

**GOVERNMENT OF MADRAS**

**A SURVEY OF  
PROCUREMENT AND RATIONING OF FOOD  
IN THE MADRAS STATE  
(1942-49)**

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## FOREWORD

This is a useful booklet which I commend to the public of the Madras State and to people elsewhere in general. As a Government publication this is unlike many forerunners of its category for we have herein a mass of what is usually treated as dry-as-dust official information presented in an attractive style and form. The subject of this booklet is of paramount importance and interest to the public at present. It tries to explain the several intricate and difficult problems which the Madras Government have had to face from time to time and the measures taken by them to solve these problems. A correct understanding by the public both of the problems and of the measures adopted by Government to meet them is an all-important pre-requisite for the co-operation of the public with the Government which is indispensable in the day-to-day administration of the food laws. I have every hope that this booklet will amply achieve this object.

J. L. P. ROCHE VICTORIA,

*Minister for Food and Fisheries.*

## INTRODUCTION



The development of rationing and procurement in India during the period 1942-49 has not been adequately appreciated in other parts of the World. For example, the League of Nations' Survey on Food, Famine and Relief published in May 1946, does not mention the development of various forms of procurement in the deficit provinces of India and makes no reference to the extension of rationing to rural areas. The American Famine Commission to India, in their report of July 1946, do, however, pay a tribute to the averting of famine during the first six months of 1946 "by means of a highly successful system of rationing and enforced procurement of foodgrains from cultivators." More recently, the United States Secretary for Agriculture, Mr. Anderson, in a statement to the House of Representatives, Appropriations Committee, said "I think that probably of all the peoples on earth, Indians have one of the best, if not the best, systems of rationing that is to be found."

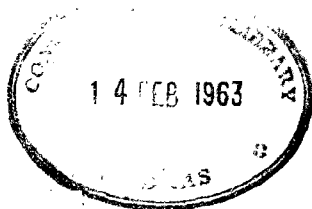
Although each country of the world in times of food shortage settles its problems of food distribution in a way which depends to some extent upon local conditions, all countries tend to introduce systems which ration the supplies available among the non-producers. Because it was realised that such a system in a year of bad harvest would not result in a sufficiently large ration being available to the non-producers, the Madras Government gradually developed a system which if the ideal had been achieved, would, in times of great shortage, have

secured equitable distribution not only among non-producers but also between the producer and the non-producer. No other country of comparable size in the world and certainly no large agricultural country has attempted such a solution. In spite of its poverty and its low standard of literacy, and its large number of small holdings, Madras was able to attempt such an experiment largely because of its efficient system of village officers—an hereditary system which stretches back for hundreds, possibly thousands of years, to the Mauriyas and the Guptas.

Although the Madras experiment was far from perfect, the extent to which it was successful can be estimated by comparison with the conditions in the other States of India. For example in Bengal, in the 1943 famine, mainly as a result of no system of equitable distribution being in force, out of a total population of 80 million people, over a million are estimated to have died of starvation and under-nourishment. By comparison, nobody at all died in the 1946 Madras famine. Although in fairness to Bengal it must be admitted that the grain shortage in Madras in 1946, taking into account the large imports from U S. A., Australia and Argentine, was less than in Bengal in 1943.

It is hoped that the description of this Madras experiment which in extent and objective bears some resemblance to other more enduring social experiments, will be of some use to other Provinces and countries, if they are faced in future with similar food shortages.

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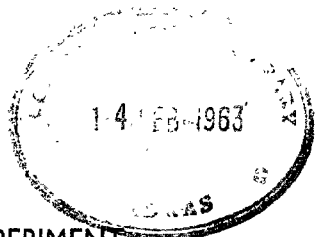


## CONTENTS.

	Page
Foreword	
Introduction	
<i>Chapter I. Subject of the experiment.</i>	
Area and population of Madras Province...	1
Food and Agricultural production of Madras	1
Foodgrains production ... ..	2
Pulses production .. .. .	4
Oil seeds production ... ..	4
Production of sweetening material ... ..	5
Production of fruits and vegetables including root crops.	6
People of the Province ... ..	6
The Governmental machine ... ..	8
<i>Chapter II. Prelude to the experiment.</i>	
The pre-war years ... ..	10
Beginnings of control ... ..	11
The grain purchase system ... ..	13
<b>Further steps towards complete price control monopoly procurement and rationing.</b>	
1. Price Control ... ..	25
2. Statutory Rationing ... ..	29
3. Provincial reserves and storage ... ..	33
4. Levy schemes of procurement ... ..	34
<i>Chapter III. The experiment I.</i>	
<b>(Intensive Procurement and Province-wide Rationing.)</b>	
a. The introduction of monopoly procurement and informal rationing into heavily deficit districts. ...	39
b. The famine year of 1945-46 ... ..	48
c. The year 1946-47 ... ..	59
<i>Chapter IV. The experiment II.</i>	
<b>(Decontrol and Recontrol.)</b>	
The year 1947-48 .. ..	65
The year 1948-49 .. ..	72

	Page.
Appendix A. Statement comparing the final estimated production of rice and millets in the Province according to the season and crop report with the estimated requirements of these grains for consumption and seed according to the five year formula during the four years ending 1945-46 ... ..	76
Do. 1946-47 ... ..	77
Appendix B. Estimated population in Madras Province and the rate of consumption ... ..	78
Appendix C. Statement comparing the normal production of rice and the estimated requirements for consumption and seed in this Province ... ..	79
Appendix D. Statement comparing the normal production of millets (in terms of cleaned grain) with the estimated normal requirements for consumption and seed in this Province ... ..	80
Appendix E. (i) Imports, exports, and net imports of paddy and rice in terms of rice by sea and rail within and out of Madras Province ... ..	81
(ii) Imports, exports and net imports of millets by sea and rail within and out of Madras Province ... ..	81
(iii) Imports, exports and net imports of maize by sea and rail within and out of Madras Province ... ..	82
(iv) Imports, exports and net imports of barley by sea and rail within and out of Madras Province ... ..	82
(v) Imports, exports and net imports of rye by sea and rail within and out of the Madras Province ... ..	82
(vi) Imports, exports and net imports of wheat, and wheat products by sea and rail within and out of Madras Province ... ..	83
(vii) Imports, exports and net imports of pulses and grains by sea and rail within and out of Madras Province ... ..	84
Appendix F. Millets :—	
(i) Movements under Zonal scheme ... ..	84

	Page.
Appendix F. Millets :— <i>cont.</i>	
(ii) Statement showing the exports of millets within the Province during the Khariff years 1945-46, 1946-47 and 1947-48	... 85
Appendix G. Collections under levy scheme from April to November 1944	... .. 85
Appendix H. Provincial figures	... .. 86
Appendix I. Statement showing monthly off-take of rice, wheat and wheat products and millets in the Province of Madras	... .. 91
Appendix J. Statement showing monthly issues of rice, millets, wheat, wheat products and maize in Madras Province	... .. 92
Appendix K. Statement showing the average calorific value of the diet of an adult in this Province	... 93
Appendix L. Procurement of rice in the years 1944-45 to 1948-49 compared with production	... 94
Appendix M. Procurement of millets in the years 1944-45 to 1948-49 compared with production	... 96



## CHAPTER I

### SUBJECT OF THE EXPERIMENT.

#### Area and population of Madras Province.

Madras Province has an area of 79.93 million acres or 1,24,890.5 square miles. This is equal to roughly 1/13th of the area of the whole of India. Since the Province stretches from latitude 8° North to 18° North the entire area is within the tropics. The net area sown under holdings plus current fallows is 40.8 million acres, the remainder of the land being covered by forests or reserved for common use or areas not fit for cultivation. Although the area under holdings was 40.8 million acres in the three years ending 1944-45, the average area sown with crops was only 31.58 million acres. From this it will be seen that there is not very much room for expansion of cultivation and that any future increase in food production must necessarily come from an increased yield per acre rather than an increase in the area under cultivation.

According to the 1931 census, the population of Madras Province was 4,42,05,000. Ten years later, at the 1941 census, the population was 4,93,42,000. The population of the province in 1949 is therefore estimated to be 53.9 million.

#### Food and agricultural production of Madras.

Madras is still largely an agricultural province and by far the largest portion of the area cultivated is devoted to the raising of food crops. Out of the total population of 53.9 million, it is estimated that 71% are still directly connected with agriculture either as producers or as agricultural labourers. During the three year period 1942-43 to 1944-45, the average area under cultivation was 31.58 million acres. Out of this area, the average extent cultivated with major food crops (food-grains and pulses) was 26.643 million acres. The area sown with major food crops was thus about 84.37 per cent of the total area cultivated. In addition, 3.743 million acres were sown with ground-nut which, although primarily a



non-food crop, does yield an oil, which to some extent is used as a foodstuff. The area cultivated with plantation food crops like tea, coffee, betel, and arecanuts was 2,74,000 acres which has not been included in the area under food crops. The land covered with fruit and vegetable which approximates to 7,40,750 acres has however been included in the area under food crops.

### Foodgrains production.

The most important constituent of any diet is the carbo-hydrate element. In countries where the standard of living is low, the carbo-hydrate element predominates much more vis-a-vis the protective foodstuffs than in lands where incomes are higher. Under these circumstances, it is not surprising that by far the larger portion of the area sown with food crops is utilised for the cultivation of foodgrains, notably, paddy and millets. During the period mentioned above, the average annual area under paddy was 10.774 million acres and the average area annually under other foodgrains was 15.869 million acres. Wheat is not grown to a large extent, since it is better suited to temperate lands. In the year 1945-46, the area sown with wheat was 12,245 acres.

Although so large a proportion of the area cultivated in the province is devoted to the production of foodgrains, the province does not produce sufficient foodgrains for its own requirements. The average production of rice in the three years ending 1944-45 was 4.8665 million tons and of millets 2.651 million tons. The normal consumption of the province in the five year period ending 1941-42 was estimated at 4.962 million tons of rice and 2.890 million tons of millets. As will be seen later, the balance of the requirements of rice and millets in pre-war years were secured by imports from other parts of India and from overseas.

Most of the rice cultivated in the province is produced on irrigated lands, out of the normal acreage of 10.775 million acres under paddy, only 2.254 million being un-irrigated cultivation. The fact that rice is predominantly an irrigated crop determines, to a considerable extent, the area in which a major portion of the rice cultivation occurs. For, although

some irrigated paddy is cultivated by water from wells and in the ayacuts of small tanks in the inland districts, by far the major portion of the irrigated paddy cultivation takes place in the ayacuts of large tanks near the sea and in the deltas of the three major rivers, the Godavari, Krishna and Cauvery. Out of the 4.8665 million tons normal production of rice in the Province 1.677 million tons are produced in the four districts of East Godavari, West Godavari, Krishna and Tanjore covering the deltas and irrigation systems of these three major rivers. As a result, these four districts are the districts which produce more rice than is needed for their own requirements and are the districts, which export rice to the needy areas in the Ceded districts, the south of the province and on the West Coast. The fact that much of the rice of the province is produced in these three deltas thus determines the normal flow of rice in pre-war years and more particularly in the War-years, after the institution of an inter-provincial ban on export of rice.

Cultivation of millets is not concentrated in certain areas of the province to the same extent as rice. From production and import figures, it has been estimated that 63% of the population are mainly rice eaters and the other 37% millet eaters, but there is a tendency for the portion of the population who eat rice to increase. In general, the districts, which are the main exporting areas of rice, namely the delta districts, are also the main exporting areas of millets. In general too, the inland districts are the districts which have the highest percentage of dry land and are, therefore, the main millet producing districts. The millet cultivation is very largely done by small subsistence producers and as a result, the main millet producing districts tend to be the districts with the largest proportion of millet consumers. The chief millet consuming districts are Visakhapatnam, the Ceded districts, Guntur, Nellore, South Arcot, Chittoor, North Arcot, Salem, Coimbatore, Tiruchirappalli, Madurai, Ramnad and Tirunelveli. On the other hand the main millets exporting districts of the province are normally East Godavari, West Godavari, Krishna and Tanjore. These four districts are able to export substantial quantities of millets inspite of their low production, as a result of the percentage of the total population, which is millet eating, being extremely

small. In general therefore, the flow of millets from surplus to deficit districts within the province tends to be along the same lines as the flow of rice, but the surplus quantities which move are very much smaller.

### Pulses production.

In Madras Province, it is estimated that about 12 per cent of the population are vegetarian and the remainder non-vegetarian in their diet. The main source of proteins in the diet of the vegetarians is pulses. The normal production of pulses in the province is 2,54,800 tons. This production figure is equivalent to 5802 oz. per adult per day. The Famine Enquiry Commission of 1945 estimated that a balanced diet should contain at least 3 ozs. of pulses per day. It will thus be seen that the production of pulses is considerably less than would suffice for a balanced diet for the whole population. Before the War, this deficiency was to some extent made up by imports of pulses from other Provinces. Net imports in the 5 year period ending 1941-42, attained 2,46,000 tons per year. The consumption of pulses was thus about 1.2 ozs. per adult per day and for most individuals was considerably below the level required for a balanced diet.

The non-vegetarians who form about 88 per cent of the population derive their protein in-take mainly from meat consumption. The commonest form of meat consumed is goat and sheep. At the time of 1944 census of livestock, it was estimated that the goat population was 60,88,000 and the sheep population 1,05,69,000. In the report on the marketing of sheep and goats, it has also been estimated that the quantity of meat consumed per year in the province is approximately five million sheep and three million goats. This is equivalent to a consumption figure of about 4.7 ozs. or 28 grams of animal protein per adult per month.

### Oil seeds Production.

Madras Province is in a much better position in the matter of production of fats, the third essential constituent of human diet. The province is slightly deficit in carbo-hydrates production and heavily deficit in protein production but is probably surplus in fat production. The main oil seed

produced is groundnut, with an average production of 16,19,000 tons of unshelled nuts during the three year period ending 1944-45. Unfortunately from the food point of view, although fortunately from the economic point of view, groundnut is mostly a commercial crop, only about 65,000 tons of groundnuts and 2,00,000 tons of groundnut oil being consumed. The next most important oils are gingelly and coconut. 68,000 tons of coconut oil and 43,000 tons gingelly oil are normally required for civil consumption in the province. The total consumption of all vegetable oils within the province including prepared foodstuffs like Vanaspati and Cocogem, is probably 3,16,000 tons per year. The position regarding animal oils, like ghee, which is consumed by the higher income groups is less favourable, the annual production of ghee being 40,210 tons against a consumption figure of 36,120 tons.

#### Production of sweetening material.

As in the case of fats and oil seeds, Madras is surplus in the raw materials but deficit in the more highly prepared product in the case of sweetening material. The production of sugarcane in the three years ending 1944-45 was 37,38,000 tons. Most of this sugarcane is converted into jaggery, the average production of jaggery in the three years ending 1944-45 being 2,94,750 tons against a consumption figure of 2,50,000 tons. On the other hand the average production of sugar in these three years was 43,600 tons against a normal consumption figure of one lakh tons. The actual consumption of sugar in the province, after allowing for imports, was about 74,000 tons per annum. In addition, it has been estimated that 2,24,000 tons of sugarcane are normally consumed in the raw stage. The average production of Palmyrah jaggery in each of these three years was about 61,000 tons of which perhaps 5,000 tons per year was exported. Accordingly the consumption of Palmyrah jaggery in the province was about 56,000 tons per year. The total consumption of sweetening material in the province is thus equivalent to about 3,80,000 tons of sugar per year, which works out to about 16.2 lbs. per head of the population. This consumption figure is much lower than the normal consumption of 97 lbs. per head in the U.S.A. and 106 lbs. per head in the United Kingdom.

## Production of fruits and vegetables including root crops.

The production of fruit within the province is considerable and most of this production is consumed within the province. The normal area under fruit and root crops excluding coconuts is 7,40,750 acres per year. The normal area under coconuts is 6,06,290 acres per year. Many of these fruits are not only rich in vitamins, notably vitamin C, but also supplement considerably the carbo-hydrate content of the diet of the South Indian, obtained from foodgrain and pulses consumption. The largest crop is the plantain, which has a normal yield of about 8,42,510 tons per year. The next most important is the mango with a production of 7,00,830 tons per year. Fruits of the citrus variety, e.g., orange and limes, have a normal production of about 79,710 tons per year. But their importance is greater than this figure would suggest since they form an extremely concentrated source of vitamin C. The most important vegetable produced in Madras is the onion, of which the normal production is about 1,94,000 tons per year. Sweet potatoes with a normal production of 1,00,000 tons, potatoes with a normal production of 55,000 tons and tapioca with a normal production of 82,000 tons like onions, have a low carbo-hydrate content and are mostly composed of water but are useful in supplementing the foodgrain carbo-hydrate content of the diet.

### People of the province.

As already mentioned Madras is still largely an agricultural province and the majority of the population still derive their income directly from agriculture. About two-thirds of the province is covered by the ryotwari system under which the cultivator pays assessment direct to the Government on his holdings and the remaining one-third is covered by the Zamindari system in which the cultivator pays his rent to a landlord who in turn pays pesh-kush to the Government. Under both types of systems, the average size of the holding of a cultivator is small. In 1939, it was estimated that the average size of a holding was 4.13 acres, the total number of holdings being 66,90,000. Of these 66,90,000 holdings, in a

normal year, slightly more than half were estimated to be self-sufficient, 5 acres of wet land or 10 acres of dry land being considered self-sufficient for the average family.

The problem of food administration in Madras is largely determined by the fact that it is a land of a large number of small producers and by the fact that it is a province which is slightly deficit in the production of the fundamental foodstuffs, namely foodgrains. The problems of Madras are thus completely different from those of a country, which has to import a much larger percentage of its food consumption, because it is heavily deficit in production, like the United Kingdom. Such countries' food problems are mainly concerned with securing sufficient imports and distribution. The problems of Madras are also different from surplus countries with large holdings, like the U.S.A., Canada and Australia. Since Madras is a slightly deficit province with a large number of small producers, the difficulties which it has to face are those connected with procurement of a large number of small surpluses.

The ryotwari system referred to above which covers two-thirds of the province has been in existence for nearly one and a half centuries, but was a revival of earlier systems of direct collection of taxes by the Government from the cultivator. The system of direct collection of taxes from numerous small cultivators necessitates the existence of a net work of village officials responsible for calculating and collecting the kist due from each ryot. The ryotwari settlement and former systems of direct tax collection are thus responsible for the existence in each village of a trained accountant, who is usually hereditary, and a trained headman or munsif. The accountant, who is accustomed to maintaining land revenue registers and calculating the tax due from each individual cultivator, is eminently suited for maintaining any procurement or rationing registers within the village and for estimating the quantity of grain which must be sold to the Government or a Government agent under any system of foodgrain procurement. The ryotwari system also thus resulted in there being ready for use by any food administration a system of village officers for the maintenance of procurement and rationing registers.

## The Governmental Machine.

The existence of the ryotwari system in most parts of the province was also responsible for the development of a Government machine which was peculiarly suited for introducing and supervising any system of food control. The Revenue department which was responsible for supervising the collection of land taxes from the cultivators consisted of a hierarchy of officials stretching from the Revenue Inspector at the bottom who is responsible for supervising collection in a few villages to the Collectors and the Board of Revenue at the top, who are responsible for watching the progress of collection in the districts and throughout the province respectively. Admittedly, there were other departments of Government also with a territorial and pyramidal structure, notably the Agricultural department, the Co-operative department and Health department. But these departments were younger and did not have the same control over the village officers or the same standing as the Revenue department and usually, the Revenue department was relied upon for undertaking any new scheme of Government. In the Revenue department there was thus a system of officials, which, if they themselves could not be responsible for procurement and rationing, could either assist in this work or at least provide trained staff for the basis of a new department.

Another feature of the Revenue department was that it had already developed a system of estimation of crop production and crop forecasting and a statistical staff for these calculations was already in existence to some extent in the Collectors' offices and more competent staff in the Office of the Board of Revenue at Madras. When the rains and hence the crops fail, the Government give a total or partial remission of land tax. In order to see whether remission is justified, village accountants are required to enter in the village accounts a figure for each field showing the relation of the yield in that field to the normal yield in the village. But not unnaturally, the village accountants tend to under estimate the yields in the fields of the village. A Director of Agriculture, Mr. G.A.D. Stuart, shortly after the first world war, invented a means for correcting the under-estimation by the village officers and hence for estimating the production of each village of each district and so of the

province as a whole. Under this method it is assumed that the under-estimation in the present is the same as in the past. Consequently an estimate for actual production is derived by multiplying the harvests estimates of production by a correcting factor derived from the past. A comparison and analysis of the results obtained with the results of crop cutting experiments shows that the method gives fairly accurate estimates of crop production,—the accuracy being greater for paddy than for the dry crops. Estimates of crop production obtained by this method are given in Appendix A attached.



## CHAPTER II

### PRELUDE TO THE EXPERIMENT.

*The pre-war years.*—As already pointed out, Madras Province is normally slightly deficit in foodgrains and made up this deficit in pre-war years by importing rice and millets from other parts of India and from overseas. During the five years ending 1939-40 the annual net imports of rice and millets into the Province amounted on the average to 4,31,600 tons and 9,400 tons respectively (vide Appendix E). In addition, about 2,33,800 tons of pulses and 55,000 tons of wheat and wheat-products were also being imported from outside the Province. In toto, about 7,29,800 tons of foodgrains, including pulses, were thus being imported each year into the Province.

In the five pre-war years, out of the total quantity of rice imported, on the average, per year 85·2% came from Burma and other eastern countries. The declaration of War in Europe in 1939 did not seriously affect the volume of this import and as a result there was no serious shortage of foodgrains in the Province in the first two years of the War, but the beginning of the War with Japan in December 1941 produced an abrupt change in the position. By early 1942, the rice areas of Burma and Siam had been over-run by the Japanese and imports from these areas stopped completely. To make matters worse from the point of view of Madras, adjacent areas e.g., Ceylon, Travancore, Cochin and Bombay began to purchase rice in Madras Province and export it to their territories. At first, the Government of Madras took no action to prevent this export of rice and Madras which had been a rice importing province, became a rice exporting area during 1941-42 and 1942-43. In 1941-42, the net exports amounted to 1,55,000 tons of rice. In 1942-43, the export was even greater, amounting to a net figure of 2,46,000 tons. These exports would not have been possible if the harvest in 1940-41 had not been a fairly good one, but as a result of the export of 4,01,000 tons in the two years, the province not only lost any surplus which might have resulted from that harvest,

but also the carry-over with the cultivators was probably reduced below its normal level.

During the first two years of the War from September 1939 upto the entry of Japan into the War in December 1941, the price of second sort rice rose steadily and by the beginning of 1942, was about  $1\frac{1}{2}$  times the 1939 price. The steady increase was no doubt due to the increasingly reduced imports of low quality rice from Burma and due to the increased competitive buying of Travancore and Cochin merchants in this province. No doubt, too, the general shortage of fertilisers and the increasing shortage of labour resulting in an increased cost of production also contributed to the rise in the price. During this period, the rise in the price of millets was not so marked, possibly as a result of the fact that not so large a quantity of millets was imported before the War with the result that the coming of the War did not diminish supplies of millets to the same extent as supplies of rice. After the entry of Japan into the War in December 1941, the prices of both rice and millets rose rapidly. Millets prices reached their peak level of about 3.75 times the pre-war price in September 1943 and the price of second sort rice reached its peak level of 2.6 times the pre-war price in about November 1943.

*Beginnings of control.*—Early in 1942, the Japanese proceeded to overrun the areas in South-East Asia, which had been supplying rice imports to this Province. It was clear that imports of rice from these areas could not be resumed for some time and that in the meantime the province would have to take steps to counteract this loss of import, which was resulting in a rapid rise in prices, by conserving its locally produced stocks. The obvious first step was the prohibition or control of exports to other areas like Travancore which had suffered to an even greater extent than Madras as a result of the loss of Burma rice and which was therefore buying heavily in this Province. On 13th June 1942, a notification was issued prohibiting the export of rice outside the Province except on a permit issued by the Government. Exports of rice to other provinces and States and supplies to the Defence Services after that date were regulated by a system of quotas. Under these quotas, the following quantities were exported in 1942:—

<i>Importing Area:</i>		1942 Tons.
Ceylon	...	65,379
Bombay	...	1,364
Travancore	...	16,161
Cochin	...	6,464
Mysore	...	567
Bengal	...	3,014
Other areas	...	6,247
Total		99,196

The importing provinces and the Defence Services nominated private merchants for purchasing and exporting these quotas. Since no system of price control had been introduced, the merchants representing the provinces, states and the Defence Services competed with one another. This in itself partly explains why prices rose so rapidly during 1942-43. The importing merchants did not restrict purchasing to the surplus districts only but purchased in deficit as well as surplus districts. Partly, therefore, in order to prevent further rises in prices as far as possible and partly to help the States secure their quotas, the Government set up an official agency of Grain Purchase Officers in the grade of Deputy Collectors on 1st September 1942. These Grain Purchase Officers purchased rice or paddy in the surplus districts from merchants or ryots at a price fixed by Government.

To strengthen the Government control over prices, the Government of Madras, also, on 22nd June 1942, gave effect to the Foodgrains Control Order, which had been promulgated by the Government of India. This required all wholesale merchants to be licensed. Any licensee under the Foodgrains Control Order indulging in blackmarketing or hoarding violated the provisions of the Foodgrains Control Order and could have his licence suspended or cancelled under the provisions of that Order. A merchant, who had his licence cancelled, could not continue to do wholesale business in foodgrains. The Foodgrains Control Order not only applied to rice, but also to millets and the four major pulses and thus to the extent to

which prices could be controlled under the Order, it controlled the prices of these food commodities too. Under the Foodgrains Control Order, licensees were required to send monthly returns to the Collectors of the districts concerned, showing their stocks of foodgrains. This was the first step taken towards Governmental assessment and control over stocks of foodgrains in the Province. Admittedly, however, the assessment and control was inadequate since it only enabled to Government to estimate the stocks in the hands of the wholesalers in the district and neglected stocks in the hands of the ryots and retailers.

Government control over other foodgrains was increased by the extension of the ban on the export of rice outside the Province without permits to millets and pulses on 12th August 1942. Governmental control over stocks was further increased by prohibiting the movement of rice, millets and pulses, from one district to another within the Province on 1st June 1943.

*The Grain Purchase System.*—As already explained above, the Government purchasing agency for buying rice at fixed prices in the surplus delta districts was established primarily to enable neighbouring provinces and states like Travancore, Cochin, Mysore, Hyderabad, Bombay and Ceylon and also the Defence Services to obtain their quotas of rice from this province at fixed and reasonable prices. Further more, the establishment of an official agency of Grain Purchase Officers buying at fixed prices prevented the increase of price, which would have resulted from competitive buying by these other provinces. Not unnaturally, since the province was actually deficit in rice, the supply of rice from the surplus areas of this province to other provinces except on an exchange basis was gradually abandoned during the course of 1943. Not unnaturally, too, in order to prevent competitive buying by the merchants of the deficit districts of this province in the surplus delta districts, the Government procurement agency became more and more concerned during the course of 1943 with purchasing rice for supply to the deficit areas of the Province and less concerned with purchase of rice for export to other provinces. During 1943 and 1944, as will be explained later, statutory rationing of foodgrains was introduced into all the larger towns of the province, including the larger towns of the

surplus districts themselves. As a result of the fact that the province is deficit in foodgrains even in a normal year, it was necessary for the grain purchase organisation in the surplus delta districts to purchase the complete surplus of these districts in order to supply sufficient foodgrains to feed the deficit districts of the province. This resulted in very little grain being left in the surplus areas of the surplus districts for supply to the larger urban areas of those districts, into which rationing was introduced in 1943 and 1944. If the wholesalers of these rationed areas in the surplus districts had purchased grain in the open market in the surplus areas of their districts, they would have had to buy at prices higher than the normal export price. To prevent such a state of affairs, which would have caused much local criticism, the grain purchase organisation was also gradually made responsible towards the end of 1943 and during 1944 for the supply of rice to not only the statutorily rationed areas, but also the non-rationed urban and hence deficit areas of the surplus districts. In some cases too, the grain purchasing agency supplied quotas of rice to the upland areas of the surplus districts, e.g., in Guntur and Nellore districts.

At first, Grain Purchase Officers were posted only to Tanjore and Vijayavada, the former for procurement in the Cauvery delta and the latter for procurement in the Krishna and Godavari deltas. It later became apparent that two Grain Purchase Officers were not sufficient to do all the purchasing. Accordingly, in January 1943, the northern area was split up into three grain purchasing areas, with Grain Purchase Officers centred at Tadepalligudem, Vijayavada and Nellore and the Cauvery area was split into two parts with Grain Purchase Officers centred at Tanjore and Tiruchirappalli. In August 1943, a further Grain Purchase Officer was stationed at Chidambaram in South Arcot in order to purchase in the surplus areas of that district. In June 1944, it was decided that the Nellore Grain Purchase Officer could not cope with the purchasing in Guntur and Nellore districts and this area was divided into two parts, Grain Purchase Officers being posted to Tenali and Nellore to be responsible for the purchase of rice in Guntur and Nellore districts respectively. Finally, shortly

before the grain purchase system of voluntary purchase in the surplus areas was converted into a monopoly procurement system in January 1946, Tadepalligudem area was divided into two and a further official stationed at Kakinada for purchase in East Godavari. The Grain Purchase Officers were assisted by Grain Movement Officers in the grade of Tahsildars from 1943 onwards.

Generally, transactions under the grain purchase system were financed by the trade and not by the Government. The Collector of the importing district selected importing merchants, in some cases co-operative stores, and these merchants made deposits for the value of their quota of rice in the personal deposit account of the Grain Purchase Officer. The Grain Purchase Officer paid the local merchant or miller by a cheque on his account. This cheque was paid to the miller only after receipt by the Grain Purchase Officer of the railway receipt for the rice or later on receipt of a form completed by the purchaser showing that the grain has been loaded and a railway receipt obtained by him. Only in the case of Madras City, Salem town, and Visakhapatnam district were purchases financed on Government account. In these areas, purchase on Government account was adopted, since reliable wholesalers could not be found for importing the rice. This system of using private merchants had several advantages. In the first place, it meant that Government need not set aside large sums of money, which would have run into several crores, for purchasing grain for the deficit districts. Furthermore, it placed much of the responsibility for seeing that the grain was of good quality on the importing wholesaler, thereby, to some extent, lifting the responsibility from the shoulders of the Purchase Officer's staff. For the same reason it reduced the possibilities of the purchasing staff being bribed to accept poor quality rice.

Although most of the responsibility for accepting not only bags of good quality rice but also bags of full weight lay upon the representatives of the importing merchants, partly in order to test the quality and weight of rice being supplied to areas, like Madras, Salem town, and Visakhapatnam district, which were purchasing on Government account, and partly in order to assist private quota-holders, the loading inspectors and food

inspectors, working under the Grain Purchase Officers, test-weighed a few sample bags of each consignment despatched. According to instructions, one out of every ten bags was supposed to be test-weighed but in practice, due to lack of time, the percentage test-weighed was considerably less than this proportion. If some of the bags test-weighed were found to be below weight, the merchant was required to re-standardise the bags in the entire consignment. It was found in practice that this system of check generally prevented bags, which were despatched by rail, from being short-weighed on arrival in the deficit districts. But, possibly owing to pilferage, en route, despatches by canal and by country-craft resulted in more cases of short-weighed bags arriving at the destination.

The loading inspectors and food inspectors were also responsible for bringing to the notice of the Grain Purchase Officer any defect in the quality of the grain being loaded. The Grain Purchase Officer, if in doubt, referred the sample to his technical staff of an Assistant Marketing Officer and a Marketing Assistant, who analysed it to estimate the percentage of brokens, over polished or under polished grain, admixture of paddy, dirt and weevilled grain. At first the standards adopted by the Grain Purchase Officers' staff were mostly arbitrary, but later in February 1945 a schedule of standard specifications was introduced fixing the limits of tolerance and cuts to be imposed if quality was below standard. In March 1943, the Rice Mills Licensing Order had prohibited mills from giving more than a single normal polish to rice after de-husking. The technical staff at first tested for over-polish by means of an iodine test, but later on, the test consisted of a comparison with a standard sample received from the mill concerned and kept with the Grain Purchase Officer. Both tests were not strictly scientific but were at least rough and ready methods of preventing gross over-milling of rice and to that extent did succeed in generally preventing polishing to an extent greater than single polish. If the rice delivered at the railway station by the miller or merchant was below the standard specifications, the Grain Purchase Officer, on the advice of his technical staff, could impose a cut in price, which was handed on to the consumer, or in cases where the limits of tolerance were exceeded, could refuse to permit despatch. Towards the end of the year, when

procurement became difficult, not unnaturally, the grain purchase staff tended to accept a lower standard of quality, in order to maintain as high a level of movement as possible.

Even when the grain purchase system was first introduced, rice was classified only into first, second and third sorts both for raw and boiled rice. The Board of Revenue, on the advice of the Provincial Marketing Officer, drew up a list of all the varieties of paddy showing whether each variety normally fell into first or second sort, raw or boiled. The price fixed for first sort rice was of course higher than that fixed for second sort rice, and varied according to whether the rice was raw or boiled. During the operation of the system, not unnaturally, producers continually tried to persuade the Government to upgrade the variety of rice grown in their areas. In spite of this, very few changes of classification took place during the three years when the scheme was in force.

In order to maintain as high a level of quality as possible in addition to the grain purchase staff inspecting rice in the station at the time of despatch to the deficit areas, the Grain Purchase and Grain Movement Officers spent much of their time inspecting mills. During the course of their visits, they sometimes found that the blades of the huller required adjustment in order to decrease the polish being given to the rice. At other times, they would find that the water used in the tanks in the mills producing boiled rice was not being changed frequently enough and was giving the rice an unpleasant flavour. At the time of these visits, inspection of the accounts of the millers would help to show whether they were black-marketing grain. In cases of serious violations of the Rice Mills Licensing Order, the licence of the miller would be suspended or cancelled. Towards the end of 1944 and in 1945, Grain Purchase Officers were not encouraged to suspend or cancel licences freely, since this tended to reduce the output of rice at a time when procurement of sufficient supplies for the deficit districts was becoming difficult.

There are certain disadvantages inherent in any system of purchase of a commodity of variable quality by State Agency. These disadvantages were noticeable in the case of purchase of rice by the Grain Purchase Officers. When a commodity of



varying quality is purchased by one private individual from another private individual the price naturally varies according to the quality of the commodity. Government cannot however completely trust their officers and so cannot permit their purchasing officers to their offer varying prices dependent upon quality as determined by the purchasing officer. The net result particularly at a time when the commodity is in short supply, is that quality of the rice offered for sale tends to be rather inferior to the quality of the stuff which would have been offered for private sale. In other words, the net result of the introduction of Government Purchasing Agency is a general lowering of quality. Partly with a view to overcome these defects of Government Purchase System, the Madras Government in 1943 introduced the system of grading rice. Millers who chose to come under this scheme were required to produce rice which attained certain standards of quality. These millers were paid a premium ranging from one to four annas per maund of rice according to the gradation of the quality of the rice and the area in which it was produced. Unfortunately, very few millers took advantage of the scheme and the scheme never covered more than one per cent of the total quantity of rice produced in the surplus districts. It was therefore thought desirable to adopt some device which would attempt to raise the quality of all the rice produced and not merely a small quantity of grade in rice produced under the system of grading scheme. The Schedule of Standard Specifications which was introduced in February 1945 attempted to raise the standard of quality of all the rice purchased in the surplus districts. As a result of the introduction of the Schedule, the grading scheme became unnecessary and was abolished in December, 1944.

Although the grain purchase system was primarily based on voluntary purchase, the Grain Purchase Officers had powers of requisitioning not only rice from millers but also paddy from ryots, which they tended to use more and more towards the end of the season or at a time when prices in the free market in the surplus districts showed an upward tendency. In cases where the supply situation rendered it necessary the Grain Purchase Officer could serve a requisitioning notice on a miller or a cultivator holding stocks of rice or paddy, requiring him to

deliver the rice or paddy to some other person, usually a miller, by a prescribed date. In practice, in most cases, the ryot or miller, on whom the requisitioning order was served, would deliver his paddy or rice to the persons specified by the required date, but in cases where delivery was not effected, the Grain Purchase Officer could proceed to serve an acquisition order on the ryot or miller and acquire the grain from him on Government account. In December 1942, merchants were tending to buy at prices which were considerably above the Grain Purchase Officers' prices in the northern supply areas and further more these prices of free purchases were tending to rise. This rice was partly due to hoarding by a number of merchants who were hoping to speculate on a rising market. As a result, the Grain Purchase Officer was compelled to step in and requisition over 5,000 tons of rice, which immediately had the effect of lowering the free market price to the Grain Purchase Officer's price level. In March and April 1943 supplies began to dry up and the Grain Purchase Officer started requisitioning again from the millers and merchants on a small scale. From then until the end of the Kharif year in October 1943, about 93,000 tons of paddy and rice, in terms of rice, were requisitioned from merchants and cultivators. Of this quantity, 26,000 tons was actually acquired. From these figures, it will be seen that out of the total quantity of rice and paddy purchased by the grain purchase system in 1942-43, about 20% was requisitioned and about 5% was acquired. Out of the quantities mentioned above, about 58,000 tons of paddy and rice in terms of rice was requisitioned from the cultivator and about 10,000 tons was acquired from cultivators. During 1943-44, the proportion requisitioned and acquired was considerably less out of the total quantity of rice procured. The percentage requisitioned was 0.15% and the percentage acquired was 0.5%. Nevertheless during this year it became necessary to tighten up requisitioning procedure by reducing the length of time given to a ryot or merchant to declare his stocks from 7 to 3 days. However, in 1944-45, the quantity secured by compulsory sale was again greater probably due to the season being worse and in that year, out of the total quantity procured, the percentage requisitioned was 16.5% and the percentage acquired 0.0003%.

Throughout the entire period 1942-45, during which the grain purchase system was in operation, it was noticeable that procurement was easier in the Cauvery delta in Tanjore than in the northern deltas of the Krishna and the Godavari. In Tanjore, the millers and merchants usually had rice ready for delivery to quota-holders when approached by the Grain Purchase Officer, but in the Circars, most of the rice for contract with the Grain Purchase Officer was usually milled and produced after the execution of the contract. The more difficult procurement in the northern circars may have been partly due to the over-pitching of the surpluses of these areas and partly due to the greater dissatisfaction over prices fixed for these areas. As a result, rather less requisitioning and acquisitioning took place in Tanjore than in the northern circars, as will be seen from the following figures :—

The Grain Purchase Officers' purchase system utilising voluntary methods of purchase backed up by requisitioning where necessary did succeed in securing practically the entire surplus of the surplus districts as the following figures show :—

	1942-43	1943-44	1944-45
Total production of rice in the province in the khariff year (final season and crop report figure).	46,14,000	49,32,000	50,54,000
Total purchase by Grain Purchase Officers.	7,21,164	8,41,419	7,55,971
Percentage of provincial production purchased.	15.63	17.06	14.96
Total production of surplus districts, (East and West Godavari, Krishna, Guntur, Nellore, Tanjore and Tiruchirappalli.)	22,30,260	22,69,680	22,75,990
Total estimated surplus of surplus districts.	7,04,260	7,43,680	7,49,990
Percentage of production of surplus districts purchased.	32.34	37.07	33.22

During the three year period, in which the purchase system was in operation, the quantity of rice being moved out of the surplus districts approximated to about 60,000 tons per month.

As a result of the War, a number of railway engines and a certain amount of rolling stock had been moved to other places. Furthermore, the rolling stock remaining could not be repaired with the same facilities as in peace-time. Partly for these reasons and also because of the increased movements of troops and war materials undertaken for the defence of the country and for the coming invasion of Burma, there was a much greater strain on the railway transport than in peace time. Although Grain Purchase Officers accepted no responsibility for supply of waggons to quota-holders from the deficit areas, in order to maintain supplies to the deficit areas, it was necessary for Government to see that the deficit areas obtained sufficient supplies of rice by rail. The Madras Government realised quite early that movement of food was second in importance only to military movements. In June 1942, even before the Grain Purchase system was started, a zonal scheme was introduced for movement of rice from surplus to deficit districts. Under this zonal scheme cross movement and transshipment from broad gauge to metre gauge and vice versa was eliminated as far as possible. The post of the Regional Controller of Railway Priorities was created in September 1942 and a schedule of priorities was drawn up by the Regional Controller soon afterwards. Although this schedule was revised from time to time, movement of foodgrains sponsored by Government was accorded priority class 3, and later class 2, only military movements being accorded greater priority. In order to economise in railway transport as much as possible, movement of not only rice from surplus to deficit districts but also of other commodities like millets, pulses, sugar, firewood, and other minor commodities, which were being controlled to a greater or lesser extent, was carried out in accordance with zonal schemes, which were drawn up in consultation with the Regional Controller of Railway Priorities and the Railways. The fundamental idea of all these zonal schemes was to minimise the waggon miles required to move the quantity of the commodity available from the places where it was available to the places where it was required. As a corollary this meant that all cross movements should be eliminated and that transshipment from metre gauge to broad gauge lines and vice versa should also be cut out as far as possible.

There were times when the Railways and the Food Administration did not see eye to eye. For example, the Railway authorities tended to argue that the differences between first, second, and third sort rice and even raw and boiled rice should be ignored and that deficit areas should not expect to receive the sort and variety of rice to which they were accustomed, when a zonal scheme based upon the principles of minimisation of waggon miles rendered it desirable that these differences should be ignored. One of the most important cases of this type related to the supply of Tanjore rice to Madras City. In Madras City, although it may be true that large quantities of Tanjore rice were not consumed before the war, rice from that district was generally preferred to rice from the circars. But unfortunately, movement of rice from Tanjore to Madras was in the reverse direction to the general movement of rice in the province and hence resulted in a considerable wastage of waggon miles. The difficulty was overcome partly by moving Tanjore rice by country craft from the Cauvery delta to Madras and partly as a result of the Regional Controller adopting a conciliatory attitude in allowing a certain amount of rice to move by rail from Tanjore. In general, however, there was very little disagreement between the Food Administration and the Railways, and as a result of the institution of the zonal schemes and the system of priorities, the maximum possible use was obtained from the Railway stock available and movement of rice from the surplus to deficit districts was not limited by availability of waggons.

To assist the Railways, as much rice as possible was moved by canal, by country craft and by shipment from Masulipatnam, Nagapattinam and Madras to the West-Coast. The quantities moved by these methods in each of the three years was as follows :—

			<i>By Canal.</i>	<i>By Country Craft.</i>	<i>By Sea.</i>
			tons.	tons.	tons.
1942-43	...	...	Nil.	Nil.	Nil.
1943-44	...	...	12489	Nil.	10808
1944-45	...	...	20241	15264	10779

Unfortunately these alternative methods of water-borne transport cannot be used during the two monsoon periods and it

Analysis of the actual price levels in the surplus districts before the war showed that there was a marked tendency more pronounced in some areas like Vijayavada and Tiruchirappalli than in others, for the price of rice to rise sharply at the end of the season in November and December. This no doubt was partly due to the reduced supply at the end of the season just before the long term harvest and partly also due to the fact that dryage, shrinkage, godown charges, and interest on capital, played a more important part in the case of the old paddy and rice. To some extent the Grain Purchase Officer's system recognised this seasonal fluctuation by permitting Grain Purchase Officers to depress the price of rice to the extent of 3 annas per maund in the case of new rice immediately after the long term harvest. This artificial seasonal fluctuation which amounted to about 2 per cent of the rice price was considerably less than the normal seasonal fluctuation which is greater than 10%. From some points of view, paying a flat rate throughout the year was desirable, since it did encourage producers and millers to sell their produce early in the season and to some extent this counteracted the tendency for these persons to retain their grain, hoping that Government would be forced to raise the price generally. But on the other hand, there is no doubt that it did result in poor procurement at the end of the year in October, November and December. In spite of the flat rate, the grain purchase system was able to extract sufficient supplies from the surplus districts during the years 1942-45, because the seasonal conditions in those years were generally good. An indication of what might have been necessary and the result that might have been achieved from raising the prices at the end of the year, if the season had been bad during any one of these years, was however given later by the results of the bonus scheme which was operating under the monopoly system of procurement in 1945-46.

*Further steps towards complete price control, monopoly procurement and rationing.*

(1) *Price Control*.—As already pointed out above, the establishment of the grain purchase system in the surplus areas had the effect of making supplies by the trade to towns and deficit areas in the surplus districts more difficult. As already

explained this resulted in the grain purchase system being made responsible not only for purchase of quotas to deficit districts but also to the statutorily rationed areas, urban areas and deficit areas within the surplus districts. The institution of the purchase by Grain Purchase Officers at fixed prices in the surplus districts had another effect. The local market prices, i. e., the prices at which private merchants were buying rice from millers tended to rise above the Grain Purchase Officers' ceiling prices for export. Since millers secured better price by selling their rice locally, they naturally preferred to sell locally instead of selling to the Grain Purchase Officers. This made procurement by the Grain Purchase Officers more difficult. As a result, it became necessary for Government to control the price at which sales in the free market for consumption within the district were taking place. Early in 1944, ceiling prices for rice were fixed for wholesale transactions in the surplus districts. These ceiling prices were fixed by means of a notification under condition 9 of the licence under the Foodgrains Control Order and thus applied only to licensees under that order. The ceiling price for these local transactions was fixed at 9 pies per maund below the F.O.R. price at which the Grain Purchase Officers were purchasing for export to other districts. This 9 pies per maund roughly represented the cost of transport and handling charges from the railway station to the wholesale market. The ceiling prices fixed for local transactions were as follows:

District.	Quality of rice.	Wholesale price per maund.		
		RS.	A.	P.
East Godavari	... 1st sort boiled	...	8	7 3
West Godavari	... Do. raw	...	8	5 3
Guntur	... 2nd sort boiled	...	8	3 3
	... Do. raw	...	8	1 3
Krishna	... 3rd sort boiled	...	7	10 9
	... Do. raw	...	7	8 9
Nellore	... 1st sort raw	...	9	2 0
Tanjore	... Spl. sort boiled	...	9	7 3
	... Do. raw	...	9	11 3
	... 1st sort boiled	...	9	2 3
	... Do. raw	...	9	6 3
	... 2nd sort boiled	...	8	8 3
	... Do. raw	...	8	12 3

District.	Quality of rice.	Wholesale price per maund.		
		RS.	A.	P.
Tanjore	3rd sort boiled	7	14	3
	Do. raw	8	2	3
Tiruchirappalli	1st sort boiled	8	14	3
	Do. raw	9	2	3
	2nd sort boiled	8	10	3
	Do. raw	8	14	3
	Kuruvai boiled	8	3	9
	Do. raw	8	7	9
South Arcot	1st sort boiled	8	10	3
	Do. raw	8	14	3
	2nd sort boiled	8	6	3
	Do. raw	8	10	3
	3rd sort boiled	7	14	3
	Do. raw	8	2	3

It has already been pointed out above that the main rice exporting districts also happen to be the main millet exporting districts, namely East Godavari, West Godavari, Tanjore, Krishna and Nellore. The surplus of these districts mainly consisted of cholam, with the exception of Tanjore and Nellore, which were mainly surplus in and exported varagu and ragi respectively. In addition, Chingleput and Salem were normally exporters of ragi. The quantity of millets which could be supplied from these districts to the chief millet deficit districts, like Coimbatore, Ramnad, Madurai, Tirunelveli, the Nilgiris and the Ceded districts, was very much less than the quantity of rice which was moved under the grain purchase system from the surplus to the deficit districts. In a normal year, the quantity of millets moved from surplus to deficit districts did not exceed 20,000 tons as compared with a quantity of about 7,00,000 tons of rice moved from surplus to deficit districts. Under these circumstances, it was not necessary to set up any elaborate purchase system for millets. In the years 1942-43, 1943-44 and 1944-45, movements of millets took place from surplus to deficit districts under a zonal scheme, which was drawn up with the intention of dividing the available surplus among the deficit districts to the best advantage and at the same time with the object of minimising the waggon mileage required to effect the total movement. The quotas allotted



from the surplus to deficit districts were normally allotted to the importing merchants by the Collectors of the deficit districts. This system of issuing permits to the importing merchants, under the conditions of shortage existing during the years 1941-45, had the advantage of preventing prices from rising to the higher level, which they might have attained, if the permits had been issued to exporting merchants. However, as already pointed out, millets prices rose to a higher level compared with pre-war prices than rice prices, possibly due to the fact that millets were still not being adequately controlled in 1943, long after the grain purchase system for rice had been brought into existence. In 1943, the Government of India decided that it was desirable to have all-India ceiling prices for the two chief millets, namely cholam or jawar and cumbu or bajra. They did not decide upon a uniform all-India ceiling price for rice, possibly because of the greater importance of that grain. The ceilings for wholesale transactions decided upon in January 1944 for cholam and cumbu were Rs.7-0-0 per maund and Rs.7-8-0 per maund respectively for unbagged grain in the wholesale market. In October 1945 these prices were reduced by 4 annas per maund.

At the end of 1943 and early in 1944, the Collectors were required to select primary and non-primary markets for cholam and cumbu in their districts and notify the ceiling prices for wholesale transactions in these markets. The primary market was defined as the market to which the grain came direct from the producer, the non-primary market was defined as the market in which the grain was sold for a second time, after being purchased in the primary market. The prices in the primary markets were not necessarily equal to the Government of India's ceiling, but were not allowed to exceed that ceiling. Ceiling prices in the non-primary markets were higher than the ceiling prices in the primary market, the difference being equal to cost of transport and handling charges. Prices in these markets were notified under the Foodgrains Control Order and any violation of the prices could be penalised by suspension or cancellation of the licence under the Foodgrains Control Order. This system of ceiling prices for millets in practice worked quite well throughout 1944 and 1945 up to the time, when

introduction of monopoly procurement of millets rendered unnecessary fixation of ceiling prices for millets in wholesale markets. At times, there was a tendency for market prices in the surplus districts, like East Godavari and West Godavari, to fall considerably below the ceiling price. This tendency resulted from the slow movement of millets out of these surplus districts, possibly due to lack of railway facilities. Possibly as a result of this, the desirability of introducing floor prices for millets was discussed in 1944 and 1945, but no floor prices were eventually fixed, nor were they logically necessary, in view of the fact that the province was heavily deficit in millets.

By the middle of 1945, the control of wholesale prices of the main foodgrains in the province had, thus, advanced to a considerable extent. The price at which rice was procured in the surplus districts and despatched to deficit districts was rigorously controlled. The wholesale price at which this rice was released in the deficit districts was also controlled. Furthermore, the wholesale selling prices of rice in the surplus districts were controlled. Thus, in the case of rice, the only wholesale transactions in which the price was not controlled, related to the rice produced and consumed in the deficit and self-sufficient districts. Even in such cases, a less elaborate control existed, since Collectors of these districts had been instructed to requisition at prices corresponding to ceiling prices in the deficit districts, when rice prices rose appreciably above these levels. Retail prices of rice, although not controlled by any system of ceiling prices, were fixed and published by Taluk Fair Price Committees. Although the prices fixed by these committees were purely advisory and could not be enforced, there was generally no great tendency for retailers to blackmarket. In the case of the two major millets, cholam and cumbu, although retail prices were also fixed by the Taluk Prices Advisory Committees in practice it was found that fixation at the wholesale market stage generally resulted in retail prices being kept down to a reasonable level.

(2) *Statutory Rationing.*—As already explained above, the over-running of South East Asia by the Japanese resulted in Madras Province losing completely its imports of rice from those areas. These imports amounted to rather more than

10% of the province's normal consumption. Owing to the world shortage of rice, these Burma imports could not be replaced by imports from other sources, although it is true that in later years, notably in 1946, small quantities of rice were imported into this province from Brazil, Java and Sind. In addition, in each of the two years after 1942-43, substantial quantities were received from Orissa, Eastern States and the Central Provinces, but these supplies of rice were mostly on an exchange basis in return for supplies made to Travancore and Cochin and therefore did not amount to any appreciable net import into the province. Indeed after the entry of Japan into the War, only in the famine year of 1945-46 were net imports into this province substantial, as the following figures show:—

Year.	Quantity imported.	Quantity exported.	Net imports
	Tons.	Tons.	Tons.
1939-40 ... ..	8,38,629	2,89,877	(+)5,48,752
1940-41 ... ..	4,44,405	2,47,825	(+)1,96,580
1941-42 ... ..	2,52,049	4,06,834	(-)1,54,785
1942-43 ... ..	45,859	2,92,008	(-)2,46,149
1943-44 ... ..	92,772	92,772	.....
1944-45 ... ..	1,18,621	1,01,621	(+)17,000
1945-46 ... ..	2,15,812	47,200	(+)1,68,612

It seemed evident that at least for the duration of the War, Madras would have to subsist upon its own production, which in a normal year amounted to rather less than 90% of its requirements. It has been estimated that the average requirements of the province, during the five years ending 1941-42 amounted to 49,62,000 tons of rice, which was equivalent to 1.19 lb per adult per diem allowing for the quantity required for seed. To add to the difficulties of the province, allowance had to be made for the fact that population was increasing at the rate of about 1% per year and also for the fact that there was a gradual rise in the standard of living during the War, with the result that the lower income groups tended to consume more than before the War. The obvious remedies to these difficulties were firstly the Grow More Food Campaign and secondly rationing.

If the supplies of rice available in a province are suddenly reduced from 100% to rather less than 90% of the normal

requirements, the ideal solution is obviously a system of equitable distribution, under which each consumer receives 90% of the quantity of rice which the average individual was consuming before the War, allowances possibly being made for the fact that some classes of the community, like heavy manual labourers require more than sedentary workers. Such an ideal solution can be readily introduced into countries where the available supplies are obtained mainly from imports or where the ratio of producers to non-producer consumers is fairly small, but in a country like Madras province, where about 45% of the population are normally self-sufficient producers and where over 70% of the inhabitants are associated with agriculture, such an ideal solution would be impossible, in practice. If the consumption of the producers is limited to 9/10ths of their pre-war level, they will not be interested in increasing their production and indeed the production of the province may very well decrease. Quite apart from this, it would be difficult for even a large organisation and even an honest organisation of Government officials to estimate accurately the actual production of the producer, deduct from this production the requirements of the producer at the rate of 90% of his pre-war requirements, and thus assess the surplus of that producer and then procure it. In practice, the limited finances of the province and the lack of trained staff limited the size of the governmental machine for procurement in the province. In practice too, the low paid official would not be free from corruption. Under these circumstances, in practice, a province like Madras could only hope, as a limited ideal, to allow the 50% of the population, who represented self-sufficient producers and their families to retain their full requirements, calculated at or slightly above the pre-war level and distribute the balance of the supplies available equitably among the other 50% of the population. Even this would be only an ideal, since besides the self-sufficient producers, the further 20% of the population associated with agriculture would also insist upon receiving as much food as they were accustomed to before the War. The most efficient system that might be realised in practice would thus be a scheme of distribution under which in a normal year about 70% of the population retained or were allowed to purchase as much food as they were consuming before the War, the balance of

the production being distributed equally among the other 30%. Under this system, the 70% of the population associated with agriculture would receive their full pre-war requirements. The 30% of the population not associated with agriculture would receive rations equal to about 2/3rds of their pre-war requirements. Even such a system would not be achieved in practice if the procurement machinery was inefficient and the producers were allowed to retain more than they required for their consumption, with a view to indulge in hoarding and black-marketing.

The grain purchase system, which was introduced in September 1942, was brought into existence to prevent the rise of prices in the surplus districts, due to competitive buying by Travancore, Cochin and Mysore. The main reason for the continuance of the system was in order to divide the surplus of the surplus districts among the deficit districts and in order to prevent hoarding and a further rise in the prices in the surplus districts. Since the province in a normal year had a production of only 90% of its requirements, it soon became apparent that equitable distribution among the deficit districts was not enough and that the administration would have to proceed from the stage of allotting quotas to deficit districts to rationing among individuals. As it happened, the years 1940-41 and 1941-42 were years of good harvest. In addition, at the time when Burma was over-run early in 1942, there was still a large carry-over in the hands of the cultivators in the surplus and to a lesser extent in the deficit districts. Partly for these reasons and partly because 1942-43 was a year of poor harvest, shortage in the province did not become acute until some months after the main harvest of 1942. By June 1943, the Grain Purchase Officers were finding it difficult to purchase quotas allotted to the deficit districts. Some of the deficit districts, notably Visakhapatnam which had experienced a cyclone resulting in decreased production, were beginning to run short of supplies. In that month, for these reasons, instructions were issued to Collectors to introduce informal rationing of foodgrains in all large towns. It was natural that rationing should be introduced first in the towns, since it was in towns that the proportion of non-producers was greatest.

In Madras City, possibly because it was the largest town in the province, the informal system of rationing first introduced was unsatisfactory. There were complaints about the quality of the rice imported from the surplus areas by the private merchants who were acting as wholesalers in the City and so private merchants were eliminated in August 1943. The Collector, Madras, was made responsible for the import of rice on Government account, its storage and distribution to retail shops in the City. Early in September 1943, statutory rationing of rice was introduced into the City, to replace the former system of informal rationing. Unlike the previous system of informal rationing, statutory rationing made any violation of the rationing rules a penal offence. At the same time, it guaranteed a ration of 1 lb of rice per head per day, to each adult of above 12 years of age and  $\frac{1}{2}$  lb per day per child of 2 to 12 years of age. Statutory rationing was extended to Madras suburban areas, Visakhapatnam and Vizianagaram in November 1943 and to Coimbatore, Erode and Dharapuram in December 1943. Statutory rationing was extended to all the Municipalities of the deficit districts in the first four months of 1944. It was later extended to all the Municipalities of the surplus districts in May, June, and July of the same year.

(3) *Provincial Reserves and Storage.*—

(3) *Provincial Reserves and Storage.*—With the introduction of statutory rationing and procurement, the need arose for building up Provincial Reserves to prevent a breakdown in the machinery of procurement, rationing and price policy. There were not sufficient Government godowns in the Province for stocking foodgrains on Government account. Godowns were built at Government cost at the following places which were either ports or convenient railheads.

Visakhapatnam . . .	24	godowns—Lahore type—each with a capacity of 500 tons.
Madras City . . . .	20	buildings with an overall capacity of 12,000 tons.
Guntakal . . . . .	4	Lahore sheds each with a capacity of 500 tons.

Other buildings, private as well as those belonging to other departments of Government wherever available, were taken on

rent. Co-operative stores and other private merchants having godown facilities were entrusted with storage of Government stocks on commission basis.

The need was also felt to set up a trained Government organisation for the proper preservation of foodgrains in storage and to prevent losses arising from infestation etc. The Government of India set up a Directorate of Storage in 1944. The Madras Government also appointed Assistant Entomologists who were normally Graduates in Agriculture (B. Sc.) and of Gazetted rank. They were assisted by non-gazetted storage assistants who were mainly university graduates in zoology and fieldmen. Their duties were to carry out periodical inspections of stocks, examine godown conditions, analyse foodgrains with a view to estimate their fitness for storage and suggest priorities for release. They also carried out reconditioning of damaged grains and fumigations of infested stocks with Cyanogas and Killoptera wherever necessary and disinfestations of empty godowns and stocks with gammaxene or D. D. T. as a preventive measure.

(4) *Levy Schemes of Procurement.*—In 1942-43, as already explained the poor harvest made it difficult from the middle of 1943 onwards for Government to maintain an adequate flow of supplies from the surplus to deficit districts and resulted in the introduction of informal rationing in towns in August 1943, which was later converted into the more efficient form of statutory rationing. The poor season in 1943, which was followed in 1943-44 by a harvest which was nearly as poor, also led to a similar development and elaboration of the Governmental system of procurement. The grain purchase system, which operated in surplus districts, as already explained attempted to procure the surplus of each surplus district and supply that surplus as equitably as possible to the various deficit districts. It has been pointed out that even in a year of normal production, the production of the province is only sufficient for about less than 90 per cent of its normal requirements. In the years 1942-43 and 1943-44, the production was somewhat below normal and as a result, in these years, the quantity available for consumption even after taking into account the carry-over from previous years,

which was released for consumption, must have been considerably below 90 per cent of the normal pre-war requirements. As might be expected, shortages were noticeable mostly towards the end of the season for example, between June and December 1943 and similarly in the second half of 1944. Furthermore, as might be expected, evidence of shortage was most apparent in the urban areas, particularly in the larger towns, where the percentage of non-producers was greatest. When the Government ordered the introduction of informal rationing into these urban areas in June 1943 and then gradually converted informal rationing into statutory rationing, the administration became increasingly responsible for maintaining sufficient supplies to these towns to maintain the ration at the declared level. This varied very slightly from one town to another, in view of the local measure used for distribution but in all towns it was slightly more than or less than 1 lb. per adult per day. Since the province was deficit in a normal year and even more deficit in the two years 1942-43, and 1943-44, it was apparent that even if the surplus of the surplus districts was equitably distributed among the deficit districts, the deficit districts, after receipt of these surpluses would still continue to have less rice than was required for normal pre-war consumption. Since there was a larger percentage of producers in the surplus districts than in the deficit districts and since, in practice, producers were allowed to retain at least as much as they required for their own consumption based on the pre-war level, the deficit districts, during these two lean years, probably received rather less than their fair share of the produce of the whole province. The more deficit the district, the more strongly this argument would have applied. As a result, during 1942-43 and 1943-44, the deficit districts, even taking into account any carry-over available in those districts, probably had available considerably less than 90 per cent of their pre-war normal requirements of foodgrains

Since the deficit districts in these two years were receiving considerably less than they needed for normal requirements, it is not surprising that at least towards the end of the season, the import quotas from the surplus districts were not sufficient to maintain a ration of 1 lb. per head per day in the rationed areas in the deficit districts and at the same time to supply the



requirements of the deficit rural areas of the districts. To supplement these imports from the surplus districts, it was necessary that some system of procurement should be instituted in the surplus areas of the deficit districts, if there were any surplus areas, and in addition, in the less deficit areas of the deficit districts. If there were surplus areas in the deficit districts, admittedly once the inter-district movement ban had been imposed, there would tend to be a flow through the normal channels of trade from the surplus to deficit taluks. But because of the deficit nature of the whole province and more so of the deficit districts, there would be a tendency for producers in the deficit districts to hoard and a tendency for prices to rise throughout the deficit districts. Furthermore, movement through the trade would not secure sufficient movement from the surplus or lesser deficit areas within the district to the more deficit areas within the district to maintain a roughly equitable distribution between the various parts of the district.

Even as early as April 1943, Collectors of deficit districts had been asked to requisition stocks as soon as prices showed a tendency to rise steeply. In June 1943 Collectors of deficit districts were told to requisition stocks for sale in retail shops whenever necessary.

By August 1943, the situation was worse and a vigorous antihoarding drive was launched to bring out stocks of millets and rice and Collectors were instructed to introduce some form of rationing in urban and industrial areas. Towards the end of the season, the Government decided that it would be useful to have a uniform system of procurement in all the deficit districts. Accordingly, in November 1943, they issued instructions for automatic requisitioning of paddy and rice. The automatic requisitioning was to be applied to 25 per cent of the landlord's share of the crop in the case of the long-term crop and 50 per cent in the case of the short-term crop. Requisitioning was only to apply in the case of holdings of 5 acres and above. A special scheme was drawn up for South Kanara, which not only involved automatic requisitioning but also ceiling prices of rice for all licensees under the Foodgrains Control Order. Not very much rice was secured, however, under this automatic levy, partly because it was not intensive enough and partly because Collectors did not work the system properly.

Meanwhile, other provinces like the Central Provinces and Bombay were experimenting with levy schemes. Under these schemes of levy, the cultivator was required to sell grain at a certain rate in maunds per acre to the Government nominated agents. The levy could either be a flat rate levy, the rate per acre being independent of the size of the cultivator's holding, or could be a graded levy, the rate per acre being raised as the holding increased in size. In any case, the quantity required to be sold under the levy system by the cultivator to the procuring agent could not exceed the ryot's surplus, although in the case of a heavy levy, it could approximate to that surplus. In the case of a light levy, the quantity to be sold by the cultivator to the procuring agent was appreciably less than the ryot's surplus. It may be noted here that such levy schemes were suitable for procuring a limited quantity of grain in surplus provinces like the Central Provinces. Such levy schemes, however, were not particularly suited to a province like Madras, which was deficit and which was not receiving sufficient rice to make up for its deficit. In a province like Madras, ideally, the entire surplus of the cultivator had to be procured in order to secure as equitable a distribution as possible.

Nevertheless, before the Government of Madras decided upon introducing such a system of monopoly procurement of the individual surpluses, they experimented with levy schemes. The first experiment with the levy schemes was the automatic levy of rice introduced in November 1943, already mentioned above. A more serious attempt at a levy scheme was made early in 1944. This scheme applied only to millets. Under this scheme in all districts except Madras, Chingleput, Malabar, the Nilgiris and South Kanara, ryots cultivating more than 10 acres per year with major millets were required to sell at the rate of one maund per acre to agents nominated by the Collector. In the more heavily deficit millet districts of Anantapur, Bellary, Kurnool, Cuddapah, Salem, Coimbatore, Mathurai, Ramnad and Tirunelveli, a more intensive system of millet procurement was introduced. In these districts, a ryot cultivating millets was not permitted to sell his produce of millets to any one except to agents nominated by the Collector. If the scheme had worked properly in these nine districts, this

would have resulted in the Collectors' agents procuring the surplus of millets from each cultivator of millets. Unfortunately, the levy scheme was not introduced until the middle of April 1944 and by that time much of the previous millets harvest had already become scattered and sold. Unfortunately, too, the ban on sale except to the Collector's agents was not properly enforced in the nine heavily deficit millet districts. As a result, the yield of the scheme was most disappointing. Out of a total demand of about 1,00,000 tons of millets, a quantity of only 12,083 tons was procured between April and November 1944 (vide appendix.G.)

## CHAPTER III

### THE EXPERIMENT I

(Intensive Procurement and Provincewide Rationing.)

*(a) The introduction of monopoly procurement and informal rationing into heavily deficit districts.*

As already pointed out, the levy schemes for procurement of rice and millets could not provide a solution for the food problem in Madras Province. The Province even before the War was producing in all only about 90 per cent of its normal requirements of rice. By 1944 as a result of the increase in population and to a lesser extent due to the rise in the standard of living of the lower income groups, the production of rice in the province was probably not sufficient for even 90 per cent of normal requirements. The balance of rather more than 10 per cent of the requirements was not made up by imports and could not possibly be supplied from imports due to the world shortage of rice. Under the circumstances the utopian solution of the problem would have been for the State to take over the entire production of the province and distribute it equitably among the entire population, both producers and non-producers. Such a utopian solution neglecting differences between producers and non-producers was not possible in practice since it would have discouraged producers and resulted in a decrease in production, and also because it would not have been possible to procure a sufficiently large quantity from the producers in order to effect such an equitable distribution. The ideal which could be hoped for in practice, was to allow all producers in the province to retain sufficient for their normal requirements and for the requirements of their labour and to procure the balance. Any levy scheme which would have tried to effect this in practice would have been a graded levy scheme which would have aimed at securing a larger proportion of the produce of a larger holding than of a smaller holding and which would have aimed at securing from the ryot a quantity of grain as near to his surplus as possible. Such a graded levy scheme would have had to be extremely complicated in order to take into account the variation of the

season and yield from one taluk to another and even from one village to another. In practice, such a complicated scheme could not be introduced since it could not have been understood and operated by the supply staff and village officers. Maximum procurement and maximum equitability of distribution were more likely to be achieved by estimating and procuring the surplus of each ryot rather than by a levy scheme.

The levy schemes introduced in 1943 and early in 1944 tended to divert the province away from the goal of procurement of the ryots' surplus and equitable distribution, but indirectly assisted and hastened the introduction of such a scheme. These levy scheme necessitated the introduction of a register, showing the production and levy due from each ryot in every village in the Province. Previously any procurement officer who proceeded to a village to procure from a ryot had worked on the basis of the stocks found in the hands of the ryots or in some cases had consulted the village revenue accounts in order to estimate roughly the ryot's production of grains. Such revenue accounts were designed primarily for the estimation of kist and remission of kist payable by the ryot and were not primarily intended for estimating the production of grains by the ryot. The levy registers were the first registers to be introduced in which the actual production of foodgrains by the ryot was estimated. In July 1944, the Commissioner of Civil Supplies prescribed two village registers, the A and B registers, in which was the production of grain by each cultivator, but also estimated not only the requirements and hence the surplus of each cultivator. The form of these registers was as follows :

REGISTER A.

Name of Cultivator.	Cultivator's No. in enumeration Register (Form 1.)	Survey No.	Extent cultivated with					Yield in local measures.					Total yield under each crop.	Carried over from previous crops.	Total surplus transported from other villages.	Available stocks total.	Cultivator's family consumption in year.	Payment of rent where rent is due in kind.	Wages of labourers.	Seed.	Cultivator's needs total.	Surplus in local measures (Col. 17 minus Col. 22.)	Surplus in mannds.	Remarks.	
			Paddy.	Cholam.	Cumbu.	Ragi.	Millets.	Paddy.	Cholam.	Cumbu.	Ragi.	Millets.													
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
<i>Sample entries</i>																									
Ramaswami.	7	1258-20	..	..	..	..	..	3100	..	..	..	..	3676	200	600	4376	2000	1800	400	600	4800	..	..	..	..
	..	1860-60	..	..	..	..	..	576	..	..	..	..	1250	..	..	1250	2400	..	150	200	2750	..	..	..	..
Krishna-swami.	9	2801-90-70	..	..	..	1-00	..	1250	420	..	600	..	420	..	..	420	..	..	100	120	220	200	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	600	..	..	500	..	..	150	300	350	250	..	..	..
Lakshmana Row.	14	3151-25	..	..	..	..	..	1200	..	..	..	..	1200	..	..	1200	1800	..	150	200	2150	..	..	..	..
	..	126	..	..	..	C-80	..	..	..	..	480	..	480	..	..	480	..	..	120	140	260	220	..	..	..
	..	252	..	1 50	..	..	..	..	850	..	..	..	850	..	..	850	..	..	200	250	450	400	..	..	..

Notes.—(1) The names of the persons to whom rent is paid in kind should be entered in the remarks column.

(2) There are five columns each under "extent cultivated with" and "yield in local measures." If in any village paddy is grown, collectors may use their discretion to have only one column instead of five and to renumber the rest. In the columns provided for "millets" the particular variety of millets grown in the locality like Cholam, Cumbu, Ragi etc., may be shown. If the 4 columns (5-8) allotted for millets are not sufficient additional columns may be opened. The same remarks will apply to columns 10-13.

## REGISTER B-I.

Serial No.	Name.	Surplus according to		Total.	Remarks.
		'A' Register. (3)	B-II Register. (4)		
(1)	(2)			(5)	(6)





These A and B registers could thus be used not only for procurement of a levy but also for the procurement of the surplus of each cultivator. The second advantage of the levy scheme was that it induced several Collectors notably the Collectors of Tirunelveli and Coimbatore, to experiment with their own schemes of procurement. These districts experimented with a system of procurement depending on heavy levies of millets and paddy and thus like South Kanara gained experience in more intensive procurement.

The season in the Khaniff year 1943-44 was not much below normal. According to the five year formula adopted by the Government of India, the province was deficit to the extent of about 30,000 tons of rice the estimated production being 4,932,000 tons. This five year formula assumes that the consumption of the province during that year is the same as it was during the five year period ending 1941-42. Actually the consumption of the Province after allowing for increase in population would be much greater than on the five year formula. During 1943-44 it has been estimated to be 51,75,000 tons. On this basis, the province was deficit in 1943-44 by 2,43,000 tons. The supply situation in some of the deficit districts became difficult in the second half of 1944. As already mentioned, procurement in surplus districts was intensified by tightening up the requisition procedure in July 1944. In the same month, Collectors were circularised and asked for their views on procurement policy during the coming year. Most Collectors favoured the introduction of intensified forms of procurement some favouring the introduction of heavy levies and a few favouring the procurement of the entire surplus of each ryot. As a result, the Madras Government in October 1944 ordered the introduction of an intensive system of procurement involving sale of the surplus of rice and millets of each ryot to Government agents in the heavily deficit districts of Visakhapatnam, Ramnad, Tirunelveli, Coimbatore and the Nilagiris and also in the districts of Tiruchirappalli and South Kanara. Visakhapatnam, Ramnad, Tirunelveli and Coimbatore were all districts which complained of food shortage during 1944. Tiruchirappalli, although a surplus district, had been disappointing in procurement in 1943 and

1944. South Kanara had also complained of food shortage in 1944, possibly due to large scale smuggling out of the district and the system of intensive procurement had already in fact been introduced into that district. The Government ordered the introduction of informal rationing into all these districts, except the district of Tiruchirappalli, at the same time as intensive procurement. Informal rationing was particularly suited to these heavily deficit districts, more particularly to the Nilgiris, since the Nilgiris produces very little grain for the consumption of its inhabitants.

At the same time as Government was ordering the introduction of intensive procurement into the seven districts of the province and informal rationing into six of these districts, statutory rationing was under the orders of Government being extended to the rural areas of Malabar. Malabar which has a population of over five million people is normally the most heavily deficit district of the province and only produces slightly more than 50% of its requirements. It is however probable that the consumption of rice per head in that district is not quite so great as in other districts due to the large production of other foodstuffs like plantains, tapioca, other varieties of fruits and fish. Since the main harvest in Malabar is the South-West Monsoon crop, it is gathered in October and November. The most difficult months in Malabar are July, August and September when the offtake rises to its maximum. During these months in 1944 at a time when procurement was beginning to become difficult in the surplus districts, Malabar did not receive sufficient supplies from the surplus districts. As a result of the complaints of food shortage, the Government extended statutory rationing into the rural areas of the district and at the same time introduced intensive procurement by promulgating in the district the Madras Foodgrains Procurement Order, 1944.

In fact there was very little difference between the system of statutory rationing and procurement enforced in Malabar district and the system of informal rationing and intensive procurement which was introduced in October 1944 in the other heavily deficit districts. Under the Malabar statutory system the entire produce of the cultivator was at the disposal

of the Commissioner of Civil Supplies; but the producer was permitted to retain the necessary grains for domestic consumption, seed and cultivation expenses. In Malabar the cultivator was not permitted to retain rent in kind \*whereas under the less formal intensive procurement introduced into other districts the cultivator was allowed to do so. Since the Malabar system was statutory, changes in ration could only be made by the Government whereas in the other deficit districts, changes in the size and composition of the ration could be made by Collectors. This difference however tended to be whittled away in course of time, since in practice the Collector of Malabar, under stress of shortage, on more than one occasion was compelled to reduce the ration and secure the post approval of the Government. Furthermore, in the other deficit districts Government later on inclined to the view that the ration should not be reduced without their knowledge.

The Malabar system of procurement and rationing used a more complicated system of registers than the less formal system in the other deficit districts. Furthermore, larger staff was required to operate statutory rationing and procurement in Malabar than was required for intensive procurement in the six or seven districts. Another practical difference between Malabar and other districts was that when statutory rationing was first introduced in Malabar, the ration was fixed at 0.78lb per head per day whereas the ration to cardholders in the informally rationed districts was 1 lb per head per day. This discrepancy although possibly to some extent justified by the fact that supplementary foodstuffs were more readily available and were habitually consumed in Malabar, caused a certain agitation for its removal. As a result, in May 1945, the ration in Malabar was raised to 0.99 lb. For the sake of comparison it may be noted that the five year formula is equivalent to consumption figure of 1.18lbs. per head in the basic year of 1939; but is equivalent to 1.05lbs. per head in the year 1944-45.

The season in the Kharif year 1944-45 was even better than in the previous year 1943-44. The production of

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\* In 1949 the order relating to Malabar was amended permitting the cultivator to utilise the undelivered rent paddy for his consumption.

rice in the kharif year was 5,054,000 tons and on the basis of the Government of India's five year formula of consumption, the province was surplus to the extent of 92,000 tons, but taking into account the increase of population the province was actually deficit to the extent of about 1,76,000 tons of rice. Possibly because the year was a good one, the province did not experience any serious difficulty during the course of the year. During the early part of the year informal rationing and intensive procurement which Government had ordered to be introduced in Visakhapatnam, Coimbatore, Ramnad, Tirunelveli, the Nilgiris and South Kanara districts was slowly being introduced in those districts and by mid 1945 was working smoothly throughout those districts. As the following figures show, the procurement of rice in those deficit districts was generally satisfactory and indeed a substantial portion of the quantity due from the cultivators must have been secured.

Name of the district,	Estimated production in 1944-45.		Total quantity procured.		Percentage of procurement to production.	
	Rice, Tons.	Millets, Tons.	Rice, Tons.	Millets, Tons.	Rice.	Millets.
Malabar ...	3,01,200	6,000	89,673	613	29.8	10.2
Visakhapatnam ...	2,51,400	1,34,000	29,060	3,283	11.6	2.5
Coimbatore ...	70,200	2,71,000	17,612	15,866	25.1	5.9
Ramnad ...	2,12,600	1,01,100	34,647	2,539	16.3	2.5
South Kanara ...	2,41,700	2,500	53,627	6	22.2	0.2
Tirunelveli ...	1,84,200	89,600	41,881	3,837	22.7	4.3
The Nilgiris ...	3,600	2,900	420	682	11.7	23.5
Total ...	1,264,900	607,100	266,920	26,826	21.1	4.4

In order to encourage Collectors and district officials to procure as much as possible, target figures were fixed for procurement in each district. The target figures varied from 32 per cent of the total production in Malabar district to 22 per cent of production in Ramnad and Tirunelveli districts. It was found that the procurement of millets was considerably less efficient than procurement of rice. This was probably due to the fact that millets were generally grown by small producers with the result that the sum of the surplus available for procurement was much less than in the case of rice.

As already stated, the supply position was generally satisfactory throughout the Kharif year 1944-45. By the end of

March, stocks in Malabar had risen to 71,000 tons of rice, a total which was never attained in later years. Admittedly the Malabar stocks fell to about 17,000 tons at the beginning of September 1944; but the stock position rapidly recovered in that district after the harvest towards the end of that month. It is interesting to observe that the offtake of rice in the seven deficit districts was generally lower in 1945 than in the corresponding months for 1946 inspite of the fact that the ration was 1 lb., per head per day in 1945 compared with 12, 10 or even 8 ozs. in 1946. This was the direct result of the better season in 1945 than in 1946 which meant that more persons were selfsufficient in 1945 than in 1946. Because the stock position in the deficit districts and the season was generally good in 1945, intensive procurement and informal rationing was not extended to the remaining 15 districts of the Province. Further towards the end of 1945 there was even some thought of abolishing the system in the less heavily deficit districts. Early in 1945, however there were complaints of shortage in parts of South Arcot district, notably Cuddalore and Tindivanam taluks. Accordingly Government decided upon the introduction of intensive procurement and informal rationing in these two deficit taluks and in the urban areas of other taluks in the district in May 1945.

(b) *The famine year of 1945-46.*—After two very good years 1943-1944 and 1944-45 the Province entered into the bad year 1945-46. The South-west monsoon in June unfortunately was late and the rainfall was 6 per cent below normal. In the earlier stages during the North-east monsoon there was a severe cyclone in the Godavaris which entirely destroyed the ripening crops over a wide area in the coastal belt; further in-land the wind affected the crops and greatly reduced the yield. In the centre and south of the province, rainfall was far below normal. The partial failure of both monsoons resulted in the water level in Mettur Reservoir falling to a record low level early in 1946 which considerably reduced the yield from the second crop in Tanjore. As a result, the Province was heavily deficit in the year 1945-46. The production of rice was eventually estimated at 4,241,000 tons. On the basis of the five-year formula this was

equivalent to a deficit of 7,21,000 tons. On the basis of the actual consumption it was equivalent to a deficit of 1,061,000 tons. In addition, the millet deficit was estimated at 7,63,000 tons compared with a normal deficit of 2,38,700 tons

As a result, the system of intensive procurement and informal rationing which was operating in the seven deficit districts of the Province was extended to all the other districts in the Province in February 1946. Some doubts were felt concerning the extension of the system to the surplus districts of East Godavari, West Godavari, Krishna, Guntur and Tanjore. It was thought by some people that the grain purchase system was already securing as much rice as possible for export from those districts and that assessment of the surplus of each ryot in those districts might merely hinder procurement. However, against this, it was argued that intensive procurement by the grain purchase system in these districts was likely to make supplies to the non-producers, difficult. In order to ensure supplies to these non-producers the introduction of informal rationing was necessary and this in turn must be accompanied by its corollary intensive procurement. However in these districts unlike other districts monopoly procurement was not introduced and in practice the cultivator was allowed to sell his produce to more than one selected miller or wholesaler.

To supervise effectively the introduction of intensive procurement and informal rationing which now became known as rural rationing considerable staff became necessary. A District Supply Officer and a District Rationing Officer, each of the rank of the Deputy Collector, were appointed in each district, and under these officials Taluk and Firka Supply Officers and Assistant Rationing Officers were appointed. Four Deputy Commissioners were appointed for the Northern, Central, Southern ranges and ceded districts. They were assisted by six Assistant Commissioners. A Deputy Commissioner, assisted by an Assistant Commissioner, was appointed to be in charge of movements. To aid procurement a large fleet of lorries and jeeps was distributed throughout the districts working under a Provincial Road Transport Officer.

Following the policy laid down by the Government of India, the Madras Government reduced the scale of rations in all rationed areas—statutory and rural—from 1 lb. per adult per day to 12 ozs with effect from 17—2—1946. The Government estimated the supplies that would be available from procurement and imports upto the time of the next long term harvest, and also estimated the total offtake of the Province up to that time, and came to the conclusion that such a reduction was essential. In order to reduce the strain on rice supplies other foodgrains like wheat, wheat-flour, millets and later barley were also declared as rationed articles. The composition of the ration was fixed at 12 oz. of rice, wheat and millets in any proportion for rice eaters, 12 ozs. of rice millets or wheat of which upto 2 oz, might be of rice for millet eaters and 12 oz., of rice millets or wheat of which upto 4 oz., might be rice for mixed diet eaters. Heavy manual labourers were allowed a supplementary ration of 4 oz., in the shape of wheat or millets.

Even after cutting the ration for card-holders in February 1946 to 12 oz., of foodgrains, but allowing 1 lb., per head for producers, it was calculated that the province was still heavily deficit as the following figures show :—

	Production.	Consumption.	Deficit.
Rice ...	4,241,000	4,516,600	63,000
Millets ...	2,127,000	2,278,800	3,80,000
<b>Total ...</b>	<b>6,368,000</b>	<b>6,795,400</b>	<b>4,43,000</b>

As a result it was essential that large quantities of food grains, particularly of rice were imported from other provinces of India or failing that, from overseas. The total quantity of rice imported during 1945—46 was 315,812 tons of which 132,278 tons came from overseas. This overseas rice came mostly from Burma, Brazil and Java as the following figures show :—

From Burma ...	75,459 tons.
„ Brazil ...	29,281 „
„ Java ...	14,158 „

It will be seen from these figures that although the quantity of rice imported in 1945-46 was much greater than in any year during the war, the quantity imported was considerably less than the rice deficit of the province namely 7,21,000 tons.

In order to alleviate the shortage of rice large quantities of other foodgrains were imported during 1945-46. The total quantities imported were as follows :—

			Tons.
Millets	...	...	38,456
Maize	...	...	92,858
Wheat Products	...	...	57,075
Wheat	...	...	1,66,646
Barley	...	...	4,900
Rye	...	...	...
			3,59,930

In addition, the province was offered imports of oats; but these imports were not accepted since it was thought that they would not be consumed to any large extent in this province. Out of 23,842 tons of millets imported from overseas, 22,142 tons came from Egypt and 1,700 tons from Argentine. It was fortunate that the millets imported from Egypt consisted of cholam very similar to the cholam grown in the province. The millets imported from Argentine were similar to the local korra which, although not so popular as cholam, was familiar to the millet eating districts of the province. The total imports of foodgrains from overseas and other provinces during 1945-46 was thus 6,75,742 tons against a total rice and millets deficit of 1,484,000 tons. As a result, even taking into account imports of unfamiliar foodgrains, it will be seen that the imports were not sufficient to make up the deficit of foodgrains within the province.

The normal consumption of wheat and wheat flour in the province had been only about 5,000 tons and 2,500 tons per month respectively before 1946. Maize is grown in only a few places in the province, and its consumption by human beings probably does not normally exceed 1,000 tons per year. Barley and rye are not normally consumed in this province. The monthly



consumption of unfamiliar foodgrains wheat, maida, maize, barley and rye thus did not exceed more than 8,000 tons per month before the war and this was negligible when compared with the gap between the imports and the deficit of rice and millets. This gap amounted to 8,08,258 tons in 1945-46, which was equivalent to 67,355 tons per month. Early in 1946, it was not known whether sufficiently large quantities of the unfamiliar grains, like wheat, maida, maize and barley could be imported from overseas in order to meet even a portion of this gap. Further, it was not known whether large quantities of these unfamiliar foodgrains would be consumed even if they were imported. In 1944, when there was a food shortage in the province, although admittedly not so serious a food shortage as in 1946, Government had imported a mere 600 tons of barley, but had not been able to get it consumed in the province and had incurred a heavy financial loss on the transaction. This unfortunate precedent gave rise to doubt as to whether it was desirable to import large quantities of maize, barley, rye and oats, and whether such large imports would not result in very heavy financial loss. In order to ensure that no heavy financial loss would result, the Government took various steps. First of all, campaigns for the popularization of wheat, maize, and barley were inaugurated. Advertisement were inserted in most of the newspapers. Lectures were delivered by the large propaganda organisation, which was set up both in the city and in the mufasal, and large number of pamphlets were distributed throughout the province. Altogether, nearly four and a half million pamphlets on the different ways of cooking unfamiliar foodstuffs were distributed.

Secondly, in order to increase consumption, the Government reduced the price of these unfamiliar foodgrains. The wheat, which was being imported at Rs.9-8-0 per maund from overseas was sold at Rs 7-8-0 and Rs 7-0-0 per maund ex-railway stations to the wholesalers. Maize, which was imported at Rs.6-6-0 per maund was sold at Rs 5-0-0 per maund ex-railway stations to the wholesalers. Maida, which was imported at Rs.13-6-0 per maund was sold to the wholesalers at Rs.8-0-0 per maund after the 2nd July 1946, but from January 1947 was sold at unsubsidised prices.

The total expenditure on subsidizing the consumption of wheat, maida, maize and barley during 1946 approximated to Rs.2.2 crores, a considerable budget item in a province where the total revenue is only about Rs.40 crores per year. The success of the campaigns to increase offtake of the unfamiliar foodgrains can be seen from the following monthly consumption figures (issues) which showed how the consumption of wheat, maize, and maida increased from month to month :—

Month.	Wheat. (Tons.)	Maida. (Tons)	Maize. (Tons)
1946.—			
April ...	5,045	...	...
May ...	6,229	...	...
June ...	13,418	6,128	...
July ...	22,191	10,188	...
August ...	37,831	12,184	10,139
September	34,333	7,219	15,919
October ...	28,986	4,543	18,154
November	20,859	4,793	18,518
December	26,200	4,191	20,473

It will be seen from these figures that the wheat consumption increased from a normal of 5,000 tons per month to nearly 38,000 tons in August and that the maida consumption increased from a normal of 2,500 tons per month to a peak figure of 12,184 tons in August. The reduced consumption of wheat flour after August and of wheat after September was due to the reduced stocks of these foodgrains. Although the greatly increased consumption of wheat and maida must be partly ascribed to the fact that the rice ration was reduced to 8 oz. per head on the 4th August, the greatly increased consumption may be regarded as a triumph for the popularisation measures. The maize was less familiar to Madras than wheat or maida and its popularisation may be regarded as an even greater triumph. As in the case of wheat and maida, the districts of Salem and Coimbatore were the most successful districts in popularising the maize.

When the extent of the shortage was first realised early in 1946, the Government not only endeavoured to import as much grain as possible both familiar and unfamiliar, from overseas

but also examined whether the consumption of unfamiliar foodstuffs grown in the province could not be increased. The only major foodstuffs in which this province is surplus are sugarcane and its product jaggery, groundnuts, potatoes and salt. Normally, this province exports 50,000 or 60,000 tons of jaggery to other provinces. In 1946, no exports at all were allowed during the early part of the year and only towards the end of the year did the Government, on representations received from producers, allow exports to other provinces. Altogether, only 21,000 tons were exported to places outside the province.

Madras is normally surplus to the extent of about 4,00,000 tons of groundnuts and usually allows this quantity to be exported to other provinces and overseas. In 1946, about 20,000 tons of groundnuts were exported from the province. At the same time, during the year, the Government tried to encourage the consumption of groundnuts as much as possible by the civil population. Collectors of all districts were asked to see that groundnuts were available in the ration shops for sale to the ration-cardholders. Supplies of groundnuts were moved to Madras and to the districts of Malabar, South Kanara, Tirunelveli, the Nilgiris and sold to the people through ration shops in these districts and the city. Recipes for preparations of groundnuts were issued by the Commissioner of Civil Supplies. It was found that ration card-holders did not buy groundnuts in very large quantities and the experiment cannot be regarded as a complete success. It has, however, to be borne in mind that, at the beginning of 1945, it was not known exactly how grave the food situation would be towards the end of the year. If the food shortage had been even greater than it actually was, the experiment for increasing the consumption of groundnuts might have proved a very useful step in preventing starvation.

The province is normally surplus to the extent of about 25,000 tons in potatoes. During 1946 Government considered increasing the consumption of potatoes within the province by subsidizing the price but ultimately this subsidy scheme was not adopted since it was found to be too expensive. It may be noted that the nutritional value of potatoes in certain respects is much less than that of foodgrains—the calorific value being

only 28 per cent that of rice. The consumption of fresh potatoes however increased slightly in 1946 to about 15,500 tons and about 32,500 tons were exported. In addition, during 1946, 2,232 tons of dehydrated potatoes were imported from overseas and were consumed within the province at subsidized rates. Two hundred tons of dehydrated potatoes produced by Parry's factory at Mettupalayam were also consumed within the province. The total subsidy expended upon the sale of dehydrated potatoes was about Rs.66 lakhs.

In addition to the import of large quantities of foodgrains like maize, wheat, maida, barley and rye the Madras Government also imported about 7,643 tons of powdered milk from overseas mostly from America. The total cost of the milk powder came to Rs.1.35 crores. Besides this, 20 tons of milk powder were given free by the New Zealand Government. The milk reconstituted from the milk powder was first distributed to all the elementary school children at the rate of one o'clock per child per day in the districts of Anantapur, Bellary, Salem, Chittoor and North Arcot in July 1946 and the scheme was later extended to the districts of Coimbatore, Malabar, Ramnad, Tirunelveli and Visakhapatnam in October 1946. A large number of school children were benefited by this scheme. The distribution scheme was supervised by the members of the Friends Service Unit, who were paid an honorarium. The actual distribution was carried out through the medium of foodgrains wholesalers and retailers. In the schools themselves the Divisional Inspectors, Headmasters and teachers were responsible for seeing that the milk was distributed to the school children. The teachers were each given an allowance of Rs.5 per mensem for doing the extra work and in order to cover the cost of firewood and incidental expenses. The total expenses on such allowance and other incidental charges incurred by the Government amounted to about Rs.20 lakhs. Although this scheme was undoubtedly an expensive one, it was noticeably beneficial to the school children particularly after the rice portion of the ration was reduced to 8 ozs. on 2nd August 1946.

Although the import of unfamiliar foodgrains like maize, barley and rye from overseas and schemes for popularizing

groundnut and potatoes did alleviate the shortage of foodgrains to some extent, the most important factor in meeting the famine of 1945-46 was procurement. If procurement in 1945-46 had been inefficient, breakdown of rationing could not have been averted. Fortunately, procurement aided by the introduction of two bonus schemes was good. Although the scheme of intensive procurement was not introduced into the remaining districts of the province until February 1946, and therefore probably was not effectively introduced until about April of that year, out of a total production of 42,41,000 tons of rice, 13,13,895 tons was procured. The quantity of rice procured was 31 per cent of the estimated production and 94 per cent of the target figure of 14,02,500 tons. Millet procurement was not quite so good being only 1,16,739 tons out of a total production of 21,27,000 tons. In May, 1946, the rice stock position in the province was assessed. Although the stock of rice was 4,48,000 tons on 2nd May 1946 procurement was dropping off and it was not definitely known what quantity of rice would be imported before the end of the year. In order to speed up procurement and to tide over an acute food shortage in the province in the critical months of June and July 1946, the Government found it necessary to secure the maximum stocks of foodgrains out of the local produce in the province and considered that the offer of a liberal bonus for deliveries made to procuring agents would induce producers to part with all the surplus stocks they could spare for sale to the Government or to their procuring agents. They accordingly announced the grant of a bonus over and above the village site prices at the rates shown below for deliveries made to the Government authorised procuring agents during the months of June and July 1946:—

- (1) Re.1 per maund for paddy and major millets (cholam, cumbu and ragi);
- (2) Rs.1—8—0 per maund for rice; and
- (3) Twelve annas per maund for minor millets (Arica, Korra. Samai, Varagu, etc.).

Subsequently the Government extended the period of bonus upto 15th August 1946. As a result, procurement

in those two months was considerable, a total of about 2,34,392 tons of rice being procured.

In June also the poor stock position of rice necessitated a cut in the rice portion of the ration. From 2nd June 1946 the rice portion of the ration was reduced to 10 ozs. although the overall ration was maintained to 12 ozs. After that date the composition of the ration was as follows:—

Rice eaters	....	10 ozs. rice plus 2 ozs. other grain (wheat, wheat product and baker's bread) with option to take other grains against rice portion.
Mixed-diet eaters	....	4 ozs. rice plus 8 ozs. other grains (Millets etc.)
Millet eaters	....	2 ozs. of rice plus 10 ozs. other grains (Millets etc.)

At the same time the allowance of foodgrains to non-cultivators was reduced from 16 ozs. to 10 ozs. per day permitting the purchase of the balance of 2 ozs. as wheat or wheat products on ration cards.

By the end of July stocks of rice had fallen to 3,25,000 tons and further measures to conserve rice stocks and encourage procurement became necessary. Accordingly the rice content of the rice eaters' ration was reduced from 10 ozs. to 8 ozs. per adult per day with effect from 4th August 1946. Out of the total ration of 12 ozs. 8 ozs. of rice and 4 ozs. of wheat, wheat products or millets were allowed to rice eaters. Similarly mixed-diet eaters and millet eaters were allowed 4 ozs. and 2 ozs. of rice respectively and other grains to make up the balance. Heavy manual labourers continued to receive a ration of 16 ozs. out of which 10 ozs. consisted of rice. The allowance of foodgrains to non-cultivators continued to be 12 ozs. per day, 10 ozs. of their own produce plus 2 ozs. of wheat or wheat products from ration shops. Owing to the difficult food position in the province, the Government

further considered it essential to encourage the immediate cultivation of short term foodgrains wherever possible. They therefore decided to offer an inducement to the ryots for growing such crops by granting a bonus at the following rates for short term paddy and millets delivered to the procuring agents in the months of September, October and upto 15th November 1946.

(1) Re. 1 per imperial maund of paddy.

In addition producers were paid for all short term paddy classified as third sort and delivered during the period referred to above at the price of paddy second sort, the increase in cost being borne by the consumers.

(2) Twelve annas per maund for ragi and eight annas per maund for cholam, cumbu, and other millets.

It was represented that the cultivation of short term crops such as Kuruvai paddy in some districts was delayed due to causes beyond the control of the ryots. The Government therefore extended the time for the grant of the bonus in respect of short term paddy only upto 30th November 1946. Payment of second sort price for third sort paddy was also continued for such deliveries.

The food situation at the end of August 1946 revealed that the stocks of rice had fallen to a very low level that the prospect of obtaining rice from outside the province in adequate quantities was gloomier, and that the harvest of the short term crops would not be ready for the market till about the end of October 1946, and that the surplus to be procured from such crops would not be adequate and that the stocks would not be sufficient to maintain the ration of rice which had been reduced to 8 ozs. till the next main harvest in January 1947. The Government therefore issued an appeal to producers who had been permitted to retain rice for their personal and family consumption at the rate of 16 ozs. per adult per day to reduce their consumption for the rest of the year to 12 oz. and to sell the balance to the Government procuring agents. The Government also announced a bonus for paddy or rice made available to Government from 16th September 1946 upto to 31st October 1946 at the rate of

Rs.2 per imperial maund for paddy or Rs.3 per imperial maund of rice inclusive of the bonus of Re.1 for paddy delivered in the months of September, October and upto 15th November 1946. Thereafter the bonus was limited to Re.1 per maund of paddy only. These steps produced the expected effect of increasing procurement. Nevertheless, although only 57,219 tons of rice was procured in August, only 29,784 tons of rice was procured in September; but in October 1946 the procurement increased considerably to 1,43,720 tons of rice.

In spite of these bonus schemes procurement of rice in the last four months of the Kharif year did not keep pace with the issues. As a result by the 10th of October the stock of rice in the province had fallen to 1,73,067 tons. Thereafter however the stock of rice rose and the stock position in November and December was rather better than in October. The stock again fell to about 1,73,000 tons on 2nd January, 1947, but after that due to the coming in of the long term harvest, stocks rose rapidly. In the second half of 1946, the district which caused most anxiety was Malabar. Throughout August, 1946 the stock of rice in Malabar varied between 11,000 and 15,000 tons which represented about two weeks' supplies. In September, the stocks in that district oscillated between 13,000 and 15,000 tons. During these two months it was feared that rationing in Malabar might break down; but by the beginning of October, the South-West Monsoon harvest which is the main harvest in that district was beginning to be procured and the stocks began to rise. The other districts which had difficult stock positions towards the end of the year were the Nilgiris and Coimbatore.

### (c) The Year 1946-47.

The year 1946-47 was the year of fairly good harvest although the production in the next year was rather less than in the earlier years 1943-44 and 1944-45. The total production was estimated at 4,919,000 tons. Since production in 1946-47 was more than 6,78,000 tons greater than in 1945-46, it was thought that the province would have no difficulty in getting through 1946-47 even if large imports of



foodgrains were not received. Partly because the season appeared to be a good one and partly because the stock of other foodgrains like wheat by December, 1946, was rather low, the Government in December, 1946, decided to increase the rice content of the rations from 8 to 10 ozs. The increased ration came into force from the 15th December throughout the province except in the districts of Visakhapatnam, Bellary, Cuddapah, Chittoor, North Arcot, Ramnad, Malabar, Coimbatore, Salem, the Nilgiris and Tirunelveli. Later in the month the ration was increased to 10 ozs., in these areas too except in Ramnad, Salem and Tirunelveli. In February, 1947, the rice content of the ration was increased to 12 ozs., in majority of the districts.

In December, 1946, the ceiling price of rice was revised. In the surplus districts rice prices were raised slightly to allow for the rise in the cost of the gunnies. Village-site prices were also slightly reduced. The benefit of the increased out-turn of rice as a result of the Dehusking Order was passed on to the millers to compensate for the reduced offtake of bran. In other districts discretion was given to the Collectors to pass on to the millers the benefit of the increased out-turn of rice upto a maximum of two annas per maund.

Although the estimated production in 1946-47 was much greater than in the previous year, procurement did not correspondingly increase in 1946-47. There are various reasons for this. In June, 1946 the Government had ordered that a committee should be set up in each village and this committee would be responsible for determining the surplus procurable from each ryot. These Village Committees were mostly composed of big producers who not unnaturally tended to adopt lower figures for the surplus than probably would have been estimated by the officials. The powers of these Village Committees were gradually reduced when it was realised that they were hindering procurement. But by that time much of the grain had been lost. Secondly, Producer-cum-Consumer Co-operative Societies were established as the procuring agents in some districts. In June, 1946, these societies had been organised in Malabar and entrusted with the work of procurement in the district in place of private merchants. The

scheme had worked fairly well in the heavily deficit district of Malabar, although it is debatable as to whether large quantities would not have been procured if private merchants had done the procuring. In November, 1946, the scheme was extended to the surplus districts of East Godavari, West Godavari, Krishna and Guntur. Here the scheme undoubtedly proved to be a failure and during the early months of 1947 procurement in these districts was rather poor. Accordingly the P.C.C. societies in the four Circar districts were replaced again by private wholesalers. There was then some improvement in procurement in these districts; but much of the grain which could have been procured in the early months of the year had by that time been dissipated and as a result, procurement in those districts was not good as it would have been if the experiment of the P.C.C. Societies had not been tried.

In working out the systems of procurement and rationing, the Madras Government utilised the existing trade channels to the maximum extent. In so doing, the Government followed a policy of fostering the Co-operative institutions in all fields of activities as far as possible. They ordered that District Central Co-operative Stores and other smaller co-operative stores in the district should be given preference in the matter of appointment as authorised procuring agents, wholesalers and retailers. In pursuance of these orders, the District Central Co-operative Stores were appointed in a number of districts as sole procuring agents for the entire district or a part of the district for local procurement, and also as import quota holders for all foodgrains imported into the district. The smaller co-operative institutions were appointed to run ration shops.

Partly because the total quantity procured was not in proportion to the increased production in 1946-47 and partly because substantial imports of foodgrains were not received from outside, the stock position began to cause anxiety at a much earlier date in 1947 than in 1946. The stock of rice were 2,90,045 tons by the end of March and never rose to that level thereafter. By the end of June stocks had fallen to 2,24,467 tons and there was no sign of increase. Accordingly the rice content of the ration was reduced to 10 ozs. on the 25th May 1947 and again to 8 ozs. on 13th July, 1947.

The food situation was deteriorating month by month. The position in July 1947 was by no means easier and rationing on a statutory basis in the urban areas and on informal basis in the rural areas had to be continued and the intensive procurement scheme tightened up. At the same time the Madras Government had to take note of growing discontent among the producers over the procurement prices, which the producers felt were relatively low in the face of the prevailing high prices, and over the scarcity of all essential commodities other than foodgrains; but the Madras Government had to conform to the general price policy of the Central Government and refrain from increasing the prices of foodgrains in the province. The Madras Government, therefore decided upon a scheme of bonus to producers which would meet the clamour for increased prices immediately and also help to intensify cultivation. The scheme was announced in July 1947 sanctioning the grant of a bonus at Re. 1 per maund of paddy or Rs. 1—8—0 per maund of rice for all deliveries made from 1st December 1946 to 6th December 1947. The bonus was ordered to be paid half in cash and half in the shape of food bonus coupons, which the ryots could exchange for groundnut cakes and fertilisers. Later as a result of lack of manure, the issue of coupons was stopped with effect from 1st October 1948 and the entire bonus was paid in cash. The entire cost was passed on to the consumers by levying a surcharge on the sale of rice. The scheme had an appreciable effect on producers. There was also considerable unrest among the producers of millets in several districts because they considered that the Government had encouraged the paddy producers only and that they had been ignored. The Government therefore sanctioned the payment of bonus in cash at 8 annas per maund on all millets delivered to Government during the months of September and October 1947. In this case also the entire cost was passed on to the consumers by the levy of a surcharge on the sale of millets. The cost of the bonus scheme for paddy, rice and millets amounted to nearly Rs. 503 lakhs.

To improve the situation the Hon'ble Ministers of the Government undertook an intensive tour of the districts and appealed to the producers to spare as much as they could.

The Heads of all Departments as well as their subordinates were also requested to do everything in their power to intensify procurement.

As a result of the effective steps taken in the manner stated above, the tempo of procurement rapidly rallied and from the end of September onwards procurement reached record figures and the Government were able to tide over what otherwise could have been a very ugly situation. The quantities of rice and millets procured are given in Appendix L and M.

In the expectation that the food situation in the province would improve the milk distribution scheme to the school children was terminated towards the end of February 1947. As the food position did not improve, and taking into consideration the usefulness of the scheme, it was revived in July 1947 in eight districts. The scheme was extended to the children studying in the Madras Corporation Elementary Schools in Madras City and the inmates of the Schools for the Blind, Deaf and Dumb and also the orphanages in the city and in the deficit districts. \* In addition 125 lakhs of multi-vitamin tablets were also distributed to the elementary school children in the deficit districts.

In July 1947 Government controlled the movement and prices of fresh potatoes grown in the Nilgiris. The ceiling price in the producing district and the retail prices in all the consuming districts were fixed with a view to make potatoes available to the public at the controlled rates in all ration shops. The wholesalers were paid subsidies by the Government to cover any loss incurred by them in adhering to the controlled retail rates fixed by the Government. A sum of about Rs.9,000 was paid as subsidy to the wholesale merchants on this account. This control was, however, removed in October 1947. This scheme helped the public to a certain extent to make good the cereal shortage.

In the latter half of 1947 there was agitation on the one hand that all controls should be removed, while on the other

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\* The scheme was unofficially continued in 1948-49 also till the stocks were exhausted.

hand there was counter-agitation from other sections of the community who held the view that removal of controls was inopportune. The Government of India, after a careful consideration of all the aspect of the question, decided in September 1947 on a policy of decontrol of foodgrains.

## CHAPTER IV

### THE EXPERIMENT (II)

#### (Decontrol and Recontrol)

*The year 1947-48.*—The season in the Kharif year 1947-48 was again below the normal. The rainfall in the South-west Monsoon period was below the normal in the districts of Chittoor, North Arcot, Coimbatore, and the Nilgiris while the North-east Monsoon was defective in all the districts outside the Circars. As a result of the failure of rains, a drought prevailed during November and December 1947 and standing crops suffered a severe set back in parts of Nellore, South Arcot, Ramnad and South Kanara districts. Paddy crops in Chingleput, Chittoor, North Arcot and Tiruchirappalli districts and in the non-Periyar area of Mathurai district and dry crops in parts of Nellore, Chingleput, Chittoor, Coimbatore and Mathurai districts withered for want of sufficient rains. Insect pests affected the millet crops in parts of Bellary and Kurnool districts. Agricultural operations had to be suspended for some time for want of rains in parts of Chittoor district. The area under second crop cultivation was less than the corresponding area in the previous year by 15.3 per cent and the average area in the three years ending 1944-45 by 18.2 per cent. The yield per acre of all the main crops was below the normal in all the districts of the Province. The total production was estimated at 4,330,000 tons of cleaned rice and at 2,150,000 tons of cleaned millets. According to the five year formula, the province was deficit to the extent of 632,000 tons of rice and 740,000 tons of millets. The Government of India who were fully apprised of the food position in the province came to the rescue but the allotments made were quite insufficient to meet the deficit. However, with the aid of the allotments made by the Government of India and the intensification of local procurement, the province was able to tide over the difficult situation.

It has already been stated that in September 1947 the Government of India decided on a policy of decontrol of food-grains in the country. In accordance with this policy the intensive procurement scheme was given up with effect from 28th December 1947 in the deficit districts of Visakhapatnam, Cuddapah, Kurnool, Bellary, Anantapur, Chittoor, North Arcot, Chingleput, Coimbatore, Salem, Mathurai, Ramnad, Tirunelveli and South, Kanara. The scheme was abandoned in the districts of South Arcot and Tiruchirappalli also with effect from 14th March 1948, and it remained in force only in the surplus districts of East Godavari, West Godavari, Krishna, Guntur, Nellore and Tanjore and in the highly deficit districts of Malabar and the Nilgiris. In the upland taluks of the surplus districts procurement was, however, done on a voluntary levy scheme. In the deficit districts in which intensive procurement was given up, procurement was being done under a voluntary levy scheme under which all big producers owning, say, 10 acres and more, were required to deliver their surpluses of paddy and millets at an easy scale fixed by the Collectors. Collectors were, however, given discretion to reduce the limit of acreage to suit local conditions and requirements. Collectors and their subordinates were also given statutory powers to resort to compulsory procurement of the surplus stocks if there was no voluntary response to the executive orders requiring the producers to deliver the surplus at the rates fixed. Experience showed that producers were generally apathetic to the levy scheme. This scheme was ultimately given up at the end of May 1948. Intensive procurement was, however, continued uninterruptedly only in the delta portions of the surplus districts of East Godavari, West Godavari, Krishna, Guntur, Nellore and Tanjore and in the highly deficit districts of the Nilgiris and Malabar. The statement below shows the targets for the khariff year 1947-48 and the procurement under the intensive procurement scheme for part of the year and also under the voluntary levy scheme subsequently :—

Districts.	Target.		Procurement from 1st November 1947 to 31st October 1948.	
	Rice. Tons.	Milletts. Tons.	Rice. Tons.	Milletts. Tons.
1. Surplus districts of East Godavari, West Godavari, Guntur, Nellore, Krishna and Tanjore and also Nilgiris and Malabar (intensive procure- ment scheme.)	10,49,324	31,395	8,46,845.	5,362
2. Other districts (both under intensive pro- curement scheme and levy scheme.)	1,82,000	71,060	71,639 29,056	13,916 (I.P.S.) 6,103 (Levy S.)
<b>Total ...</b>	<b>12,31,324</b>	<b>1,02,455</b>	<b>9,47,540</b>	<b>25,381</b>

Consequent on decontrol the Village Food Committees and the Taluk Food Committees were abolished in all districts. The District Food Committees were also abolished in the surplus districts but were continued in the deficit districts.

Paddy and rice continued to be purchased under Government supervision in the surplus districts and moved to deficit districts according to monthly programmes. During the early part of 1948, large stocks of paddy and rice were moved out from the Circars districts with a view to provide the deficit districts with sufficient stocks during the period of transition from control to decontrol. Stocks from the Circars were also utilised to build up Provincial Reserves at different centres chief among which were the reserves at Avadi and Suler (Coimbatore district). During the latter part of 1948 supplies to some of the deficit districts were made mainly from these reserves.

As a result of the gradual abandonment of procurement of millets during the year the quantity of millets locally



procured was low. It was however supplemented by appreciably large imports. During the first half of 1948 itself large quantities of overseas maize amounting to 131,665 tons were received, there being no shipments after 15th June 1948. The receipts were rather heavy during the period from January to April 1948. About 67,000 tons of maize had been received and distributed to the districts by the end of February and there was no more storage space in the districts for the further arrivals expected in March. With great difficulty storage space was secured in the Naval Hangars at Chromepet and the Military R.B.S.D. sheds at Avadi. Over 30,000 tons were stored in these two places for a few months before diversion to the districts. The imported maize and milo were, as usual, sold on the basis of the notified local wholesale ceiling prices for similar local varieties of millets and the resulting loss was shared by the Provincial Government and the Government of India. The loss involved in the sale of stocks transferred from one district to another at local rates was, as before, borne by the Provincial Government.

There was no allotment of wheat or wheat products in the first quarter of the year. The province had to manage with the stocks left over. As a result, restrictions were imposed on the issue of these commodities with the object of conserving them for the use of habitual consumers of wheat and bread and those on a diet. The subsidised sale of wheat had been discontinued at the close of 1946-1947. The stocks in some of the districts were found later to be far in excess of their requirements and the excess was transferred to other districts. The stocks so transferred were sold in the recipient districts at rates applicable in those districts. The Government decided to bear the extra charges involved in the process of transferring those commodities from one district to another. The estimated subsidy on this account is Rs.40,000.

For the first time in the year 1948, "Semolina" otherwise known as "Rava" or "Sooji" was imported on Government account outside the Basic Plan of the Government of India. Though it was not compulsory for the

Provincial Government to import it, yet in view of the general food shortage, this Province accepted the quotas allotted to it. The price charged for this commodity by the Government of India was calculated on a "no profit-no loss" basis. During the later part of the year 1948 a total quantity of about 4,500 tons of semolina was imported. But the consumption of semolina by issue outside the rations was not very encouraging. With the object of stepping up the offtake, the following measures were adopted :

- (1) Bringing semolina within rations
- (2) Increase of over all rations by 2 ounces, the extra ration being given in the shape of semolina.
- (3) Issue of semolina compulsorily to establishments.
- (4) Reduction of the consumer's price of semolina.

Along with process of withdrawal of intensive procurement, rationing was given up gradually from December 1947 onwards and by the end of February 1948, rationing both statutory and rural, was abolished except in the Districts of Ma'abar, the Nilgiris and Madras, the municipal towns in the districts of Tirunelveli and Salem, Coimbatore and Tiruppur municipalities in Coimbatore district and Mangalore and Kasargod towns in South Kanara district.

To ensure smooth transition to complete decontrol and derationing the following measures were taken :

(1) Collectors of surplus districts in which intensive procurement was continued were instructed to procure all the surpluses in their districts within two months after the harvest so that the surplus might be moved early to deficit districts to meet their requirements.

(2) Collectors of deficit districts were instructed that the quotas allotted to their districts should be utilised first to feed rationed towns and then the rural areas of the districts.

(3) To prevent hoarding, the Government extended the Essential Articles Restricted Acquisition Order to all

the parts of the Province and laid down that no one should purchase and stock more than his requirements for three months at a time, calculated at the rate of 1 lb per adult per day.

(4) The ban on the inter-district movement of food-grains was continued so that each district might be treated as a unit though the restriction on the movement of millets from one district to another was relaxed in the area comprising the Ceded districts, West Godavari, Guntur, Nellore, Chittoor and North Arcot. In the surplus districts the existing ban on the movement of foodgrains within the district as well as the belt area notifications continued to be in force.

(5) Relief shops were opened in derationed areas in order to check the upward trend of prices and to assure a subsistence ration wherever marked distress was felt and during the course of the year such shops were established in all deficit districts and in the upland taluks of Nellore and Guntur districts. As their very name implies, these shops were intended to assure something like a bare subsistence ration and not be a complete substitute for the erstwhile ration shops. The idea was to make them unattractive when the local harvest was going on or local stocks maintained a fair flow of grains into the market. When local conditions were such that the people (mostly non-producers) could not get any quantity of foodgrains at prices within their reach, issues from these shops were made on a reasonably generous scale according to the stocks at the disposal of the Government. These relief shops were also expected to exercise a salutary influence on the trend of prices in the open market as respects locally procured food-grains sold freely outside the Government's scheme of controlled distribution through relief shops. The shops were not run departmentally but by private individuals or by co-operative societies. Supply of foodgrains to these shops was made by authorised wholesalers either from locally procured or from imported stocks at prescribed rates. Both the wholesaler and the retailer were allowed the prescribed margin of profit and they were precluded, by an adequate provision in the licence granted to them, from selling foodgrains either to the retailer

or to the consumer, as the case may be, at more than the wholesale or retail price fixed. Issue of foodgrains to the public was subject to the production of the ration cards which were in use when rationing was in force in those areas. The overall relief quota of foodgrains allowed for issues through the relief shops was at first 6 ozs. per adult per day but it was gradually raised to 10 ozs. per adult per day. In the initial stages supplies of foodgrains from these relief shops were restricted to meet the requirements for 3 days only at a time but the period was subsequently enhanced to one week. The composition of the relief quota varied from time to time with reference to the availability of each kind of grain for distribution. Besides drawing supplies from the relief shops according to the scale and composition prescribed by the Government from time to time, people could purchase foodgrains in the open market also, but it can be generally assumed that only the poorer classes resorted to the relief shops and only when they could not buy in the open market.

The Firka Supply Officers, the Taluk Supply Officers, the District Supply Officers and all other touring officers of both the Civil Supplies and Revenue Departments of and above the rank of Revenue Inspector were required to inspect the relief shops and scrutinise the issues made and accounts maintained at each shop and furnish the results of such inspections in their fortnightly diaries with a view to guard against leakage of foodgrains through relief shops.

One main difficulty in the way of efficient procurement all these years had been unsatisfactory prices from the point of view of the producers. As a remedy to this longstanding grievance, the ceiling prices of rice and millets in this Province were revised in December 1947 and the revised prices came into effect from 12th January 1948. The village site prices of paddy, rice and millets which prevailed in the districts during the previous year were also increased and the increase amounted on an average to about Rs. 1-6-0 per maund in the case of paddy and Re. 1-0-0 per maund in the case of millets. These price increases were made to meet the increased cost of production and to stimulate deliveries by producers.

The period of decontrol from January to end of September 1948 was one in which the prices of foodgrains rose to phenomenal heights. As trade in foodgrains was free, the market jumped sharply and control over prices became ineffective. Inflation assumed threatening proportions. To save the country from the consequent economic crisis, the Government of India decided towards the end of September 1948 to abandon their policy of decontrol and to revert to controls gradually.

In retrospect it may be said that on the whole the process of decontrol was effected without considerable friction or trouble. During this period the food position in the surplus districts continued to be normal and in the deficit districts the overall situation was satisfactory though there were occasional local shortages (with the resultant rise in prices) which were met by internal transfers of stocks.

*The year 1948-49.*—The season in 1948-49 continued to be bad as in the previous year. The rainfall in the South west Monsoon period was defective in 16 districts of the Province with the result that the acreage under early crops became limited and their yields were below the normal. The North-east Monsoon commenced rather late in October, resulted in good showers in November, but slackened thereafter. The total rainfall in the North-east Monsoon period was below the normal in the 16 districts of the Province. As a result of the failure of seasonal rains in both the monsoon periods, the supply received in the irrigation sources especially in the Carnatic and Central districts was limited and insufficient for irrigation and the total area under food crops was restricted. The crops sown early in the season were affected by drought in parts and they failed to some extent in others. The total production during the year was estimated at 4,284,000 tons of rice and 2,934,000 tons of millets in terms of cleaned grain. The production estimated for this year was short of the estimated requirements for consumption and seed according to the five-year formula by 7,14,000 tons in the case of rice and 4,99,000 tons in the case of millets.

The Madras Government falling in line with the revised policy of the Central Government towards recontrol issued the

Madras Food-grains (Intensive Procurement) Order, 1948 under section 3(1) of the Essential Supplies (Temporary Powers) Act 1946 (Act XXIV of 1946.) The intensive scheme of procurement in respect of paddy, rice and millets was re-introduced gradually in the districts in which it was abolished previously, as shown below :—

<i>Areas.</i>	<i>Date of re-introduction.</i>
1. Delta portion of East Godavari, West Godavari, Krishna, Guntur, Nellore and Tanjore.	Continued uninterruptedly from 1946 in respect of paddy and rice. Reintroduced from 15th November 1948 in respect of millets.
2. Non-delta portions of the surplus districts.	15th November 1948 in respect of paddy, rice and millets.
3. South Arcot (Chidambaram alone), Tiruchirappalli, Mathurai (Periyar area alone), Tirunelveli and South Kanara districts.	5th October 1948 (Paddy and rice alone)—15th November 1948 (millets.)
4. Anantapur, Bellary, Cuddapah, Kurnool, Chittoor, Salem, Mathurai (other than Periyar area) and South Arcot (All taluks other than Chidambaram.)	15th November 1948 in respect of paddy, rice and millets.
5. Visakapatnam, Coimbatore, North Arcot, Chingleput and Ramanathapuram districts.	15th December 1948 (Paddy, rice and millets.)

Statutory and rural rationing were also reintroduced in the province and the system of distribution of food-grains through relief shops was abolished. District and Taluk Food Committees were also revived in all the districts.

The village site prices of paddy, rice and millets which prevailed in the districts during the khariff year 1947-48 were suitably increased in some districts with effect from 21st November 1948 and in the other districts with effect from 12th December 1948. The general increase amounted on an average to Rs. 1-8-0 per maund in the case of paddy and Re. 1-0-0 per maund in the case of millets. The prices were enhanced to meet the cost of

production and increased cost of living in the case of producers and to ensure the free flow of grains into the market.

In order to minimise the evils arising out of the monopoly procurement and distribution of foodgrains and to ease the financial strain experienced by the procuring agents, the Government decided that the number of procuring agents should be increased to the maximum extent, and to this end they directed the grant of licences under the Madras Food-Grains Control Order, 1947 to all those who were in the food-grains business for any period before 22nd June 1942 and who applied for them, provided they produced satisfactory evidence to show that they were in the food-grains business and provided also that they had not at any time been found guilty of hoarding or other black-marketing offences or even strongly suspected of having indulged in such anti-social activities. To step up procurement by co-operative institutions which had undertaken food-grains procurement work, loans were granted to them to the extent of Rs.82 lakhs from Government funds and an additional accommodation of Rs.2 crores arranged from the Madras Imperial Bank to the Madras Provincial Co-operative Bank to enable the latter to advance funds to the co-operative institutions which undertook food-grains procurement work. The local procurement of food-grains during the year was satisfactory. (The quantities of rice and millets procured in the year are given in appendices L and M).

The food position during the year was generally satisfactory. The reintroduction of controls resulted in a temporary depletion of local stocks of rice in the deficit districts, but the position improved with the coming in of the main harvests in the Northern districts soon after. The restrictions on the inter-district movement of millets in the zone comprising the Ceded districts, West Godavari, Guntur, Nellore, Chittoor and North Arcot which, were removed during the decontrol period, were revived. There were large imports of overseas milo during the year and large allotments were made and sent to the districts, over and above the requirements in some cases. There was no difficulty in disposing of the maize stocks, as the imports were small when compared to the previous year. The supply of

wheat and wheat products during the year was satisfactory and the restrictions imposed on the issue of wheat and maida were therefore removed. Wheat was made available to all card-holders from the middle of July 1948. The supply of maida was made available to vermicelli factories to some extent, to biscuit manufacturers and confectioneries to a large extent and to bakeries to meet their needs in entirety.

In October 1948, the Government of India reimposed control over Bengal-gram and its products and they also drew up a basic plan for gram under which transport of gram on trade account from one Province or State to another was banned and the requirements of the deficit areas were to be imported on Government account from the surplus areas linked to them under the Plan. The Madras Government did not, however, then consider it necessary to impose full-fledged control over gram and its products. In November 1948, they decided to restrict only movements of gram to places outside the Province and to continue to exercise informal control over the prices of stocks imported on Government account and distributed to merchants for sale. The Government of India did not agree to this partial control. The Madras Government had therefore to revive full control over gram from 19th April 1949. Under this scheme, the inter-district movement of Bengal-gram and its products and transport outside the Province except under permits issued by the Collector of the district concerned or the Commissioner of Civil Supplies was prohibited. Control over import, distribution and sales of gram and its products imported on trade account from overseas sources was exercised under the provisions of the Madras Control of Distribution and Sales of Imported Gram Order, 1949. The Madras Food-grains Control Order, 1947, was extended to gram also. The prices of both Government and privately imported stocks were controlled on a statutory basis under the provisions of the Bengal-gram (Price Control) Order, 1949. Initially no price control was exercised over gram grown locally in the Madras State and over stocks imported into the State on trade account before 19th April 1949, but later on price control was imposed on locally grown gram also.



## APPENDIX A

Statement comparing the final estimated production of rice and millets in the Province according to the season and crop report with the estimated requirements of these grains for consumption and seed according to the five year formula during the four years ending 1945-46

Year.	Estimated production in terms of cleaned grain.	Estimated requirements for consumption and seed according to 5 year formula.	Seasonal factor.	Surplus (+) or Deficit (-)
<i>Rice.</i>				
	Tons.	Tons.		Tons.
1942-43 ...	4,614,000	4,962,000	88	-348,000
1943-44 ...	4,932,000	4,962,000	90	- 30,000
1944-45 ...	5,054,000	4,962,000	91	+ 92,000
1945-46 ...	4,241,000	4,962,000	82	-721,000
1946-47 ...	4,919,000	4,962,000	89	- 43,000
1947-48 ...	4,330,000	4,962,000	83	-632,000
1948-49 ...	4,284,000	4,998,000	81	-714,000
<i>Cholam.</i>				
1942-43 ...	934,000	1,077,000	78	-143,000
1943-44 ...	978,000	1,077,000	79	- 99,000
1944-45 ...	1,021,000	1,077,000	89	- 56,000
1945-46 ...	768,000	1,077,000	74	-309,000
1946-47 ...	749,000	1,077,000	66	-328,000
1947-48 ...	804,000	1,077,000	76	-273,000
1948-49 ...	966,000	1,093,000	81	-127,000
<i>Cumbu.</i>				
1942-43 ...	485,000	542,000	82	- 57,000
1943-44 ...	511,000	542,000	85	- 31,000
1944-45 ...	484,000	542,000	89	- 58,000
1945-46 ...	393,000	542,000	76	-149,000
1946-47 ...	414,000	542,000	77	-128,000
1947-48 ...	385,000	542,000	77	-157,000
1948-49 ...	402,000	550,000	76	-148,000
<i>Other dry grains.</i>				
1942-43 ...	1,171,000	1,271,000		-100,000
1943-44 ...	1,202,000	1,271,000		- 69,000
1944-45 ...	1,169,000	1,271,000		-102,000
1945-46 ...	966,000	1,271,000		-305,000
1946-47 ...	1,028,000	1,271,000		-243,000
1947-48 ...	961,000	1,271,000		-310,000
1948-49 ...	1,067,000	1,291,000		-224,000

## APPENDIX A—cont.

Year.	Estimated production in terms of cleaned grain.	Estimated requirements for consumption and seed according to 5 year formula.	Seasonal factor.	Surplus (+) or Deficit (-)
<i>All dry grains.</i>				
1942-43 ...	2,590,000	2,890,000		-300,000
1943-44 ...	2,691,000	2,890,000		-199,000
1944-45 ...	2,674,000	2,890,000		-216,000
1945-46 ...	2,127,000	2,890,000		-763,000
1946-47 ...	2,191,000	2,890,000		-699,000
1947-48 ...	2,150,000	2,890,000		-740,000
1948-49 ...	2,435,000	2,934,000		-499,000

*Note.*—Figures for 1948-49 include particulars in respect of the merged States of Sandur, Banganapalle and Pudukkottai.

*Statement showing the final estimated production of rice in the Province according to the season and crop report with the estimated actual requirements of rice for consumption and seed during the 7 years ending 1946-47.*

Year.	Estimated actual requirements of rice for consumption and seed.	Estimated production of rice.	Estimated surplus (+) or deficit (-) Col. (3) - Col. (2)
	Tons.	Tons.	Tons.
1940-41 ...	5,015,000	5,150,000	+ 135,000
1941-42 ...	5,066,000	4,955,000	- 111,000
1942-43 ...	5,120,000	4,614,000	- 506,000
1943-44 ...	5,175,000	4,932,000	- 243,000
1944-45 ...	5,230,000	5,054,000	- 176,000
1945-46 ...	5,286,000	4,241,000	-1,045,000
1946-47 ...	5,342,000	4,919,000	- 423,000
1947-48 ...	5,399,000	4,330,000	-1,069,000
1948-49 ...	5,457,000	4,284,000	-1,173,000

## APPENDIX B.

Year.	Estimated population in Madras Province.	Estimated adult equivalent (81% to 2% of Col. 2.)	Estimated rice saving of the adult equivalent (63% to 70% of Col. 3)	Estimated rate of consumption per adult per diem in lb (available quantity 4,762,000 tons.)
(1)	(2)	(3)	(4)	(5)
1937	47,210,505	38,335,000	24,151,000	1.2101
1938	47,734,542	38,760,000	24,419,000	1.1958
1939	48,264,395	39,191,000	24,690,000	1.1837
1940	48,800,130	39,626,000	24,964,000	1.1707
1941	49,341,810	40,006,000	25,242,000	1.1578
	(actual)			
1942	49,899,505	40,510,000	25,521,000	1.1451
1943	50,443,278	40,960,000	25,805,000	1.1325
1944	51,033,198	41,415,000	27,610,000	1.0585
1945	51,569,333	41,874,000	27,916,000	1.0469
1946	52,141,753	42,339,000	29,637,000	0.9861
1947	52,720,526	42,809,000	29,966,000	0.9752
1948	53,305,724	43,284,000	30,299,000	0.9644
1949	53,897,417	43,765,000	30,636,000	0.9584

## APPENDIX C.

*Statement comparing the normal production of rice and the estimated requirements for consumption and seed in this Province.*

District.	Estimated normal production of rice.	Estimated requirements for consumption and seed on the basis of the five year formula.	Estimated surplus plus (+) or deficit (-) of Col. 2 as compared with the Col. 3.
(1)	(2)	(3)	(4)
	Tons.	Tons.	Tons.
Visakhapatnam ...	232,300	425,000	-192,700
East Godavari ...	354,600	295,000	+59,600
West Godavari ...	393,200	225,000	-168,200
Krishna ...	301,900	174,000	+127,900
Guntur ...	210,700	161,000	+49,700
Kurnool ...	30,900	46,000	-15,100
Bellary ...	13,200	34,000	-20,800
Anantapur ...	40,100	64,000	-23,900
Cuddapah ...	63,500	53,000	+10,500
Nellore ...	187,500	104,000	+83,500
Madras ...	.....	117,000	-117,000
Chingleput ...	295,300	258,000	-22,700
South Arcot ...	290,200	260,000	+30,200
Chittoor ...	122,700	123,000	-300
North Arcot ...	257,700	270,000	-12,300
Salem ...	125,700	162,000	-36,300
Coimbatore ...	63,800	147,000	-83,200
Tiruchirapalli ...	183,200	166,000	+17,200
Tanjore ...	627,600	401,000	+226,600
Madurai ...	200,900	202,000	-1,100
Ramanad ...	165,200	174,000	-8,800
Tirunelveli ...	185,800	224,000	-38,200
Malabar ...	331,200	614,000	-282,800
South Kanara ...	245,600	236,000	+9,600
The Nilgiris ...	3,700	27,000	-23,300
Province ...	4,866,500	4,962,000	-95,500

## APPENDIX D.

Statement comparing the normal production of **Millets** (in terms of cleaned grain) with the estimated normal requirements for consumption and seed in this Province.

District.	Normal production of millets in terms of cleaned grain.	Estimated requirements for consumption and seed on the basis of the five year formula.	Estimated surplus (+) or deficit (—) of Col. 2 as compared with Col. (3).
(1)	(2)	(3)	(4)
	Tons.	Tons.	Tons.
Visakhapatnam ...	137,600	179,000	—41,400
East Godavari ...	42,600	39,000	+3,600
West Godavari ...	24,400	14,000	+10,400
Krishna ...	62,000	64,000	—2,000
Guntur ...	192,200	203,000	—10,800
Kurnool ...	186,500	137,000	+49,500
Bellary ...	153,600	132,000	—21,600
Anantapur ...	133,900	122,000	+11,900
Cuddapah ...	132,700	114,000	+18,700
Nellore ...	179,700	155,000	+24,700
Chingleput ...	37,500	37,000	+500
Madras ...	.....	6,000	—6,000
South Arcot ...	114,800	148,000	—33,200
Chittoor ...	96,900	135,000	—38,100
North Arcot ...	97,600	141,000	—43,400
Salem ...	264,200	297,000	—32,800
Coimbatore ...	283,300	298,000	—14,700
Tiruchirapalli ...	160,800	184,000	—23,200
Tanjore ...	16,900	12,000	+4,900
Madurai ...	139,300	186,000	—46,700
Ramnad ...	91,100	136,000	—44,900
Tirunelveli ...	91,200	128,000	—36,800
Malabar ...	7,300	7,000	+300
South Kanara ...	2,300	9,000	—6,700
The Nilgiris ...	2,900	7,000	—4,100
Province ...	2,651,300	2,890,000	—238,700

## APPENDIX E.

(i) Imports, Exports, and net Imports of Paddy and Rice in terms of Rice by Sea and Rail within and out of Madras Province.

Year.	Imports.	Exports.	Net imports.
	Tons.	Tons.	Tons.
1935-36 ...	794,878	217,659	(+) 577,219
1936-37 ...	564,958	229,950	(+) 335,008
1937-38 ...	353,294	225,678	(+) 327,616
1938-39 ...	634,250	264,979	(+) 369,271
1939-40 ...	838,629	289,877	(+) 548,752
	3,386,009	1,228,143	(+) 2,157,866
Average ...	677,202	245,629	(+) 431,573
1940-41 ...	444,405	247,825	(+) 196,580
1941-42 ...	252,049	406,834	(-) 154,785
1942-43 ...	45,859	292,008	(-) 246,149
1943-44 ...	92,772	92,772	...
1944-45 ...	118,621	101,621	(+) 17,000
1945-46 ...	815,812	47,200	(+) 268,612
1946-47 ...	144,109	...	(+) 144,109
1947-48 ...	248,524	...	(+) 248,524
1948-49 ...	129,250	...	(+) 129,250

(ii) Imports, Exports and net Imports of Millets by Sea and Rail within and out of Madras Province.

Year.	Imports.	Exports.	Net imports.
	Tons.	Tons.	Tons.
1935-36 ...	4,676	...	(+) 4,676
1936-37 ...	1,082	7	(+) 1,075
1937-38 ...	15,789	1,138	(+) 14,651
1938-39 ...	28,434	998	(+) 27,436
1939-40 ...	12,186	13,137	(-) 951
	62,167	15,280	46,887
Average ...	12,433	3,056	(+) 9,377
1940-41 ...	10,158	2,675	7,483
1941-42 ...	21,108	997	20,111
1942-43 ...	34,895	...	34,895
1943-44 ...	25,579	...	25,579
1944-45 ...	36,613	...	36,613
1945-46 ...	38,456	...	38,456
1946-47 ...	43,819	...	43,819
1947-48 ...	65,142	...	65,142
1948-49 ...	1,34,111	...	1,34,111

## APPENDIX E—cont.

(iii) Imports, exports and net imports of Maize by sea and rail within and out of Madras Province.

Kharif year.	Imports.	Exports.	Net imports.
	Tons.	Tons.	Tons.
1942-43 ...	.....	.....	.....
1943-44 ...	.....	.....	.....
1944-45 ...	.....	.....	.....
1945-46 ...	92,853	7,840	85,013
1946-47 ...	15	.....	15
1947-48 ...	1,31,665	.....	1,31,665
1948-49 ...	16,370	.....	16,370

(iv) Imports, exports and net imports of Barley by sea and rail within and out of Madras Province.

Kharif year.	Imports.	Exports.	Net imports.
	Tons.	Tons.	Tons.
1942-43 ...	.....	.....	.....
1943-44 ...	600	.....	600
1944-45 ...	.....	.....	.....
1945-46 ...	4,900	2,304	2,596
1946-47 ...	100	.....	100
1947-48 ...	.....	.....	.....
1948-49 ...	.....	.....	.....

(v) Imports, exports and net imports of Rye by sea and rail within and out of the Madras Province.

Kharif year.	Imports.	Exports.	Net imports.
	Tons.	Tons.	Tons.
1942-43 ...	.....	.....	.....
1943-44 ...	.....	.....	.....
1944-45 ...	.....	.....	.....
1945-46 ...	.....	.....	.....
1946-47 ...	2,000	966	1,034
1947-48 ...	.....	.....	.....
1948-49 ...	.....	.....	.....

## APPENDIX E—cont.

(vi) Imports, exports and net imports of wheat and wheat products by sea and rail within and out of Madras Province.

Year.	Imports.	Exports.	Net Imports.
	Tons.	Tons.	Tons.
1935-36 ...	Not available.	Not available	19,138 (wheat only)
1936-37 ...	Do.	Do.	61,022
1937-38 ...	Do.	Do.	65,364
1938-39 ...	Do.	Do.	64,110
1939-40 ...	Do.	Do.	65,420
			2 75,049
Average ...			55,010
1940-41 ...	Not available.	Not available.	72,067
1941-42 ...	Do.	Do.	53,988
1942-43 ...	Do.	Do.	1,008
(Up to December only):			
1943-44 ...	47,629	Nil.	47,629
1944-45 ...	101,479	Nil.	1,01,479
1945-46 ...	65,466	Nil.	65,466
1946-47 ...	239,451	11750*	2,27,701
1947-48 ...	21,309	Nil.	21,309
1948-49 ...	75,323	Nil.	75,323

\* Exports to Central Provinces and United Provinces.

1. The figures from 1943-44 relate to the Rabi year (1st May to 30th April of current year.)

2. The figures do not include imports or exports of semolina, wheat meal and selfraising flour by private parties.



## APPENDIX E—cont.

(vii) Imports, exports and net imports of pulses and grams by sea and rail within and out of Madras Province.

Year.	Imports.	Exports.	Net imports.
	Tons.	Tons.	Tons.
1935-36 ...	202,788	3,084	199,704
1936-37 ...	192,172	2,544	189,628
1937-38 ...	298,210	9,480	288,730
1938-39 ...	264,143	12,762	251,381
1939-40 ...	246,282	6,885	239,397
	1,203,595	34,755	1,168,840
Average ...	240,719	6,951	233,768
1940-41 ...	251,270	6,491	244,779
1941-42 ...	219,315	12,741	206,574
1942-43 ...	169,348	17,375	151,973
1943-44 ...	159,043	6,494	152,549
1944-45 ...	160,311	1,683	158,628
1945-46 ...	Figures not available.	Figures not available.	Figures not available.
1946-47 ...	180,368	1,556	178,812
1947-48 ...	198,919	9,010	189,909
1948-49 ...	Figures not available.	Figures not available.	Figures not available.

## APPENDIX F.

## Millets.

(i) Movements under Zonal Scheme.

Name of surplus district.	Quantity exported in	
	1943-44	1944-45
	Tons.	Tons.
East Godavari ...	2,727	8,214
West Godavari ...	7,623	5,208
Nellore ...	855	526
Chingleput ...	2,909	1,237
Tanjore ...	1,990	1,604
North Arcot ...	1,000	198
Salem ...	1,999	2,375
Tiruchirappalli ...	...	50
Cuddapah ...	...	555
Anantapur ...	...	691
Total ...	19,103	20,658

## APPENDIX F.—cont.

(ii) Statement showing the exports of millets within the Province during the Kharif years 1945-46, 1946-47 and 1947-48.

Name of exporting District.	Kharif year 1945-46.	Kharif year 1946-47.	Kharif year 1947-48.	Remarks.
Anantapur. ...	...	1,483	...	There were no Zonal Schemes during these years and the figures represent exports of surplus millets to other deficit districts within the Province.
Bellary ...	...	43	37	
Chingleput ...	...	465	...	
Chittoor ...	...	250	28	
Coimbatore ...	...	1,562	...	
East Godavari ...	4,251	1,709	...	
Guntur ...	1,280	...	...	
Krishna ...	...	...	65	
Kurnool ...	2885	92	95	
Madurai ...	...	...	76	
Nellore ...	1,965	342	...	
North Arcot ...	331	...	...	
Ramnad ...	...	1,014	...	
Salem ...	587	...	...	
South Arcot ...	370	151	...	
South Kanara ...	450	...	...	
Tirunelveli ...	...	97	...	
Tiruchirappalli ...	...	33	...	
West Godavari ...	4,422	1,767	799	

## APPENDIX G.

## Millets.

Collections under levy scheme from April to November 1944.

Name of District.	Collections. Maunds.	Name of District.	Collections. Maunds.
1. Anantapur ...	48,690	16. North Arcot ...	354
2. Bellary ...	4,459.5	17. Ramnad ...	423.5
3. Chingleput ...	exempt	18. Salem ...	76,463
4. Chittoor ...	Nil.	19. South Arcot ...	31
5. Coimbatore ...	10,775	20. South Kanara ...	exempt
6. Cuddapah ...	2,836	21. Tanjore ...	283
7. East Godavari ...	Nil	22. Tiruchirappalli ...	Nil.
8. Guntur ...	30	23. Tirunelveli ...	21,496
9. Krishna ...	Nil.	24. Vizagapatam ...	219
10. Kurnool ...	1,57,734	25. West Godavari... ..	313
11. Madras ...	exempt		
12. Madurai ...	240		
13. Malabar ...	exempt		
14. Nellore ...	4,553		
15. Nilgiris ...	exempt		
Estimated demand (Statistical)	100,000 tons.		
Collections:	12,083 tons.		
		Total ...	3,28,900 maunds. or 12,083 tons.

## APPENDIX H.

*Stocks—Provincial figures—Figures in tons.*

Week ending.	Rice.	Millets.	Wheat.	Wheat products.	Maize.	Barley.
February.						
23— 2—46	353560	...	7921	...	...	...
March.						
7— 3—46	384999	...	10568	...	...	...
14— 3—46	297905	...	9597	...	...	...
21— 3—46	435682	...	9741	...	...	...
28— 3—46	358839	21657	9887	...	...	...
April.						
4— 4—46	477765	21800	9887	...	...	...
11— 4—46	474491	22545	9189	...	...	...
18— 4—46	474137	24126	8586	...	...	...
25— 4—46	455245	24226	7358	...	...	...
May.						
2— 5—46	448283	25798	6500	...	...	...
9— 5—46	477937	26636	7906	...	...	...
16— 5—46	455533	26615	11667	...	...	...
23— 5—46	450038	26280	11411	11313	...	...
30— 5—46	444436	27087	18844	14006	...	...
June.						
6— 6—46	429258	26430	14766	15998	...	...
13— 6—46	412439	26291	13204	15465	...	...
20— 6—46	390647	26440	11996	14194	...	...
27— 6—46	390638	25887	14454	12599	...	...
July.						
4— 7—46	379638	27280	24518	12875	...	...
11— 7—46	352908	24409	19990	13410	...	...
18— 7—46	347657	26062	35653	16885	...	...
25— 7—46	342699	25740	40916	16374	...	...
August.						
1— 8—46	325374	28930	39826	14836	3261	...
8— 8—46	339146	29876	33227	12662	12434	...
15— 8—46	333270	28709	29376	8897	20002	...
22— 8—46	310660	26553	22981	6999	22835	...
29— 8—46	288748	26694	31066	6569	22433	...
September.						
5— 9—46	269417	25934	33688	7858	23525	...
12— 9—46	244660	26047	31935	9131	23583	...
19— 9—46	223812	25890	30415	9172	23263	...
26— 9—46	199974	27873	28094	9196	23046	...
October.						
3—10—46	180524	28986	26836	7146	26137	...
10—10—46	173067	30943	26546	7893	29072	...
17—10—46	174056	30439	22657	7328	26676	...
24—10—46	186105	29698	19711	8651	23778	...
31—10—46	226467	28576	16104	9795	34585	1845
November.						
7—11—46	259490	27704	14019	9998	41881	2494
14—11—46	263367	26624	14225	8898	42726	2904
21—11—46	250145	28654	27410	8107	41467	3583
28—11—46	227932	22986	40101	8098	39103	3843

## APPENDIX H—(cont.)

Week ending.	Rice.	Millets.	Wheat.	Wheat products.	Maize.	Barley.
<b>December.</b>						
5—12—46	218896	22739	43022	8947	34874	3992
12—12—46	191787	22164	37121	7784	32471	4277
19—12—46	185042	10918	32028	7464	26828	4561
26—12—46	176577	18690	27480	6589	24012	4570
<b>January.</b>						
2—1—47	173016	17395	24168	6589	23480	4172
9—1—47	185578	17623	20849	6546	23161	3808
16—1—47	195593	17824	18756	6017	18530	4369
23—1—47	183796	17595	15660	5545	17256	4316
30—1—47	191134	16842	13814	5291	15532	4141
<b>February.</b>						
6—2—47	188503	16012	11582	4691	13790	4223
13—2—47	188613	15337	9862	4470	11874	4061
20—2—47	196709	14851	8855	4292	11931	3962
27—2—47	206588	14284	7884	4036	11409	3257
<b>March.</b>						
6—3—47	230239	15342	7463	3584	10694	2644
13—3—47	251643	15695	6906	3502	9223	2062
20—3—47	264267	15695	6521	3147	8756	1848
27—3—47	290045	16328	5898	3178	7813	1644
<b>April.</b>						
3—4—47	280255	16129	5444	2908	6848	1369
10—4—47	276044	17317	5317	2829	4495	1319
17—4—47	271026	21349	4953	2745	6277	1236
24—4—47	265212	22077	4689	2718	6207	961
<b>May.</b>						
1—5—47	255364	21464	4651	2357	6086	871
8—5—47	243694	21890	4388	2067	5185	812
15—5—47	242348	21693	4014	1774	4697	751
22—5—47	237798	21970	3771	1546	4106	713
29—5—47	240289	23206	3371	1378	3411	669
<b>June.</b>						
5—6—47	245534	24475	3225	1314	3112	617
12—6—47	243761	24396	3094	1278	3006	593
19—6—47	234112	24079	2696	1055	2646	565
26—6—47	224467	23333	2645	1024	2432	516
<b>July.</b>						
3—7—47	212676	13133	2516	871	2047	405
10—7—47	199477	24161	2365	826	1859	422
17—7—47	190916	25796	1907	744	1735	406
24—7—47	184235	26679	1705	680	1485	380
31—7—47	184680	27326	1606	532	1290	343
<b>August.</b>						
7—8—47	179885	29410	1399	434	1127	308
14—8—47	180116	27479	1104	379	974	285
21—8—47	166271	25696	1022	314	869	270
28—8—47	153378	23653	951	272	749	218
<b>September.</b>						
4—9—47	147433	21281	979	248	501	192
11—9—47	144995	19753	1491	227	797	158
18—9—47	140408	18462	1391	171	714	147
25—9—47	143286	78041	1177	135	625	138

## APPENDIX H—(cont.)

Week ending.	Rice.	Millets.	Wheat.	Wheat products.	Maize.	Barley.
<b>October,</b>						
2—10—47	152888	17816	985	804	598	140
9—10—47	163959	17436	2264	308	529	187
16—10—47	178542	17131	2544	384	362	192
23—10—47	178427	15940	2847	390	344	129
30—10—47	197971	16994	1526	391	384	113
<b>November.</b>						
6—11—47	221887	14248	4661	328	297	108
13—11—47	213285	15390	6840	291	275	91
10—11—47	193866	16098	6703	235	269	85
27—11—47	175922	14362	7228	207	233	81
<b>December,</b>						
4—12—47	158638	13234	8237	167	215	73
11—12—47	143297	11427	4959	226	139	61
18—12—47	128029	10041	7222	418	163	55
25—12—47	114962	8683	6693	399	159	53
<b>January 48.</b>						
				The figures for wheat products included under wheat.	Figures of maize included under other grains.	...
3—1—48	108858	8204	6371			...
10—1—48	116213	11966	5981			...
17—1—48	122214	18852	6606			...
24—1—48	141208	15376	5723	333	20104	...
31—1—48	165505	16368	5623	401	21612	...
<b>February.</b>						
7—2—48	194473	15834	5727	438	24026	...
14—2—48	211806	15106	5172	604	27680	...
21—2—48	241755	14778	5039	536	29761	...
28—2—48	261141	14636	4925	497	37170	...
<b>March.</b>						
6—3—48	279518	12222	4773	454	43273	...
13—3—48	294006	12166	4672	616	47882	...
20—3—48	310276	12317	4627	834	47758	...
27—3—48	325762	14921	4933	779	45507	...
<b>April.</b>						
3—4—48	331734	18684	4314	751	61263	...
10—4—48	351522	20193	4108	708	66881	...
17—4—48	369573	20408	5261	661	66164	...
24—4—48	302553	20869	5868	608	72535	...

## APPENDIX H—(cont.)

Week ending.	Rice.	Millets.	Wheat.	Wheat products.	Maize.	Barley.
<b>May.</b>						
1— 5—48	385642	22485	6116	550	78607	...
8— 5—48	389809	23128	9110	522	79574	...
15— 5—48	393133	23039	13632	426	75943	...
22— 5—48	403134	22306	15610	467	71316	...
29— 5—48	410726	21554	17412	407	68399	...
<b>June.</b>						
5— 6—48	404671	19483	17780	392	65999	...
12— 6—48	398075	17909	17274	322	63894	...
19— 6—48	396011	16501	16027	236	59998	...
26— 6—48	393811	15667	15079	260	52589	...
<b>July.</b>						
3— 7—48	384635	13713	16032	1579	47771	...
10— 7—48	388017	14161	15700	2569	43420	...
17— 7—48	384182	15440	10987	2782	35941	...
24— 7—48	368937	14919	16255	2845	31605	...
31— 7—48	341992	12786	16838	2776	27215	...
<b>August.</b>						
7— 8—48	322224	9931	17485	2815	25503	...
14— 8—48	299889	7632	17907	2841	22339	...
21— 8—48	279766	6563	17381	2795	19115	...
28— 8—48	265840	5496	16686	2736	16326	...
<b>September.</b>						
4— 9—48	241544	4305	13945	2686	16821	...
11— 9—48	222647	6252	12806	2577	12570	...
18— 9—48	210566	8319	11562	4487	12715	...
25— 9—48	198254	9138	10388	2410	11395	...
<b>October.</b>						
2— 10—48	196989	9042	9567	2782	10145	...
9— 10—48	184911	13618	9079	2785	10009	...
16— 10—48	189584	17196	8976	3414	9117	...
23— 10—48	195192	17423	8674	3501	8356	...
30— 10—48	205046	15215	9892	3397	7425	...
<b>November.</b>						
6— 11—48	208298	13591	11660	3272	7243	...
13— 11—48	198959	11068	10933	3513	6468	...
20— 11—48	195150	8332	10046	4017	5887	...
27— 11—48	187331	7999	8564	4871	5083	...
<b>December.</b>						
4— 12—48	183171	9420	8857	5421	4449	...
11— 12—48	174986	13317	7993	5570	4060	...
18— 12—48	172852	16746	8754	5649	3453	...
25— 12—48	170429	16532	9178	5324	3133	...

## APPENDIX H—(cont.)

Week ending.	Rice.	Millets.	Wheat.	Wheat products.	Maize.	Barley.
January 49.						
1— 1—49	182400	15232	9685	6420	2752	...
8— 1—49	202944	14053	9116	7506	2569	...
15— 1—49	215722	14154	11225	3428	2124	...
21— 1—49	225940	16317	11049	4583	2101	...
29— 1—49	251000	23824	11366	4505	1955	...
February.						
5— 2—49	285095	29736	11254	3661	1591	...
12— 2—49	314094	30497	12812	3502	1446	...
19— 2—49	351521	29830	13038	3343	1273	...
26— 2—49	383684	27597	12349	3096	1197	...
March.						
5— 3—49	425481	27008	10940	2805	1102	...
12— 3—49	441266	26337	9599	2574	925	...
19— 3—49	456911	25884	8080	2379	766	Semolina 3577
26— 3—49	475028	24170	8867	2193	1701	3213
April.						
2— 4—49	498794	25040	11298	2335	2480	3502
9— 4—49	502352	24940	13459	2921	3897	3885
16— 4—49	497961	23884	14144	2805	3369	3933
23— 4—49	491920	23694	17285	2527	3260	4003
30— 4—49	483960	22608	21757	2394	4571	3739
May.						
7— 5—49	478244	22612	21236	2253	6163	3690
14— 5—49	468376	22595	21154	2073	5712	3392
21— 5—49	455669	22236	20107	1879	5990	3744
28— 5—49	451553	22173	21433	1325	4856	3821

## APPENDIX I.

Statement showing monthly off-take of rice, wheat, wheat products, and millets in the Province of Madras (Figures relate to entire month).  
(All in tons.)

Month.	Rice.	Wheat and Wheat products.	Millets.
April 46	113041	1973	8034
May 46	144414	3475	11582
June 46	144313	13179	14051
July 46	164490	22646	15985
August 46	149335	42226	25547
September 46	141341	36034	27171
October 46	141619	30172	30415
November 46	145810	24706	31255
December 46	142468	24080	27493
January 47	137736	13296	19553
February 47	116451	5908	13830
March 47	139369	5475	11858
April 47	142142	2359	12508
May 47	148691	2302	14355
June 47	137551	1836	13796
July 47	128808	1385	14939
August 47	126050	1415	21228
September 47	118610	1214	21212
October 47	114719	1278	18337
November 47	118504	1091	17199
December 47	114449	3456	13760
January 48	65860	1149	4594
February 48	51177	740	4723
March 48	39745	503	2250
April 48	37623	655	10785
May 48	48345	1182	17923
June 48	68833	3488	27578
July 48	101099	9402	34352
August 48	106173	6855	19339
September 48	89637	6015	10916
October 48	84240	2332	14174
November 48	72241	3694	11839
December 48	90558	4782	10603
January 49	86558	4767	9425
February 49	80244	5661	10952
March 49	79056	4845	10620
April 49	94608	4976	13601

\* Includes maize also.



## APPENDIX J.

Statement showing monthly issues of rice, millets, wheat, wheat products and maize in Madras Province (figures relate to entire month.)

Month.	Rice.	Millets.	Wheat.	Wheat products.	Maize.	Re- marks.
1946—						
April ...	186966	11739	5045	...	...	
May ...	194565	14918	6229	...	...	
June ...	191426	13974	13418	6128	...	
July ...	185991	18105	22191	10188	...	
August ...	166476	17758	37831	12184	10139	
September..	150025	17802	34833	7219	15919	
October ...	146578	21645	28986	4543	18154	
November...	163086	18817	20859	4793	18518	
December...	142750	13773	26200	4191	20473	
1947—						
January ...	143376	9018	10890	2162	8783	
February...	129696	7542	8413	1457	4947	
March ...	152300	9298	21740	1696	4155	
April ...	150890	11371	1711	937	2584	
May ...	149045	11559	1454	920	3078	
June ...	133307	10506	933	417	1172	
July ...	181989	117296	1486	437	1071	

## APPENDIX K.

Statement showing the average calorific value of the diet of an adult in this Province.

Name of the food-stuff	Normal consumption	Calorific value per ounce.	Calorific value per ton.	Calorific value of normal consumption per diem in millions.
(1)	(2)	(3)	(4)	(5)
	Tons.			
Rice ...	4,762,000	99	3,548,160	46,291.84
Other food-grains ...	2,840,000	100	3,584,000	27,886.47
Pulses and grains except horse-gram	406,200	98	3,512,320	3,908.78
Fruits, and vegetables including root-crops.	3,007,700	12	430,080	3,543.98
Sugarcane including sugar	348,700	103	3,691,520	3,526.67
Groundnut ...	791,000	155	5,555,200	12,038.80
Other oil seeds (Gingelly and castor)	101,100	160	5,734,400	1,588.35
Meat and fish ...	206,460	40	1,433,600	810.91
Other foodstuffs ...	385,800	50	1,792,000	1,894.12
Milk ...	1,893,500	24	860,160	4,462.23
Total ...	14,742,460			105,951.65

Average per adult per diem =  $1,05,95,16,50,000 \div 42,817,000 = 2,474.5$ .

## APPENDIX L.

Procurement of Rice in the years 1944-45 to 1948-49 compared with production. (All in tons.)

District.	1944-45 Nov. 44 to Oct. 45.		1945-46 Nov. 45 to Oct. 46.		1946-47 Nov. 46 to Oct. 47.		1947-48 Nov. 47 to Oct. 48.		1948-49 Nov. 48 to Oct. 49.	
	Production. (2)	Procurement. (3)	Production. (4)	Procurement. (5)	Production. (6)	Procurement. (7)	Production. (8)	Procurement. (9)	Production. (10)	Procurement. (11)
1 Anantapur ...	53510	...	22780	428	59540	4648	57620	902	39170	1848
2 Bellary ...	15010	...	9190	279	19010	1564	18600	211	14770	1078
3 Chingleput ...	268740	10509	174180	21657	266190	62606	145320	1824	110480	11572
4 Chittoor ...	147480	2120	74010	4628	112920	19108	61640	592	63190	6560
5 Coimbatore ...	70190	17612	59500	23448	71110	23974	67800	4286	64160	21407
6 Cuddapah ...	67160	50	39220	1511	59880	5485	50390	698	84810	3294
7 East Godavari ...	358320	*	842310	100992	818250	91741	370980	104565	861600	97056
8 Guntur ...	229860	78991	225920	77465	187850	52084	217750	49918	218420	89195
9 Krishna ...	802630	137870	314950	180150	327300	157751	323840	145847	326680	197086
10 Kurnool ...	88420	...	28860	519	35040	1965	40740	145	84160	1860
11 Mathuraj ...	228420	...	165460	31940	197200	67024	177820	9399	178110	40908
12 Malabar ...	901170	89873	328300	83417	329310	92614	276680	63218	320930	84733
13 Nellore ...	209340	10086	126570	57597	172000	51694	137620	39879	151630	56489
14 North Arcot ...	274030	222	167100	12810	268110	45558	186980	1468	117770	8856
15 Ramnad ...	212590	34647	101170	15745	202880	32538	66060	996	123680	9168
16 Salem ...	138400	...	94080	6720	127460	24352	101840	3817	78350	6191
17 South Arcot ...	282000	19061	230380	56914	286860	73451	209240	20322	176000	45100
18 South Kanara ...	241740	58627	265590	60560	286010	56567	284700	35533	261970	43099
19 Tanjore ...	614660	321502	583250	282253	557440	282469	609830	265384	655160	309365
20 The Nilgiris ...	3590	420	3300	563	3380	603	2120	606	3320	516
21 Tirunelveli ...	184230	41881	164630	45258	205860	48833	118860	7278	196790	40492

22 Thuchirappalli.	182910	20139	139650	42434	168410	53589	144450	11756	169850	84745
23 Visakhapatnam.	261380	29060	250750	86611	267680	41277	394870	1468	281590	24791
24 West Godavari	384380	247856	329170	172601	417810	207975	419490	131483	402940	230389
Total ...	5053990	1025916	4241500	1313895	4919450	1498465	4929640	947540	4284460	1364528

\* Quantity shown against West Godavari includes the quantity from East Godavari.

**APPENDIX M.**  
*Procurement of Millets in the years 1944-45 to 1948-49 compared with production.* (All in tons.)

District.	1944-45 Nov. 44 to Oct. 45.		1945-46 Nov. 45 to Oct. 46.		1946-47 Nov. 46 to Oct. 47.		1947-48 Nov. 47 to Oct. 48.		1948-49 Nov. 48 to Oct. 49.	
	Produ- tion. (2)	Procu- re- ment. (3)	Produ- tion. (4)	Procu- re- ment. (5)	Produ- tion. (6)	Procu- re- ment. (7)	Produ- tion. (8)	Procu- re- ment. (9)	Produ- tion. (10)	Procu- re- ment. (11)
1 Anantapur ...	159750	...	81500	29297	121280	7588	188940	2672	152530	4728
2 Bellary ...	197680	...	100180	7450	162130	11833	192310	2697	183140	7854
3 Chingleput ...	30590	...	21110	290	33569	1269	26510	214	28240	230
4 Chittoor ...	85210	...	71250	3972	83510	4663	57880	885	69750	2809
5 Coimbatore ...	271920	15866	222430	15166	208670	19646	181720	8322	219730	8759
6 Cuddapah ...	189410	...	99170	4101	99370	3830	123110	900	120680	2839
7 East Godavari ...	41990	...	36230	4210	36840	1863	83720	339	34420	520
8 Guntur ...	187590	...	192220	4194	151090	2721	225370	890	207830	2965
9 Krishna ...	59820	...	54780	1888	53090	1119	56560	550	59420	675
10 Kurnool ...	196390	...	157690	15503	183180	10883	183180	1138	221190	6855
11 Mathurai ...	150160	...	117840	7364	136760	7202	94280	553	128920	7488
12 Malabar ...	5950	613	4820	48	3620	50	2380	16	3070	13
13 Nellore ...	189850	...	194290	8927	139220	2790	164190	2522	176410	3259
14 North Arcot ...	83770	...	75290	453	79950	1643	79750	166	86610	1800
15 Ramnad ...	101070	2689	57960	4980	70160	3690	30920	288	74490	1518
16 Salem ...	269790	...	239940	5211	225770	19977	168390	3650	191590	6639
17 South Arcot ...	97720	646	106940	4933	108330	5098	76000	669	90250	4911
18 South Kanara ...	2490	6	2430	10	2380	3	3380	..	2360	2
19 Tanjore ...	14120	...	12960	3084	13180	524	7810	252	11060	202
20 The Nilgiris ...	2860	682	2450	220	2080	164	1950	139	3310	180
21 Tirunelveli ...	89680	3887	68510	7308	65560	4976	57200	214	84640	4104

22 Tiruchirap- palli	158860	...	132980	6995	122200	5441	116410	691	153490	4610
23 Visakha- patnam.	184040	3288	125860	4441	118050	4895	113880	2022	121890	3644
24 West Godavari	19490	...	18870	4199	19880	1814	17040	652	16890	516
Total ...	2674100	27472	2126640	116789	2191380	128647	2150460	25381	2440910	77165

