

idea of encouraging duck-rearing in the province, on the basis of the experience gained in the military venture.

The export of poultry and eggs from Bengal is now controlled, no one being allowed to take more than one bird and 6 eggs out of the province, except under permit. We understand that the Government of Bengal are now taking some steps to develop poultry farms and encourage the rearing of poultry in villages.

25. **Vegetables.**—Both Indian vegetables and vegetables of the European type are produced and consumed in Bengal. The latter grow well anywhere in the province during the cold weather and can be grown in the hills throughout the year. In 1944 there was a shortage of all kinds of vegetables for the civilian market, and prices in Calcutta were 2 to 3 times in excess of the pre-war level. A large farm for the production of vegetables for the Army has been created in Darjeeling, a small proportion of its produce being available for the civilian market. The Bengal Government have also developed vegetable farms in Darjeeling and a scheme has been sanctioned for the creation of farms in other centres. It is proposed to put 5,000 acres near Calcutta, and 1,000 acres somewhere in East Bengal, probably near Dacca, under cold weather vegetables. No serious attempt has been made by Government to control the price of vegetables.

26. The supply of home-grown potatoes in Bengal is normally insufficient for the needs of the province. The average annual imports from 1937 to 1942, which included imports from Burma, were about 62,000 tons. Since 1942 the import from Burma, which amounted to 40 per cent of the total imports, has ceased, and provinces which previously supplied potatoes to Bengal have restricted or prohibited exports. A small export to Bengal was allowed in 1944 by the Government of Madras, and in September 1944, the Government of Bihar temporarily removed the ban on exports. The shortage of seed potatoes is an obstacle to an immediate increase in the production of potatoes within the province. Sweet potatoes are widely grown in Bengal, but no data about the quantities produced are available. Their price in the Calcutta market in 1944 was one to three annas per pound. Ordinary potatoes were selling at about 8 times this price.

27. The present scarcity of vegetables of all kinds obviously calls for a vigorous "grow more vegetables" campaign. We feel that this is an important matter which should receive the special attention of Government. As regards control of price, we would draw attention to the fact that in England the price of vegetables has been fixed by the Government, although the Government does not itself purchase vegetables for distribution, and that prices have been successfully kept in check. Vegetables are rapidly perishable. If reasonable prices are fixed and made known to the public, and the public learns to insist on paying no more than the fixed rate, opportunities for refusing sale and subsequent disposal in the black market are limited. In Bombay vegetables are sold at fixed rates in ration shops. The sale of even a limited quantity of vegetables at controlled prices would help to keep the general price level down. We have little information about the fruit position; but it appears that fruits, like vegetables, are scarce and dear. The quantities reaching the Calcutta market are considerably less than before the war. The scarcity is no doubt due to approximately similar causes to those which have reduced supplies of other supplementary foods.

28. **Mustard oil.**—About half of Bengal's supply of mustard seeds for the manufacture of oil formerly came from other provinces. Here again, imports have almost entirely ceased owing to embargoes on export imposed by other provinces. The actual quantity imported annually from 1937 to 1942 averaged

about 170,000 tons. This would yield some 60,000 tons of oil, equivalent in caloric value to perhaps 140,000 tons of rice.

#### B.—COMMENT ON PROTECTIVE AND SUPPLEMENTARY FOODS.

29. We have emphasized the value of non-cereal foods from the nutritional standpoint. Another point to which attention must be drawn is that the aggregate contribution made by such foods to the quantitative food needs of the province is by no means negligible. Pulses, fish, potatoes and vegetable-oil are the most important in this respect. We have dealt with the matter in some detail because we feel that it must be given a prominent position in the programme of reconstruction in Bengal. Clearly, there is not one single problem, but many both large and small which require solution. Few of these appear, however, to be insoluble. We would lay immediate stress on the need for the following: an improvement in distribution of pulses on an all-India basis, with particular reference to the requirements of Bengal; more motor boats for Bengal and more ice and its better distribution; more potatoes for seed and consumption; an energetic effort to grow more vegetables; closer collaboration with the military about the question of military purchases. With regard to the last, the establishment of Regional Control Boards, including military and civil representatives, to co-ordinate military purchases of various foods, is strongly to be recommended. We hope that the efforts of the army to develop its own sources of supply will be intensified and that when the war is over arrangements will be made to utilize and develop certain of these sources to meet civilian needs. It may be added that many of the problems considered in this Chapter concern not only the Bengal Government, but also Governments of provinces which normally fulfilled Bengal's demands for non-cereal foods, and the Government of India. We are aware that shortage and dearness of supplementary foods are not peculiar to Bengal at the present time. A similar situation exists in many other parts of the country. It is, however, particularly urgent and serious in Bengal.

#### C. THE SUBSTITUTION OF RICE BY WHEAT.

30. In view of the present all-India shortage of rice, the use of wheat and other cereals in place of rice is a question of importance. During the famine large supplies of wheat and millets were sent to Bengal and helped to relieve food shortage. They were supplied to rice eaters through the free kitchens but efforts to persuade people to eat them in their homes in place of rice met with little success. Reference has already been made to the unpopularity of *bajra* and other millets. Wheat is somewhat more acceptable, but in general is consumed with reluctance by habitual rice-eaters. When in Bengal, we were informed of the difficulties of increasing the offtake of wheat and we visited numerous grain stores in which quantities of wheat, mainly in the form of *atta*, were deteriorating for lack of demand. In Travancore we found a similar situation. It may be added that from the standpoint of nutrition, the partial substitution of rice by wheat is a good thing, since wheat is richer in protein and certain vitamins than rice.

31. The reasons why little progress has been made in increasing the consumption of wheat by rice-eaters may be briefly analysed. Wheat as a staple food is eaten in two principal forms: as bread, or as unleavened cakes, known as *chappaties*. In this country bread is eaten only by well-to-do people and bakeries are confined to towns and cities. The domestic baking of bread is unknown, except possibly in limited areas in the North-West. To make *chappaties* an iron grid is needed, and it takes skill and experience to produce a light and palatable *chappati*. The poor rice-eater does not possess the necessary iron utensil and if he did would not know how to use it. Further, *chappaties* as a food differ in bulk and consistency from a bowl of rice. The rice-eater is accustomed to bulky meals of soft consistency which give him a

feeling of repletion, and does not relish more concentrated food which needs chewing.

32. In certain parts of the country wheat is eaten in small amounts by rice-eaters in the form of special preparations made from *atta* or semolina. Generally speaking, this habit is confined to the middle classes. Such preparations add variety to a diet largely composed of rice, but are not taken as a staple article of diet to replace rice. In the same way, people in Europe or America may take some rice in the form of curries or puddings, while the bulk of their diet is made up of other foods.

33. In wheat-eating areas whole wheat is stored as such and, ground into *atta* in mills or stone *chakkies* before being made into *chappaties*. It is not stored in the form of *atta*. In Bengal there are few wheat mills outside Calcutta and the people do not possess stone *chakkies*. Hence wheat sent to Bengal has to be ground before distribution, mainly in Calcutta, and the resulting ground flour or *atta* readily goes bad on storage. There would be no point in distributing unground whole wheat, since it is difficult to use wheat in this form, and as has been said the people have no facilities for grinding it. In Bombay, on the other hand, *chakkies* are generally available and wheat can be distributed unground.

34. We noted that in Travancore tapioca is preferred to wheat as an alternative to rice largely because people are used to it and it can be cooked in the same way as rice. Tapioca is an inferior starchy food, containing less than one per cent. of protein as compared with 11 to 12 per cent in wheat. We may also refer to the experience of Ceylon which, before the outbreak of the war with Japan, imported over two-thirds of her rice supplies and has since been forced to consume Australian wheat as an alternative. The following is an extract from a recent report on the food situation in Ceylon:

"The change-over of the diet of the people from rice to substitutes was not done in one stroke nor without disappointments and tears. At first, whole wheat was issued and used by the population in the same way as rice. Government too put out propaganda, during the early days of the change-over, trying to teach people how wheat could be boiled like rice after being broken up or roasting, or how local preparations could be made from ground wheat exactly in the same manner as with rice flour. Failure of this plan to produce in wheat an exact substitute for rice was soon discovered and, under stress of necessity, the preparation and serving of wheat flour in the form of bread (baked in European style) was popularised, in addition to the use of flour (maida) for whatever local forms of preparations for which it was suitable. Vigorous propaganda was carried out through schools, local Government Bodies and health officers, in all the languages of the country by lectures, demonstrations and posters, explaining the value of bread and the methods of preparation of the more successful varieties of dishes according to styles with which the people were familiar. It was pointed out that while there was bread available to eat there was no necessity to starve; and bread was available outside the ration. Government vigorously encouraged the establishment of bakeries throughout the country, including the rural areas and estates. Large numbers of bakeries have in fact been so established and the consumption of bread (as baked in European style) has increased considerably. Bread is eaten with curry or chutney".

35. The problem of increasing the consumption of wheat and other cereals by rice eaters is obviously a most difficult one and we do not find it easy to make constructive suggestions. As long as rice is available, rice eaters in general will consume it in preference to other grains and in such circumstances "eat more wheat" campaigns are not likely to be very effective. Propaganda based on nutritional arguments might, however, carry some weight with certain sections of the public. Even when shortage of rice makes the consumption of alternative foods necessary, mere visual and verbal propaganda by itself cannot

achieve much in changing the habits and preferences of the mass of the population. Such propaganda must be reinforced by practical demonstration. Suitable recipes must be devised and popularized by sale in canteens, government restaurants, etc. Before undertaking an educational campaign, it is essential to be fully informed about the cooking habits and tastes of the people and their facilities for adopting unfamiliar methods of cooking (utensils, etc.). More use could be made of women for studying domestic food questions, and the improvement of methods of preparing and cooking food, and also for teaching the public about desirable changes in diet—for work, in fact, on what has been called the "Kitchen Front" in England. Domestic science institutions have played a useful part on the "Kitchen Front" in England and other countries and we feel that they could also do so in India.

36. If school-feeding schemes are developed, alternative cereals could be used for school meals, as in Cochin, and their offtake thereby increased. Further, if children learn to take such foods, they may carry the preference into later life. Children are more flexible in their dietary habits than adults.

37. Whatever methods are adopted in the attempt to encourage the use of wheat in place of rice, progress is likely to be slow. We feel, however, that in view of the position of Bengal as regards rice supplies, steady and persistent efforts should be made in that province to increase the consumption of wheat, particularly in urban areas. It is obviously easier to influence people in cities and towns than the rural population. A greater offtake of wheat under existing rationing schemes is most desirable in connection with Bengal and all-India food policy. The problem of how to wean rice-eaters from their determined preference for a food in short supply and reluctance to turn to alternative grains is, as we have already pointed out, not peculiar to Bengal, but is of all-India importance.

J. A. WOODHEAD, *Chairman*

S. V. RAMAMURTY

MANILAL B. NANAVATI

M. AFZAL HUSAIN\*

W. R. AYKROYD

R. A. GOPALASWAMI, *Secretary*  
New Delhi, the 10th April 1945

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\* Signed subject to separate minute.

## MINUTE BY MR. M. AFZAL HUSAIN

The following minute sets out briefly the conclusions, which I have reached in respect of the questions of the existence of a carry-over, and the effects on the economy of Bengal of the inter-provincial trade barriers. It has been shown, in Section A of part I of the minute, that during recent years, and particularly in the beginning of 1943, there was no carry-over. In Section B the course of events leading to the famine of 1943 has been traced from 1941, and it has been shown that the shortage (considered in Section C) was really large and could not be made up without imports from other provinces. Section D shows that the shortage was aggravated by Calcutta remaining on the Bengal market. It has been shown (Section E) that imports became impossible, because of the barriers which were set up in the way of inter-provincial trade. Thus Bengal had to face a very serious problem during the war and the Government had a very difficult task (Sections F and G).

In Part II of the minute a brief account has been given of the general unpreparedness of India to meet a food emergency.

### I. THE CAUSES OF THE BENGAL FAMINE

#### A—THE FALLACY OF CARRY-OVER

In Chapter X of the Report, under Section B, the causes of the Bengal Famine have been discussed, and one of the causes mentioned is:

“a shortage in the stock of old rice carried forward from 1942 to 1943”  
(p. 77).

In Appendix II, the problem of the, “production and consumption of rice in Bengal”, has been dealt with very fully, and is summarised in Chapter III, C. It is stated that “the carry-over at the beginning of 1943 was probably sufficient for about 6 weeks’ requirements” (p. 15). In other words it was 11.5 per cent of the annual requirement.

The idea that there has been, even during recent years, a substantial ‘carry-over’ of rice in Bengal, has been responsible for the miscalculations that led to the Bengal disaster, and, on ‘looking back’, this impression still causes a great deal of confusion. This conception of “huge stocks somewhere” may prove dangerous in the future as well, as it is likely to give a sense of false security. It is necessary, therefore, that the true nature and significance of ‘carry-over’ should be fully understood. The theory of ‘carry-over’ is a survival from the era of plenty when Bengal produced far in excess of the requirements of its population and exported rice. The unconsumed stocks constituted the ‘carry-over’. Those days are long past. Absolutely no data are available regarding the stock position of rice (or any other foodgrain) from month to month, or year to year, in Bengal, or any other part of India. Such data, in fact, are not available for any rice eating country of Asia, with the single exception of Japan. According to Wickizer and Bennett, “Japan is about the only Oriental country which has followed a regular practice of storing considerable quantities of rice”. And even in Japan “normally the carry-over at the close of a season is equivalent to one month’s or six weeks’ consumption, but at the end of the bumper crop year 1933-4 it was approximately twice as great”.<sup>1</sup>

<sup>1</sup> The Rice Economy of Monsoon Asia, 1941.

Wickizer and Bennett sum up the position thus: "Rice stocks are commonly held in many hands: by growers for the need of the family, and by numerous intermediaries and distributors scattered throughout the market. Such holdings are necessarily small, and are intended generally to meet requirements only until the next harvest. Except where governments have intervened in order to influence a rice price situation, rice stocks do not ordinarily become concentrated, nor are they carried over for more than one season. Hence annual production of rice tends to correspond closely with annual utilization". The last sentence of this quotation is significant. In arid zones, where rainfall is scarce and uncertain, where a good crop is obtained once in five years or so, and where fluctuations in production are wide, climatic conditions, types of food-grains—jowar and millets—psychology of the people, all tend to bring about the storage of an occasional surplus crop. These factors do not operate in a region of abundant rainfall; at least, not to any appreciable extent.

2. There are other causes also of the illusion about the existence of a carry-over. Some 'high class' varieties of rice improve in storage and are kept for more than a season. The rich few who have more than they need may store rice. Traders have a small stock left at the end of the year. There may be isolated pockets of carry-over in some heavily surplus districts. Such stocks, however, are too insignificant to alter the general food supply situation of a province of over 60 million people, with an overall deficit production.

3. The real cause of the misunderstanding, however, is that "most rices are not really suitable for consumption until at least two or possibly three months have elapsed from the date of harvesting.....". The new rice has "an insipid watery taste", cooks into "a meshy glutinous consistency", a "pasty mass" which "cannot be digested as satisfactorily as grains which retain their individuality". Therefore, "wherever it is possible to exercise preference, no consumer will eat rice which has only just been harvested"<sup>1</sup>. Thus the year of production and that of consumption normally do not coincide. The point may be elucidated by a statement of what actually happens. The *aman* crop is harvested from November to December, and may be said to be assembled by the beginning of January; the *boro* crop is harvested by March-April, and the *aus* crop in August-September. The year of production may be regarded as from January to December. Ordinarily the year of consumption will be, approximately, let us say, from March-April to March-April next year.

Jan/Feb/Mar/Apr/May/June/July/Aug/Sep/Oct/Nov/Dec/Jan/Feb/Mar

(..... Production Year .....) )

(..... Consumption Year .....) )

Only that quantity which is left over as *surplus* after full twelve months' consumption is strictly speaking a 'carry-over'. But the quantity in stock during January to March-April is not 'carry-over'; it represents the actual requirement for the last two or three months of the year of consumption. The year of consumption is not rigidly fixed. It slides over the year of production backwards and forwards according to the quantity of stocks available for consumption. When the quantity during the previous year is short of full requirements, the consumption of the new *aman* starts earlier, and when the quantity is in excess of requirements it starts later. This overlapping acts as a 'shock absorber', and is of great importance. The crop assembled in January is certainly available for early consumption, but if consumed prematurely will leave a deficit at the end of the year of consumption, unless the crop produced is more than the requirement of 12 months and will, therefore, meet the additional requirements up to the end of the normal year of consumption.

<sup>1</sup>Report on the Marketing of rice in India and Burma, 1941.

4. Ever since the annual production, or supply, has begun to be only equal to, or less than the actual requirements, the deficiencies due to very short crops have been met, not to an appreciable degree from the accumulated reserves of previous years, but mainly by an earlier consumption of the *aman* harvest. It was Bengal's good fortune that years of serious crop shortages have been well spaced and have invariably been followed by years of very heavy crops. For instance:

- 1 { 1928 with 7.1 million ton short-crop, was followed by  
1929 with 9.2 million ton crop; and eight years later,
- 2 { 1936 with 7.8 million ton short-crop, was followed by  
1937 with 10.7 million ton crop; and again,
- 3 { 1941 with 7.4 million ton short-crop, was followed by  
1942 with 10.3 million ton crop.

Therefore, during recent years, it is not so much on his accumulated reserves, carried forward from year to year, that the subsistence farmer of Bengal has existed, but on the 'advances' that he has been able to draw. The deficit of a poor crop he made up by starting consumption of the next crop before its normal period of 'maturity'. He lived by borrowing and this applied to money and food equally. When his 'debts' increased beyond a certain limit he collapsed. It may be stated that the triennium 1941-3 was the first in the recent history of Bengal when a bumper crop year (1942) was preceded and succeeded by years of very poor crops (1941, 1943).

5. In Appendix II, a study is made of the actual conditions in Bengal relating to the yearly requirements of rice. The correctness of the statistics of acreage, yield, consumption, and even population has been rightly questioned. It has been recognised that the acreage estimate is too low and so is that of the yield, and an increase of 20 per cent over the Director of Agriculture's estimate has been made (Statement III). With statistics so hopelessly defective, either no attempt at all should be made to evaluate the position, or the conclusions drawn from the estimates available should be subjected to various tests and their reliability determined. In what follows, the second alternative has been employed in determining whether a 'carry-over', i.e., a surplus really existed in Bengal.

6. "India, without Burma, is not self-sufficient in the production of food-grains. Before the war a comparatively small and diminishing exportable surplus of wheat was offset by a large and increasing import of rice". In pre-war years India's dependence upon rice imports was progressively increasing.<sup>1</sup>

	1937-8	1938-9	1939-40	1940-1
Net Imports of Rice and Paddy (in tons).	+1,165,072	+1,253,098	+2,138,600	+1,097,198

In view of these large and increasing imports, any substantial 'carry-over' of rice could not be a reality in India.

Similarly, since 1934 Bengal has been, except for a single year (1937), an importing province, in other words not completely self-sufficient in respect of the production of rice. It was, therefore, not producing more than it actually needed. This must be admitted. It is true that the volume of net imports did not correspond with the variations in production, but the significant fact is that year after year imports were made and their quantity showed a tendency towards increase. In such circumstances any appreciable accumulated carry-over was not likely to emerge, for imports would not be made if the demand

<sup>1</sup> Report of the Foodgrains Policy Committee. 1944.

could be satisfied from the carry-over. According to the estimates made this carry over, from 1932 to 1940, varied between 13 and 33 per cent. of the total crop harvested (Statement I, Appendix II). (See paragraph 12 *infra*).

7. From 1934 to 1941 there was no increase in rice production in Bengal (Appendix II, Statements I and III). Yield per acre had shown a downward tendency [Appendix II, paragraph 9 (ii)]. The population, on the other hand, had increased from 53 million in 1934 to 60.3 million by 1941. Therefore, during this period the food position was steadily deteriorating. From being an exporter, Bengal had become an importer. From solvency in regard to food it had reached the stage of insolvency. If there ever was a 'carry-over' in the sense of surplus over consumption, it must have vanished years ago.

8. Another test of whether supplies were adequate would be an assessment on the basis of actual food and seed requirements and production. On the basis of *per capita* consumption, as worked out by Prof. Mahalanobis, there has been since 1936 (except for the year 1937) a definite shortage in the quantity of rice available. It is difficult to reconcile this unquestionable shortage with any surplus or 'carry-over'. A more detailed study of figures will be fruitful. Reference may be made to the statement below, which is based on the data of supplies as given in statement III of Appendix II. It should be made clear that any notion of the quantity consumed being absolutely inelastic is inadmissible. In fact during years of plenty a person eats a little more, and during years of scarcity he eats less; and the margin is fairly wide, and may range from a mere subsistence ration to the full satisfaction of hunger. Further, during scarcity there is increased use of other available food such as tubers. Ignoring these considerations, and even admitting, merely for the sake of argument, a progressive accumulation of surpluses—which is very unlikely—there was a deficit in 1941 of 1.55 million tons. The previous 'carry-over', if any, must have disappeared by the end of 1941, a year of poor crop. The adjusted supply figures (involving a 20 per cent increase over the estimates of the Director of Agriculture Bengal) and the data of actual consumption requirements obtained by Prof. Mahalanobis, fit in admirably with the supply and consumption position in Bengal during the last 15 years and give a picture very close to the reality. These data also fit in with the change-over of the province from the position of a net exporter to that of a net importer. These figures, therefore, provide a very good test of the food resources of the province in respect of rice.



Year	II Population (Million)	III Adjusted supply ('000 tons) including net imports or exports	IV Net imports (+) or exports (-) ('000 tons)	V Seed ('000 tons)	VI Net available supply ('000 tons)	VII Requirement at 3.58 seers per week (tons)	VIII (-) Deficit (+) Surplus (Million tons)	IX Progressive total of Col. VIII or Carry over (Million tons)
1928	49.0	7,563	+161	422	7,141	8,377,873	-1,237*	..
1929	49.44	9,662	-250	411	9,251	8,436,005	+ 815	-422
1930	49.68	9,009	-311	437	8,572	8,504,137	+ 68	-354
1931	50.1	9,940	..	441	9,499	8,565,947	+ 933	+ 579
1932	51.1	9,945	-239	440	9,505	8,739,924	+ 768	+ 1,347
1933	52.1	10,771	-31	438	10,333	8,907,901	+ 1,425	+ 2,772
1934	53.1	9,927	+414	425	9,502	9,078,878	+ 423	+ 3,195
1935	54.1	9,840	+ 150	424	9,416	9,249,855	+ 166	+ 3,361
1936	55.1	8,251	+ 155	448	7,803	9,420,832	-1,618	+ 1,743
1937	56.1	11,218	-135	446	10,772	9,591,809	-1,180	+ 2,923
1938	57.1	9,981	+ 133	446	9,535	9,762,786	-228	+ 2,965
1939	58.1	9,596	+ 482	445	9,151	9,933,763	-783	+ 1,912
1940	59.1	9,882	+ 358	440	9,442	10,104,740	-663	+ 1,249
1941	60.3	7,954	+ 323	482	7,472	10,275,717	-2,304	-1,555
1942	..	10,774	-2	467	10,307	10,446,694	-140	-1,695

Consumption per million per annum—170,977 tons.

\* It may appear that a 'negative' carry-over has no meaning. Reference is invited to paragraphs 3 and 4 of this minute, as stated deficiencies are made up by early consumption of the crop of the succeeding year.

A comparison of columns VI and VII shows that since 1936 net available supplies have been considerably short of the minimum requirements, as calculated on the Mahalanobis formula, every year with the exception of 1937. Before 1936 supplies were in excess of requirements; Bengal then was an exporting province. Surpluses and deficits are shown in column VIII. Further, when supplies were adequate the people were able to eat more, and perhaps lay by some stocks. Since 1936-7, the people have been on short rations.

The figures in column IX, provide a test for the accuracy of the assumption of a carry-over. If there was an accumulated surplus, it had disappeared by 1941, and 1943 opened with nothing more than the *aman* crop of 1942, assembled by January, 1943.

9. The test supplied by the economic condition of the people leads one to the same conclusions. The distribution of holdings given on p. 6 of the Report is as follows:—

More than 5 acres	2	million families
Between 2-5 acres	2	„ „
Less than 2 acres	3.5	„ „

It is stated that 5 acres will be the minimum area required to keep the average family in reasonable comfort, but the size of holding will have to be 7 acres if the land is capable of growing nothing but *aman* paddy. If the number of holdings above 5 acres capable of growing *aman* paddy only is taken to be 0.5 million, the number of families which live below the level of 'reasonable' comfort will be 6 millions. What happens to these 6 million holders when the crop is very short? Such families could just balance income and outgo in a normal year. They cannot have any carry-over of either money or grain. In many cases a substantial portion of the crop goes to the money-lender. The only possibility is that during years of short-crops consumption of rice must be reduced in order to meet the constant factor of the standing charges. Alternative foods such as sweet potatoes are grown and consumed and make up for the deficit. During normal years the consumption increases, and carry-over is possible only when the production is much above the requirements. Such occasions have become rare since population increase has outstripped food supply.

10. The nutritional standard of the people of Bengal supports the above contentions. Since the days (1933) when Sir John Megaw (p. 7, para. 9) conducted his inquiry, there has been a marked deterioration in the food position. There has been no increase in production and a steep rise in population. The Foodgrains Policy Committee arrived at the following conclusion "..... though it is true that taking India as a whole ..... and taking an average of years, she may broadly be described as only slightly less than self-sufficient in foodgrains as a whole, nevertheless the self-sufficiency implied by this statement at the very best is self-sufficiency at a very low level of *per capita* consumption. There is very little room, taking the country as a whole, for the process of tightening the belt. We have it on the authority of the highest nutritional expert in this country, Dr. Aykroyd, that there is at all times serious under-nourishment of some third of the population".<sup>1</sup> With a considerable proportion of the population living at a level of under-nourishment, if not starvation, it is difficult to accept the hypothesis of large surpluses or stocks remaining unconsumed year after year, and getting accumulated, even to the extent of

<sup>1</sup> Report of the Foodgrains Policy Committee, 1943, p. 33.

33 per cent. of the annual production (paragraph 8 above and statement). Under-nourishment of a large section of the population and huge accumulations of stocks cannot go together.

11. The results of the "anti-hoarding" campaign or the "food drive" which was undertaken in Bengal in June 1943 (excluding Calcutta, Howrah and a few other areas) supports this conclusion. From the data available the following conclusions may be drawn.

1. Population of the area of this drive . . . . .	55·748 million		
2. Total requirement of this population from 16th June to 31st December in terms of rice at 3 seers <i>per capita</i> per week <sup>1</sup> . . . . .	4·4	"	tons
3. Actually consumed by this population from 1st January to 15th June, at the same rate . . . . .	3·8	"	"
4. Stocks on 16th June, 1943 (at 25 per cent excess of those actually discovered) . . . . .	1·17	"	"
5. Total consumed and in stock <i>i.e.</i> 3 <i>plus</i> 4 . . . . .	4·97	"	"
6. Total consumed by the remaining population (6·5 million) up to 15th June 1943, at the above rate. . . . .	0·44	"	"
Total consumed and in stock on 16th June 1943 . . . . .	5·4	"	"
Estimated <i>aman</i> crop assembled in January 1943 . . . . .	6·0	"	"
Balance unaccounted for . . . . .	0·6	"	"

Even allowing for undiscovered stocks if there had been a large carry-over, much bigger stocks would have been found. (There had been import of rice and other grains as well during this period). Similarly the Calcutta Food census in July 1943 discovered stocks of the order of 31,000 tons, which is just one month's rice consumption of that city. Had there been a substantial 'carry-over', the stocks would have been larger. \*

12. In Appendix II, Section B, the relation of supply of rice to requirements for the ten years 1928 to 1937 has been examined, and the conclusion arrived at is stated thus:

"...*prima facie*, it would appear that stocks carried over from year to year must have been accumulating in the province during the period" (page 209, paragraph 13).

Similarly in Section C, the supply position in relation to requirements for the years 1938 to 1942 has been examined, and the following conclusion is arrived at:

"The state of current supply during 1941 supports the conclusion reached in paragraph 14 above, namely, that the stocks carried over from year to year must have been considerable." (page 210, paragraph 16). Again, in Section D, the supply position in relation to requirements for the year 1943 has been discussed and it is stated:

"The carry-over at the beginning of the year was sufficient for the requirements of about 6 weeks" [page 212, paragraph 23(ii)(b)].

<sup>1</sup> This figure is lower than Prof. Mahalanobis' estimate of actual consumption.

It is to be determined if these conclusions are correct. The table below has been compiled from the data of surpluses and deficits as given in Appendix II, Statement IV.

I Year	II		III	IV
	+ Surplus — Deficit (Million tons)	Progressive total of Col. II (Million tons)	Net—Export (—) Imports (+) (‘000 tons).	
1928	-1.20	..	..	
1929	+0.79	-0.41	..	
1930	+0.01	-0.42	..	
1931	+0.80	+0.38	..	
1932	+0.69	+1.07	..	
1933	+1.39	+2.46	..	
1934	+0.44	+2.9		+414
1935	+0.24	+3.14		+150
1936	-1.50	+1.64		+155
1937	+1.35	+2.99		-185
1938	..	+2.99		+133
1939	-0.51	+2.48		+482
1940	-0.34	+2.14		+358
1941	-2.43	-0.29		+323
1942	+0.29	..		-2

Column III of this table shows the stocks of rice in the province at the end of each year, on the assumption that accumulation of surpluses was taking place; while Column IV shows the net imports or exports of the province. If, as the Report has concluded, accumulated stocks were available in the province in each of the years 1931 to 1940, and during certain years those stocks were very large, it becomes impossible to explain the net imports in these years for the following reasons. The population of Bengal may be divided into the four classes:—

(a) those who grow their own food but whose production is just equal to or less than their requirements;

(b) those who buy their requirements;

(c) traders;

(d) big land-holders who have surplus over their requirements.

Of these it is only classes (c) and (d) who would hold surplus stocks of rice. The big landlords would accumulate unnecessarily large stocks only if they were unable to find a market for them. Therefore, stocks would come to be concentrated in the hands of traders. And it is this class which imports rice. If the traders had been accumulating stocks, would they still import and thus add to their unsold stocks? No wise trader would hold stocks much in excess of his annual turnover. The existence of net imports is thus incompatible with the accumulation of large stocks.

13. In 1942, according to Statement IV, of Appendix II (p. 216), the current supply, seed deducted, was 10.31 million tons and consumption 10.02 million tons, leaving a surplus of 0.29 million tons, equal to 1.5 weeks' supply. Is it too much to say that this so-called 'surplus' was completely wiped out by the cyclone of October 1942 in the districts of Midnapore and the 24 Parganas, and by the export of 185,000 tons which was allowed to take place during 1942? There was definite shortage during November-December, as is evident from

the prevailing distress, and this supports the conclusion that the supplies had been exhausted.

### Conclusion

One is, therefore, forced to the conclusion that in Bengal, and in fact in the rest of India as well, there are no surplus stocks of such magnitude as to serve as "huge" reserves. What we find is a hand to mouth existence, at a very low level of consumption. Events of the last two years have proved this conclusively. In spite of the 'Grow More Food' campaign, the food situation still causes anxiety. At any rate, this much is certain that Bengal had no carry-over of rice worth considering in the beginning of 1943.

### B—THE COURSE OF EVENTS LEADING TO THE FAMINE

14. The cycle of events which terminated in the famine of 1943 may now be described. One need not labour the point that every event has a history and its true cause cannot be determined by a study merely of factors involved at the moment of its occurrence, but must be traced to its past. To borrow a phrase from biology, every event has a phylogeny. Therefore, the immediate causes of the famine of 1943 have to be traced from 1941. These events may be traced year by year.

1941.—(Appendix II, Statement III). The *aman* crop which was assembled in January 1941 was 5.178 million tons (adjusted figures by addition of 20 per cent to the Director of Agriculture's figure)—the shortest crop for fifteen years and with *boro* and *aus*, supplemented by 323,000 tons imports, and after deduction of seed requirements, gave 7,472,000 tons of rice, for the consumption of 60.8 million people, which was the population of Bengal at that time. According to the estimate of 3.58 seers *per capita* per week (the estimate of Prof. Mahalanobis) the total quantity required for 12 months was over 10.25 million tons. Thus there was a shortage of 2.8 million tons, *i.e.*, 14 weeks supply. Normally the *aman* crop would come into consumption, let us say, from March-April 1941. The total crop being short, it was barely enough for nine months, and was, therefore, consumed by about the end of the year 1941. Nothing was available for the last two or three months of the consumption year 1941-42 (January-February-March 1942).

1942.—The *aman* crop assembled by January 1942 was 8.876 million tons—the highest since 1937. The *boro* crop of 1942 gave 206,000 tons and the *aus* 1.694 million tons. There were no imports. The total quantity available for consumption (*minus* seed requirements) was 10.8 million tons. This crop would normally have come into use from March-April, but as the previous crop was very short and had been consumed by the end of the year 1941, the new crop was drawn upon most probably from about the beginning of January 1942. It would have sufficed for twelve months, *i.e.*, till the end of December 1942, and possibly even beyond that period with some effort, but during this year various unforeseen factors adversely affected the position:—

(i) A quantity of rice was exported (187,500 tons in the year, of which 184,618 tons were exported between January and July 1942). [Report p. 28].

(ii) There was short supply of wheat during later part of 1942:—57,377 tons [Chapter V—para. 23].

(iii) The disastrous cyclone of October 1942 destroyed large stocks of rice in important surplus districts in Bengal, *viz.*, Midnapore and the 24-Parganas. The quantity destroyed has not been determined but is described as very large.

(iv) There was an influx of refugees, estimated at several lakhs.

(v) There was a very large increase in the strength of the Defence Forces in Bengal, and also rapid increase in the industrial population, labour for mili-

tary works etc., etc., which directly or indirectly depleted the foodgrain resources of the province.

In view of these considerations (a) of heavier demands and (b) of serious loss, it would not be incorrect to hold that by the end of the year 1942 the year's production had been completely consumed.

This view is supported by the fact that reports of distress were made early in December (Appendix VI), and by the end of the month hunger-marches had started. The price of rice had risen enormously, and there was shortage in some places even in the villages. This was at the time when the *aman* crop was being harvested. The situation at that time has been described in the Report (Chapter V, paragraph 29):—

“The evidence presented by these contemporary documents leaves no room for doubt that the upheaval in the Bengal markets towards the end of 1942, was due to the fact that in November and December of that year, that is, before the bulk of the *aman* crop had been reaped, unusual purchases were being made by persons who were convinced, quite correctly, that the yield of the *aman* crop would be so short and stocks in hand so low, that a crisis in supply was inevitable and was fast approaching”.

In face of these observations any material ‘carry-over’ at the end of 1942 was a mere myth.

1943.—Therefore, it may be assumed, with considerable justification, that 6.024 million tons *aman* crop, assembled by January 1943, came into consumption almost immediately, if not even earlier during the harvest, i.e., November-December 1942.

According to the Rice Marketing Report, on the average of the years 1934-35 to 1936-37, out of the total production of 8.4 million tons, 3.9 millions were kept for domestic consumption and 376,000 tons for seed. The marketable surplus was 3.87 million tons. It is generally the *aman* crop which comes into the market, and when it is taken into consideration that—

(i) this crop was very short (1.5 million tons short of the previous fifteen years average),

(ii) there was a general feeling of insecurity, on account of the military situation,

(iii) prices were rising rapidly,

(iv) there was no carry-over, not even for the usual period of ‘maturing’ of the harvested crop, and

(v) all these facts were being widely advertised, the conclusion is irresistible that the cultivator retained a larger quantity than the normal for his own use, and the marketable surplus was reduced, perhaps to 2 million tons, in a market which used to get double that quantity during times of peace and stability. Consumers began to secure supplies in excess of immediate requirements, priority concerns to lay by stocks to ensure supplies for their labour, traders to make money, all joined the mêlée. The sources of supply having dried up, panic set in. This was a critical stage. Effective action was not taken, stocks had been captured, and those left without food had to pay prices which many could not afford. Famine had really begun from the commencement of the year 1943 although its results became manifest some months later, and its effects even continued in the heavy death-rate during the first half of 1944.

#### C—THE REAL EXTENT OF THE SHORTAGE

15. The conclusions arrived at in the Report regarding supplies are given in paragraph 15 (iii), p. 15 and in paragraph 23 of Appendix II, of the Report (p. 212), and these may be summarised thus:—

(1) The current supply during 1943, was sufficient for the requirements of about 43 weeks (8.86 million tons).

(2) The carry-over at the beginning of the year 1943, was sufficient for the requirements of about 6 weeks (1.16 million tons).

(3) Therefore, the absolute deficiency of supplies was of the order of the requirement for 3 weeks, i.e., 0.58 million tons.<sup>1</sup>

With these conclusions it is difficult to agree. From what has been said above (p. 15), it is evident that there was no carry-over of any significance at the end of 1942. The *aman* rice crop available for consumption from January to September 1943 (when the *aus* crop becomes available), was approximately 5.5 million tons (adjusted figures with 20 per cent increase over Director of Agriculture's estimates). If all grain available had been procured and distributed equitably, it would have provided 2.44 seers *per capita* per week for a population of 63 million for 9 months. At a rate of 3 seers *per capita* per week, with a perfect system of control and distribution, 6.7 million tons would have been the required quantity, and, at 3.2 seers *per capita* per week 7.2 million tons. It is evident, therefore, that the absolute shortage, at a very conservative calculation, could not have been less than 1.5 million tons. The Government of Bengal had placed their demands for all foodgrains at 1.36 million tons, of which rice was 0.9 million tons. These were indeed very modest estimates. The Director of Agriculture informed the Commission that an enormous area had been put under sweet potatoes during 1943. This must have helped to mitigate the effect of the shortage. Taking everything into consideration one is forced to the conclusion that the shortage was large and far more than 0.58 million tons. It was certainly of a magnitude, that by mere manipulation of supplies actually available in the province, it could not have been wiped out. This was not realised early enough. The 'carry-over' mentality had bred complacency. To avert disaster, a timely supply in regular and substantial instalments of foodgrains to the extent of at least a million tons was absolutely necessary. The quantity of foodgrains which actually arrived in Bengal was of the order of 0.65 million tons, but it came sometimes in dribbles, sometimes in torrents, and most of it came too late, towards the end of the year.<sup>2</sup>

All the rice that came into Bengal was within the country and if the large quantities which came after May had come earlier deaths might have been avoided. Regular arrivals would have produced confidence and kept the prices down.

#### D—CALCUTTA ON THE BENGAL MARKET

16. The shortage considered in the last section was aggravated by the fact that, throughout the famine of 1943, Calcutta, was on the Bengal market.

<sup>1</sup> If the actual shortage was of the magnitude of 0.5 million tons, i.e., a little in excess of the net Burma imports, then would not free trade have supplied this deficiency from the so-called 'stocks' all over the country? Had not the rest of India accumulated the same carry-overs which, it is suggested, Bengal possessed? The theory of carry-over thus stands exploded.

<sup>2</sup>The arrivals of rice and wheat into Bengal during 1943 were:—

	Rice.	Wheat.
January . . . . .	17,452 tons.	26,000 tons.
February . . . . .		
March . . . . .		
April . . . . .	15,827 "	33,000 "
May . . . . .		
June . . . . .	100,324 "	99,000 "
July . . . . .		
August . . . . .	30,689 "	
September . . . . .		
October . . . . .	99,334 "	176,000 "
November . . . . .		
December . . . . .		

On 'looking back' the feeling grows strong that the most obvious and correct step, which was taken in 1944, should have been taken in 1943. With the first signs of distress, Calcutta should have been immediately taken off the Bengal market. This was obvious. For wheat Calcutta had been off the Bengal market always. The average imports of Burma rice were roughly equal to the rice requirements of Calcutta. Therefore, for many years Calcutta had been virtually off the Bengal market both for rice and wheat. During the year of a short crop, after cyclone and flood, with the enemy knocking at the gates, the population increasing through an influx of refugees, increased concentration of war industries, and a huge army depleting the market of milk, fish, egg, poultry, vegetables, and fruit, Calcutta was on the Bengal market, armed with a huge purchasing power. The inevitable result was famine in Bengal. This should have been easily foreseen. This is a lesson for the future.

#### E—THE STORY OF THE BARRIERS

17. From what has been said above it is evident that there was no carry-over in the beginning of 1943, the previous year's crops had been consumed by the end of 1942, the aman crop available was very short, imports from Burma were not possible, the external and internal situation was disquieting, panic had set in, prices were soaring. The only thing which could stem the tide was an assured supply of foodgrains. There were obstacles. To appreciate the difficulties of Bengal a review of the conditions leading to these obstacles is necessary.

18. In Chapter IV, paragraphs 1 and 2, are described changes in the economic and administrative organisation of the country as a result of the control of trade by Governments. In this change, which has been rightly described as 'tremendous', the period when 'barriers' were springing up to prevent the movement of grain from one district to another and from one province to another has been very correctly described as "a critical and potentially most dangerous stage". The erection of barriers may be regarded as a necessary step in the assumption by Government of control over trade (para. 4), but was the step taken at the right time and in the right direction? And, these are the two essential attributes of a wise step. Government control over trade was admittedly a most urgent wartime necessity, but stopping the flow of trade, without creating adequate channels for the flow of food supply, is like putting a dam across a river first and planning to dig irrigation channels afterwards. The consequences of such a mistake are evident. It may be argued that in the absence of a well-planned scheme of food control and distribution, on an all-India basis, barriers set up by Provinces and States independently, without co-ordination or even mutual consultation, essentially to protect their own interests, had become inevitable. Nevertheless, it cannot be denied that, as anticipated, these barriers led to the conditions which, were responsible, in no small measure, for the scarcity and famine that visited Bengal—the province which had the singular misfortune of being in the war zone, and falling a victim to floods, a devastating cyclone, a short crop, political unrest and enemy action, and with 'denial' and defence measures leading to dislocation of internal economy. I, therefore, agree with the following view: "If there was a single root cause . . . for the initial dislocation of the whole 'food economy' and 'food morale' of this densely populated area . . . it was the incautious use of newly created provincial barriers."

In paragraph 32, p. 24, the possibility of such a danger is recognised. It is stated that if the machinery of control could not be completed speedily "any serious and sudden deterioration in internal supply arising out of natural causes, was liable to lead to disaster," and this is exactly what happened in Bengal.



19. The dangers inherent in those barriers, or measures restricting trade, did not come as a surprise. They were evident and had been fully anticipated. Categorical statements prophesying disaster as the consequence of such measures had been repeatedly made. The Bihar Central Advisory Committee on Price Control meeting on 18th December 1939, emphasised "the need of some form of inter-provincial control"<sup>1</sup> and this opinion was communicated to the Government of India as early as the 8th January 1940.

20. In the Third Price Control Conference of the official representatives of the Centre, Provinces and States, held at Delhi in October 1941, the President (Sir Ramaswami Mudaliar) stated "the Government of India wished to keep inter-provincial trade as free as possible, but if the control was applicable within a particular area he saw no objection to it". The views expressed were: It was "feared that restriction of inter-provincial or inter-State movement of supplies would lead to difficulties" (Bihar). It "was clear that the Central Government's intervention was necessary in respect of inter-provincial trading for provincial boundaries were not economic boundaries" (Madras). It was suggested that the "control should extend from the producing stage right down to the final stage" "imports should be flattened", and "the possibility of not merely controlling prices but also regulating the movement of rice to the competing consuming provinces" should be considered (Assam). The scramble for rice supplies in the Central Provinces, was leaving a deficit in the province's own requirements.

A foretaste of such unco-ordinated control had already been experienced when, on account of scarcity in Arakan, the Burma Government had prohibited export of rice, just as some Provincial Government had prohibited export of rice from their own areas to adjacent areas. The Government of Burma had finally lifted the embargo, but by that time the favourable season for shipping rice had practically ended.

The President emphasised: "We do not contemplate at all the possibility of provincial barriers for export of this product (rice) or any product for the matter of that", and he added: "If any Government finds itself in such an unfavourable position as a result of the activities of its surrounding provinces or States, it can come to the Government of India who will use their good influence to get over the difficulty".

It is clear from the above that by October 1941, difficulties had arisen, and barriers were considered dangerous, and need for a central controlling agency, was evident.

21. The Fourth Price Control Conference met on 6th/7th February 1942. (A day previously the Rice Conference had met at the instance of the Bihar Government. At this Conference Bihar and Assam had expressed the opinion that provincial control of exports would lead to chaos.) By then the problems had "become more complicated, their solutions were more urgent and the administrative difficulties greater than they had ever been." Bans "had been put by certain Administrations, both Provincial and State, on the movements of commodities", the President (Sir Ramaswami Mudaliar) remarked "At first flush it looks as if such a ban was eminently justified and that the Provincial or State authority concerned had a duty towards the population in its charge to see that the movement of goods, when scarcity conditions were about to prevail, was checked so far as its area was concerned, that is to say, that foodstuffs available within the area are not transported beyond its border. One or two Provincial Governments have done it; and some States have done it; and I must also admit with thankfulness that some Provincial Administrations have stoutly resisted the temptation to put such a ban . . . .

<sup>1</sup> Perhaps this referred to Price Control only.

The free movement of commodities up to the last stage is the most vital factor that will check the growing rise of prices and will also try to preserve for the consumer adequate supplies in every area . . . . India may be geographically called a 'continent'; it is after all one country and under one Administration; and consequently the Central Government is concerned with the safety and the conditions of living of all the people within this geographical area, India." He continued: "The Central Government cannot, therefore, view with equanimity any attempt at tying up stocks of a particular commodity, within a specified area, and leaving other areas to look after themselves . . . . If this movement is widespread then it will create the most chaotic conditions, nay, absolutely famine conditions in several parts of the country . . . . The theory of self-sufficiency has led to ruin so far as Sovereign States are concerned; and if that theory of self-sufficiency were to be incorporated in provincial and State units in this great Federation, not only ruin but something worse, will be our lot. We have agreed, not with enthusiasm, to such bans as a very temporary measure in certain areas. But the decisive view of the Government of India is that such bans on export do much more harm than good, and to the utmost possible extent should be avoided." He also referred to the anxiety of certain governments to build up stocks.

While on the one hand certain provinces considered that their first care was the supply of food to those who lived within their jurisdictions, and help to other provinces could not be given to the extent of facing a shortage themselves (Punjab, Madras), on the other hand a higher degree of control over transport and supplies was demanded (Bombay), to the extent of an all-India control of stocks (C. P.). It was stressed that the unit was not the province or the district, but the whole of India, and a shortage of any particular commodity had to be shared equally (N. W. F. P.), by means of control at the Centre (Bihar) and that bans on exports should not be placed (Bihar), as restrictions on inter-provincial trade would be suicidal (Mysore). It was claimed that in certain emergent circumstances, such as the danger of a famine, stoppage of exports from a particular area would be justifiable. The President, summing up the discussion stated "that the process of tightening up the belt must be a universal process and not a process which must apply only to those unfortunate provinces which were in short supply with reference to any particular commodity". He drew the conclusion "that broadly speaking there should be no attempt on the part either of the Provinces or States to put a ban on the export of commodities but that when a proper transport authority which would co-ordinate the interests of various Provinces and States began to function at the Centre, it could be left to that authority so to adjust the transport that there was no draining of all resources of one province to its own disadvantage and to the advantage of accumulating stocks in the neighbouring province or State. He, however, agreed that if there were a famine condition in a local area, something must be done on the spot, and he did not "object to a particular kind of emergency power being used by district officer or local officer".

22. Barriers continued to be put up. In March 1942, the Central Provinces, after a scramble for rice, had stopped export of foodgrains to places outside the province. The Government of India had in some cases issued directions against such steps. When the Food Production Conference met in April 1942 the question of barriers came up for a good deal of discussion. The President (Mr. N. R. Sarker) stated in his opening remarks: "..... that in case intensive and planned efforts (to Grow More Food) failed to make good the shortage of a commodity, then substitution of this commodity by some other surplus foodstuff shall have to be considered. And, even if this remedy failed to fill up the gap, then it would be for the various governments to consider how

far an all-round cutting in the consumption of the commodity must be voluntarily accepted by all the Provinces and the States."

Sir Ramaswami Mudaliar said: "The Central Government has been up against this problem of every province, of every State, of every area thinking in terms of its own population, and not willing to recognise the needs of the population elsewhere in India..... That is a most dangerous doctrine to be preached.....It would bring about such confusion in trade, commerce and transport that it would harm the interests of the whole country.....When we have gone to the extent of including a country like Ceylon into (our) economic orbit in respect of food production and food supply, it seems to me the most unnatural thing to suggest that each province or State will look after itself and only when there is a surplus and to the extent that (province or) State judges there can be a surplus, having provided for all the contingencies which might arise in the future and having provided for all that is necessary for the province (or State), would it allow export from its territory.....That sort of attitude, ..... would completely break up the economic structure of the country.....We have been resisting this idea that each area should look after itself first, leaving others alone.....I do venture to suggest that we cannot take the view that each province or State must first look after itself and then to other provinces or States." He further emphasised his point of view by taking a specific example. "Taking wheat consumption as 10 million tons, and supposing there is only 9 million tons in the country, we know how it is distributed to various provinces from the surplus; would it be an impossibility to say that Punjab will have nine-tenths and all the other importing provinces will have nine-tenths of their normal imports?" In the same meeting Sir Pheroze Kharegat explained this point of view further. He stated that if in spite of the best efforts of the surplus and deficit areas, there was a shortage of a particular commodity in the country, for instance rice, then "*the whole lot of rice available in the country should be treated as one and it should be distributed equitably between all the Provinces and States throughout the country, so that all may suffer equally and benefit equally* ..... Where there is a deficit in a particular commodity in the country as a whole, it should be distributed as equitably as possible humanly, and as equitably as transport facilities may allow". The underlying idea was equality of sacrifice of all consumers. As a logical corollary to this proposition representatives of many Provinces and States stressed the need for a *Central authority with executive power*. No steps were taken to set up such an authority.

The Food Department which was established in December 1942 set out on the task of disentangling the food tangles.

The Second All-India Food Conference was held on the 24th-26th February, 1943. The Secretary of the Food Department once again preached the gospel of 'equality of sacrifice'. He stated "Although ..... shortage of production was ..... in the neighbourhood of 4 or 5 per cent, the main difficulty was to distribute the deficiency over the whole body of consumers. If equitably distributed no one would feel the deficiency but if the whole weight was to fall on certain unfortunate localities then the shortage in these areas would be severe. Every area therefore must be prepared to take its share of the shortage." It was emphasized that "the only solution to the difficulty must be for all areas in surplus to surrender slightly more than their actual surplus". It was necessary that the stocks collected, whether for the use of the province where these were collected or for another Province or State, should become the property of the Central Government. The gravity of the position in Cochin and Travancore was emphasized, and it was stated that it could only be "alleviated" in a satisfactory manner if the Central Government were to exercise a considerable measure of centralised control". Mr. Pinnell (Bengal) held that, "there was one

rice crop in the North East India, that was the concern of every province. There was need for co-ordination of purchase and that co-ordination could only be exercised by the Central Government. There must be one authority if an effective control over prices and supplies was to be secured and he expressed that very early arrangements for such purpose should be made." It was emphasized that the artificial boundaries between the Punjab and Delhi ought to be removed. The control measures introduced by Provinces and States which placed an embargo on exports were reacting harshly on small territories (Coorg). Mr. Maqbool Mahmud (the Chamber of Princes) considered a co-ordinated scheme on an all-India basis as essential. The representatives of the Government of India held that "if control was to be effective, it must be a strong control", and dwelt on the absolute necessity that provision be made for the last word and decision in any matter resting with the Central Government. It was felt that certain provinces were not prepared to give up anything beyond the food balance left there after providing for their own normal consumption, however, serious the position, and it was therefore, 'urged that the Government of India should control surpluses on the lines of equality of sacrifice' (Sind). Centralised control, and even a high degree of centralised control, was considered to be the only way in which the problem of the country could be solved (Bombay, Madras, Bihar). Such control did not materialise.

23: This is the story of the barriers. The food position continued to deteriorate. Isolated actions had been taken, natural flow of food supplies had been stopped, no controlled channels on an all-India basis had been created, the country had drifted into independent food-kingdoms. Price control without control of supplies, disappearance from the market of commodities thus controlled, black market, de-control, ineffective requisitioning, wranglings over the quotas of the 'Basic plans', failure to obtain supplies for the 'rescue plans' of Bengal, present a sorry spectacle. Frustration is writ large on the history of this period. As clearly foreseen and predicted, disaster and famine were the result. The weakest organ was attacked and succumbed to the disease. Bengal, the province which had suffered from a series of calamities, was the victim, and sank deeper and deeper into famine conditions.

#### F—THE PROBLEM FOR BENGAL

24. The facts which emerge from a study of the position as it developed in Bengal during the later part of 1942 and the early months of 1943, justify the following conclusions.

There was a serious shortage of foodgrains, far more serious than Bengal had faced previously for at least twenty years. The shortage was such that it could not be met by husbanding Bengal's own resources, without large-scale supplies from outside the province. The position was aggravated by acute psychological factors which were the results of the war, and of the military situation at the time. Burma had fallen, refugees were pouring in, retreating troops were coming into Bengal, the danger of invasion was imminent, Calcutta had been bombed, there was danger of further air raids, serious doubts existed as to the capacity of British troops to stem the Japanese 'Blitzkrieg', the 'denial' policy had been put into action, political unrest of serious magnitude had manifested itself within the province and in the neighbouring areas, the 'quit India' demand had been made, political dissensions in Bengal were serious, cyclone and floods had destroyed human life, cattle, and crops and stores of foodgrains, and there was an atmosphere of tension. No one knew what was coming. Everyone played for safety; food, the most urgent requirement of man, was to be conserved. The producer wished to lay by stocks for his own consumption; consumers were anxious to secure supplies. Employers of big industries wished to make adequate provision to feed their employees. Essential services had

to be maintained. Traders knew that money could be made. The marketable quantity had diminished. The combination of these formidable factors created unprecedented conditions. A series of calamities, each one of unprecedented magnitude, followed in such quick succession that the administration was overwhelmed. It was a 'Dunkirk' on the food front in Bengal. It was in these circumstances that the Government of Bengal had to discharge its tremendous responsibilities.

A full and complete control over supplies and distribution of all available foodgrains might have saved Bengal—excellent in theory but not so in practice under the then existing conditions. Statutory price control had been tried and it had failed. Procurement operations in December and January had not been successful. Another attempt was made on the 9th of January but abandoned on the 17th of February. This obtained 2,200 tons. The Foodgrains Purchasing Officer did not purchase more than 3,000 tons. By the beginning of March stocks were down to such a low level in Calcutta that it looked as if the city must starve within a fortnight unless large supplies arrived quickly. Price control was abrogated on the 11th of March and then the Food Purchase Officer was able to obtain 17,000 tons from 12th to 31st March. Early in March the Government of India started their 'rescue plan' which was to obtain 60,000 tons within three weeks to a month, but succeeded in obtaining only half the required quantity. The Basic Plan had not started functioning as, by March 1943 when the need of Bengal became acute, the Government of India's arrangements for supply of foodgrain were not complete. The preliminary figures of the first Basic Plan were issued on the 13th April 1943. By the end of April the stocks of rice in Calcutta were again running low and reports of distress in the districts clearly indicated famine. By April it was clear to everybody, including the Government of India, that the Basic Plan would not function.

#### G—INTO THE BREACH

25. About the end of March 1943 the Ministry went out of office. For a month the Governor of Bengal was in charge of the administration. It was at this time that the Muslim League party was invited to accept responsibility, and a Coalition Ministry was sworn in on the 23rd of April. This was the most critical period in the recent history of Bengal and the new Ministry had to face the unprecedented problem of impending famine, during a world war, with imminent threats of invasion. There cannot be two opinions that in this crucial period an All-Parties Ministry was obviously the only right thing. Various attempts were made to secure such a combination, but they proved abortive. Congress was in any case out of it, having refused to "co-operate". The European Group had adopted the policy of not sharing responsibility in the cabinet. The Hindu Mahasabha was prepared to join, but on the condition that the Muslims outside the Muslim League had a share. This the Muslim League was not prepared to accept. The blame must be shared equally by all the parties for this *impasse*.

On 'looking back' one cannot help feeling that the Muslim League party took a great risk in accepting office, so as to continue a parliamentary form of government, at a time when it was evident that a terrible famine was approaching and formidable difficulties lay ahead. The difficulties were such as demanded for their solution undivided attention, vigorous action, full support and complete co-operation from everyone in Bengal and outside. They knew they could not obtain such full co-operation. On the other hand, when called upon to shoulder a grave responsibility, at the most difficult period in the history of the province and country, a refusal would have meant abdication of all constitutional rights. It would have meant a desire to *rule* during peace and prosperity and to seek safety during trials and tribulations. It would have meant

political *hara kiri*. They decided to fill the breach. Criticism of the Ministry in the Legislatures and in the Press was bitter and unrelenting. There was no respite. Such was the atmosphere in which the Ministry had to function.

As stated (report page 84, para. 24) a non-political organization in charge of food would have been the second best alternative to an all-parties government. The Government have been accused of not grasping the hand of co-operation offered to deal with the food problem. In an atmosphere charged with suspicion, bred of intensive propaganda, it is a pity that mutual understanding was not achieved.

26. The situation had become grave and menacing by the end of April. The short supplies had been eaten into for four months, further reducing the available quantity and more particularly the quantity in the market. The Basic Plan of the Government of India had not functioned even by this time. The country had become divided into numerous independent food monarchies, all thinking of their own limited interests. The new Ministry tried to grapple with the deteriorating situation which it had inherited. It groped, fumbled, sometimes blundered, sometimes floundered. But it continued its efforts. The magnitude of the problem had not been appreciated. Even the diagnosis of the disease had been wrong. At one time there was doubt regarding the shortage of grain supply in Bengal. The "carry-over" spectacles had coloured the vision. There were no data to go by. In the circumstances the "propaganda of plenty" was prescribed. The remedy, if successful, would have been trumpeted as a wonderful achievement. However, the treatment proved wrong. It failed, it engendered mistrust. The need was food, and not propaganda; propaganda alone could not appease hunger. Valuable time was lost. Another prescription was indicated. The traditions in which generations in India had been brought up was:

"If half a loaf a man of God eats, the other half he gives to those in need" (Saadi).

Instead, the more materialistic doctrine of self-preservation dominated. The geographical, economic and racial unity of India had receded into the background.

27. The condition caused grave anxiety. Food had to be obtained at any cost, anyhow. Persuasion and entreaties had failed. The evident solution was to pay the price and save life. *Basic Plan, Modified Free Trade and Free Trade* presented the possible alternatives, and a graded series to choose from. Absolute shortage of supplies was the real cause of the disease; high prices, like high temperature, were merely the symptom. Hence, the demand of the Bengal Ministry, in the beginning of May 1943, was for a guarantee from the Central Government that the quota of foodgrains according to the Basic Plan would be made available within a few months. May had arrived. August-September would bring in the *aus* crop. Three to four months of grave shortage lay ahead. Was the demand for the *approved quota, within a few months*, unreasonable or excessive? The Government of India presumably were not prepared to give the guarantee demanded. The Basic Plan had not started functioning. Was the middle course of Modified Free Trade rapid enough to resolve an acute emergency which had arisen? Modified Free Trade was a younger sister of the Basic Plan. It might have matured slowly and borne fruit. The urgency of the situation, however, called for quick action. It is not possible to determine the ethical value of a measure by detaching it from its context. It may be urged by some that free trade in war-time was wrong in principle. In the peculiar circumstances, however, which obtained in India in 1943, when some parts of the country were unwilling to share in the 'equality of sacrifice', free trade was the only course which had at least some chance of averting the impending disaster. But those

who had accepted the expediency of free trade had not taken into account the power of obstruction of the local administrations. Free trade, hemmed in by transport priorities and other difficulties, was strangled by strong local measures. The provinces requisitioned and froze stocks, put traders behind the bars. Buying was like trying to get stuff from behind doors bolted and locked and well guarded. Free trade was not allowed to function and it is not possible to determine what results would have been achieved if it had been allowed to function, even for a short while. During the operation of free trade the economic unity of India was on trial. Free trade engendered much bitterness and much mud-slinging. It was withdrawn. The Government of India stood vanquished for the time, and the Government of Bengal shared their defeat. At least one thing happened, namely, as is evident from later events, the shock of Free trade resuscitated the Basic Plan. In this role free trade was a significant factor in resolving difficulties which months' discussions had failed to resolve. It must also be remembered that if rice and wheat had come into Bengal during May-July 1943 in the same trickle at which they were coming from January to April 1943, the distress would have been acuter. Free trade produced over 90,000 tons of rice and saved Bengal for a while—at least for a while.

28. It was in these circumstances that the Third All-India Food Conference was called in July 1943. In this conference the Government of India lost the 'Free Trade', but regained the 'Basic Plan'. What was considered impossible became possible. Foodgrain was procured and moved into Bengal. Unfortunately it was too late. Had the quantity which reached Bengal during the third and fourth quarters of 1943 been sent during the first and second quarters, the whole story would have been different.

29. All along the Government of Bengal failed to appreciate the enormity of the problem facing them. This applied also to the handling of foodgrains in quantities amounting to hundreds of thousands of tons.

An experienced witness deposed that the quantities of foodgrain moved after May 1943 was greatly in excess of those moved in peace-time in two ways, "..... first, in peace-time civil supplies moved in an even flow according to requirements. In this case next to nothing had moved for months, and the supplies were 'bunched' as we call it in technical transportation parlance; secondly: Bengal is a war area and army stores were moving in considerable quantities ....." In reply to an enquiry as to the time necessary to build up an adequate organisation in an emergency the witness stated, "..... it is a colossal business ..... Government has not got the staff and when they have recruited men have to be trained." Asked whether it was possible to have foreseen that the movements of the grain coming in would be so tremendous, the witness replied: "I think it would have been very difficult indeed to have foreseen it because it was an entirely new situation in India ..... and it must have been extremely difficult for the Provincial Government to realise beforehand that difficulties would arise in transportation in areas not far from the front-line ..... I do not think that with peace-time resources they would have been able to deal adequately with such emergencies in war-time ....."

It should have occurred to those in authority, that only an army, with trained staff, tried organisation, well equipped with transport, could cope with such a big job. A soldier grasped the problem and solved it.

30. *Inefficiency and corruption.*—These running sores of society, are serious obstacles to stability and progress, economic and social, and during an emergency lead to complete breakdown. They can neither be created nor destroyed in a day. The conditions of distress in a social organisation which lacked vigour led to defeatism, fatalism and inefficiency. Profiteering, a war-time disease, in face

of a serious shortage of food supplies, led to increased corruption. If India hopes to march on the path of progress, she must get rid of inefficiency and corruption, and every possible means should be adopted for the eradication of these evils as early as possible.

## II. UNPREPAREDNESS OF INDIA TO MEET FOOD EMERGENCY

31. On 'looking back' one is astonished at the unpreparedness of India to meet the food situation during an emergency. In England a complete food scheme had been worked out before the war started. It has not been possible to ascertain whether His Majesty's Government had, at any stage, suggested a similar study of the food problem of India in case of war. It may be said that India had passed through the last Great War without any food difficulty, and, therefore, the position did not demand attention. On the contrary, for years, numerous investigators and writers on economic, agricultural, medical and nutritional problems had been pointing to the seriousness of the food situation in India. Stationary, if not declining, food production, rapidly increasing population, under-fed millions, disease and high mortality had been the topics of serious thought and discussion. Was the Government ignorant of the normal food situation in the country? Did not dwindling exports and increasing imports for a pre-eminently agricultural country indicate danger?

Even after war had been declared, the food question received little attention. Even after Japan entered the war, food was still considered a problem of secondary importance. The Bihar Government's warning of 1940 was not heeded. A series of Price Control Conferences and Food Conferences had urged a better and co-ordinated control of food. They caused not a stir, till the situation was out of hand.

32. The Allies were carrying on a world war on several fronts, with unity of objective, and unity of action. The Russians were sacrificing men in millions. The Americans and the British were fighting in the deserts of Africa thousands of miles from their homes. All resources of men and material had been pooled. American factories were working for England and Russia, and British factories manufactured equipment for all the Allies. Russia had to be provided with munition and supplies. She could be supplied through Iraq and Iran with greater facility. A passage had to be obtained and a passage was obtained. Again, to carry on the war effectively the independent countries of the Middle East were organised for food supply. Unity of effort was achieved.

In contrast, what happened in India? India was fighting starvation and famine. The Government of India used persuasion, made demands for food-grains in the name of the unity of India, and equality of sacrifice. These failed. The last effort was free trade. The power of money, to get out grain which had not been produced, was employed. But free trade was resisted and it failed. Unity of effort was not achieved. Till July nothing effective was done. Free trade failed, but led to the working of the Basic Plan. Grain was produced from *within* the country. It was too late to save thousands who had marched too far on the path of starvation. Deaths continued during 1943 and during a part of 1944.

33. October 1943, in the fifth year of the war, witnessed a sudden change in the attitude of the Government of India. At the Fourth Food Conference held in October 1943 the President (Sir J. P. Srivastava) said "..... we must think of each other and not of ourselves ..... In the mobilisation of India's resources the Government of India will have to take and implement, decisions which may at times conflict with what appear to be local or sectional interests. Whenever possible, and to the greatest extent possible, the Government of India



will proceed after consultation with you and with your consent, but if circumstances should compel us to proceed otherwise, I look to you to accept and implement those decisions which we, and we alone can take on behalf of all ..... We can no longer afford either failure or prospect of failure and I, in the discharge of the duty which is mine, shall not hesitate to exercise whatever degree of superintendence and control at every stage may be necessary, or to invoke the use of whatever powers are essential to ensure success". This is what had been urged from the beginning of 1940. An early decision on these lines would have saved Bengal. This decision, one is constrained to say, was arrived at when the famine had almost spent itself.

M. AFZAL HUSAIN.

## Agricultural families and their holdings

1. The results of investigation into the means of livelihood of the population of Bengal have been tabulated at pages 121 to 125 of Volume IV of the Census of India, 1941. The form of the Tables differs from that of the Imperial Tables of 1931 by reason of the more detailed classification of dependants. As a measure of economy extraction did not proceed beyond the category of the class.

2. All occupations providing means of livelihood have been divided into four classes, namely, (A) production of raw materials, (B) preparation and supply of material substances, (C) public administration and liberal arts, and (D) miscellaneous. The cultivation of land naturally falls under (A). As indicated already, there are no separate figures for occupations falling under this class other than the cultivation of land. It is seen, however, from page 69 of the Statistical Abstract for British India, published in 1942, that "extraction of minerals" accounts for only 0.3 per cent and "fishing and hunting" for 1.4 per cent of the total; we may, therefore, roughly assume 2 per cent to be the allowance to be made under this class for occupations other than the cultivation of land.

3. It is seen from page 123 of the Census Tables, Volume IV, that the number of persons for whom particulars have been furnished, was 1,193,754 in the province of Bengal. It is presumed that this was a representative sample. The summary at page 122 shows that the numbers enumerated under the heads P, PS, and TD together add up exactly to this total. The figures thus added are shown below :—

Class and type of occupation	Number of persons	Percentage to total
A—Production of raw materials . . . . .	883,584	74.0
B—Preparation and supply of material substances . . . . .	161,141	13.5
C—Public administration and liberal arts . . . . .	38,253	3.2
D—Miscellaneous . . . . .	110,776	9.3
Total . . . . .	1,193,754	100.0

The following explanations have been furnished for the terms P, PS, and TD :—

P : Principal means of livelihood without subsidiary means of livelihood ;

PS : Principal means of livelihood with subsidiary means of livelihood ;

TD : Total dependants on this means of livelihood.

From this (and with reference to what has been said at paragraph 2 above) it may be concluded that all persons deriving the whole or a major part of their income from the cultivation of land, whether as owners of land, cultivating tenants or labourers working on the land, together with the members of their families dependent on them, amount to 72 per cent of the total population (60.31 millions) of Bengal, that is, 43.4 millions.

4. The subsidiary table at page 4 of the Census of India Tables, Volume IV, shows that in 1941, the number of persons per thousand houses in Bengal was 5,412. Assuming on the average that the size of a family is equal to the average number of inhabitants per house, the number of families in a population of 43.4 millions comes to 8 millions.

5. At the instance of the Land Revenue Commission, Bengal, certain special enquiries were made in 1939. The results have been tabulated as Appendix IX at pages 88-123 of Volume II of the Report of that Commission. Table VIII(b) (pages 114-115) shows that the 19,599 families enquired into held 85,470 acres and that the average holding of these families was 4.36 acres. Table No. VI(a) (pages 107-108) shows that the total area of all land held in *khas* by *raiyats* and *under-raiyats* holders in Bengal is 31.06 million acres. If the average holding of the sample which was investigated was roughly the same as the average of the province as a whole, the total number of families dependent on the cultivation of land should be 7.1 million.

6. The question arises whether the estimate of 8 million families arrived at on the basis of 1941 census figures is too high or whether the above estimate is too low. The figure of 8 millions is probably too high because it includes persons who are merely rent receivers. It also appears not unlikely that the estimate of 7.1 millions is too low, particularly if the families enquired into were not sufficiently representative of the poorest classes of cultivating families. There is some reason to think that this may have been the case, as will now be explained.

7. It is seen from Table No. VIII(d) (page 117) that 22.5 per cent of the families enquired into were "living mainly or entirely on agricultural wages". As a footnote to the Table points out, the corresponding figure according to the census of 1931 was 29.2 per cent. This

is one indication that the sample was inadequately representative of the class of cultivating families for the province as a whole. This is also corroborated by information furnished at page 121 of the Census of India 1941, Bengal Tables (Volume IV). This shows that out of a total of 453,689 persons who were wholly or principally dependent on the cultivation of land, 121,804 persons were agricultural labourers and their dependants. In other words, the percentage according to the 1941 census was 26.8. Similarly, Table No. VIII(d) (page 117) referred to above shows the percentage of families living mainly or entirely as *bargadars* (i.e., crop-sharing tenants) was 12.2 per cent. The corresponding percentage obtained from information given at page 121 of the Census of India 1941, Bengal Tables is 15.3 per cent.

8. It is, however, not surprising that estimates based on different methods of sampling vary, more especially since the census figures of dependants are not based on the treatment of the family as an ascertained unit. The census figures themselves have varied from one decennium to another. The inference which, we think, can safely be drawn is that the number of families in Bengal who depend mainly or entirely on the cultivation of land is approximately 7.5 millions.

9. Table No. VIII(b) (pages 114-115) shows that the proportion of families with less than 2 acres is 46.0 per cent of families with between 2 and 5 acres is 28.6 per cent of families with between 5 and 10 acres is 17.0 per cent; and of families with above 10 acres is 8.4 per cent. We accept these results, subject to the uncertainty indicated already and make the following deductions:

(i) Less than 2 million families hold more than 5 acres each and about one-third of this number hold more than 10 acres each.

(ii) About 2 million families hold between 2 and 5 acres each.

(iii) All others, who constitute about one half of all the families who depend wholly or mainly on the cultivation of land, are either landless or hold less than 2 acres each.

10. Table No. VIII(d) (page 117) shows that the proportion of families living mainly or entirely as *bargadars* is 12.2 per cent and the proportion of families living mainly or entirely on agricultural wages is 22.5 per cent. Reference has already been made at paragraph 7 above to the reasons for believing that the actual percentage for Bengal as a whole was probably rather higher. The available figures permit the following inferences to be drawn:

(i) The cultivating families of Bengal include roughly about one million families who live mainly or entirely as *bargadars*, i.e., crop-sharing tenants.

(ii) The number of families who live mainly or entirely on agricultural wages is about 2 millions.

## APPENDIX II

### Production and consumption of Rice in Bengal

1. PRELIMINARY.—It is necessary to make an estimate of the supply of rice available in Bengal during 1943, and to determine how this supply compared with—

- (a) the supply available in previous years, and
- (b) the requirements of the province during 1943.

No conclusions can be formed on these matters except by a survey of all available statistical information relating to a series of years; and, as there are defects and gaps in the information available, any conclusions finally reached must necessarily be tentative. The object of this note is to assess the effect of errors and omissions in available statistics and formulate the conclusions which appear to be the most probable.

2. DEFINITIONS.—Some of the terms used in this note are defined below.

(i) *Year*.—Except where otherwise stated, this means the calendar year.

(ii) *Rice*.—Means de-husked paddy and includes paddy in terms of rice. It also includes rice-products.

(iii) *Old rice*.—Of the rice available in the province during any year, the rice grown or imported during previous years is called "old rice", but it does not include the yield of the *aman* crop harvested at the end of the immediately preceding year.

(iv) *Carry-over*.—The 'carry-over' of any year means the stock of "old rice" physically in existence in Bengal on the first day of the year.

[*Note*.—This definition is sufficiently accurate for practical purposes. A stricter definition would be that the "carry-over" of any year means the stock of all rice physically in existence in Bengal on the first day of the year, *minus* the yield of the *aman* crop harvested in the immediately preceding year. A difference exists between the two definitions, only in so far as any portion of the *aman* rice harvested in the closing months of a year may be consumed in that year. This happens only in very lean years, and the quantities thus consumed are small in proportion to the *aman* supply as a whole.]

(v) *Aman supply*.—In relation to any year, the '*aman* supply' means the entire yield of the *aman* crop grown in the immediately preceding year.

(vi) *Boro supply* and *aus supply*.—In relation to any year, these terms mean the yield of the *boro* and *aus* crops grown and harvested during the year.

(vii) *External supply*.—By this is meant the excess of imports over exports. When exports exceed imports, "external supply" is negative.

(viii) *Current supply*.—In relation to a year, this means the sum of *aman, boro, aus*' and external supplies (that is to say, production *plus* imports *minus* exports).

(ix) *Total supply* means the sum of the carry-over and the current supply (that is to say, the carry-over *plus* the *aman, boro* and *aus* supplies, *plus* imports, *minus* exports).

(x) *Requirements* means the quantities estimated as required for seed and for consumption. The estimates are made on the basis of prevailing average rates—variations due to abnormal conditions being disregarded.

(xi) *Consumption*.—This is primarily meant to signify human consumption.

[*Note*.—Wastage and the use of rice for purposes other than seed and human consumption are not separately allowed for, nor is allowance made for consumption of cereals other than rice. The two factors are deemed to offset one another in the province as a whole.]

(xii) *Surplus or Deficit*.—The difference between *aman, boro* and *aus*, and external supplies on the one hand, and requirements on the other, is a 'surplus' when the supply exceeds requirements, and a 'deficit' when the supply falls short of requirements.

(xiii) *Supply in terms of weekly requirements*.—This means the number of weeks during which any given supply (whether carry-over, *aman, boro, aus*, external, current, or total) may be expected to be consumed, at the prevailing rate of consumption and after deducting seed requirements.

(xiv) *Shortage of supply and absolute deficiency*.—A distinction is drawn in this note between "shortage of supply" and "absolute deficiency". The latter exists when total supply falls short of the requirements of the year and is an advanced stage of 'shortage'. Supply is taken to be short when it is so relatively to the average supply of a period assumed to be the standard for purposes of comparison. In this note, the supply during 1943 is compared with the average of the immediately preceding 5 years as the standard; and the latter, in its turn, is compared with the average of 10 years preceding 1938.

### SECTION A—REVIEW OF INFORMATION AVAILABLE

3. **POPULATION**.—According to the census, the population of Bengal was 60·31 millions in 1941. The rate of increase at ten-yearly intervals had been 2·8% from 1911 to 1921, 7·3% from 1921 to 1931, and 20·3% from 1931 to 1941. It has been suggested that these figures do not reflect the real rate of increase, but an over-statement of actual numbers in the 1941 census or an understatement in the 1931 census or both. This may be true, but there are no reliable data to indicate the degree of error, if any, involved. There is, therefore, an element of uncertainty about the actual population in any particular year which must necessarily affect all estimates of the aggregate consumption of rice in the provinces as a whole.

4. **RATES OF CONSUMPTION OF CEREALS**—(i) *Standards (per adult and per capita)*.—The standard advised by the Government of India for purposes of rationing, and generally followed throughout India, is one pound a day per adult. The standard adopted in the rationing of Calcutta is 4 seers per week per adult, equivalent to 19 ounces per day. These standards are not based on ascertained actual consumption. It is generally assumed that the consumption of 100 persons of all ages is equivalent to that of 80 adults. On this basis, the standard rates of *per capita* consumption are 80% of those of adult consumption.

(ii) *Actual off-take of Greater Calcutta under Rationing*.—The average weekly off-take, on the basis of 22 weeks' actuals, was 5,529 tons of rice and 3,562 tons of wheat and wheat-products, or 9,091 tons in all. The number of registered ration card holders in Greater Calcutta was 4·10 millions. Of these 3·36 millions are adults, 0·68 million are children entitled to a half ration, and the rest are infants not entitled to any cereal ration; in other words, the total in terms of adults is 3·70 millions. If these figures represent the actual population, then the actual average off-take would be as follows:—

Average off-take	In seers per week	In ounces per day
Per adult	2·68	13
Per capita	2·41	11

But the number of registered ration cards cannot safely be assumed to be equivalent to the number of the total population, for the former include "dead cards" which, though registered are not used. The proportion of "dead cards" among those registered with Government stores is 16 per cent and it is believed that the proportion is smaller among cards registered elsewhere. Hence the actual average off-take is somewhere between the figures given above and those given below which are obtained by multiplying the figures by 100/84.

Average off-take	In seers per week	In ounces per day
Per adult	3·20	15
Per capita	2·87	14

(iii) *Estimates furnished by Professor Mahalanobis, Honorary Secretary, Indian Statistical Institute, Calcutta.*—Professor Mahalanobis has analysed the results of five different surveys conducted at different times between 1936 and 1942. Some of these were made at the instance of the Bengal Government and others were undertaken by the Indian Statistical Institute or the Viswabharati Institute of Rural Reconstruction. The following estimates, relating to the consumption of cereals, are based on his report :—

Per capita consumption of all cereals	In seers per week	In ounces per day
General average rate for Bengal . . . . .	3·58	17
Sectional average rates—		
(a) Rural population . . . . .	3·65	17
(b) Calcutta middle classes . . . . .	2·79	13
(c) Mofussil Urban middle classes . . . . .	2·75	13
(d) Industrial working classes . . . . .	3·47	16
(e) Families whose monthly expenditure is Rs. 10 or less . . . . .	2·95	14

[*Note.*—The number of families whose monthly expenditure was Rs. 10 or less, was 3,212 as against a total of 15,409 families in the sample ; and the number of persons included in such families was 11,788, as against a total of 81,554 in the sample.]

(iv) *Other estimates.*—Many other estimates have been made in the past which need not be referred to here. These were reviewed by the Foodgrains Procurement Committee, appointed by the Bengal Government during 1944. This Committee drew attention to the wide divergence between the estimates, and concluded that the general average rate of consumption in the province as a whole was probably higher than 4 seers per week per adult. If this view is accepted, the *per capita* rate is not less than 3·20 seers per week or 15 ounces per day.

(v) *Conclusions.*—(a) *General average.*—The available data do not permit of conclusions being drawn with certainty. It is probable that the true average rate is somewhere between the following limits :—

Per capita consumption	In seers per week	In ounces per day
Lower limit . . . . .	3·2	15
Upper limit . . . . .	3·6	17

(b) *Sectional averages.*—The rate of consumption of cereals is higher in the villages than in the towns and cities and higher for the working classes than the middle classes.

(vi) *Under-nourishment.*—A low rate of cereal consumption does not necessarily mean under nourishment. The figures supplied by Professor Mahalanobis show that the relatively lower rates of cereal consumption of the urban middle classes are associated with relatively higher rates of consumption of protective and supplementary foods. But the figures for “families whose monthly expenditure is Rs. 10 or less” indicate a cereal consumption rate of 14 ounces per day with a very low rate of consumption of other foods. This class, which accounts for one-seventh of the total number, is probably under-nourished even in normal times. It is probable that the actual proportion of the population which is under-nourished in normal times is larger than one-seventh, but precise information on this point is not available.

5. *DIRECT ESTIMATES OF ANNUAL CONSUMPTION.*—If, as mentioned already, the probable rate of consumption per head per week is anything between 3·2 seers and 3·6 seers, the probable annual consumption of a population of one million during one year might be anything between 153,000 tons and 172,000 tons. As the population of Bengal during 1941 was (according to the census) 60·3 millions, the probable annual consumption of the province may have been anything between 9·2 million tons and 10·4 million tons during 1941. The elements of uncertainty inherent in any estimate of total consumption of the province during any particular year include the following :—

(a) There is a range of error of over one million tons, arising out of the uncertainty about the average rate of consumption.

(b) The population of Bengal during 1941 may have been less than the census figure of 60·3 millions. If the true figure was smaller by as much as, say, 3 millions, the figure of consumption would have to be reduced by nearly half a million tons.

(c) An estimate of consumption for any earlier or later year depends on an allowance being made for the increase of population. This might, in view of the doubts mentioned already, be anything between 0·7 per cent per annum and 2 per cent per annum.

(d) For the following reasons it cannot be assumed that an average rate of consumption per head remains constant over a series of years :

(i) The proportion of the population which is under-nourished in normal times may be increasing. There is, however, no means of determining the effect of such a change on total consumption.

(ii) The poorer classes in rural areas, whose standard of consumption is normally low probably reduce their consumption in lean years and increase it in years of good harvest. Likewise the urban poor increase their consumption in periods when the prevailing level of wages and employment rises more rapidly than the price of cereals, and decrease it when the opposite occurs. It is, however, not possible to make any satisfactory allowance for such variations, because neither the numbers of the classes whose consumption may vary for these reasons, nor the range of the variation, is known.

It may thus be concluded that the information available is such that any estimate of the annual consumption of the province based on population statistics and an assumed average rate of individual consumption is likely to err by as much as 2 million tons—or about 25 per cent of the estimate. Se wide a margin of error blocks this method of approach.

6. BASIS OF INDIRECT ESTIMATES OF CONSUMPTION.—The annual consumption of the province may be estimated indirectly, without making any assumptions about the rates of individual consumption. Thus, if information is available as regards (i) the stock in hand in Bengal at the beginning of the year (ii) the stock added to it in the course of the year as a result of production and the balance of imports and exports, and finally, (iii) the stock carried forward at the end of the year, then (i)+(ii)-(iii) represents consumption and seed. Estimates of consumption have been made on this basis. Attention must, however, be drawn to the following difficulties :—

(i) Information is available about production, imports, exports and seed requirements. These are, however, subject to errors which in Bengal and other permanently settled areas are of considerable magnitude.

(ii) There is no information available about stocks carried over from year to year. An attempt may be made to overcome this difficulty taking a long period of years and assuming that the difference between the stocks at the beginning and end of the period is negligible in comparison with the consumption during the period as a whole. This is a reasonable method of procedure, but can give only the average annual consumption over the whole period and not the consumption of any particular year. In order to deduce the latter, some assumption has to be made as to the rate at which consumption varied from year to year during the period, and this is subject to uncertainties referred to in item (d) of paragraph 5 above.

7. STATEMENT I EXPLAINED.—(i) *Production*.—Information furnished by the Government of Bengal about the estimated acreage and yield of crops during 1943, and during the 15 preceding years, is given in tabular form in Statement I. The figures are based on crop forecasts prepared over a series of years by the Director of Agriculture, Bengal. The three rice crops (*aman*, *boro* and *aus*) are shown separately. The *aman* crop in any particular year is the crop which came into supply during that year, having been harvested towards the end of the preceding year. The *boro* and *aus* crops are those which are harvested during the year against which they are shown.

(ii) *Imports and Exports*.—Particulars of imports and exports, as furnished by the Bengal Government, are included in the statement. These are based on statistics compiled by the Department of Commercial Intelligence and Statistics. They relate to the financial year, except for 1943 for which figures for the calendar year are furnished (figures for earlier years have not been separately worked out in terms of the calendar year, since the difference involved is unlikely to be material for purposes of this analysis).

(iii) *Current supply*.—Current supply during each year is production plus imports minus exports. This has been determined for each year and shown in the statement.

(iv) *Seed requirements*.—In the Report on the Marketing of Rice in India and Burma, it has been estimated that the seed requirements of 21·27 million acres in Bengal are 376,000 tons, *v.e.*, an average of 1·77 tons per hundred acres. On this basis, the seed requirements of the sown area of each year have been worked out and shown in the Statement.

8. STATEMENT II EXPLAINED.—(i) *Consumption (Average over 15 years)*.—Figures of current supply (less seed), as determined from Statement I, are set out in column 2 of Statement II against the years noted in column 1. The average of the figures of current supply during 15 years (1928-1942) is taken, for the reasons explained in paragraph 6, to be the average annual consumption in this period as a whole. This amounts to 8·14 million tons.

(ii) *Consumption (year to year)*.—To deduce from this figure an annual estimate of consumption some assumptions must be made about the variation in consumption from year to year.

It is assumed that consumption increased at the rate of 0·10 million tons each year during the period.<sup>1</sup> The results are set out in column 3 of Statement II.

(iii) *Surpluses and Deficits.*—If we compare current supply (less seed) with consumption, the difference is either the surplus or the deficit according as supply exceeds or falls short of the requirements.<sup>2</sup> These figures have been determined and set out in Statement II.

(iv) *Current supply, surpluses, and deficits, in terms of weekly requirements.*—(i) 'Weekly requirements' may be estimated by dividing the estimates of annual consumption by 52. The number of weeks during which current supply may be expected to be consumed is obtained first by deducting seed requirements from current supply and then dividing by the figure representing 'weekly requirements'. This has been worked out and shown in Statement II. Similarly, surpluses and deficits are also expressed in terms of weekly requirements.<sup>3</sup>

9. **STATEMENTS III AND IV EXPLAINED.**—Statements I and II have been compiled on the basis of statistics of production, imports and exports, as available; and without alteration. But it is known that they are subject to certain errors and omissions. It is now necessary to consider the latter and make reasonable allowances for them.

Statements III and IV are the result of a revision of Statements I and II in the light of the following considerations:—

(i) *Estimates of acreage.*—The figures of acreage under the *aman*, *boro* and *aus* crops of different years as set out in Statement No. I are those given by the Director of Agriculture, Bengal. There is an important difference between the manner in which these figures are arrived at in Bengal (and certain other permanently settled areas) on the one hand, and the *ryotwari* areas of India, on the other. In the latter, the figures are arrived at by an enumeration of survey fields under crop, and the ascertainment of areas from land registers and village records.

In Bengal, the figures are arrived at by estimating the area in a particular year as a proportion of an assumed *norm*. It has been ascertained in evidence, that these *norms* were assumed in the past without any reference to areas under crop as recorded in settlement reports of different districts in different years. A comparison of the total of areas thus recorded in settlement reports with the acreages furnished in crop forecasts indicates that there has been a systematic under-estimation of acreages over a long period of years. This is also the opinion of an experienced administrative officer of Bengal, as well as of Professor Mahalanobis who has studied the

<sup>1</sup>This implies an increase of consumption at the rate of 1·34 per cent per annum in 1928, diminishing slowly to 1·13 per cent per annum in 1942. Whether the allowance is reasonable or not depends primarily on what the rate of increase of population has been. Here it has been assumed that the rate of increase is not as small as 0·73 per cent per annum (as a comparison of the census figures of 1921 and 1931 suggests) nor as high as 2·03 per cent per annum (as a comparison of the census figures of 1931 and 1941 suggests). It is probable that the actual rate of increase of population has been more steady, approximately equivalent to the mean of these two figures, *i.e.*, 1·38 per cent per annum. If this is accepted, and given the proportion of the poorest classes to the total population, an increase in the assumption made in Statement II about the variation from year to year is not unreasonable.

It should be immediately added that the derived figures are intended to be estimates of quantities required for consumption. It is possible that the actual consumption during any particular year may be a little below or a little above requirements—this depending on conditions of season and prices. In years of very poor (or very good) harvests, it is not merely possible but probable, that actual consumption may be significantly in defect (or in excess as the case may be) of estimated consumption. These facts must be borne in mind, in drawing conclusions from the estimates of consumption, which are estimates of the quantities likely to be consumed by the population as a whole, at the average rate of consumption of the different classes of the population, in the immediately preceding years.

<sup>2</sup>It is probable that surpluses, worked out in this manner, may in years of very good harvests be larger than the actual surpluses—to the extent to which the poorer classes consume more than normally. It is probable also that deficits, estimated in the same way may, in years of very poor harvests, be larger than the actual deficits—to the extent to which the poorer classes consume less than normally.

<sup>3</sup>There is an advantage in expressing supply figures in terms of weekly requirements which may be explained as follows:—

The object of this note is to draw, from statistical data which may be subject to large errors conclusions which are as little as possible vitiated by such error. It is a well known rule of statistical analysis that the error in a ratio between two terms is very nearly the difference between the errors in the two terms. If the errors in the terms are in the same direction, they tend to neutralize one another; and, if they are also nearly equal, the error in the ratio is very small. As estimates of weekly requirements are deduced from figures of current supply, the error in the latter is likely to be reflected by an error of the same order in the former. The errors thus tend to neutralize one another.

subject. It may, therefore, be regarded as well established that there is an under-estimation. The correction to be made can be deduced from the following figures:—

	Area sown (in million acres)	
	Aman	Boro and aus
Standard (1938-1942)	15.99	6.40
Total of Settlement Reports	19.22	6.32

These figures justify the assumption that the estimated acreages of *aman* crop are likely to be closer to the true figures, if they are increased by one-fifth. Figures, revised on this basis, are set out in Statement III annexed to this note.

(ii) *Estimates of yield.*—After the acreage is estimated, the yield is estimated by a process involving two factors, viz. (a) the assumption of a 'normal' rate of yield per acre, and (b) the estimation of the actual rate of yield of the year as a proportion of the 'normal'.

Errors incidental to the latter are unavoidable, but will probably not affect the comparability of estimates made in different years. As regards 'normal yield rate', this is settled at quinquennial intervals by means of crop-cutting experiments. The assumed rates are shown below:—

Period	Assumed 'normal' rate of yield in maunds per acre		
	Aman	Boro	Aus
1928-32	13.5	15.0	12.4
1933-37	12.5	14.5	11.1
1938-42	12.4	13.6	10.9

The 'normal yield' is the absolute value attached to a 12 anna crop, and has been defined as the yield which "in the existing circumstances might be expected to be attained in the year if rainfall and season were of a character ordinary for the tract under consideration, that is neither very favourable nor the reverse". If (as is implicit in this definition) the effect of the season is regarded as constant, the only factors which influence the yield rate per acre are the extension of cultivation to marginal lands, alteration in the fertility of the soil or changes in methods of cultivation. These are factors the effect of which is perceptible only over a long period. In reply to an enquiry on this point, the Director of Agriculture as well as the Department of Civil Supplies, Bengal, have agreed that the assumed rates of 1928-1932 were overpitched. It seems therefore, reasonable to assume that the *aman* yield figures of 1928-1942 should be reduced by 1/15th, and the *aus* yield figures should be reduced by 1/12th, in order to make them comparable with the corresponding figures of succeeding years.<sup>1</sup> As regards the *boro* rates, the differences between successive years are unduly wide, though nearly equal; but, in view of the very small proportion which this crop bears to the total, it is not worth while disturbing the *boro* figures. Figures of yield, revised in this manner, are exhibited in Statement III.

(iii) *Imports and Exports.*—The figures of imports and exports set out in Statement II are not estimates. They are based on the actual registration of receipts and despatches made by Port and Railway authorities and the statistics, compiled by the Department of Commercial Intelligence and Statistics, are far more accurate than estimates of yield of crops. The figures, however, do not include movements across the provincial frontiers by road or by country-boat. Such movements take place in both directions and, except for the trade with Assam and Arakan, probably balance one another. On the balance of recorded movements, the position during each of the three quinquennial periods was as shown below:—

Period	Net Imports (+) Net Exports (—) (in thousands of tons)
Average (1928-32)	—128
Average (1933-37)	+51
Average (1938-42)	+159

<sup>1</sup> On this basis the rates of normal yield of the *aman* and *aus* crops are as follows:—

	In maunds per acre	
	aman	aus
1928-32	12.6	11.4
1932-37	12.5	11.1
1938-42	12.4	10.9

It has been suggested that the effects of the economic depression on agricultural economy generally may be a possible cause of diminution of the rates of normal yield.



The quantities are relatively small. The unrecorded movements are probably smaller. It is proposed to assume that unrecorded movements are equivalent to net imports of roughly 50,000 tons per annum in the second quinquennium and 100,000 tons in the third quinquennium. This would probably suffice to remove the possibility of the true extent of the dependence of Bengal on external supply being under-estimated. Figures of external supply, revised on this basis, are exhibited in Statement III.

10. COMMENTS ON ORIGINAL AND REVISED FIGURES.—(i) The most important difference between Statements I and II based on original figures, and Statements III and IV based on revised figures, is the increase in the supply figures which results from increasing the *aman* acreage by one-fifth. There is evidence suggesting that the revised figures are nearer the truth. In paragraph 5 above, it has been pointed out that the probable limits of consumption during 1941 were 9·2 and 10·4 million tons. This result was deduced from direct estimates of consumption, without reference to supply statistics. According to Statement II, the consumption requirements are estimated for this year as 8·74 million tons; while, according to Statement IV, the estimate is 9·90 million tons. These estimates were arrived at without any reference to estimates of actual consumption, but indirectly from supply statistics. The fact that the estimate arrived at in Statement IV lies between the probable limit, while the estimate arrived at in Statement II is smaller than the lower limit by nearly half a million tons, suggests that the revised figures are likely to be more accurate.

(ii) Other changes, *viz.*, reduction of yield rates in the quinquennium 1928-32 and increase of net imports in the subsequent decade, are quantitatively of smaller importance.

(iii) In the course of further discussion in this note the figures contained in Statements III and IV will be referred to, as they are regarded as likely to be nearer the truth than the corresponding figures of Statements I and II. Both sets of figures are, however, available for comparison, when necessary.

## SECTION B—SUPPLY IN RELATION TO REQUIREMENTS FROM 1928 TO 1937

11. In this section it is proposed to examine the relation of supply to requirements during the ten years 1928 to 1937. The points to be considered are—

- (i) the relative importance of the different elements in current supply during the period as a whole, *viz.*, the yields of different crops and external supply;
- (ii) the variations of supply, and surpluses and deficits in different years;
- (iii) the carry-over and total supply in years of serious shortage of current supply.

In the next section, these points will be examined in relation to the period 1938 to 1943. Later figures of 1943 will be compared with those of the two previous periods.

12. The following table shows average current supply, in the ten years 1928 to 1937:—

	<i>Supply in terms of weekly requirements</i> <sup>1</sup>
(i) <i>Aman</i> supply . . . . .	42
(ii) <i>Boro</i> and <i>aus</i> supply . . . . .	12
(iii) External supply . . . . .	..
Current supply . . . . .	54

The yield of the *aman* crop, the most important source of supply, provided on the average the food required by the province for 42 weeks. The *boro* and *aus* crops provided 12 weeks' food. (Of these two crops, the *aus* is much more important. The *boro* accounts for a little more than one week's food). Taking the period as a whole, the external supply was quantitatively negligible. During the first half of the decade, the province was a net exporter of less than one week's supply per annum; and, towards the end, it was a net importer of less than one week's supply per annum. Thus current supply, on the whole, exceeded requirements by a margin equivalent to nearly two weeks.

13. The variations of current supply from year to year, during this ten-year period, are shown below:—

Year	Current supply in terms of weekly requirements	Year	Current supply in terms of weekly requirements
1928 . . . . .	45	1933 . . . . .	60
1929 . . . . .	57	1934 . . . . .	55
1930 . . . . .	52	1935 . . . . .	53
1931 . . . . .	57	1936 . . . . .	44
1932 . . . . .	56	1937 . . . . .	59

<sup>1</sup>Rounded to the nearest week.

Two years stand out from this table, viz., 1928 and 1936, as years of serious shortage in current supply. During the remaining 8 years there was no shortage of current supply, and in a number of years it was substantially in excess. Surpluses exceeded deficits by a considerable margin; and, *prima facie*, it would appear that stocks carried over from year to year must have been accumulating in the province during the period. Are these inferences consistent with experience?

14. There is no doubt that there was a serious shortage of current supply during 1928 and 1936. It is known that the yield of the *aman* crop harvested in the years immediately preceding 1928 and 1936 was unusually low, and there was serious distress among the poorer classes in parts of the province. Relief measures were undertaken on a considerable scale during those years. So far, the figures are confirmed by known facts. But the question arises, in respect of 1936, why, if stocks had been accumulating as the figures suggest, considerable distress should have occurred during that year? Two answers are possible: One is that the surpluses of previous years were not, in fact, substantially carried over, but were eaten up because, when crops are good and prices low, actual consumption by the poorer classes is in excess of the "requirements" indicated by the figures. The other possibility is that the surpluses indicated by the figures were substantially carried over; that the province as a whole did possess during 1936 a carry-over which, together with current supply, was more than sufficient for requirements; that distress nevertheless, occurred because large numbers among the poorer classes whose income was diminished by the failure of the crop, were too poor to buy the supplies which were physically available. The latter is probably the correct view. It is true that the consumption of the poorer classes is variable. Large numbers who live on the margin of subsistence consume more when they can and less when they must. But the range of this variation should not be over-estimated. The following considerations suggest that increase of consumption could not have wiped out the whole, or even a large part, of the surpluses of the years preceding 1936:—

(i) The cultivators and non-cultivating landholders who have a surplus in excess of their normal annual requirements are likely to consume an adequate ration even in normal times and unlikely to increase their consumption in years of good supply or low prices. Though this class may not be larger in numbers than those who produce less than their annual requirements, it is likely to be in physical possession of a large proportion of the total surplus produce. This is likely to have been carried over in full,—as stocks in the hands either of producers or traders.

(ii) From 1930 onwards for a number of years, the price of rice was abnormally low. This meant that the poorer cultivators,—who could have increased their consumption—were obliged to sell a larger quantity of produce than normally, in order to secure the same amount of cash for paying rent, debts, and other pressing cash obligations.

(iii) The period of abnormally low prices also coincided with a fall in the level of employment. Therefore, labourers who could have increased their consumption in prevailing conditions were probably handicapped to some extent by diminution of their earnings.

It may, therefore, be concluded that during 1936 there was a carry-over which largely exceeded the deficit in current supply during the year; and that distress prevailed, not because the supplies required for the adequate nourishment of the poorer classes were unavailable, but because these classes could not afford to buy them. This is an important conclusion, in connection with the supply position in 1943.

#### SECTION C—SUPPLY IN RELATION TO REQUIREMENTS FROM 1938 TO 1942.

14. The following table shows the average current supply in the 5 years 1938 to 1942:—

	Current supply in terms of weekly requirements <sup>1</sup>
(i) <i>Aman</i> supply . . . . .	38
(ii) <i>Boro</i> and <i>aus</i> supply . . . . .	10
(iii) External supply . . . . .	1
	<hr/>
Current supply . . . . .	49
	<hr/>

If we compare these figures with those in paragraph 12, it appears that, on the whole, current supply was in deficit during this period. The *aman* crop provided on the average a supply which was 4 weeks shorter than in the previous decade. The *boro* and *aus* crops provided a supply which was 2 weeks less. On the other hand, the province had become a net importer during the period, and external supply accounted for rather more than one week's supply. The difference between the two periods can be explained as follows:—First, the rate of increase of cultivation of rice was falling behind the rate of increase of population, and there was thus a long-term tendency towards decreasing surpluses and increasing deficits. Secondly, this tendency was

<sup>1</sup>Rounded to the nearest week.

to some extent offset by a preponderance of good seasons in the previous period, and emphasized in this period by a preponderance of unfavourable seasons. This is illustrated by the figures in the following table :—

	Total area sown (In millions of acres)	Average rate of yield per acre (In tons)
Average (1928-1932) . . . . .	23·71	0·39
Average (1933-1937) . . . . .	24·53	0·40
Average (1938-1942) . . . . .	25·53	0·37

15. The variations of current supply from year to year during this five-year period are shown below :

Year	Current supply in terms of weekly requirements
1938 . . . . .	52
1939 . . . . .	49
1940 . . . . .	50
1941 . . . . .	39
1942 . . . . .	54

On comparing these figures with those furnished in paragraph 13 above, 1941 stands out as a lean year even more clearly than 1928 and 1936 in the ten-year period previously considered. There was only one year (1942) when there was a surplus and the surplus was relatively small. Thus it appears that stocks must have been drawn upon during this period, and particularly heavily during 1941. Distress occurred in rural areas during this year, and relief measures were undertaken on a considerable scale.

16. The state of current supply during 1941 supports the conclusion reached in paragraph 14 above, namely, that the stocks carried over from year to year must have been considerable. The deficit in the current supply was as much as 13 weeks. It is difficult to believe that the whole, or even a large part, of this deficit could have been met by restriction of consumption. Undoubtedly, the actual consumption of large classes of the poor must have been reduced to a significant extent. Let us suppose that one-half of the population restricted their consumption in varying degrees, so that one-sixth reduced its intake of rice by half for 6 months, one-sixth for 4 months, and the remainder for 2 months and that all this was in addition subject to such under-nourishment as exists in normal years. The reduction of consumption thereby effected would amount to only 4 weeks' supply.

17. It is arguable that there must have been a large consumption of the new *aman* crop reaped at the end of 1941 and this helped to make the deficit good. This is, no doubt, true: There is evidence that in 1941 there was noticeable increase of such consumption. Here again we may ask how much could this have amounted to ? The interval between the reaping of the *aman* crop and the end of the year is small, and those sections of the poorer classes who have to get their supply from the markets, and not directly from the fields, would still consume only earlier grown or imported rice. Making allowance for all these factors, it still remains probable that in 1941, as in 1936, there was not an absolute deficiency of supply. The total supply, consisting of the carry-over and current supply, must have been smaller than in 1936, but not necessarily short of the requirements of the province as a whole. The distress prevailing in the year 1941 was, as in 1936, primarily due to the lack of purchasing power in the hands of the poorer classes who were affected by the crop failure.

18. An attempt can be made to discover whether there was any stock left at the end of 1941, as the carry-over<sup>1</sup> at the beginning of 1942, in the following manner. The carry-over at the beginning of 1928 is unknown. Supposing it was entirely wiped out by the deficit of that year, we may consider only the surpluses and deficits of succeeding years as set out below :—

Year	Surplus (Million tons)	Year	Deficit (Million tons)
1929 . . . . .	0·79	1936 . . . . .	1·50
1931 . . . . .	0·80	1939 . . . . .	0·51
1932 . . . . .	0·68	1940 . . . . .	0·34
1933 . . . . .	1·40	1941 . . . . .	2·43
1934 . . . . .	0·44		
1935 . . . . .	0·24		
1937 . . . . .	1·35		
	5·70		4·78

These figures indicate the existence of nearly one million tons, as the carry-over at the beginning of 1942—that is, about 5 weeks' supply for that year. (This might have been rather more, if the

<sup>1</sup> The stock of all rice at the beginning of 1942 minus the yield of the *aman* crop harvested in 1941, see paragraph 2 (iv) above.

carry-over at the beginning of 1928 had been larger than the deficit during that year). There is of course little direct evidence in support of this conclusion. All that can be said is that it is a reasonable inference drawn from the analysis made in this note. It is not rendered improbable merely because actual consumption is variable and not identical with the assumed figures of 'requirements'. If consumption increased in good years and decreased in bad years, the surpluses would no doubt be smaller, but the deficits would also be smaller.

#### SECTION D—SUPPLY IN RELATION TO REQUIREMENTS IN 1943.

19. The following table shows the particulars of current supply during 1943 :—

	Supply in terms of weekly requirements <sup>1</sup>
(i) Aman supply . . . . .	29
(ii) Boro and aus supply . . . . .	13
(iii) External supply . . . . .	1
	43
Current supply . . . . .	43

If we compare the figures with those of the *average* of the preceding 5 years (as set out in paragraph 14 above), current supply was short by about 6 weeks. This was mainly due to the low yield of the *aman* crop reaped at the end of the previous year which provided food sufficient for only 29 weeks, as compared with the average, viz. 38 weeks. There was a shortage in the *aman* supply to the extent of about 9 weeks. The *boro* and *aus* crops yielded more, thus reducing the shortage of current supply. External supply was about the same during 1943 as compared with the average.

20. Thus, 1943 was a lean year, comparable with the three years 1941, 1936 and 1928 already considered. Current supply in these years is compared below :—

Year	Current supply in terms of weekly requirements
1943 . . . . .	43
1941 . . . . .	39
1936 . . . . .	44
1928 . . . . .	45

The shortage of current supply was a little more serious during 1943 than in 1936 and 1928, but less serious than in 1941. This table brings out the need of forming some idea of the carry-over. If consumption is so variable that it can adjust itself to large variations in current supply and variability of consumption is of much greater importance than the carry-over, it is difficult to understand why an unprecedented tragedy befell Bengal during 1943, when current supply was larger than in 1941 by nearly 4 weeks' supply. It is clear, however, from the examination of the supply position in past years—

(i) that the total supply consisting of the carry-over, as well as current supply, has generally exceeded annual requirements by a considerable margin in past years;

(ii) that distress occurs even when such a margin is adequate, primarily because the poorer classes in rural areas affected by crop failure, lack the purchasing power necessary for buying supplies even though they are physically available in the province; and that this was so both during 1941 and 1936<sup>2</sup>.

21. If the conclusion stated in paragraph 18 is accepted some estimate of the carry-over during 1943 may be reached. The carry-over at the beginning of 1942 was about 5 weeks requirements. During 1942, current supply exceeded annual requirements, and there was a small surplus of between one and two weeks' requirements. This suggests that the carry-over at the beginning of 1943 was about 6 weeks' requirements. If this is correct, the total supply during 1943 was probably as follows :—

	Supply in terms of weekly requirements
(i) Carry-over . . . . .	6
(ii) Current supply . . . . .	43
	49
Total supply . . . . .	49

Thus, it is probable that total supply during 1943 was not adequate for the requirements of the year. In other words, there was an absolute deficiency, the probable magnitude of which was equivalent to about 3 weeks' requirements.

<sup>1</sup> Rounded to the nearest week.

<sup>2</sup> It is not possible to say anything about 1928, as the supply position prior to that year has not been examined.

22. It must, however, be emphasized that there is no direct information available about the carry-over of any year, and that the basis for assessment of surpluses and deficits involves many assumptions, none of which is conclusively provable. It can, therefore, be argued that the carry-over at the beginning of 1943 was smaller or larger than has been estimated in the previous paragraph. Some of the points in favour of either view are referred to below :—

(i) The conclusion that the carry-over at the beginning of 1942 was about 5 weeks' supply was based on the assumption that the carry-over at the beginning of 1928 was so small that it was wiped out by the deficit in that year. It may have been larger. This is possible, but there is some reason to believe that it may not have been very large. The *aman* crop of 1926 which came into supply during 1927, was also a poor one; and this makes it likely that the carry-over was not large at the beginning of 1928.

(ii) It may be urged that there was never any large carry-over during these years, and that whatever existed was completely exhausted at the end of 1941; and that since the current supply in 1942 was only a little more than sufficient for annual requirements, there could have been practically no carry-over at the beginning of 1943. The reasons for believing that there had been a substantial increase in stocks during the years of depression and a few years thereafter have already been explained.

(iii) Lastly, mention should be made of the results of the 'food drive' conducted in June 1943 by the Bengal Government. In its course a census of stocks was taken and the requirements for the remainder of the year, as well as the anticipated yield of the *aus* crop, were ascertained. The conclusion reached by the Bengal Government was that there was an absolute deficiency of 1.06 million tons—roughly equal to 5 weeks' requirements on the basis of the present analysis. The results are, however, not conclusive because it was known at the time that stocks were under-estimated, on account of under-statement by the owners as well as concealment. The Bengal Government assumed that the under-estimation was equivalent to one-fourth of the ascertained stocks. There is no way of determining whether this allowance was adequate. If it was not, the deficiency would have been less. The statistical results of the food drive are indeed of value in that they suggest that there was an absolute deficiency. The total of ascertained stocks at the time of the drive was 0.94 million tons. Unless, therefore, the stocks which were under-stated or concealed largely exceeded the ascertained stocks, it is evident there must have been some deficiency. On the whole, therefore, the results of the 'food drive' are consistent with the conclusions about the supply position reached in the preceding paragraphs.

23. To sum up, the supply position in 1943 may be described as follows :—

(i) *Comparison with previous years.*—(a) There were three years, within a period of 15 preceding years, when the shortage in current supply was comparable with that in 1943.

These were 1941, 1936 and 1928. In these years, the shortage was due to the failure of the *aman* crop, there was distress among the poorer classes in rural areas affected by the crop failure, and relief measures were undertaken on a considerable scale. The current supply during 1943 was smaller, in relation to requirements, than in any previous year except 1941.

(b) The carry-over was smaller in 1943 than in 1941 and much smaller than in 1936.

(c) The total supply, including the carry-over, was probably smaller in 1943 than in any of the preceding 15 years.

(ii) *Estimated supply in relation to requirements of the year.*—(a) The current supply during 1943 was sufficient for the requirements of about 43 weeks.

(b) The carry-over at the beginning of the year was sufficient for the requirements of about 6 weeks.

(c) The total supply during the year was sufficient for only about 49 weeks. It is, therefore, probable that there was an absolute deficiency of supply, of the order of 3 weeks' requirements.

STATEMENT I.—UNADJUSTED CURRENT SUPPLY AND SEED REQUIREMENTS IN BANGAL.

(Figures in '000)

Year	Arman crop			Boro crop			Aus crop			External supply			Current supply	Seed requires: months
	Average	Yield	Tons	Average	Yield	Tons	Average	Yield	Tons	Imports	Exports	Net imports (+) or exports (-)		
1	2	3	4	5	6	7	8	9	10	11	12			
1928	13,210	4,731	400	160	5,649	2,119	668	507	+161	7,171	388			
1929	15,357	7,405	398	162	5,031	1,589	270	520	-250	8,906	359			
1930	14,794	6,453	400	160	5,082	2,107	208	519	-311	8,409	384			
1931	15,120	6,943	380	156	6,163	2,190	571	571	..	9,289	386			
1932	15,571	7,150	394	152	5,795	2,209	360	599	-239	9,272	385			
1933	15,590	6,958	394	198	5,775	2,254	549	630	-81	9,329	380			
1934	15,439	6,226	399	200	5,571	1,842	978	614	+364	8,632	372			
1935	14,750	6,222	408	209	5,851	2,015	433	333	+100	8,546	372			
1936	14,837	5,003	404	189	5,757	1,903	570	465	+105	7,200	392			
1937	15,804	7,692	432	209	5,865	1,963	244	479	-235	9,629	390			
1938	15,923	6,873	414	198	5,727	1,403	710	677	+33	8,507	390			
1939	15,836	5,963	425	201	5,742	1,758	1,156	774	+382	8,394	388			
1940	16,096	6,504	418	194	5,416	1,525	752	494	+258	8,481	387			
1941	14,917	4,315	437	203	6,485	2,250	759	536	+223	6,991	422			
1942	16,914	7,396	444	206	6,507	1,694	274	376	-102	9,194	410			
1943	16,207	5,020	480	218	6,500	2,390	275	11	+264 (a)	7,892	472			

(a) Calendar year figure as per "Trade" Statistics.

Arman crop is crop harvested after 15th November's sowing.

STATEMENT II.—CONSUMPTION, SURPLUSES AND DEFICITS IN BENGAL.  
(In millions of tons)

Year	Current supply less seed	Consumption	Surplus (+) or Deficit (—)	In terms of weekly requirements	
				Current supply	Surplus (+) or Deficit (—)
1	2	3	4	5	6
1928 . . . . .	6.80	7.44	—0.64	47.5	—4.5
1929 . . . . .	8.55	7.54	+1.01	59.0	+7.0
1930 . . . . .	8.03	7.64	+0.39	54.6	+2.6
1931 . . . . .	8.90	7.74	+1.16	59.8	+7.8
1932 . . . . .	8.89	7.84	+1.05	59.0	+7.0
1933 . . . . .	8.95	7.94	+1.01	58.6	+6.6
1934 . . . . .	8.26	8.04	+0.22	53.4	+1.4
1935 . . . . .	8.17	8.14	+0.03	52.2	+0.2
1936 . . . . .	6.81	8.24	—1.43	43.0	—9.0
1937 . . . . .	9.24	8.34	+0.90	57.6	+5.6
1938 . . . . .	8.12	8.44	—0.32	50.0	—2.0
1939 . . . . .	7.92	8.54	—0.62	48.2	—3.8
1940 . . . . .	8.09	8.64	—0.55	48.7	—3.3
1941 . . . . .	6.57	8.74	—2.17	39.0	—13.0
1942 . . . . .	8.78	8.84	—0.06	51.6	—0.6
Total 1928-42 . . . . .	122.08				
Average 1928-42 . . . . .	8.14				
1943 . . . . .	7.42	8.94	—1.52	43.2	—8.8

STATEMENT III.—ADJUSTED CURRENT SUPPLY AND SEED REQUIREMENTS IN BENGAL.

(Figures in '000)

Year	Aman crop		Boro crop		Aus crop		External supply		Current supply	Seed requirements
	Acreage	Yield	Acreage	Yield	Acreage	Yield	Net imports (+) or exports (-)			
							Tons	Tons	Tons	Tons
1928	15,852	5,299	400	160	5,049	1,943	1,943	1,943	9,945	440
1929	18,429	8,293	398	162	5,031	1,457	+161	7,563	10,771	435
1930	17,752	7,228	400	160	5,082	1,932	-250	9,662	9,927	425
1931	18,144	7,776	380	156	6,163	2,008	-311	9,009	9,840	424
1932	18,686	8,008	394	152	5,795	2,024	-239	9,940	8,251	448
1933	18,708	8,350	394	198	5,775	2,254	-31	11,218	11,218	446
1934	18,598	7,471	399	200	5,571	1,842	+414	9,981	9,981	446
1935	17,712	7,466	408	209	5,851	2,015	+160	9,506	9,506	445
1936	17,804	6,004	404	189	5,757	1,903	+155	9,882	7,954	482
1937	18,984	9,231	482	209	5,865	1,963	-185	10,774	10,774	467
1938	19,107	8,247	414	198	5,727	1,403	+133	144,313	144,313	6,908
1939	19,003	7,155	425	201	5,742	1,758	+482	9,620	9,620	441
1940	19,315	7,805	418	194	5,416	1,525	+358	8,896	8,896	537
1941	17,900	5,178	437	203	6,485	2,250	+323			
1942	20,297	8,876	444	206	6,507	1,694	-2			
Total 1928-42	276,271	112,387	6,147	2,797	86,416	27,971	+1,158			
Average 1928-42	7,492	410	186	186	5,761	1,865	+77			
1943	19,449	6,024	480	218	6,500	2,390	+264 (a)			

(a) Calendar year figure as per "Trade" Statistics.



STATEMENT IV.—CONSUMPTION, SURPLUSES AND DEFICITS IN BENGAL.  
(In millions of tons)

Year	Current supply less seed	Consumption	Surplus (+) or Deficit (—)	In terms of weekly requirements	
				Current supply	Surplus (+) or Deficit (—)
1	2	3	4	5	6
1928	7.14	8.34	—1.20	44.5	—7.5
1929	9.25	8.46	+0.79	56.8	+4.8
1930	8.57	8.58	—0.01	51.9	—0.1
1931	9.50	8.70	+0.80	56.8	+4.8
1932	9.50	8.82	+0.68	56.0	+4.0
1933	10.34	8.94	+1.40	60.1	+8.1
1934	9.50	9.06	+0.44	54.5	+2.5
1935	9.42	9.18	+0.24	53.4	+1.4
1936	7.80	9.30	—1.50	43.6	—8.4
1937	10.77	9.42	+1.35	59.4	+7.4
1938	9.54	9.54	..	52.0	..
1939	9.15	9.66	—0.51	49.2	—2.8
1940	9.44	9.78	—0.34	50.1	—1.9
1941	7.47	9.90	—2.43	39.3	—12.7
1942	10.31	10.02	+0.29	53.5	+1.5
Total 1928-42	137.70				
Average 1928-42	9.18				
1943	8.36	10.14	—1.78	42.8	—9.2

## APPENDIX III

TABLE I.—RICE SUPPLY (INDIA) DURING 10 YEARS

Period	Production	Imports (a)	Exports (a)	Net	
				Imports (+) or exports (—)	Production minus net exports plus net imports
1	2	3	4	5	6
5 years ending 1937-38 (Average)	25.84(c)	1.96(b)	0.24(b)	+1.72	27.56
1938-39	23.96(c)	1.56	0.31	+1.25	25.21
1939-40	25.73(c)	2.43	0.29	+2.14	27.87
1940-41	22.19(d)	1.37	0.28	+1.09	23.23
1941-42	25.35(d)	1.07	0.36	+0.71	26.06
1942-43	24.90(d)	0.02	0.28	—0.26	24.64
6 years ending 1942-43 (Average)	24.42	1.29	0.30	+0.99	25.41
10 years ending 1942-43 (Average)	25.13	1.62	0.27	+1.35	26.48

NOTE.—Paddy in the case of trade figures has not been converted into Rice, the proportion being very small.

(a) Trade figures taken from the Memorandum of the Food Department, Government of India.

(b) Calculated on the basis of figures taken from the Report on the Marketing of Rice in India and Burma (1941).

(c) Taken from "Estimates of Area and Yield".

(d) "Crop Forecast" published by the Department of Commercial Intelligence and Statistics.

TABLE II.—WHEAT SUPPLY (INDIA) DURING 10 YEARS  
(In millions of tons)

Period	Production	Imports	Exports	Net imports (+) or exports (—)	Production minus net exports plus imports	
					plus	imports
1	2	3	4	5	6	
5 years ending 1937-38						
(Average) . . . . .	9.81(a)	0.02(c)	0.22(c)	—0.20		9.61
1938-39 . . . . .	9.96(a)	0.17(d)	0.36(d)	—0.19		9.77
1939-40 . . . . .	10.77(a)	0.10(d)	0.08(d)	+0.02		10.79
1940-41 . . . . .	10.03(b)	0.02(d)	0.14(d)	—0.12		9.91
1941-42 . . . . .	10.04(b)	0.02(d)	0.28(d)	—0.26		9.78
1942-43 . . . . .	11.03(b)	(Negligible)	0.03(d)	—0.03		11.00
		(d)				
5 years ending 1942-43						
(Average) . . . . .	10.37	0.06	0.18	—0.12		10.25
10 years ending 1942-43						
(Average) . . . . .	10.09	0.04	0.20	—0.16		9.93

(a) "Estimates of Area and Yield of Principal Crops in India."

(b) "Crop Forecasts and Publications issued by the Department of Commercial Intelligence and Statistics."

(c) "Report on the Marketing of Wheat in India (1937)."

"Accounts relating to Sea-borne Trade and Navigation of British India."

"Trade at Stations adjacent to Land Frontier Routes."

"Annual statement of the Sea-borne Trade and Navigation of Burma."

(d) "Memcrandum of the Food Department, Government of India."

## APPENDIX III

TABLE III.—INDEX NUMBERS OF AVERAGE MONTHLY WHOLESALE PRICES<sup>1</sup>

	Primary Commodities			Manufactured Articles	
	General	Rice (Calcutta)	Wheat (Lyallpur & Karachi)	General	Cotton manufactures
Week ending 19th August 1939 . . . . .	100	100	100	100	100
1939—					
September . . . . .	107.6	111	117	110.4	105
December . . . . .	135.9	114	156	144.5	126
1940—					
March . . . . .	128.0	114	140	133.9	123
June . . . . .	112.4	121	117	120.0	118
September . . . . .	110.3	133	133	111.6	110
December . . . . .	114.0	140	160	119.7	117
1941—					
March . . . . .	111.8	139	146	127.2	127
June . . . . .	122.3	163	148	142.9	143
September . . . . .	138.3	169	193	166.3	190
December . . . . .	139.5	172	212	157.8	198
1942—					
March . . . . .	139.4	159	202	162.5	193
June . . . . .	152.3	207	214	166.5	212
September . . . . .	160.4	218	223	179.1	232
December . . . . .	175.6	218	232	221.5	414

<sup>1</sup> Issued by the office of the Economic Adviser, Government of India. The base period is the week ending 19th August 1939.

## Distribution of Supplies in Bengal (1943).

1. There is no accurate information about the quantities of rice and paddy stocks held in Calcutta at the beginning of 1943. The Foodgrains Control Order came into force on the 15th December 1942. For various reasons, it was not satisfactorily enforced. According to the returns received, total stocks in Calcutta at the end of January 1943 were 3.84 lakh maunds of rice and 0.80 lakh maunds of paddy, or roughly 16,000 tons of rice and paddy in terms of rice, a quantity which would cover the requirements of Calcutta for about three weeks. The stocks held by dealers must clearly have been in excess of this. An officer of the Civil Supplies Department, Bengal, pointed out that many dealers had not taken out licences by this time, not all licensed dealers submitted returns, and there were glaring discrepancies between the stocks reported under the Foodgrains Control Order and the returns secured under a separate Order under the Defence of India Rules at the same time.

2. The following figures, based on Trade Statistics compiled by the Department of Commercial Intelligence and Statistics, throw some light on the position.

	Rice and paddy (in terms of rice) (In Tons)	
	1941	1942
Imports into Calcutta . . . . .	583,930	271,475
Exports out of Calcutta . . . . .	280,343	156,950
Net retention in Calcutta . . . . .	303,587	114,525

The normal annual rice consumption of the area served by the supplies received into the Calcutta trade block cannot be stated precisely, and the quantities arriving by country boat which should also be taken into account, are unknown. The area is somewhat smaller than the area of Greater Calcutta at present under rationing, but it can be safely assumed that the normal annual consumption would be somewhere between 200,000 and 260,000 tons. It is, therefore, likely that the net retention in Calcutta during 1942 was short of annual requirements by several months, and that while stocks in Calcutta at the end of 1941 were above the normal level, they were severely depleted by the end of 1942. Stocks held on the first day of 1943 were probably much smaller than those held on the corresponding day of previous years, though it is impossible to say how many weeks' stocks were actually carried in the aggregate by consumers, mills, and traders.

3. Imports into Calcutta, of rice and paddy (in terms of rice), during the first quarter of 1943 were as follows :-

	(In Tons)			
	January	February	March	Total
(i) From within Bengal by rail and river steamer <sup>1</sup> . . . . .	6,253	4,521	13,383	24,157
(ii) From outside Bengal by rail and river steamer <sup>1</sup> . . . . .	1,077	3,607	5,639	10,323
(iii) By sea and coast <sup>1</sup> . . . . .	259		212	471
(iv) By country boat <sup>2</sup> . . . . .	3,219	1,674	2,960	7,853
Total . . . . .	10,808	9,802	22,194	42,804

Exports out of Calcutta during the first quarter of 1943 were as follows :-

	(In Tons)			
	January	February	March	Total
(i) To Bengal districts by rail and river steamer <sup>1</sup> . . . . .	1,040	2,334	3,154	6,528
(ii) To outside Bengal by rail and river steamer <sup>1</sup> . . . . .	243	170	1,210	1,623
(iii) By sea and coast <sup>1</sup> . . . . .	2,087	81	69	2,237
(iv) By country boat <sup>2</sup> . . . . .	438	66	..	504
Total . . . . .	3,808	2,651	4,433	10,892

<sup>1</sup>Trade Statistics compiled by the Department of Commercial Intelligence and Statistics.

<sup>2</sup>Based on figures furnished by Civil Supplies Department of the Government of Bengal.

4. On this basis, the net retention in Calcutta during the first three months of 1943 was as follows :—

Month	Rice and paddy ( in terms of rice) (In Tons)
January . . . . .	7,000
February . . . . .	7,151
March . . . . .	17,761
<b>Total . . . . .</b>	<b>31,912</b>

These figures indicate the seriousness of the position in Calcutta during these months.

5. The Bengal Government have furnished the Commission with figures showing arrivals on Government account into Calcutta, month by month, despatches to deficit districts, the deliveries made to employers' organizations and essential services, and to the general public in Calcutta through "Controlled Shops" and "Approved Markets". The relevant figures for the first three months of 1943 are shown below :—

	Rice and paddy (in terms of rice) (In Tons)		
	January	February	March
(i) Arrivals in Calcutta . . . . .	1,200	6,361	15,727
(ii) Despatches out of Calcutta to the districts . . . . .	..	392	2,074
(iii) Deliveries to Employers' Organizations and Essential Services . . . . .	..	4,445	12,487
(iv) Deliveries to Controlled Shops and Approved Markets . . . . .	<hr/>		
		6,988	

6. Imports into Calcutta during the second quarter of 1943 were as given below :—

	Rice and paddy (in terms of rice) (In Tons)			
	April	May	June	Total
(i) From within Bengal by rail and river steamer <sup>1</sup> . . . . .	13,824	14,267	13,483	41,574
(ii) From outside Bengal by rail and river steamer <sup>1</sup> . . . . .	11,746	11,675	27,796	51,217
(iii) By sea and coast <sup>1</sup> . . . . .	..	..	..	..
(iv) By country boat <sup>2</sup> . . . . .	2,010	2,125	1,014	5,149
<b>Total . . . . .</b>	<b>27,580</b>	<b>28,067</b>	<b>42,293</b>	<b>97,940</b>

Exports out of Calcutta during the same period were as given below :—

	Rice and paddy (in terms of rice) (In Tons)			
	April	May	June	Total
(i) To Bengal districts by rail and steamer <sup>1</sup> . . . . .	2,042	1,415	5,343	8,800
(ii) To outside Bengal by rail and steamer <sup>1</sup> . . . . .	79	69	128	276
(iii) By sea and coast <sup>1</sup> . . . . .	13	4	30	47
(iv) By country boat <sup>2</sup> . . . . .	..	249	..	249
<b>Total . . . . .</b>	<b>2,134</b>	<b>1,737</b>	<b>5,501</b>	<b>9,372</b>

7. The quantities of stocks which were retained in Calcutta according to the foregoing figures were as follows :—

Month	Rice and paddy (in terms of rice) (In Tons)
April . . . . .	25,446
May . . . . .	26,330
June . . . . .	36,792
<b>Total . . . . .</b>	<b>88,568</b>

The figures reflect the improvement in supply produced by a number of measures namely, the Rescue Plan, De-control in Bengal, and the introduction of Free Trade in the Eastern Region.

<sup>1</sup>Trade statistics compiled by the Department of Commercial Intelligence and Statistics.

<sup>2</sup>Based on figures furnished by Civil Supplies Department of the Government of Bengal.

8. The distribution of supplies passing through the hands of the Bengal Government during the second quarter is shown below :—

	April	Rice and paddy (in terms of rice)			Total
		(In Tons)			
		May	June		
(i) Arrivals in Calcutta . . . . .	17,550	13,186	18,870		49,806
(ii) Despatches out of Calcutta to the districts . . . . .	5,405	7,006	3,126		15,537
(iii) Deliveries to Employers' Organizations and Essential Services in Calcutta . . . . .	16,361	12,399	7,303		36,063
(iv) Deliveries to Controlled Shops and Approved Markets in Calcutta . . . . .	7,578	6,516	4,188		18,282

9. Imports into Calcutta during the third quarter of 1943 are given below<sup>1</sup> :

	July	Rice and paddy (in terms of rice)			Total
		(In Tons)			
		August	September		
(i) From within Bengal by rail and river steamer . . . . .	7,914	8,081	6,141		22,136
(ii) From outside Bengal by rail and river steamer . . . . .	28,933	11,906	9,998		50,837
(iii) By sea and coast . . . . .	..	1	3,460		3,461
<b>Total</b> . . . . .	<b>36,847</b>	<b>19,988</b>	<b>19,599</b>		<b>76,434</b>

Exports out of Calcutta during the same period are given below :—

	July	Rice and paddy (in terms of rice)			Total
		(In Tons)			
		August	September		
(i) To Bengal districts by rail and river steamer . . . . .	6,353	2,390	4,059		12,802
(ii) To outside Bengal by rail and river steamer . . . . .	945	1,413	57		2,415
(iii) By sea and coast . . . . .	75	101	3		179
<b>Total</b> . . . . .	<b>7,373</b>	<b>3,904</b>	<b>4,119</b>		<b>15,396</b>

10. The distribution of supplies passing through the hands of the Bengal Government during the 3rd quarter of 1943 is shown below :

	July	Rice and paddy (in terms of rice)			Total
		(In Tons)			
		August	September		
(i) Arrivals in Calcutta . . . . .	16,776	8,789	10,742		36,307
(ii) Despatches to the districts from Calcutta . . . . .	9,690	3,713	5,753		19,156
(iii) Deliveries to Employers' Organizations and Essential Services in Calcutta . . . . .	7,315	4,344	6,243		17,902
(iv) Deliveries to Controlled Shops and Approved Markets in Calcutta . . . . .	5,301	4,396	4,647		14,344

11. During the last quarter of 1943, imports into Calcutta were as below :—

	October	Rice and paddy (in terms of rice)			Total
		(In Tons)			
		November	December		
(i) From within Bengal by rail and river steamer . . . . .	3,997	5,921	10,760		20,678
(ii) From outside Bengal by rail and river steamer . . . . .	19,854	23,955	25,169		68,978
(iii) By sea and coast . . . . .	7,760	2,653	7,394		17,807
<b>Total</b> . . . . .	<b>31,611</b>	<b>32,529</b>	<b>43,323</b>		<b>107,463</b>

<sup>1</sup> The figures for the 3rd and 4th quarters do not include the arrivals by country boat as no records were maintained for two months and the amounts were small for the other months

Exports out of Calcutta during the same period were as below :—

	Rice and paddy (in terms of rice)			
	(In Tons)			
	October	November	December	Total
(i) To Bengal districts by rail and river steamer . . . . .	2,470	7,820	4,468	14,758
(ii) To outside Bengal by rail and river steamer . . . . .	14	751	96	861
(iii) By sea and coast . . . . .	14	1	5	20
<b>Total</b> . . . . .	<b>2,498</b>	<b>8,572</b>	<b>4,569</b>	<b>15,639</b>

12. The distribution of supplies passing through the hands of the Bengal Government during this quarter is shown below :—

	Rice and paddy (in terms of rice)			
	(In Tons)			
	October	November	December	Total
(i) Arrivals in Calcutta . . . . .	23,662	31,016	32,639	87,317
(ii) Despatches to the districts from Calcutta . . . . .	7,484	11,108	9,201	27,793
(iii) Deliveries to Employers' Organizations and Essential Services in Calcutta . . . . .	7,421	9,639	3,104	20,164
(iv) Deliveries to Controlled Shops and Approved Markets in Calcutta . . . . .	5,922	2,462	2,484	10,868

13. There is a difference between the figures furnished by Bengal Government for despatches to the districts from Calcutta and the trade statistics of exports from Calcutta to Bengal districts by rail and river steamer. The figures are as follows :—

	Rice and paddy (in terms of rice)	
	(In Tons)	
	(Despatches Government figures)	Exports (Trade Statistics)
1st quarter . . . . .	2,466	6,528
2nd quarter . . . . .	15,537	8,800
3rd quarter . . . . .	19,166	12,802
4th quarter . . . . .	27,793	14,758
<b>Total</b> . . . . .	<b>64,952</b>	<b>42,888</b>

The two sets of figures are not strictly comparable chiefly because the "Despatches" include movements by road and country boat while the "Trade Statistics" do not.

14. The total quantity of wheat despatched to Bengal from other provinces and from abroad during 1943 amounted to 373,000 tons and the total arrivals were 339,000 tons. The total amount received on Government account was 322,000 tons out of which 120,000 tons were despatched to the districts. The arrivals quarter by quarter were :—

	(In Tons)
1st quarter . . . . .	26,000
2nd quarter . . . . .	38,000
3rd quarter . . . . .	99,000
4th quarter . . . . .	176,000
<b>Total</b> . . . . .	<b>339,000</b>

The arrivals during the 1st quarter were less than half the normal off-take. Those during the second quarter were better but they were still much below requirements.

15. The production and consumption of millets in Bengal are normally negligible. In view of the general shortage of rice and of the urgent need of Bengal for supplies, the Central Government arranged, under the Basic Plan, for the importation of millets into Bengal. Over 65,000 tons of millets were despatched during the year, out of which about 55,000 tons arrived. The arrivals were heavy in September and October. The United Provinces despatched 43,000 tons, and the Punjab 13,000 tons; and the remainder was despatched by a number of States. Out of the arrivals, 46,000 tons were sent to the districts.

16. The following table shows the figures of despatches to the districts of Bengal as furnished by the Government of Bengal :—

District	(In Tons)			
	Rice and paddy in terms of rice	Wheat and wheat-products	Millets	Total
24-Parganas . . . . .	8,157	5,114	6,524	19,795
Nadia . . . . .	1,367	2,080	165	3,612
Murshidabad . . . . .	679	3,348	552	4,579
Jessore . . . . .	184	898	56	1,138
Khulna . . . . .	2,266	7,543	3,469	13,278
Burdwan . . . . .	3,200	10,755	1,023	14,978
Birbhum . . . . .	..	1,729	..	1,729
Bankura . . . . .	..	4,710	..	4,710
Midnapore . . . . .	4,963	11,607	3,928	20,498
Hooghly . . . . .	2,461	6,004	1,287	9,752
Howrah . . . . .	11,049	4,997	1,128	17,174
Rajshahi . . . . .	..	654	..	654
Dinajpur . . . . .	..	631	..	631
Jalpaiguri . . . . .	540	2,175	232	2,947
Darjeeling . . . . .	323	5,154	325	5,802
Rangpur . . . . .	105	3,069	745	3,919
Bogra . . . . .	..	313	112	425
Pabna . . . . .	1,301	2,690	2,773	6,764
Malda . . . . .	..	202	..	202
Dacca . . . . .	6,727	15,019	4,831	26,577
Mymensingh . . . . .	956	4,693	3,259	8,908
Feridpur . . . . .	4,709	5,597	6,187	16,493
Bakarganj . . . . .	1,485	2,671	1,092	5,248
Chittagong . . . . .	9,814	9,469	4,083	23,366
Tippera . . . . .	2,922	5,092	2,918	10,932
Noakhali . . . . .	1,744	3,809	1,201	6,754
Total . . . . .	64,952	120,023	45,890	230,865

## ANNEXURE I TO APPENDIX V

EXTRACT FROM A NOTE ON "ARRANGEMENTS FOR RECEPTION AND DESPATCHES IN CALCUTTA PRIOR TO THE FORMATION OF THE DIRECTORATE OF MOVEMENTS IN NOVEMBER 1943" SUPPLIED BY THE CIVIL SUPPLIES DEPARTMENT, BENGAL.

The following problems confronted the Department :—

- (i) Creation of a widespread organization covering all the points of arrivals and despatches and rapid transmission of information to the headquarters;
- (ii) Creation of a superior staff at the headquarters to control these arrangements and under take frequent inspection of the work of the subordinates;
- (iii) A careful watch over the accommodation in godowns and adoption of prompt steps in advance to meet any difficulty that may arise in this respect, and
- (iv) To assist the Clearing Agents in their difficulties about transport, etc., which became apparent very soon.

*Staff.*—The Department began to look for staff at a time when other competitors, (e.g., the Army, the Supply Department of the Government of India, etc.), had already been in the field and taken over practically all suitable personnel available for recruitment. The Department was in dire need of staff not only for its own storage and movement organization but also for the Calcutta Rationing Scheme. All attempts to secure suitable men from the business houses proved abortive. At the beginning of September there were only one Transportation Officer and 4 Inspectors and the first essential was to obtain a sufficient number of inspectors and sub-inspectors for being placed at the different receiving points as well as for supervising despatches at several other points. It requires time to train men for such work but the Department had no time to wait. Inspectors and sub-inspectors were withdrawn from other branches and even from Calcutta Rationing and posted to the terminals and the docks. In this way, the staff was increased to 21 inspectors and 23 sub-inspectors by the end of October. In the meantime recruitment was proceeding under the Controller of Rationing both for his office and for the Directorate. It was soon found that the existing Transportation Officer was hardly able to handle problems and

officers superior to inspectors were necessary both for supervising the work of inspectors and for taking charge of the more important reception centres, e.g., Howrah, Kantapukur and the docks, Mr . . . . . and a Sub-Deputy Collector from the Department were deputed to take charge of Kantapukur and Howrah respectively and with great difficulty one Chief Inspector (an ex-Transportation Inspector of the East Indian Railway) was obtained for Howrah in the end of September another for other sidings in October and a third in the beginning of November for the docks. The Department was still in search of a suitable Transportation Officer, when Mr . . . . . was offered by the Regional Commissioner and was appointed as Controller of Transport at the end of September . . . . . But it became apparent soon that besides planning programmes for movements, both ex-Calcutta and from outside to the province, he had no time to supervise the despatches with the result that wagons were sometimes not utilised by the Agents. Another officer was therefore appointed on the 8th October to supervise storage and despatches. . . . . From the very beginning his entire attention was absorbed at the docks as shipment of foreign foodgrains began to be rushed and considerable despatches had to be made to Chittagong at very short notice. On the 18th October, Mr . . . . . who had experience of transport in the trade was recruited as Storage and Movement Officer but at the very outset he had to be placed under the Controller of Rationing for Calcutta Rationing.

While the organization was thus being improved, it was soon found that the existing clearing agents were not in a position to cope with the work which they were required to do. They were incapable of working under such stress and it was apparent that considerable supervision and training were necessary before they could work at high speed. Moreover, the difficulty of securing adequate road transport from the military sidings to their godowns was one of the principal causes of their inefficiency. This difficulty was due to diversion of lorries and bullock-carts to work under military contractors and also due to the difficulty of securing adequate petrol supplies. Arrangements were made to supply petrol to the agents according to their requirements by the Department and this enabled them to secure more lorries. But this was only a partial solution of the difficulty. The most important clearing and haulage firms were requested to take up this work but they expressed their inability to undertake any liability of this kind under the difficult conditions prevailing in Calcutta. A number of new clearing agents were however, appointed on their producing evidence that they had some transport and possessed adequate godown accommodation. The problem of coping with the daily arrivals still remained. This problem was made more difficult by the fact that the rate of arrivals was irregular and very large quantities were unloaded at very short notice at one or the other of the railway terminals. A further complication was caused by the arrival of a number of ships carrying foodgrains from Australia and Karachi. About 13,000 tons of foodgrains arrived at the port in September and 30,000 tons in October respectively. The conditions of work in the docks were far more difficult due to the following reasons :—

1. Sufficient labour was not available for loading the agents' vehicles ;
2. Railway wagons which were formerly available for removing consignment from the dock sheds to the various points in the city were available only in small numbers ;
3. Due to heavy arrivals of war and other materials and requirements of gate passes facilities for working lorries had been greatly reduced. . . .

In view of the difficult transport situation, it was decided at the end of September to acquire a fleet of 50 lorries to supplement the agents' transport, whenever necessary. Although order had been placed at the beginning of October for 50 lease-lend vehicles with specially fitted bodies only 3 vehicles were delivered on the 22nd October and 22 on the 23rd and the balance on the 18th November. About this time, Army transport was made available and when the Department vehicles were put into commission, transport difficulties were overcome and work went on smoothly.

A further point should be stressed in this connection. Both at Howrah and at Kantapukur a large number of consignments were being received on account of private merchants who were unable to make prompt clearance. Requests were received both from the E. I. R. and the Port Commissioners to remove the congestion caused by private merchants as otherwise the siding would get choked and further booking of supplies would be stopped. In spite of its own troubles the Department had to undertake this work from time to time. These consignments, unless they were removed within a week, were requisitioned and acquired by Government and removed to their own godowns. Some idea of the magnitude of this work may be obtained from the fact that during a period of about 30 days in October-November, the congestion at Kantapukur was reduced from 133,112 bags to 16,677 bags. . . .

In conclusion it may be stated that though the Department had to work under conditions of exceptional difficulty it managed to keep the Railway terminals open and never had occasion to slacken the rate of despatches to districts ex-Calcutta.

## ANNEXURE II TO APPENDIX V

### Storage in the Royal Botanical Gardens

Storage in Calcutta continued to be a serious problem even after the arrival of the Army expedited distribution to the districts. On the 1st November, the stock in hand was 50,000 tons and the approximate covered storage available in Calcutta was only 40,000 tons. At this stage a considerable amount had to be left in transit sheds at the docks. By the beginning of December stocks had increased to 82,000 tons and covered storage by requisitioning had increased to 80,000 tons. By the end of the month, stocks stood at 159,000 tons and covered storage had risen to



130,000 tons. Imports were still pouring in and could not be delayed. Stoppage of imports could not be contemplated as this would have resulted in a serious shortage when Calcutta was about to be rationed. It was also impossible to delay unloading the ships as the port had to be kept clear. In these circumstances, a depot was started in the open as a temporary measure in the Royal Botanical Gardens. Arrivals in Calcutta continued to exceed the increase in storage accommodation till February. At the beginning of February, the stocks stored in the open rose to 87,000 tons and then gradually diminished to 59,000 tons on 1st March 1944, to 28,000 tons on 1st April, to 26,000 tons on 1st May, to 18,000 tons on 1st June, to 14,000 tons on 1st July and to 4,000 tons on 1st August. In all about 120,000 tons passed through the depot. Of this total quantity 101,500 tons were distributed to the districts and to Calcutta through the rationing organization and 15,000 tons of undamaged stocks were sold to the trade. Of the balance of 3,000 tons, 2,200 tons were sold irrespective of condition and the remainder (the actual figure is 600 tons) became complete loss. On the 1st September 1944 the amount, 3,194 tons, which remained at the Royal Botanical Gardens, was removed for destruction by dumping as totally unfit for issue. This figure of 3,194 tons includes the 600 tons which had become a total loss and about 2,600 tons which had been sold to the trade but had deteriorated badly and had not been removed by the purchasers.

## ANNEXURE III TO APPENDIX V

## Stocks of Aus Paddy at Jessore

A number of witnesses have referred to the stocks of *aus* paddy at Jessore and especially to those stacked in the station. It has been said that although there was local need for rice these stocks were not released for distribution. It has also been urged that these stocks should have been sent to relieve the distress in other areas and finally it has been alleged that a large part of these stocks were damaged. The Bengal Government have furnished a report on this matter. The salient facts according to that report are as follows: Under the *aus* purchasing scheme of 1943, 3.70 lakh maunds of paddy were purchased of which about 78,000 maunds were purchased by the District Magistrate and the remainder by the Purchasing Agent of the Bengal Government. Over two-thirds of the total amount purchased was procured in November. The District Magistrate who had authority to release stocks for local consumption did not find it necessary to do so except for small quantities in October and November, 2,400 maunds in December 1943 and about 12,000 maunds in January and February 1944. An endeavour was made early in December to release appreciable quantities of paddy through the trade in the Jessore district. But though the price was reduced from Rs. 7-12-0 a maund to Rs. 6-4-0 a maund towards the end of December the off-take was poor, the reason being that the *aman* crop had been reaped. By the end of the year 2 lakh maunds had been despatched; part was sent to deficit districts, a small quantity to the District Magistrate, 24-Parganas, and the balance to Calcutta. In March 1944 the stocks which still remained (1.50 lakh maunds) were sold to the Calcutta rice mills at an average price of Rs. 7-7-0 a maund, 1.06 lakh maunds were moved between the 21st March and 27th May 0.29 lakh maunds were despatched early in July and at the time the report was made the balance was being moved gradually as the stocks were brought to rail-head. Except 75,000 maunds which were kept in the station yard, partly in the open, the entire stocks were stored in warehouses. Even the grain kept in the station yard has not shown any signs of deterioration. Reliance has been placed upon the sale of the *aus* paddy at Rs. 7-7-0 a maund in March 1944, when the market price for *aman* paddy was Rs. 9 a maund, as indicating that the stocks were not seriously damaged.

## APPENDIX VI

## Extracts from Reports from Commissioners and District Officers

## I.—PRESIDENCY DIVISION

- 28th December 1942.—Hunger marches organized by communists.
- 26th February 1943.—Agricultural labourers in difficulty as agricultural wages have not risen proportionately with the rise in the price of foodstuffs.
- 26th March 1943.—Acute distress prevails in certain areas of Kandi sub-division of Murshidabad district and number of labourers is gradually increasing at test works. It is necessary to continue test works for a long time.
- 22nd April 1943.—Cultivating classes in general are in acute distress in Nadia district due to abnormal rise in prices of foodstuffs. Paddy seed has been consumed by cultivators. They require loans immediately for purchase of seed.
- 5th May 1943.—Widespread distress in Khushtia sub-division of Nadia district due to rise in prices, warranting sanction of immediate gratuitous relief.
- 10th July 1943.—In 24-Parganas conditions are appalling owing to rice and paddy having been drained away for Calcutta market. Food kitchens being opened in Murshidabad.
- 10th August 1943.—Nadia district passing through the most acute stage of distress.
- 11th September 1943.—Food kitchens extending rapidly everywhere. Cases of emaciation numerous.
- 9th October 1943.—Rice has disappeared, following the previous drop in the controlled price. Village responsibility for running soup kitchens will be enforced.

## II.—BURDWAN DIVISION

12th December 1942.—Outturn of *aman* in Birbhum and Bankura districts 6 annas; in other districts also outturn is poor. Sudden and abnormal increase in price of rice.

12th January 1943.—All District Magistrates have given up attempts to control prices of rice and paddy. Shortage of rice in villages in Howrah district.

26th February 1943.—Rice position in Howrah grave. Midnapore apprehends acute shortage in May. Relief operations will be necessary in parts of Bankura, Hooghly and Birbhum.

28th March 1943.—Owing to de-control of prices of paddy and rice, situation getting worse in Burdwan. Economic condition grave. Crime against property increasing, and paddy looting cases have become frequent. Hunger marches going on in some places.

27th April 1943.—Major economic catastrophe apprehended after three or four weeks unless prices came down and sufficient supplies were ensured. Rice not available to feed test work labourers in Katwa and Ulubaria sub-divisions. Increase in crime.

13th May 1943.—Economic conditions approaching a crisis. Rice out of reach of the poor. Rice should be imported if the people are not to starve.

12th June 1943.—Economic position most serious. Bands of people moving about in search of rice. Labourers at test works demanding payment in rice, which is not possible in all cases.

22nd July 1943.—An area of 200 square miles comprising 14 unions in Sadar, 15 in Katwa, and 10 in Kalna, affected by floods. Boats required for relief work. Agricultural loans required immediately in flood-affected areas, where *aman* seedlings have been destroyed. Similar reports from Midnapore.

17th August 1943.—Severe famine conditions likely to prevail after transplantation of *aman*. Many deaths due to malnutrition. Destitutes from villages flocking to towns.

27th September 1943.—Situation in Contai and Tamluk terrible. Disposal of dead bodies in Contai, a problem.

28th October 1943.—Rice scarce in Burdwan. Position in Hooghly and Howrah bad. So also in Contai and Tamluk sub-divisions. Kitchens closed occasionally in Midnapore for want of supplies.

## III.—RAJSHAHI DIVISION

11th December 1942.—Increase in price of rice due to speculative buying by traders.

12th January 1943.—Prices remain high. Outturn of *aman* poor in Rajshahi and bad in Pabna and Malda.

25th February 1943.—Prices of rice going up. Unauthorised exports from the division taking place.

26th March 1943.—Difficult to obtain *aus* seeds with the lifting of control of price of rice. Cases of paddy looting reported from Dinajpur and Rangpur.

2nd April 1943.—Widespread distress in many areas of Bogra due to shortage of food supply and high prices.

6th May 1943.—Beggars and landless people are in acute distress and threatened with starvation in Pabna district. Gratuitous relief necessary in Sadar and Serajganj.

26th July 1943.—In spite of good *aus* crop the price of rice is still high.

26th September 1943.—Serious distress in Nilphamari. Deaths from starvation reported from all districts except Malda. Many deaths due to taking food indiscreetly after long period of abstinence.

15th October 1943.—Free kitchens opened in Pabna, Rajshahi, Dinajpur, Jalpaiguri and Bogra.

## IV.—DACCA DIVISION

28th December 1942.—Price of rice has risen alarmingly. Profiteering in every article on the increase. Black markets prevail.

12th January 1943.—Economic condition in Sadar and Goalundo sub-divisions of Faridpur daily becoming worse due to failure of paddy crop and high prices of all commodities. Opening of test works on an extensive scale essential and six more officers needed. Distribution of gratuitous relief should also be continued up to July 1943.

10th February 1943.—Price of rice increasing. Difficulty experienced owing to fall of export from surplus districts. People having to go without food in Bhola and Barisal towns of Bakarganj district.

24th March 1943.—Rice position very serious. Situation in Goalundo and parts of Sadar of Faridpur district now much worse than was expected.

25th April 1943.—Food position serious. Huge exports from Bakarganj. Poorer classes will starve.

22nd May 1943.—Great distress in Bhola sub-division of Bakarganj district among landless labourers who can find no employment. Situation aggravated by the fact that a large number of fishermen lost their boats as a result of "denial". Opening of test relief immediately necessary.

23rd June 1943.—Situation in Faridpur has deteriorated still further. Relief operations were for long confined to Sadar and Goalundo but the resources of most of the people in other areas have also been exhausted and urgent steps should be taken to alleviate their distress.

17th July 1943.—Situation in Bhola sub-division is alarming. Town filled with thousand of beggars who are starving. There is not enough rice available.

18th August 1943.—Opening of gruel kitchens necessary in Tangail and Kishoreganj.

16th September 1943.—Food situation in all sub-divisions of Faridpur has further deteriorated. Supply of rice and paddy has become alarmingly insufficient. Free kitchens have been opened in large numbers to save people from starvation. Homes for destitutes and camp hospitals have also been opened.

25th October 1943.—Supplies arriving but no hope of saving those who are starving.

#### V.—CHITTAGONG DIVISION

11th December 1942.—Sudden rise in price of rice to almost double the previous price.

10th January 1943.—Food problem very serious. Attempt to get emergency supply through Director of Civil Supplies failed. Position in Chittagong town extremely bad as price of rice has been kept below the prevailing price in mofussil.

27th February 1943.—Indications of distress among local people in Chittagong district, particularly of the fishermen class. It is immediately necessary to start test works. Gratuitous relief will also be necessary.

8th March 1943.—Situation serious in Chittagong. Rice position has not improved in Noakhali. Position equally bad in Tippera.

11th April 1943.—There are signs of rice crisis easing in Noakhali. Rice is being distributed by District Magistrate in famine areas of Beganganj and Senbagh at controlled rate. In Chittagong district no famine area. Distress among fishermen prevailing in certain areas. Supplies have started to arrive.

29th May 1943.—Many people starving in Chittagong district owing to high prices. First gruel kitchen started in Chittagong.

23th June 1943.—Number of destitutes in town increased. Eleven deaths in streets.

11th July 1943.—Test and gratuitous relief necessary in Chandpur sub-division of Tippera district, as well as Brahmanbaria and Sadar sub-divisions. Food census has disclosed immediate scarcity in Sadar and prospective scarcity in Brahmanbaria. Chandpur has also suffered from "Denial" policy.

10th August 1943.—Owing to distress in rural areas of Chittagong district, a large number of beggars wandered into the town. With the opening of relief kitchens in villages, they were repatriated. But there is still a number who are sick and disabled. A poor house, an orphanage and a hospital have been opened for them.

9th September 1943.—Deaths still occurring in Chittagong town.

9th October 1943.—Control prices not working except where prices have naturally fallen. The middle class are in trouble.

#### APPENDIX VII

##### LIST OF PERSONS INTERVIEWED BY THE COMMISSION

##### NEW DELHI

		Date
1. The Hon'ble Somerset Butler.	Special Officer, Department of Food, Government of India.	27-7-1944
2. Mr. R. H. Hutchings, C.M.G., C.I.E., I.C.S.	Secretary, Department of Food, Government of India.	27-7-1944 and on 5-12-1944
3. Mr. W. H. J. Christie, O.B.E., I.C.S.	Deputy Secretary, Department of Food, Government of India.	28-7-1944
4. Mr. W. H. Kirby . . . . .	Rationing Adviser, Department of Food, Government of India.	28-7-1944
5. Lt. Gen. J. B. Hance, C.I.E., O.B.E., K.H.S., I.M.S.	Director General, Indian Medical Service .	29-7-1944
6. Lt. Col. E. Cotter, C.I.E., I.M.S.	Public Health Commissioner with the Government of India.	29-7-1944
7. Mr. D. R. Sethi, C.I.E., I.A.S.	Agricultural Production (and Marketing) Adviser to the Government of India, E. H. & L. Department.	31-7-1944
8. The Hon'ble Sir Md. Azizul Haque, C.I.E., D.Litt.	Member, Executive Council of the Governor General (Commerce, Industries and Civil Supplies).	2-8-1944
9. Mr. D. L. Mazumdar, I.C.S. .	Deputy Secretary, Department of Labour, Government of India.	4-8-1944
10. The Hon'ble Mr. B. R. Sen, C.I.E., I.C.S.	Director General of Food, Department of Food, Government of India.	4-8-1944

11. Mr. N. M. Buch, O.B.E., I.C.S.	Director of Civil Supplies, Punjab	5-8-1944
12. The Hon'ble Sir J. P. Srivastava, K.B.E.	Member, Executive Council of the Governor General (Food).	5-8-1944 and on 15-2-1945
13. Mr. J. D. Tyson, C.B.E., I.C.S.	Secretary, E. H. & L. Department, Government of India.	} 7-8-1944
14. Sir P. M. Kharegat, C.I.E., I.C.S.	Additional Secretary, E. H. & L. Department, Government of India.	
15. Brig. Mac. D. Fraser, I.M.S.	Inspector of Medical Services, General Headquarters.	8-8-1944
16. Mr. I. E. Jones, I.C.S.	Director of Food Purchase, Punjab	8-8-1944
17. The Hon'ble Sir S. N. Roy, C.S.I., C.I.E., I.C.S.	Secretary, War Transport Department, Government of India.	} 8-8-1944
18. Sir Hugh Raper	Member, Railway Board	
19. The Hon'ble Dewan Bahadur Sir A. Ramaswami Mudaliar, K.C.S.I.	Member, Executive Council of the Governor General (Supply).	17-11-1944

## CALCUTTA

20. Major General E. Wood, C.I.E., C.B., M.C.	Formerly Secretary to the Government of India, Department of Food.	12-8-1944
21. Mr. O. M. Martin, C.I.E., I.C.S.	Commissioner, Post War Reconstruction, Government of Bengal.	12-8-1944
22. The Hon'ble Mr. Justice H. B. L. Braund, Bar.-at-Law.	Formerly Regional Food Commissioner, Eastern Region.	14-8-1944
23. Mr. L. G. Pinnell, C.I.E., I.C.S.	Formerly Officer on Special Duty, Department of Civil Supplies, Bengal.	15-8-1944 and on 4-9-1944
24. Mr. N. M. Ayyar, C.I.E., I.C.S.	Secretary, Department of Civil Supplies, Bengal.	16-8-1944
25. Mr. H. S. E. Stevens, C.S.I., C.I.E., M.C., J.P., I.C.S.	Food and Civil Supplies Commissioner, Bengal.	16-8-1944 and on 17-9-1944
26. Mr. A. A. McInnes	Formerly Foodgrains Purchasing Officer, Bengal.	17-8-1944
27. Mr. M. A. Ispahani	Partner, Messrs. M. M. Ispahani, Limited, Chief Agents for Procurement, Government of Bengal.	17-8-1944 and in New Delhi on 1-12-1944
28. Major General W. C. Paton, M.C., M.A., Ch.B. (Edin.), F.R.C.S. (Edin.), K.H.P., I.M.S.	Surgeon-General, Bengal (Offg. Director General, Indian Medical Service).	18-8-1944
29. Lt. Col. K. S. Fitch, M.R.C.S., F.R.C.S. (Edin.), I.M.S.	Deputy Surgeon-General, Famine Relief, Bengal.	18-8-1944
30. Dr. B. Mukerjee, M.B., D.P.H.	Deputy Director of Public Health, Bengal	18-8-1944
31. Major C. K. Lakshmanan, I.M.S.	Director of Public Health, Bengal	18-8-1944
32. Mr. E. W. Holland, C.I.E., I.C.S.	Secretary, Public Health and Local Self-Government Department, Bengal.	19-8-1944
33. Mr. K. C. Basak, I.C.S.	Secretary, Department of Education, Co-operative Credit and Rural Indebtedness, Bengal.	19-8-1944
34. Mr. A. C. Hartley, O.B.E., I.C.S.	Controller of Rationing, Calcutta	19-8-1944
35. Dr. J. B. Grant	Director, All India Institute of Hygiene and Public Health, Calcutta.	19-8-1944
36. Major General A. V. T. Wakely, C.B., D.S.O., M.C.	Director of Movements, Bengal	21-8-1944
37. Nawab Habibullah Bahadur of Dacca.	Formerly Minister, Bengal (Food)	21-8-1944
38. Mr. M. Carbery, C.I.E., D.S.O., M.G., M.A., B.Sc., I.A.S.	Director of Agriculture, Bengal.	21-8-1944
39. Mr. P. N. Banerjee, M.A., B.L., P.R.S., Bar.-at-Law.	Formerly Minister, Bengal (Revenue)	22-8-1944
40. Mr. A. K. Fazlul Huq, M.A., B.L.	Formerly Chief Minister, Bengal	23-8-1944
41. The Hon'ble Mr. H. S. Subrardary.	Minister, Bengal (Civil Supplies)	23-8-1944 and on 17-9-1944

42. Mr. L. Aldridge . . . . .	Formerly Procurement Officer, Middle East.	31-8-1944
43. Mr. K. W. P. Marar, O.B.E., I.C.S.	Secretary, Supply Department, Assam .	1-9-1944
44. Dr. N. Sanyal, M.A., Ph.D. (Lond.), M.L.A.	Chief Whip of the Congress Parliamentary Party, Bengal.	} 1-9-1944
45. Mr. A. C. Ukil . . . . .	Nutrition Expert, Congress Parliamentary Party, Bengal.	
46. Mr. Shamsuddin Ahmed	} Representatives of the Nikhil Banga Krishak Proja Party.	} 1-9-1944
47. Mr. Syed Jalaluddin Hashemi		
48. Mr. Humayun Kabir . . . . .		
49. Mr. Rajani Mukherjee . . . . .	} Representatives of the Indian Federation of Labour, Radical Democratic Party.	} 2-9-1944
50. Prof. Binoyendra Nath Banerjee.		
51. Miss Sobha Mazumdar . . . . .	} Representatives of the Bengal Committee of the Communist Party of India.	} 2-9-1944
52. Mr. Bhowani Sen . . . . .		
53. Mr. Somnath Lahiri . . . . .		
54. Mr. Bhupesh Gupta . . . . .	} Representatives of the Bengal Provincial Kisan Sabha.	} 2-9-1944
55. Mr. Bankim Mukherjee . . . . .		
56. Mr. Krishna Binode Roy . . . . .	} Representative of the Bolshevik Party of India.	} 2-9-1944
57. Mr. B. Guha . . . . .		
58. Mr. Promode Sen . . . . .	} Representatives of the Marwari Chamber of Commerce.	} 4-9-1944
59. Mr. K. N. Gutgutia . . . . .		
60. Mr. C. M. Saraff . . . . .		
61. Mr. M. L. Khemka . . . . .	} Representatives of the Bengal National Chamber of Commerce.	} 4-9-1944
62. Mr. B. D. Tharad . . . . .		
63. Mr. J. K. Mitter . . . . .	} Representatives of the Indian Chamber of Commerce.	} 4-9-1944
64. Mr. B. C. Ghosh . . . . .		
65. Mr. S. R. Biswas . . . . .		
66. Mr. D. P. Khaitan . . . . .	} Representative of the Muslim Chamber of Commerce.	} 4-9-1944
67. Mr. G. L. Mehta . . . . .		
68. Mr. R. L. Nopany . . . . .	} Representatives of the Bengal Provincial Hindu Mahasabha.	} 5-9-1944
69. Mr. Abdur Rahman Siddiqi, M.L.A.		
70. Mr. Manoranjan Chaudhuri	} Representatives of the Indian Association .	} 5-9-1944
71. Prof. Haricharan Ghosh		
72. Rai Bahadur C. L. Roy		
73. Rai Bahadur B. B. Mukherjee	} Representative of the British Indian Association.	} 5-9-1944
74. M. J. M. Datta . . . . .		
75. Mr. K. C. Neogy . . . . .	} Representatives of the Bengal District Boards Association.	} 6-9-1944
76. Mr. P. N. Singh Roy . . . . .		
77. Dr. Sachin Sen, Ph. D. . . . .		
78. Kumar B. C. Sinha . . . . .	} Adviser to H. E. the Governor of Bihar .	} 7-9-1944
79. Kumar J. C. Sinha . . . . .		
80. Khan Bahadur Jasimuddin, M.L.A.	} Formerly Secretary to the Government of Bihar, Revenue and Commerce Department.	} 7-9-1944
81. Khan Bahadur Nurul Amin . . . . .		
82. Rai Bahadur Debendra Mohan Bhattacharya.		
83. Mr. R. E. Russell, C.S.I., C.I.E., I.C.S.	} Secretary, Supply and Price Control Department, Bihar.	} 7-9-1944
84. Mr. R. A. E. Williams, I.C.S. . . . .		
85. Mr. J. S. Wilcock, O.B.E., I.C.S.	} Director of Agriculture, Bihar.	} 7-9-1944
86. Mr. A. P. Cliff, I.A.S. . . . .		
87. Mr. C. S. Jha, I.C.S. . . . .	} Secretary, Department of Supply and Transport, Provincial Controller of Supply and Transport and Director of Food Supplies, Orissa.	} 8-9-1944
88. Mr. H. Lal, I.C.S. . . . .		
89. Lt. Col. A. N. Chopra, M.B. B.S., D.T.M. (Liv.), D.P.H. (Eng.), I.M.S.	} Director, Development, Orissa.	} 8-9-1944
90. Rai Sahib Nihar Chandra Chakravarty.		
91. Mr. B. K. Guha, I.C.S. . . . .	Director of Public Health and Inspector General of Prisons, Orissa.	} 8-9-1944
	Additional Assistant Secretary, Department of Agriculture, Bengal.	
	Additional District and Sessions Judge, 24-Parganas (Formerly Relief Co-ordination Officer, Calcutta).	8-9-1944

92. The Hon'ble Mr. T. N. Mukherjee.	Minister, Bengal (Revenue)	9-9-1944
93. Mr. S. Banerjee, I.C.S.	Secretary, Revenue Department, Bengal	9-9-1944
94. Rai N. C. Sen Bahadur, O.B.E.	Additional Controller of Rationing, Calcutta.	} 9-9-1944
95. Rai U. N. Ghosh Bahadur	Special Officer, Finance Department, Bengal.	
96. Mr. D. C. Dutt	Special Officer, Rent Drive, Board of Revenue.	
97. Mr. K. D. Jalan	Representatives of the Marwari Relief Society, Bengal.	
98. Mr. R. N. Bhojanagarwala	} Representatives of the People's Relief Committee.	11-9-1944
99. Prof. K. P. Chattopadhyaya		11-9-1944
100. Mr. Panchu Gopal Bhadury	} Representatives of the Bosepukur Relief Committee.	11-9-1944
101. Mr. K. C. Roy Chowdhury		11-9-1944
102. Ba'bu Natabar Pal	} Representatives of the Muslim Relief Committee.	11-9-1944
103. Mr. S. M. Osman		11-9-1944
104. Mr. M. S. Vawda	} Representative of the Friends' Ambulance Unit.	11-9-1944
105. Mr. T. G. Davies		11-9-1944
106. Dr. K. P. Mukherjee	Representatives of the Bengal Public Health Association.	11-9-1944
107. Mr. P. C. Bhattacharyya	} Formerly Minister, Bengal (Finance)	12-9-1944
108. Mr. K. Chawdhury		12-9-1944
109. Dr. Shyamaprasad Mookerjee	} Representatives of the Bengal Rice Mills Association.	12-9-1944
110. Mr. S. C. Sawoo		12-9-1944
111. Mr. C. K. Ghose	} Secretary, Department of Commerce, Labour & Industries, Bengal.	12-9-1944
112. Mr. L. N. Hazra		12-9-1944
113. Mr. M. K. Kirpalani, I.C.S.	Secretary, Department of Commerce, Labour & Industries, Bengal.	12-9-1944
114. Major General D. Stuart, C.I.E., O.B.E.	Headquarters, 303 L of C Area	13-9-1944
115. Prof. P. C. Mahalanobis B.Sc. (Cal.) M.A. (Cantab.) F.S.S. F.N.I., O.B.E., I.E.S.	Hony. Secretary, Indian Statistical Institute, Statistical Laboratory, Calcutta.	13-9-1944
116. Mr. M. Barman	} Representatives of the Calcutta Corporation	13-9-1944
117. Dr. M. U. Ahmad		13-9-1944
118. Mr. S. Lahiri		13-9-1944
119. Mr. K. C. Ghosh		13-9-1944
120. Mrs. Renu Chakravarty	} Representatives of the All Bengal Mahila Atma Raksha Samity.	14-9-1944
121. Mrs. Ela Reid		14-9-1944
122. Mrs. Saudamini Mehta	} Representatives of the All India Women's Conference (Relief Committee).	14-9-1944
123. Dr. (Mrs.) Maitreyee Bose		14-9-1944
124. Mrs. S. C. Roy		14-9-1944
125. Mrs. Ayesha Ahmad		14-9-1944
126. Mr. J. K. Biswas, M.A., J.P.	Representative of the Rotary Club	14-9-1944
127. Mr. V. N. Rajan, I.C.S.	Deputy Controller of Distribution, Department of Civil Supplies, Bengal.	15-9-1944
128. Mr. W. A. S. Lewis, O.B.E., I.C.S.	Controller of Procurement (Formerly Dy. Director, Department of Civil Supplies, Bengal).	15-9-1944
129. Mr. Hanumanbux Biswanath	Shellac and Produce Merchant, Calcutta	15-9-1944
130. Mr. S. K. Chatterjee, M.B.E., I.C.S.	Dy. Director of Civil Supplies, Region VI Dacca.	15-9-1944
131. Khan Bahadur Maulvi Chowdhury Afsar Ali.	Registrar of Co-operative Societies, Bengal	15-9-1944
132. Mr. Ashutosh Bhattacharyya	Rice Merchant and Agent to the Government of Bengal.	16-9-1944
133. Mr. Hamidul Haq Chowdhury	Representative of the Bengal Provincial Muslim League.	16-9-1944
134. Mr. N. R. Sarker	Formerly Member, Executive Council of the Governor General.	16-9-1944
135. The Hon'ble Khwaja Sir Nazim uddin, K.C.I.E.	Chief Minister, Bengal.	16-9-1944
136. Sir John Burder	} Representatives of the Bengal Chamber of Commerce.	18-9-1944
137. Mr. F. C. Guthrie		18-9-1944
138. Mr. R. H. D. Campbell		18-9-1944
139. Mr. D. C. Fairbairn		18-9-1944
140. Mr. P. C. Chowdhury	} Representatives of Messrs. Shaw Wallace & Co., Agents for the Bengal Chamber's Foodstuffs' Scheme.	18-9-1944
Mr. R. H. D. Campbell		18-9-1944
141. Mr. C. S. Rangaswami	} Representatives of the Calcutta Relief Committee.	19-9-1944
142. Mr. Jnananjan Niyogi		19-9-1944

143. Rai Dr. S. L. Hora Bahadur D.Sc., F.R.S.E., F.R.A.S.B., F.Z.S., F.L.S., F.N.I.	Director of Fisheries, Bengal . . . . .	19-9-1944
144. Mr. M. A. H. Ispahani . . . . .	} Representatives of the Muslim Chamber of Commerce & Relief Committee.	19-9-1944
145. Khan Bahadur G. A. Dossani . . . . .		20-9-1944
146. Mr. C. J. Minister . . . . .	D. I. G., C. I. D., Bengal	20-9-1944
147. Mr. M. M. Stuart, O.B.E., I.C.S.	Collector of Chittagong . . . . .	20-9-1944
148. Major General F. H. Skinner, O.B.E.	Headquarters E. C. No. 12, A. B. P. O. . . . .	22-9-1944
149. Mr. F. A. Karim, I.C.S. . . . .	District Magistrate, Faridpur . . . . .	22-9-1944
<b>BOMBAY.</b>		
150. Mr. A. D. Gorwalla, C.I.E., I.C.S., J. P.	Supply Commissioner, Government of Bom- bay.	} 28-9-1944
151. Mr. D. S. Bakhle, O.B.E., I.C.S., J. P.	Director of Civil Supplies, Bombay . . . . .	
152. Mr. J. Booth, I.C.S.	Director of Civil Supplies, Districts . . . . .	
153. Mr. R. N. Samarth, M.B.E. . . . .	Controllor of Rationing, Bombay . . . . .	
154. Mr. G. L. Sheth, I.C.S. . . . .	Grains Purchasing Officer, Thana & Colaba and B.S.D. and Deputy Controller of Ra- tioning (in addition).	} 29-9-1944
155. Mr. Sankpal . . . . .	Statistician . . . . .	
156. Mr. M. J. Desai, I.C.S., J. P. . . . .	Secretary, Revenue Department, Bombay . . . . .	} 29-9-1944
157. Mr. W. J. Jenkins, C.I.E., I.A.S.	Director of Agriculture, Bombay . . . . .	
158. Mr. A. V. Thakkar, (Vice- President.) . . . . .	Representatives of the Servants of India Society. . . . .	29-9-1944
159. Mr. Dinkar D. Desai . . . . .	} Adviser to His Excellency the Governor of Bombay.	} 30-9-1944
160. Sir Henry Knight, K.C.S.I., C.S.I., C.I.E., I.C.S., J. P.		
161. Mr. C. N. Vakil . . . . .	Representatives of the School of Economics & Sociology, University of Bombay, Bom- bay. . . . .	30-9-1944
162. Mr. J. J. Anjaria . . . . .	} Members of the Standing Committee of Food Advisory Council, Bombay.	} 2-10-1944
163. Mr. N. N. Wadia . . . . .		
164. Mr. S. C. Joshi, M.A., LL.B., M.Litt.		
165. Mr. M. V. Rajab . . . . .		
166. Rao Bahadur J. N. Mankar . . . . .	Secretary, Bombay Humanianiat League . . . . .	2-10-1944
167. Prof. D. R. Gadgil, M.A., M.Litt. . . . .	Director, Gokhale Institute of Politics & Economics, Servants of India Society Home, Poona. . . . .	2-10-1944
168. Dr. K. A. Gandhi, M.B. B.S., D.P.H., D.T.M. & H., J.P.	Director of Public Health, Bombay . . . . .	} 3-10-1944 (Dr. T. B. Patel again at Bijapur on 5-10-1944
169. Dr. T. B. Patel, M.B., B.S., D.P.H. . . . .	District Health Officer, Bijapur . . . . .	
170. Sir William Stampe, C.I.E. . . . .	Irrigation Adviser to the Government of India, E., H. & L. Department.	3-10-1944
171. Mr. G. F. S. Collins, C.S.I., C.I.E., O.B.E., I.C.S., J. P.	Adviser (Revenue) to His Excellency the Governor of Bombay. . . . .	3-10-1944
172. Mr. Aziz Ghafoor Kazi, M.L.A., J.P. . . . .	} Representatives of the Provincial Muslim League, Bombay. . . . .	} 3-10-1944
173. Mr. I. I. Chundrigar (President)		
174. Mr. A. K. Sheikh . . . . .	} Representatives of the Bombay Muslim Chamber of Commerce. . . . .	} 3-10-1944
175. Mr. Habib Ibrahim Rahim- tools, (President).		
176. Mr. Ghulamhussain Sonawala (Vice-President).		
177. Mr. M. M. Killedar (Vice- President).		
178. Mr. Sikander Khan Dehlavi (Secretary).		
<b>BIJAPUR</b>		
179. Mr. V. N. Sausman . . . . .	Land Development Officer, Bijapur . . . . .	5-10-1944
180. Mr. S. B. Desai, M.L.A. . . . .	Bijapur . . . . .	5-10-1944
181. Diwan Bahadur Sardar Desh- mukh. . . . .	President, District Local Board, Bijapur . . . . .	5-10-1944

182. Mr. S. T. Patil	.....	5-10-1944
183. Mr. I. T. Almaula, B.A., LL.B.	Collector of Bijapur	5-10-1944
184. Mr. H. S. Kaujalgi, B.A., LL.B.	Joint Secretary, Famine Relief Committee, Bombay.	6-10-1944
<i>MADRAS</i>		
185. Mr. A. F. W. Dixon, C.I.E., I.C.S.	Acting Commissioner of Civil Supplies, Madras.	9-10-1944 and 10-10-1944
186. Rao Sahib M. A. Kuttalal-ingam Pillai.	Deputy Commissioner of Civil Supplies	9-10-1944 (Madras) 24-10-1944 (Tanjore) & 26-10-1944 (Bezwada)
187. Rao Bahadur P. V. Subba Rao	Deputy Commissioner of Civil Supplies	9-10-1944 and 10-10-1944
188. Mr. W. Scott Brown, C.S.I., C.I.E., I.C.S.	Commissioner of Civil Supplies (on leave)	9-10-1944
189. Sir Purushotamdas Thakurdas, C.I.E., M.B.E.	....	9-10-1944
190. Mr. C. E. Wood, C.I.E., I.C.S.	} Members of the Board of Revenue, Govern-ment of Madras.	10-10-1944
191. Mr. A. R. C. Westlake, C.I.E., I.C.S.		
192. Dr. R. M. Mathew, M.B.B.S., D.P.H., D.T.M. & H., M.R.C.P.	Director of Public Health, Madras	10-10-1944
193. Rao Bahadur Dr. B. Viswanath, C.I.E., D.Sc., F.I.C.	Director of Agriculture, Madras	10-10-1944
194. Janab Abdul Hamid Khan	} Members of the Provincial Food Council, Madras.	11-10-1944
195. Sir P. T. Rajan		
196. Mr. R. Suryanarayana Rao	Honorary Secretary, People's Food Committee, Madras.	11-10-1944
197. Sir Hugh Hood, K.C.I.E., C.S.I., I.C.S.	First Adviser to His Excellency the Governor of Madras.	11-10-1944
198. Mr. H. S. Town	Representative of the Madras Electric Supply Corporation Ltd., Madras Tramway (1904) Ltd., M/s. Binny & Co., The Buckingham Carnatic Co., Ltd., and the Bangalore Woollen Cotton & Silk Mills Ltd.	12-10-1944
199. Mr. C. Nageswara Row	Joint Secretary of the Rayalaseema Famine Relief Fund, Bombay.	12-10-1944
200. Mr. A. Khaleeli, I.C.S.	Director of Industries and Commerce, Madras.	12-10-1944
201. Mr. K. Govindan	} Representatives of the South Indian Chamber of Commerce.	12-10-1944
202. Khan Bahadur Adam Hajee Mohamed Sait.		
203. Mr. Yusuff Sait		
204. Mr. C. M. Kothari (President)		
205. Mr. P. Raghava Nair		
206. Mr. G. Bapiraju Chaudhury	} Land Lord, Tanjore	13-10-1944
207. Sri Rao Bahadur Thyagaraja Mudaliar, M.A.		
208. Mr. L. N. Sahu	Joint Secretary, Orissa Relief Committee	13-10-1944
209. Sri B. Ramachandra Reddi, C.B.E.	Land Lord, Nellore	14-10-1944
210. Rao Bahadur Govindaraja Ayyangar.	Chief Engineer (Irrigation), Madras	14-10-1944

*CALICUT*

211. Mr. E. Kannan, M.L.A. (Madras).	Representative of the Scheduled Castes	16-10-1944
212. Mr. Sankaran Nambiar	District Agricultural Officer, Calicut	16-10-1944
213. Dr. K. Viswanath, L.M.S., D.T.M.	District Health Officer, Calicut	16-10-1944
214. Rao Bahadur K. V. Suryanarayana Aiyer.	Public Prosecutor and Advocate, Member, Provincial Food Council, Madras.	16-10-1944



215. Mr. P. P. Hassan Koya . . . Advocate, Calicut . . . 16-10-1944  
 216. Rao Sahib Dr. K. V. Nanu- . . . Civil Surgeon and District Medical Officer, 16-10-1944  
       kuttu Nair, M.R.C.S. (Eng.), . . . Calicut.  
       L.R.C.P. (Lond.).  
 217. Mr. V. R. Nayanar . . . Representative of the Servants of India 16-10-1944  
       Society, Calicut Branch.

*COCHIN*

218. Sir George T. Boag, C.S.I., Diwan of Cochin . . . }  
       C.I.E., I.C.S. . . . }  
 219. Sri Rama Varma Thampuran . . . Secretary to the Government of Cochin . . . } 18-10-1944  
 220. Rao Sahib M. M. Paul . . . Director of Food Supplies, Cochin . . . }  
 221. Mr. V. K. R. Menon . . . Deputy Director of Food Supplies, Cochin }  
 222. Mr. T. K. Nair . . . Minister for Development, Cochin State . . . } 18-10-1944

*TRAVANCORE*

223. Sir C. P. Ramaswami Aiyar, Dewan of Travancore . . . . . 20-10-1944  
       K.C.S.I., K.C.I.E., LL.D.  
 224. Mr. G. Parameswaran Pillai . . . Chief Secretary to the Government of 20-10-1944  
       Travancore. . . . . and  
       21-10-1944  
 225. Mr. K. R. Narayana Aiyar . . . Director of Food Supplies and Additional 20-10-1944  
       Secretary to the Government of Travan- and  
       cure. . . . . 21-10-1944  
 226. Dr. C. O. Karunakaran . . . Superintendent, Public Health Laboratory, 20-10-1944  
       Travancore.  
 227. Mr. L. Sankaranarayana Pillai . . . State Food Purchasing Officer . . . . . 21-10-1944  
 228. Mr. Chattanda Karayalar . . . }  
 229. Mr. K. P. Amirthanatha Iyer. }  
 230. Mr. Sivathanu Pillai . . . }  
 231. Mr. T. Kumara Pillai . . . }  
 232. Mr. P. S. Muhamad . . . } Members of the Sri Mulam Assembly, Tra- 21-10-1944  
 233. Mr. G. Narayana Iyer . . . } vancore.  
 234. Mr. D. Krishampotti . . . }  
 235. Mr. V. S. Krishna Pillai . . . }  
 236. Srimathi T. Narayani Ammal . . . }

*TANJORE*

237. Mr. T. K. Sankaravadivelu Grain Purchase Officer, Tanjore . . . . . 24-10-1944  
       Pillai.  
 238. Rao Sahib K. P. Krishnan Collector, Ramnad District . . . . . }  
       Nair. }  
 239. Diwan Bahadur V. N. Viswa- Collector, Tinnevely District . . . . . }  
       natha Rao. }  
 240. Khan Bahadur Md. Ismail . . . Collector, Tanjore District . . . . . } 24-10-1944  
 241. Mr. V. K. Krishnaswami Aiyar } Revenue Divisional Officers-in-charge of  
       Development. }  
 242. Mr. Rajaratnam . . . . . }  
 243. Mr. Venkatachari . . . . . } District Agricultural Officer, Tanjore . . . }  
 244. Chief Rationing Officer, Tan- . . . . . }  
       jore.

*BEZWADA*

245. Rao Sahib Charles John . . . Grain Purchase Officer, Bezwada . . . . . }  
 246. Rao Sahib M. R. Bangara . . . Collector, Masulipatam . . . . . }  
 247. Mr. A. G. Barson, I.C.S. . . . Sub Collector . . . . . }  
 248. Mr. K. S. Patnaik . . . . . District Rationing Officer . . . . . }  
 249. Rao Sahib V. Hanumanta Rao Deputy Controller of Food Rationing . . . . . } 26-10-1944  
       Nayudu.  
 250. Mr. Narasimhachari . . . . . District Agricultural Officer . . . . . }  
 251. Mr. V. Sadasiva Rao . . . . . Rationing Officer for Bezwada Municipality }  
 252. Food Inspector . . . . . }

*NAGPUR*

253. Sir Geoffrey Burton, K.C.I.E., Adviser to His Excellency the Governor of 27-10-1944  
       I.C.S. . . . . the Central Provinces & Berar (Food and  
       Finance). . . . . } 28-10-1944  
       } 30-10-1944  
       } and  
       } 31-10-1944

254. Mr. P. G. Braye, C.I.E., I.C.S.	Commissioner, Berar Division	27-10-1944
255. Maharaj Nagendra Singh, I.C.S.	Deputy Commissioner, Hoshangabad	28-10-1944
256. Mr. S. H. Batliwala		
257. Dewan Bahadur Sitacharan Dube.		
258. Khan Bahadur M. E. R. Malak.		
259. Rao Bahadur Dadu Dwarakanath Singh Seoni.	Representatives of the Central Provinces Food Advisory Board.	28-10-1944
260. Mr. G. A. Gavai		
261. Mr. V. D. Brahma		
262. Khan Sahib Haji Ibrahimbhai		
263. Rao Sahib Suganchan Rathi		28-10-1944
264. Mr. S. G. Dandige		and on
265. Mr. Ramjiwan Chowdhury		31-10-1944
266. Mr. S. K. Wankhede		
267. Mr. Y. S. Athalye, B.A., LL.B. (Hony Secretary)	Representatives of the Central Provinces Malguzars Association.	28-10-1944
268. Mr. R. V. Kalikar		
269. Mr. D. V. Deshmukh		
270. Mr. G. R. Joshi		
271. Rao Bahadur Moharikar		28-10-1944
272. Khan Sahib Kerawala	Officers of the Government of C. P. & Berar	28-10-1944
273. Mr. R. C. V. P. Neronha	Deputy Director of Food Supplies, Nagpur	28-10-1944
274. Mr. R. H. Hill, I.A.S.	Director of Agriculture, C. P. & Berar	
275. Dr. R. J. Kalamkar, Ph.D.	Officer on Special Duty, Department of Agriculture, C. P. & Berar.	30-10-1944
276. Dr. R. L. Tuli, M.B.B.S., D.P.H., D.T.M., L.M.	Director of Public Health, C. P. & Berar	30-10-1944
277. Mr. N. S. Krishnan		
278. Mr. C. K. E. Naidu	Representatives of the Controlled Shop Keepers' Association, Nagpur.	31-10-1944
279. Mr. Jiwaji Modgare		
280. Mr. J. R. Dani	Raipur	31-10-1944
281. Seth Lalji Ghila Bhai	Representative of the Rice Mills Association	31-10-1944
282. Rao Bahadur Uttamrao Patil		31-10-1944
283. Mr. H. S. Kamath, I.C.S.	Secretary, Government of C. P. & Berar (Food)	31-10-1944
284. Mr. R. K. Patil		
285. Mr. Kolhe	Representatives of Shetkari Sangh	31-10-1944

#### APPENDIX VIII

##### Extracts from papers relating to certain financial aspects of relief.

#### I

##### EXTRACT OF PARAGRAPH 29 OF MEMORANDUM FURNISHED TO THE COMMISSION BY THE REVENUE DEPARTMENT, BENGAL GOVERNMENT.

The Revenue Department, who were spending large amounts of money on relief, soon came to realise that relief during this year would be too costly for the Provincial Revenues to bear. They drew up a memorandum in consultation with the Civil Supplies and Finance Departments which was submitted to the Government of India towards the end of May. As the prospects of getting supplies were still fair and it was supposed that with a good *aus* harvest, it might be possible to meet the situation with an expenditure of the order of Rs. 7 crores of which Government of India were requested to bear a substantial share. The response received was however indefinite and not too reassuring. The department, therefore, went on sanctioning funds asked for by the Collectors for carrying on the relief on a large scale but in the normal manner provided by the Famine Manual. During the months of April, May and June the following funds were sanctioned for various kinds of relief to the different districts:—

- (a) Agricultural loans—about Rs. 106 lakhs.
- (b) Gratuitous relief—about Rs. 60 lakhs.
- (c) Test relief—about Rs. 87 lakhs.

In the month of July agricultural operations were reported to be going on in all parts of the province on a large scale. The demand for labour had increased and this to some extent provided a precarious living for a large section of the people who had already been in distress. During this month therefore Government had to spend only about Rs. 26 lakhs for various kinds of relief.

LETTER DATED THE 3RD JANUARY 1945, FROM SECRETARY TO THE GOVERNMENT OF BENGAL, REVENUE DEPARTMENT, TO CHAIRMAN, FAMINE INQUIRY COMMISSION.

Will you kindly refer to your Demi-official No. FC (N)/31-3 of the 24th December 1944 regarding paragraph 29 of this department's memorandum on the famine of 1943 and the measures taken in relation thereto ?

Relief work was neither held up nor slowed down at any time because of the lack of funds. As I explained personally before the Commission our real difficulty was in respect of supplies of foodstuff and not of money. At the same time I must admit that the absence of any assurance of substantial financial assistance from the Centre did make us more cautious in our planning of measures of relief than would have been the case if such an assurance had been forthcoming. The effect was wholly psychological. It did prevent us from launching upon more ambitious schemes of relief than those provided in the Famine Manual, for instance giving timely assistance to people in distress so that they might not have had to sell their lands, houses and other assets and also the provision of shelter and clothing on a much larger scale for those in need of them. The actual relief given was almost wholly in the form of test works, doles in cash or kind and loans under the Agriculturist's Loans Act as provided in the Famine Manual, which was not adequate for a widespread famine of extraordinary severity as that of 1943. All that we could do was to spend money on the kinds of relief mentioned above but on a very extensive scale.

We meant by the statement referred to in your letter that for want of any assurance of assistance from the Government of India we could not embark upon any abnormal measures of relief or set up a proper organisation for relief on a very large scale as required by the really abnormal situation in the country during that year, but no brake was actually put on at any time on account of inadequacy of funds. On the contrary you will find from paragraph 30 of our memorandum that there were even cases where some Collectors could not fully utilise the funds sanctioned for relief because of the absence of sufficient supplies.

## III

EXTRACT FROM RELIEF COMMISSIONER'S NOTE ON RELIEF OPERATIONS IN BENGAL FROM 27TH SEPTEMBER 1943 TO 29TH FEBRUARY 1944.

"...complained to me that relief was curtailed in his area at the most critical stage of the operations, by order of Revenue Department. . . .

## IV

LETTER NO. 794-MISC., DATED THE 10TH JULY 1943, FROM ADDITIONAL ASSISTANT SECRETARY, GOVERNMENT OF BENGAL, REVENUE DEPARTMENT, TO COLLECTOR OF MIDNAPORE.

Will you please refer to your Memo. No. 2712-R., dated the 8th July 1943 and the last portion of your Memo. No. 2674-R., dated the 5th July 1943 regarding the distribution of gratuitous relief and maintenance loans.

You ask for an additional allotment of Rs. 12,80,000 for distribution as gratuitous relief including Rs. 10 lakhs required for meeting the present demand of the Sub-Divisional Officer, Contai. It appears from your Memo. No. 2424 (3)-R., dated the 16th June 1943 that a sum of Rs. 10 lakhs was drawn under T. R. 27 only on 16th June 1943 for meeting the requirements of the Sub-Divisional Officer, Contai. It is not quite clear why the Sub-Divisional Officer came up with a proposal for a further allotment of Rs. 10 lakhs in the latter part of June as it is most unlikely that the amount of Rs. 10 lakhs drawn on 16th June 1943 could have been spent on gratuitous relief in cash within a short period of a week or so specially in view of the fact that a very large number of people were being engaged in test relief work throughout the month of June. The position may kindly be clarified.

2. It may be observed in this connection that due to various causes distress prevails in almost all the districts of the province and the problem of relieving the same has assumed such proportions that it is beyond the capacity of this Government to cope with the situation without the assistance from the Government of India. We, have, therefore, approached the Government of India for substantial assistance in money and foodgrains for this purpose and pending the decision of that Government it will not be possible to carry on relief measures in the cyclone affected areas of your district on the scale which was contemplated a few months ago. I am therefore to request you to see that relief is restricted to the essential minimum until the above matter is settled.

3. As regards your proposal regarding the distribution of maintenance loans to families who have between  $1\frac{1}{2}$  and 5 *bighas* of land. Could you kindly furnish Government with an approximate estimate of the number of families which will fall in this class so that it may be examined what is to be the likely outlay.

## V

COPY OF LETTER NO. 480-F. R., DATED THE 21ST MARCH 1945, FROM OFFICIATING SECRETARY TO THE GOVERNMENT OF BENGAL, REVENUE DEPARTMENT, TO SECRETARY, FAMINE INQUIRY COMMISSION.

Please refer to your Demi-official letter dated the 24th February, 1945 addressed to . . . . The Government of Bengal generally agree with the views expressed in . . . 's Demi-official No. 7-F. R., dated the 3rd January 1945. They would, however, like to make the following further

observations on the points which have been raised, as it appears that some misunderstanding exists with regard to the statement made in paragraph 29 of this Department's Memorandum submitted to the Commission.

While the Government of Bengal felt very uneasy at the heavy expenditure on relief measures and would have welcomed timely assurance of assistance from the Centre they tried their best not to slow down relief operations for lack of funds. Throughout the province gratuitous relief in the form of free food was given on a scale far in excess of that contemplated in the Famine Manual, owing to the futility of issuing money when food was scarce and not arriving from outside sources, and also owing to the impossibility of conducting large scale test relief works in the rains. Moreover fresh ground was broken by establishing free kitchens, food canteens and cheap grain shops, and distributing clothing. Mr. . . . . . 's Demi-official letter No. 94-Misc., dated the 10th July 1943, to the Collector of Midnapore was admittedly somewhat unhappily worded, but it should be interpreted in its historical background. After the devastating cyclone of 1942, affecting large areas in Midnapore and 24-Parganas, a comprehensive plan was drawn up not only for giving immediate relief to the distressed but also for restoring them to normal condition within a short space of time. All these measures were called relief measures and no distinction was made between the measures necessary for immediate relief and those aiming at rehabilitation. Mr. . . . . . 's Demi-official letter may be taken as reflecting some anxiety in the part of Government lest Midnapore expenditure, in view of the ambitious plans previously drawn up, might be excessive in the altered circumstances in comparison with the needs of other parts of the province—but the figures do not show that it caused any slowing down of relief operations proper. To demonstrate this a statement is enclosed showing the quarterly expenditure incurred on relief measures in Midnapore and 24-Parganas from October 1942 to December 1943. Both these districts suffered severely from the cyclone of 1942 though devastation was far more widespread and intense in Midnapore than in 24-Parganas. It will be seen from the figures that between October 1942 and June 1943 expenditure on Agricultural Loans and Gratuitous Relief in Midnapore was of the order of Rs. 1 crore and Rs. 1 crore 14 lakhs respectively; the corresponding expenditure in 24-Parganas during this period was Rs. 15 lakhs and 9 lakhs respectively. Therefore expenditure in Midnapore was about 9 times more on Agricultural Loans and 12 times more on Gratuitous Relief. In the following six months i.e. between July and December 1943, 23 lakhs were spent on Agricultural Loans in Midnapore and 1 crore on Gratuitous Relief while the figures for 24-Parganas for the corresponding period were Rs. 2 lakhs and 9½ lakhs respectively. There was thus no noticeable decline in relief operations in Midnapore as compared to 24-Parganas.

VI

A STATEMENT SHOWING THE EXPENDITURE ON RELIEF MEASURES IN MIDNAPORE AND 24-PARGANAS BETWEEN OCTOBER 1942 AND DECEMBER 1943.

*Midnapore*

(Area affected by the cyclone—3600 Sq. miles with a population of 2·3 millions.)

	Agricultural loans.	Gratuitous Relief.	Test works.
October to December 1942 . . . . .	19,00,000	24,28,000	5,05,000
January to March 1943 . . . . .	37,25,000	19,30,000	5,25,000
April to June 1943 . . . . .	44,00,000	69,80,000	62,48,900
July to September 1943 . . . . .	21,63,000	64,15,000	..
October to December 1943 . . . . .	1,50,000	38,28,000	..

*24 Parganas.*

(Area affected by the cyclone—400 Sq. miles with a population of 2 lakhs.)

October to December 1942 . . . . .	..	82,000	50,000
January to March 1943 . . . . .	4,60,000	3,03,500	50,000
April to June 1943 . . . . .	10,05,500	5,00,000	3,00,000
July to September 1943 . . . . .	1,05,000	2,95,000	..
October to December 1943 . . . . .	1,10,000	6,60,000	..