LEAGUE OF NATIONS

REPORT ON
ECONOMIC CONDITIONS
IN RUSSIA

WITH SPECIAL REFERENCE TO
THE FAMINE OF 1921-1922
AND THE STATE OF AGRICULTURE
Chapter III.

THE FAMINE OF 1921

The serious situation revealed by the results of the 1920 harvest led to considerable activity in the autumn of that year in the formation of "sowing committees" throughout Central Russia and the south-eastern provinces. It is claimed that in some cases the efforts of these committees were so successful that there was actually an increase over the area sown for the harvest of 1920. But unfortunately, any such success was more than counterbalanced by the continued influence of the causes which had already reduced the cultivated area of Russia, and although the area was slightly increased in the consuming provinces, it fell considerably in the producing regions of Central Russia and the Middle and Lower Volga; in the districts particularly affected by what we have called the partial famine of 1920 it dropped by 25%. Taking the figures of the Central Statistical Bureau the sown area for the whole of Russia (excluding the Caucasus and Turkestan) fell from 57 million dekarov to 49 million dekarov in 1921 (1). In spite of the abnormal conditions of drought in the Volga and Southern Ukraine provinces, the yield for the whole of Russia was actually better than in 1920. But the reduction of sown area was so serious that the total supply available for consumption fell from 1,748 to 1,662 million puds.

There was thus a fresh reduction which, even if the harvest could have been distributed with perfect equality, would have involved reduced consumption. But the decline was very unevenly distributed, and in particular was concentrated upon the agricultural territory of the Lower and Middle Volga, in the part of South-West Siberia adjacent to the frontier of European Russia and in the South-West Ukraine on the northern and north-western shores of the Black Sea. The Volga area is the most important, since it contains the greater part of the famine-stricken population and includes some of the most productive grain-growing provinces of Russia. Indeed, one of the most significant features of the situation was that the worst effects of famine were felt in regions which are ordinarily areas which have a surplus to send either to North Russia or to foreign countries. In Russian statistics a distinction is commonly drawn between the consuming

and the producing areas, that is to say, provinces which are unable and those who have sufficient production to allow them to export respectively. The harvest for the chief cereals analysed by districts shows the following changes between 1916, 1920 and 1921:

<table>
<thead>
<tr>
<th>District</th>
<th>1916</th>
<th>1920</th>
<th>1921</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>1916</td>
<td>1920</td>
<td>1921</td>
</tr>
<tr>
<td>Russia</td>
<td>100%</td>
<td>90%</td>
<td>80%</td>
</tr>
<tr>
<td>South-Eastern</td>
<td>120%</td>
<td>100%</td>
<td>90%</td>
</tr>
<tr>
<td>Siberia</td>
<td>80%</td>
<td>90%</td>
<td>100%</td>
</tr>
<tr>
<td>Ukraine</td>
<td>120%</td>
<td>110%</td>
<td>120%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>90%</td>
<td>80%</td>
</tr>
</tbody>
</table>

These figures show that the Soviet Government's sowing campaign succeeded in maintaining the area in the North, and that an improvement in the yield per dekarov gave them a surplus available for assisting the more distressed regions. In the producing areas, on the other hand, there was a reduction both in the area sown and the yield per dekarov; the latter figure falling to half the normal yield before the War.

So far as the Ukraine is concerned, the official statistics show that for the whole of the territory the harvest of 1921 was about as good as for the preceding year, though details reveal that the southern provinces experienced a very severe deficiency. The reports received by the workers of the International Russian Relief Commission however suggest that the official figure for the area is far too optimistic. This view is supported by the report of the President of the foreign Delegation of the Ukraine Famine Relief Commission and the figures of the Ukrainian Government. These show a crop of 798 million instead of 581 million puds (2).

But grouping in these large areas (which, in the case of the "producing areas" includes 62 million puds per district) does not show the full extent of the severity of the famine in particular districts. In the Middle and Lower Volga the rainfall between October 1st and June 30th is normally about 14 inches, but in 1920-1921 the total rainfall including snow amounted to only 2 3/4 inches, most of which fell early in the year. Crops in this area depend in the main upon the rainfall in the months of May and June, and on this occasion there was practically no rain at all (3). In the 20 provinces and republics most severely affected, viz., Viatka, Tartar Republic, Chuvash, Mari Territory, Simbirsk, Saratov, the German Commune, Astrakhan, Kirghiz, Samara, Ufa, Tsaritsyn, Bashkir, Crimea, Eskatiernburg, Votyak, Stavropol, Ekaterinoslav, Zaporozyche and Nikolaev, the total yield of all crops amounted only to 180 million puds, compared with 1,240 million puds in the

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(1) See also note (2) on p. 204.

(2) As indicating a disparity between various Soviet estimates, it is worth noting that Khrushchev's, an economist attached to the People's Commissariat for Agriculture's estimates the area for 1921 to 550 million dekarov the Agricultural and Forestry Bureau, November 1921, and published by the People's Commissariat for Agriculture. Both Khrushchev and Pope's figures referred to above.

(3) See note (3) on p. 204.
period preceding the War [1]. The yield fell to 1143 pecks per dekret, a figure which on the average leaves only two or three pecks in excess of sowing requirements. But clearly signifies that many areas had no surplus at all over seed requirements, and indeed plunged into the land. Bearing in mind that 1920 produced very much less than half a normal crop, the following comparison between the two years 1920 and 1921 for those particular areas tells its own story (2). The regions of famine are indicated on the map attached in Annex XII.

<table>
<thead>
<tr>
<th>Area</th>
<th>1920</th>
<th>1921</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vatrivka</td>
<td>2,942</td>
<td>1,127</td>
<td>5,276</td>
</tr>
<tr>
<td>Czernivka</td>
<td>8,929</td>
<td>1,824</td>
<td>11,039</td>
</tr>
<tr>
<td>Hutnik</td>
<td>77,822</td>
<td>7,007</td>
<td>84,832</td>
</tr>
<tr>
<td>Sambir</td>
<td>1,408</td>
<td>1,217</td>
<td>3,626</td>
</tr>
<tr>
<td>Lutsk</td>
<td>5,443</td>
<td>1,195</td>
<td>8,638</td>
</tr>
<tr>
<td>Gomel</td>
<td>2,977</td>
<td>1,458</td>
<td>4,436</td>
</tr>
<tr>
<td>Grodno</td>
<td>1,974</td>
<td>1,170</td>
<td>3,144</td>
</tr>
<tr>
<td>Białystok</td>
<td>2,979</td>
<td>1,072</td>
<td>4,052</td>
</tr>
<tr>
<td>Białystok</td>
<td>3,979</td>
<td>1,172</td>
<td>5,151</td>
</tr>
<tr>
<td>Brzeg</td>
<td>1,501</td>
<td>1,022</td>
<td>2,523</td>
</tr>
<tr>
<td>Toruń</td>
<td>3,409</td>
<td>1,159</td>
<td>4,568</td>
</tr>
<tr>
<td>Breslau</td>
<td>1,897</td>
<td>1,088</td>
<td>2,985</td>
</tr>
<tr>
<td>Kraków</td>
<td>2,979</td>
<td>1,184</td>
<td>4,163</td>
</tr>
<tr>
<td>Poznań</td>
<td>1,979</td>
<td>1,182</td>
<td>3,161</td>
</tr>
<tr>
<td>Gdańsk</td>
<td>2,490</td>
<td>1,389</td>
<td>3,879</td>
</tr>
<tr>
<td>Warsaw</td>
<td>25,544</td>
<td>27,890</td>
<td>53,434</td>
</tr>
</tbody>
</table>

In many districts the harvest failure produced an instantaneous effect. Those who had supplies were anxious to retain them, and distress began to appear in July and August of 1921. But the area of the famine steadily spread and reached a crisis as supplies became totally exhausted.

There are no really satisfactory figures showing the variation in the number of famine-stricken persons from month to month, but it will be seen from the detailed reports which follow that the famine reached its maximum intensity in about April or May of 1922 and that thereafter it began to subside as spring vegetables began to become available.

A phenomenon which is a common feature of famines at once appeared, namely, the migration of the population in search of food. This occurred chiefly at two periods: first, immediately after the harvest from villages where there had been a complete failure, and, secondly, in the late spring of 1922 after the melting of the snows. As regards the first movement, the Official Bulletin of the Central Russian Famine Relief Committee states that about 5,000 persons were massacred by the Government from the famine provinces between July 1st, 1921, and April 1st, 1922. Kalinin stated at the Ninth All-Russian Congress of Soviets in December 1922 that in addition to these numbers about 600,000 persons had migrated independently. It is, however, possible that some of this movement was the normal migration at harvest-time.

It is estimated that, at its worst, perhaps half of the population defined as famine-stricken were relieved either under the agency of the Soviet Government or the American or International Relief Organisations. The difficulties of organizing from abroad, however, meant that, in fact, the work of these external agencies did not reach its maximum at an early date. It will be seen that the figures for July of this year show the largest number of persons fed from abroad during the famine. Throughout the period of the

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(1) The figures of the Ukrainian Famine Relief Committee in the famine provinces are not included, and the figures for population in certain provinces not covered by the Committee are not included in the present official statistics of the Soviet Union, as shown by these statistics do not agree; partly being reported in separate sections.

(2) The high figures of the end of 1920 are due to the famine in the Donets Basin.
famine diseases which had been epidemic during the whole period of the Revolution and after the normal subsidence in the summer of typhus, a serious suffering in July. It did not, however, at one time feared. In the late summer immediately preceding the harvest, the Soviet medical relief work somewhat declined, and it is reported that in Southern Russia through inability to find food for patients and staff. Various aspects of the famine situation are dealt with more fully below.

Two main areas need to be described in any account of the famine, namely, the Middle and Lower Volga and the Southern Ukraine. These call for separate treatment not merely because the latter is administratively a separate Republic and that the Government at Moscow on famine policy, but also because economically the two districts are somewhat distinct; whereas many parts of the Volga area give comparatively high crops and are purely agricultural, the Ukraine contains some of the richest territory in Russia. Nevertheless, it will be recalled from the following statement that the causes of the famine and the conditions accompanying it have been the same in both cases.

The Volga Provinces.

In the Interim Report of the State Economic Planning Commission on Agriculture in the famine area, S.P. Sereda (1), the President of the Commission, indicates in a brief sketch of the district that the weakness of the agricultural position which we have described in this report for the whole of Russia are specially present in this part of the country.

The acuteness of the crisis and its extraordinary extent this year, but are partly dependent upon social and economic conditions. The agricultural area in this part of the country is a particularly arid one. It contains a vast extent of cultivable land. Good harvests in favourable years, and a vigorous demand for cereals (especially for wheat) have in conjunction with the foregoing circumstances, promoted the development of an extremely low level of agricultural technique.

(1) Formerly People's Commissioner for Agriculture, in the Soviet Government.

(2) P. Balitsner, Observations on Concentrated Vegetables, made in the year 1911 at Barakh neighbourhood (Samara Province).
their windows white leaves and cakes and point to a state of famine. But shortly of fine stature, but gaunt and emaciated after the other, their eyes covered with a rigidity of complete exhaustion. They were
down by the banks of the Volga a few stood grouped together, migrating some to from where they had settled in Siberia to the harvest was good. Their children played
in a refugee barracks on the outskirts of Saratov, Mr. Webster found about 150 refugees from the Trans-Volga provinces. The few children among them were mere skin corpses lay within. A communist doctor, conditions, was making a great stir about a central kitchen block, where soup could have not a single bottle was in operation. The
black bread per day, and an additional pension if they did any work. Most of them prefer appeared too weak to be capable of much work.
So far as children's feeding kitchens were concerned, both in the town of Stratov and elsewhere in the province, they were found without exception to be clean, and at the homes where the children were under the invariably good and the children and rooms ing had been good and sufficient, they would be lay along the road, and a man was found cutting up the carcass for meat. Peasants cases selling their last cow in order to buy bread. Fields which had obviously been ploughed in the previous spring were a mass of weeds, while in some places the harvest had been so sparse that the peasants had not troubled to gather it, but had just ploughed the ground afresh, and thus sowed their harvest as it stood. Large pots, usually full
In a peasant's house, in a wayside hamlet, Mr. Webster saw four children. There was no bread in the house, and the only food dried, preparatory to being ground for food. Dried, preparatory to being ground for food. The rallers were had two bowls of milk, but expected to have others meat at half Moscow prices did not afterwards Mr. Webster met three peasants, to a degree, dragging one leg with difficulty curious film, staring straight ahead with the was clearly in an advanced state of starvation. Tartars, German colonists and Ukrainians Turkestani or Siberia, and the Ukrainians their own country, where they had heard that in the river mud and ate the skins of water melons.
was a heap of dried thistles. A daughter was away, begging potatoes in the next village. Before his horse died, he had managed to save three desultories of land. He admitted with embarrassment that out of 6 potatoes he had kept back about twenty pounds (about half a pound) for food. It was all he had till next harvest.
A trip up the Volga showed many crowded passenger boats, oil barges going upriver, and water rafts floating down, but no grain movement, which usually forms the bulk of the traffic in the autumn. In Khvalinsk starvation was so bad that many had fled from the district, while deaths from starvation were of daily occurrence. The people were, however, busy sowing, having just obtained their seed, and where there were no horses, they were turning over the soil with spades, and working through the night by the light of lanterns.
Conditions in the Saratov area where Mr. Webster wrote his report of November 10th, were becoming more acute. The misery and privations of vast numbers of people had already passed beyond the power of description. The refugee movement, although it had assumed reduced proportions, was still such that numbers of people, whose wanderings made it difficult to organize any substantial relief for their children, remained in the most desperate plight. One thousand five hundred children were being fed by the Save the Children Fund, but they were housed under terrible conditions, and the death-rate among them was extremely high. The local authorities had increased the bread ration to one pound a day, in addition to thick soup made of potatoes and cabbage. "This, Mr. Webster wrote, "is hardly necessary to add, is merely an episode. Here and there, a little is being done, and individual distress is being alleviated, but the total misery and distress and collapse are so general as to be far beyond the scope of any charitable effort. Even in the immediate vicinity of Saratov itself, may be seen the depression of desolation, where, in mud and ruins and hovels which serve as human homes, but are used even for animals, hungry dogs may be seen feeding furtively on the carcasses of horses fallen by the wayside, and even the human face is blighted with an appearance of terror and horror that makes it almost brutal!"
Nowhere in the famine area were conditions worse than in the Bunbuluk County of the Samara Province, where the principal centre of the relief work of the Society of Friends was established. Miss Ruth Fry, writing from Bunbuluk in January 1922, describes the deaths from starvation which were of frequent occurrence in the streets of the town and heaps of bodies at the cemetery awaiting common burial. The children's homes were crowded far beyond their capacity, so that there was not room for them all to lie down, and some stood huddled against the wall. In some cases they had a few poor bedsteads, or a wooden platform raised high from the ground, so that two tiers of children could be packed in. Clothes were as non-existent as food, and in most cases the children had to be left in their verminous rags, spreading the infection of typhus. So great was the loss in horses and camels in the Bunbuluk area that Mr. Frank Watts, the head of the Society of Friends Relief Mission there feared, in June 1922, that it would be very difficult to gather the coming harvest, or the wood and forage necessary for the winter. It would not be possible, in Mr. Watts' opinion, to supply sufficient food to keep alive through the winter the seven thousand orphans at present in children's homes.
The general state of health throughout the district was bad, and large numbers of people were suffering from dysentery, and also from swelling caused by eating grass. Relief workers arriving in the area in June considered that present conditions were worse than anything they had ever seen, although Mr. Watts and his fellow-workers were of opinion that the position was better than it had been.

The German Red Cross Mission in Kazan in November 1921 found that the lack of primary necessities—food, fuel, linen, bedding, etc.—robbed medical work of all its effect. The water-supply was available only in the evening and then only for a part of the buildings. In the workmen’s hospital, the patients were lying in dirty, dark, unheated cellars, fully dressed, on their camp beds, for lack of bedding. Tuberculosis, spotted typhus, and recurrent fever, and the room in the hospital, five or six human beings, were lying motionless on the ground, covered with rags. In the middle of the room, a naked corpse lying reserved for refugees picked up in the streets of Kazan was dying of weakness. Those in this room were not fed because it was not worth the time to come and succumb daily to hunger and epidemic, which was, indeed, of bread, to appease their hunger. Cases of cannibalism were also registered.

A similar state of destitution is described by the local Soviet authorities in the Taurida Province, where relief work has been carried on by the local Soviet authorities. The situation in the province during the autumn of 1921, and of this number 299,200 were regarded as the snow, for example, reaping machines, for one of which, worth 230 pounds of grain, the owner would receive a single pound of grain, and he could find a purchaser for it. I was shown one or two of the few horses remaining in the village. Their condition was pitiable; they were fed upon thieft from the roof of a barn which had been pulled down for this purpose.

The President gave me a copy of the mortality statistics for the month of December, drawn up by himself for his Volost. Twelve children died of starvation, 23 of disease, 25 adults died of starvation, 23 of disease, disease making a total of 83—an annual rate of 144 per thousand. The village cemetery contains several new graves, one of which holds 6 corpses.

“With a view to verifying the stocks held by this village, I visited the houses of the richer inhabitants and certain of those of the poorer farmers. The richest man in the Commune served for six years on the staff in the army, and I had the impression that he was an intelligent and capable man. His house, although empty, was clean and orderly. He possessed 70 deniers of land, and in normal times he had 10 to 12 horses and 7 to 8 cows. All that he had left was one horse and one cow, the latter being fed on the roots of trees, fodder being unobtainable. 800 pounds of grain were requisitioned from him in 1919. In 1920 a still larger amount was demanded, but he could only provide 200 pounds,

To this account may be added the following extracts from a report of Sir Benjamin Robertson, who visited the famine area in the spring of 1923 on behalf of the British relief organisations:

"The village of Prissimone lies on the west bank of the Volga, fifteen miles north of Saratov. It is the chief village of the "Volost" of the same name, and seems formerly to have been a prosperous place. Its population comprises about 700 inhabitants and that of the entire Volost is about 7,000 inhabitants, distributed over seven villages."

"I had an interview with the President of the Executive Committee of the Volost, a good type of soldier of the old army who served in Galicia. He was elected by popular vote, and his presidential monthly emoluments amounted to 400,000 rubles and two pounds of rice, but the felt boots that he was wearing, similar to those worn by the peasants, had cost him a month’s salary. He said that in the first years of the war the area under cultivation in his Volost was from 12,000 to 13,000 deniers. 2,500 deniers were sown last autumn, and it was hoped to sow 2,000 more in the spring, if they could obtain fodder to keep the horses alive, and a Government grant of seed. There were formerly 4,000 horses in the whole Volost; there remain only 300, 4,000 cows only 50 or 100 are still alive. The rest of the cattle has perished of starvation or were slaughtered for food. The President also gave me statistics of the village of Lipovich, where he lives. Out of 400 horses there remain only 12, ten of which are in fit condition and the journey to Saratov and back. The number of cows has decreased from 300 to 40. He himself owned six cows, but had to get rid of five owing to shortage of fodder. Not one of the four horses which he had owned was left.

"Several modern agricultural machines had been abandoned in the snow; for example, a reaping machine, for one of which, worth 230 pounds of grain, the owner would receive a single pound of grain, and he could find a purchaser for it. I was shown one or two of the few horses remaining in the village. Their condition was pitiable; they were fed upon thieft from the roof of a barn which had been pulled down for this purpose."

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because the area of his land under cultivation had decreased as a result of the previous requisition. His only stock of food-stuffs consisted of 1 1/2 pounds of rice bought at Smolensk with the money from the sale of a fur coat. His tea was made from tree bark and water-melon seeds.

“I selected as my example of the poverty of the houses of a widow with six children, four of whom were still in the village. Her food-supply consisted of a little barley obtained from a neighbour whose horse had died.

“I was shown a sample of bread eaten in the village; it consists of a mixture of rice, straw, bark and similar substances.

“The ‘Save the Children Fund’, which has been at work in the Volost for two months, maintains several kitchens, in which it feeds a thousand children. 200 out of a total of 350 children in Pristovce receive rations. Even the President of the Executive Committee of the Volost, who has nine months to feed, has to send his children to the kitchen.

“Two kitchen-columns in Pristovce contain a second kitchen managed by the Soviet, which feeds 150 adults and some children from a Children’s Home. The adults ration consists of 1/4 lb. of black bread and soup made from potatoes, with a little buckwheat, but they are not considered fully adequate for an adult.

“The only logical conclusion which can be drawn from an inspection of this village is one of complete economic ruin. The children who were fed at the kitchen seem to enjoy health, but signs of privation are noticeable among the adults, and it is difficult to foresee how, without foreign help, they will be able to get through the next months. Even when it arrives, the harvest will not be plentiful, in view of the restricted area under cultivation. The problem is thus still unsolved.”

“Palinovka lies about 7 versts north-west of Barulik. It is a large village having a population of 5,077 inhabitants, of which, on January 1st, had decreased to 5,008. This decrease is due to mortality and emigration—the latter chiefly to Tashkent.

“266 deaths from starvation and 12 deaths from typhus were registered from November 4th to January 16th. 70 houses are deserted that were in the autumn, but last year’s sow, and the Soviet authorities provided only enough seed rice to sow 162. The Soviet area of spring sewings is 4,000 dekstra, and the ploughed area is only 1,882 dekstra, which is not enough for the present moment, there is not enough seed. Last year’s crops varied from 6 to 2 acres to the dekstra.

“There were 1,500 horses in the village in January 1921, and 205 in January 1922. The number of cows has decreased in similar proportions from 3,000 to 1,699, oxen from 450 to 1,602, pigs from 1,000 to 500, and calves from 600 to 2, the number of sheep which was between 20,000 and 100,000 has fallen to 9,000. Poultry, previously very numerous, amounted to as much as 15,000 broods, but 5,000 broods were requisitioned.

“Three of the children were being fed at the kitchen, and all of them appeared to have any chance of recovery. The food in the house was a horse’s head which I found being boiled on the fire.

“In the house of one of the biggest farmers in the village, who owned 30 dekstra of land, the only food consisted of a small quantity of flour made of chopped grass. The number of his horses had fallen from 15 to 1, and of his cows, from 5 to 1.”

The Ukraine.

The attention which was concentrated upon the famine conditions in the Lower and Middle Volga served to obscure the fact that conditions were extremely serious in other parts of Russia, and particularly in the Ukraine. The map of the famine area shows that the failures spread throughout the Crimea and along the north-western shores of the Black Sea.

It has already been pointed out that there was a serious difference of opinion between the official Bolshevik statisticians and the statisticians of the Ukraine as to the total yield of the 1921 harvest. But even the statistics of Popov, show that in the provinces of Nikolaev, Zaporozhye and Ekaterinoslav there was a reduction in harvest to less than one-half of the previous years’ production. The Ukrainian Committee, however, credits those same Provinces with only 13 1/2 million poods, compared with Popov’s 52 1/2 million poods and 125 million poods in the preceding year. In these circumstances, we may perhaps quote from the report of the representative of Dr. Nansen, dated March 30th, who points out that the rich yield of the Ukraine is normally regarded as one of the mainstays of Russian consumption, and that it was difficult to believe that a famine of real importance could occur in so rich a cereal country. When the famine broke out in the Volga regions, the Ukraine was called upon to furnish grain to relieve that area, and it was only in January of 1922 that the Government of the Donets, for example, was permitted to suspend the shipments which it had been ordered to make by the Central Government. The Ukraine, which has a territory as large as Italy and a population of 25,000,000, had been peculiarly affected by the movement of war-ravaged armies, and even after the Civil War, Captain Quisling states that until the end of 1921 the country suffered on a very large scale from roaming companies of bandits. These difficulties, as well as continued requisitions, had left the country peculiarly bereft of livestock, and as in the Volga, it suffered from a particularly severe drought in the critical months of 1921. Captain Quisling gives the total harvest of that year as 350 million poods, as against the 978 millions of the Ukrainian Committee and Popov’s 380 millions, and 1,000 millions before the War. More than 30 million poods were exported to Russia for the assistance of the famine regions. When deduction is made for seed, the total left for the whole of the Ukraine is seen to be quite inadequate. Some investigators have indeed formed the opinion that in spite of the civil wars, etc., some of the Northern Governments did in fact carry over a certain amount of stock. But it is agreed that
in the Ukraine, as elsewhere, there were to be found areas with a reasonable supply of food not far distant from the most severely famine-stricken regions. The railways are so far as permanent way and bridges are concerned, and the actual war damage in this section is very poor and organization bad. Communication by post and telegraph is also in a very backward state.

According to the report of Captain Quilling, Dr. Nasonoff's representative in the Ukraine, the number of famine-stricken persons in the Ukraine was as follows on March 14th, 1922:

<table>
<thead>
<tr>
<th>Town</th>
<th>Population</th>
<th>Starving</th>
<th>Percentage of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odessa</td>
<td>1,951,000</td>
<td>350,000</td>
<td>18%</td>
</tr>
<tr>
<td>Nikolayev</td>
<td>1,400,000</td>
<td>200,000</td>
<td>14%</td>
</tr>
<tr>
<td>Ekaterinoslav</td>
<td>1,100,000</td>
<td>200,000</td>
<td>18%</td>
</tr>
<tr>
<td>Dneprovsk</td>
<td>3,112,000</td>
<td>670,000</td>
<td>21%</td>
</tr>
<tr>
<td>Zaporozhye</td>
<td>2,228,000</td>
<td>1,000,000</td>
<td>71%</td>
</tr>
<tr>
<td></td>
<td>9,681,000</td>
<td>4,300,000</td>
<td>34%</td>
</tr>
<tr>
<td>Kremenchug</td>
<td>1,905,000</td>
<td>150,000</td>
<td>8%</td>
</tr>
<tr>
<td>Poltava</td>
<td>3,555,000</td>
<td>150,000</td>
<td>4%</td>
</tr>
<tr>
<td>Kharkov</td>
<td>2,400,000</td>
<td>200,000</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>16,307,000</td>
<td>4,000,000</td>
<td>24%</td>
</tr>
</tbody>
</table>

"To this number must be added at least 100,000 starving people in the four other provinces (13% of population), plus 100,000 starving fugitives from Russia, especially in the northern provinces.

The total number of starving people on March 14th, 1922, in the Ukraine may consequently be estimated at about 4,800,000 or about 16% of the whole population.

Mortality from starvation is at present impossible to fix in definite figures. Most of the available figures are too old and would perhaps only give a false impression of the situation.

When I visited Zaporozhye in the end of February, the deaths from starvation amounted already to 30 to 40 every day in each volost. The day I visited Kherson town (March 3rd, 1922) there were registered from the day before 43 deaths from starvation (20 adults, 23 children). I was told that there might then be 100 cases a day. The town has about 20,000 inhabitants. In the town of Ekaterinoslav (160,000 inhabitants), about 80 persons daily are now dying from starvation. In the town of Taganrog in the month of February 642 cases of death from starvation were registered. It must be remembered that hunger directly increases susceptibility to disease. Even diseases with a mortality of 20% very soon after eating. In connection with the use of meat from dead horses there are cases of gaspoisoning.

"The famine has caused still more terrible destruction among the horses and cattle. Some figures will illustrate this:

Since last autumn to the end of February as an average for the whole gubernias of Donets nearly 30% of the horses and cattle had died off; in the end of Markopol, the worst in the Donets province, half the horses and cattle had died. At present (end of March), the authorities in Donets estimate that only one-third of the horses and cattle are left in the famine districts.

In Zaporozhye on January 14th, 1922, there were estimated to be 160,000 horses, on the 1st of February 120,000, and at the end of February less than 100,000. I saw there at the end of February great villages of several thousand inhabitants with 20-30 horses left, and in the worst villages no horses at all.

In the province of Ekaterinoslav, the reduction in the number of horses and cattle has been estimated at 50%. The same in the provinces of Nikoidev and Odessa. Especially for Kherson, used, I received the following information from the president of the town:

November 75,000 horses; January 46,000 horses; March 2nd, 1922, less than 13,000 horses.

"It may be noticed that the number of pigs is specially reduced; very few are left. In considering the given figures it must be remembered that in 1921 the number was already considerably diminished in comparison with pre-war times.

Zaporozhye is undoubtedly the worst. It is not easy for one who has not seen such scenes, to imagine these really occurring now in the villages in Zaporozhye. When one hears the descriptions of wars and revolutions and other catastrophes, and then later arrives at the place oneself, one generally finds the reality much less serious than the report. Perhaps one receives the same impression in Zaporozhye, if, for instance, only such a town as Alexandrovka is visited. But if one goes into the country, sees the flying visitors enters the houses and hospitals, there one will witness awful tragedies and be convinced of the great distress of this good and brave people. The land is burnt black and stripped of trees and plants. One sees the straw of the roofs used as food for men and cattle, the miserable and often poisonous soups made for humans first; hears the people tell how they have already eaten all the dogs, cats and crows they could get hold of, even dead cattle, leather of the harnesses, wood of the furniture. You hear of and get proof of necrophagy and cannibalism, speak with persons who have eaten their children or sisters and brothers, see the people lying like skeletons only in the houses, dying or awaiting death without any relief in view. You see the hospitals, which in reality are only places where the starving people and other sick persons are brought together to get a certain care, but where there are no beds, no linen, no medicine and often no people, the people lying closely together on the floor in the utmost misery."

From May onwards the situation in the Ukraine has improved as in other parts of Russia, as the crops of spring vegetables, etc., have become available.
Famine Relief

No complete account of the steps taken by the Russian Government to cope with the famine has come to hand, but the following short statement is extracted from the reports of the official Russian Central Famine Relief Commission which have been issued from time to time, up to June last, and from other official documents.

By decree dated July 21st, 1921, the All-Russian Central Executive Committee recognised a state of famine as existing in the Middle and Lower Volga Provinces, appealed to the public for help and established a Central Famine Relief Commission attached to the All-Russian Central Executive Committee (1). The importance attached to the work of this Commission is shown by the standing of the men placed upon it.

M. I. Kalinin, President of the Commission, President of the All-Russian Central Executive Committee.

A. I. Rykov, Vice-President of the Commission, President of the Council of Labour and Defence, member of the Council of People’s Commissaries, and member of the Central Committee of the Russian Communist Party.

I. B. Kamenev, Vice-President of the Commission, President of the Moscow Soviet and member of the Central Committee of the Russian Communist Party.

S. P. Sereda, President of the Agricultural Section of the State Planning Commission and formerly People’s Commissary for Agriculture.

M. A. Semenov, People’s Commissary for Public Health.

L. D. Krasin, People’s Commissary for Foreign Trade.

The People’s Commissarists for Agriculture, Ways and Communications, Food, Public Welfare and Home Affairs were also represented on the Commission (2).

The two primary questions which occupied the attention of the All-Russian Central Executive Committee in regard to the famine at this early period were the fulfilment of the food-tax and the taking of the necessary measures for the saving of the autumn crops. In view of the serious situation in the famine area, the provinces of the Middle and Lower Volga were exempted from payment of the Food Tax. In other provinces, however, representatives were appointed on the provincial, county and voivod Soviets specially charged with supervising the proper fulfilment of the tax and in Moscow half the members of the college of the various Commissariats were mobilised for the same purpose. The People’s Commissariat for Food was instructed to resort to the use of the militis for the purpose of securing the tax where necessary. As a result of these efforts, out of 1,230,000 tons of foodstuffs and fodder, forming the programme for collection under the tax, 1,170,000 tons were stated to have been received for 1921-1922, constituting 94.2 per cent of the programme.

Owing to the successful carrying out of the food tax campaign, the Soviet Government was able to move to the famine area almost 250,000 tons of seed for the autumn sowing campaign. In regard to the spring sowing campaign, it was decided to allocate 400,000 tons of seed from Russian sources for delivery to the famine area. Up to May 4th, 21,614 wagons with Russian seed had been delivered in the famine area. Allowing 26 tons as the freight capacity of a Russian wagon, this represents a quantity of 346,176 tons or approximately 20,650,560 poods, with which, provided that it could all have been transported in time from railroad to the districts where sowing was actually to take place, about 25,000,000 dekats of land would have been sown. In many cases, however, there is reason to fear that the lack of draught animals and the weakened physical condition of the local population, more especially in outlying areas, made it impossible to effect the local distribution of the total quantity of seed delivered at the various points along the railway. In spite, therefore, of the great efforts made to carry out both autumn and spring sowing campaigns effectively, and of the importation from abroad of considerable quantities of seed, the total area placed under cultivation for 1921-1922 in the famine provinces ultimately amounted to 10,000,000 dekats as against 15,200,000 in 1920-1921.

With reference to the expenditure of the Soviet Government in connection with the famine, the “Russian Information and Review” estimated that up to March, 1922, a sum equivalent to £15,277,000 had been expended by the Government, including £7,221,000 for the purchase of autumn and spring seed, £2,797,000 in respect of food-stuffs, £5,310,000 on the despatch of seed potatoes to the famine area, £2,875,000 on the evacuation of people from the famine area and £2,425,000 on the organisation of public works. In addition to this, it incurred the cost of transporting and distributing foreign relief supplies and a further 5,100,000 dollars allocated by the Soviet Government in connection with the 20,000,000 dollars appropriation of the Congress of the United States (3). It is also stated that expenses were incurred for the upkeep of the medical personnel, hospitals, etc., and expenditure incurred in providing the inhabitants of the famine area with agricultural implements and other commodities. While observing that there is no complete information available as to the actual monetary value of foreign relief effort, apart from the sum of 20,000,000 dollars allocated by the American Congress, the article in the “Russian Information and Review” ventures the assumption that the total foreign relief effort is probably equivalent to something between one-quarter and one-half of that of the Soviet Government. This estimate refers to the period up

(1) A body of some sixty constituting the supreme legislative and executive power in the State except for the short period in the year during which the All-Russian Congress of Soviets was in session. The present executive of the Relief Commissions in Western Europe would be a Committee of Parliament, elected with executive power and sitting under the President of the Chamber.

(2) At the time there was no Commisariat. The provisions of the Soviet Government, the so-called “Red Cross” bodies, and the Relief Commissions representing all branches of Russian society, and presided over by M. Elkins, former Lord Mayor of Moscow and Minister for Home Affairs in the Provisional Government after the Revolution of February 1917. The Committee was abolished shortly after, on the ground that all its members were loyalists against the Government.

(3) The appropriation of 20,000,000 dollars by Congress for the purchase of cons is to be distributed by the American Relief Administration in Russia on a basis conditional upon the Soviet Government estimating sumary dollars in gold to be used by the A. R. A. for the purchase of food for the population of the famine area.
to March, 1923. There seems no possibility of judging how far this statement is correct or otherwise (1).

In March, 1923, the Government decided to confiscate the Church treasures consisting of gold and silver plate and vessels, and certain cases and jewels and to dispose of them for the purposes of famine relief. It is estimated that up to May 15th, 1923, 14,000,000 pounds 41,000 pounds of silver had been received by the Government. Judging by Kalinin's speech at the third session of the Ninth All-Russian Central Executive Committee, the results of the seizure of Church treasures were not very remunerative. The Soviet Government valued the silver at 200,000,000 Soviet roubles per pound, making the total value about 3,600,000,000 roubles, or nearly 2,100,000 at the current exchange. No figures are given regarding the value of the gold, but the quantity is so small that it can hardly have been considerable.

On account of the Church valuables, however, the Central Famine Relief Commission received an advance of 1,000,000 gold roubles from the State Bank. Out of the 1,000,000 gold roubles, 800,000 roubles were expended on the purchase of 300,000 roubles of corn in Finland, and 200,000 roubles were advanced to the Crimans and North Caucasians for relief purposes.

Other financial operations in connection with the famine were the allocation to the Ukraine of 4,000,000 gold roubles for the purchase of seed and the reception by the Central Famine Relief Commission of a loan from the State Bank of 2 millions of Soviet roubles (about £100,000 at the then rate of exchange) to enable the Commission to combat the speculation on the coming harvest, which was widely indulged in in rural areas by making advances to the famine-stricken peasants who were feeling starvation acutely and were beginning to sell their growing crops to speculators for next to nothing (2).

A table is added showing

The total number of soup-kitchens established by the provincial authorities in the Middle and Lower Volga Provinces up to April, 1923, the number of persons being fed, the money actually received by the provincial authorities from the Central Government for famine work and the total amount of money necessary to enable the provincial authorities to cover the expenditure incurred on famine work.

With regard to voluntary subscriptions in money 13,211,649,472 Soviet roubles were subscribed from the beginning of the famine campaign up to the end of April, 1923.

### Tableau

<table>
<thead>
<tr>
<th>Province</th>
<th>Date</th>
<th>No. of Soup-Kitchens</th>
<th>Children in Population</th>
<th>Adults</th>
<th>Total</th>
<th>Total Money Received from Central Government November-April</th>
<th>Total Money Necessary to Cover Expended November-April</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saratov</td>
<td>Nov. 24</td>
<td>197</td>
<td>8,750,000</td>
<td>900</td>
<td>27,000</td>
<td>3,105,000,000</td>
<td>6,105,000,000</td>
</tr>
<tr>
<td>Saratov</td>
<td>Apr. 24</td>
<td>942</td>
<td>9,849,000</td>
<td>100,000</td>
<td>57,050</td>
<td>11,195,000,000</td>
<td>20,415,000,000</td>
</tr>
<tr>
<td>Saratov</td>
<td>Apr. 29</td>
<td>942</td>
<td>9,849,000</td>
<td>100,000</td>
<td>57,050</td>
<td>11,195,000,000</td>
<td>20,415,000,000</td>
</tr>
</tbody>
</table>

In addition to the operations of the Soviet Government, an immensely important contribution towards keeping alive the population of the famine area was made by the foreign organisations, which at their maximum at the end of July were feeding over 11 million adults and children, the American Relief Administration being responsible for approximately 6 million, and the associations working under the International Russian Relief Committee for 1,000,000. That this great effort was not able to prevent

<table>
<thead>
<tr>
<th>Province</th>
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<th>Children in Population</th>
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<th>Total</th>
<th>Total Money Received from Central Government November-April</th>
<th>Total Money Necessary to Cover Expended November-April</th>
</tr>
</thead>
<tbody>
<tr>
<td>March</td>
<td>Mar. 21</td>
<td>122</td>
<td>3,105,000</td>
<td>100</td>
<td>3,105</td>
<td>1,377,345,000</td>
<td>2,504,000,000</td>
</tr>
<tr>
<td>Vruchta</td>
<td>Feb. 28</td>
<td>38</td>
<td>10,000</td>
<td>1,000</td>
<td>11,000</td>
<td>2,025,000,000</td>
<td>4,050,000,000</td>
</tr>
<tr>
<td>Bydno</td>
<td>Nov. 21</td>
<td>99</td>
<td>2,000</td>
<td>100</td>
<td>3,000</td>
<td>20,300,000,000</td>
<td>40,600,000,000</td>
</tr>
</tbody>
</table>

(1) For the work, see L. B. R. B. A. and the International Russian Relief Committee. (2) See note. (3) For the work, see L. B. R. B. A. and the International Russian Relief Committee.
the heavy mortality which occurred is due, on the one hand, to the inevitable delay which occurred in improvising an organisation under the very difficult conditions that obtained in Russia, and, on the other, to the fact that when supplies began to become available, their transport in Russia itself was held up during the winter by the congestion at the ports and the deplorable state of the railways. The following shows the progress of relief:

<table>
<thead>
<tr>
<th>Number of Persons Fed by the Foreign Relief Organizations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
</tr>
<tr>
<td>Adults</td>
</tr>
</tbody>
</table>

This table incidentally illustrates the ultimate recognition of the necessity for feeding adults as well as children.

Those programmes involved up to the end of July the distribution of 625,000 tons by the A. R. A. and 77,000 tons by the I. R. R. C. The transport of this quantity of goods required very special exertions on the part of the disorganised railway staff. First priority on the railways was given to food-corn, and second priority to food. But even with this advantage over all other transportation, both organisations found their goods not infrequently blocked at port by the inability of the administration to supply empty wagons for loading. The worst period, as is usual in Russia, was towards the end of March, when stocks sufficient to occupy the railways at their current rate of carriage for three weeks in the Baltic ports, and for four weeks at Black Sea ports, were held up. Again, during March and April the actual time taken in transport was very great, but greatly improved in the summer. Thus shipments from the Baltic to Saratov which averaged 50 days in transit, varied between 60 at the worst congestion and 26 days recently. Shipments from Black Sea ports to the same town, averaging 28 days, varied between 50 at the worst congestion and 7 days recently. The relief agencies, however, on the whole, pay tribute to the work of the railway staffs, who co-operated wholeheartedly to the extent of their power, and it is added that the percentage of losses was remarkably small.

A table taken from a report of the Central Commission on Famine Relief gives the following comparative figures for various organisations on May 31st:

<table>
<thead>
<tr>
<th>Tableau</th>
</tr>
</thead>
<tbody>
<tr>
<td>(I) By August 1921, the I. R. R. C. were feeding 27,000 children and 40,000 adults.</td>
</tr>
</tbody>
</table>

According to "Russian Information and Review", August 15, 1922, the following quantities of food have been requisitioned or levied in food taxes from the peasants:

<table>
<thead>
<tr>
<th>Period</th>
<th>Exports of Wheat grain,</th>
<th>Actually procured in tax,</th>
<th>Percentage of 1910-1911</th>
<th>Percentage of 1916-1917</th>
</tr>
</thead>
<tbody>
<tr>
<td>1916-1917</td>
<td>7,104,000</td>
<td>5,384,000</td>
<td>10.0%</td>
<td>73.8%</td>
</tr>
<tr>
<td>1917-1918</td>
<td>7,094,000</td>
<td>794,000</td>
<td>11.7%</td>
<td>41.1%</td>
</tr>
<tr>
<td>1918-1919</td>
<td>4,525,000</td>
<td>1,798,000</td>
<td>33.4%</td>
<td>41.7%</td>
</tr>
<tr>
<td>1919-1920</td>
<td>4,280,000</td>
<td>3,626,000</td>
<td>62.8%</td>
<td>86.2%</td>
</tr>
<tr>
<td>1920-1921</td>
<td>7,510,000</td>
<td>4,907,000</td>
<td>93.2%</td>
<td>44.9%</td>
</tr>
<tr>
<td>1921-1922</td>
<td>5,230,000</td>
<td>2,212,000</td>
<td>41.1%</td>
<td>84.2%</td>
</tr>
</tbody>
</table>

It is necessary to draw a distinction between requisitions made before the Revolution, which were primarily intended to satisfy the demands of the Army, and those carried out by the Soviet Government which were intended to meet the requirements of the town population throughout Russia in addition to military needs. Taking the year 1920-1921, it will be seen that the figures never exceeded 5,000,000 tons, i. e.,

(1) Bulletin of the All-Russian Central Relief Commission, Moscow, 1922, Nov. 5, 6 and 7.
500,000,000 foodstuffs. Taking the urban population of Russia at 60,000,000 and 10,000,000 as the quantity allowed by Soviet statisticians as the minimum necessary per head of the population per year, 200,000,000 foodstuffs is thus accounted for. The remainder is accounted for by the Red Army, which received about 2 pounds of bread a day and which, according to Trotsky, reached 5,000,000 in numbers before the close of the Civil War, and also by the very large number of technical experts and special categories of workers receiving special Red Army rations during the War. The great decrease in the programme for collection in 1921-1922 is accounted for partly by the fact that Soviet Russia was at peace. A partial demobilization of the Army had taken place and the majority of the civilian population who had drawn food rations during the War ceased to receive them. Under the new economic policy, moreover, the distribution of state rations was reduced to a minimum and steps were taken towards restoring freedom of trade in grain. Finally, in agreeing upon a programme of 2,500,000 tons, the Soviet Government was doubtless influenced by the state of famine which had declared itself.

One of the chief difficulties in the collection of foodstuffs was to ensure that the peasants not only concealed their produce, but also present false returns about the amount of land they had in cultivation. Thus, it was stated in a “Economic Life” in July 1922 that 1,150,000 desyatins had been discovered as being under cultivation, although concealed by the peasants. These discoveries were made from October 1921 to April 1922 in the following provinces:

<table>
<thead>
<tr>
<th>Province</th>
<th>Amount of Land Cultivated (Desyatins)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zaporozhye</td>
<td>279,800</td>
</tr>
<tr>
<td>Volhynia</td>
<td>113,428</td>
</tr>
<tr>
<td>Dnestro</td>
<td>247,230</td>
</tr>
<tr>
<td>Kiev</td>
<td>97,962</td>
</tr>
<tr>
<td>Kievc</td>
<td>25,012</td>
</tr>
<tr>
<td>Nikolov</td>
<td>25,300</td>
</tr>
<tr>
<td>Odessa</td>
<td>11,000</td>
</tr>
<tr>
<td>Poltava</td>
<td>114,457</td>
</tr>
<tr>
<td>Poltova</td>
<td>88,500</td>
</tr>
<tr>
<td>Kharkov</td>
<td>163,059</td>
</tr>
<tr>
<td>Chernigov</td>
<td>89,087</td>
</tr>
</tbody>
</table>

This concealment of land under cultivation amounted in some regions to 15-20% of the land taxable, and in some cases it attained 60%.

On the other hand, in the famine year requisitions were supplemented by a considerable amount of voluntary contributions of grain.

The following table indicates the amount in kilograms of cereals and other produce contributed by the Russian public for famine relief up to May 10th, 1922, the amount of these contributions actually dispached and received in the famine area and the percentage these amounts bear to the total amounts contributed.

<table>
<thead>
<tr>
<th>Total Contributed</th>
<th>Dispached to Famine Area</th>
<th>Received in Famine Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,018,000</td>
<td>2,795,184</td>
<td>1,194,240</td>
</tr>
</tbody>
</table>


**Disease.**

All reports relating to the famine make constant reference to the prevalence of disease. It must be realized, however, that the epidemics which have been ascribed to the famine period occurred long after the famine was over. Unfortunately, however, reliable data are exceedingly difficult to obtain and the figures of disease must therefore be taken with great reservation. But however imperfect the picture which it is possible to present, there can be no doubt as to the gravity of the epidemic situation. Russia in this period was little affected by the plagues which ravaged the world. Russia was formerly recognized as an endemic focus of infection. According to official figures, the number of cases of typhus in Russia averaged about 20,000 annually. It varied from 16,887 (the lowest figure recorded) in 1892 to 130,724 in the famine year of 1897, i.e., from 25 to 15.5 per 10,000 of the population. The provinces which suffered most severely were the Ural, Black Sea and White Russia Provinces, Tarnov and Orlov Provinces in Central Russia and Kharkov and the Ukraine.

Typhus increased steadily during the European War. In 1914 the total average number of cases was recorded in 1911. In 1913, there were 100,407 cases and in 1916 the number increased nearly to 124,808. By this time the number of cases of infectious diseases notified in the Army began to increase owing largely to exhaustion and, due to military operations carried on over a long period in conditions of great hardship. Refugees, forced by the Russian military authorities to evacuate their homes, and prisoners of war, scattered infection throughout Russia.

The disturbed condition of the country since 1917 has further encouraged the spread of epidemics. According to the official figures, 1,180,757 cases of typhus were registered in 1915 and 1,458,933 in 1916. These figures are evidently incomplete and do not give more than an approximate idea of the situation, for the system of registration had practically ceased to work in most places by that time. After the Bolsheviks came into power, however, the notification of infectious diseases was made compulsory by law on the 18th July, 1918, by the People’s Commissariat for Public Health. The number of cases rose from 2,240,825 in 1918 to 3,678,509 in 1920. In 1921 the incidence declined, the number of recorded cases being 600,000 (in round figures). These figures do not include those for the Ukraine, Siberia and Turkestan, and it must be borne in mind that there were a large number of cases which were never officially notified.
According to Dr. Sysin, the Chief of the Sanitary Epidemiological Division of the Russian People's Health Commissariat, the total incidence for the years 1918-1920 may be estimated at about 13,000,000, but Professor Tarnavski in his report presented to the Health Committee of the League of Nations in 1922 considered that the total figure during the last 4 years might be placed at between 25, and 30 millions. He gives the official statistics in round figures as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Ukraine</th>
<th>Siberia</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1918</td>
<td>1,200,000</td>
<td>2,600,000</td>
<td>3,800,000</td>
</tr>
<tr>
<td>1919</td>
<td>2,200,000</td>
<td>600,000</td>
<td>2,800,000</td>
</tr>
<tr>
<td>1920</td>
<td>2,600,000</td>
<td>2,500,000</td>
<td>5,100,000</td>
</tr>
<tr>
<td>1921</td>
<td>600,000</td>
<td>1,200,000</td>
<td>1,800,000</td>
</tr>
</tbody>
</table>

He then takes 1/2 as the maximum coefficient of error, and a figure of 16 1/2 million is obtained. If 5 millions are added for the period during which no statistics were collected, and for the western regions for which no statistics were obtainable, this gives 21 1/2 millions. If an attempt is made to apply a separate coefficient to each statistical return, the result will not be very different:

<table>
<thead>
<tr>
<th>Year</th>
<th>Ukraine</th>
<th>Siberia</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1918</td>
<td>1,100,000</td>
<td>2,500,000</td>
<td>3,600,000</td>
</tr>
<tr>
<td>1919</td>
<td>2,200,000</td>
<td>600,000</td>
<td>2,800,000</td>
</tr>
<tr>
<td>1920</td>
<td>2,600,000</td>
<td>1,200,000</td>
<td>3,800,000</td>
</tr>
<tr>
<td>1921</td>
<td>600,000</td>
<td>1,000,000</td>
<td>1,600,000</td>
</tr>
</tbody>
</table>

Another method is to take the city of Petropavlovsk with its population of 700,000 and 700,000 cases during these years and Moscow, with one million inhabitants registering 120,000 cases for the same period. There are about 100,000 cases for 700,008 inhabitants. The coefficient of error for these two cities is at least 25% and may be as much as 50%. The true morbidity may therefore be estimated at 250,000 to 500,000 which gives a comparative morbidity of 15% to 18%. If the comparative morbidity is assumed to be the same for the whole of Russia with its 130 millions inhabitants a total of 20 to 25 millions cases is obtained. But all the data available indicates that the morbidity in the greater part of Russia (except in the very sparsely populated provinces in the north) must be higher than in the two capitals where there were means available for combating the disease. If the comparative morbidity is assumed to be 20%, a total of 26 millions is obtained. If however, such a high figure as 25% is assumed the total will be as much as 31 1/2 millions. For these reasons, and on account of other considerations of the same nature, I believe that a total of 25 millions is nearest the truth; in any case, the true total lies in my view between a minimum of 20 millions and a maximum of 30 millions.

Typhus was accompanied by relapsing fever—the average incidence of this disease in Russia before the war was about 50,000.

Relapsing fever began to increase during the autumn of 1918, and in 1919 the number of notified cases was about 10 per cent of the registered number of cases of typhus (277,977 cases of relapsing fever). It greatly increased in 1920, when 1,500,000 were notified. A decline also set in in this disease in 1921, but relapsing fever continued to gain proportionately to typhus, and about 700,000 cases of this disease have been notified as against 600,000 cases of typhus.

The recrudescence of louse-borne disease assumed very grave forms during the current year. The causes of this violent recrudescence lie in 1) famine, and all its associated consequences—malnutrition, malnutrition, overcrowding, and 2) in the repatriation of hundreds of thousands of persons which was carried out under the most unfavourable conditions. Not only have the epidemics been very serious during the winter of 1921, but a continued increase of incidence was marked, and, contrary to former experience, the figures remained high notwithstanding the season. Fully complete data for the first five months of this year indicate a total of 1,013,185 cases of typhus and 676,041 cases of relapsing fever.

Since March the figures for typhus have been three times as high, and those for relapsing fever about twice as high as in 1921.

These epidemics are extending over the whole of Eastern and Southern Russia, and throughout the country they are following the railway lines. The striking increase in the number of louse-borne diseases on railways is noteworthy. 199,229 cases of typhus and 106,590 cases of relapsing fever were reported during the first five months of 1921, as compared with 16,305 cases of typhus and 19,160 cases of relapsing fever notified during the corresponding period of the previous year.

The highest number of typhus cases were reported from the governments of Ekaterinburg, Perm, Sibakinsk, Samara, Saratov and in the Ukraine. The distribution of relapsing fever is very similar to that of typhus, the only difference being a tendency of this disease to predominate over typhus in the southern regions, whilst it is less important in the north.

No returns are available yet for Soviet Russia and the Allied Republics as regards the epidemics of louse-borne diseases since June, 1922.

Provisional returns for the Ukraine for June and the early weeks of July indicate that the morbidity has doubled for relapsing fever and the figures for typhus are four times as high as in the corresponding period of 1921. These data include 22,507 cases of relapsing fever, 48,200 cases of typhus, and 17,042 cases of undiagnosed typhus (of
which 5,546 cases of typhus; 7,065 cases of relapsing fever and 3,810 cases of undiagnosed typhus were notified on railways.

A continued increase of paralytic epidemic diseases is also reported from the Crimea, where 2,773 cases of typhus and 1,674 cases of relapsing fever were notified in June, as against 99 cases of typhus and 199 cases of relapsing fever notified in June, 1921.

It is not possible at present to give accurate figures of mortality for louse-borne diseases; the average mortality for all periods (from 1918) and all localities is 10 to 12% for typhus, and it varies between 1.8 to 4.3% for relapsing fever, reaching more often the latter figure. The total number of deaths from typhus during this period, according to official statistics may be estimated as follows (in round figures):

<table>
<thead>
<tr>
<th>Year</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1918</td>
<td>15,000</td>
</tr>
<tr>
<td>1919</td>
<td>25,000</td>
</tr>
<tr>
<td>1920</td>
<td>21,000</td>
</tr>
<tr>
<td>1921</td>
<td>72,000</td>
</tr>
<tr>
<td>Siberia 1918-1921</td>
<td>32,000</td>
</tr>
<tr>
<td>Ukraine 1918-1921</td>
<td>96,000</td>
</tr>
</tbody>
</table>

Giving a total of 101,000 deaths.

Under certain circumstances the percentage is considerably higher; thus, according to Professor Tarasov, the mortality rate was 68% in the compulsory labour camps at Kishnya-Navagorod while it amounted to 80% among the prisoners of war at Tyumen.

Another disease peculiarly dangerous to an untended population is cholera. The most important cholera epidemic of the twentieth century in Russia occurred in 1910, when 250,713 cases with 109,590 deaths were notified. During and since the war the course of the epidemics has been as follows:

In 1915, 14,582 cases were notified, chiefly on the western front and among the practical years were practically free from cholera; in 1917. In 1918 the epidemic spread to 30 provinces, the number of registered cases 30% of this total—13,755 cases—occurred in the city and the province of Petrograd. The epidemic was also severe in the Volga and Voronetz in the centre. In 1919 and 1920, 5,928 and 8,106 cases were respectively notified.

There was a considerable prevalence of cholera in Russia in 1921, when 176,888 cases were officially reported. During the winter of 1920-1921, cases of cholera continued to be notified in the south in the Province of Rostov and in the Kuban Territory. The distribution of cholera in 1921 showed that the areas most heavily affected were the south-eastern and eastern territories. The epidemic was present among the famine-stricken population moving in search of food as far as Siberia.

In 1922, cholera broke out, in spite of the severity of winter early in the year, in many widely separated localities in the Ukraine and extended to Central Russia, the Don area, Tauride and Siberia during January and February, 1922. According to official returns, 62,739 cases were notified between January 1st and August 26th. The epidemic of 1922 appears to have been concentrated in the Kuban region (4,015 cases), in the Don region (2,745), in the Crimea (2,222), but especially in the Ukraine. 33,033 cases were reported, i.e. the Ukraine is responsible for 50.8% of the total incidence of cases which occurred in the Russian Federation during the current year. Cases were notified in more than 600 different localities. The mortality rate, as it is officially stated, although still high, is declining; it was 60-100% during the first months of the epidemic, 50% in May and 40% in June.

As regards other infectious diseases, the figures for enteric fever and dysentery during and since the war were about the same as before the war giving an annual average of about 909,000 cases for each of these diseases. The tendency to decrease, which according to official returns seemed to exist during the years 1916-1919, has to be explained by the disorganization of the vaccination system. In 1920 the incidence increased, and 142,401 cases of enteric fever and 324,589 cases of dysentery were registered. In 1921 the number of notified cases was 308,548 for enteric fever and 197,430 for dysentery. There is a slight increase in enteric fever in 1922, as compared with 1921, the figures for the period January to May being 104,874, as against 131,472 for the corresponding period of the previous year.

The incidence of smallpox remained practically unaltered during the first year of war, but the disorganization of the health administrative machinery added to the number of unvaccinated people, and in 1919 there were 155,000 registered cases of smallpox (figures twice as high as the average for the pre-war period). Vaccination was made compulsory by law in 1919, and since then a marked decrease in the incidence of smallpox has been observed, the figures for 1920 and 1921 being respectively 98,179 and 83,016. This decrease has continued during 1922; 26,547 cases were notified from January to May, as against 71,505 cases notified during the corresponding period of 1921. One-tenth of the total number of cases were notified on railways.

The possible development of plague on the borders of the Federation has often caused anxiety during recent years, but happily these fears have not materialized.

The figures for scarlet fever and diphtheria are low as compared with pre-war statistics. About 70,000 cases of scarlet fever and 25,000 of diphtheria were reported in 1921, as against 460,208 cases of scarlet fever and 506,125 cases of diphtheria reported in 1913. This is remarkable in view of the gigantic increase of other epidemics in Russia.

Malaria has increased considerably since the war and appeared in districts where this disease was previously unknown, i.e. in the northern provinces; this increase in a virulent form is particularly marked during the last few months, but no precise figures are available, as the notification of malaria is not compulsory by law.

As for the incidence of enteric fever, if comparison is made between the morbidity for the years 1914 and 1915 on the one hand and 1920 and 1921 on the other, within the limits of those regions concerning which we possess more or less accurate data, a considerable
increase is apparent. Thus official returns for the first five months of 1922 included 48,943 cases of scurvy. The most heavily affected area in the famine struck region is the province of Perm.

<table>
<thead>
<tr>
<th>Area</th>
<th>1921-22 Mortality</th>
<th>1922 Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moscow Industrial Area</td>
<td>1,952 - 1,792</td>
<td>16,345 - 14,845</td>
</tr>
<tr>
<td>Central Russia</td>
<td>2,785 - 880</td>
<td>14,020 - 10,185</td>
</tr>
<tr>
<td>Middle Volga Area</td>
<td>1,002 - 3,845</td>
<td>5,906 - 22,155</td>
</tr>
<tr>
<td>Lower Volga Area</td>
<td>1,243 - 2,436</td>
<td>6,960 - 6,497</td>
</tr>
<tr>
<td>Ural Area</td>
<td>1,949 - 3,914</td>
<td>20,187 - 2,648</td>
</tr>
</tbody>
</table>

Afflictions produced or aggravated by malnutrition, by an overworked condition or by other difficult circumstances of life, were encountered at every turn.

It was widely realized that the population of the famine area was being decimated by starvation, but this was only one side of the story; the other side was shown by the famine victims who were streaming all over the country from the centres where epidemics were raging, falling ill on the road, and leaving heavy and infected every train, every station where they stopped, each town in which they sought food or work, and thus infecting the whole country-side through which they passed with typhus and retching fever.

Along these railway lines, under practically the same conditions, more than 300,000 persons were repatriated in 1921 to the States bordering on Russia on the west. The repatriation into Poland has continued in 1922 at a rate of about 30,000 per month, and the number of those awaiting repatriation in Russia is still very large.

Confronted with outbreaks of epidemics on such a widespread scale, the health administration was in no position to undertake an effective anti-epidemic campaign, having to deal with epidemiological problems of extreme complexity with wholly inadequate resources, lack of trained medical staff of all kinds, an extreme shortage of hospital and sanitary accommodation, of drugs, sanitary materials, food, and funds, and the tremendous fall in the purchasing power of money with all its consequences.

At the head of the Health Organisations in Russia is the People's Health Commissariat. The local public health work is in the hands of governments and districts Soviets. The local health bureaux are responsible [1] to their respective executive committees of the Soviet budget estimates; and [2] to the People's Commissariat for Public Health for their medicosanitary activities.

The administrative work relating to transit, evacuation, health resorts and supervision of medical schools is concentrated in the hands of the Central Health Administration. A Central Epidemic Commission composed of prominent medical men and representatives of the competent section of the People's Commissariat for Public Health is attached to the Commissariat.

With the exception of the Ukraine, the department controlling the medical sanitary work on the lines of communication, the medical sanitary services on the railways and waterways in the autonomous republics is placed under the control of the Health Commissariat of the R.S.F.S.R.

Sanitary inspection on the maritime frontiers and the carrying out of measures to prevent the spreading of contagious diseases through the ports (some of these ports belong to more than one republic) are controlled by the respective frontier administrations (1). Up to the year 1922 all the health services throughout the Republic were financed by the Central Authorities. The treatment was free of charge, sanitary materials, drugs and food rations for hospitals and staff were supplied by the State in the limited amounts in which they could be afforded.

But, in accordance with the new economic policy, all expenditure on local medical and sanitary accommodation from May 1st, 1922, has to be paid out of local means. What will be the sources of revenue?

(1) Local taxation (with rates widely different in various areas).
(2) The special levy. (The levy was imposed on the population in order to meet the needs of the famine area—some governments have contributed on a larger scale than was expected; the balance is assigned to the anti-epidemic campaign. 70% of this sum is granted to government health authorities and 30% to the Central Health Administration. It is insurance funds.
(4) Enterprises maintained by the local health administrations for the preparation of drugs, the manufacture of sanitary supplies, etc... The expenditure incurred on the budget of the Central Health Administration is divided among the following items as follows:

- The military sanitary administration,
- Sanitary supervision of railways and waterways,
- Evacuation,
- Health resorts of State importance,
- Maintenance of the health administration in governments and oyezds,
- Maintenance of medical and sanitary organisations in the famine area,
- The general anti-epidemic campaign,
- Local model institutions for child-welfare,
- Maintenance of medical and sanitary institutions granted to workers of the State enterprises.

The budget of the People's Commissariat for Public Health for the period January—September 1922 amounts to 45,015,920 pre-war rubles.

The expenditure of the Health Commissariats of autonomous Republics is not included in the budget of the Central Health Administration, in view of the fact that each of the Federative Republics has for the present its own budget.

31% of the total estimates of autonomous Republics relating to those People's Com-
missions which exist separately in each of the Republics are provided by the Central Administration. Of this 13% - 15% is granted to the Ukraine, 4% to the Turkestan Republic, and 12% to the remaining republics.

The internal distribution of sums received from the Central Administration among the various commissariats of the republics falls to the exclusive competence of Soviet of People's Commissars of the republic concerned.

It is important that there should be recognition of the true picture of the present situation.

The steps which have recently been taken in Russia to place the state Departments on an economic basis have, for the time being, seriously aggravated the situation in so far as the health problems are concerned. Hospitals are given up one after another, the charge for treatment, even of infectious cases, is extremely high, some medical schools have been closed and the staffs dismissed, and in this country, where millions of cases of infectious diseases are officially registered, there is a growth of unregistered and medical men (!).

It is evident that the circumstances in different localities vary widely. Some of them, the provinces of Nizhni-Novgorod and Kishinev, etc., have been able to meet their needs and the transferring of expenditure has not affected the work concerned. But in the majority of cases reports presented to the regional meetings of health authorities tell the same tale of discouraging financial difficulties (taxes are not paid or even not decreed owing to the indifference of the population and local authorities; the insurance funds are not available), of the impossibility of granting daily food rations to patients owing to the appalling conditions under which the medical staff has to work, in circumstances in which salaries are not paid regularly, and the underfeeding making it difficult to do effective work.

Mortality.

The most varying statements have been made as regards the effect of the famine upon mortality, the lowest of which is 1.14 million deaths in excess of the normal, from both famine and disease. Dr. Nansen gives as the figure of deaths from famine at least 2 million persons, and his view is that it should be 3 millions. In the absence of reliable statistics of mortality it is only possible to give the following table, supplied to Dr. Nansen's Representative in Moscow, by the Russian Famine Authorities and purporting to give a calculation of the population in 1922 for some provinces of the famine area, based on statistics published in 1921.

<table>
<thead>
<tr>
<th>Province</th>
<th>1920</th>
<th>1921</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>32,245</td>
<td>3,085</td>
<td>29,160</td>
</tr>
</tbody>
</table>

(1) The figures for Bashkort are given by the Russian census on 1,215 and 20 respectively. The rest of the above figures are in conformity with the raw census figures. A notable improvement is stated to report in Bashkort, 9% to 10% in excess from the figures of Bashkort in the census, 1,215 and 20 respectively for the 1920-21 and 1921 populations respectively for the 1921.

These figures show a reduction from 27 millions to 25 millions, and to this has to be added the losses in Siberia and in the Ukraine, for which no figures have been given. These two areas would no doubt increase the total nearly to the 3 millions mentioned by Dr. Nansen. But these statistics include migration, the total of which it would be very difficult to assess.

For particular areas, however, particular statements have been made. Thus, the total number of registered deaths from starvation in the Ukraine was, according to the reports of the People's Health Commissariat of the Ukraine for the first half of 1922, 67,125, and the number of cases of diseases notified as due to famine amounted to 741,352. But, as is stated in the same report, whole villages, swollen from hunger, lay down and were not able even to apply for medical help.
The number of deaths directly due to starvation in the Crimea was, according to official statistics, in February 14,415, in March 19,902, in April 12,753. The total population of the Crimea was 762,000 in 1920. In the Government of Samara the whole population (2,900,000 in round figures) was reported to be starving in April. The mortality in February reached the high figure of 60,000, in March 150,000—of which 104,000 from starvation and the remainder from other causes; together 7.8% of the population died in two months. In the Baku and Beshir Republics there were 83,740 deaths from famine recorded, and the reporter was of opinion that this figure must be at least doubled in order to obtain the approximate picture of the situation.

The population of the Tatar Republic in March was 3,125,377. Of this total about 2,500,000 were starving in February. The total number of cases of infectious diseases notified during the period from January 18th up to March 15th amounted to 392,300 with 45,383 deaths. This means that no less than one-tenth of the whole population were suffering from epidemic diseases, with a mortality of about 14%.

The death-rate for the city of Odessa in the early months of 1922 was about 80 to 90 per 1,000 of population, at against 40 to 50 for the pre-war period.

A word must be added as to the industrial famine of 1921-1922, which covers the grater part of the period of the new economic policy (N. E. P.) has been accompanied by an industrial and commercial crisis. The cause of this crisis has been fully discussed in the Soviet Press and various explanations given, but on the whole the general explanation of the paradoxic situation that at the same time comparatively minute production is unable to dispose of products on terms which cover the cost of production.

When the new policy was introduced and the cooperatives were organized to exchange industrial goods for agricultural products, the ratio of these to agricultural output diminished much more than agricultural output itself. Consequently, the Soviet Government authorised the cooperatives to exchange goods for other industrial products, and the quantity of goods exchanged for industrial products is about 40% of the total.

It has, of course, been impossible to fix industrial wages without some regard to the cost of living, and it follows that, whether measurement is made in terms of food units, gold rubles or paper rubles, wages and the cost of production have had to rise out of all proportion to the old exchange value of the manufactured products. In the case of coal and wood fuel, in which labour is almost the whole cost of production, the difficulty is particularly great and has raised the exchange value to a level which still further increases the difficulty of manufacturing industries. The fact that there is no agricultural surplus means that there is no market for industry, and this is responsible for the closing of factories at a time when Russia is in most urgent need of goods of every kind. The recent developments in this connection are referred to in the following chapter.

\[\text{(1) See Russian Literature, 21 September 1920.}\]