditions of a free market.

The vast majority of the population in the Union are suffering from malnutrition in some degree or another. From the standpoint of an adequate and balanced diet for everyone in the country, the supplies produced locally are greatly deficient as far as the meat group is concerned and grossly inadequate in the case of dairy produce. From an economic point of view malnutrition is synonomous with poverty so that it became obvious that an answer to this particular problem would lie in greater equality of incomes for it is unquestionable that the relative difference in earnings between skilled and unskilled grades is greater in this country than in any other with whose level of civilization we would compare our own. On the other hand, were we to encourage greater equality of incomes, and bearing in mind the fact that the income elasticity of demand for most products is less than unity, it would lead to an inevitable increase in demand for food and in the long run especially for those foods in which the position at the moment is worst viz. dairy produce and meats, since in the present circumstances the distribution of the population over the income range is heavily loaded at the lower groups of the income scale.

How is the position likely to develop in the future with no conscious interference in either more widespread subsidization and rationing or an encouragement of greater equality in earnings?

On the demand side, assuming a continued increase in the National Income, it is probable that it will become more and more diverted to the poorer and non-European sections of the population for it is one of the most noticeable features of a developing economy that the difference between the rates of reward for different grades of labour becomes less.(1) At

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(1) It is possible, however, that even were the National Income not to rise at the same rate, this redistribution of income would occur.

the same time it is reasonable to expect a continued movement of people from the rural to the urban areas which too has been accepted as a "law" of economic development, where the economy has been without undue interference. We have already seen what the results of such developments would be on the demand for foodstuffs, for they have been the main factors operating behind the enormous increase in consumption in recent years. The effect will probably be more immediate on the demand for meat and sugar, slightly delayed on wheat and maize products since we have noticed that the substitution of wheaten for maize products is dependent upon the length of urbanization, and much delayed in the case of dairy products for which the non-European would appear to have acquired little appreciation due of course to their expensive nature. That is not to say that the increase in demand for these more expensive foodstuffs is likely to tail off for it is unlikely that real incomes of the less well-to-do Europeans who themselves certainly do not receive sufficient, will not rise and especially in view of the fact ~~because~~ of their protective value and the greater importance to be attached to propaganda in the nutrition field. In short, there would appear no reason to suppose that the factors which have in the past caused the increase in consumption, will not continue to do so given unfettered economic development. The writer obviously cannot predict actions by the State likely to influence the position.

It is interesting to note here that the natural consequence of the continued operation of the redistribution of income and population described above would appear to be a reduction in the human consumption of maize and in turn greater utilization as stockfeed. The importance of maize as the base upon which much of the country's agriculture is based has been stressed in the body of the text, and it is therefore probable that such would ultimately lead to higher

production of meats and dairy products. It would, however, at the same time lead to an increased demand for wheaten products in which South Africa is far from self-sufficient and would therefore require far greater importation of that commodity.

If there appears in the above paragraph some feeling of optimism as regards the production of those foodstuffs of which the position at the moment is least encouraging, it is soon dispelled when the writer recalls what was said in Chapter 6. While it is true that at present the agricultural potential of the Union is far from exhausted, there would appear weighty arguments in support of the contention that in the long run South Africa will not be able to continue to produce even at the present level unless drastic action is taken to revise agricultural practices throughout the country. Once again the thought occurs; is it in the interests of the country as a whole to permit the continuation of a practice whereby some of the most fertile of the country's land is farmed by an agriculturally backward people in a backward, wasteful and from a long run point of view, an extremely disasterous manner.(1)

Finally an observation on Malthus and the applicability of his views on population to conditions within this country. There can be little doubt that the Native Reserves are examples of a stagnant economy where to earn sufficient income to exist, male members of the family are forced to sell their one asset - labour, for a certain part of the year. If one accepts the view of certain medical men, one of whom has been quoted in this study,(2) that the adult population is in fact

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(1) The author is not blind to the fact that any change would involve a complete reversal of policy, social and economic, and therefore does not feel that any further discussion here, is warranted.

(2) Dr F.W. Fox, see Chapter 7, page 196.

a privileged few, privileged by virtue of their greater health and thereby able to live through the critical years of infancy, then there is every reason to accept the fact that at the moment the population of the Union is itself in part, a function of the food supplies and income.

The present food situation is serious, of this there can be no doubt; the future appears likely to become even worse unless drastic action is taken and a complete reversal of accepted policies occurs; yet, however serious the appearances are, as long as the facts of the problem are appreciated, it need not be insoluble. The intention of this study has been to present the fact and as far as possible to produce lines along which food policies can be formulated, but because the policies cannot be in conflict with the general policy for the economic and social development of the country, the writer has deliberately refrained from making concrete policy recommendations.

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