average wage of £5 6s. 8d. on which the family was in debt and had not sufficient food, indicated that a minimum wage of at least £6 10s. per month is necessary in Johannesburg, if the bare necessities for decency and health are to be maintained, and the women are to superintend their own homes.

CONCLUSION.

LUSIMUS SATIS.

We have played enough. At one time the major difficulty facing those who wished to support the case of the urban African suffering under disabilities was the lack of factual evidence. The last ten years have increasingly produced the necessary material from which reasonable conclusions may be drawn.*

The danger now seems to be that a too frequent reiteration of the facts may dull the public mind to their urgency. Changes will happen in any event. It rests with those at present responsible for the Administration of South Africa to make those changes as constructive as possible.

The Prime Minister has given a lead to the seeking of a solution of the urban African problem by appointing a Committee of Enquiry into the cost of living of this group. Under the chairmanship of the Secretary for Native Affairs, the Committee consists of experts from each section of public administration concerned. It is hoped that this report, which has been an attempt to state the facts as they relate to a large number of Africans in a very large city, will supplement the findings of that Committee. Interpretation, rather than further collection of material, is the immediate need, and the devising of remedies will have to be the separate work of individual experts.

While it does not fall within the province of this study to make specific recommendations, the facts presented do suggest the need for greater co-operation between Government and local authorities with regard to the inter-action of the Reserves and the Urban Areas. In this connection the creation of State Labour Exchanges, acting as liaison institutions between town and country, might form one type of control of the ingress to the towns.

With regard to wages, increased minima are preferable to widespread subsidies, which may lead to pauperisation. The African is a proud man by tradition, and the unwitting encouragement of dependence, which would be coupled always with resentment, should be guarded against.

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* "The Native in Industry": Johannesburg Joint Council of Europeans and Natives, Memorandum No. 3. Hortors Limited, Johannesburg, 1927.

"Native Life in a Johannesburg Slum Yard": Ellen Hellman, Africa, Vol. VIII, No. 1. Oxford University Press, 1935.

"Social and Economic Facts revealed in Native Family Budgets": Eileen Jensen Krige, "Race Relations," Vol. I, No. 6. Morija, Basutoland, 1934.

"The Bantu in the City": Ray E. Phillips, Lovedale, 1938.

"Native Budgets in Johannesburg": A sample investigation by the Johannesburg Political Economy Club, *South African Journal of Economics*, Vol. VIII, No. 2, June, 1940.

A greater spending capacity would create the need for more careful training in the use of money, and would inevitably be to the benefit of the European producer as well as to the advantage of the African consumer.

In the development of educational policy it is evident that increasing attention will have to be paid to practical and vocational training if African labour is to be less wastefully employed.

Experiments already under consideration in some areas are (a) the making available of good food, including fruit and vegetables, at reasonable prices, through the development of market schemes, particularly by co-operation between the Native Local Councils, Native Trust Land Areas and local authorities, (b) the provision of Old Age and Unemployment Insurances, and (c) the creation within reasonable travelling distance of the large cities of freehold areas where Africans, without any tribal ties, may purchase land and build their own properties. The present permanent urban dweller can look forward neither to a pension nor to security of habitation when his labouring days are done, and it is manifestly unfair that Africans in a position to support themselves adequately, should be reaping the benefits and suffering the restrictions of sub-economic housing schemes designed for the poorer worker.

Finally, it is essential that a census of all areas within the Union should be taken simultaneously and at regular intervals. The development of any aspect of national policy is dependent upon the availability of such vital statistics. In addition, the country might, with advantage, be zoned into areas distinct in economic conditions, in each of which a Research and Welfare Branch of the Union Department of Social Welfare would, by intimate knowledge, assess changing local conditions and the needs of the people concerned.

Should a co-ordinating council representative of all African territories be set up after the war, such work, on a national scale, would contribute to the formation of policy. The common discipline and service in which so many Africans are now sharing may well be a prelude to the sharing of the larger benefits of peace.

REFERENCES.

1. Report of the Native Economic Commission, 1930-1932. Government Printer, Pretoria, 1932.
2. Report of the Native Farm Labour Committee, 1937-1939. Government Printer, Pretoria, 1939.
3. "The Case for African Freedom," Joyce Cary. Sacker & Warburg, London, 1941.

Appendix I.

DIET IN THE URBAN LOCATIONS AS INDICATED BY THE SURVEY

BY

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The following information regarding the diet available to location residents is based on that obtained during the course of the foregoing survey.

The formidable difficulties involved in obtaining an accurate picture of the diet actually consumed by such a population group are sufficiently obvious, and it cannot be claimed that they have been altogether overcome. Thus, while it was comparatively easy to ascertain the amount of cash available for the purchase of food, the actual price paid had to some extent to be estimated, since variations occur according to the quantity of a given foodstuff bought at a given time. This aspect will be considered later.

A further and much more serious source of inaccuracy arises from the fact that quite appreciable amounts of food are commonly obtained from sources which it was not found possible to deal with in any detail. From what follows it will be seen that these extraneous and precarious supplies of food play a most important part in the nutrition of native urban residents. Indeed, it seems clear that without such additional supplies the diet would be grossly deficient in most essential constituents, not excluding calories.

Unfortunately, for obvious reasons, it is impossible to assess the effect of the food obtained in this way; to obtain all the necessary details would prove a difficult and most laborious task, even assuming that a sufficient number of residents could be found who would be willing to disclose them.

We have therefore had to content ourselves with as precise a statement as possible of the " diet as purchased " and leave to the imagination the extent to which the " diet as actually eaten " makes good the glaring deficiencies that are revealed.

1. Family budgets were collected from 987 households over a period of eleven months, i.e. from January to November, 1940.

The households included 4,784 persons, giving an average per household of 4·84. It is well known that lodgers, official and unofficial, are an important feature of location life. The number of the former in the group studied is stated to be 73. If these are ignored, it would appear that a typical family consisted of 3 persons over the age of fourteen (2 parents and 1 older child), together with 2 persons under fourteen. The actual age distribution has been given in full in the body of the report. For convenience it has been summarised in Table 1.

TABLE 1.

Number and Percentage Distribution of the Population included in the Survey according to Four Age Groups.

Age Group.	Number.	Percentage.
Children:		
0 to 11 months	138 ...	2·9
1 to 14 years	1,703 ...	35·6
Adults	2,891 ...	60·4
Old People	52 ...	1·1
	4,784 ...	100·0

The proportion of children in the group is of obvious importance from the standpoint of diet, and hence it is of interest to note that the percentage under fourteen (38·6) is closely similar to that found for the native population as a whole at the 1936 Census (40·6). Apparently the former custom of sending young children away to the country to be looked after by relatives is rapidly declining, while the high infant mortality associated with town life is more or less counterbalanced by the number of country children sent to the towns as well as illegitimate children that have to be cared for.

2. Clearly it is of little use in a group consisting of both sexes and all ages to work out the average amount of the various foods per head. The usual practice is to express the persons in the group as "fractions of an adult male," using a standard scale of coefficients. We have adapted the scale suggested by Cathcart and Murray (1931).

In this way it was found that the 4,784 persons were equivalent to a "man value" of 3,786.

3. Knowing the average monthly expenditure on each item of food, the typical price paid for the food and its chemical composition, it was possible to estimate with some degree of precision the amount of each dietary constituent available per "man unit."

The figures obtained are summarised in Table 2, and in the succeeding table a comparison is made between the amounts of each constituent provided by the food purchased with that considered to be desirable for the promotion and maintenance of health. Such estimates are the best available to us, but must be regarded as still of a tentative nature. In order to make the comparison as practical as possible we have included two such standards; by "marginal" is meant an amount that will maintain health at any rate for a limited period; the "optimal" standard represents amounts which are presumed to be fully adequate and probably are on the generous side. Moreover, it is well to remember that neither of these standards has been arrived at from the study of natives living under South African conditions.

TABLE 2.

Table showing the amounts of various articles of diet purchased monthly per man unit, together with the approximate amount of each of the principal constituents supplied by this diet.

FOODSTUFF.	Average expenditure per man unit (pence).	Price, pence (per pound).	Amount purchased (pounds).	Calories.	Protein (grams).	Fat (grams).	Carbo-hydrates (grams).	Calcium (milligrams).	Iron (milligrams).	Phosphorus (milligrams).	Vitamin A (International units).	Vitamin B_1 (International units).	Vitamin C (International units).
Mealie Meal, refined white	22·6	1·1	18·83	30,693	787	256	6,326	1,368	256	14,619	427	1,282	—
Bread, white bakers' ...	10·5	3·0	3·50	4,186	127	11	858	365	16	1,160	636	238	—
Rice, polished	3·0	4·0	0·75	1,186	20	1	273	34	3	324	—	85	—
Sugar, white	15·7	4·0	3·93	7,094	—	—	1,784	—	—	—	—	—	—
Jam	6·0	6·0	1·00	1,282	3	—	313	109	7	82	—	—	45
Meat	57·5	6·0	9·58	9,264	870	652	—	391	152	6,524	870	652	435
Sardines, tinned	3·0	32·0	1·50 oz.	124	9	10	—	176	2	294	?	?	—
Milk, fresh	12·6	3·0 pint	4·2 pint	1,567	79	86	119	2,863	5	2,219	477	239	12
Milk, sweetened condensed	4·0	9·0	7·0 oz.	650	16	17	109	742	1	585	199	40	2
Potatoes	9·0	3·0	3·00	1,155	27	1	255	191	18	790	136	545	136
Cabbage	6·5	5·0	1·30	169	8	1	25	266	6	171	1,770	118	295
Onions, dried	4·0	3·0	1·33	293	8	1	57	205	4	272	91	60	60
Tomatoes	4·0	6·0	1·50	158	7	2	23	75	3	177	13,620	136	123
Fruit	Nil	—	—	—	—	—	—	—	—	—	—	—	—
Salt	1·0	—	—	—	—	—	—	—	—	—	—	—	—
Tea	9·1	33·0	4·4 oz.	—	—	—	—	—	—	—	—	—	—
Coffee	2·7	8·0	5·4 oz.	—	—	—	—	—	—	—	—	—	—
Total per month ...	171·2			57,821	1,961	1,038	1,004	6,775	473	27,217	182,266	3,395	1,108
Total per day	5·7			1,927	65	35	334	225	16	907	607	113	37

TABLE 3.

Comparison of Diet as Purchased with "Marginal" and "Optimal" Requirements.

	Diet as Purchased.	Requirements: "Marginal."	"Optimal."
Calories ...	... 1,827 ...	3,000	3,500
Protein ...	... 65 gm. ...	50	70—100 gm.
Fat ...	... 34 ,, ...	50	120 ,,
Carbohydrate	... 334 ,, ...	570	485 ,,
Calcium ...	... 225 ,, ...	750	1,000 ,,
Iron ...	... 16 mg. ...	10	20 mg.
Phosphorus ...	... 907 ,, ...	1,000	1,500 ,,
Vitamin A ...	... 607 I.U. ...	2,500	5,000 I.U.
Vitamin B_1 ...	... 113 ,, ...	330	700 ,,
Vitamin C ...	... 37 mg. ...	25	75 mg.

4. A glance at Table 3 shows clearly that the diet, as purchased, falls short in most respects even when compared with the "marginal" standard. The amount of the discrepancy is particularly noticeable with respect to fat, calcium and vitamins A and B_1.

PROTEIN.—It is somewhat surprising that the amount of protein is as high as it is, seeing that this constituent is usually considered to be one of the most expensive in a diet; furthermore, since almost exactly 50 per cent. is derived from animal sources, it may be presumed that this protein is of a fully satisfactory quality. The amount of money spent on meat, and the cheap price at which it was obtainable, is in fact one of the striking features of the budget. It is, however, a well-known fact that the availability of meat in the urban locations proves a most attractive feature to the majority of natives. The quality or cut seems to be a matter of little importance. The figures also indicate the practical importance of mealie meal as a source of protein in the diet; a fact consistently overlooked by those who regard this valuable food as merely a source of starch.

FAT.—The amount of fat is extremely low and in all probability is lower than indicated by the figures, since the amount present in meat is very variable indeed and may have been estimated at too high a figure. Provided an adequate supply of fat soluble vitamins are forthcoming from the remainder of the diet, the chief value of this constituent turns on the part it plays in supplying calories, while at the same time reducing bulk. In other words the diet as it stands is far too bulky to be regarded as satisfactory.

CALCIUM.—The amount indicated is undoubtedly extremely low and compares very badly with requirements as suggested by overseas workers. On the other hand there is a good deal of evidence which suggests that under South African conditions requirements may be somewhat lower, at any rate, diets low in calcium are not uncommon and have not as yet been shown to produce the unsatisfactory results to be expected from them.

VITAMIN A.—There is a gross deficiency of vitamin A, and the amount present would be lower still were it not for the inclusion of a few tomatoes. This is a most unsatisfactory feature of the diet as it stands, yet it could easily and very inexpensively be remedied if supplies of the vitamin A concentrate now being manufactured from South African fish were made available. No doubt in practice additional supplies are also sometimes forthcoming when pumpkins are available.

VITAMIN B_1.—According to our figures the daily intake of this vitamin is barely one-third of the "marginal" value, yet few dieticians would accept this amount as adequate. It will be noted that the chief source is highly refined mealie meal, for which a value of 15 International Units per 100 grams has been adopted. The popularity of this type of meal is a most unfortunate feature of the urban native's diet, since it is so low in this constituent. Recent work at the Institute by Dr. L. Goldberg has shown that the unrefined meal, such as was formerly in common use in the rural areas, contains at least four times as much of this vitamin.

VITAMIN C.—In arriving at a total of 37 milligrams for vitamin C we have probably erred on the generous side, for although meat and vegetables in the quantities purchased will undoubtedly contribute appreciable amounts of this vitamin, it is doubtful how much will survive the drastic methods of cooking that are likely to be employed. A 50 per cent. destruction would not be unreasonable, and this would barely leave enough to protect from actual scurvy.

It is necessary to emphasize that the position is a good deal worse than appears on the surface. For, although by converting to an equivalent number of adult men, it is possible to overcome the varied requirements of a group consisting of people of both sexes and different ages in respect to their needs for "fuel" (or calories), the needs for many other constituents are masked, rather than adjusted. Thus the requirements for calcium and the vitamins are, as would be expected, considerably *greater* during childhood, pregnancy and lactation than for an adult male, no matter how hard he works. But as we have seen the amounts available do not even meet the needs of the "man unit."

CALORIES.—The most striking thing of all about the diet is that it fails to supply the adult male with the calories he must have if he is to carry out active work. But these needs have got to be supplied, for they express themselves in the urgent terms of appetite.

This immediately raises the question of whether the diet as it stands, i.e. the foods purchased, does in fact include all that is eaten during the course of the month, or whether there may not be other sources of food which have not been taken into account.

5. We have already referred to the great practical difficulties encountered when attempting to make a survey of this kind as precise as possible; nowhere, perhaps, are these difficulties greater than when dealing with the food consumed. That other sources of food do in fact exist was stressed by those carrying out the survey, and since it

is almost impossible to express them in quantitative terms, we can only enumerate them as follows:—

(a) All women workers—a total of 450, or about one-third of the total included in the group—probably receive one or two full meals a week, according to the number of days they are out washing or charring.

(b) Daily workers in flats, etc., probably receive the bulk of their food in this way.

(c) Domestic servants, who return to their families only at the week-ends, receive all their food from their employers.

(d) Many such servants receive parcels of scraps to take home, and in some cases it is known that these gifts are regular and generous.

(e) Occasionally, small children accompany their mothers to their work and also receive food.

(f) Where no official ration is issued employers occasionally provide a supply of mealie meal, or marewu for the use of their employees. Similarly tea, marewu and other foods are sometimes available for men working in hotels, boarding-houses, factories, etc.

(g) The exchange of food that takes place at weddings, funerals, friendly visits, etc., must also be taken into account. The amount of food obtainable in this way is stated to be "considerable," though it must be remembered that this item cuts both ways; the group can hardly have always been the recipients.

(h) Relatives living in a house will supply an occasional bag of mealie meal, or a gift of meat, which is not recorded in the budget.

(i) All the children at nursery schools and crèches are supplied with three full meals a day, but the number included in this survey which received help in this way probably does not amount to more than 40 to 50 at the outside.

(j) Several other minor sources of food are recognised, e.g. gifts in kind to children who help in shops; boys obtain similar supplies for running errands; a certain amount is distributed at clinics to mothers and so on.

(k) Variable amounts of vegetables—sometimes quite appreciable—are obtained from home gardens.

It will be realised that it is impossible to express these extraneous sources of food quantitatively, but that they may well exert an appreciable, though erratic effect upon the diet when taken as a whole can hardly be questioned.

A pound of mealie meal alone will supply nearly two thousand calories, and it may be assumed that it is in this way that the otherwise unaccountable discrepancy between calorie intake and fundamental, inescapable requirements is met.

The bald fact remains that the diet "as purchased" is grossly deficient in many of the requirements of an adult male, still more does it fail to meet the needs of the children and the pregnant or lactating women. In other words, the health of the group is very largely dependent on a most undependable source of supply. Surely a disgraceful state of affairs.

6. It may be of some interest to compare the composition of the purchased diet with that revealed by an inquiry made in 1936 upon European families at various income levels. In Table 4 we have reproduced the results obtained for the lowest income group, i.e. up to £125 per annum. It will be noticed that the average yearly income for the group in this survey amounts almost exactly to half this sum, i.e. £64.

TABLE 4.

Constituents Consumed per Man Unit per Day by European Families in Certain Urban Areas, 1936.

(Annual Income Group—Up to £125.)		
Protein	101— 103 gm.	(animal 36).
Fat	60— 68 gm.	
C'hate	626— 633 gm.	
Calories	3,576—3,683	
Calcium	494— 507 mgm.	
Phosphorus	1,643—1,685 mgm.	
Iron	22— 23 mgm.	

No estimates of vitamin intake were made.

7. The nature of the foods selected also calls for some comment.

(a) MEALIE MEAL.—It will be seen that mealie meal forms the backbone of the diet. Unfortunately, as already mentioned, this is almost invariably a highly refined type; there is a widespread and growing dislike for the types that approximate more closely to that used in the rural areas. This single fact has a most marked effect upon the nutrition of Natives. Samp is used in small quantities only.

(b) BREAD.—Less than a pound of bread per head is bought during one week, in fact more money is spent on sugar than on bread. (The war loaf has had the effect of compelling the people to eat a much more nutritious product.)

Home-made bread is seldom used, partly because the women have to go out to work and therefore find it difficult to make, even if they know how, but mainly because yeast is unobtainable without a permit, which involves a visit to the office. Baking also means more money spent on fuel.

(c) MEAT.—This is not bought specially in cuts, but by the pound. The price at the time of the survey was 6d. per pound. This meat is generally a mixture of beef and lights, with little bone or fat.

(d) VEGETABLES.—Potatoes are fortunately a popular vegetable, but even in 1940 threepence would usually only purchase four average size specimens. Next in popularity come cabbage, tomatoes and onions. In 1940 cabbages cost 3d. " for a very small one as big as a tennis ball," 6d. for a larger one; tomatoes were 1d. each; dried onions were 1d. each. Pumpkins at 6d. each for a small one, and green mealies at 1d. each are eaten in season, but " practically every household grows its own." Sugar cane when available costs 1d. per stick. Green peas and beans are seldom eaten, even if they are available, because of the expense.

(e) Milk.—The following further particulars may be mentioned with regard to the consumption of milk.

Number of households using:		Per cent.
Fresh milk only	545 ...	55
Condensed milk	288 ...	29
Fresh and condensed ...	99 ...	10
No milk at all	53 ...	5
	985 ...	100

No mention is made of the consumption of sour or separated milk, which we understand is available at any rate during certain parts of the year. Condensed milk is not really as dear as is generally imagined, unless bought in the smallest size tins, and in the poor home possesses the virtue of keeping well under unfavourable circumstances. A cheap source of dried milk would prove of the greatest benefit, until a properly organised milk scheme is put into operation. In view of the popularity of tea, it is questionable whether the milk purchased reaches those who need it most, i.e. the children. On the other hand many women are stated to refuse milk on account of tribal taboos.

(f) Fruit.—Fruit is not included in the expenditure because its purchase depends upon the occasional and unanticipated availability of cash. It is considered a luxury, not a necessity.

(g) Sugar.—The large amount of money spent on sugar is an interesting example of the way in which taste determines what is selected, rather than nutritional value. The same amount of sugar could have been obtained from digesting mealie meal or bread at a fraction of the cost, but sweetness is as irresistible to adult Natives as it is to most children.

(h) Tea and Coffee.—Natives have readily adopted the tea and coffee drinking habits of Europeans, much to the detriment of their diet. It will be noticed that as much money is spent on this item, which contributes nothing to the nutritional value of the diet, as on fresh milk, which would greatly improve it. From this standpoint the money would be very much better spent on marewu or kaffir beer.

A few people purchase Bush tea at 4d. per pound, but the majority use ordinary Indian tea. Coffee is liked, but is bought by only a few householders.

(i) Eggs.—Eggs are seldom bought except for feasts, or occasionally for the baking of cakes.

(j) Butter.—Butter is so rarely used as to be a negligible item in the diet. Practically no families admitted purchasing it. The same applies to cheese. This probably has an important influence on the low consumption of bread and the way that white bread is preferred, since we have learnt from very poor European families that bread, particularly wholemeal bread, is less palatable than porridge if there is no " relish " to go with it. Dripping is collected by careful housewives in small tins on the special occasions when a roast is being cooked, but again the amount is practically negligible.

The main meal of the day is eaten in the evening and consists chiefly of mealie meal and stew. A pot of cold stiff mealie meal is generally available in the kitchen for snacks during the day. Most of the children subsist on this only until their parents come home. A teacher remarked " porridge thinned out with water will go a long way "; it is probable that towards the end of the month, or when money is scarce, the mealie meal porridge becomes thinner and thinner.

8. Another noticeable feature is the tendency to buy food in small quantities. We are informed that this is due (a) to lack of money, (b) lack of forethought, (c) lack of storage facilities.

With regard to the last-mentioned, it is interesting to note that even skokiaan queens in excellent financial circumstances still buy in very small quantities except for the mealie meal needed in brewing; they have not got the necessary space for storing larger amounts.

Contrary to general belief, there does not appear to be much advantage, as far as price is concerned, when the staple foodstuffs, such as mealie meal, sugar, potatoes, etc., are bought in what might be called reasonably large units; the same applies to fuel. But in the case of vegetables and fruit, and especially tea, the housewife who can afford to buy in larger quantities stands to gain quite considerably. For instance, tea is frequently bought in 1 ounce packets at 3d., i.e. 4s. per pound; when bought by the pound, less than 2s. is the charge. The very small tins of condensed milk are (naturally) much more expensive than the larger sizes in terms of food obtained.

No doubt a good deal could be done to educate the poor housewife regarding these and similar matters, thus helping her to spend her very restricted income to the best advantage. Co-operative buying of vegetables and fruit offers another line of attack; moreover, this obviates the very real difficulty arising from inadequate storage facilities.

Poverty is clearly the principal cause of the unsatisfactory nature of this diet, though other factors must also not be overlooked; thus, custom, the desire to be civilised in the less satisfactory sense of the word, ignorance about what to buy and how best to buy it, the unavailability of the protective foodstuffs, as well as the influence of advertising, are some of the contributory causes.

Even at the low level of expenditure shown by the survey there could be some real improvement in the nutritional value of the diet; thus the use of whole-meal, mealie meal and whole-meal bread would raise the intake of vitamin B_1 appreciably, much to the benefit of the consumer. With habits as they are, it would no doubt be unreasonable to expect that the money spent on tea and sugar could be diverted to more milk, but it would be a most desirable change as far as health was concerned.

The value of communal feeding schemes is also well illustrated by the fact that on the very large scale employed by the mines a much superior diet is supplied at a slightly lower cost; but probably few location residents would look with favour on such a diet, even if

it could be arranged. Nevertheless, there is scope for experiments along the lines of simple communal feeding schemes.

The tragic way in which the hard-won income is spent on foods of low or negligible nutritional value is obvious and emphasises the need for education about such matters; equally clear is the need for greatly improving the availability and reducing the cost of the protective foodstuffs, particularly milk, vegetables and fruit.

SUMMARY.

An attempt has been made to assess the nutritive value of the diet in common use by the urban native population from data supplied by an investigation on 987 households.

The diet "as purchased" discloses a gross deficiency in the amounts of most constituents, even when compared with that recommended as a "marginal" standard for an adult male. The discrepancies are even greater when allowance is made for children and pregnant or lacatating women.

However, other sources of food are also made use of, and the possibility cannot be excluded that these subsidiary supplies greatly lessen the discrepancies revealed.

Even if the situation thus disclosed is viewed in its most favourable light, we are faced with the intolerable position that the health of the individuals composing this group is dependent upon these extraneous and precarious supplements.

The diet is also unsatisfactory in other ways; the foods selected are often of low nutritive value, and in some cases are more expensive than they need be owing to the high price paid when purchases are made in small quantities.

That diets of this kind are likely to give rise to a low standard of health has now been established beyond any reasonable doubt. In the case of our urban native population, however, we have the clear evidence of the hospitals that such is actually the case.

No doubt increased hospital accommodation is urgently required on many grounds, but it is suggested that money spent on preventive measures, including improved nutrition, would relieve the hospitals of some of the present pressure.

Raising wages, or alternatively decreasing the cost of living; better availability of protective foods, especially milk, vegetables and fruit; better storage facilities and education regarding the planning and selection of food, are some of the more obvious directions in which the present situation could be improved. Experiments along the lines of communal feeding are also clearly indicated.

REFERENCES.

Cathcart, E. P., and Murray, A. M. T. (1931): "A study in Nutrition. An inquiry into the diet of 154 families at St. Andrews." Great Britain: *Med. Res. Coun. Spec. Rep. Ser.*, No. 151.

Union of South Africa: Report on the inquiry into the expenditure of European families in certain urban areas, 1936. Pretoria: Government Printer, 1937.

Union of South Africa Yearbook. 1940, 21, 1011 (Age distribution of Natives).

Suggested diet for an urban African family consisting of a labourer, woman and children—aged 14, 10 and 1½ years (baby)—at a cost of £4 8s. for four weeks.

The following is a working example of a low cost diet which goes some way towards meeting essential requirements, with due regard to native custom and taste:—

Price List from which costs are estimated:

Mealie Meal: 2s. 6d. per 25 lbs., or 10 lbs. for 1s.
Sugar, Government: 2½d. per lb.
Bread, wholemeal: 6d. per 2 lb. loaf.
Dripping: 6d. per 1 lb.
Milk: 3d. per 1 pint.
Meat: 6d. per 1 lb.
Rice: 3d. per 1 lb.
Cabbage: 5d. per 1 lb.
Potatoes: 1s. per 10 lbs.
Tea: 2s. 3d. per 1 lb.
Beans: 3d. per 1 lb.
Samp: 5 lbs. for 9d., or 6 lbs. for 1s.
Amasi: 3d. per pint.
Mealies: 1d. each.
Raisins: 6d. per 1 lb.
Peanuts: 3d. per packet (about 3d. per 8 ozs.).

WEEKLY ANALYSIS.

Commodity and Quantity.	Price. £	s.	d.		Daily Average.
Mealie Meal: 8½ lbs.	0	0	10 *	...	1¼ lbs. per day.
Milk: 19 pints	0	4	9	...	2¾ pints per day.
Sugar: 30 ozs.	0	0	4½*	...	4 ozs. per day.
Tea: 3½ ozs.	0	0	5¾*	...	½ oz. per day.
Bread: 3 loaves	0	1	6	...	½ loaf* per day.
Dripping: 1¾ lbs.	0	0	10½	...	¼ lb. per day.
Vegetables and Fruit: 4s. 1½d.	0	4	1½	...	7d. per day.
Peanuts: 7d.	0	0	7	...	1d. per day.
Meat: 9 lbs.	0	4	6	...	1¼ lbs. per day.
Rice: 2 lbs.	0	0	6	...	Twice week.
Mahewu: 6d. at 2d.-3d. pint ...	0	0	6	...	Twice week.
Beans: 2 lbs.	0	0	6	...	Twice week.
Fish and Chips: 1s.	0	1	0	...	Twice week.
Mealies: 8 at 1d. each	0	0	8	...	Once week.
Samp: 2 lbs.	0	0	3½	...	Twice week.
Salt	0	0	6	...	——
	£1	1	11¾		
	£1	2	0 *		

* Approximately.

MEALS.

	£	s.	d.
Monday	0	3	1½
Tuesday	0	2	9
Wednesday	0	3	2
Thursday	0	2	11
Friday	0	3	1
Saturday	0	2	11½
Sunday	0	3	5¾
	£1	1	5¾
Salt (extra)	0	0	6
	£1	2	0*

Cost of Meals: £1 2s. 0d. per week.
£4 8s. 0d. per month.
* Approximately.

MENU FOR ONE WEEK.

	s.	d.	s.	d.
MONDAY:				
Breakfast:				
Mealie meal (1 lb. for porridge)	0	1*		
1½ pints milk	0	4½		
4 oz. sugar	0	0¾		
½ oz. tea	0	0¾		
			0	7
Lunch:				
Husband—				
Half loaf bread	0	3		
¼ lb. dripping	0	1½		
			0	4½
Family (i.e. wife and three children)—				
Vegetable soup and peanuts	0	5		
Dripping	0	1½		
			0	6½
Evening Meal:				
Liver, at 6d. per 1 lb.	1	0		
Vegetables, green	0	3		
Rice	0	3		
½ pint milk for baby	0	1½		
			1	7½
			3	1½
TUESDAY:				
Breakfast: As for Monday	0	7		
			0	7

	s.	d.	s.	d.
Lunch:				
Husband—				
Mahewu	0	3		
Fruit/tomatoes	0	3		
			0	6
Family—				
Bread, half-loaf	0	3		
Amasi, 1½ pints	0	4½		
			0	7½
Evening Meal:				
Beans, dried, 1 lb.	0	3		
4 ozs. dripping	0	1½		
Samp, 1 lb.	0	2		
Vegetables, green and root	0	6		
			1	2
			2	9
WEDNESDAY:				
Breakfast:				
As for Monday	0	7		
			0	7
Lunch:				
Husband—				
Fish and chips	0	6		
			0	6
Family—				
¾ lb. mealie meal	0	1*		
Peanuts	0	3		
1 pint milk	0	3		
			0	7
Evening Meal:				
Pluck	1	0		
Vegetables, green	0	3		
Potatoes	0	1½		
½ pint milk for baby	0	1½		
			1	6
			3	2
THURSDAY:				
Breakfast: As for Monday	0	7		
			0	7
Lunch:				
Husband—				
Green mealies	0	2		
½ pint milk	0	1½		
			0	3½

* Approximately.

	s.	d.	s.	d.
Family—				
Green mealies	0	6		
Fruit	0	3		
½ pint amasi	0	1½		
			0	10½
Evening Meal:				
Beans, 1 lb.	0	3		
4 ozs. dripping	0	1½		
Vegetables, green	0	6		
Samp	0	2		
½ pint milk for baby	0	1½		
			1	2
			2	11

FRIDAY:

Breakfast:				
As for Monday	0	7		
			0	7
Lunch:				
Husband—				
Mahewu	0	3		
Bread	0	3		
			0	6
Family—				
Vegetable soup	0	3		
Dripping	0	1½		
Bread	0	3		
			0	7½
Evening Meal:				
Mince	0	9		
Onions	0	3		
Potatoes	0	3		
Milk, ½ pint for baby	0	1½		
			1	4½
			3	1

SATURDAY:

Breakfast:				
As for Monday	0	7		
			0	7
Lunch:				
Husband—				
Fish and chips	0	6		
			0	6
Family—				
Mealie meal	0	1*		
Amasi, 1 pint	0	3		
			0	4

	s.	d.	s.	d.
Evening Meal:				
Stew meat	0	9		
Beans/peanuts	0	2		
Vegetables	0	6		
Milk, ½ pint for baby	0	1½		
			1	6½
			2	11½

SUNDAY:

	s.	d.	s.	d.
Breakfast:				
1 lb. mealie meal	0	1*		
1½ pints milk	0	4½		
			0	5½
Midday:				
Meat	1	0		
Vegetables, green	0	6		
Rice	0	3		
			1	9
Evening Meal:				
1 loaf bread	0	6		
½ lb. dripping	0	3		
1½ pints milk	0	4½		
Tea	0	0¾		
6 ozs. sugar	0	1*		
			1	3¼
			3	5¾

* Approximately.

B. E. SMITH,
Housecraft Organiser.

APPENDIX III.

Tables showing—

(a) Revealed income in ascending order in relation to expenditure on food and man value (as far as possible, 10s. groups have been selected).

(b) Expenditure on food in ascending order in relation to total income and man value (as far as possible, 5s. groups have been selected).

(c) Man value in ascending order in relation to revealed income and expenditure on food (as far as possible, variations of ·20 in man value have been selected).

Factors for "man value" taken from "Food the Deciding Factor," by F. Wokes, Penguin Special, 1941:—

		Factor for "Man Value."
Baby:	0-1 year	0·20
Child:	1-2 years	0·30
	2-3 years	0·40
	3-6 years	0·50
	6-8 years	0·60
	8-10 years	0·70
	10-12 years	0·80
	12-14 years	0·90
Girl above 14 years	... ...	0·83
Boy above 14 years	... ...	1·00
Woman	... ...	0·83
Man doing moderate work	... ...	1·00
Men and women above 60 years	... ...	0·70

N.B.—These tables are included for interest only and are extracts from the total 987 cases. They illustrate the point made in the report that there is no consistent relation between the size of the family, the income earned and the amount spent on food.

Total Income in Ascending Order in Relation to Expenditure on Food and Man Value.

(As far as possible, 10s. groups have been selected.)

Revealed Income.		Expenditure on Food.		Man Value.
£0 10 0	...	£2 9 10	...	2·13
1 0 0	...	1 1 1	...	3·66
1 10 0	...	1 0 5	...	3·66
2 0 0	...	1 18 4	...	2·86
2 10 0	...	1 8 9	...	3·63
3 0 0	...	2 17 3	...	3·66
3 10 0	...	1 9 10	...	3·56
4 0 0	...	1 6 3	...	3·23
4 10 0	...	2 19 7	...	3·56
5 0 0	...	4 1 2	...	3·66
5 10 0	...	2 2 8	...	3·66
6 0 0	...	2 18 0	...	3·53
6 10 0	...	3 9 6	...	4·23
7 0 0	...	3 13 9	...	4·13
7 10 0	...	2 15 0	...	3·83
8 0 0	...	3 19 7	...	3·43
8 10 0	...	2 11 9	...	4·43
9 0 0	...	3 7 3	...	4·53
9 10 0	...	5 1 0	...	3·13
10 0 0	...	4 4 4	...	4·36
10 10 0	...	2 10 9	...	3·86
11 0 0	...	5 9 6	...	4·96
11 10 0	...	3 12 3	...	5·26
12 0 0	...	5 19 7	...	6·20
12 10 0	...	4 15 2	...	6·29
13 0 0	...	3 2 11	...	3·53
13 10 0	...	3 11 9	...	3·29
14 0 0	...	4 9 9	...	5·86
14 6 6	...	4 18 3	...	6·05
15 0 0	...	3 10 6	...	2·83
16 0 0	...	4 9 3	...	2·83
18 11 0	...	1 11 3	...	1·83
18 17 0	...	4 13 5	...	3·22
20 0 0	...	4 16 0	...	3·66

Expenditure on Food in Ascending Order in Relation to Revealed Income and Man Value.

(As far as possible, 5s. groups have been selected.)

Expenditure on Food.		Revealed Income.		Man Value.
£0 10 11	...	£4 0 0	...	1·83
0 15 3	...	3 0 0	...	3·43
1 0 0	...	3 12 0	...	1·83
1 5 0	...	2 0 0	...	2·13
1 10 0	...	4 5 0	...	2·83
1 15 1	...	3 0 0	...	1·83
1 15 1	...	1 17 6	...	4·46
2 0 0	...	9 0 0	...	1·83
2 5 0	...	4 0 8	...	5·63
2 10 0	...	4 0 0	...	2·83
2 15 0	...	6 0 0	...	2·83
3 0 0	...	7 10 0	...	2·40
3 5 3	...	1 10 0	...	1·83
3 10 1	...	5 10 0	...	2·83
3 15 1	...	5 8 0	...	6·03
4 0 0	...	6 4 0	...	3·66
4 5 11	...	7 5 0	...	5·62
4 10 2	...	5 0 0	...	5·52
4 15 2	...	12 10 0	...	6·29
5 0 6	...	7 10 0	...	2·83
5 4 0	...	9 0 0	...	5·16
5 10 8	...	6 10 0	...	4·86
5 16 0	...	9 10 8	...	5·93
6 5 2	...	7 10 0	...	5·83
6 9 11	...	6 10 0	...	6·39
6 16 8	...	10 0 0	...	4·66
7 4 6	...	12 0 0	...	7·86
7 9 8	...	12 10 8	...	3·83
8 1 10	...	9 7 4	...	7·76
9 12 1	...	12 0 0	...	3·53

Man Value in Ascending Order in Relation to Revealed Income and Expenditure on Food.

(As far as possible, variations of ·20 in man value have been selected.)

For factors for "man value" see page 43.

Man Value.		Revealed Income.		Expenditure on Food.
1·03	...	£1 0 0	...	£0 12 4
1·50	...	5 5 0	...	1 12 7
1·63	...	1 10 0	...	0 11 8
1·83	...	5 0 0	...	2 6 9
2·03	...	4 16 0	...	1 8 2
2·23	...	4 16 0	...	2 11 9
2·43	...	5 8 0	...	1 18 5
2·63	...	4 15 0	...	2 14 1
2·83	...	5 0 0	...	3 1 4
3·03	...	5 10 0	...	3 5 10
3·23	...	4 8 0	...	2 8 7
3·43	...	4 15 0	...	2 3 7
3·63	...	4 10 0	...	2 1 0
3·83	...	7 0 0	...	3 11 1
4·03	...	4 16 0	...	2 4 2
4·23	...	5 10 0	...	3 11 4
4·43	...	4 0 0	...	2 2 3
4·63	..	5 14 0	...	1 18 4
4·83	...	5 0 0	...	3 5 6
5·03	...	5 8 0	...	2 7 6
5·23	...	5 8 0	...	4 4 2
5·43	...	6 0 0	...	3 7 11
5·63	...	4 0 8	...	2 5 0
5·83	...	4 10 0	...	1 19 11
6·03	...	5 10 0	...	3 6 9
6·23	...	1 12 0	...	2 1 11
6·45	...	3 10 0	...	2 5 9
6·66	...	5 0 0	...	3 16 7
6·86	...	8 0 0	...	5 17 6
7·06	...	6 16 0	...	3 11 0
7·26	...	5 12 6	...	3 7 8
7·46	...	8 14 0	...	3 7 11
7·66	...	4 6 6	...	1 16 7
7·86	...	12 0 0	...	7 4 6
8·47	...	7 0 0	...	3 15 10
8·69	...	7 0 0	...	3 15 5
8·79	...	5 7 6	...	1 19 2
9·32	...	8 0 0	...	3 5 6

QUESTIONNAIRE ON ECONOMIC CONDITIONS OF JOHANNESBURG BANTU.

1. (a) Name.
   (b) Address.
2. Tribe.
3. Is your permanent home in town or in the country?
4. How many people live in your house?
5. Number and age of children.
6. (a) Husband's salary.
   (b) Is any allowance made for housing or food? (Specify details.)
7. Place of employment.
8. How long have you been in your present employment?
9. What increase in salary have you had?
10. What does your wife earn?
11. How does she earn this money?
12. What other people in your house are earning?
13. How much of this money does each give to the support of your house?

Person.	Money Given.

14. How much per month do you pay for the following?

Rent.	Medicine and Doctors.
Food.	Clothes.
Fuel and Light.	Transport (daily, weekly or monthly).
School Fees.	Pleasure.
Church Fees.	Other Expenses.

15. Do you belong to any benefit society (burial, insurance, etc.)?

Society.	Monthly Contribution.

16. How much per month do you put in Savings Bank?
17. How much have you in Savings Bank?
18. Do you possess any stock or other property?
19. Are you in debt, and to what extent? What do you owe for:—

Furniture.	Clothing.
Rent.	Food.
School and Church Fees.	Other Debts.

General Remarks.

Trades and Professions of 974 Men in 956 Households

(indicating average individual income and average household expenditure).

Trade or Profession.	Total in Trade.	Average Income.	Average Expenditure.
EUROPEAN:			
Factories	149	£5 14 2	£5 12 1
Shops	133	6 2 5	5 15 8
Municipal Departments	90	3 19 4	3 19 10
Engineering Trade	64	5 3 2	5 8 1
Other European Industry	45	7 1 2	6 2 2
Building Trade	37	4 15 8	5 4 3
Motor Industry	37	5 19 0	5 10 1
Government and Public Works ...	35	6 4 6	5 11 7
Mining Industry	34	4 14 4	4 17 10
Wholesale Merchants	32	6 10 2	6 5 4
Contractors	16	4 10 5	4 17 10
Domestic Work	15	4 13 0	5 5 1
Laundry and Dry Cleaning ...	12	5 15 0	6 5 2
Clerical Work	8	7 5 3	5 10 11
Chauffeurs	6	6 14 9	5 11 10
Liquor Trade	2	5 5 0	5 13 11
Total	715		
AFRICAN:			
Hawkers	44	£6 15 11	£6 5 11
Tailors	15	6 12 8	6 6 1
Other African Industry — Marewu Sellers, Bangle Makers, Watchmakers, Photographers, Plumbers, Mattress Makers ...	15	5 11 2	5 16 9
Boot Repairers	8	5 10 11	5 10 5
Teachers	7	9 2 2	8 10 2
Evangelists and Ministers ...	6	7 17 3	6 3 9
Shopkeepers (own account) ...	6	9 7 0	9 17 1
Carpenters	3	11 16 8	6 9 2
Taxi Drivers	3	6 8 4	6 17 6
Barbers	2	7 17 6	6 16 2
Herbalists	2	6 12 6	5 18 5
Bakers	1	9 0 0	6 11 9
Total	112		
Unemployed	147	2 11 8	4 12 5

European Trade	715
African Trade	112
Unemployed	147
Total	974

Analysis of 182 Families of Five, indicating Age Distribution, Total Income in ascending order, Total Expenditure and Expenditure on Food. (N.B.—Households containing sub-tenants have been excluded from this table.)

Age Distribution.							Total Income.	Total Expenditure.	Expenditure on Food.
Under 2	2–6	7–14	15–18	19 and over	Adults.	Total No. Persons in Family.	£ s. d.	£ s. d.	£ s. d.
1	—	1	—	—	3 ...	5	—	5 17 11	2 15 0
—	2	—	—	—	3 ...	5	—	4 18 11	2 11 2
—	3	—	—	—	2 ...	5	—	5 14 9	3 4 4
—	2	1	—	—	2 ...	5	0 10 0	4 13 8	2 6 11
1	1	—	2	—	1 ...	5	1 0 0	6 14 10	3 7 7
—	1	—	1	1	2 ...	5	1 0 0	5 3 4	2 14 7
1	1	1	—	—	2 ...	5	1 0 0	4 2 0	1 3 11
—	—	1	2	—	2 ...	5	1 0 0	4 19 11	2 15 7
—	2	1	—	—	2 ...	5	1 0 0	3 6 2	1 10 6
1	1	—	—	—	3 ...	5	1 10 0	2 17 9	1 8 1
—	—	2	1	—	2 ...	5	1 10 0	2 16 7	0 14 1
—	2	1	—	—	2 ...	5	1 10 0	5 10 6	2 11 8
—	—	2	1	1	1 ...	5	1 17 6	4 2 0	1 12 1
—	—	2	—	1	2 ...	5	2 0 0	8 9 10	4 12 7
—	1	2	—	—	2 ...	5	2 0 0	5 7 0	2 13 7
1	—	2	—	—	2 ...	5	2 0 0	4 19 8	2 8 5
—	2	1	—	—	2 ...	5	2 5 0	3 13 3	0 18 11
1	—	1	—	—	3 ...	5	2 10 0	4 6 3	2 5 10
—	—	2	1	—	2 ...	5	2 17 6	3 14 0	1 17 2
—	—	1	1	1	2 ...	5	3 0 0	5 7 9	2 19 9
—	2	1	—	—	2 ...	5	3 0 0	5 0 4	1 17 6
—	2	1	—	—	2 ...	5	3 0 0	2 17 8	0 15 3

Appendix VI—Continued.

Age Distribution. Under 2	2–6	7–14	15–18	19 and over	Adults.	Total No. Persons in Family.	Total Income. £ s. d.	Total Expenditure. £ s. d.	Expenditure on Food. £ s. d.
—	1	1	2	—	1	5	3 0 0	4 10 9	2 1 6
—	—	2	—	—	3	5	3 5 0	3 19 6	0 19 6
1	2	—	—	—	2	5	3 5 0	7 7 5	3 14 1
1	—	1	—	—	3	5	3 5 0	5 7 9	2 8 11
—	1	1	—	—	3	5	3 10 0	6 17 5	3 15 11
—	—	1	—	—	4	5	3 10 0	5 2 4	2 7 5
—	—	3	1	—	1	5	3 10 0	3 14 3	1 7 0
—	2	—	—	—	3	5	3 10 0	4 5 3	2 11 0
1	—	1	—	1	2	5	3 10 0	6 6 10	4 12 3
1	1	1	—	—	2	5	3 12 0	5 14 1	2 11 7
—	—	1	2	—	2	5	3 12 0	6 15 2	3 19 7
1	1	1	—	—	2	5	3 12 0	4 8 1	1 16 5
—	—	1	1	—	3	5	3 12 0	5 11 8	2 14 8
—	2	—	1	1	1	5	3 12 6	4 4 11	2 8 2
—	—	3	—	—	2	5	4 0 0	4 13 9	2 2 9
2	1	—	—	—	2	5	4 0 0	4 16 10	2 10 0
1	1	1	—	—	2	5	4 0 0	6 7 9	3 8 11
—	1	1	—	1	2	5	4 0 0	3 18 8	1 10 1
1	1	1	—	—	2	5	4 0 0	3 10 1	1 6 3
—	1	2	—	—	2	5	4 0 0	5 4 8	2 0 8
—	1	2	—	—	2	5	4 0 0	5 1 4	2 8 5
—	1	2	—	—	2	5	4 0 0	4 5 9	1 7 9
—	—	2	—	1	2	5	4 0 0	5 14 6	2 19 5
—	2	1	—	—	2	5	4 0 0	5 11 8	3 8 7
1	1	1	—	—	2	5	4 0 0	6 3 10	3 9 3

Age Distribution.							Total Income.	Total Expenditure.	Expenditure on Food.
Under 2	2–6	7–14	15–18	19 and over	Adults.	Total No. Persons in Family.	£ s. d.	£ s. d.	£ s. d.
—	—	2	1	—	2 ...	5	4 0 0	4 13 8	1 15 10
—	1	3	—	—	1 ...	5	4 0 0	5 1 9	2 9 9
1	2	—	—	—	2 ...	5	4 0 0	4 5 8	1 14 3
—	—	2	1	—	2 ...	5	4 0 0	7 2 7	3 5 9
—	—	—	—	4	1 ...	5	4 0 0	5 5 4	2 8 8
1	—	—	1	1	2 ...	5	4 0 0	6 7 0	2 18 0
—	—	—	—	3	2 ...	5	4 0 0	3 14 9	2 8 0
—	—	2	1	1	1 ...	5	4 0 0	4 16 10	2 17 0
—	—	1	2	—	2 ...	5	4 2 0	5 8 7	2 13 3
1	1	1	—	—	2 ...	5	4 4 0	4 16 2	1 15 4
—	—	3	1	—	1 ...	5	4 5 0	5 16 6	2 11 8
—	1	2	—	—	2 ...	5	4 5 0	6 5 4	2 18 6
—	2	1	—	—	2 ...	5	4 6 0	6 13 9	3 9 7
—	1	2	—	—	2 ...	5	4 7 0	6 8 7	2 18 7
—	—	1	1	2	1 ...	5	4 7 6	5 10 0	3 5 3
1	1	—	—	—	3 ...	5	4 8 0	5 3 7	2 8 7
—	—	3	—	—	2 ...	5	4 8 0	4 5 6	1 15 11
—	—	1	1	—	3 ...	5	4 10 0	5 15 8	2 13 6
—	—	3	—	—	2 ...	5	4 10 0	5 1 7	2 11 9
—	1	2	—	—	2 ...	5	4 10 0	5 3 3	2 1 0
—	1	1	—	—	3 ...	5	4 10 0	5 0 4	2 10 9
—	1	1	1	—	2 ...	5	4 10 0	4 14 0	1 13 7
—	2	1	—	—	2 ...	5	4 10 0	4 11 10	1 11 1
1	1	1	—	—	2 ...	5	4 10 0	3 10 10	1 3 2
—	2	1	—	—	2 ...	5	4 10 0	4 9 5	2 1 9

Age Distribution.								Total Income.	Total Expenditure.	Expenditure on Food.
Under 2	2–6	7–14	15–18	19 and over	Adults.		Total No. Persons in Family.	£ s. d.	£ s. d.	£ s. d.
1	—	—	1	1	2	...	5	4 10 0	6 5 6	3 16 3
1	—	—	1	1	2	...	5	4 10 0	5 16 2	3 19 9
—	2	1	—	—	2	...	5	4 12 6	5 0 7	2 11 3
—	2	1	—	—	2	...	5	4 15 0	5 17 0	3 2 6
1	1	1	—	—	2	...	5	4 15 0	4 18 2	2 3 2
1	1	1	—	—	2	...	5	4 15 0	4 17 3	3 0 1
—	2	1	—	—	2	...	5	4 16 0	5 18 2	2 13 2
1	1	1	—	—	2	...	5	4 16 0	4 18 5	2 4 11
—	2	1	—	—	2	...	5	4 16 6	6 5 3	3 1 2
—	1	2	—	—	2	...	5	5 0 0	6 7 6	3 8 2
—	1	2	—	—	2	...	5	5 0 0	6 10 10	3 6 6
—	—	2	1	—	2	...	5	5 0 0	5 18 10	2 18 6
—	2	1	—	—	2	...	5	5 0 0	5 13 9	2 7 3
—	2	1	—	—	2	...	5	5 0 0	6 1 8	2 4 9
—	2	—	—	—	3	...	5	5 0 0	5 2 9	2 11 5
1	—	3	—	—	1	...	5	5 0 0	8 13 1	4 11 9
—	3	—	—	—	2	...	5	5 0 0	4 18 2	1 18 4
1	1	1	—	—	2	...	5	5 0 0	5 16 5	3 2 9
—	2	—	—	—	3	...	5	5 0 0	3 16 8	1 13 5
1	1	—	—	—	3	...	5	5 0 0	3 17 0	0 18 0
—	2	1	—	—	2	...	5	5 0 0	4 8 3	2 5 4
—	1	1	—	1	2	...	5	5 0 0	3 9 3	1 7 10
—	—	—	2	2	1	...	5	5 0 0	5 19 4	3 17 5
—	—	2	1	—	2	...	5	5 2 0	4 2 8	1 18 3
1	1	—	—	—	3	...	5	5 4 0	5 10 11	2 19 1

Age Distribution.							Total Income.	Total Expenditure.	Expenditure on Food.
Under 2	2–6	7–14	15–18	19 and over	Adults.	Total No. Persons in Family.	£ s. d.	£ s. d.	£ s. d.
1	2	—	—	—	2 ...	5	5 5 0	4 16 7	2 7 6
1	1	—	1	—	2 ...	5	5 6 0	6 19 4	3 12 6
—	—	2	1	—	2 ...	5	5 10 0	7 4 7	3 6 11
—	—	—	2	1	2 ...	5	5 10 0	5 13 6	1 18 4
—	2	1	—	—	2 ...	5	5 10 8	6 15 1	3 8 5
1	—	2	—	—	2 ...	5	5 10 8	6 16 10	3 14 7
—	—	3	—	—	2 ...	5	5 10 8	4 13 9	1 14 7
1	1	1	—	—	2 ...	5	5 10 8	5 8 0	2 12 0
—	—	—	2	1	2 ...	5	5 10 8	4 16 3	2 5 5
—	—	2	—	—	3 ...	5	5 11 0	5 7 7	2 4 8
—	2	1	—	—	2 ...	5	5 11 4	6 11 1	3 10 6
1	2	—	—	—	2 ...	5	5 12 0	7 0 0	3 12 7
—	1	1	—	—	3 ...	5	5 12 0	3 15 6	0 9 1
—	—	1	1	2	1 ...	5	5 12 0	6 1 10	3 2 0
—	—	2	1	—	2 ...	5	5 14 0	5 14 1	3 19 2
—	1	2	—	—	2 ...	5	5 15 0	4 16 3	1 14 3
1	—	2	—	—	2 ...	5	5 15 0	6 7 8	2 11 0
—	—	2	1	—	2 ...	5	5 15 0	5 6 3	2 4 7
—	1	1	—	—	3 ...	5	5 15 0	4 7 3	2 10 9
—	1	1	—	—	3 ...	5	5 16 0	6 8 3	2 12 8
1	1	1	—	—	2 ...	5	5 16 6	5 8 5	2 9 2
—	1	2	—	—	2 ...	5	6 0 0	4 15 0	1 18 6
—	1	—	—	2	2 ...	5	6 0 0	5 3 8	2 0 3
1	1	1	—	—	2 ...	5	6 0 0	3 16 1	1 0 11
1	—	—	2	—	2 ...	5	6 0 0	5 13 1	2 16 9

Age Distribution. Under 2	2–6	7–14	15–18	19 and over	Adults.	Total No. Persons in Family.	Total Income. £ s. d.	Total Expenditure. £ s. d.	Expenditure on Food. £ s. d.
—	1	2	—	—	2	5	6 0 0	5 8 0	2 11 6
—	—	1	1	1	2	5	6 0 0	7 2 3	3 14 1
1	1	1	—	—	2	5	6 0 0	5 12 2	2 11 7
—	1	2	—	—	2	5	6 0 0	7 8 9	4 2 3
1	2	—	—	—	2	5	6 0 0	5 7 0	2 14 0
1	1	—	—	1	2	5	6 0 0	4 5 7	1 5 10
—	1	1	1	—	2	5	6 0 0	7 1 5	3 12 5
1	1	1	—	—	2	5	6 0 0	5 8 0	2 7 0
—	—	—	—	3	2	5	6 0 0	5 5 4	2 13 7
1	1	—	—	—	3	5	6 0 0	6 0 5	4 0 1
—	—	1	—	2	2	5	6 0 0	6 3 7	4 0 11
—	1	—	—	—	4	5	6 0 6	4 7 10	1 15 10
1	1	1	—	—	2	5	6 0 8	4 11 11	2 2 4
1	—	1	1	—	2	5	6 0 8	5 9 7	2 5 1
2	1	—	—	—	2	5	6 5 0	5 0 0	1 13 3
—	—	1	1	1	2	5	6 5 0	5 1 4	2 17 6
—	2	1	—	—	2	5	6 6 0	5 16 5	2 13 3
—	—	—	—	3	2	5	6 6 0	7 9 6	4 2 9
—	—	—	2	1	2	5	6 8 0	5 11 1	2 12 7
1	—	1	—	—	3	5	6 8 0	4 16 9	2 15 10
—	1	2	—	—	2	5	6 10 0	6 3 1	3 2 7
1	1	1	—	—	2	5	6 10 0	6 9 11	2 13 11
—	—	2	—	—	3	5	6 10 0	6 16 1	3 9 10
—	1	2	—	—	2	5	6 12 0	5 9 1	2 6 0
—	2	1	—	—	2	5	6 15 0	5 12 4	1 18 5

Age Distribution.							Total Income.	Total Expenditure.	Expenditure on Food.
Under 2	2–6	7–14	15–18	19 and over	Adults.	Total No. Persons in Family.	£ s. d.	£ s. d.	£ s. d.
—	1	—	—	—	4	5	6 15 0	7 2 10	4 18 0
—	1	1	—	1	2	5	7 0 0	6 3 3	3 7 3
—	2	1	—	—	2	5	7 0 0	4 13 11	1 18 1
—	1	1	1	—	2	5	7 0 0	5 17 3	3 13 2
—	—	1	1	1	2	5	7 2 8	6 8 0	4 11 5
—	—	3	—	—	2	5	7 8 0	8 4 7	4 8 3
—	1	1	—	2	1	5	7 10 0	5 6 5	3 6 1
—	1	1	1	1	1	5	7 10 0	5 5 10	2 14 11
—	—	3	—	—	2	5	7 10 0	4 13 7	2 10 3
—	2	1	—	—	2	5	7 10 8	6 2 10	2 3 3
—	—	—	2	1	2	5	7 15 0	6 12 9	3 0 7
—	1	1	—	—	3	5	8 0 0	5 11 8	2 15 6
—	—	2	1	—	2	5	8 0 0	6 0 8	3 11 10
—	—	1	1	—	3	5	8 0 0	6 9 3	3 1 1
—	—	2	—	—	3	5	8 0 0	8 0 5	4 1 0
1	—	2	—	—	2	5	8 0 0	7 7 7	3 19 7
—	—	—	1	2	2	5	8 0 0	4 17 1	2 9 9
—	—	3	—	—	2	5	8 0 0	5 16 0	3 4 3
—	—	3	—	—	2	5	8 0 8	5 6 8	2 12 11
—	—	2	1	—	2	5	8 2 0	5 7 10	3 0 3
—	2	—	—	1	2	5	8 2 6	5 14 5	2 17 3
—	—	—	—	3	2	5	8 5 0	8 15 6	4 16 0
—	1	—	—	2	2	5	8 7 0	6 3 5	3 7 11
1	2	—	—	—	2	5	8 10 0	5 15 7	3 1 0
—	—	1	—	—	4	5	8 15 0	6 7 9	4 10 11

Age Distribution.								Total Income.	Total Expenditure.	Expenditure on Food.
Under 2	2–6	7–14	15–18	19 and over	Adults.		Total No. Persons in Family.	£ s. d.	£ s. d.	£ s. d.
—	—	2	1	—	2	...	5	9 0 0	6 12 7	3 7 3
—	—	1	1	—	3	...	5	10 0 0	7 11 11	4 4 4
—	1	1	—	—	3	...	5	10 0 0	4 17 7	0 18 0
—	—	—	2	1	2	...	5	10 0 0	4 18 3	2 2 3
—	1	1	1	—	2	...	5	10 10 0	9 0 10	2 10 9
—	—	1	—	2	2	...	5	11 5 0	6 12 1	3 11 6
—	—	1	1	1	2	...	5	11 6 0	5 18 8	3 5 5
—	1	1	—	—	3	...	5	12 10 8	13 19 11	7 15 2
—	—	—	—	3	2	...	5	12 12 6	7 1 7	4 12 9
—	2	1	—	—	2	...	5	13 0 0	6 13 6	3 2 11

Appendix VII.

Comparative Table of Population,

showing Europeans and Africans of the Union, Witwatersrand and Johannesburg in 1921, 1936, 1941. (These figures have been supplied by courtesy of the Acting Director of Census.)

Area and Race.	Census, 1921.	Census, 1936.	Census, 1941.*
Europeans:			
Union, All Areas	1,519,488	2,003,857	2,188,200
Union, Urban	847,508	1,307,386	1,500,000
Witwatersrand	231,111	402,223	498,000
Johannesburg and Suburbs	152,597	257,671	300,000
Natives (both sexes):			
Union, All Areas	4,697,813	6,596,689	7,250,700
Union, Urban	587,000	1,141,642	1,230,000
Witwatersrand	278,274	570,726	650,000
Johannesburg and Suburbs	118,138	229,122	270,000
Native Females (all ages):			
Union, All Areas	2,315,416	3,284,038	3,617,400
Union, Urban	147,293	356,874	425,000
Witwatersrand	28,806	107,286	133,000
Johannesburg and Suburbs	13,479	60,992	75,000

* Estimated.

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