#### Report on the public health administration of the Punjab.

#### **Contributors**

Punjab (India). Public Health Department.

#### **Publication/Creation**

Lahore: Government Printing, Punjab, [1930]

#### **Persistent URL**

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## REPORT

ON THE

## Public Health Administration of the Punjab

**DURING THE YEAR 1930** 

BY

KHAN BAHADUR DR. K. A. RAHMAN, M.B., CH. B. (EDIN.), D. P. H. (LOND.), Offg. Director of Public Health, Punjab,

TOGETHER WITH

## The Report on Sanitary Works

**DURING THE YEAR 1930** 

BY

RAI BAHADUR AMAR NATH, NANDA, B.A., M.I.E. (INDIA), Superintending Engineer, Public Health Circle, Punjab,

AND

REPORT

ON THE

Proceedings of the Urban Sanitary Board

During the financial year 1930-31.



Lahore :

PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRINTING, PUNJAB.

1931.

Price: Rs. 4-0-0 or 6s.



The Director of Public Health January 1932



# (The text of the Public Health Report is limited to 31 pages and that of the Superintending Engineer to 19 pages.)

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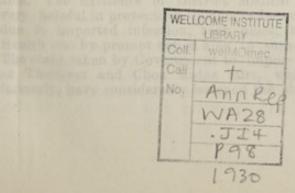
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Proceedings of the Punjab Government (Ministry of Education) in the Public Health Department, No. 33797, dated the 12th November 1931.

READ-

The Report on the Public Health Administration of the Punjab for the year 1929.

In 1930 the climate was favourable for health and for agriculture, the monsoon being heavy but sufficiently early not to encourage malaria, while winter dryness militated against plague. Though the low prices made it difficult for agriculturists to pay revenue, the good harvests ensured sufficient sustenance.

While the increase in population in 1930 was 278,939 as compared with 321,955 in 1929, it is interesting to learn Vital Statistics. that the annual average increase since 1921 Census is 242,958, the total increase in the ten years being 2,368,841, every district contributing to the increase except Muzaffargarh, which has recently suffered intensely from malaria. Another interesting feature of the population mentioned in the report is the excess of males over females by 2,051,469; the birth statistics showing an annual preponderance during the last five years of male over female babies of 11 per cent. The provincial death rate (29 7 per mille) was somewhat higher than in 1929, but corresponds almost exactly with the quinquennial average. Lyallpur, the richest district, and Gurdaspur, which is one of the unhealthiest, again, as last year, were among the districts with the highest birth rate and also highest infant mortality. There was a considerable fall in the death rate for the three largest cities (Lahore, Amritsar and Multan); the more important of the smaller towns which show an exceptionally high death rate are Jagadhri (492 per mille), Ferozepore (40:10), Palwal (44:70), Phillaur (44:51) and Isa Khel (42.45), the mortality of the latter place being due to cholera and of the others chiefly to " fever ". Urban death rate was, as usual greater than the rural, but only by under 1 per cent. Infant mortality was about the same as in the previous year, the deaths of infants under one month being almost exactly the same, i.e., between 71,000 and 72,000, and of infants between one month and six months and of those between six and twelve months about 47 000 each. That is to say, the total number of infant deaths was 165,000 or about 185.73 per thousand births. Clearly therefore the problem of infant mortality is as serious as ever; and it must be remembered that the above statistics do not include still births. It is therefore greatly to be hoped that the Health Centres, of which there are 6, out of a total of 35 in the province, now maintained by district boards. will increase in number and size.

Cholera appeared only in a mild form, accounting for 2,040 cases with 1,181 deaths, and as usual the disease was Chief diseases. imported by pilgrims from fairs in other provinces, viz., from the Kumbh Fair, Allahabad, and the Hardwar Fair, while there was some importation from Kashmir in the winter. Vigorous anti-cholera measures probably helped to keep the disease down. They were brought into force at the beginning of the year, anti-cholera depôts being established at important railway stations, and efforts to get pilgrims inoculated before departing for Allahabad being to some extent successful. It was decided by Government shortly after the year under report that measures for compulsory anti-cholera inoculation would be inadvisable. The existence of District Medical Officers of Health have been very helpful in preventing epidemics because wherever a sporadic case, due to imported infection, took place, the District Medical Officer of Health was by prompt action able to suppress the spread of the disease. The steps taken by Government to improve water supplies, particularly at Thanesar and Choa Katas fairs, which used to spread infection formerly, have considerably lessened the dangers of cholera epidemics.

the provincial works completed during the year may be mentioned

Small-pox claimed 5,341 victims or more than 2,000 less than in the previous year, chief mortality being in May, June and July and the disease being spread impartially over the province. As usual the mortality from it was severer in urban than in rural areas.

Plague showed a very welcome decrease of mortality to the insignificant number of 554. It may, therefore, be hoped that this disease is well under control in the province, as this is by far the lowest mortality during the last thirty years, and the disease was confined to five districts, three of them being a neighbouring group of submontane districts. Gurdaspur, Sialkot and Hoshiarpur, the other two being the adjoining districts in the south of the province, Rohtak and Karnal. Intensive rat destruction was carried out in the off season, and doubtlessly to this and to the general work of District Health Officers as well as to the climatic conditions is to be attributed the welcome decrease of this fell disease. Should the active steps now being taken be slackened, there will be a possibility of recrudescence of this disease which has endemic centres within the province.

Fever which includes malaria and influenza, accounted for considerably more deaths than in the previous year (422,377 against 402,429). This is surprising in view of the dry start of the cold weather, but it is pointed out in the report that the high mortality was the aftermath of the epidemic of malaria at the end of 1929.

Dysentery and Diarrhoea show rather less mortality than in the previous year, and the chief features were the high death rate in the hill districts of Simla, Kangra and Rawalpindi, and the very much higher urban (1.53 per thousand) death rate as compared with the rural (0.48).

Statistics of mortality from respiratory diseases, as is to be expected, show a still more marked disparity between urban and rural areas, the figures being 5.90 and 2.10 per thousand. The high urban death rate from this cause will continue until the municipal administration reaches a higher standard of efficiency, the narrow streets, high buildings and archaic sanitation, in fighting against which the public and their elected representatives have so far not adequately discharged their duty, taking a heavy toll of the inhabitants.

Under the head "Injuries" are included deaths from rabies (95 or 22 less than preceding year); and the Government is pleased to observe the increasing usefulness of the Punjab Bacteriological Laboratory attached to the Pathological Department of the King Edward Medical College, Lahore, which was instituted in January 1925. At this centre 2,887 persons were treated as compared with 2,651 at the Pasteur Institute, Kasauli.

The total number of Vaccinators and Superintendents of vaccination.

Vaccination increased from 526 to 534, and the plan of appointing at least one vaccinator for every police station is nearing fulfilment. The total number of vaccinations increased by about 140,000 to 1,730,000, and the Government is gratified to observe that there has been a steady and progressive increase during the last few years. The existence of a District Medical Officer of Health in each district is largely responsible for this improvement. Another satisfactory feature is the steadily increasing number of re-vaccination operations. The percentage of success was about the same as in the previous year, being 97.96 for primary vaccination and 68.80 for re-vaccination.

The Sanitary Engineering Department had under construction 34

Sanitation (Urban).

Sanitation (Urban).

Works for local bodies, and as many as 73

preliminary and detailed projects were prepared. The financial stringency, however, which became acuter as the year went on, will for a long time prevent many of these projects from being carried out. Among the provincial works completed during the year may be mentioned

the Water Supply and Sewerage Schemes for Chauburji Gardens Estate, Lahore, costing Rs. 1,10,343 and Rs. 2,70,731 respectively, and among the works done for local bodies (for executing which works the Public Works Department receive 19 per cent. departmental charges) the Pathankot Water Supply (Rs. 1,71,145), the Multan Water Supply (Rs. 12,57,637) and the Robtak Water Works (Rs. 5,56,479). As is pointed out in the report however expensive water supply and conservancy arrangements often suffer from inefficient control and from an unwillingness of the public and of local bodies to permit the levy of a water-rate and the metering of house connections. These drawbacks were mentioned in last year's report, and it is regrettable that they are as much in evidence as ever.

Government are pleased to learn from the report that the model sanitation (Rural).

Sanitation (Rural).

Sanitary regulations framed under the District Boards Act are being increasingly adopted by villages, Rohtak district setting an example to the rest. The works carried out by the Rural Sanitary and Improvement Board were mainly for improving water supply in waterless tracts and for providing piped water supplies for localities for fairs and markets.

The charge of the office of Director, Public Health, was held by Lt.-Col. C. A. Gill, I. M. S., except for the period 14th May to 9th October when he officiated as Inspector-General of Civil Hospitals, during which period Khan Bahadur Dr. K. A. Rahman officiated, and Government are pleased to observe the steady progress made by the department under these two officers, and desire to thank Khan Bahadur Dr. K. A. Rahman for a full and detailed report.

Ordered that copies of this review be circulated with the report and be furnished with the usual number of copies of the report to the Government of India, also that the review be published in the Punjab Government Gazette.

Ordered further that a copy be furnished to the Director of Public Health, Punjab, for information.

By order of the Punjab Government, (Ministry of Education).

FIROZ KHAN, NOON,

Minister for Education.

P. MARSDEN, Secretary to Government, Punjab, Transferred Departments. are pleased to concrete the steady progress made by the department under these two officers, and desire to thank likhan hankdur Dr. K. A. Rahman for a full and detailed report.

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### ERRATA.

Annual report on the Public Health Administration of the Punjab during the year 1930.

1. Appendix I, page iv, item 18, line 3, read 10" instead of 10' before "Tej strainer."

17 DPH-442-23-11-31-SGPP Lahore.

## FRRATA.

Annual report on the Public Health Administration of the Punjab during the year 1930.

I. Appendix I, page iv, item 18, line S, read 10' instead of 10' before

17 DPH-442-28-11-80PP Lebore.

#### CHAPTER I .- Climatic and Economic Conditions.

1. The following brief account is extracted from the report of the Chief Meteorological features. Director-General of Observatories and the monthly figures in respect of temperature, relative humidity and rainfall are given in Appendix VI.

In January, during the second week and again towards the end of the month, rainfall was fairly widespread throughout the province but largely in excess of normal in the southwest. During February the pre-cipitation associated with western disturbances occurred mainly in the Punjab hills and the adjacent plains and the weather was practically dry in the south-west Punjab. The rainfall was again in large defect throughout the province during March as was also the mean relative humidity ; the maximum temperature was, however, above normal. The chief features during the winter, from the point of view of public health were, therefore, low rainfall and low atmospheric humidity and the practical absence of the plague epidemic in the spring was in a large measure There was an improvement a reflection of these circumstances. in April and widespread and locally heavy rain fell in the Province between the 6th and 8th and from the 24th to the 26th; the total rainfall of the month was nearly double the normal amount. During May, on the other hand, rainfall was in large defect in the east and north Punjab, and normal in the southwest of the province. Conditions were disturbed in the Punjab and its neighbourhood on five occasions during June and were associated with local falls of rain. The monsoon extended into the province on the 4th July and was unusually active during the greater part of the month under the influence of four disturbances from the Bay of Bengal thus resulting in very heavy falls in the east and north Punjab on the 27th. The monsoon was weak in the first week of August but strengthened and gave widespread rain in the second week. A break in the rains, which commenced in the plains at the beginning of the third week, had extended to the hills also after the 22nd and during the rest of the month there was no rain in the province. The monsoon showed some signs of revival in the beginning of September and was fairly active in the third week. Rainfall was normal in June, in large excess in July, and in moderate to large defect in August and September. Numerous western disturbances entered north-west India in the months of October. November and December, but only a few were productive of rain in the province. Rainfall was consequently in large defect throughout, weather being absolutely dry in the south-west Punjab in the last two months.

Skies were more clouded than usual in January, April, July and October and less clouded in March and August. Humidity was in defect in March and from September to December, but was in excess in July. Maximum temperature was below normal in February, April and July and above normal in March and December. Minimum temperature was lower than usual in June, July, September and November.

2. The average wholesale prices per maund of staple food-grains, expressed in rupees annas and pies, which prevailed in the principal markets of the Punjab during the year 1930 and in the previous year, are given in table I below:—

TABLE I.

0 0001 87	Wat	SAT.	BAR	LEY.	Jos	FAR.	BAJ	24.	MA	#1.	GRA	м-
Locality.	1930.	1939.	1930.	1929.	1000,	1937,	1930,	1929.	1930,	1929.	1980.	1929.
Ambala	Rs. 4.F.	0.000	Rs. A.P.	09459	Re, a. r.	Rs. a. r.	Real P.	Rs. 1,P.	Re. a. r.	12/22/20/00		
	3 4 8	-		-	3 1 2 2 13 0	-	-	5 2 6	2 14 5	-		5 6
Multan	2 13 7	4 15 7	1 1 5	3 15 1	2 10 10	4 5 1	3 13 4	5 2 6	2 11 4	500	3 6 4	5 4

From a study of the figures given in Table I it will be seen that as compared with the preceding year a marked fall in prices of all the food-grains occurred during the year under review. This general decline in prices is attributed to lack of demand for export of wheat and fall in price throughout the world.

Fodder and water were generally adequate. There was no marked change in the wages demanded either by the skilled or unskilled labour. Economic stress, due to the big fall in the prices of foodgrains was, however, keenly felt by the agriculturists, who constitute the majority of the inhabitants of this province and by others due to heavy depression in trade and increased unemployment. These conditions were specially bad in Gurgaon and Hissar where test works for the relief of the famine-striken had to be continued till the conditions improved by favourable monsoon in August followed by a fall in the world's prices of wheat. The comparatively poor Kharif crops necessitated remission by Government of part of the land revenue in badly effected parts of the province.

3. The meteorological circumstances of the year were equally favourable both to the crops and public health. The excessive, but somewhat early monsoon while responsible for bumper crops in several districts reduced the chances of the prevalence of widespread epidemic of malaria in the province. On account of deficiency of rains in winter the weather was unfavourable for the spread of plague.

#### CHAPTER II.-Vital statistics.

- 4. The vital statistics of the 45 municipal towns with a population of over 10,000 were, as usual, compiled Registration of vital statistics. and published in the official Gazette every week. Besides this vital statistics of all towns with a population in excess of 20,000 as also of rural areas excluding these towns were published monthly. In addition weekly reports of epidemic diseases from all towns and tabsils in each district showing the number of seizures and deaths from cholera, plague, smallpox, influenza and relapsing fever were also collected, summarised and published for wide circulation in the official Gazette as well as by the courtesy of the management in several news-papers issued from the province. In this way both the public and the Government were kept constantly informed of the actual state of health and of the prevalence of epidemic diseases. The vital statistics form as it were a barometer of public health indicating whether it is high or low, good or bad. But their usefulness is dependent on accuracy and reliability of the data. It need hardly be emphasised that the increasing reliability of facts and figures now collected by the Department, specially in regard to the occurrence of epidemic diseases, indicate a good augury that if efforts are continued on the lines now being adopted, in course of time, the value of the conclusions arrived at will be materially augmented.
- 5. The census enumeration (20,517,606) of the Punjab carried out in 1921 is the basis for calculating birth and death rates mentioned in this report. The estimated population on January 1st, 1931, which has been arrived at by adding births and substracting deaths since April 1921, works out to 22,886,447 and shows that the census population had increased by 2,368,841 during the last 9\frac{3}{2} years. The natural increase in the population during 1930 was 278,939 as compared with 321,955 in the previous year and an average of 242,958 per annum since the last census. All the districts except Muzaffargarh shared in this increase, which affords evidence of the recuperative power of the population under favourable conditions of health. The decrease in population in Muzaffargarh is mainly attributable to the direct or indirect effects of previous year's epidemic of malaria.

The estimated population on December 31st, 1930, comprised of 12,468,958 males and 10,417,489 females, the number of males thus exceeding the number of females by 2,051,469 as compared with 2,038,378 at the end of the preceding year.

Calculated on the estimated population the provincial birth rate is 38.8 or 4.5 less than the rate calculated on the census figures. Similarly the provincial death rate 26.6 is less by 3.1.

6. Births.—The total number of births registered during the year 1930 was 887,521 or 43.3 per mille of which 469,771 (22.9 per mille) were males and 417,750 (20.4 per mille) females, the corresponding figures for the year previous to it being 911,918 (44.5 per mille) were females. This falling off in the births is attributable to the epidemic of malaria which took place in the autumn of 1929, of which the effect is reflected in the births of the year following the epidemics. The number of males born compared with every 100 females was 112.5 as compared with 112.1 in the year 1929 and 111.8 during the preceding quinquennium. An analysis of the figures by months shows that in the Punjab the highest birth-rate (4.74) was recorded in December and the lowest (2.72) in June.

It may be pointed out that the birth-rates mentioned above are the crude birth-rate calculated as they are on the basis of total population. To arrive at anything like a true general measure of the force of natality it is essential firstly to differentiate between legitimate and illegitimate births, between living and still births and secondly to use as a basis the total number of married women between the age limits of child bearing period.

7. The birth-rate of districts varied between a maximum of 52.0 and a minimum of 23.8 per mille. The five districts recording the highest birth-rate were Gurdaspur (52.0). Amritsar and Lyallpur (51.7) each, Sialkot (50.4) and Rohtak (49.3) whilst the five districts recording the lowest birth-rates were Muzaffargarh (23.8), Simla (26.9), Dera Ghazi Khan (28.1), Attock (33.2) and Karnal (36.0).

The birth-rate of all districts except Muzaffargarh (where autumnal fever had been prevalent) exceeded the death-rate, the excess being most marked in Sialkot (+23.0), Lyallpur (+22.5), Gurdaspur (+21.5), Amrit-sar (+20.6) and Sheikhupura (+20.4) neither of which was affected by epidemic of malaria during the preceding year nor by any other epidemic disease during the year under report. Comparing the birth-rate of the year 1930 with the mean figure of the preceding five years, 18 districts showed an increase and 11 districts a decrease. The five districts recording the greatest increase above the quinquennial mean figure were Rohtak (7.2), Sheikhupura (5.9), Sialkot (5.3) Gurdaspur (4.4) and Lahore (4.1).

8. The birth-rate of the 45 towns with a population of 10,000 and upwards was 45.9 per mille as compared with 45.7 per mille in the previous year and a mean birth-rate of 43.8 per mille during the preceding five years. The birth-rate of the three large cities in the year under review, in the preceding year and in the previous five years is shown in table II.

TABLE II.

	Tow	n.	212	1930.	1929.	1925-29.
Lahore	The same of		 	41.72	41.06	38-64
Amritsar			 ***	52.28	52.68	50.88
Multan		101	 	43-39	45.95	46-57

The birth-rate of all the towns (municipal, notified area and small towns) where registration of vital statistics is compulsory, and which now number 206 was 44.29 per milie, as compared with 44.01 per mille in the previous year and a mean birth-rate of 42.67 per mille in the preceding five years.

9. The birth-rate in rural areas (excluding the towns) was 43·13

\*\*per mille\* as compared with a mean birth-rate of 42·9 during the previous five years and 44·49 during the preceding year. The districts (rural areas) showing in order the highest birth-rates were Lyallpur (52·64), Gurdaspur (52·01), Amritsar (51·50), Sialkot 50·14) and Rohtak (49·29). All these districts escaped the malaria epidemic of 1929.

Provincial death-rate.
Annual Form No. II.

Provincial death-rate.
and 284,828 females. The provincial death-rate works out to 29.7 per mille as compared with 28.8 per mille in the preceding year and a mean death-rate of 29.5 during the previous quinquennium.

Calculated on the estimated population the death-rate was 26.6 per mille or 3.1 per mille less than the figure based on the census population.

The death-rate of males and females in the year under review, in the preceding year and in the previous five years was as given in table III.

TABLE III.

Sex.	01	1925-29.	1929.	1930.
Males		28-6	27.7	28-9
Females		30.6	30-0	30.6
Excess of the female over the male death-rate		2.0	2.3	1.7

From a scrutiny of table III it will be seen that the female deathrate exceeded the male death-rate by 1.7 per mille as compared with 2.3 per mille in the previous year and 2.0 per mille in the preceding quinquennium. The comparatively small difference between the death-rate of the sexes in 1930 is attributable to the lowest incidence of plague recorded in the year under review.

The death-rate under the main heads of mortality during the years 1929 and 1930 and during the previous five years is shown in table IV.

TABLE IV.

Andoli erewano	a Ball	entralation de la	de la companie de la	de abovo t	EXCESS OR DEFECT IN 1930 AS COMPARED WITH.		
Head of mortality.		1930.	1929.	1925-29.	1929.	1925-29.	
Cholera		0.06	0.11	0.18	-0.05	-0.12	
Small-pox	10.50	0.26	0.38	0.50	-0.12	→ 0.24	
Plague		0.03	0.10	1.61	-0.07	- 1.58	
Fever		20.59	19.61	18-67	+0.08	+1.92	
Dysentery and Diarrhos	n.	0.60	0.64	0.54	- 0-04	+0.08	
Respiratory Diseases		2-52	2.53	2-66	-0.01	-0.14	
Injuries		0-30	0.32	0.33	-0.03	- 0.08	
All other causes		5-32	5-05	5.02	+0.27	+0.27	
Total		29-66	28.75	29.48	+0.91	+0.18	

From a scrutiny of the above table it will be seen that the "fever" death-rate in 1930 was in excess of the corresponding figures of the previous year as well as of the mean of quinquennial years, whilst the death-rate from plague, small-pox and cholera showed marked diminution. In the absence of any febrile disease in epidemic form and the presence of epidemic malaria in the previous autumn it may be assumed that malaria was mainly responsible for the enhanced "fever" mortality and consequently for the increase in the total death-rate.

- 11. Eleven districts registered higher mortality and 18 lower than the provincial average (29.7). The six districts exhibiting the highest death-rates were Gurgaon (40.1), Gujranwala (33.7), Mianwali (32.9), Montgomery (31.6), Amritsar (31.1) and Rohtak (30.9). The relatively high death-rates occurred almost entirely from "fevers." Among the districts which recorded a rate lower than the provincial death-rate were Simla (22.4), Gujrat (26.8), Sheikhupura (26.9), Attock (27.2) and in the remaining 14 districts it ranged between 27.4 and 29.4.
- The Urban death-rate.
  Annual Form No. VI-(B).

  30.43 per mille as compared with a mean figure of 30.19 during the preceding five years, which represents an increase of 0.24 per mille of population. The death rate of the three largest cities during the years 1929, 1930 and the mean of the years 1925-29 is given in Table V.

TABLE V.

Town.	do chel	1930.	1929.	1925-29,	Decrease in death rate in 1930 as compared with the year 1929.
Lahore City		31.55	34-63	31.86	- 3.08
Amritsar City	or and or	38-01	42-99	42-61	- 4.08
Multan City	00 (1)	34.96	41-86	34-73	- 6.90

Some of the smaller towns recorded exceptionally high death rates viz., Guru Har Sahai (69.77), Rajanpur (68.12), Kot Chhutta (58.00), Kot Mithan (57.12), Vahoa (56.67), Vehari (53.10), Kabirwala (50.60), Jagadhri (49.12), Firozpur (49.10), Beri (48.97), Jalalabad (48.53), Dajal (46.93), Mukerian (46.46), Hodal (40.12), Alipur (44.85), Palwal (44.70), Phillaur (44.51), Karor (44.36), Ballabgarh (42.46) and Isakhel (42.45). With the exception of Isakhel where high death-rate was due to an outbreak of cholera, deaths from "fevers" were mainly responsible for the high figures though other causes also helped to swell up the death-rate.

- The Rural death-rate compared with 28.43 per mille during the preceding year and a mean death-rate of 29.40 per mille during the preceding five years. The rural death-rate was above the quinquennial mean figure in 11 districts out of the total of 29, the highest rate being returned from Gurgaon (40.65), Gujranwala (34.60), Mianwali (33.41) and Montgomery (32.05). The cause of the high mortality rate is chiefly the prevalence of autumnal malaria in these districts.
- Comparison of Urban and Rural death-rate in urban areas exceeded, as usual, the death-rate in rural areas by 0.86 per mille of population as compared with 3.03 per mille in the previous year.

The death rate under the various main heads in urban and rural areas in the year 1930 and in the year previous to it is given in table VI below:—

TABLE VI.

	URBA	N DEATH-	RATE.	Run	AL DEATH-I	RATE.	
Head of Mortality.		1929.	1930.	Increase or decrease in 1930.	1929.	1930.	Increase or decrease in 1930,
Cholera		0.35	0.31	-0.04	0.08	0.03	-0.05
Small-pox		0.72	0.51	-0.21	0.34	0.23	-0.11
Plague		0.05	0.01	-0.01	0.11	0.03	0.08
Fevers		14.80	13.76	-1.04	20:20	21.42	+1.22
Dysentery and Dia	rrhœa	1.65	1.53	-0.12	0.52	0.48	-0.04
Respiratory Diseases		5.97	5.90	-0.07	2.11	2.10	-0.01
Injuries		0.37	0.37		0.32	0.29	-0.03
All other causes		7.55	8.04	+0.49	4.75	4.98	+0-23
Total	0.0	31.46	30.43	-1.03	28.43	29-57	+1-14

From a scrutiny of the figures quoted in the above table it will be seen that the urban death-rate under every head of mortality, with the exception of "fevers" and "plague" was higher than the rural death-rate. This corroborates the well known fact that malaria chiefly attacks the rural population. The relatively high mortality rates in towns, from respiratory diseases and diseases of the alimentary canal as compared with the rural areas have been repeatedly observed before, and the year under review, as will be seen from table VI, is not an exception to it. Want of fresh air, pure water, wholesome food and above all adequate conservancy arrangements are among the causes which contribute towards this high mortality and have often been clearly and cogently presented before the local bodies. The problems for the improvement of the health of the urban population are, therefore, a matter of great importance and special urgency and as a result of the representation recently made by this department for the complete re-organisation of conservancy arrangements in urban areas the matter is engaging the attention of municipal committees and other authorities concerned.

Seasonal mortality.
Annual Form No. III.

Seasonal mortality.
Annual Form No. III.

of the year. The month of January was the unhealthiest month during the year, when the total death-rate was 3.07 per mille. "Fever deaths" contributed largely towards it and were the results of after-effects of epidemic malaria of 1929. Next in order of severity came December (2.83 per mille) followed by November (2.76 per mille) and October (2.72 per mille) attributal to the prevalence of malarial fevers. The month of July with a death rate of (1.95 per mille) was as usual the healthiest month of the year, next in order coming March and April (2.11 per mille each). The weekly incidence of cholera, smallpox and plague is shown in charts II, III and IV (Appendix VII) respectively.

- Age incidence of mortality.

  Annual Form No. IV.

  Age incidence of mortality.

  Annual Form No. IV.

  Age incidence of mortality.

  Annual Form No. IV.

  Age incidence of mortality.

  Annual Form No. IV.
  - 1. Not exceeding one month;

- 2. Over one and not exceeding six months;
- Over six months and under 12 months, can alone be given.

Among infants not exceeding one month in age the total mortality was 71,348 (38,828 males and 32,520 females) as compared with 71,745 (39,294 males and 32,451 females) in the preceding year. The mortality in this age group was therefore —397 (—466 males and +69 females) in defect of the figure of the previous year. The districts of Amritsar (4,799) Lyallpur (4,622), Jullundur (4,045), Ferozepore (3,943) and Gurdaspur (3,558) exhibited the largest number of deaths of infants during the first month of life.

Among Muslims the total number of deaths reported was 38,885 (21,481 males and 17,404 females), Hindus 30,926 (16,504 males and 14,62 females), Indian Christians 1,159 (633 males and 526 females) and other classes 378 (210 males and 168 females).

In the case of children over one month and not exceeding six months in age, the mortality amounted to 46,891 (25,210 males and 21,681 females) as compared with 49,197 (26,342 males and 22,855 females) in the preceding year. The defect in the year under review was therefore, 2,306 (—1,132 males and—1,174 females). The districts recording the largest number of deaths in this age-group were Lahore (2,715), Gurgaon (2,471), Ferozepore (2,366), Sialkot (2,316) and Multan (2,169).

#### Amonglthe different classes the figures were :-

	Total.	Males.	Females.
Muslims	 26,262	14,186	12,076
Hindus	 19,790	10,568	9,222
Indian Christians	 624	338	286
Other Classes	 215	118	97

In children over six months and under 12 months, the mortality amounted to 46,600 (24,813 males and 21,787 females) as compared with 48,857 (25,820 males and 23,037 females) in the preceding year. The districts of Ferozepore (2,893), Gurdaspur (2,625), Hoshiarpur (2,618), Lahore (2,525), and Multan (2,127), were responsible for the largest number of deaths in this age group.

In the case of infants under one year of age, the total number of deaths was 164,839 showing an increase of 4,346 as compared with the quinquennial mean figure and a decrease of 4,960 as compared with the preceding year. The infant mortality rate or the number of deaths per 1,000 births in the year under review was 185.73 (189.14 males and 181.90 females) as compared with 186.20 (189.79 males and 182.18 females) in the previous year.

Classified according to different communities the death-rates in this group were recorded as under :—

		19	1929.		
101	- 1	Males.	Females.	Males.	Females.
Muslims		207-09	177:72	221-60	291-91
Hindus		212:20	196-96	208-79	193-14
Indian Christians		169-02	148.87	142-53	120.56

Annual Form No. IV, in respect of the incidence of deaths amongst the different religions and classes of the population are shown in the table VII.

#### TABLE VII.

Race religion or class.	DEAT	H-BATE.	DEATH-RATE PER MILLE OF POPULATION UNDER ONE YEAR,		
neter to admin to mam	Males	Females.	Males.	Females.	
Muslims	30.15	30.40	207*09	177-72	
Hindus	27.05	30.60	212-20	196-96	
Indian Christians	30 50	29.93	169.02	148-87	

The figures given in table VII show that the total death-rate of Muslims was higher than that of other religions whereas the infant death rate of both sexes in Hindus was higher than the corresponding figures of other religions. The infant death-rate of males of all religions, as usual, was higher than the female death-rate.

- 18. Births and deaths amongst Railway Employees.—During the year under report 83 births (55 males and 28 females) and 54 deaths (38 males and 16 females) were registered at railway stations situated outside municipal limits as compared with 94 births (49 males and 45 females) and 73 deaths (43 males and 30 females) in the preceding year. Of the total of 54 deaths fevers accounted for 21, respiratory diseases 14, all other causes 9, dysentery and diarrhœa 5, injuries 4 and smallpox 1. Births and deaths occurring at railway stations situated within the limits of municipal and other towns which have adopted compulsory registration were reported and included in the figures of the civil population.
- 19. Births and deaths amongst Europeans and Anglo-Indians.— During the year there were 522 births and 121 deaths amongst Europeans and Anglo-Indians against 461 and 123, respectively in 1929. The deaths were classified as follows:—

All other causes 65, Respiratory diseases 28, fevers 25, dysentery and diarrhœa 2 and cholera 1.

20. Births and deaths in Cantonments. -4,073 births and 2,709 deaths were registered during 1930 among the non-military population of cantonments which represents a decrease of 290 and 63, respectively, as compared with the previous year. The deaths were classified as under:—

Fevers		 ed parting	in conti	1,471
All other ca	uses	 		700
Respiratory	diseases	 		375
Dysentery a	nd Diarrhea	 		100
Injuries		 		46
Cholera		 		10
Smallpox		 		7

21. Summary of the state of public health in the year 1930.—
The year 1930 with a total death-rate of 29.66 per mille although relatively a healthy year yet as measured by mortality compares somewhat unfavourably with 1929 which had a total death-rate of 28.75. The slight increase, however, in the death-rate may be only an apparent one as in calculating the rate, the actual increase in the total population during the year has not been taken into consideration. This fact is clearly pointed out in chart I where the annual birth and death-rate and the infantile mortality rate during the period 1867-1930 and 1880—1930,

respectively, are graphically shown. The high death-rate is usually associated with a high birth-rate. The provincial figure was 43.3 per mille as compared with an average birth-rate of 43.0 per mille during the preceding quinquennium. The infantile mortality rate in 1930 was lower as compared with that of the previous year.

The death-rate under the various heads of mortality during the year under review together with the average for the previous five years are shown in table VIII.

TABLE VIII.

ASSESSED VISIONA	10-51-51		MEDICAL PROPERTY.						
Years.	Cholera.	Smallpox.	Plague	Fevers.	Dysent-ry and Diarrhosa.	Respiratory discases.	Injuries.	All other causes.	Total.
1930	0.06	0.26	0.03	20.59	0.60	2.52	0.30	5-32	29-66
1925-29	0.18	0.50	1.61	18-67	0.24	2.66	0.33	5-05	29.48
Increase or decrease in 1930.	-0.12	-0.24	-1.58	+1.92	+0.06	-0.14	-0.03	+0.27	+0.18

The diminished death-rates from plague, cholera and smallpox as will be seen from a study of the above table is an evidence of the practical absence in epidemic form of those diseases from the province during the year under review. The province was visited by an epidemic of malaria in 1929 and the increase in death-rate of 1.92 per mille observed in 1930 under "fevers" as compared with the quinquennial mean is mainly attributable to that epidemic as also to autumnal malaria.

The following table (IX), which speaks for itself, gives the registered birth and death-rates of the various provinces in India during the year 1930:—

TABLE IX.

Serial No.	Name of pro	vince.	vint b	Birth-rate.	Death-rate.	Excess of birth- rate over death- rate.
1	Central Provinces	II see		47*74	37-76	9-98
2	Punjab	1901		43.26	29.66	13.60
3	Madras			39-83	25.52	14.31
4	Bombay			37.41	29-53	7-88
5	United Provinces			37:31	27-20	10-11
6	Bihar and Orrisa	11010	House D	36.2	29.6	6.6
7	Assam	min p		31.35	21.40	9-95
8	Burma			28.87	20.82	8.05
9	Bengal	Sd		26.60	22-44	4.16
10	NW. F. Province	00.30	100	25.60	21.89	3.71

The consistently high birth-rate of the Punjab, which is usually about twice that of the United Kingdom, in spite of its high death-rate (chiefly as a result of the frequency and severity of epidemic visitations) is nevertheless an encouraging sign since it indicates that the somewhat severe epidemics to which the province is liable exercise little or no permanent effect on the virility and recuperative power of its inhabitants.

#### CHAPTER III.-Chief Diseases.

22. Cholera.—Cholera appeared in a mild form during the year under report accounting in all for 2,040 seizures and 1,181 deaths as compared with 4,510 seizures and 2,309 deaths in the preceding year. The cholera death-rate was 0.06 per mile 0.06 males and 0.05 females) as compared with 0.11 per mille in the previous year and a mean cholera death-rate of 0.18 in the preceding quinquennium. The annual cholera death-rate during the period 1867-1930 is shown graphically in chart II and from a study of which it will be seen that the mortality from cholera during the year under review was unusually small. The figures given in the Annual Form No. VII show that the districts with the single exception of Muzaffargarh were infected, at one time or the other. Owing to the prompt and vigorous action taken, in 5 districts only did the infection persist for some time and was responsible for 216 deaths in Hoshiarpur, 193 in Lahore, 130 in Mianwali, 102 in Jullundur and 79 in Amritsar.

Infection continued longer in the towns than in the rural areas with the result that the urban death-rate was 0.31 per mile or ten times the rural death-rate.

Out of a total of 206 towns, no less than 60 were involved returning 700 deaths. The towns chiefly affected were Lahore (119), Isakhel (88), Hissar (53), Jullundur (51), Hoshiarpur (37), Wazirabad and Kalabagh (36 each) and Baghbanpura (31).

In rural areas cholera was reported from 194 villages or 0.6 per cent. of the total villages of the Province; the total number of deaths was only 481.

Thus, as is usually the case nowadays, the incidence of cholera infection lasts longer and is higher in the towns than in the villages where, once the report of the outbreak of the disease is received, the measures adopted yield surer results.

Punjab is not a home of cholera and the province was free from the disease in winter up to the middle of February, when after the returns of pilgrims from the Kumbh Fair, Allahabad (which was held in January and February 193) isolated cases occurred during February and March in Lahore, Hoshiarpur, Gujranwala and Amritsar. During April isolated cases, some suspected, others to be due to importation from Katas and Hardwar, occurred in five districts. In May sporadic cases or small outbreaks (total deaths 29) in which the source of infection could not be traced took place in the districts of Rawalpindi, Hoshiarpur, Multan and Amritsar. Infection continued to spread to the neighbouring districts and in June localized epidemics of cholera were reported from Mianwali, Lyallpur, Multan, Jullundur and Gurgaon. Small outbreaks of cholera, most of which were short-lived, continued throughout the province during the months of July, August and September. The height of the intensity as usual was in August.

In view of the danger of introduction of cholora by the pilgrims returning from Kumbh Fair, Allahabad, held during January and February and also because of the outbreaks of cholera which occurred in Kashmir during the month of November 1929, the anti cholera measures which are usually adopted in April were brought into force in the beginning of the year. In this connection, so far as the outward journey was concerned, every effort was made, short of compulsion, to induce intending pilgrims to get inoculated against cholera before their departure to Allahabad. District Medical Officers of Health were also directed to overhaul their arrangements for securing the prompt submission of cholera reports, to replenish their supplies of medicines and disinfectants and to establish cholera depôts on all important roads and railway stations. Owing to the season of the year as well as due to the precautionary measures taken by the Department, the infection imported as a result of this fair did not take root and spread in the province.

The infection imported later on from Hardwar and other places continued to spread for about six months but its manifestations were everywhere brought promptly under control due to the untiring energy and commendable promptitude displayed by the Public Health Staff throughout the period.

The Railway Administration offered their close co-operation to the Public Health Department for which they deserve our thanks.

23. Smallpox.—The recorded mortality from smallpox during the year under report was 5,341 (0.26 per mille), as compared with 7,763 deaths (0.38 per mille) during the preceding year and a mean death rate of 0.50 per mille during the preceding quinquennium. A study of chart III will reveal that smallpox has a tendency to appear in epidemic form once every five years and 1930 being the ebb tide year it would be problematical to claim that the relatively low death rate in 1930 was due chiefly to more general adoption of vaccination during the preceding quinquennium.

As usual the disease prevailed throughout the year and is represented graphically in the diagram attached to chart III.

The maximum mortality (947) occurred in May when it began to decline showing 798 in June, 492 in July and 192 in August. In October the number of deaths fell to 89 and after that month it began to rise gradually and was responsible for 288 deaths in December.

Every district in the province was infected but the death rate from smallpox was above the provincial mean figure (0.26) in the following districts:—

Hoshiarpur (0.73), Hissar (0.54), Ferozepore (0.52), Gurgaon (0.47), Ludhiana (0.39), Ambala and Lahore (0.38 each), Gujrat (0.37), Rohtak (0.35), Montgomery (0.34) and Jhelum (0.32).

The lowest rate recorded was in Muzaffirgarh (0.01), Dera Ghazi Khan and Jhang (0.03 each) and Mianwali (0.04).

In regard to age distribution only 29 per cent. of the total deaths occurred amongst children under one year of age whilst, in the case of children over one and under 10 years of age, the percentage was 52, which emphasises the fact that it is not possible to minimise the spread of infection to a substantial extent till re-vaccination becomes as common as primary vaccination is to-day.

As regards sex, the female death rate, as usual, slightly exceeded (0.02 per mille) the male death rate (a circumstance which may probably be ascribed to the fact that the re-vaccination of adult females is less complete than is the case with males).

Smallpox is normally more prevalent in Urban than in Rural areas and the year under report proved no exception to the rule since the urban death-rate was 0.51 per mille as compared with 0.23 per mille in the rural areas. The higher death rate in towns may partly be due to more complete reporting but it is probable that the congestion prevailing in urban areas is responsible for the greater exposure to infection of the urban population.

Of the three largest towns, Multan reported smallpox death-rate of 0.70 per mille, Lahore 0.35 per mille and Amritsar 0.20 per mille, the corresponding figures for the previous year being 0.17, 0.70 and 0.89 per mille. The comparatively high death-rate in Multan City is ascribed to the visitation of smallpox in epidemic form after the five years cycle. Out of the 206 towns 115 registered deaths from smallpox. Some of the smaller towns suffered even more than the big cities, the death-rate in Kabirwala being as high as 8.84 per mille, Sri Gobindpur 5.05 per mille and Hariana 5.00 per mille.

The anti-smallpox measures taken and progress made in vaccination during the year under review is dealt with in chapter IV,

24. Plague.—For the fourth year in succession the toll of human Annual Form No. IX (a) and (b). life exacted by plague was conspicuously small. The mortality recorded during the year under review was in fact the lowest on record since the commencement of the present plague cycle in the province. The total number of deaths in each year since the disease established itself is as follows:—

Year.		Number of deaths.	Ye	ar.	Number of deaths.	
1901	111 m	14,959	1916	n valle	3,278	
1902	a carrie man	171,302	1917	100 40	8,775	
1903	TOTAL VICE	2,05,462	1918	h wol.	95,615	
1904	miller	396,357	1919	- nolden	11,068	
905	bus ress	334,897	1920		6,137	
906		91,712	1921	964 01.7	2,553	
907	dimen.	608,685	1922	10 000	7,780	
908	The state of	30,708	1923	DI SO	50,086	
909	300	35,655	1924	Con Const.	251,261	
910		135,483	1925		37,630	
911	(O) est s 3	175,345	1926		108,287	
912		29,805	1927	-1.	8,452	
913	compa de.	17,877	1928	(850.3	8,282	
914	V2160) 452 in	61,010	1929	alada.	2,053	
915		221,966	1930		554	

The plague death rate in 1930 of British districts was 0.03 per mille (0.02 males and 0.03 females) as compared with 0.10 per mille (0.08 males and 0.12 females) in the previous year and 1.61 per mille in the preceding quinquennium. As recorded elsewhere the higher death-rate of females as compared with that of males is ascribed to the greater exposure to infection of the former owing to their domestic habits which makes them spend most of their time indoors.

Five districts out of a total of 29 were infected with plague as compared with 13 districts during the previous year. The total number of villages infected in 1930 was 89 as against 259 in 1929. Three districts situated in the submontane region of the Himalayas which were chiefly affected and recorded mortality in excess of the provincial mean, are as follows:—

			Deaths.		Rate per mille.
Gurdaspur	CO DEIW	DITEGR	262	200.10	0.31
Sialkot	STAG TROP	8117/11	215	1000.30	0.25
Hoshiarpur	transpire a	if I dad	63	al dedu	0.07

From the remaining 2 districts, viz., Robtak and Karnal, only sporadic and imported cases were reported. Out of the 206 towns only Sialkot and Dasuyah were infected during the year as compared with 9 in the preceding year. As usual the disease was more severe in the rural circles than in the urban areas, the death-rate being 0.03 and 0.01, respectively, as compared with 0.11 in the case of rural and 0.05 in that of urban areas during 1929. The three largest towns, i.e., Lahore, Amritsar and Multan remained free from plague throughout the year.

Among the Punjab States only Jind was infected with plague.

The annual death-rate in the Punjab from plague from the time of its inception in 1898 up to the end of the year under report is shown in chart IV.

Plague revived in the autumn of the year 1929 in Gurdaspur district, which in January and Februrary 1930 together with Sialkot district constituted the main endemic area. On 25th March a fatal case of bubonic plague imported from village Behari Garh of Saharanpur district (United Provinces) was reported in Sonepat town of Rohtak district. In April two mild endemic foci exhibited themselves in the districts of Hoshiarpur and Gurgaon which completely disappeared by the end of June and the province was declared free from plague. In October again, the disease recrudesced in Gurdaspur and by the end of the year Sialkot and Hoshiarpur also became infected. The weekly incidence of seizures and deaths from plague as will appear from the diagram attached to chart IV reached its maximum intensity in April. A rapid decline followed in May and the disease died out by the end of June.

The main features of the year, therefore, were :—(1) the steady shrinkage of the endemic area combined with a tendency of the disease to persist in the relatively humid districts in the foot-hills of the Himalayas; (2) the low diffusive power and the low intensity of the epidemic and (3) its early and complete decline in June and its reappearance in a restricted number of localities in the autumn. The disease was of the bubonic type although a few cases of the pneumonic plague were also reported.

Preventive Measures.—Anti-plague measures were conducted on the usual lines. During the off season, August to October, rat destruction by means of trapping and poisoning was carried out as far as possible systematically in and around the towns and villages in which plague or rat mortality had occurred during the previous plague season. The total number of anti-plague inoculations performed in the infected localities amounted to 28,764 as compared with 59,382 in the preceding year. The decrease is due to the mild nature of the epidemic in the year under review. There is, as a rule, no demand for inoculation until plague assumes epidemic proportion.

The unprecedented decline in the plague mortality is largely attributable to the unfavourable meteorological conditions for the prevalence of the disease but the great energy displayed by the Public Health Staff in carrying out the anti-plague measures and thus reducing the intensity of the disease and also human suffering is worthy of commendation.

25. "Fevers."—The deaths registered under the head "fevers, numbered 422,377 as compared with 402,429 in the previous year. The "fevers" deathrate was 20.59 per mille (19.85 males and 21.47 females) as compared with 19.61 per mille (18.68 males and 20.73 females) in the previous year and a mean death-rate of 18.67 per mille in the preceding five years.

The annual "fever" death-rate during the period 1867—1930 is shown in chart V, from a scrutiny of which it will be seen that there is a slight rise during the year under review as compared with 1929 when a portion of the province was visited by an epidemic of malaria. It is no doubt true that "fevers" is a comprehensive term and besides malaria includes a large number of diseases, more especially plague, relapsing fever and influenza; but in view of the well marked seasonal characteristics exhibited by these epidemic diseases it is possible to determine the relatively high "fever" mortality in 1930. From a reference to the Annual Form No. X where the monthly "fever" mortality is given it will be seen that in 1930 there is a marked diminution (-34,504) in the "fever" mortality during the months of October, November and December only if compared with the figures of the corresponding months in the preceding year; whereas in the remaining nine months the figures have exceeded those of 1929. This excess is conspicuously marked during the months of January and February the figures being 26,040 in excess of that of the previous year.

A study of the above data permits of the following conclusion :-

- 1. Because of a diminished "fever" mortality during the months of October, November and December in the year under review as compared to the corresponding months in the previous year it may be safely inferred that the excess in the "fever" death-rate in 1930 over the figures for the previous year was not attributable to epidemic malaria.
- 2. The exceedingly high "fever" mortality during the mouths of January and February 1930 in the absence of influenza in winter and in the presence of an epidemic of malaria in autumn 1929, may reasonably be attributable either to the direct consequence of 1929 malaria epidemic or to its sequelæ.
- 3. As a corollary of the above, therefore, the increase in the "fever" mortality in 1930 should be regarded to be the ultimate result of epidemic malaria of 1929.

In 19 districts the "fever" death-rate was higher than in the previous year, the most conspicuous being Gurgaon, Rohtak, Karnal and Sheikhupura, where the rate was 7.78, 4.60, 3.99 and 3.93 per mile, respectively in excess.

Fifteen districts exhibited a "fever" death-rate in excess of the provincial mean figure, the most prominent being Mianwali (28:00), Gujranwala (27:52), Muzaffargarh (27:04), Montgomery (25:93) and Gurgaon (25:49).

The "fever" death-rate in towns was as usual lower than the death-rate in rural areas the figures being 13.76 per mille and 21.42 per mille, respectively, the corresponding figures in the year 1929 being 14.80 per mille and 20.00 per mille, respectively. It may be remarked that although the province was generally free from an epidemic of malaria, the ma'aria forecast correctly designated certain areas in Gurgaon, Ferozepore and Montgomery where mild outbreaks of the disease would occur during the autumnal months.

Preventive Measures.—Little need be said on this subject. The malaria forecast issued on the 31st August predicted that the province will remain free from a widespread epidemic of malaria but mild foci of the disease will develop in certain districts. On the basis of this knowledge, particular attention was paid in those localities and the scheme of quinine distribution by means of quinine depôts which were successfully enforced during epidemic of the previous year was again adopted; while anti-malaria measures on usual lines were carried out in other districts to reduce the intensity of autumnal malaria. In this connection 141 lbs. of quinine was supplied from this department free of charge to the infected districts requiring such help.

In all 5,509 depôts and sub-depôts were formed and the total amount of quinine distributed by them was 1,746 lbs.

26. Dysentery and Diarrhoea.—There were 12,247 deaths recorded under this head of mortality as compared with 13,208 in the previous year, the death rate being 0.60 per mille (0.59 males and 0.61 females) as against 0.64 per mille in the preceding year and a mean death-rate of 0.54 per mille in the previous five years.

The most striking feature exhibited in Annual Form No. XI is the high death-rate recorded in the sub-Himalayan districts of Simla, Kangra and Rawalpindi, which is attributed to the prevalence of hill diarrhæa and enteric fever. Due mainly to bad conservancy arrangements the urban death-rate was as usual nearly three times the rural death-rate, the former being 153 per mille and the latter 0:48 per mille as compared with 1:65 and 0:52 in the preceding year. Some of the large towns recorded a distinctly high death-rate more especially Vehoa of Dera Ghazi Khan district (7:64), Firozpur of Gurgaon district (5:50), Dhariwal of Gurdaspur district (4:18) and Beri of Rohtak district (4:02). The highest

figure in Vehoa is attributed to the presence of guineaworm in the water.

27. Respiratory Diseases. - The total number of deaths from diseases of the respiratory system accounted Annual Form No. XII. for 51,678 deaths or 2.52 per mille which shows a decrease of 0.01 and 0.14 per mille when compared with the figures for the last year and the average for the previous five years, respectively. The provincial rate was exceeded in eight districts, but the excess was most marked in Ambala where the rate was 11:69 pr mille followed by Simla 5.79, Kangra 6.04 and Amritsar 4.30. It was as low as 051 per mille in Sheikhupura, 0.65 in Muzaffargarh, 0.74 in Dera Ghazi Khan and 0.86 in Montgomery. The respiratory diseases death-rate per mille in Lahore City was 7.11, in Amritsar City 13.70 and Multan City 11:11; it was also exceptionally high in the towns of Shahpur Civil Station (28:21), Vehari (26:55), Palampur (18:90), Nurmahal (17:38) and Dharmsala (12.07).

The urban and rural death-rates were 5.90 and 2.10 per mille, respectively as against 5.97 and 2.11 in the preceding year. The death-rate from respiratory diseases is nearly three times in the urban as compared with rural areas. This is more or less a constant feature in the province and is said to be due to the higher incidence of pulmonary tuberculosis in towns as a result of over-crowding, defective conservancy arrangements, and other gravely insanitary conditions prevailing in these quarters which help to form fertile breeding ground for the disease. On the other hand so far as it is known pulmonary tuberculo is is a relatively rare disease in rural areas where light and fresh air are more freely available.

- 28. Influenza. As a result of unusually intense waves of cold in January and February and December cases of mild catarrhal fever or which might be termed as a mild type of influenza were detected at certain hospitals and dispensaries in Dera Ghazi Khan, Muzaffargarh, Montgomery and Amritsar districts. Out of a total number of 562 cases who received medical treatment only nine deaths are reported to have taken place in Montgomery district. In addition cases of influenza were reported from Mochh, Abba Khel and Rokhari in Mianwali tabsil which caused 72 deaths during the year. The patients, their contacts and the persons in the neighbourhood were given the necessary medical treatment and advice. The infection was localised in all cases and did not spread to the adjoining localities.
- 29. Injuries During the year under report 6,103 deaths (0.30 per mille) occurred as the result of injuries, Annual Form No. VI-A and B. as compared with 6,636 (0.32 per mille) in the previous year and an average death-rate of 0.33 during the previous five years.

The deaths were classified as follows :--

.. 247 (143 males and 104 females). Suicide

.. 784 (640 males and 144 females). Wounds

.. 4,351 (2,492 males and 1,859 females). Accidents

95 (70 males and 25 females). Rabies

Snake-bite .. 447

Injuries inflicted by wild 179

beasts.

The figures under the above heads exhibit only slight fluctuations from year to year, but attention may be called to the steady increase in the number of fatal accidents during the past few years owing possibly to the increased use of motor vehicles and electricity; it is satisfactory to note that a decrease of 622 was recorded under this head during the year under review. The number of deaths ascribed to rabies shows a

decrease of 22 as compared with the last year and 50 when compared with the mean figure of the preceding five years. As usual the male death-rate from hydrophobia greatly exceeded the female death rate. During the year 2,651 patients (154 Europeans and 2,497 Indians) from the Punjab underwent anti-rabic treatment at the Pasteur Institute, Kasauli (which receives substantial aid from the Punjab Government) as compared with 1815 (158 Europeans and 1,657 Indians) in the preceding year. In addition 2,887 persons (199 Europeans and 2,688 Indians) underwent treatment at the Pathological Laboratory of the King Edward Medical College, Lahore, against 2,596 (214 Europeans and 2,182 Indians) in the year 1929. The Lahore centre, therefore, continues to win the confidence of the people in spite of the fact that certain cases have to be directed to Kasauli for special treatment with etherised vaccine.

30. All Other Causes.—The total number of deaths registered under this head was 109,101 (58,363 males and 50,738 females). This figure represents a death-rate of 5:32 per mille which is 0:27 per mille in excess of that for the previous year as well as of the quinquennial average.

The highest death-rates were recorded in the districts of Ludhiana (10.8), Gurgaon (10.4), Simla (9.4) and Gurdaspur (8.4).

#### CHAPTER IV-Vaccination.

[This chapter and all the statistical tables connected with vaccination refer to the period April 1st, 1930—March 31st, 1931, instead of the calendar year 1930.]

31. Administration.—The administrative and other arrangements vaccination Statement No. II. in connection with vaccination during the period under review remained the same as in the previous years. The total number of Superintendents of Vaccination and vaccinators employed by local bodies during the years 1929-30 and 1930-31 was as follows:—

	El bean	1929-30.	1930-31.
Superintendents of Vaccination	bus seen	37	37
Vaccinators	1 01 00	489	497
		at the last	29.
Total	700	526	534

The number of vaccinators was increased by 8 during the period under review. In Multan District 12 additional vaccinators were engaged, four in Lyallpur, three in Amritsar, two in Muzaffargarh and one each in Gurgaon, Ambala, Rawalpindi and Mianwali, but in Hissar the staff was reduced by six, in Jullundur, Ferozepore and Sialkot by two and in Karnal, Lahore, Shahpur, Jhelum and Jhang by one. Considerable progress has been made in giving effect to the policy of appointing one vaccinator to each thana and it is gratifying to see that with the exception of Hissar and Muzaffargarh districts this desideratum has been brought nearer to fulfilment. No change took place in the strength of the Special Staff (Provincial) of Vaccinators or those employed in the tribal area beyond the borders of Dera Ghazi Khan district. The average number of persons vaccinated by each vaccinator during the year 1930-31 was 3,356 as compared with 3,084 in the preceding year.

32. Number of Vaccinations.—The total number of operations

Vaccination Statement No. I. performed by all establishments during the period under review was 1,729,082 as compared with 1,588,729 in the previous year. Thus there was not only a

marked increase in the number of operations done but the steady improvement in the vaccinal condition of the population was maintained as shown below:—

Year.	Total number of operations.
1926-27	1,242,090
1927-28	1,292,384
1928-29	1,504,656
1929-30	1,588,729
1930-31	1,729,082

Out of the total number of vaccination operations performed during the year under report the number of primary vaccinations was 868,368 and of revaccinations 850,714 as compared with 870,908 and 717,821, respectively in the preceding year.

The measure of success achieved in the efforts made to extend vaccination during recent years is illustrated in Chart VII and the details are given below:—

Year.		Primary Vaccinations.	Re-vaccination Operations.
1926-27	g 0080 (9)	720,328	521,762
1927-28		765,094	527,290
1928-29	cold differ	858,983	645,673
1929-30	you will say	870,908	717,821
1930-31	CONTRACTOR OF	868,368	860,714

It would thus appear that in the number of primary vaccinations the level reached in previous year has been well maintained in spite of the fact that because of smaller number of births in the beginning of the year the number of children available for vaccination were fewer.

In regard to the number of re-vaccinations, the increase has been the greatest of any one year during the last five years and affords definite proof of the fact that the campaign started to protect the adult population by re-vaccination has been taken up in right earnest by the District Medical Officers of Health; in the absence of any legal provision to that effect, it shows that the vigorous educative propaganda carried out by the Department is bearing fruit specially so in a year when the incidence of smallpox was very mild.

The progress made during the past 6 years in extending vaccination is illustrated in Chart VII.

Vaccination Statement No. I. formed by the Vaccination Staff of District Boards and Municipal Committees was 1,615,524 as compared with 1,479,539 in the previous year. The number of primary and re-vaccinations was 835,029 and 780,495, respectively, which represents a decrease of 4,834 in the number of primary vaccinations and an increase of 140,819 in the number of re-vaccinations. The small falling off in primary vaccinations is ascribed to the absence of smallpox in epidemic form and to the smaller number of children available for vaccination owing to fewer births in certain districts in the beginning of the year. Fourteen districts showed an increase in the number of primary vaccinations as compared with the preceding year, conspicuous being Montgomery (3,775); Lyallpur (2,414); Gurdaspur (2,339); and Hissar (2,190). On the other hand in 15 districts the figures of the preceding year were not maintained, in Karnal the decrease was 4,298, in Hoshiarpur 3,695, in Gurgaon 3,324, in Jhelum 3,124 and in Muzaffargarh 2,516.

The figures in respect of revaccination show an increase as compared with the previous year in 21 districts, the largest figures being recorded in Rawalpindi (28,506); Muzaffargarh (18,755), Gurgaon (15,916) and Multan (15,699).

- (2) Municipal Staff.—In the case of municipal towns, the total number of operations performed by municipal vaccinators during the period under review was 167,575 of which 83,508 were primary and 84,067 were re-vaccinations as compared with 172,948 (85,411 primary and 87,537 re-vaccinations) in the previous year.
- (3) Special Staff.—The total number of vaccinations performed by the Special Staff (Provincial) during the year under report was 76,836 (22,019 primary and 54,817 re-vaccinations) as compared with 80,574 (23,206 primary and 57,368 re-vaccinations) in the preceding year. The decrease of 1,187 in the primary and of 2,551 in the re-vaccinations is ascribed to the fact that thorough vaccination was carried out during the preceding two years in the localities visited by the staff during the year under report and, therefore, the number of children available for vacination was comparatively less. Also one of the posts of vaccinators remained unfilled since November 1930 and no substitutes were employed during temporary leave vacancies of some vaccinators.
- (4) Dispensary Staff.—During the year 1930-31 the number of primary operations and re-vaccinations performed by Medical Officers in charge of dispensaries was 3,700 (1,711 primary and 1,989 re-vaccinations) as compared with 5,053 vaccinations (1,680 primary and 3,373 re-vaccinations) in the previous year.
- (5) Cantonment Staff.—In Cantonments the total number of operations carried out during the year under review was 28,519 (7,016 primary and 21,503 re-vaccinations) as compared with 20,803 (4,799 primary and 16,004 re-vaccinations) in the preceding year. This substantial increase in the number of primary vaccinations and re-vaccinations as compared with the previous year is an evidence of the success that has been attained to protect the civil population residing in the Cantonments.
- (6) Railway Employees.—During the year under review 3,017 vaccinations (548 primary and 2,469 re-vaccinations) were carried out by railway medical officers amongst persons residing in areas under the jurisdiction of the North-Western Railway. The corresponding figures for the previous year were 3,221 total operations (1,113 primary and 2,108 re-vaccinations).
- Vaccination Statement No. II. cluding the cost of the Punjab Vaccine Institute, the Provincial Vaccination Staff and the Vaccinator employed in the Political area of Dera Ghazi Khan district, detailed in the Statement No. II during the year under review amounted to Rs. 3,34,671-15-4 as compared with Rs. 3,97,299-13-3 in the previous year. The decrease of Rs. 62,627-13-11 is mainly accounted for by the fact that under instructions received from the Public Health Commissioner with the Government of India and following the practice obtaining in other provinces of India the cost of Circle Assistant Directors of Public Health in the Punjab and their staff and contingencies which had hitherto been included has been excluded. Calculated on these figures the average cost of each successful vaccination in the Punjab was Re. 0-4-2 as against Re. 0-5-4 in the preceding year.

The average cost of each successful vaccination performed by vaccination staff of municipal committees, district boards and Cantonments was Re. 0-3-5 as compared with Re. 0-3-6 in the previous year. This is accounted for chiefly by the larger number of successful vaccinations performed during the year.

The average cost of each successful operation carried out by the Special Staff was Re. 0-11-1 as compared with Re. 0-8-2 in the preceding year the increase being due to the fact that the post of Assistant Director of Public Health, Paujab (Technical) Vaccination, was occupied by an officer of the Indian Medical Service who was in receipt of a higher

salary and also because of the arrears of travelling allowance drawn by members of the Special Vaccination Staff. The smaller number of vaccinations performed is also partly responsible for the increase in the average cost.

34. Success of Vaccination.—The potency of the vaccine lymph, was as usual, extremely satisfactory. The percentage of success in the case of primary vaccinations and re-vaccinations reported by all establishments was 97.96 and 68.80, respectively, as compared with 98.14 and 68.29 respectively in the preceding year. The results reported by the various establishments were as follows:—

	Primary Vaccinations.	Re-vaccinations.
District and Municipal Staf	¥ 97.98	69.84
Special Staff	97-62	57.56
Dispensary Staff	94.65	66.48
Cantonment Staff	98.02	56.16

The annual vaccination inspections were carried out by the provincial administrative staff with a view to check the accuracy of the figures recorded in the district and village vaccination registers.

35. Vaccination Inspections.—The total number of vaccinations vaccination Statement No. IV. Inspected by the Assistant Directors of Public Health during the year under report was 15,725 primary and 5,620 re-vaccinations, respectively, the percentage of success being 92.99 in the case of primary operations and 48.70 in the case of re-vaccinations.

Civil Surgeons, District Medical Officers of Health and Municipal Medical Officers of Health inspected 123,911 primary vaccinations and 88,566 re-vaccinations, the reported success rate being 96.73 per cent. and 64.18 per cent., respectively.

Superintendents of Vaccination inspected 366,678 primary vaccinations and 264,377 re-vaccinations. The percentage of success being 94.46 and 55.35, respectively.

The success-rate reported by vaccinators themselves was 97.96 in primary and 68.80 per cent. in re-vaccination.

36. Vaccination in Indian States.—The reports received from the Indian States that employ their own vaccinators are summarised below:—

State.			NUMBER OF	VACCINATIONS,	SUCCESS RATE.		
		nds date	Primary.	Re-vaccination.	Primary.	Re-vaccination.	
Patiala			109,843	44,961	99.10	79*77	
Kapurthala			10,587	2,112	98.02	75.38	
Faridkot			7,566	1,881	98.79	47.53	
Jind	***		9,997	7	99.16	100.00	
Bahawalpur	which		23,842	615	99.89	95-41	
Nabha	mileo	0011	10,930	260	95.22	77.25	

37. Diagram.—A diagram showing the death-rate from small-pox per 10,000 of population during the year 1930-31, the average recorded death-rate from smallpox for the five years ending 1929-30, the proportion of successful vaccinations during the year 1930-31 and during the preceding six years per 10,000 of population in each district of the province is appended.

38. Conclusion.—A scrutiny of the diagram and charts appended to the report will afford conclusive evidence to the effect that since the Public Health Department took charge of vaccination there has been a noticeable increase in the number of vaccinations and also an appreciable decrease in the number of deaths from smallpox. The steady progress made during the year in getting extended the Vaccination Act to the rura! areas under the Punjab Vaccination Law Amendment Act, 1929, is hopeful augury for the future.

#### CHAPTER V.-Urban and Rural Sanitation.

38 Whether urban or rural, the sanitary problem is essentially the same. It is true that the mode and the manner of administration do vary, dependent as they are on population, type of people, topographical configuration and environmental conditions. But none can fail to notice the regular gradation in the nature of the problem from the town to the village.

If in the towns there is the problem of defective conservancy the presence of rubbish heaps in and around the villages is a conspicuous feature of rural areas. The basket, the bullock-cart and the donkey are the means employed for the removal of filth in towns as well as in the villages. The disposal in both the cases is by dumping raw filth into agricultural laud. Nuisances are committed in the open wherever an opportunity offers itself. The rural areas lack in public latrines, but then even in most of the large towns of the Province one would look in vain for a public latrine or urinal worth the name. Incinerators are as much a necessity in the towns as in the villages.

In regard to water supply, wells for drinking water abound and chances of contamination are much the same. In villages where water level is not very low wells are numerous enough to create nuisance for want of drainage.

Rat infestation is equally common and housing of cattle, both cows and others, present obstacles which require solution both in towns and villages.

If there is no sanitary law in the rural areas, the sanitary provisions of the Municipal Act if not enforced effectively lie impotent, the net effect being more or less the same. It may be easier to get a manure heap removed from a village than to get a "purnala" drain covered in a town if the owner of the house knows how to exercise influence and evade compliance of law. Sanitary law has no usefulness for a practical sanitarian if its provisions remain inoperative.

The crux of the problem is not only the provision of effective sanitary law but also the efficiency and adequacy of the administrative machinery as well as power with the Public Health Department to be able to enforce the law should the machinery fail to function properly.

#### (1) Urban Sanitation.

39. The details of sanitary improvements in the towns completed or in progress during the year are enumerated in the annual report of the Superintending Engineer, Public Health Circle, which is reproduced in Appendix I and in an extract from the proceedings of the Urban Sanitary Board which is given in Appendix III.

A perusal of Appendix I will show that the Sanitary Engineering Department had under construction during the year 34 provincial sanitary works on behalf of Government and 32 contribution works for local bodies. In addition to this 10 preliminary projects estimated to cost Rs. 11,59,739 and 38 detailed projects (17 provincial and 21 contribution works) estimated to cost Rs. 36,42,520 were prepared

by the Executive Engineers of the Public Health Divisions whilst preliminary or detailed projects of 25 works at a total estimated cost of Rs. 26,80,410 were prepared under the supervision of the Superintending Engineer, Public Health Circle. It is scarcely possible to gauge from these bare statements the transformation that is steadily taking place in the sanitary conditions of urban areas in this province but it cannot be too often affirmed that unless these sanitary works are efficiently and adequately maintained they will bardly exercise any material effect upon public health. The conservancy arrangements in towns, however, in spite of the attention of local authorities being repeatedly drawn, to them, still remain very primitive and unsatisfactory, and unless a fundamental change is effected in the existing methods of collection, removal and disposal of sewage and refuse, this serious defect will continue to be the chief cause of the high degree of insalubrity in urban areas.

The aggregate income of municipal committees, 107 in number, after excluding opening balances (Rs. 26,58,923) and Rs. 13,27,313 under the head extraordinary receipts and debts, amounted to Rs. 1,39,23,431 as compared with Rs. 1,35,42,040 in the previous year.

The expenditure incurred on public health measures including a sum of Rs. 4,87,971-2-0 received from Government in the shape of grants-in-aid amounted to Rs. 46,70,361-2-0 as compared with Rs. 45,44,552-3-0 in the year 1928-29.

The percentage of income spent upon public health measures was 33.54 per cent. whilst the cost of sanitary measures per head of population of urban areas was Rs. 2-8-6. The expenditure in the 107 municipal towns in respect of public health measures in the year 1929-30 and the previous years is given in table XI.

TABLE XI.

				1928-29	1929-30.	
087,72 H	Heads.			Expenditure.	Expenditure.	
13,000			1	Rs.	Rs.	
Water Supply	181.5	***		14,08,439	14,10,628	
Conservancy				17,78,435	18,00,004	
Drainage	SANTE ATTACK	HURAE	(2)	8,91,758	5,30,911	
Public Health Staff	he acceptant	00.0001	- 1	2,24,332	2,38,738	
Vaccination OFF SA AS .	H suitenous	Bonnels	na fi	41,085	44,509	
Anti-epidemic measures	- noon -campr	mongo	0.600	73,947	51,262	
Markets and Slaughter-houses		annunzi	11	56,497	50,001	
Registration of Births	Omancial-stri	baumling	10 540	12,581	12,372	
Burial and Burning of Paupers	as boon main	d'actions.	ad po	11,429	16,267	
Infectious Diseases Hospitals	on'l moise	altinas in		40,335	42,175	
Other Sanitary Equipments	m with the treat	, can lo	ome	21,816	27,698	

In case of small towns 113 in number the total income excluding opening balances and extraordinary receipts, was Rs. 10,31,869 whilst the expenditure on public health measures was Rs. 2,24,572.

Water Supply.—The revenue derived from the sale of water continued to show marked deficit as compared with the cost incurred in supplying water to the public. This unsatisfactory feature

can only be rectified by efficient municipal administration and by the enforcement of the model water supply bye-laws approved by Government.

Conservancy.—During the year under review 2,067.76 acres of land were under sewage irrigation in nine towns as compared with 2,155.63 in 1929, showing thereby a total decrease of 87.87 acres. Labore alone has been responsible for this decrease, where 95 acres went out of irrigation whereas Jullundur showed an increase of 7.13 acres. There was a decrease of Rs. 830 in the income derived from land under sewage irrigation. The total income derived from the sale of street sweepings of nine municipal towns amounted to Rs. 1,02,463-3-10 as compared with Rs. 64,714-11-0 in 1929 thus showing an increase of Rs. 37,748-8-0 over that of the previous year. Amritsar city again contributed Rs. 39,862 towards this income whilst Lahore showed a deficit of Rs. 6,942-8-0 as compared with the previous year.

It is hoped that other municipalities especially Lahore will follow the good example of Amritsar and will largely add to their income by better management of their sewage farms which can be made to yield a larger revenue than is at present obtained from this source.

Slaughter-houses and Markets.—Little advance has been made towards the improvement of slaughter houses and markets, most of which are far from satisfactory. It is, however, gratifying to note that the Rawalpindi municipality has taken up the suggestion of levying adequate fees on the animals slaughtered and its income from this source has increased from Rs. 960 to Rs. 3,200.

Infectious Diseases Hospitals.—The presence of suitably equipped and efficiently administered infectious diseases hospitals in large towns is one of the civic needs of the day. The "so-called" infectious diseases hospitals that exist in Lahore, Amritsar and Lyallpur hardly deserve the name. The cost of maintenance of these hospitals was as follows:—

		 oneco nospr		
				1929-30.
				Rs.
Lahore		 Contract of the	della.	25,160
Amritsar	100.	 		2,979
Lyallpur		 		1,036
Simla				13,000
		Total		42,175

#### (2) RURAL SANITATION.

40. During the year 1929-30 the aggregate income of the District Boards, excluding opening balances aggregating Rs. 26,38,099, amounted to Rs. 2,15,36,394 whilst their expenditure upon public health measures was Rs. 6,16,518 or after excluding grants-in-aid from Government of Rs. 61,984, Rs. 5,54,534 which latter sum represents 2.6 per cent. of their income. Notwithstanding continued financial stringency and the apathy of the populace continued progress has been maintained during the year in the improvement of rural sanitation. The sustained efforts of the department in regard to public health matters have sown the seed broadcast throughout the province. Most of it may have fallen on barren soil; in other cases the green sprouts, after an initial struggle for existence, shrivelled up amidst the cold blasts of lack of continuous co-operation as well as insufficiency of the immediate supervising staff, yet in others the plant has survived and shows signs of steady growth and the beneficient effects are visible in the achievements which are to the credit of the department. Village after village is now adopting the simple sanitary regulations administered by committees set up under the authority of the district board or the rural community council or by regular

panchayats. The institution of District Sanitary Tournament introduced by the District Medical Officer of Health in the Ferozepore District for the improvement of rural sanitation on a voluntary basis is a feature which possesses potentialities of immense good in the future.

Rohtak district has established a unique record in the improvement of rural sanitation where 503 villages out of a total of 773 have adopted the regulations and 40,711 manure pits have been dug. Jhelum, Dera Ghazi Khan, Muzaffargarh, Amritsar, Ambala and Karnal in particular and nearly all districts in general have achieved considerable progress on the same lines. Still much remains to be done. Diffusion of sanitary ideals is a slow process At others it is difficult to maintain initial achievements for lack of staff.

The number of wells cleaned during the year was 15,264 and 322 wells were repaired at a cost of Rs. 24,267.

As a result of the the activities of the Rural Sanitary Board, great progress was made in improving the village water supplies in waterless tracts and in providing piped water supplies in places where important religious fairs are held. The Budha Nala Drainage Scheme, which is designed to dewater parts of Ludhiana District in the vicinity of the Sirhind Canal was completed during the year.

A large number of sanitary works of public utility were executed at the expense of individuals, the nature of gifts, their cost and the names of donors, which cannot be given here owing to lack of space, are detailed in Appendix IV.

#### (3) RELIGIOUS FAIRS.

41. The sanitary arrangements of all the fairs and religious gatherings held in the province during the year, were as usual supervised by the personnel of the Public Health Department; those of the important fairs by the Assistant Directors of Public Health, while of the others by the District Medical Officers of Health and their staff. The general sanitation of all these fairs shows marked continued improvements on the lines laid down by the Department and constant endeavour is being made to attain the standard aimed at. The anti-epidemic measures enforced resulted in the conspicuous absence of infectious diseases at these numerous temporary congregations of people.

Advantage was also taken of these big gatherings to convey the message of health to the villagers by means of health exhibitions, wherein were displayed various models and posters, giving the causes, main symptoms and directions for the prevention of various epidemic diseases. These exhibitions were supplemented by lectures and demonstrations of instructive cinema films which provided both recreation and education in health matters to thousands of people. The financial assistance rendered by the local bodies in the steady improvement of the sanitary arrangement of fairs is encouraging but is still only a small fraction of the total expenditure.

Special mention must be made of Phalgu Fair, held at village Pharal (Tahsil Kaithal) in Karnal District which was attended by over a lakh people on the final day. The fair was held in September and was attended by persons derived from some of the localities infected with cholera and consequently it was feared that the disease might be introduced into the fair with the consequent danger of its widespread dissemination throughout the province. The efficient conservancy arrangements and the rigid control over the water supply, however, averted this danger and there did not occur a single case of cholera or any other infectious disease on this occasion.

# CHAPTER VI.-Administration.

42. General.—Lieutenant-Colonel C. A. Gill, I.M.S., held charge of the office of Director of Public Health and Secretary of the Urban Sanitary Board, Punjab, during the year except from 14th May to 9th October when he officiated as Inspector-General of Civil Hospitals, Punjab, in the leave vacancy of Colonel H. M. Mackenzie, I.M.S., and Khan Bahadur Dr. K. A. Rahman, D.P.H., Assistant Director of Public Health, Punjab (Technical) Vaccination officiated for him. Similarly Khan Bahadur Dr. K.A. Rahman held the post of Assistant Director of Public Health, Punjab (Technical) Vaccination throughout the year except during the time he officiated for Colonel Gill, I.M.S., and Major R. C. Malhotra, O.B.E., I.M.S., officiated for him. Dr. Rahman also acted as lecturer on Hygiene at the King Edward Medical College, Lahore and to the Sanitary Inspectors' Class.

Major R. C. Malhotra, O.B.E., I.M.S., remained Assistant Director of Public Health, Rawalpindi Circle, from 1st January to 11th May 1930 and again from the 14th October to the end of the year. Dr. G. R. Vohra, D. P. H., District Medical Officer of Health acted as Assistant Director of Public Health, Rawalpindi Circle, during the absence of Major Malhotra. Dr. A. H. Butt, D.P.H., held charge of the office of Assistant Director of Public Health, Lahore Circle and Personal Assistant to the Director of Public Health, Punjab, throughout the year. Dr. G. R. Vohra, D.P.H., continued to officiate as Assistant Director of Public Health, Ambala Circle, up to the 21st April 1930 when he was relieved by the permanent incumbent Dr. A. B. Arora, M.B.E., D.P.H., on return from leave ex-India and the latter then held this charge till the end of the year. Dr. S. G. Rasul, D.P.H., was relieved by Dr. G. R. Vohra, D.P.H., District Medical Officer of Health, of the charge of the Assistant Director of Public Health, Multan Circle, on the afternoon of the 15th October 1930 when the former proceeded on five months leave. While on leave Dr. Rasul died at Rawalpindi on the 9th February 1931. His untimely death after 17 years devoted service as Municipal Medical Officer of Health and District Medical Officer of Health and latterly as Assistant Director of Public Health is a great loss to the Department.

The appointment of a whole-time Assistant Director of Public Health for the Jullundur Civil Division had again to be postponed on account of financial stringency.

Dr. R. B. Lal, D.P.H. remained as Epidemiologist to Government (Officer-in-charge, Epidemiological Bureau) throughout the year.

The sanctioned strength and distribution of the provincial cadre of District Medical Officers of Health remained the same as last year, viz:—

28 in Public Health of each district,

3 in Epidemiological Bureau,

6 Leave and Epidemic Reserve.

The proposal to provincialise the services of Municipal Medical Officers of Health is still under the consideration of Government. In addition to the 11 whole-time Municipal Medical Officers of Health employed by the municipalities in the headquarters and large towns, an offer was made to the municipalities of Gujranwala, Rohtak and Kasur towns for such an appointment but only the last named municipal committee accepted the offer. The services of two District Medical Officers of Health of the leave reserve were lent for the first time to the municipal committees of Murree and Dalhousie for the summer season. A start was made with the scheme for providing municipal towns other than the headquarter towns, with part-time Medical Officers of Health. An offer of a subsidy of 50 per cent. towards the pay of part-time Medical Officers of Health for 5 years was made to 9 such towns with effect from the financial year 1931-32.

Owing to financial stringency the special temporary emergency staff engaged to assist the exiguous district health subordinate staff in combating the spread of epidemic diseases and other public health work and which consisted of 20 Sub-Assistant Health Officers. 20 Sanitary Inspectors, 8 dispensers and 4 peons had to be reduced and finally discharged from 1st November 1930. The temporary staff of 6 additional Sanitary Inspectors (subsequently increased to 10) employed in connection with famine test works in the Gurgaon and Hissar districts from January to March was discharged at the end of August owing to the closure of the works.

43. Public Health Equipment Depôt.—The Public Health Equipment Depôt at Jullundur which is maintained for supplying at short notice to local bodies, reliable drugs, disinfectants, etc., required for use in combating epidemics, continued to function with success and efficiency. The value of the stores in hand on 1st January 1930 was Rs. 14,597-14-3 and the additional articles obtained during the year cost Rs. 12,485-14-0. Thus stores to the aggregate value of Rs. 27,083-12-3 were available for issue.

The cost price of the articles sold during the year amounted to Rs. 19,347-8-6 and their sale price including Depôt percentage was Rs. 24,622-10-9. There was thus a gross income of Rs. 5,275-2-3 during the year whilst the annual maintenance charges amounted to Rs. 5,900-9-9 thereby causing a net loss of Rs. 625-7-6 to the depôt during 1930 as against a profit of Rs. 1,684-9-2 in the preceding year. The decrease in purchases, sales and profit reflects the relatively small demand for disinfectants, rat poison and bhoosa battis owing to the absence of plague and cholera in epidemic form in the province. The increase of Ps. 137 in the maintenance charges of the depôt is due mainly to the post of the Superintendent having been held by a whole-time officer for the complete year. The issues from the depôt included 46,260 doses of anti-plague vaccine which were supplied free of cost as against 102,502 doses in the year 1929. In order to minimise the wastage of anti-cholera vaccine it was arranged to stock it at the depôt and send out in small quantities to meet the requirements of District Officers. 5,000 c. c. of anti-cholera vaccine were thus issued. About 494 gallons of chlorine solution were supplied free of cost to the neighbouring districts for disinfection of water supplies especially on the occasion of large fairs and other gatherings during cholera season. One hundred and forty-one pounds of quinine tablets were also sent out for free distribution in the localities where malaria was prevalent.

44. Educational Bureau and Health Propaganda.— Health propaganda now forms part of the routine duties of District Medical Officers of Health. These officers with the help of their staff delivered 4,334 lectures with or without magic lanterns on health topics to the general public and to school children, whilst the usual courses of lectures in Hygiene in normal schools in the province were continued during the year.

On account of continued financial stringency the scheme for providing a projector at each civil division did not mature, but the success obtained at Ferozepore, where one has been purchased in propagating the principles of hygiene and sanitation amongst the rural population is a practical proof of the effectiveness of this scheme.

Intensive public health propaganda has been carried out in Jhelum District under the guidance of Mr. Brayne, the Deputy Commissioner and the film on malaria prepared by the Punjab Film Company with the help of Dr. Chaudhri is likely to prove to be very instructive and educative. R. S. Dr. Harnath Singh who returned from study leave ex-India was appointed Publicity Officer, Public Health Department, in the beginning of November. With little funds at his disposal, he could only pursue a few inexpensive branches of publicity. He was, however, able to prepare a short film entitled "Hygiene in Nature", a synopsis of the film and set

of magic lantern slides on hockworm and two popular lectures illustrated by magic lantern slides on Rural Sanitation and Tuberculosis.

The Photographer attached to the Education Bureau prepared during the year partly for departmental use and partly for Red Cross Society 526 magic lantern slides, 236 new photographs, 462 enlargements and 264 prints.

The department is indebted to the Educational Staff and the Rural Community Council of the various districts as well as to Red Cross Societies for their willing co-operation in health propaganda work.

45. Public Health Chemical Laboratory.—The work carried out in this Laboratory during the year comprised the chemical analysis of the following 443 samples of articles as compared with 346 in the preceding year:—

Serial No.	Nature of sample.	Total number of samples examined.	Result.
odd P	Drinking water	103	57 samples (55 per cent.) were declared to be unfit for domestic use.
2	Ghee	54	17 samples (33 per cent.) were found to be adulterated, the adulterant used in most cases being vegetable ghee.
3	Milk	65	18 samples (28 per cent.) were found to be either deficient in fat or accompanied by added water.
500 40	Sweets	3	All samples were found to be prepared from Banaspatine.
5	Quinine	18	6 samples (33 per cent.) did not contain the declared amount of the drug.
6	Gur, Sugar, Atta and Tea.	dan protect the the province	There was very little adultera- tion in the case of these arti- cles.
-0117	Miscellaneous articles	17	Variable.

In addition to the routine examination of the samples mentioned above 142 samples of different cooking oils were examined this year for the purpose of working out their standards of purity which have since been notified under the Punjab Pure Food Act, 1929.

The methods of analysis for various articles of food, standards for which have already been laid down were prescribed and notified as required under the Punjab Pure Food Act, 1929.

Experiments were also carried out in this laboratory to determine the stability of chlorine solution of different strengths and all concerned were informed as to its preparation, storage and use. Chlorine solution was prepared and sent out to District Medical Officers of Health on demand for use on the occasion of large fairs and other gatherings.

During the year under report a sum of Rs. 80 was realized from local bodies and credited to the Government on account of chemical examination of drinking water and foodstuffs.

46. Epidemiological Bureau.—The Epidemiological Bureau continued to function satisfactorily under Dr. R. B. Lal, Epidemiologist to Government, Punjab, who held its charge throughout the year. The work performed in the Bureau comprised laboratory and field work, mainly in connection with malaria, experimental work and routine laboratory work. The field investigation comprised the malaria survey of Beit Ilaqa in Ludhiana District by Dr. Shah, a report on which will be published in due course. Intensive investigation which commenced in October 1927 at the Chakanwali Reclamation Farm was continued throughout the year. A preliminary survey of the water-logged area in the vicinity of the Dipalpur Canal was carried out with a view to determine the magnitude of the problem. The detailed survey will be conducted in 1931.

The malaria forecast issued on 31st August predicted that the province would remain free from a severe or widespread epidemic of malaria during the ensuing autumn but there would be foci of mild epidemics in some of the districts situated in Ambala and Lahore Divisions. It is satisfactory to note that subsequent events justified this prediction. A noteworthy point in connection with the forecast was the fact that rainfall during July was in excess of the normal practically all over the Punjab and it was feared that the province would again be visited by an epidemic of malaria, but deficiency of rainfall during August (except in a few places), however, averted this danger.

An analysis of the data obtained as a result of the biennial spleen census showed that the number of school children examined in June was 86,039 and in November 88,468 of whom 11,385 and 13,757, respectively, showed enlargement of spleen—the provincial spleen rate being 13.23 per cent in June and 15.55 in November 1930—this small rise of the spleen rate between June and November is attributable to mild epidemic foci of malaria. It will be seen from a study of chart VI that the spleen rate in November shows a slight rise in the districts that were affected by mild epidemics of malaria.

Experimental work included tests for determining the efficiency of certain mixtures for destroying flies and mosquitoes and also investigation to find out the photophobic habits of house flies. The study of the rôle played by the house fly as a "carrier" of the cholera vibrio was continued throughout the year. The details of the experiments are embodied in the April 1931 issue of the Indian Journal of Medical Research. The Bureau undertook the bacteriological examination of water supplies of towns and rural areas and 152 examinations were done during the year.

47. Punjab Vaccine Institute. - Khan Bahadur Dr. K. A. Rahman, Assistant Director of Public Health, Punjab (Technical) Vaccination held charge of the Punjab Vaccine Institute during the year except from 14th May to 9th October when Major R. C. Malhotra, O.B.E., I.M.S., officiated for him, whilst Captain H. C. Phillips, I.M.S., continued to hold the post of Superintendent throughout the year.

The work performed in the Institute comprised mainly the preparation of vaccine lymph, the total number of tubes issued during the year 1930-31 being 70,435 as compared with 67,362 in the previous year.

The following statement gives the details in respect of distribution during the years 1929-30 and 1930-31:—

Institution to superior so to				1930-31,	1929-30.
the mental tempological to	100	(Laubauxen	donor.	Tubes.	Tubes.
Punjab		1000		42,832	39,715
North-West Frontier Province		olippia san		4,948	5,611
Special Staff, Punjab		9 30 19		2,550	1,803
States in the Punjab				4,095	4,054
North-Western Railway		distance in		536	384
Military Department in India				4,651	4,324
Foreign countries and Indian Sta	tes	no detect :		11,423	11,472
			of since	01 S 1000	province bearing
		Total		70,435	67,362

Vaccine lymph was prepared as usual according to Forster Java Method, and the potency of the lymph supplied was well maintained. The experiment of supplying vaccine lymph in collapsable metal tubes instead of glass tubes was extended during the year under report to eight other districts in the province. While definite recommendations as to the universal adoption or otherwise of the metal tubes will be made on completion of the experiment, the reports received so far in respect of the utility of these tubes are favourable.

One-hundred and seventy buffalo calves, 16 bovine calves and 21 rabbits were used as vaccinifers during the year under report. The average yield of pulp per animal successfully vaccinated during the year as will be observed from the sub-joined table, was greater than that in the preceding three years:—

ellicioney luvestign y of the	edd ynli edd laid byta add eleas- ei	MACHEN MA	Buffalo calf.	Cow calf.	Rabbit.
1927-28	lo facere	G mail	85·4 gms.	19:3 gms.	·608 gms.
1928-29	I was a		84.0 ,,	19.70 ,,	-805 ,,
1929-30			89.78 ,,	22.69 ,,	.876 "
1930-31			113.68 ,,	28.70 ,,	1.312 ,,

The net profit to Government from the sale-proceeds of vaccine lymph was Rs. 29,137-12-0 as against Rs. 26,810-9-3 in the preceding year.

Experiments to determine the bactericidal action of chloroform vapour on vaccine lymph and the cleaning and disinfecting properties of certain soaps on the skin of the calf were also carried out during the year.

Three Sanitary Inspectors, 44 vaccinators and 35 private individuals were trained at the Punjab Vaccine Institute in the methods of preparation of vaccine lymph, technique of vaccination and elementary hygiene.

The medical students of the King Edward Medical College, Lahore and the pupils of the Sanitary Inspectors as well as the Lady Health Visitors Classes were as usual instructed in the technique and method of vaccination.

48. Maternity and Child Welfare.—"In the welfare of the child of to-day is bound up the well-being of the State in the years that lie before us", said Lord Irwin in his speech at the opening of the Red Cross Building, New Delhi; and steady progress has been maintained in the maternity and child welfare work during the year under review.

Three new Health Centres were opened during the year at Gujran-wala, Muzaffargarh and Ferozepore Cantonment, and two at Ballabgarh and Palwal (Gurgaon) were closed, the resulting total being 35. Of these 13 are situated in rural and 22 in urban areas and are maintained as follows:—

- 6 by District Boards,
- 4 by Municipal Committees,
- 8 by Red Cross Society.
- 14 by private committees,
- 1 by the Coleyana Estate,
- 1 by the Mamdot Estate,
- 1 by the Punjab Health School.

All the 35 health centres trained 607 dais who conducted 8,051 confinement cases in the year under report. 7,748 of these had been seen ante-natally by Health Visitors while medical aid was called in for 173. There were 31 maternal deaths among them giving an average of 3.84 per mille which is much less than the figure under the ordinary conditions.

In spite of the shortage of the tutorial staff of the Punjab Health School, the Inspectress of Health Visitors and Centres inspected all the centres on one or more occasions making 40 inspections in all as compared with 45 in the previous year. Her inspection notes show that the work in all recognised centres had been conducted on sound lines. These visits by the Inspectress were of a great help to the Health Visitors and to the local committees and provided opportunities for conducting useful educative propaganda.

The Punjab Health School where Health Visitors are trained continued to function with success. Of the nine candidates under training seven obtained the Health Visitors diploma and all of them were immediately provided with posts.

The new training term commenced in October of the year with nine candidates of whom 8 were stipendiaries and one private. These included the two Red Cross Stipendiaries who had completed their midwifery training at the Victoria Zenana Hospital, Delhi. The present hired building of the school and the hostel attached to it provides accommodation only for the existing number of students. The proposal for building a new health school could not be proceeded with owing to the financial stringency. The centre at Qila Gujar Singh, Lahore, which is completely equipped and provides excellent training for a student Health Visitor continued to do good work.

The Punjab Health School, which was taken over by Government from the Lady Chelmsford League in the first instance for a period of 3 years has now been retained for another 4 years. Miss Simon, Principal

and Inspectress of Health Visitors and Health Centres and Miss Raynor Superintendent who rendered long and devoted services to the Punjab Health School and the cause of maternity relief and child-welfare in the province since 1921 retired on the expiry of their contract with effect from the 16th April 1930. The ability, tact, sympathy, energy and devotion to duty of the two ladies earned the confidence and esteem of all. The great progress made by the maternity and child-welfare movement in the Punjab during the past few years is mainly due to their excellent work. In recognition of her services Miss Simon was awarded the Kaisir-i-Hind Medal on 3rd June 1930.

# INSPECTIONS AND MISCELLANEOUS DUTIES.

49. The multifarious duties of the Director of Public Health as a member of the Legislative Council, Secretary of the Urban Sanitary Board and member of various other boards and committees did not permit him to carry out long sanitary inspections. During winter Col. C. A. Gill, I. M. S., visited Ambala, Ludhiana, Ferozepere, Hoshiarpur, Jullundur, Gurgaon, Amritsar and Kangra Districts and discussed public health matters with the authorities concerned; whilst during the monsoon Khan Bahadur Dr. K. A. Rahman visited a number of cholera-infected towns and villages in Hoshiarpur, Jullundur, Hissar and Ferozepore Districts and also inspected the Sanitary arrangements of the Test Works that were going on in Gurgaon and Hissar Districts. He also visited Multan, Muzaffargarh, Rawalpindi, Murree and Kasauli and inspected the sanitary arrangements at Phalgu fair.

Col. Gill attended the Indian Research Workers Conference held at Calcutta in December.

The Assistant Directors of Public Health conducted long tours thus supervising the work of the District Medical Officers of Health in connection with anti-plague and cholera measures, vaccination inspections and the registration of births and deaths and in addition carried out inspections of 31 larger towns and 24 villages in their respective circles. The sanitary arrangements of 22 fairs were inspected by them in addition to the inspection of the sanitary condition of 29 schools and 9 factories in the Punjab.

The District Medical Officers of Health inspected the sanitation of 81 large towns and 4,876 villages as against 173 large towns and 5,270 villages inspected last year.

50. Conclusion.—In the foregoing pages an attempt has been made to interpret the significance of the statistical data available with regard to the health of the province and to outline the main activities of the department during the year under review. The year was, it has been shown, a comparatively healthy one and the province remained free from wide-spread epidemics of plague, smallpox and malaria. The incidence of cholera did not assume widespread epidemic proportions. Except in a few localised areas, its manifestations were promptly nipped in the bud. Even in the few areas where it did persist for some time, it was successfully controlled and its spread limited.

In Gurgaon and Hissar Districts considerable labour was employed for a prolonged period at the various famine test works put in operation there. Special additional staff was provided for the purpose and the District Medical Officers of Health of the respective districts, Dr. Sahgal and Dr. Chopra were in charge of the sanitary organisations which presented peculiar difficulties. All these difficulties were, however, successfully met and the arrangements made were both efficient and adequate. There was no outbreak of any epidemic disease and not a single case of cholera occurred. This bears testimony to the effectiveness of the measures adopted by the Department and His Excellency the Governor when visiting the test works in the Gurgaon District was pleased to remark that this constituted "a record without precedent on famine works of this magnitude in progress over many months."

The demands on the time and energy of the officers of the Department were on the whole, satisfactorily met.

All the Assistant Directors showed keeness and ability in the discharge of their responsibilities. Dr. Butt performed the onerous duties of the Personal Assistant in an efficient manner. Dr. A. B. Arora's valuable services in connection with the supervision of the sanitary administration of the Famine Test Works as well as in the prompt suppression of cholera epidemics deserve conspicuous mention.

Amongst Medical Officers of Health special mention may be made of Dr. Sahgal, District Medical Officer of Health, Gurgaon, for the ability and zeal displayed by him in connection with the sanitary arrangements of the famine test works in the district, of Dr. W. C. Mathur, District Medical Officer of Health, Rohtak and Dr. Kaushash, District Medical Officer of Health, Ferozepore, for the creditable efforts made by them to improve rural sanitation in their respective districts and of Dr. Kapur Singh, District Medical Officer of Health, Hoshiarpur, Dr. C. D. Tiwari, Municipal Medical Officer of Health, Jullundur as well as of Dr. M. Farid, District Medical Officer of Health, Mianwali, for the ability and energy with which they controlled the epidemics of cholera in their respective jurisdictions. The services of Dr. Abdul Hamid also deserve particular mention for allround good public health work in the Sialkot District.

K. A. RAHMAN,

Offg. Director of Public Health, Punjab.

# APPENDIX I.

ANNUAL REPORT OF THE SUPERINTENDING ENGINEER, PUBLIC HEALTH CIRCLE, PUNJAB, FOR THE YEAR 1930.

#### I .- ADMINISTRATION.

The post of Superintending Engineer, Public Health Circle, Punjab, was held by Rai Bahadur Amar Nath, Nanda, B.A., M.I.E. (Ind.), throughout the year.

The number of divisions comprised in this Circle remained the same as before, viz., 3 Divisions.

- 1. Lahore Public Health Division.—Mr. J. A. R. Bromage, A.M.I., C.E., held charge of this Division up to 4th March 1930, the date on which he proceeded on long leave to Europe for 10½ months, and Mr. D. A. Howell, A.M.I., C.E., remained in charge of the Division for the rest of the year. He also held the charge of Multan Public Health Division in addition to this one up to 10th March 1930.
- 2. Ambala Public Health Division.—Mr. B. F. Main, A.M.I., C.E., retained the charge of this D vision throughout the year.
- 3. Multan Public Health Division.—This Division remained in the charge of Mr. D. A. Howell up to 10th March 1930 and in charge of Mr. T. B. Madnani, Temporary Engineer, to the end of the year.
- Mr. Devi Chandra Khanna held the charge of the office of Personal Assistant to Superintending Engineer throughout the year.
- Mr. J. S. Sethi held charge of the Lahore Public Health Sub-Division for the whole year.

Lala Guranditta Mal retained charge of the Sialkot Public Health Sub-Division for the full year.

Sardar Hukam Singh, B.Sc. was appointed in charge of the Estate Public Health Sub-Division on 6th June 1930, the date of the opening of the Sub-Division and held it through the rest of the year.

Lala Nand Lal, Sub-Engineer, held the charge of the Ludbiana Public Health Sub-Division for the whole year.

Lal. Dina Nath Duggal was placed in charge of the Robtak Public Health Sub-Division from the date (15th May 1930) this Sub-Division was opened and held it throughout the year.

Lala Devi Chand held the charge of the Multan Public Health Sub-Division throughout year.

Miscellaneous work.—Two-hundred and thirty visits to Municipal towns, Notified Areas and Small Towns were paid by the Superintending Engineer and his staff in connection with Public Health schemes during the year.

Boring Works.—Forty borings were done during the year, some of these were done departmentally with Government boring plant and some by contract. The work in both the cases was done expeditiously and economically.

The average number of Public Health works under execution during 1930 from month to month was 49.

Seven new schemes were commenced during the year and 11 completed.

### II- PUBLIC HEALTH WORKS UNDER CONSTRUCTION.

Government Works are dealt with first :-

- 1. Water borne Sewerage in Civil Secretariat and adjoining offices, Lahore, Rs. 23,023.—This work has been sanctioned technically but funds are awaited.
- Water Supply and Drainage High Court and adjoining office, Lahore, Rs. 29,716.—The above work has been completed and accounts closed.
- Providing water supply and drainage for the proposed alteration in Borstal Institution, Lahore, Rs. 25,398.—The work has been completed.

- 4. Installing a disinfector in Central Jail. Labore, Rs. 11,645.—The building to house the disinfector has been completed, the disinfector with the necessary boiler has been received and is being installed.
- 5. Proposed Extramural Drainage and Sullage Disposal in Borstal Institution Central Jail and Female Jail, Lahore, Rs. 83,565.—About 2/8rds of the total work has been completed. The pumping plants are being placed on order and it is anticipated that this scheme will start functioning by June 1931.
- Water-supply and Drainage Sub-Jail, Kasur, Rs. 37,569.—Work completed and accounts closed.
- 7. Water-supply and Drainage at the New Sub-Jail, Gujrat, Rs. 43,597.—The work has been completed during the year.
- 8. Emergent Water-supply, Attock Fort Jail, Rs. 14,557.—The work has been completed during the year.
- Water-supply and Drainage for proposed hospital, Police Lines, Lahore, Rs. 27,467.—The work has been completed and the accounts closed.
- 10. Surface Drainage Police Lines, Amritsar, Rs. 27,004.—The internal surface drainage has been completed but the outfall and disposal works have not been started owing to the land acquistion question which is pending settlement with the Deputy Commissioner, Amritsar.
- Sanitary Installation in the Dental Hospital and School Lahore, Rs. 14,455.
   Except for a minor item the Work has been completed and it is functioning properly.
- 12. Additions and Alterations to Water-supply, Mayo Hospital and King Edward Medical College, Lahore, Rs. 71,328.—The work has been completed.
- Sewerage of Main College and Anatomical Block, New Medical School, Amritsar, Rs. 10,187.—Work practically completed.
- 14. Laboratory Equipment including Water-supply, Internal Drainage, Sinks and Basins for the Dental Hospital and School, Lahore, Rs. 10,588.—But for a few minor items the work is complete and functioning properly.
- Sewerage Scheme for Female Section of Mental Hospital, Lahore, Rs. 42,271.—The work has been completed.
- 16. Sewerage Scheme, Maclayan Engineering College, Moghalpura, Rs. 86,516. —The land acquisition question is still undecided and the work is in the same state of progress as reported last year.
- 17. Water-supply Chauburji Gardens Estate, Lahore, Rs. 1,10,343.—The work as far as possible has been completed and functioning properly.
- 18. Sewerage Chauburji Gardens Estate, Lahore, Rs. 2,70,731.—The work has been completed except for the menials quarters which are in hand. The sewerage scheme is functioning perfectly.
- Independent Water-supply, Gazetted Officers' Residence Estate, Lahore, Rs. 30,793.—The work has been completed.
- 20. Equipment necessary for maintaining sewage scheme Chauburji Gardens Estate, Lahore. Rs. 17,241.—Most of the necessary equipment has been purchased and the balance is on order.
- 21. Water-supply to the High School, Jhelum, Rs. 10,253.—The work has been completed during the year.
- 22. Sewerage and Sanitary fittings in the Maternity Hospital, Lahore, Rs. 68,527. About 90 per cent. of the work has been completed.
- 23. Providing Sanitary Services and Air Conditioning in Main Block at Maternity Hospital, Lahore, Rs 1,06,414.—The work is being taken in hand. The contract for the steam boiler installation and air conditioning plant has been let.
- 24. Water-supply Maternity Hospital, Lahore, Rs. 25,102.—About 90 per cent. of the work has been completed.
- 25. Providing water-supply to Lawns and Shrubberies at Old Fort, Lahore, Rs. 13,320.—The work has been completed and the accounts closed.
- 26. Water-supply to Fountains and Grass Plots, Old Fort, Lahore, Rs. 13,780.—
  The work has been completed and the accounts closed.

- 27. Pumping plant, valves, pipes, tanks, etc., in Hydraulic Research Laboratory, Lahore, Rs. 36,608.—The work has been practically completed.
- 28. Fortlands Internal Drainage, Rs. 22,863.—All the drains have been completed in the blocks where houses have so far been built.
- 29. New Central Jail Water-supply and Drainage, Rs. 1,41,762.—The Water-supply and Drainage works have been completed, the maintenance of the works is in the charge of this Department, 1½ lakh gallons of water is supplied daily for domestic and irrigation purposes.
- 30. New Central Jail Bathing Platform, Rs. 16,305.—Bathing platforms with showers have been provided in each block of cells, barracks and hospital, etc.
- 31. Disinfecting Plant—New Central Jail, Multan, Rs. 10,399.—The running of the above plant is with this Department, it is worked for disinfecting the clothes and blankets of the prisoners.
- 32. New Hospital, Multan Drainage and Sanitary Fittings, Rs. 50,060.—Works in the above hospital consisting of surface drains, water-supply (domestic and irrigation), disinfecting plant, hot water-supply in the main block have been completed. The hospital was opened on 1st December 1930 and all these works are functioning efficiently.

Domestic water-supply is stored in the elevated service reservoir from municipal main and water is kept open in the hospital for 24 hours. Water is pumped from 10' diameter well for irrigation of grass lawns in the hospital. Domestic boiler is worked for the supply of hot water in the main block of the hospital.

Disinfecting plant is worked for disinfecting the clothes and when required by the hospital authorities sullage water from drains is drained in the low fields on the north of the hospital which is used for irrigating the fields.

Hospital sweeping is disposed of in an incinerator built outside the hospital premises.

- 33. Providing water-supply and latrines, Government School, Naushehra, Shahpur District, Rs. 11,928.—The work consists of (a) one set of 4-seated latrines and (b) 8' inside diameter well.
  - (a) One set of 4-seated latrines .- These have been completed.
  - (b) 8' diameter well.—Excavation up to spring level, viz. 104 feet below ground level has been done. Wet sinking below 104 feet is in hand. Stone masonry of steining the well 20 feet high above the curb has been done and steining in B. B. in cement is well in hand.
- 34. Warcha Water-supply, Rs. 73,799.—The work consists of a 21 miles of 3 inches gravity pipe and a mile of 2 inches gravity pipe, one 20 feet high dam above the gorge and a reservoir of 5,000 gallons capacity for Public Works Department camp, 13 No. suspension crossings for the 3 inches pipes to cross the gorge. The work is mostly completed, the weak points caused by the heavy rains of 1929 have been watched and set right on the spot.

WORKS IN CONNECTION WITH LOCAL BODIES ARE DESCRIBED BELOW.

- 1. Water-supply, Pathankot, Rs. 1,71,145.—The work has been completed and accounts closed.
- 2. Jowalamukhi Water-supply, Rs. 40,000.—Except for a few minor items the work has been completed.
- 3. Sialkot Drainage Scheme, Rs. 4,49,881.—The extramural portion of this scheme was completed in the year 1928, with the exception of 2 crossings under the Railway and a portion of the southern intercepting drain near Imam Shaib. The crossings were built by the Railway Department in 1929 but the portion of southern intercepting drain is still incomplete as the question of alignment of this drain is not yet finally decided.

Intramural portion of the scheme has, however, started this year and fair progress made over about ½ the total area. The remaining half has only recently been given out on contract and work has been started on it.

4. Sialkot Water-works, Improvements and Addition, Rs. 1,50,258.—This work has been completed.

- 5. That Ilaqu water-supply, Rs. 1,48,043.—The main work under this estimate was done in the previous year, during the year under report certain damages sustained by the work due to heavy rains have been set right. Certain additions to the scheme are under consideration.
- 6. Rawalpindi Drainage of D. A.-V. College, Mohalla Area, Rs. 63,225.— The work was completed during the year and finally paid for.
- 7. Tamman water-supply, Rs. 78 894 Progress on this work during the year has been very little due to the fact that the land required for the Headworks could not be acquired. The steel reservoir was fitted up and all stores for works obtained.
- 8. Pind Dadan Khan Temporary water-supply, Rs. 28,033.—Work on this was started in the last quarter of the year and almost all pipe lines have been laid and the new well for supply of water is in hand.
- 9. Wazirabad Drainage Scheme, Rs. 31,497.—The work is sanctioned but has not so far been started as there is some trouble about acquisition of land.
- 10. Multan water-supply, Rs. 12,57,637.—The scheme has been completed and is being maintained by the Multan Public Health Division. Water is supplied to the town from the public standposts. The daily supply of water varies from 125,000 gallons to 300,000 gallons during winter and summer. One hundred private house connections have been sanctioned by the Urban Sanitary Board and funds are awaited from the Municipal Committee.
- 11. Multan Drainage, 1st Instalment, Rs 1,22,976.—Pumping plant consisting of Mirrless Horizontal chokeless pumps and General Electric Company's enclosed ventilated squirrel cage motors have been ordered and is expected shortly. The land for the sullage main carrier is being acquired.
- 12. Multan Drainage, 2nd Instalment, Rs. 1,34,747.—Construction of main northern sewer has been completed and 900 ft. length of outfall sewer has been completed. The progress of work was much delayed due to difficulties for acquisition of land. The land has now been acquired and tenders for the construction of the remaining part of the outfall drain, disposal works, sullage carrier and storm channels have been sent to the Superintending Engineer for approval.
- 13 Improvements to Montgomery Market Drainage, Rs. 35,351.—The above work has been completed and handed over to the Municipal Committee, Montgomery.
- 14. Sinking 3 more Percolation Wells at Dera Ghazi Khan, Rs. 27,406.— The work has been completed in all respects and the wells have been put into operation.
- 15. Providing duplicate set of Pumping Plant at Dera Ghazi Khan, Rs. 29,790.—The plant is on order with Alfred Herbert and Company.
- 16. Roofing Old Well, Khushab Water Supply, Rs. 1.651.—The existing two wells of 17 ft diameter of Khushab Water Supply have been roofed by putting 3° R. C. concrete slab over R. S. beams.
- 17. Chhidru Trial Boring, Rs. 4,088.—Two hundred and seventeen feet of 15" boring has been completed by this time. The casing pipes have not been withdrawn as yet. The estimate for water supply scheme has been sent up for approval and if funds are received in the near future, the bore hole will be utilized for sinking the plain pipe and strainer.
- 18. Musakhel Water-supply, Rs. 37,394.—The work has been completed and water service commenced to the public. The scheme comprises of a pump chamber  $(2)' \times 14'$  and a 10'' diameter tube-well with  $24' \times 10'$  Tej strainer. The service reservoir is of 10.00 gallons capacity with 16 taps round it.
  - 19. Isakhel Water-supply, Rs, 1,30,844.—The work is nearing completion.
- 20. Ghundi Water-supply, Rs. 3937.—The work is almost complete. It consists of improvement to the existing well and augmenting its supply by sinking a 3" tube and strainer in its bed.
- 21. Na mi W ter-supply, Rs. 4,523.—The work is nearing completion and comprises of the same work as item 15.
- 22. Kalri Water-supply, Rs. 9,721.—The scheme comprises of sinking of a 10" diameter percolation well and the provision of a 3" plain pipe and Tej strainer in the bottom of the well. No suitable strata permitting sinking of a bore pipe

or promising a good yield has so far been met with. Further investigations in the matter are in progress.

- 23. Abohar Drainage, Rs. 2,45,:09.—The metalling of streets, the only remaining work has been completed and the accounts will be closed during the next financial year.
- 24. Abohar Water-supply, Rs. 3,25,357.—All metered connections have been made and the accounts will be closed in Japuary 1931.
- 25. Moga Drainage Scheme, Rs. 1,76,204.—The sullage pumping plant has been handed over to the local body for maintenance.
- 26. Ferozepur Drainage Scheme, Rs. 82,994.—The construction of the storm water channel has not yet been commenced due to the Municipal Committee not having approved of the conditions laid down by the Irrigation Department regarding the disposal of the storm water.
- 27. Jagadhri Drainage Scheme, Rs. 1,34,966.—The work is now complete except the construction of drains and pavements in one bazar, which will be taken in hand on receipt of sanction from the Urban Sanitary Board.
- 28. Ludhiana Drainage Scheme, Rs. 3,45,009.—The land for the irrigation farm has not yet been acquired by the Municipal Committee. The outfall and storm water channel are nearing completion and the scheme is expected to function early next year, the neighbouring farmers agreeing to take sullage temporarily.
- 29. Karnal Drainage Scheme, Rs. 2,92,924.—The flushing installations together with the pumping station are nearing completion. The outfall and disposal works have been held up as the land for the same has not yet been acquired by the Local Body. It is anticipated that the land will be acquired early next year when the works will be pushed on with the object of completing the scheme before the rains.
- 30. Improvement to old well and converting it into tube-well for flushing arrangement at Hoshiarpur, Rs. 14,372.—Boring has been completed and the strainer is about to be lowered.
- 31. Jagraon Drainage Scheme, Rs. 80,251.—All extramural and intramural drains, pavements, and major part of the roads have been completed. The construction of the out-fall will be taken in hand when the land has been acquired.
- 32. Rohtak Waterworks, Rs. 5,56,479.—All work with the exception of the pump house has been completed. The machinery has been ordered and the erection will start next year. It is anticipated that the scheme will be put into action by the end of the first quarter of the next year.

#### GENERAL

This Circle, through its Divisional and Sub-Divisional staff, has charge of water supply and sanitary services of almost all the Government estates, residences and institutions in the Province, which work is being carried out in a very efficient manner.

# AMAR NATH, NANDA,

Superintending Engineer, Public Health Circle, Punjab.

Detail of Sanitary Projects prepared during the year under report by the Executive Engineers, Public Health Divisions, is given below:—

## PRELIMINARY PROJECTS.

(a) Major Works—(Provincial).

near Industrial School, Ludhiana

Name of Project.	Amount.
	Rs.
(a) Major Works—(Contribution) Preliminary.	
(1) Proposed protection works along Udhana Nullah at Bhakkar, District Mianwali	1,42,738
(2) Shishmahal Drainage Extension	1,00,763
(3) Pakpattan Fair Area Water Supply	80,000
(4) Dajal Town and Rural Water Supply—Estimate	ave between mond
No. I	2,02,827
Estimate No. II	2,13,021
(5) Sargodha Drainage (New Sullage disposal works and improvements)	.52,944
(6) Khushab Drainage Scheme	1,42,227
(7) Vehoa Water Supply (Dera Ghazi Khan District)	25,000
(8) Proposed Water Supply for Bari village and other villages in Hoshiarpur District	63,872
Total	10,23,392
DETAILED PROJECTS.	o exion lessignit
(a) Major Works—(Provincial).	
(1) New Maternity Hospital, Lahore, complete Steam Installation and Sanitary and Air Conditioning services in Block C of the Hospital	1,06,414
(2) Improvement to Water Supply of Dina Encamping Ground	11,821
(3) Rivaz Gardens, Lahore, improvements to Water- supply	14,273
(4) Attock Fort Jail Water-supply Scheme	14,557
(5) Providing additional tube-well at the Borstal	
Institution, Labore	15,419
(6) Lawrence School Water-supply Installation of duplicate pumping plant and additions and alterations to the Engine House and existing driver's and oilman's quarters to suit the duplicate set of pumping plant at Lawrence School, Ghora Gali	12,966
(7) Tube-well Water-supply for Intermediate College,	
(8) Rawalpindi District Jail Drainage Improvements	19,195 15,900
(9) Sanitary Installation for New Civil Hospital, Gujran-	Dream tree House
wala	42,976
(10) Maintenance of Dera Ghazi Khan Water-supply	13,457
(11) Bathing Platforms, New Central Jail, Multan	35,729
(12) Proposed Lines for Police Constables and Warders' New Central Jail, Multan	17,933
(13) Revised estimate of Water-supply and Latrines in Government High School, Naushehra	11,928
(14) Fort Munro Water-supply	1,20,946
(15) Installation of water pipe connection in the Govern-	of a
ment Industrial School, Ludhiana	13,540

Name of	of Projec	t.			Amount.
(16) Water-supply,	Govern	ment Inte	ermediate	College,	140.
Ludhiana	··		··	conege,	31,505
(17) Water-supply, Karnal	King	Edward	Medical	Hospital,	21,085
			Total	puoil) ni	5,19,654
		Mine	or Works	ana Drain	3,45,331
		GRAN	D TOTAL	I boord in	8,64,985
	Dra	AILED PRO	TECARS	Report 15	
101,10,1		Works (Co			
Les colos			Los Maries and		
(1) Sinking a perc Khattar, Di	strict Ra	walpindi			19,892
(2) Choa and Ka	as Wate	er-supply	Improvem	ents and	31,232
(8) (a) Construction			at Dunga	Gali for	1131 Hades
the Murree (b) Constructio			nomata ma	ommoin of	5,64,528
Dunga Gali	d of rein	Horced co	nerete res	servoir at	4,57,259
(4) Protection of S	ialkot fr	om Aik Nu	ıllah	oley/ your	55,285
(5) Pind Dadan K				7 000	28,033
(6) Revised estim	ate of	3 percolat			wnaB (01)
(7) Extension of			n Tankha	Water	30,882
supply		ion syster	u, Isakile		20,305
(8) Chhidru Wate	r-supply	(bolte)	rapply De	PROJECT TO	43,346
(9) Sargodha Wat		Extension	propose	d Storage	glast (cc)
Tank	Desir Do	in Indeal)	rigue at	14/1	72,441
(10) Sakhi Sarwar V	Vater-su	pply			92,019
(11) Drainage of Pa	rao Land	l in Rohta	k Town	Webub Meb	12,654
(12) Old Moga Tow	n Draina	ge Scheme	, 1st Insta	lment	33,646
(13) Ferozepur Dra	inage Ex	tension Pa	rt II, Stor	m Water	(100) Tunto
Channel		(4)	plan (Hou	Dromate.	92,166
(14) Supplementary improvemen	estimate	to accom	pany esti		11 170
(15) Water-supply,					11,173
			**		30,250
(16) Gurgaon Drain					88,806
(17) Palwal Water-		cheme			2,99,544
(18) Bhiwani Wate					6,00,500
(19) Special Repairs					18,921
(20) Maintenance W					16,789
(21) Extension of	storm	water cl	nannel an	d outfall	
Ludhiana			••		41,567
			Total		26,61,238
		Mino	r works		
			- II OLAG		1,16,297
			TOTAL		27,77,535
		130			

Detail of projects prepared in the Circle Office under the supervision of the Superintending Engineer, during the year under report—

Name of Project.	Amount.
	Rs.
(1) Pindi Gheb Drainage (Rough)	1,84,427
(2) Bhera Drainage (Rough)	3,22,800
(3) Kot Adu (Rough)	97,263
(4) Ludhiana Drainage (Detailed)	84,292
(5) Jhelum Drainage (Rough)	98,000
(6) Jhelum Flood Protection (Rough)	5,05,592
(7) Wasawe Wala Drainage (Rough)	84,860
(8) Renala Khurd Drainage (Rough)	1,24,404
(9) Kamoki Mandi Drainage (Rough)	40,583
(10) Nankana Sahib Drainage (Detailed)	58,380
(11) Old Town Moga Drainage (Rough)	31,485
define come to the substitute of the substitute	58,688)
(12) Hafizabad and Gari Awan (Rough)	$\left\{\begin{array}{c} 54,669 \\ 6,145 \end{array}\right\}$
(13) Sialkot Suburbs	95,621
(14) Dunyapur Water-supply (Detailed)	1,86,012
(15) Sultan Khel Water-supply (Detailed), Mianwali	1,00,012
District	27,808
(16) Sanwans Water-supply (Rough) Mianwali District	10,780
(17) Burekhel Water-supply (Detailed), Mianwali District	27,468
(18) Bhadrar village, Shahpur District	15,000
(19) Arafwal Water-supply (Detailed)	1,23,608
(20) Panipat Water-supply (Detailed)	3,00,604
(21) Thal Ilaqa Water-supply (Jethal and Dhudi) (De-	The
tailed)	68,546
(22) Kundal, Kundwal, Jhelum District (Rough)	85,715
(23) Dharampur Sanitorium (Detailed)	59,920
(24) Pindi and Wahir, Shahpur District (Detailed)	61,506
(25) Okara Water-supply (Rough)	1,58,780
Minor Works	10,454
Total	29,80,410
803,88 88,600	20,00,410

APPENDIX II.

STATEMENT OF PUNJAB WATER WORKS FOR THE YEAR ENDING 31ST MARCH 1930.

						ix	Z																			i
	DVIEW MERKS.	21																								
9	Debit balance.	12	Ra	14,803			8,244	818	:	15,201	6,276	:		:	4,687	20,982	15,589		1,18,735		9,436	:	2,454	:		:
BALANCE.	Credit balance.	8	Bs.	:	:	8,978	:	:		:		1,12,415	7,261	18,891	:	:	:	:	:	:	:	:	1	:	:	:
lat.	Total expenditure,	61	Br.	34,206	:	673	10,324	4,760	:	16,252	8,881	2,10,672	10,248	30,791	4,687	47,137	16,474	:	5,93,703	:	11,481	:	11,889	:	:	:
giota on	Miscellineous, "The cellineous,"	18	Bs.	8,400	101		:		;					200	:		:	:		:	1	;	2002	:	:	:
digo.	Water analysis.	17	Bs.	16	:	:	1,772	:	:	:	:	1,570	:	191	:	:	:	:	:	:	:	:	:	:	:	:
1010	Repolits	16	Rs.	2,613	:	889	800'8	4,383		182	2,161	9,737		1,706	427		1,067	:	15,834	5,877		190	:	:	:	:
EXPREDITURE.	Descripation.	100	Rs.	3,157	:	93	47.5	:	:	884	:	5,291	:	1,290	211	:	854		28,211	:	:		2,136	:	:	:
Exp	Settling tanks and filters.	14	Es.	*	:	10	1	:		:	1,563	:	:	2,644	:	:	18	:	7,487	:	:		2,211	:	:	:
300	Safafa	2	Rs.	2116	:	50	:	:	:	9,062	170	:	:	9,842		:	1,707	-	:			:	2,887	:	:	-:
	Pumpleg.	12	B.	7,876	1	:	2,363	:	:	4,808	2,926	1,32,520	11,257	685'9	2,835	48,704	6,875	1111	1,20,292		\$,015	i i	1,829	:	:	:
ė i m	Establishment.	п	Bs.	11,667	:	492	3,206	222	:	1,613	1,461	61,554	1,991	9,155	1,214	8,433	5,963	:	1,02,879	:	1,089		2,194	:	:	-:
_	Approvided.	10	Bs.	19,403		4,651	2,080	:	:	1,015	2,005	3,23,067	26,509	44,682		26,155	888	11:0	1,74,968	:	2,045	:	9,434	:	:	:
	Other receipta.	0	Hs.	:	:		:	:	:	:	90		98	:	:		:	:	978	:	:	:	5,690	:	:	:
RECEIPTS.	Rent of Mesers.		B.				123	:	:	4.	:	11	2		:	1,775	174		10,144	:	:	:	1,415	:	:	:
H	Sale of water,	1+	B.	19,403			1,957		:	1,051	-	3,23,087	26,375	44,682	:	24,280	111		72,550	:	877	:	:	:	:	:
	Water rate.	9	Bs.	:	:	4,651	:	4,445	:	:	2,575	:	:		:		:	0:0	91,400	1	1,789	:	2,329	:	:	:
to b	Average daily supply per hea population,	10	1	6.63	12.75	:	27.0	:	:		10.00	:	U.			85.88	11.0	15-13	:	13-20	:	:	:	6.58	8-50	6-17
Taker S.	Average daing the year endin		1	189,184	2,002,678		123,129		:	:	:	:	:			1,579,167	118,229	268,311		757,785	:	:		25,636	18,749	45,262
-,	Topulation at the consus of 192	05	-	182,12	157,031	1,457	182,02	2,000	4,000	7,622	3,340	257,295	50,312	28,136	9,919	55,251	23,129	17,728	26,149	66,911	5,041	10,000	10,539	4,082	2,205	7,335
-	000,00		1000	0	:	:	:	defpal	Canton-	: :	:	:	:	:		:	:	:	;	:	:	:	:	:	:	:
I SHA	Name of Municipality.	al		Ambala (Handesta)	Amelicar	Dalhousie	Dera Ghazi Khan		sada. Cant	Gojra	Jaran wala	Lahore	Ludhlana	Lyallpur	Pind Dadan Khan	Rawalpinds	Rewari	Sargodha	Simla	Sialkot	Toba Tek Singh	Khushab	Muktaar	Bhalwal	Sillanwall	Pathankot
-	No.	-	1	1	04	8	4	_	10	9	-	8 1	6	100	H	12 1	13	11	10	16	11	18	10	93	=	81

#### APPENDIX III.

# PROCEEDINGS OF THE URBAN SANITARY BOARD, PUNJAB.

(THE PROJECTINGS REFER TO THE PERIOD APRIL 1ST, 1930 TO MARCH 31ST, 1931, INSTEAD OF THE CALENDAR YEAR 1930.)

fhe Hon'ble Malik Firoz Khan Noon, Minister for Local Self-Government (at present Minister for Education) was the President and the Director of Public Health the Secretary of the Board throughout the period under review.

With the change in the portfolio of the Minister the composition of the Board was also changed with the exception of Rai Bahadur Lala Mohan Lal, M.L.C., and Khan Bahadur Sheikh Din Muhammad, M.L.C., who continued to remain its members.

Under the old composition the Board met twice when out of 7 non-official members four attended both the meetings, two attended one and one could not attend any; whilst under the present composition only one meeting was held which was attended by five members. The attendance of the members is an evidence of the keen interest displayed by them in matters pertaining to the public health of urban areas.

In April 1930, the sum of Rs. 4,00,000 was placed at the disposal of the Board. In addition the Board had the sum of Rs. 1,60,000 surrendered at the close of the previous year together with a reserve of Rs. 77,000 with the Finance Department which represented the recoveries of unspent balance of grants-in-aid made to local bodies. Owing however to financial stringency the Board under orders of the Government surrendered Rs. 90,000 as well as the reserves; and the total amount available for allotment during the year 1930-31 was thus reduced to Rs. 3,10,000 which was allotted in full during the year under review.

The accounts of schemes executed by the local bodies were checked by the Auditor with a view to recovery of the unexpended balance and in this manner a sum of Rs. 68,760-10-4 was recovered.

The number of schemes assisted during the year was 16 as compared with 21 in the previous year.

The names of the schemes and the amount allotted to each is enumerated below:—

		Rs.
1.	Fatchiang Water-supply Scheme (Trial Boring)	2,368
2.	Ambala Combined Water-supply Scheme	9,389
3.	Construction of two railway culverts over the	
	storm water channel of the Drainage Scheme at	
	Sialkot	2,904
4.	Hoshiarpur Drainage Scheme	7,186
5.	Murree Water-supply Extension Scheme	16,000
6.	Pind Dadan Khan Temporary Water-supply	
	Scheme	28,033
7.	Sialkot Intramural Drainage Scheme	66,868
8.	Murree Water-supply Extension Scheme	69,000
9.	Lyallpur Factory Area Drainage Scheme	19,400
10.	Shahpur Sadar Drainage Scheme	8,241
11.	Choa and Katas Fair Area Water-supply Scheme	16,000
12.	Grant of a bonus to the contractor employed in	
	the execution of the Choa and Katas fair area	
4	Water Supply Scheme	500
13.	Dera Ghazi Khan Water-supply Extension	
131.	Scheme	3,476
14.	Temporary Water-supply Scheme, Pind Dadan	
1000	Khan	2,000
15.	Repairs to Rewari Water Works	16,921
16.	Murree Water-supply Extension Scheme	41,714
	Total	3,10,000
	Surrendered	90,000
	GRAND TOTAL	4,00,000

## APPENDIX IV.

LIST OF SANITARY WORKS OF PUBLIC UTILITY CONSTRUCTED BY PRIVATE BENEFACTION DURING THE YEAR 1929-30.

## AMBALA DIVISION.

- 1. Hissar district.—A well at a cost of Rs. 1,000 by B. Shri Krishan Deva, Pleader, at Hissar. A well at a cost of Rs. 1,500 by Lala Nand Kishore, son of Lala Salig Ram, Rais, at Hissar. A well at a cost of Rs. 1,000 by Lala Radha Kishan, son of Lala Ram Chander, at Hissar. A well at a cost of Rs. 2,000 by Alladiya, son of Qazi; Karim Bakhsh, son of Ilahi Bakhsh; Gulab, son of Sandal; and Maulah, son of Khuda Bakhsh, Goojars at Bhiwani.
- 2. Rohtak.— A well and a Dharamshala at a cost of Rs. 1,500 by Kewal Singh, Jat, of Samehana at Hasangarh, tahsil Rohtak. A well at a cost of Rs. 1,000 by Jita, son of Gurdial, Mahajan of Ismaila on Sampla-Ismaila road. A well and a Dharamshala at a cost of Rs. 1,575 by Badri, son of Sheo Ram, Mahajan of Dulehra, tahsil Jhajjar, on Dulehra road.
- 3. Gurgoan.—The following is the statement showing the number of wells cleaned and the number of parapets constructed:—

Serial No.	de company construction of the construction of	Distric	t.		Number of wells cleaned.	Number of parapets constructed.	Amount spent.
	In M	unicipal	Towns,	D. W.		d 002 43	Rs. A. P.
1	Ballabgarh	14.7			1	1	49 4 0
2	Faridabad		Laborate Season		1	Nil	3 8 0
3	Rewari	"	De kol et	1	127	Nil	218 0 0
4	Palwal		Ton Atlanta	miny 77	Nil	Nil	Nil
5	Firozpur-Jhirka		B. Zu	11000	.25	1	5 0 0
6	Hodal		00 0.20 15	ad dala	26	Nil	Nil
7	Hidayatpur Chl	haoni		Sinuniti	3	Nil	45 0 0

A well at a cost of Rs. 150 by Tulsi, Khatri of Dhankot at Kherki, Mazara Dhankot. A well at a cost of Rs. 7,000 by Lala Salig Ram at Dabina, tahsil Rewari, two wells at a cost of Rs. 9,000 by Lala Murli Dhar at Dabina, tahsil Rewari, three wells at a cost of Rs. 500 by Lala Nathu at Guraora, tehsil Rewari. Four parapets constructed by village community at a cost of Rs. 25 at Suma Khera, tehsil Rewari. A well at a cost of Rs. 22,000 by Lala Hukam Chand at Nikhri, tehsil Rewari. A well at a cost of Rs. 225 and a platform at a cost of Rs. 50 by Mussammat Ganga Devi at Ban Chari, tehsil Palwal. A well at a cost of Rs. 250 by Ram Jiwan, son of Parem Mahajan at Taoru, tehsil Nuh. A well at a cost of Rs. 275 by Shib Lal, son of Bhiki, Mahajan at Mand Kaula, tehsil Nuh.

- 4. Karnal.—A new drinking water well at a cost of Rs. 400 by Mussammat Ram Devi, wife of Rupu Ror, outside Diyalpura Gate in Karnal town. Boring of an old well at a cost of Rs. 600 by Pandit Munshi Ram of Panipat in Mohalla Khara Kuwan, Taraf Rajputan.
- 5. Ambala.—A well at a cost of Rs. 2,000 by Lala Shadi Ram, son of Lala Joti Ram, Ahluwalia, Rupar and Mussammat Basanti, alias Chhoto, wife of Kirpa Ram, Ahluwalia, Rupar, in Mohalla Khera Kalan. A well at a cost of Rs. 500 by Mussammat Bansi, wife of Lala Maghi Ram, Khatri, of Rupar, in Mohalla Chaklan Kalan.

#### JULLUNDUR DIVISION.

- 6. Hoshiarpur.-Repair of public wells at a cost of Rs. 240 by village Panchayat Darapur. Repair of public wells and levelling of lanes and drains at a cost of Rs. 501-5-0 by village Panchayat Khanaura. Construction of new public well at a cost of Rs. 400 by village Panchayat Langeri. Rejair of a well with Khurli and persian wheels at a cost of Rs. 275 by village Panchayat Manak Dheri. Repair of a well at a cost of Rs. 80-11-0 by village Panchayat Mawa Kaholan. Excavation of public pond at a cost of Rs. 315 by village Parchayat Pasi Umar Khan. Levelling of lanes at a cost of Rs. 126-8 0 by village Panchayat Lambera. Levelling of lanes at a cost of Rs. 150 by village Panchayat Ajnoba. Repair of a Ghati at a cost of Rs. 52-8-0 by village Panchayat Dudial (Dasuya). Levelling of lanes at a cost of Rs. 43 by village Panchayat Dudial (Garhshankar). Levelling of lanes at a cost of Rs. 60 by village Panchayat Dhagam. Levelling of lanes at a cost of Rs. 33 by village Panchayat Johal. Levelling of lanes at a cost of Rs. 124-12-9 by village Panchayat Tarkiana. A serai at a cost of Rs. 800 by Bhagwat Acharya at Majara. A serai at a cost of Rs. 1,000 by Lambardar Indar Singh and members of his family at Halri. A serai with a well at a cost of Rs. 500 by Gobind Ram, Jat at Jainpur. Repairs to a serai at a cost of Rs. 50 by Pandit Daryodhan Das at Joh. A well at cost of Rs. 2,000 by Babu Karm Chand of Sujanpur at Bambowal. A well at a cost Rs. 1,500 by village community under the guidance of Chaudhri Hukam Chand at Nadalon. A well at a cost of Rs. 1,500 by village community at Laksian. A well at a cost of Rs. 700 by Laxman Singh, Khalsa Bradar at Bambeli. A well at a cost of Rs. 1,000 by Ad-Dharmi Community at Bambeli. A well at a cost of Rs. 750 by Ad-Dharmi community at Bilaspur. A well at a cost of Rs. 1,500 by Sardar Kundan Singh of Baddon at Sarhala Kalan. Repair to a well at a cost of Rs. 30 by village community at Bodal. Repair to a well at a cost of Rs. 150 by village community at Jaja. Repair to a well at a cost of Rs. 150 by Chaudhri Sadu-ud-Din Sufaidposh and some other donors at Taggar Kalan. Repair to a well at a cost of Rs. 70 by Bahti community at Haleri. Repair to a well at a cost of Rs. 125 by village community at Mehandpur. Repairs to a well and Musafar Khana at a cost of Rs. 150 by Mussammat Basanti, widow of Indar Singh, at Kharar. Repairs to a well at a cost of Rs. 200 by Lambardar Nur Abmad at Pandori Araian. Repairs to a well at a cost of Rs. 50 by Chaudhri Nur Muhammad at Passi Bet. Repairs to a well at a cost of Rs. 40 by village community at Safdarpur. Repairs to a well at cost of Rs. 25 by village community at Ghorewaha. Repairs to a well at a cost of Rs. 50 by village community at Nangal Jamal. Repairs to a well at a cost of Rs. 30 by village community at Babak. Repairs to a well at a cost of Rs. 200 by village community at Sarain. Repairs to a well at a cost of Rs. 35 by village community at Bairampur. Repairs to a well at a cost of Rs. 45 by Chaudhri Abdul Karim and village community at Panj Debra. A tank at a cost of Rs. 300 by village community at Dhillu. A tank at a cost of Rs. 250 by village community at Heran. A tank at a cost of Rs. 250 by village community at Kungrat and Baiderwal. Lanes repaired at a cost of Rs. 140 by village community at Santokhgarh. Laying of lanes with bricks at a cost of Rs. 127 by village community at Laksian. Well sunk in school compound at a cost of Rs. 400 by Manak Dheri and Birampur villages at Manak Dheri.
- 7. Jullundur.—A Water pump at a cost of Rs. 150 by Mussammat Mohan Devi, widow of Lala Bindar Ban, Khanna, outside Mai Hiran Gate. A water pump at a cost of Rs. 150 by Lala Dhani Ram, shopkeeper. Bazar Bheron, inside Mai Hiran Gate. A water pump at a cost of Rs. 150 by Lala Sham Das, Khanna, Bazar Bheron, inside Mai Hiran Gate. A water pump at a cost of Rs. 125 by Lala Shiv Sahai, Khatri in Mohalla Lawan. A water pump at a cost of Rs. 100 by Lala Shiv Sahai, Khatri, Purani Sarai in Bazar Boharwala. Repairs of a well at a cost of Rs. 200 by Maharaj Mal, Muni Mal Khatri, Mohindru Mohalla Mahindruan, in Adda Kapurthala. A water pump at a cost of Rs. 150 by Lala Mohan Lal, Rais, Basti Sheikh, in Adda Basties. A water pump at a cost of Rs. 150 by Lala Mohan Lal, Rais, Basti Sheikh in Chauk Hashem Shahid. A water pump at a cost of Rs. 125 by Lala Mohan Lal, Rais, Basti Sheikh in cremation ground Basti Sheikh. A water pump at a cost of Rs. 100 by Lala Mohan Lal, Rais, Basti Sheikh in Mohalla Kot Kucha Bandian Basti She kh. A water pump at a cost of Rs. 100 by Lala Mohan Lal, Rais, Basti Sheikh in Mandir, Arya Samaj, Basti Sheikh. A water pump at a cost of Rs. 100 by Lala Mohan Lal, Rais, Basti Sheikh in Mohalla Kot Basti Sheikh. A well and a house at cost of Rs. 1,200 by Lala Amritsaria Mal, son of Lala Das Mal, Khatri, Basti Sheikh at Ferozepore road, Basti Sheikh. A house at a cost of Rs. 1,400 by Lala Mohan Lal, Rais inside Marghat, Basti Sheikh.

A water pump at a cost of Rs. 350 by public fund through B. Gujjar Mal, at Wehra Khakroban Abkariwala. A water pump at a cost of Rs. 150 by Lala Bansi Lal, Bahri at Gandhi Mandap. A water pump at a cost of Rs. 100 by Lala Khem Chand, merchant, near Doaba School, Adda Hoshiarpur. A water pump at a cost of Rs. 100 by Mr. Sudarshan, Agent, Tata Iron Works, at Adda, Tanda. Three water pumps at a cost of Rs. 400 by Lala Khem Chand, merchant, at District Board Road, Tanda. A water pump at a cost of Rs. 100 by Lala Khem Chand, merchant, near Kot Kisher Chand Gate. A water pump at a cost of Rs. 100 by Sheikh Ghulam Nabi, Khawaja, Basti Guzan, outside Dehlvi Gate, Basti Guzan. A water pump at a cost of Rs. 100 by Qazi Mehbub Alam, Rais, at Pir Jalal road. A water pump at a cost Rs. 100 by public fund at Kucha Gujaran Kot Pashka. A water pump at a cost of Rs. 250 by public fund in Chauk Imam Nasir-ud-Din. A water rump at a cost of Rs. 100 by Lala Harbans Lal, Beri, in bazar Nauhrian. A water pump at a cost of Rs. 100 by Lala Kishori Lal, Nauhria, in bazar Nauhrian. A water pump at a cost of Rs. 100 by Bawa Hari Das near Sarai Sheikh Karam Bakhsh. A water pump at a cost of Rs. 100 by Lala Gujjar Mal, Halvai, outside Shagalan Gate. A water pump and repairs of a well at a cost of Rs. 500 by Lala Shib Sahai Ram Lal, Khatri, in chauk Jaggoo. A water pump at a cost of Rs. 100 by Mistri Allah Bakhsh in Rennick bazar near Girl School. A water pump at a cost of Rs. 100 by Lala Nathu Mal, cloth merchant, at G. T. Road, near Civil Hospital. A water pump at a cost of Rs. 100 by public fund in bazar Barpagian. A water pump at a cost of Rs. 100 by Puran Chand, son of Ghasita, Halvai, in bazar Sarafan, Basti Guzan. A water pump at a cost of Rs. 100 by public fund in Ali Takia. A water pump at a cost of Rs. 100 by public fund in Mohalla Chhoti Mori, Basti Guzan. A water pump at a cost of Rs. 100 by public fund in bazar Jamanwala, Basti Guzan. A water pump at a cost of Rs. 100 by Lala Khem Chand, merchant in district court. A water pump at a cost of Rs. 100 by Chaudhri Lakha, Sheikh, in bazar Keilewala, Kucha Nechabandan. A water pump at a cost of Rs. 100 by Mihan Singh in new habitation Chah Mehran.

8. Ferozepore.—A drainage at a cost of Rs. 1,040 by village communities in village Patto H ra Singh. A drainage at a cost of Rs. 502 by village communities in village Badhni. A drainage at a cost of Rs. 250 by village communities in village Lopon. A drainage at a cost of Rs. 100 by village communities in village Doudher. A drainage at a cost of Rs. 50 by village communities in village Buttar. A platform of the well at a cost of Rs. 100 by village communities in village Buttar. Draining at a cost of Rs. 268-8 by village communities in village Gholia Kalan. Draining at a cost of Rs. 60 by village communities in village Gill. Draining at a cost of Rs. 332 by village communities in village Jhandiana. Repairs of a well at a cost of Rs. 50 by village communities in village Darapur. Draining at a cost of Rs. 85 by village communities in village Salina Draining at a cost of Rs. 318 by village communities in village Kokri Kalan. Draining at a cost of Rs. 97 by village communities in village Killi Chahlan. Draining at a cost of Rs. 442 by village communities in village Baga Purana. A parapet at a cost of Rs. 350 by Dilawar Khan, Zaildar, Diwan Khera, in Diwan Khera. A parapet at a cost of Rs. 45 by Bahawal Khan, Sufedposh Jandwala Miran Sangla at Jandwala Miran Sangla. A parapet at a cost Rs. 400 by Fateh Muhammad Zaildar, Jandwala Bhime Shah, 't Jandwal: Bhim Shah. A parapet and reservior at a cost of Rs. 1,000 by Rupdaman Singh, Lambardar, of Thathi Bhai at Thathi Bhai. Three cesspits for disposal of waste water at a cost of Rs. 20 by Mamraj, Lambardar, Nihal Khera at Nihal Khera. Repair to parapets and platform at a cost Rs. 40 by Maghar Singh, Zaildar, Waring in Waring. A parapet at a cost of Rs. 250 by Prem Singh, Zaildar, Gobind Garh in Gobind Garh. A parapet and drain for waste water at a cost of Rs. 350 by Khan Sahib Majhe Khan, Sufedposh, Patre Wala at Patre Wala. A parapet at a cost of Rs. 200 by Jai Singh, Zaildar, of Bidwali, at Chanu. A drinking water well at a cost of Rs, 200 by Sardar Santokh Singh and Sardar Kala Singh of Patto Hira Singh, Tahsil Moga, at Patto Hira Singh. A drinking water well at a cost of Rs. 200 by Lala Salig Ram of village Salhina, tahsil Moga, at Salhian. A drainage at a cost of Rs. 1,300 by Lt. Sodhi Harnam Singh, Chief of Sultan Khanwala, tahsil Ferozepore, at Sultan Khan Wala. Two water pumps at a cost of Rs. 80 by Lala Bhagat Ram, member Small Town Committee, Dharamkot in Chauk Soodan, Dharamkot. A water pump at a cost of Rs. 40 by Pandit Prabh Dial, Bhaigwa of Zira in Chauk Mahtman, Zira. A water pump at a cost of Rs. 40 by Lala Maghi Mal, Rais and Municipal Commissioner, Zira, on main road Zira. A drinking water well and a water pump at a cost of Rs. 600 by Messrs. Anant Ram, Mangat Rai, Bankers of Ludhiana on station road, Moga. A water pump at a cost of Rs. 35 by Lala Mani Ram, son of Ratna, Chamar of Fazilka, in Kucha Chamaran, Fazilka.

# LAHORE DIVISION.

- 9. Lahore.—A well at cost of Rs. 400 by Lala Jawala Ram, Bazaz of Chunian, in his own building but open to the public from outside. Five drinking, one pump and one parapet at a total cost of Rs. 1,260 by Lala Sain Das of Sangowal, the residents of village Pandori Nijran, Pandit Gurdit Chand of Kartarpur, Maula Bakhsh, Lambardar of village Ghug, Bhagat Singh of Dialpur, the residents of village Rastgo and by Sardar Uttam Singh of Manan in the rural areas of Jullundur district.
- 10. Amritsar .- A new parapet and a pipe in a well at cost of Rs. 10 by public subscription in village Sarai Amanat Khan. Parapets and platforms of two existing wells at a cost of Rs. 100 by Bhai Gopal Singh of Pulkanjri and Sardar Arjan Singh in village Pulkanjri. Two wells at a cost of Rs. 500 by Maulvi Fazal Din, son of Imam Din and the Muhammadans of the village at Fatehabad. Parapet and platforms at a cost of Rs. 80 by public subscription in village Nurdi. Two wells at a cost of Rs. 300 each by M. Rustam Khan and Umroo in village Kot Muhammad Khan. A parapet of a well and construction of a persian wheel at a cost of Rs. 400 by the village panchayat of Srahli Mandan. A parapet and a platform of a well at cost of Rs. 34 by public subscription in village Janian. Two wells at a cost of Rs. 194-2 and Rs. 200, respectively, by Bhai Ganda Singh, Havaldar and Lala Shankar Das in village Sathiala. A parapet and a platform at a cost of Rs. 275 by Bhai Sant Singh in village Sathiala, parapets to 2 wells at a cost of Rs. 48 by Sardar Budha Singh and public subscription in village Wallah. Two wells at a cost, Rs. 300 by Umra, teli and Allah Ditta, weaver, in village Dheriwala. Parapets to 3 wells at a cost of Rs. 66 by public subscription in village Gaggomahl. A handpump at a cost of Rs. 25 by public subscription in village Gaggomahl. Parapet to 2 wells at a cost of Rs. 60 and Rs. 20 respectively by public subscription in village Harsehchhina. Parapets and p'at'orms to 2 wells at a cost of Rs. 45 by public subscription in village Makowal. Parapet to a well at a cost of Rs. 90 by public subscription in village Mughlanikot. Paving of a drain at a cost of Rs. 25 through the efforts of Pandit Duni Chand in village Sarai Amanat Khan. Paving of a street at a cost of Rs. 100 by S. Hardit Singh and Hakim Singh, son of Natha Singh in village Balsarai. Paving of a lane at a cost of Rs. 140 by public subscription in village Tangra. Paving of a street at a cost of Rs. 180 by Puran Singh and Sohan Singh in village Mudhal. Filling up of a pond at a cost of Rs. 60 by Imam Din Faqir in village Mudhal. Filling up of a pond at a cost of Rs. 60 by Bahadur Singh, son of Jawa'a Singh, in village Miran Kot. Two pacca drains at a cost of Rs. 30 by public subscription in village Janian. Paving of a lane at a cost of Rs. 140 by public subscription in village Wallah. Paving of 10 lanes at a cost of Rs. 675 by public subscription in village Wadala Virum. Paving of 5 lanes at a cost of Rs. 543 by the villagers of village Pheruman. A pacca drain and pavement of lane Boharwali at a cost of Rs. 300 by the residents of Jagdevkalan.
- 11. Gurdaspur.—A well at a cost of Rs. 150 by Madhu Ram Sadha at village Marar, tehsil Batala. A water pump at a cost of Rs. 100 by Sahibzada Pir Manzoor Mohd. at Qadian. Parapet of a well and a pump at a cost of Rs. 200 by the inhabitants of mohalla Julkian, Batala.
- 12. Sialkot.—A pump at a cost of Rs. 100 by Miran Bakhsh, carpenter of village Kot Ghuman, tashil Daska, on the Jamke-Badiana road. A pump at a cost of Rs. 50 by the inhabitants of village Kotli Hira, tahsil Daska. A well at a cost of Rs. 500 by Pandit Mohan Lal, Sarbrah Lambardar of village Siranwali, tehsil Daska, in village Mianwali, tahsil Daska.
- 13. Gujranwala.—A drinking water well at a cost of Rs. 900 by Lala Nand Lal, son of Lachhman Singh, Arora, at Bharoki Chima, tahsil Wazirabad. A water-pump for public use at a cost of Rs. 50 by Lala Karam Narain, Khatri of Jalalpur, at Jalalpur Nau on the Jalalpur-Vanike road.

#### RAWALPINDI DIVISION.

- 14. Gujrat.—A well at a cost of Rs. 925 by Malik Ahmad Khan, Tiwana, Tebsildar, Kharian, near Red Cross Centre at Kharian. A well at a cost of Rs. 500 by Phalla Awan of Sabour, on Gujrat-Bhimber road. A water pump at a cost of Rs. 50 by S. Mehr Shah of Badshahpur on road from Chillianwala to Mong. A pump at a cost of Rs. 50 by B. Havali Ram of Saida on road from Phalia to Kadarabad. A pump at a cost of Rs. 50 by M. Ismail, Ghulam Rasul-Sharaf Din of Mangat on road from Phalia to Bahau-din.
- 15. Shahpur district.—A parapet to a well at a cost of Rs. 250 by public subscription in block No. 5 at Sargodha.

- 16. Jhelum.—A well at a cost of Rs. 100 by Mirza of village Ladhar at the road running from Dina to Sheikhupura. Supply of a well gear at a cost of Rs. 80 by Suba, pensioner in village Munara. A well at a cost of Rs. 2,800 jointly constructed by Makial Ahluwalias in village Diwalian. A well at a cost of Rs. 200 by Ahmad and Gaman in village Naurang.
- 17. Rawdpindi.—A drinking water well at a cost of Rs. 900 by villagers and District Board at Panjar (Kahuta).
- 18. Attock.—A we'll for drinking purposes at a cost of Rs. 450 by Lala Hira Nand of Hazro, tehsil Attock, on Campbellpore-Hatti road.
- 19. Mianwali.—A drinking water well at a cost of Rs. 50 by Lala Duni Chand Nakra, of Isakhel, at Isakhel. A drinking water well at a cost of Rs. 800 by Ram Chand, Physician of Kammarmushani, at Pakka Kammarmushani. One drinking water well at a cost of Rs. 20 by village community at Trag Sharqi. Clearance of 17 wells at a cost of Rs. 83 by village community in Jalalpur. Clearance of 3 wells at a cost of Rs. 20 by village community at Kalabagh. Clearance of 8 wells at a cost of Rs. 40 by the village community at Kot Chandna. Clearance of 6 wells at a cost of Rs. 45 by the village community at Khudozai. A drinking water well at a cost of Rs. 2,000 by Hayat Mohd., son of Gul of Chorwala, at Chorwala. A drinking water well at a cost of Rs. 2,000 by Fateh Khan, son of Mohammad, of W anbhachran, at Wan Bhachran. A drinking water well at a cost of Rs. 200 by Ghulam Ali, son of Mohammad, Jat Bhati by caste of Wan Bhachran, at Wan Bhachran. A building at a cost of Rs. 300 for Lower Middle School, by Faqir Sher Rasul Khan, son of Faqir Sher Mohammad Khan, at Rakh Piplan. A drinking water well at a cost of Rs. 1,500 by Mian Maluk Ali, son of Mian Mohammad Ali, at Mianwali. A drinking water well at a cost of Rs. 300 by Mst. Dai Jawai, mother of Mohammad Machhi of Kundian, at Kundian Pakka. A drinking well and an area of about 15 kanals with enclosures at a cost of Rs. 2,000 by the Panchayat of the village of Kundian, at Kundian Pakka.

## MULTAN DIVISION.

- 20. Montgomery.—A drinking well at a cost of Rs. 600 by Lala Wasakhi Ram at Montgomery. A drinking well at a cost of Rs. 1,500 by Lala Gian Chand at Mandi. A drinking well at a cost of Rs. 1,000 by Sat Sang Sabha at Montgomery town.
- 21. Lyallpur.—A well for drinking purposes at a cost of Rs. 800 by Lala Indar Singh, son of Kishan Singh, Jat of Chak No. 58-J. B., tahsil Lyallpur and Arur Singh, son of Harnam Singh, Jat of Chak No. 58-J. B. at Narwala Road in Chak No. 58-J. B. A well for public use at a cost of Rs. 400 by Lala Jagiroo Ram, son of Palu, Brahmin, in Chak No. 475-G. B. A well for public use at a cost of Rs. 300 by Lala Shambhu Nath, in Chak No. 447-G. B. A tube well in Toba Tek Singh Dispensary at a cost of Rs. 140 by Lala Karam Chand, Arti, Lambardar, Toba Tek Singh.
- 22. Jhang.—A hand pump at a cost of Rs. 45 by M. Naurang and Sardara, sons of Muhammad, Haral of Chak No. 148, on a road from Chiniot to Aminpur. A hand pump at a cost of Rs. 25 by Lala Raja Ram, son of Ram Ditta, of village Sumandar, near Guddinwali bridge, Jhang-Chiniot road.
- 23. Multan.—A water pump by Lala Shankar Das, tahsii Multan, on Nilkot-Fazii Shah road. A water pump by Lala Radha Kishan, tahsii Multan, on Bahawalpur road.
- 24. Muzaffargarh.—Construction of Khanqah and a well therein at a cost of Rs. 564 by M. Illahi Bakhsh, son of Bakha, Jat, Khaglani, of Mauza Gulab Shah, tahsil Muzaffargarh, in Mauza Gulab Shah. A water pump at cost of Rs. 28 by Lala China Ram, son of Piara Ram, caste Virmani, of Muradabad, on Muzaffargarh-Rangpur road in Mauza Dunyapur.
- 25. Dera Ghazi Khan.—A well at a cost of Rs. 450 by Lala Udho Dass, petition-writer, in block No. 1, Dera Ghazi Khan. A well at a cost of Rs. 400 by M. Khan Mohammad Khosa, in block U, Dera Ghazi Khan.

# APPENDIX V.

Statement showing the death-rates from cholera, small-pox, fever and dysentery and diarrhoa for the five years preceding and for the period since the introduction of drainage or water-supply or both in the under-mentioned towns:—

1   2   3   4   6   6   7   7   8   0   0   10   11   11   11   11		WORKS OF	s or	DR	DRAINAGE OR WATER-SUPILY OR BOTH,	R-SUPTLY OR B	OTH.	DBJ	DRAINAGE OR WATHE-SUPPLY OR BOTH.	R-SUPPLY OR B	OTH.	
1933   1930   194   195   19	Towas,	Drainage.	Water-supply.	Cholera.	Smallpox.	Fever.	Dysentery and diarrhora.	Cholers.	Smallpox.	Fever.	Dysentery and diarrhos.	REMARKS.
1923   1925	1	01	69	7	9	9	1	00	6	10	п	12
1882   1883   1884   1885	tak	1923		0.57	0.25	13.37	1-15	0.2	0.3	27.72	1.2	100
1860   1860	nari nala	1	1920	0.30	0.41	19.39	1.01	4.0	7.0	10.9	00 00	10-
1925   1908   1948	The state of the s	1893	1893	0.03	0.34	11.85	66.0		1.1	17.1	1.4	
1925   1925	rmsala		1908	0.48	80.0	89.6	1.85	0.3		6.1	1.6	11
1985   1985	niarpur	1925		0.03	0.18	11.76	0.78	0.0	0.1	0.6	0-1	
1985   1985	indust.	1924	1000	0.50	0.02	16.58	20.0	7.0	0 0	11.6	000	
1916   1917   1918	300	1907	coer	0.44	1.08	12.90	1.63	9.0	1.5	0.0	0.0	50
1913   1.15	zebore	1916		0.46	0.04	11.96	1.39	0.0	0.2	0.0		To the
1913   1925   1926   1926   1926   1926   1926   1927   1928	and a	1913	: :	0.81	1.15	17.31	92.0	0.0	4.0	16.6	6.0	
1882   1884   1885   1884   1885	lka	1913		0.80	1.06	21.05	1.55	0.01	5.6	91.4	1.1	
1921   1982   1983   1984   1985   1984   1985	tsar		1925	80.0	2.21	12.00	0.87	10.0	0.04	11.3	1.1	
1922   1881   1934   1935   1934   1935   1934   1935   1934   1935   1934   1935   1934   1935   1934   1935   1934   1935   1934   1935   1934   1935   1934   1935   1934   1935   1934   1935   1934   1935   1934   1935   1934   1935   1934   1935	lar	100.	1929	-	0.45	98.8	0.34		1.1	200	1.1	
1882   1.0	dre	1921	1881	0.56	0.83	12.52	2.02	0.5	9.0	20-0	1.3	
1985   1904   0.50		1922		1.99	0.30	13.76	1.54	1.6	1.0	21.8	1.0	
1914     1915     191	tsar	1885	1904	0.20	1.04	21.37	1.05	1.0	0.1	31.3	1.8	70
1918   1918	isia	1924		69-0	0.44	16.56	1.36	0.03	0.1	17.1	0.1	8.9
1915   1915	asbur	1918	1001	0.18	0.44	10.35	200.0	9.0	0.9	14.5	1.00	111
1882   1882   1883   1884   1885	ousie anket	101	1994	1.16	0.00	17.76	0.20	8.0	0.2	10.4	0.0	17
1892   1874   1875	ot		1915	0.21	0.34	13.60	10.13	3.0	1.0	9.6		1
1929   1924   1924   1925	anwala	1892		0.21	86.0	18.18	1.20	0.2	9.0	19.7	1.1	
ndi	ngah Dogran	1929			0.10	3.18			6.0	4.4	0.1	
1905 0.71 0.20 18.32 1.00 0.3 0.7 1.00 0.3 1.00 0.3 0.7 1.00 0.3 1.00 0.3 0.7 1.00 0.3 1.00 0.3 0.7 1.00 0.3 1.00 0.	la		1924	0.10	0.43	010.0	0.02	10.4	1.1	7.1	03.0	
1907   1907   1907   1907   1908   1708	iarkana Mandi	1928			00.00	4.45	0.50	6.0	0.1	4.6	0.9	
1907 1907 1907 0.08 0.32 7.23 0.94 0.0 0.95 1925 1925 0.06 0.05 1925 1925 0.06 0.08 15.95 1925 0.09 1.14 0.09 15.95 1.10 1.00 1.10 1.00 1.10 1.00 1.10 1.00 1.10 1.00 1.10		1906	:	0.01	0.50	18.25	1.00	0.03	000	10.0	2.1	
1925 1926 1926 1926 1926 1926 1926 1926 1927 1928 1928 1928 1928 1928 1928 1928 1928	and the second	1007	1007	0.08	0.80	2000	0.07	200	linea.	able		
1925   1925	nwali	1000	1006	0.00	-	3.63	0.50		-			
nn	wal	1925	1928	1-14	0.98	11.68	1.10	+0.1	40.3	+8-3	+0.3	
nn 1908 0.37 0.44 12:30 1.47 1.5 0.3 14:0 1909 13909 0.41 0.35 19.65 2.38 1.1 0.7 23.1 16:4 1907 1884 0.05 0.56 0.73 13:47 0.72 13.65 0.75 0.75 0.72 13.65 0.75 0.75 0.75 19.64 14:8 19.64 0.00 0.12 0.72 10:31 0.65 1.50 0.75 0.45 19.6	shab		1923	0.03	0.00	15.29	1.10	0.1	0.3	14.3	1.6	1
nn 1969 1909 0-41 0-95 19-65 2-38 1-1 0-7 23-1 16-4 17-70 1909 0-1 1887 0-56 0-37 17-70 2-16 0-5 0-4 1884 0-16 1884 0-18 1904 0-13 0-40 17-40 17-60 0-77 17-6 0-77 18-8 1924 0-12 0-74 17-02 0-59 17-1 18-8 1924 0-12 0-12 0-19 0-19 0-8 19-1 19-1 19-1 19-1 19-1 19-1 19-1 19	um	1908		0.37	0.44	12.30	1.47	1.5	0.3	14.0	2.1	-
1907   1887   0.56   0.37   17.70   2.16   0.5   0.1   16.4   16.4   18.8   19.04   0.07   0.09   13.87   1.50   0.77   0.09   13.87   1.50   0.77   0.09   17.40   1.50   0.75   0.4   14.8   16.3   19.04   0.12   0.74   1.00   0.19   0.78   1.00   0.19   0.78   1.00   0.19   0.74   1.00   0.19   0.78   1.00   0.19   0.74   1.00   0.19   0.78   1.00   0.19   0.19   0.10	Dadan Khan	1909	1909	0-41	0.82	19.62	000	1.1	1.0	23.1	3.6	
1884   0.07   0.09   13.87   1.00   0.7   0.04   14.8   14.8   1904   0.05   0.09   13.87   1.00   0.7   0.04   1904   0.05	alpindi	1907	1887	99.0	0.37	17.70	2.16	0.2	0.1	16.4	400	
1904 0.13 0.72 10.51 0.55 #2.8 #0.4 0.65 1904 0.01 1904 0.02 0.13 0.72 10.51 0.55 #7.0 0.59 #7.0 0.19 0.19 0.19 0.19 0.19 0.19 1924 0.12 0.74 4.00 0.19 0.19 0.19 0.19 0.19 0.19 0.14 1.62 0.04 (a) (a) 4.6 (b) 4.6 (b) 4.6 (c) 1929 1913 0.01 1.61 0.09 Not ax aliable. 1929 0.00 0.00 0.01 1.86 0.01 1.0 Ditto 14.7 1928 0.00 0.00 0.01 15.24 2.24 2.24 2.0 0.06 15.9			1894	0.02	60.0	13.87	8:1.	1.0	-	8.91	6.0	
1904 1904 0.00 0.72 10.31 0.00 0.8 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	iwali		1904	0.13	05.0	17-40	00.1	90.00	ot av	Allable.	800.0	
1920 1924 0.12 0.74 4.00 0.19 0.8 4.6 (a) 1924 0.12 0.74 4.00 0.09 0.8 (b) 1924 0.12 0.074 4.00 0.09 0.8 (a) (b) 1929 1913 0.00 1928 0.001 1.61 0.09 0.01 1.61 0.00 0.01 1.80 0.01 1.0 Ditto 1.92 0.00 0.001 1.80 0.01 1.0 Ditto 1	ibur	1904	1904	60.0	0.12	10.01	00.00	0.7	1.0.4	40.5		0
1920 1914 0'14 1.62 0'04 (a) (b) (a) (a) (a) (a) (a) (b) (b) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	Minerally .	1014	1916	0.12	24.0	20.7	0.00	0.0	0.0	0.01	:	Y
1929 1913 0.02 1.93 0.08 Not available. (a) 1.92 0.06 0.01 1.91 0.04 1928 0.05 1932 0.05 1932 0.05 1933 0.05 1938 194.7 1957 0.77 1.1 1.0 Ditto 14.7 15.24 2.24 2.0 0.06 15.9	Hannais, Tr.b. Sinch	1000	1924	0.12	0.14	1.69	0.04	(m)	(14)	fal 4.6	10101	
. 1918 1913 0·001 0·01 1·61 0·09 Ditto Ditto 1922 1933 0·05 0·05 15·24 2·24 2·0 0·6 15·9	Jhumra	1090	1913	1 H	0.03	1.93	80.0	100	Not	ailable.		
1907 1928 0.001 0.04 1.86 0.41 0.01 1.0 14.7 1928 1.57 0.7 1.1 31.1 1918 1.57 0.7 1.1 31.1 1918 1.57 0.7 1.1 1918 1.59 1.59	nwala	1918	1913	10-0	10.0	1.61	00.00	000000	Di	tto		10
zi Khan 1922 1913 0.05 0.51 15.24 2.24 2.0 0.6 15.9	lan.	1907	1928	0.001	0.00	1.86	0.41	10.0			2.0	
zi Khan 1913 0.03 0.27 15.24 2.24 2.0 0.6 15.9	abad	1922	:	0.00	0.21	19.98	1-57	2.0	1.1	31.1	6.6	
	Charl Khan		1913	0.03	0.07	15.94	F0-0	0.0	0.0	15.0	9.1	

APPENDIX VI.

A.-TABLE SHOWING THE MEAN MONTHLY TEMPERATURE AND DEPARTURE FROM NORMAL FOR 12 METEOROLOGICAL STATIONS IN THE PLAINS OF THE PUNJAB

	REMARES.	1													
DECEMBER.	Dep.	01	:	9	0.7	1.0	01.0	6.0	9-0+	+0.6	+1-9	+0-7	+1.9		:
DECE	M. T.	01	2.02	40.0	45.2	43-8	42-6	44-2	43.1	46-7	45.8	49-5	53.4	0-89	50.4
NOVEMBER.	Dep.		25	-1.0	-01	-1-0	6.0	11	7.0	7	+0.1	-1.7	+0.3		:
Nove	M. T.	1 .	9-19	59-6	57.0	22.0	P-829	9.19	52.9	7-19	58.5	8-69	63-7	8-69	62.1
OCTOBER,	Dep.		-1.7	2-0-2	+1.5	+0°5	11+	+04	6.0+	+0-1	+0-5	9.0-	+1.5	:	:
Ocre	М. Т.		73.5	73.4	72-6	71.9	70-3	10.00	2-69	75.4	8.02	73-8	6-92	74.2	75-6
MBER.	Dep.	0	6.0	000	+0-1	63	6	6.0-	=======================================	-150	2.0-	=======================================	9.1-	:	:
SEPTEMBER	M. T.	1 .	81.8	81.5	79.5	77.3	80-5	18.8	77.9	83-0	81.3	82-6	86-1	86.4	83-9
18T.	Dep.		- 0.5	10-5	+1:3	0.0	0.7	6.0	1.6	6.0	0.2	-17	6-0	:	:
Acoust.	M. T.	1 .	10 61 61	90 61 60	7.00	0.78	822.8	84.1	86-9	88-0	82.3	9.28	89.5	0.88	84.3
Jux.	Dep.	1 .	F-2-	15.3	-6-1	6.5 6.5	1.50	-3.3	9.0	-2-7	117	-6.1	1.0	:	:
Jo	M. T.	0	83-4	84.1	82-1	\$3.4	83.0	82.7	30 63 63	86.2	8.78	84-7	9.68	9.88	7.88
B,	Dep.	01	15	9.4	-0-7	10.61	6.0-	-1.9	8.0	19.5	-1-9	6.5	+0-1	:	1:
JUNE.	M, T.		89.3	87.3	87.8	86.7	9.88	88.7	91.3	0.06	88.4	9.68	93.3	95.6	92.9
н	Dep.		8.0-	-1.3	+1.4	0.0	8.0	9	9.0	7-7-	0.1	1.3	1.6	:	:
MAY.	M. T.		88.7	87.0	87.0	0.98	8.98	82.0	85.4	9.88	82.8	88.0	0.06	0.06	89.4
APRIL.	Dep.	1 .	0.8	61	+1.6	-1-7	7	-3.2	-1.7	-1.7	-0.7	-1.9	-1:1	:	:
AP	М. Т.		80.2	78.1	74.6	74.8	74.5	71.6	1.69	76.0	73.0	75.8	4-77	77.8	78.3
ICIE.	Dep.	0	9.0	1.3	2.1	0.3	1.61	0-5	61	90	1.5	1.7	63	:	:
MARGIE.	M. T.		0.69	67-1	63-2	63-3	0.19	6.19	62.5	67.4	6.19	65.3	67.5	6.99	0.89
FEBRUARY.	Dep.	1.	9.0	1.3	1.0	0.3	1.8	1.0	ė	2.1	1.8	1.5	2.9	:	:
FEBR	M. T.		56.6	53.5	53.3	6-19	52.1	51.7	48-7	53-8	51.4	53.1	25.4	8.45	53.9
JANUARY.	Dep		8.0	-1.5	6.0-	63	-2.5	3.1	7.8	-1.3	-2.1	15.7	-1:1	:	:
JAN	M. T.	1 .	51.7	46.5	47.7	45.3	44.0	45.5	41.7	16.0	44.0	9.99	48.5	45.8	47.8
1		1	:	:	:	:	:	:	di	:	:	ory	:		:
District of the last of the la	Station,	Charles	Delhi	Hissar	Ambala	Ludhians	Lahore	Stalkot	Rawalpindi	Khushab	Lyallpur	Montgomery	Multan	Bahawalpur	Khanpur
	Serial No.	1	-	01	60	4	10	9	-	00	6	10	=	03	133

(b) Mean of 30 days.

APPENDIX VI-CONTINUED.

B.-TABLE SHOWING MEAN MONTHLY RELATIVE HUMIDITY AND DEPARTURE FROM NORMAL FOR THE YEAR 1830.

	REMARKS.										1.111	er inne			
IBER,	Dep.	26	1	-13	-12	+3	10	4	-18		-11	1	91	1	1
DECEMBER,	B. H.	bR	69	22	88	139	55	75	(8)	E 23	69	65	09	67	3
CBER.	Dep.	24	7	-11	-13	0	1-	1-1	-13	-12	7	oc	1 63		
NOVEMBER.	В. Н.	84	19	49	8	29	8	23	52	33	899	09	48	57	40
BEB.	Dep. B	æ	10	00	112	10	01	-12	-12	1,1	9	G	-13	:	F
OCTOBER.	В. Н.	88	- 62	29	9/2	26	75	02	1.4	39	10	553	43	19	99
IBER.	Dep. B	bR.	°î	-1		1	+	91	7	9-	1-1	9+	61	-	
SEPTEMBER.	В. Н.	28	8	69	61	101	25	67	89	10	659	89	99	99	99
UST.	Dep. B	90	09	65	7	9	65	-1	-15	61	10	1-	19	:	-
August.	В. Н.	8R	101	-13	12.0	20	27	73	62	67	9	20	99	100	20
X.	Dep. 1	aR	0	=	4	1-	16	di	1-	11	14	19	*	1	
JULY.	B. H.	8R	22	11	83	79	12	18	7.5	8	11	22	89	17	12
JUNE.	Dep. I	æ	-1	7	-15	00	69	7	-11	0	7	19	10	:	i
Ju	R. H.	aR.	90	150	44	49	10	48	34	- 27	48	89	46	46	90
I.	Dep. F	36	77	60	-15	op 1	60	4-	-10	91	00	14	10	1	
MAY.	R. H.	36	30	41	88	31	45	39	31	00	37	46	90	40	4
Argin	Dep.	34	19	+	00	+	9	4	-1	04	4	+12	60	;	No. of Lot
Ar	В. Н.	26	34	44	40	48	29	19	10	10	69	20	19	20	45
MARGE.	Dep.	88	6-	7	91	01	7	00	-19	-16	-10	1	-1	1	No.
MA	R H.	80.	43	653	57	8	62	99	09	99	89	653	19	92	48
FEBRUARY.	Dep.	»e	4	4	-	œ	*	4	01	04	-	1-	9	:	-
FEER	В. Н.	SR.	89	7.4	7.9	18	83	84	76	29	200	61	17°	29	99
JANUARY.	Dep.	88	01	0	7	*	*	*	04	80	8	7	29	:	1
JAN	В. Н.	al.	67	75	18	86	80	25	158	99	76	76	76	63	79
or distance	Stations,	Service .	Delhi	Hissar	Ambala	Ludhiana	Lahore	Stalt ot	Rawalpindi	Khusheb	Lyallpur	Montgomery	Multan	Bahawalpur	Khanpur
	Serial No.		-	64	60	4	10	0	1-	00	6	10	=	23	13

(a) Mean of 29 days.

APPENDIX VI-CONCLUDED.

C .- TABLE SHOWING MEAN MONTHLY RAINFALL AND DEPARTURE FROM NORMAL FOR THE YEAR 1930.

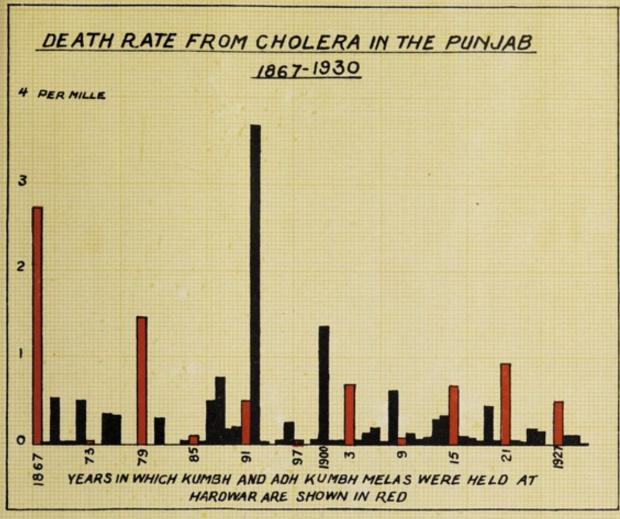
	REMARKS.				-									
DECEMBER,	Dep.	-0.33	-0.59	0.63	0.20	-0-36	99.0	-109	-0.45	0-35	-0.30	-0-22	:	:
Discre	A. B.	90-0	0.0	1.20	1.15	0.0	0.0	0-01	9	0-0	0.0	0.0	0.0	0.0
NOVEMBER.	Dep.	-0.00	+0-15	-0.58	-0.08	-0-07	- 0.11	-0-16	80.0-	-0.01	10.07	-0.07	:	:
Nove	A. B.	0.05	0-18	0.0	0.03	90	0.0	0-10	0.0	0-0	0.0	0.0	0.0	0.0
Остовки.	Dep.	0-49	-0.52	-0.18	29.0-	42.0-	-0-12	0.47	-0-10	-0.30	90.0 -	-0-02	:	:
Оото	A. B.	0.81	90.0	0.57	0.03	0 01	0-18	86.0	0.02	10.0	00-00	000	00-0	0.01
MBEB.	Dep.	-3:18	-2.03	-2.51	3.53	-1.38	0.17	80-0-	-0.34	-1-81	92-0-	0-41	:	:
SRPTEMBER.	A. B.	1-60	0.33	5.00	7-77	86-0	3.24	65.50	0.07	0-19	0.77	0	0	0
August.	Dep.	-5.73	99-0	1-25	-4.08	-3.70	- 3-62	-0.41	0.00	1.03	-212	-1-83	:	:
Апо	A. B.	1.69	4.28	8-95	2.80	1-63	6-59	5-73	66.0	3.52	1.16	0-15	0-03	1.12
ж.	Dep.	+5.63	+6.47	+17.31	+2.02	+4.40	+0.26	+10-17	+0-32	+1.37	+4-93	+0-17	:	:
Julk.	A. B.	13.16	10.23	24.66	10.22	88.6	8.42	17.83	3-96	4 64 64	7.15	2-19	3-90	2.04
	Dep. A	+0.75	1.11	3.05	1.56	-107	-1.86	11:17	+0-71	0.02	0-27	09-0	:	:
JUNE.	A. B.	3.74	3.41	6.77	4.09	19-0	09-0	1.13	2.08	1.40	1.15	1.22	1.16	0
т.	Dep.	-0.18	-0-52	-0.87	-0.44	-0.30	-1:13	-0-97	-0.29	0.15	-0-27	-0.35	:	:
MAY.	A. B.	0.40	0.02	9	0-50	8	0.0	0-37	0.20	0.53	80-0	0	0.07	200
II.	Dep. /	-0.38	-0 30	12.0-	0.07	0-82	5-24	3.54	0.78	25.0	0-28	0.88	:	:
APRIL.	A. B.	0	0.19	0.37	0.85	1.36	6.18	54.6	1.83	0.33	80-0	1-16	0-08	0.0
	Dep.	-0.52	-0.16	0-21	-1.06	-0-83	-1.55	-2.08	-1.01	19-0-	-0.40	-0.33	:	:
MAROIL.	A. B.	0.0	0.26	1:11	0	0-03	0.36	0.36	0-14	0.16	0.00	0 10	0-0	90-0
ABY.	Dep.	+ 0-34	-0-02	0.19	90-0	-0-74	-0.82	0.54	-0.84	-0-31	97-0-	98 0-	:	1
FREEDARY.	A. B.	1-10	0.33	1.84	1-34	0-50	0-77	2.73	0.02	0	0	0	0	90.0
ABY.	Dep	1-05	-0-52	0.34	-0-27	27-0-	-0.19	2-97	0.99	66-0	-0-37	-0.17	:	:
JANUARY.	A. B.	2-09	0-19	1.83	1.45	09-0	1.92	5-46	1-76	1.37	0-19	0.22	0.11	70-0
	Stations.	Delhi	Hissar	Ambala	Ludhiana	Lahore	Sialkot	Rawalpindi	Khushab	Lyallpur	Montgomery	Multan	Behawalpur	Khanpur
	*oN IsinoS	n n	61	8 A	H H	- F	9	-4 -4	90	0	10 %	11 %	12	13 E

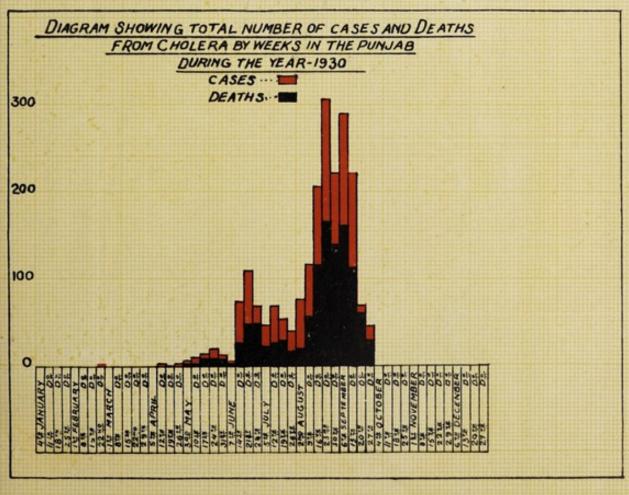
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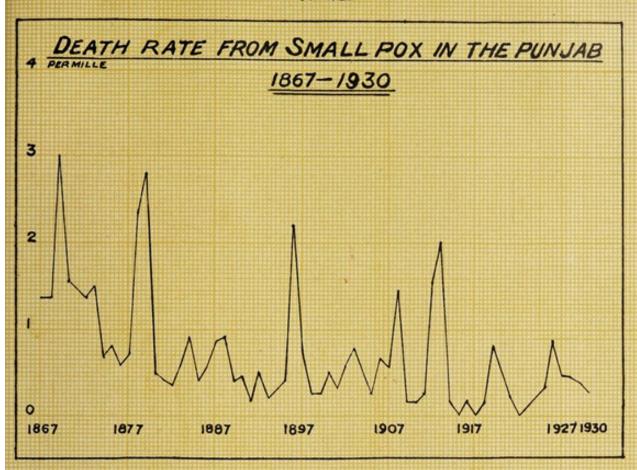
CHART 1 THE BIRTH AND DEATH RATES IN THE PUNJAB. 1867-1930 BIRTHS -DEATHS ---80 PER MILLE 1867 1875 1885 1895 1915 1930 INFANTILE MORTALITY RATE IN THE PUNJAB. 1880-1930 400 PER MILLE

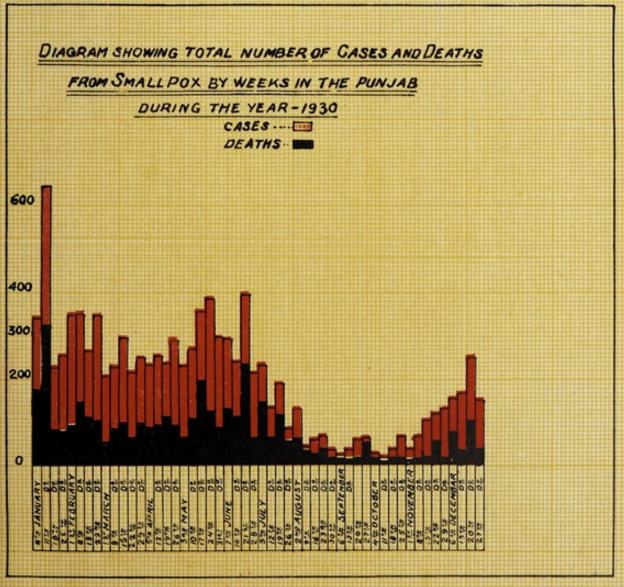
AND DEATH RATES IN THE PUNU 0861-0881



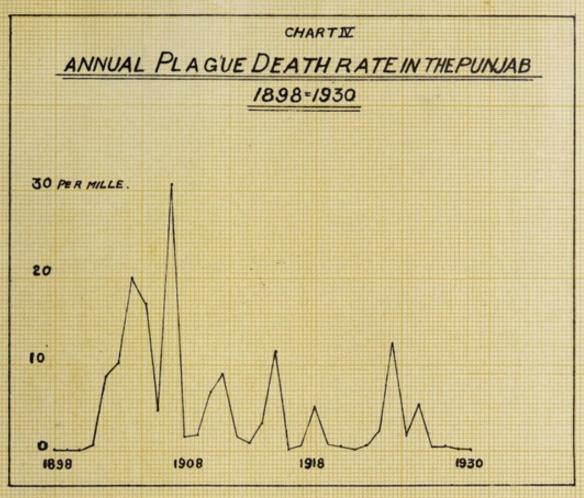












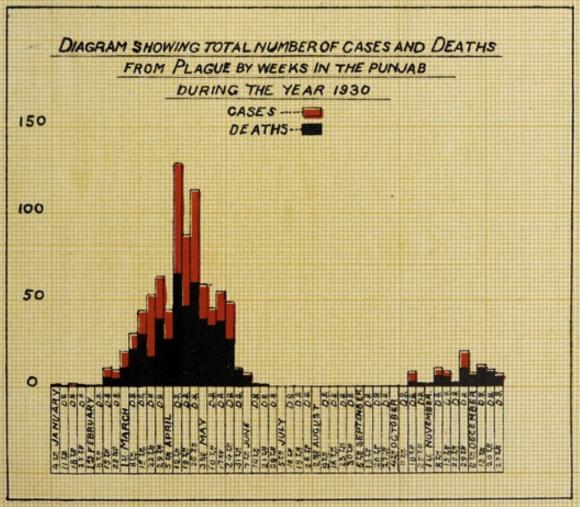
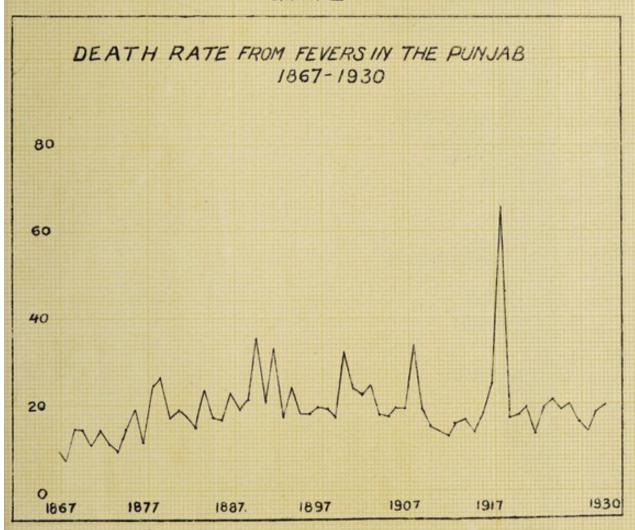


CHART I





SPLEEN RATE OF THE PUNJAB BY DISTRICTS

1930

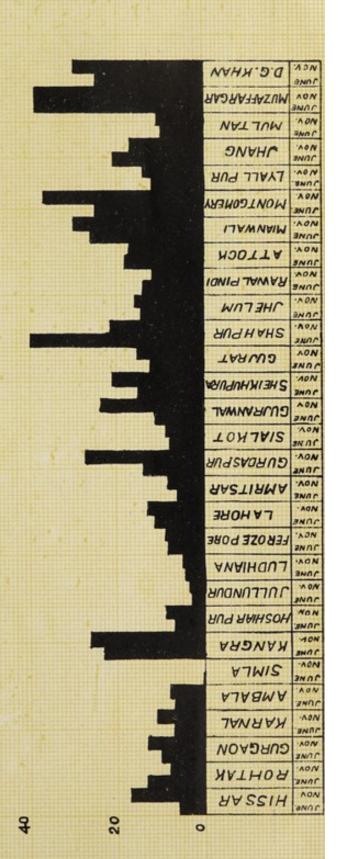
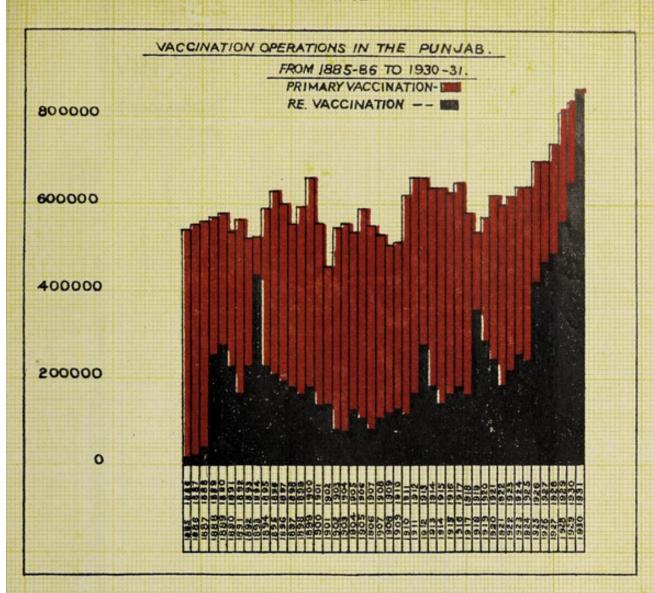
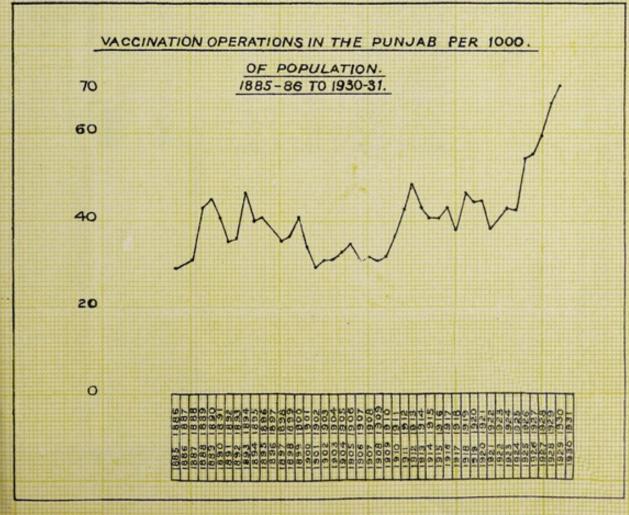


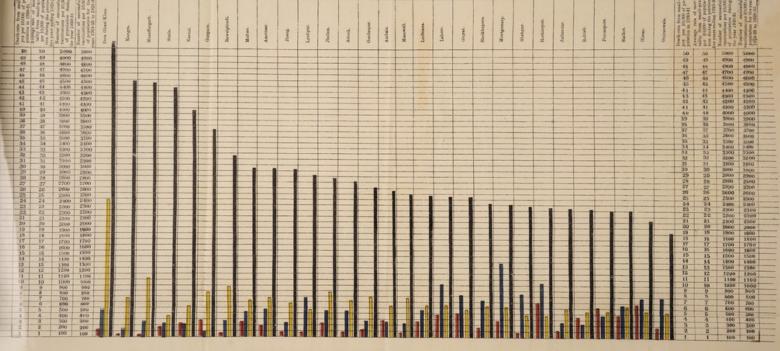
CHART VIL





#### CHART VIII

Diagram showing the death-rate from small-pox per 10,000 of population during the year 1930-31, the average rate of mortality from small-pox per 10,000 of population for the five years ending 1929-30 and the proportion of successful vaccinations during the year 1930-31 and the preceding six years in each district of the Punjab.



Nova-Red lines indicate death rates from small-pox per 10,000 of population during the year 1000-31

Nora.—Rue lives indicate the average rate of mortality from emplipous per 10,000 of population for the previous five years ending 1920-30

Now.—Yellow lines indicate the proportion of encoundal vaccinations per 10,000 of population during the year 1980-1931.

Nova. - Black lines indicate the proportion of successful vaccinations per 10,000 of population for the six years unding 1923-30

PEROZ PRINTING WORKS, LABORE.



# ANNUAL FORMS (PUBLIC HEALTH).

#### ANNUAL FORM No. I.

STATEMENT SHOWING THE BIRTHS REGISTERED IN THE DISTRICTS OF THE PUNJAB DURING THE YEAR 1930.

1	2		3	•		4			5		6	7	8		9		10
			TION ACCOR			BER OF BI		PER	O OF BI	OF T	to every 100	deaths per 1,000	births per 1,000	BIRTI	EAN RAT HS PER NG PEE FE YEAR	1,000 VIOUS	
Number.	DISTRICTS.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Number of males born t females born.	Excess of birth over deal of population.	Excess of deaths over bit of population.	Males.	Females.	Total.	Number.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	AMBALA DIVISION.	1		Townson .		1					-				6.30		
1	Hissar	435,562	381,248	816,810	19,112	16,513	35,625	23.4	20.2	43.6	115.7	15.7		24.0	21.7	45.6	1
2	Rohtak	417,379	354,893	772,272	20,012	18,064	38,076	25.9	23.4		110.8	18.4		22.1	20.1	42.1	2
3	Gurgaon	367,800	314,203	682,003	17,096	15,328	32,424	25.1	22.5		111.5	7.4		24.4	22.0	46.3	3
4	Karnal	453,637	375,089	828,726	15,886	13,977	29,863	19.2	16.9		113.7	6.8		20.5	18.4	38.9	4
ō	Ambala	360,967	280,942	641,909	15,036	13,474	28,510	23.4	21.0	44.4	111.6	15.0		22.1	19.8	41.9	5
6	Simla JULLUN- DUR DIVISION.	27,599	13,338	40,937	568	535	1,103	13.9	13.1	26.9	106.2	4.5		12.9	12.1	25.1	6
7	Kangra	393,121	371,626	764,747	15,015	14,033	29,048	19.6	18.3	38.0	107.0	10.0		18.8	17.6	36.4	7
8	Hoshiarpur	498,662	428,757	927,419	21,463	19,374	40,837	23.1	20.9	44.0	110.8	13.9		23.1	20.5	43.6	8
9	Jullundur	450,045	363,480	813,525	19,676	18,379	38,055	24.2	22.6	46.8	107.1	16.9		24.1	22.5	46.6	9
10	Ludhiana	318,845	248,777	567,622	14,044	12,779	26,823	24.7	22.5	47.3	109.9	16.6		23.9	22.3	46.2	10
11	Ferozepore LAHORE DIVISION.	598,760	480,547	1,079,307	23,985	20,978	44,963	22.2	19.4	41.7	114.3	13.0		21.4	18.6	40.0	11
12	Lahore	636,596	480,134	1,116,730	26,581	23,552	50,133	23.8	21.1	44.9	112.9	16.8		21.6	19.2	40.8	12
13	Amritsar	518,500	409,898	928,398	25,366	22,670	48,036	27.3	24.4	51.7	111.9	20.6		25.0	22.7	47.7	13
14	Gurdaspur	467,576	380,238	847,814	22,958	21,165	44,123	27.1	25.0	52.0	108.5	21.5		24.7	22.9	47.6	14
15	Sialkot	472,231	396,703	868,934	23,092	20,677	43,769	26.6	23.8	50.4	111.7	23.0		23.5	21.6	45.1	15
16	Gujranwala	348,695	274,886	623,581	15,564	13,675	29,239	25.0	21.9	46.9	113.8	13.2		24.3	21.7		
17	Sheikhupura RAWAL- PINDI DIVISION.	351,259	277,163	628,422	15,813	13,894	29,707	25.2	22.1	47.3	113.8	10.4		22.2	19.3	41.4	17
18	Gujrat	438,550	385,496	824,046	18,012	16,041	34,053	21.9	19.5	41.3	112.3	14.5		21.1	18.9	40.0	18
19	Shahpur	392,086	327,832	719,918	14,139	12,231	26,370	19.6	17.0		115.6	6.1		21.5	19.1	40.6	19
20	Jhelum	240,464	235,104	475,568	9,685	8,737	18,422	20.4	18.4		110.9	9.9		20.7	18.3	39.0	20
21	Rawalpindi	292,317	248,376	540,693	11,145	9,896	21,041	20.6	18.3	38.9	112.6	11.1		21.0	18.8	39.9	21
22	Attock	262,028	246,001	508,029	9,183	7,694	16,877	18.1	15.1	33.2	119.4	5.0	1.10	20.4	17.7	38.2	1
23	Mianwali	190,021	168,184	358,205	8,029	6,786	14,815	22.4	18.9	41.4	118.3	8.5		24.4	21.8	46.2	23
000	MULTAN DIVISION.	200.072	900 474	min mod	10.00	15.000		1				1.0		24.9	21.3	46.2	24
24		393,372	320,414	713,786	18,291	15,605	33,896	25.6	21.9		117.2	15.9		26.5	24.2	50.7	
25		522,707 305,483	413,235 265,076	935,942 570,559	25,200 11,622	23,174	48,374	26.9	24.8	51.7	108.7	9.0		23.5	20.9	44.5	
26	Jhang	484,581	399,593	884,174	18,748	15,968	21,931 34,716	20.4	18.1	38.4	117.4	8.7		23.9	20.5	44.4	
28	The state of the s	133333	259,873	568,478	7,349	6,174	13,523	12.9	10.9	23.8	119.0	0.1	5.2	19.2	16.1	35.3	28
29		257,386	211,666	469,052	7,101	6,068	13,169	15.1	12.9		117.0	0.3		19.1	16.1	35.2	29
		11,204,834	9,312,772	20,517,606	469,771	417,750	887,521	22.9	20.4	43.3	-	13.6	1	22.7	20.3	43.0	T

ANNUAL FORM

# STATEMENT OF BIRTHS AND DEATHS REGISTERED IN EAC

		-		-			ATEMENT O	F BINTIIO	ALL D	1100 2 1100	401000	
1	2		3	4		5		6			7	
10.53	e real E	Control of		per square	Popula	TION (CENSU	s 1921).	Birt	HS.	Number of	F DEATHS RI	COISTERED
Number.	District.	Now See articolog	Area in square miles.	Average population p	Males.	Females.	Total.	Total number.	Birth-rate per 1,000 of population.	Males.	Females.	Total.
	2		3	- 4	5	6	7	8	9	10	11	12
							-					
Tro.	AMBALA DIVISI			107	107.700	201 246	010.010			10.141	10.000	00.01
2	Hissar		5,213 2,919	157 265	435,562	381,248	816,810	35,625	43.6	12,141	10,672	22,81
3	0	**	2,263	301	417,379 367,800	354,893	772,272 682,003	38,076 32,424	49.3	12,739	11,135	23,87 27,34
4	Karnal		3,125	265	453,637	375,089	828,726	29,863	36.0	12,445	11,724	24,16
5	Ambala		1,882	341	360,967	280,942	641,909	28,510	44.4	9,941	8,900	18,84
6	Simla	.,	101	405	27,599	13,338	40,937	1,103	26.9	507	408	91
	JULLUNDUR DIVISION.		in					na.us	need		1	112 16
7	Kangra		9,978	77	393,121	371,626	764,747	29,048	38.0	10,928	10,499	21,45
8	Hoshiarpur		2,247	413	498,662	428,757	927,419	40,837	44.0	14,905	13,016	27,99
9	Jullundur		1,431	568	450,045	363,480	813,525	38,055	46.8	12,229	11,325	23,55
10	Ludhiana		1,452	391	318,845	248,777	567,622	26,823	47.3	9,299	8,115	17,41
11	Ferozepore		4,286	252	598,760	480,547	1,079,307	44,963	41.7	16,731	14,214	30,94
	LAHORE DIVISI	ON.	2,000	-19/9	- 718		AT LINE			Burklin,		1016
12	Lahore	0.220	2,691	415	636,596	480,134	1,116,730	50,133	44.9	17,131	14,295	31,45
13	Amritsar		1,593	583	518,500	409,898	928,398	48,036	51.7	15,305	13,548	28,85
14	Gurdaspur		1,889	449	467,576	380,238	847,814	44,123	52.0	13,714	12,121	25,83
15	Sialkot		1,206	721	472,231	396,703	868,934	43,769	50.4	12,747	11,066	23,81
16	Gujranwala	•••	2,309	270	348,695	274,886	623,581	29,239	46.9	11,363	9,656	21,01
17	RAWALPINDI DIVISION.	3.50	3,198	197	351,259	277,163	628,422	29,707	47.3	9,150	7,772	16,92
18	Gujrat		2,563	322	438,550	385,496	824,046	34,053	41.3	11,945	10,141	22,08
19	Shahpur		4,476	161	392,086	327,832	719,918	26,370	36.6	11,703	10,233	21,93
20	Jhelum		2,773	172	240,464	235,104	475,568	18,422	38.7	7,237	6,476	13,71
21	Rawalpindi		2,023	267	292,317	248,376	540,693	21,041	38.9	8,017	7,015	15,03
22	Attock		4,117	123	262,028	246,001	508,029	16,877	33.2	7,372	6,457	13,82
23	Mianwali		5,395	66	190,021	168,184	358,205	14,815	41.4	6,287	5,502	11,78
	MULTAN DIVISI	ON.	0.011	00	The state of		HA	The state of the s		Financial	100	14 23
24	Montogomery		4,623	154	393,372	320,414	713,786	33,896	47.5	12,054	10,520	22,574
25	Lyallpur		2,759	339	522,707	413,235	935,942	48,374	51.7	13,947	13,341	27,28
26	Jhang		3,452	168	305,483	265,076	570,559	21,931	38.4	8,914	7,847	16,76
27	Multan		5,939	149	484,581	.399,593	884,174	34,716	39.3	14,511	12,502	27,013
28	Muzaffargarh		6,052	94	308,605	259,873	568,478	13,523	23.8	8,960	7,502	16,465
29	Dera Ghazi Khan	0.00	5,325	88	257,386	211,666	469,052	13,169	28.1	7,238	5,776	13,01
	Total		97,280	211	11,204,834	9,312,772	20,517,606	887,521	43 3	323,754	284,828	608,585

NOTE .- Those born dead are not include

No. II. DISTRICT OF THE PUNJAB DURING THE YEAR 1930.

8						9						10			11
males to females.				DEATI	as per 1,0	00 of Pop	ULATION 1	FROM				PER 1,0	RATIO OF 1000 DURIN S FIVE YE	O PRE-	
deaths of					and	liseases.		causes.		Ill causes.					
Number of deaths of males to every 100 deaths of females,	Cholera.	Small-pox.	Pisgue.	Fevers.	Dysentery Diarrhusa.	Respiratory diseases.	Injuries.	All other c	Males.	Females.	Total.	Males.	Pemales.	Total.	Number.
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
111			1 100		- 1									The same	
113.8	0.1	0.5		17.7	0.4	1.3	0.1	7:8	27.9	28.0	27.9	31.7	33.5	32.5	1
114.4	0.1	0.4	0.002	22.0	0.4	2.4	0.1	5.6	30.5	31.4	30.9	36.2	37.5	36.8	2
109.5	0.02	0.5		25.5	0.7	2.5	0.5	10.4	38.9	41.5	40.1	37.2	39.7	38.4	3
106.1	0.01	0.2	0.01	18.7	0.8	1.8	0.03	7.6	27.4	31.3	29.2	38.0	41.7	39.7	4
111.7	0.03	0.4		11.1	0.3	11.7		5.8	27.5	31.7	29.4	31.9	35.9	33.6	5
125.4	0.02	0.2		3.8	1.9	6.8	0.3	9.4	18.4	30.6	22.4	17.3	27.8	20.8	6
1 224	19-		10 40		- les				100		110	-	1	Reports	
104.1	0.002	0.1		12.7	3.2	6.0	0.8	5.2	27.8	28.3	28.0	30.9	30.4	30.7	7
114.5	0.2	0.7	0.1	22.4	0.6	2.0	0.2	3.9	29.9	30.4	30.1	30.2	31.7	30.9	8
108.0	0.1	0.1		20.4	0.4	2.3	0.3	5.3	27.2	31.2	29.0	25.9	29.7	27.6	9
114.6	0.001	0.4		17.1	0.3	2.1	0.04	10.8	29.2	32.6	30.7	27.9	33.1	30.1	10
117.7	0.01	0.5		19.0	0.4	2.3	0.2	6.3	27.9	29.6	28.7	26.0	26.9	26.4	11
1 100	2 100				1860		1 7 161		100		130				(A)
119.8	0.2	0.4		16.7	0.7	2.8	0.3	7.0	26.9	29.8	28.1	26.6	30.8	28.4	12
113.0	0.1	0.2		19.7	0.5	4.3	0.4	6.0	29.5	33.1	31.1	33.7	38.5	35.8	13
113.1	0.01	0.2	0.3	18.9	0.7	1.7	0.3	8.4	29.3	31.9	30.5	32.5	35.8	34.0	14
115.2	0.03	0.2	0.3	18.1	0.5	3.7	0.3	4.4	27.0	27.9	27.4	29.1	31.4	30.1	15
117.7	0.1	0.2		27.5	0.2	1.3	0.4	4.0	32.6	35.1	33.7	29.4	32.0	30.6	16
117.7	0.01	0.1		22.0	0.1	0.5	0.3	3.9	26.1	28.0	26.9	23.6	25.2	24.3	17
U 000	12 17	- 1211	1 101	1 100		TO THE			raz	1 11	1 100			1000	
117.8	0.02	0.4		19.4	0.2	2.1	0.3	4.5	27.2	26.3	26.8	23.6	23.8	23.7	18
114.4	0.02	0.1		23.2	0.5	2.8	0.4	3.5	29.9	31.2	30.5	25.7	27.4	26.5	19
111.8	0.01	0.3		21.5	0.3	2.2	0.5	4.1	30.1	27.6	28.8	26.9	25.0	26.0	20
114.3	0.1	0.1		18.6	3.1	3.1	0.5	2.3	27.4	28.2	27.8	24.1	26.1	25.0	21
114.2	0.1	0.1		23.0	0.1	1.4	0.5	2.2	28.1	26.3	27.2	26.0	24.6	25.3	22
114.3	0.4	0.04		28.0	0.2	1.1	0.2	3.1	33.1	32.7	32.9	29.8	30.3	30.0	23
	0.3 22		. 34								91.0	95.0	26.2	25.5	24
114.6	0.01	0.3		25.9	0.2	0.9	0.5	3.9	30.6	32.8	31.6	25.0	26.9	25.1	25
104.5	0.04	0.1		21.8	0.3	1.1	0.3	5.7	26.7	29.6	29.2	25.8	26.1	26.0	26
113.6	0.002	0.03	1	21.0	0.3	2.3	0.4	3.3	30.0	31.3	30.6	25.9	27.4	26.6	27
116.1	0.03	0.2	1	24.2	0.4	0.7	0.2	0.9	29.0	28.9	29.0	25.9	26.3	26.1	28
125.3	0.01	0.03		24.5	0.4	0.7	0.2	1.8	28.1	27.3	27.8	23.5	23.5	23.5	25
25.0									Contract of the Contract of th					- Veneral	-
113.7	0.1	0.3	0.03	20.6	0.6	2.5	0.3	5.3	28.9	30.6	29.7	28.6	30.6	29.5	1

this or any other statement.

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### ANNUAL FORM No. III.

DEATHS REGISTERED IN THE DISTRICTS OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1930.

1	2		101					3							4	1
Number.	Districts		January.	February.	March.	April	Мау.	June.	July.	August.	September.	October,	November.	December.	Total deaths regis- tered during the year.	
1	2	-	3	4	5	6	7	8	9	10	11	12	13	14	15	
-																
	AMBALA DIVISIO	N.								1 3						1
1	Hissar		2,175	1,791	2,001	1,662	1,665	2,222	1,732	1,701	2,227	1,963	1,878	1,796	22,813	
2	Rohtak		2,373	1,624	1,603	2,086	2,543	2,228	1,494	1,808	2,129	2,076	2,084	1,826	23,874	-
3	Gurgaon		2,239	1,626	1,738	2,195	2,462	2,299	1,637	1,869	2,933	3,581	2,677	2,088	27,344	4
4	Karnale.		2,040	1,366	1,345	1,658	2,320	2,371	1,486	1,540	1,930	2,805	2,719	2,589	24,169	1
5	Ambala		1,399	1,118	1,077	1,277	1,685	1,813	1,301	1,426	1,899	2,102	1,926	1,818	18,841	
6	Simla		81	57	46	57	100	100	68	94	106	78	- 73	55	915	I
	JULLUND! DIVISION		0.4		-								1 100	100	1 2	I
7	Kangra		1,959	1,577	1,496	1,636	2,121	1,870	1,534	1,636	2,076	1,896	1,787	1,839	21,427	, 1
8	Hoshiarpur		2,140	1,603	1,723	2,086	2,594	2,311	1,889	2,428	3,080	2,901	2,467	2,699	27,921	-1
9	Jullundur		1,749	1,534	1,566	1,730	2,280	2,041	1,852	2,238	2,173	2,114	2,112	2,165	23,554	н
10	Ludhiana		1,648	1,201	1,071	1,323	1,757	1,381	1,281	1,361	1,542	1,674	1,631	1,544	17,414	31
11	Ferozepore		2,551	2,104	2,248	2,275	2,620	2,302	2,038	2,254	3,028	3,042	3,165	3,318	30,945	1
	LAHORE			N											10	1
	DIVISION				1 9	5 54			1 1 1 1 1 1 1	100			1 150	1 13	10 100	1
12	Lahore		2,847	2,057	2,066	2,237	3,014	2,702	2,172	2,827	2,995	2,859	2,708	2,942	31,426	1
13	Amritsar		2,511	1,861	1,720	1,905	2,818	2,409	2,144	2,810	2,787	2,709	2,625	2,554	28,853	
14	Gurdaspur		2,204	1,563	1,519	1,791	2,421	2,034	1,658	1,985	2,626	2,937	2,641	2,456	25,835	
15	Sialkot		2,150	1,618	1,666	1,634	2,618	1,988	1,544	1,886	2,140	2,220	2,219	2,130	23,813	п
16	Gujranwala		2,469	1,651	1,373	1,162	1,968	1,718	1,303	1,508	1,879	1,826	2,105	2,057	21,019	1
17	RAWALPIN	DI	1,607	1,087	1,085	1,099	1,746	1,514	1,166	1,331	1,540	1,548	1,573	1,626	16,922	1
18	DIVISION Gujrat		2,573	0.000	1.000	1 001	1 001	1047	1 770	1 410	1 570	3.850	1.000	0.00	00.000	1
19	CIL L		3,480	2,020	1,863	1,681	1,891	1,847	1,556	1,410	1,579	1,758	1,807	2,101	22,086	1
20			1,739	1,492	1,764	1,545	1,067	956	1,316	1,296	1,335	1,483	1,913	2,172	21,936	
21	21.0		2,075	1,553	1,241	1,063	1,190	1,063	894	937	1,033	1,143	1,195	1,360	13,713	
22			2,040	1,688	1,229	929	837	901	895	781	814	940	1,237	1,586	15,032	
23	30		1,651	1,179	996	824	809	796	661	684	910	933	1,119	1,538	13,829	ш
	MULTAN		1,001	1,179	990	024	500	130	001	1101	310	900	1,110	1,227	11,709	2
	DIVISION.	9.1			10						0.4		100	5.1		ı
24	Montgomery		2,320	1,648	1,582	1,619	1,885	1,641	1,201	1,454	1,855	2,248	2,553	2,568	22,574	2
25			2,026	1,739	1,721	2,000	3,359	2,601	1,962	2,374	2,454	2,314	2,468	2,270	27,288	2
26	Jhang		2,575	1,518	1,264	1,149	1,258	1,261	1,010	1,009	1,043	1,227	1,567	1,880	16,761	2
27			3,684	2,786	2,302	1,864	2,257	1,873	1,721	1,465	1,604	2,117	2,474	2,866	27,013	2
28	Muzaffargarh	3	2,643	1,962	1,349	969	1,242	1,060	860	828	978	1,348	1,527	1,696	16,462	2
29	Dera Ghazi Kh	an	2,013	1,609	1,482	983	872	788	724	565	767	887	1,096	1,228	13,014	2
	Total for th Province,	e	62,961	46,893	43,367	43,369	55,088	49,772	39,952	44,314	52,459	55,803	56,610	57,994	608,582	-
	Ratio of deat per 1,000 each month.	hs in	3.07	2,29	2.11	2.41	2.68	2.43	1.95	2,16	2,56	2.72	2.76	2.83	29.66	1

ANNUAL FORM No. IV. DEATHS REGISTERED BY SEXES AND CLASSES ACCORDING TO SPECIFIED AGE PERIODS IN THE DISTRICTS OF THE PUNJAB DURING THE YEAR 1980.

## DEATHS REGISTERED BY SEXES AND CLASSES ACCORDING TO SPECIFIED AGE PERIODS

1	2						3					
					POPUL	ATION AC	CORDING	TO THE C	ENSUS OF	1921.		
	Distriors.		Muhamn	nadans.	Hind	lus.	Indian Ch	hristians.	Other C	lasses.	To	tal.
Number.			Males.	Fomales.	Malos.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2		3	4	5	6	7	8	9	10	11	12
-												
1	Hissar		112,889	103,054	322,126	277,714	486	431	61	49	435,562	381,248
2	Rohtak		65,488	59,547	346,666	290,538	5,188	4,798	37	10	417,379	354,893
3	Gurgaon		115,933	100,927	251,172	212,648	609	564	86	64	367,800	314,203
4	Karnal		126,916	108,702	324,923	264,803	1,784	1,568	14	16	453,637	375,089
5	Ambala		106,123	86,972	252,231	192,265	1,637	1,425	976	280	360,967	280,942
6	Simla		4,611	1,244	21,433	10,205	487	329	1,068	1,560	27,599	13,338
7	Kangra		21,025	17,210	370,380	352,749	142	142	1,574	1,525	393,121	371,626
8	Hoshiarpur		155,165	134,133	341,419	292,957	1,982	1,657	96	. 10	498,662	428,757
9	Jullundur		197,011	165,932	250,831	196,055	1,850	1,455	353	38	450,045	363,480
10	Ludhiana		106,764	86,197	211,208	161,821	853	729	. 20	30	318,845	248,777
11	Ferozepore	100 11	259,451	216,039	336,222	262,804	2,034	1,526	1,053	178	598,760	480,547
12	Lahore		357,101	285,083	253,608	174,908	22,458	18,939	3,429	1,204	636,596	480,134
13	Amritsar		232,747	190,653	278,793	213,423	6,590	5,636	370	186	518,500	409,898
14	Gurdaspur		231,410	190,761	218,188	174,712	17,908	14,635	70	130	467,576	380,238
15	Sialkot		288,815	246,325	153,436	125,740	28,670	24,491	1,310	147	472,231	396,703
16	Gujranwala		246,243	196,904	87,253	65,869	15,141	12,050	58	63	348,695	274,886
17	Sheikhupura		224,231	181,095	110,110	82,532	16,660	13,358	258	178	351,259	277,163
18	Gujrat		377,925	331,759	59,348	52,641	1,242	1,046	35	50	438,550	385,496
19	Shahpur		323,746	272,354	62,081	50,465	6,209	4,977	- 50	36	392,086	327,832
20	Jhelum		212,844	209,447	27,415	25,528	199	125	6	4	240,464	235,104
21	Rawalpindi		241,100	215,743	45,536	31,035	1,661	928	4,020	670	292,317	248,376
22	Attock		238,983	224,507	22,741	21,411	115	56 28	189	27	262,028	246,001
23	Mianwali		162,581	146,295	27,153	21,807	123	4,600.	164	54	190,021 393,372	168,184
24	Montgomery		281,044	232,011	106,548	83,775	5,737	18,600	43	28	522,707	320,414
25	Lyallpur	**	308,897	254,089	190,929	140,499	22,830	182	6	47	305,483	413,235 265,076
28	Jhang		266,594	218,794	48,634	46,088	249	1,999	1,181	136	484,581	399,593
27	Multan	200	396,651	332,194	84,408	65,264	72	68	208	8	308,605	259,873
28	Muzaffargarh Doze Ghazi Khan		268,374	224,995	39,951	34,802	19	15	9	4	257,386	211,666
29	Dera Ghazi Khan		226,773	184,658	30,585	26,989	19	10			201,000	211,000
	Total		6,147,435	5,217,624	4,875,328	3,952,047	165,276	136,364	16,795	6,737	11,204,834	9,312,772
	Population according Census of 1921.	ding to										Not
	Ratio per 1,000 li the Province.	iving for	5									1106

1					-		4			-			-	-		-
-		M	10 H	18 TO	more	UN	DER ON	E YEAR.		. ,						-
2011	n mu	Not a	XCEEDING	ONE MON	TH.	2071	NAME OF TAXABLE	2	Over or	NE MONTH	AND NOT	EXCEE	ING SIX	MONTH	18.	_
Muhami	nadans.	Hind	us.	Ind Christ		Oth Class		Muhami	nadans.	Hind	ius.		lian tians.	Ott	her ises.	
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Number.
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	1
279	255	500	500					273	229	600	600					1
175	169	1,245	892					107	136	952	750					2
375	326	940	803					369	358	906	838					3
400	350	500	451			**		300	400	554	396					4
331	291	878	746		2	***	**	164	157	677	605	**				6
4	4	67	56	1			**	11 129	89	648	782	1.				7
109	79	1,438	1,433	8	2			312	298	665	461	· ·	1			8
625 921	529 785	1,252	1,038	1 3 5 77			**	358	314	480	414		1 4			9
603	117	1,128 751	998	4	2	20	4	524	412	500	506	1	1	10	4	10
1,008	858	1,087	950	2	1	19	18	601	565	645	541	1		6	7	11
1,199	841	701	615	16	12	13	11	1,001	728	509	416	13	20	15	13	12
1,253	955	1,395	1,033	24	28	50	61	518	434	562	463	12	13	32	37	13
998	812	913	705	88	42		11.	546	425	510	438	43	35			14
888	711	486	392	97	79		1	780	620	425	339	84	68		1	15
744	640	199	139	64	36	3	1	781	611	122	118	45	30		2	16
628	566	451	279	107	90	25	10	499	334	119	141	55	50	20	8	17
856	757	23	41	1	1	3	1	738	610	44	22	1	2			18
1,099	792	181	152	27	17	18	12	638	519	86	112	9	7	13	9	19
715	666	41	36	1				438	360	45	29					20
672	511	90	93	5	4			546	411	78	73	2	1		1	21
739	633	26	30					282	214	25	29					22
510	401	73	43					424	331	64	51					23
1,337	1,095	502	433	18	16	45	46	698	556	284	201	4	5	16	13	24
1,369	1,222	905	789	155	182			581	575	433	376	56	46			25
1,332	1,069	78	59					598	491	64	63					26
1,081	966	384	288	16	12	5	4	834	880	264	168	11	7	3	2	27
745	602	175	127					635	665	161	166					28
486	402	95	90			9		501	352	107	85			.3	1	29
21,481	17,404	16,504	14,422	633	526	210	168	14,186	12,076	10,568	9,222	338	286	118	97	-
2,104:07						-										-
					-							1 3	-	nothile		
available													POLT.			_
1				SCI BU	100								1971.001	3,200	110	
													-Dibly	NI COL		

ANNUAL FORM

### DEATHS REGISTERED BY SEXES AND CLASSES ACCORDING TO SPECIFIED AGE

1	2				41200				4			-			1700
					lla	17.117	o' lan		UND	ER ONE	YEAR-	concld.			
	Agreem are represent		OVER SIX	MONTHS A	ND UND	ER TWE	LVE MO	STHS.				Tot	PAL UNDEI	R ONE YEA	R.
	Districts.	Muhamn	nadans.	Hind	us.		lian tians.	Oti Clas		Mukam	nadans.	Hind	lus.	Indi Christ	
Number.		Males.	Females.	Males.	Pemales.	Males.	Females.	Males.	Females.	Males.	Females.	Males,	Females.	Males,	Females.
1	2	29	30	31	32	33	34	35	36	37	38	39	40	41	42
			-		100							999		979	
1	Hissar	290	294	700	600					842	778	1,800	1,700		
2	Rohtak	109	70	917	856		**			391	375	3,114	2,498	***	
3	Gurgaon · ·	250	203	569	430					994	887	2,415	2,071		**
4	Karnal	500	300	559	585					1,200	1,050	1,613	1,432	**	
5	Ambala · ·	199	183	683	613					694	631	2,238	1,964	"	
6	Simla	6	3	36	20			1		21	9	142	115	1	
7	Kangra	141 436	85	396 920	515	3			1.0	379	253	2,482	2,730	12	
8	Hoshiarpur	460	409	654	850 558					1,373	1,236	2,837	2,349	11199	
9	Jullundur	411	389	540	505	4		10		1,538	930	1,791	2,009	9	
10	Ludhiana	794	1999	805	656	4		13	**	2,403				7	1
11	Ferozepore	959	604	431	413	28	20	17	15	3,159	2,027	2,537	2,147	57	1
12	Lahore	490	634	547	448	9	11	27	23	2,261	1,801	1,641	1,444	933	
13	Amritsar	679	412 616	662	598	21	47		22	2,223	1,853	2,504	1,944	152	1:
14	Gurdaspur	636	495	349	273	70	The same of			2,304	1,826		1,741	251	20
15	Sialkot	777		117	115	41	56	2		2,302	18.30	1,260		1.55	1
16	Gujranwala	636	616	195	166	48	28	25	1	33.351	1,867	438	372	150	100
17	Sheikhupura	120	492	100		1	100		12	1,763	1,392	765	586	210	18
18	Gujrat	769 622	724	32 72	25 99	13	2	7	1	2,363	2,091	99	88	3	
19	Shahpur	344	550	45	34	and the	11		6	2,359	1,861	339	363	49	3
20	Jhelum	588	298	1.836	64		**			1,497	1,324	131	99	3. 00	
21	Rawalpindi	228	480	64 27	31	17				1,806	1,402	232	230	8	
22	Attock	352	188	44	34		••	1		1,249	1,035	78	90	11010	
23	Mianwali	642	349 526	204	246	5	4	11		2,677	1,081	181	128		9
24	Montgomery	420	415	420	398	44	36	200	10	2,370	2,177	100	880	27	
25	Lyallpur	446	445	53	58		1000	2		2,378	2,212	1,758	1,563	255	26
26	Jhang	900	847	144	216	6	9	2	3	2,815	2,693	792	672		
27	Multan	614	544	83	100	1		W. C.		1,994	1,811	419	393	33	-
28	Muzaffargarh	364	293	62	53			3	2	1,351	1,047	264	228	1	
29	Dera Ghazi Khan		200							1,001	1,021	201	220		-
	Total	14,062	11,865	10,330	9,559	299	266	122	97	49,731	41,345	37,402	33,203	1,270	1,0
	Population according to Census of 1921.	]			Not a	vailab	le.			240,139	232,641	176,259	168,581	7,514	7,5
	Ratio per 1,000 living for the Province.	)								207.09	177.72	212.20	196.96	169.02	148

No. IV-CONTINUED.

PERIODS IN THE DISTRICTS OF THE PUNJAB DURING THE YEAR 1930.

			I Tomaria		5		-							1
			ON	E YEAR	AND U	NDER FI	IVE YEA	RS.		FIV	E YEARS TEN Y	AND UND	ER	-
Other	classes.	Muhan	ımadans.	Hine	dus.	Ind Chris	lian stians.	Oth Clas		Muham	madans,	Hine	ius.	
Males,	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	-
13	44	45	46	47	48	49	50	51	52	53	54	55	56	+
														ŀ
		370	496	904	700					370	200		1997	ı
		258	243	1,395	1,166					183	112	712	362	ı
		977	941	1,973	1,823	2				125	91	268	659 192	
		700	240	714	1,093					650	302	633	912	
		501	497	1,433	1,323					146	124	213	144	1
1		6	18	42	38	1				2	2	9	6	١
		59	31	641	625				4.4	45	49	589	574	
	**	897	812	1,859	1,764	3	6			215	241	553	467	ı
		1,245	1,240	1,614	1,505					222	212	253	228	ı
40	8	913	613	868	909	5		**	10	247	213	294	300	
38	40	1,272	1,145	1,762	1,501	2		21	18	457	376	548	386	ı
45	47	2,800	2,487	1,230	926	60	47	40	30	587	511	205	198	ı
109	120	1,417	1,305	1,534	1,377	31	26	74	62	280	260	303	292	ı
	2	1,226	1,083	1,117	1,229	126	115	1		363	313	268	310	ı
		1,181	999	545	507	119	104			259	263	145	147	ı
70	30	2,248	2,060	402	398	147	100	2	1	461	420	-80	97	ı
4	2	1,628	1,665	832	611	141	101	30	15	332	308	90	70	١
38	27	2,630	2,180 1,978	40	79	4	6	2	1	813	721	56	80	
	1	1,233	1,186	261	224	26	23	7	5	540	581	74	63	
		1,189	1,025	105	88 123	1 2		**		447	442	30	33	
1		1,204	1,131	40	32		2			622	518	76	91	
		563	489	32	34			**		490	397	20	27	1
72	69	1,968	1,758	763	768	21	22	11		364 547	365	56	37	1
.		1,439	1,519	1,382	1,092	130	112			659	539 647	178	151	
		1,620	1,440	95	105	1			1	460	127	452 102	399	1
10	9	1,605	1,090	244	253	8	7	3	2	983	716	168	425 156	П
		1,481	1,173	196	161		1			591	515	98	91	
15	3	1,071	960	163	167			5	1	351	281	38	53	н
448	362	35,709	31,784	22,314	20,621	830	672	196	154	11,811	9 846	6,812	6,950	-
52	20	587,475	566,315	430,242	408,415	18,176	17,236	167	98	950,073	831,383	683,426	592 470	
?	7	60.78	56.12	51.86	50.49	45.66	38.99		-					1

### DEATHS REGISTERED BY SEXES AND CLASSES ACCORDING TO SPECIFIED AGE

1	2		6		-				7				
	490737.03			AND UNI		1027	TI	EN YEARS	AND UNI YEARS		FEEN		
	Districts.	India Christia		Other C	lasses.	Mukam	madans.	Hind	lus.	Indi Christie		Other C	lasses.
Number.		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	57	58	59	60	61	62	63	64	65	66	67	68
						-	-				-	-	
1	Hissar					328	119	200	300				
2	Rohtak	1				192	114	547	557				
3	Gurgaon					180	154	435	334				
4	Karnal					500	250	779	966				
5	'Ambala					91	79	149	129				
6	Simla	2	3	.,		3	4	7	6		1		
7	Kangra					56	56	560	626				
8	Hoshiarpur	3				120	149	346	226	1	1		
9	Jullundur				.,	116	109	135	174				
10	Ludhiana			5		191	101	194	246	2		5	
11	Ferozepore		1	25	21	264	248	350	270	3	1	27	24
12	Lahore	50	41	31	25	299	355	179	159	44	43	28	16
13	Amritsar	7	4	20	19	232	273	245	290	3	1	9	7
14	Gurdaspur	30	12			262	255	206	251	15	6		
15	Sialkot	29	30			247	235	137	131	28	26		
16	Gujranwala	47	40	1		426	419	125	96	50	42		1
17	Sheikhupura	40	33	8	5	154	162	55	51	35	26	- 10	6
18	Gujrat	3	1	1	1	530	474	77	92	2		1	
19	Shahpur	5	2	2	4	255	307	62	56	4	5	3	2
20	Jhelum					237	165	23	26				
21	Rawalpindi					411	326	49	57				
22	Attock				1	234	208	25	28				
23	Mianwali					416	413	41	44				
24	Montgomery	16	7	14	4	338	266	87	75	4	7	8	12
25	Lyallpur	46	33			568	507	231	246	31	23		
26	Jhang			**		276	275	89	63			1	
27	Multan	9	6	4	2	783	617	182	195	10	8	3	2
28	Muzaffargarh	2				617	449	84	73		1		
29	Dera Ghazi Khan	**			1	197	129	23	11				
	Total	290	218	. 111	83	8,523	7,218	5,622	5,778	232	191	95	70
	Population according to Census of 1921.	28,011	24,222	158	128	770,738	584,428	591,587	438,614	22,692	16,848	177	136
-	Ratio per 1,000 living for the Province.	10.35	9,00	702.53	648.44	11.06	12.35	9.50	13.17	10.22	11.34	536.72	514.71

No. IV-CONTINUED.

### PERIODS IN THE DISTRICTS OF THE PUNJAB DURING THE YEAR 1930.

	- 11		8								9				11	T
and the same	FIFTEE	N YEAR	S AND U	INDER T	WENTY	YEARS.	THE RESERVE	Manager 1	Т		YEARS HIRTY Y					
Muhamn	sadans.	Hind	us.	Indi Christi		Other C	lasses.	Muhamm	nadans.	Hind	118.	Indi Christi		Other C	lasses.	
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Number.
69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	1
250	150	93	206					263	190	200	303		",	"		1 2
169	123	542	575	1				197	144	591	1,062		1			3
216	171	478	507					360	520	788	968					4
300	100	933	1,038			**		1 1985	293	337	361					5
83	104	125	167		**			189	1000	41	51	3		i sta		6
4	3	16	15	1		"		49	51	796	803	1			nlis	7
49	40	758	751	",				195	209	389	393	1			3.1	8
129	131	308	169		2			186	244	241	370					9
87	147	190	169			6	4	200	104	208	276	1				10
150	151	320	356	1		29	26	344	356	421	388		- 1	19	17	11
278	320	197	201	51	44	15	10	688	610	219	297	46	31	16	12	12
286	336	271	318	6	4	17	16	347	411	372	445	4	2	15	14	13
249	274	204	296	24	38	1		403	453	328	395	43	11			14
311	270	157	138	32	29			1,079	1,007	507	497	114	107			15
280	425	148	117	53	48	1		512	433	151	145	69	51		2	16
518 120	100	45	50	- 34	21	6	5	333	345	70	60	40	27	8	7	17
466	469	138	115		2			699	599	105	119	3	1	3		18
249	229	41	38	6	3	2	1	549	632	94	88	12	9	6	8	19
187	177	17	21					330	412	21	47					20
280	217	32	28			*		193	182	28	21			300		21
221	176	15	28	.1				479	541	25	27					22
434	425	39	29					459	396	44	23			1		23
243	271	51	49	5	6	7	12	372	366	122	112	15	14	7	23	
390	380	252	242	32	30			354	359	220	236	30	38			25
202	169	113	107					356	340	119	99					26
802	691	146	157	9	3	4	1	865	675	158	167	6	10	1	1	
538	504	75	84	1		'		665	446	40	67		1			28
136	97	23	34					420	426	. 52	98	**		3	3	26
7,627	6,897	5,833	6,265	258	230	88	75	11,599	10,858	7,849	8,593	388	304	79	87	
506,702	405,557	436,767	317,417	16,312	11,736	182	133	943,910	833,320	812,778	645,951	33,066	23,019	374	357	
15.05	17.01	13:35	19.74	15.82	19.60	483.23	563.91	12:29	13-03	9.66	13.30	11.73	13.51	211 · 23	243 . 70	

ANNUAL FORM

#### DEATHS REGISTERED BY SEXES AND CLASSES ACCORDING TO SPECIFIED AGE

1	2				10							11	
			тн	IRTY YE	ARS ANI YEARS.	UNDER	FORTY	1	- Indi	FO	RTY YE	ARS ANI	UNDER
		Muham	madans.	Hine	lus.	Ind Christ		Other (	lasses.	Muham	madans.	Him	dus.
Number.	Districts.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1 1	2	85	86	87	88	89	90	91	92	93	94	95	96
									3.1				
1	Hissar .	. 319	169	200	400					387	273	685	700
2	Rohtak .	. 134	131	678	621					123	132	708	617
3	Gurgaon .	. 332	365	721	717					333	305	764	668
4	Karnal .	370	260	- 615	739					200	390	627	501
5	Ambala -	169	157	370	337	1				227	155	408	282
6	Simla .	. 5	5	33	22	2	1			4	3	38	15
7	Kangra .	63	60	967	798	1	1			66	39	996	864
. 8	Hoshiarpur .	211	198	377	360	3	. 2			270	219	537	375
9	Jullundur .	202	192	201	267	1				217	145	275	199
10	Ludhiana .	115	144	261	200	1				200	154	204	201
11	Ferozepore .	418	341	450	389	1		24	21	596	492	620	552
12	Lahore .	483	- 504	291	215	37	31	14	12	647	512	207	149
13	Amritsar .	382	376	405	402	9	7	28	21	428	345	504	457
14	Gurdaspur .	392	384	336	311	52	19			356	297	398	272
15	Sialkot .	955	873	375	328	95	86			702	604	391	335
16	Gujranwala .	522	433	160	147	72	54	2		520	417	159	138
17	Sheikhupura .	279	276	61	71	36	32	9	6	286	202	35	70
18	Gujrat .	552	475	176	163	6	3	1	2	537	446	178	127
19	Shahpur .	646	627	89	58	14	12	6	5	668	528	77	66
20	Jhelum .	456	411	26	38					459	348	29	25
21	Rawalpindi .	256	277	63	56		• 1			479	469	77	- 68
22	Attock .	554	575	26	19	***			7.	624	508	26	26
23	Mianwali .	435	443	57	33					465	410	51	22
24	Montgomery .	368	402	121	151	16	22	10	11	421	369	179	110
25	Lyallpur .	289	365	224	201	45	48			280	344	246	233
26	Jhang .	. 297	385	120	88			1	***	346	339	129	116
27	Multan .	864	771	131	154	9	7	3	4	860	738	146	178
28	Muzaffargarh .	555	458	53	81					470	370	91	47
29	Dera Ghazi Khan .	537	511	71	69			3	2	601	413	90	62
	Total .	11,160	10,568	7,658	7,435	401	326	101	84	11,772	9,966	8,875	7,475
1 ×	Population according to Census of 1921.	g 794,114	666,352	643,616	511,228	22,481	17,177	361	265	568,025	486,332	474,779	386,058
100	Ratio per 1,000 livin for the Province.	g 14.05	15.86	11.90	14.54	17.84	18.98	279.78	316.98	20.72	20.49	18.69	19.36

o. IV-continued.

### ERIODS IN THE DISTRICTS OF THE PUNJAB DURING THE YEAR 1930.

							12						13			
FTY Y	YEARS.				FIFTY Y	EARS A	ND UND	ER SI	XTY Y	EARS.		SIXT	Y YERA UPWAR			-
Indi		Other Cl	asses.	Muhamm	adans.	Hindu	18.	Indi Christi		Other Cl	usses.	Микатт	adans.	Hind	18.	-
Males.	Fomales.	Males.	Females.	Males.	Pemales.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Number.
97	98	99	100	101	102	103	104	105	106	107	108	109	110	.111	112	1
														-		
				400	240	1,068	1,000					561	500	2,600	1,886	1
				137	123	766	688			**		163	198	1,737	1,383	2
				158	148	378	355					568	514	1,315	1,225	3
				270	280	413	413					260	290	520	400	4
1	1			197	141	382	261	1	1	**		506	491	1,479	1,259	5
1				7	. 4	20	12	1				22	8	59	50	6
	**			80	38	1,021	967			1		60	87	1,209 2,496	1,056 2,179	7
3				345	312	743	639	3	2			1,137	481 902	1,401	1,117	1
"			**	253	168	336	265	"	1			649	449	570		10
2	1			212	151	220 767	615			25	22	940	709	943		1
44	2	29	26	759 613	592 413	220	242	46	42	28	20	1,662	1,129	722	755	1
19	29	18	13	473	399	531	469	16	14	39	36	967	786	1,050	818	1
61	25			394	402	408	214	57	18			883	626	863	699	1
79	67			500	427	279	237	59	48			384	335	212	187	1
65	52		1	533	427	170	129	79	49	2		522	404	156	126	1
34	36	11	7	284	137	49	68	29	31	9	8	908	727	195	161	1
2	4	2	1	602	457	169	93	3	2		3	1,530	1,129	143	106	н
7	4	5	4	766	598	91	76	13	5	3	5	2,075	1,465	213	197	10
				554	400	47	34	1				1,269	1,070	137	130	н
1	2			679	634	93	83		1			1,190	1,077	120	119	ш
				619	442	25	25					1,396 765	1,092	20 72	49 35	Ш
**				467	416	59	31		10			1,174	668 887	442	347	П
32	15	8	3	461	391	189	118 249	22 36	18	2		1,019	982	559	540	1
42	35		7	334	349	217 181	120					1,305	919	218	230	н
			1	310 928	750	252	280		6	1	2.	1,382	1,215	258	. 212	н
8	8	5	2	263	249	191	104					271	272	264	151	1
		1	1	543	361	. 102	51			2	1	1,029	647	147	118	177
**	••		- " -									-			-	-
401	295	110	87	12,141	9,762	9,387	8,056	371	271	112	98	25,271	20,059	20,120	16,833	
15,069	12,104	264	261	397,365	320,366	339,811	261,590	9,704	7,704	160	156	437,197	321,889	334,927	253,383	
26.61	24.37	416.67	333.33	30.55	30.47	27.62	30.80	38.23	35.18	700.00	628.21	57.80	62.32	60.07	66.43	

#### ANNUAL FORM

#### DEATHS REGISTERED BY SEXES AND CLASSES ACCORDING TO SPECIFIED AG

1	2		1		13	1				14		
-	VELT		SIXT		AND UPWA	RDS—				TOTAL.	· Since	right
	Distric	TS.		ndian istians.	Other	Classes.	Muham	madans.	Н	ndus.	Ind Christ	
Number.			Males.	Females.	Males.	Females.	Males.	Fenales.	Males.	Females.	Males.	Females.
1	2	THE	113	114	115	116	117	118	119	120	121	122
		Total										
1	Hissar						4,080	3,109	8,061	7,563		
2	Rohtak						1,947	1,695	10,790	9,439	2	1
3	Gurgaon						4,383	4,096	9,909	8,954	2	
4	Karnal						4,810	3,262	7,635	8,462		
. 5	Ambala		1				2,803	2,672	7,134	6,227	4	1
6	Simla			1			87	70	407	330	12	8
7	Kangra						906	704	10,019	9,794	2	1
8	Hoshiarpur		1				4,429	3,988	10,445	9,012	31	16
9	Jullandur						5,404	4,847	6,824	6,477	1	1
10	Ludhiana	3.0	2.50	2	10	.6	4,415	3,010	4,800	5,072	18	5
11	Feròzepore		1	1	28	26	7,731	6,606	8,718	7,358	17	9
12	Lahore		84	70	42	34	11,224	9,060	5,111	4,586	519	430
13	Amritsar		23	17	45	39	7,036	6,230	7,719	6,812	163	143
14	Gurdaspur		125	95	1	2	6,813	5,936	6,213	5,718	685	463
15	Siaffcot		42	39 .		., 1	7,891	6,816	4,008	3,511	848	739
16	Gujranwala		64	46	1	1	8,564	7,305	1,989	1,765	796	576
17	Sheikhupura		95	68	11	11	6,087	5,314	2,197	1,798	694	560
18	Gujrat		2	3	41	1	10,722	9,041	1,181	1,062	28	27
19	Shahpur		28	31	11	8	10,115	8,806	1,341	1,229	164	129
20	Jhelum						6,669	5,935	566	541	2	
21	Rawalpindi		3				7,105	6,127	898	876	14	11
23	Attock						7,070	6,105	300	351	1	
23	Mianwali						5,654	5,086	632	416		
24	Montgomery		64	53	2	1	8,569	7,426	3,122	2,761	222	189
25	Lyallpur		55	59	2	1	7,702	7,664	5,541	5,001	702	675
26	Jhang						7,548	6,612	1,361	1,233	1	
27	Multan		12	11	4	3	11,887	9,956	2,477	2,424	109	94
28	Muzaffargarh						7,445	6,247	1,511	1,252	4	3
29	Dera Ghazi K					2	6,236	4,872	973	891		
-											- 100	
	Total		600	496	157	135	185,332	158,597	131,882	120,915	5,041	4,081
	Population ae to Censes of		11,268	7,482	147	146	The Page					
	Ratio per 1,00 for the Prov		53.25	66.29	. Z	924.66		33.23	\gt			

lo. IV-concluded.

#### ERIODS IN THE DISTRICTS OF THE PUNJAB DURING THE YEAR 1930.

						15						
				RAT	IO OF DEA	ATHS PER	1,000 OF 1	POPULATI	ON.			
Other Ci	lasses.	Muhamm	nadans.	Hind	us.	India Christia		Other Cl	asses.	Tota	d.	
Males.	Females.	Males.	Females,	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	-
123	124	125	126	127	128	129	130	131	132	133	134	1
												Ì
		36.14	30.17	25.02	27.23					27.87	27.99	ı
		29.73	28.46	31.13	32.49	0.39	0.21			30.52	31.38	1
		37.81	40.58	39.45	42.11	3.28				38.86	41.53	İ
		37.90	30.01	23.50	31.96					27.43	31.26	
		26.41	30.72	28.28	32.39	2.41	0.70			27.54	31.68	
1		18.87	56.27	18.99	32.34	24.64	24.32	0.94		18.37	30.59	ı
1		43.09 28.54	40.91	27.05	27.76 30.76	14.08	7.04 9.66	0.64		27.80	28.25	ı
**		27.43	29.73	30.59 27.21	33.04	0.54	0.69			29.89	30.36	l
66	28	41.35	34.93	22.73	31.34	21.10	6.86	7	933.33	29.16	31.16	ı
265	241	29.80	30.58	25.93	28.00	8.36	5.90	251.66	300.00	27.94	32.62	ı
277	219	31.43	31.78	20.15	26.22	23.11	22.70	80.78	181.89	26.91	29.58	
387	363	30.23	32.68	27.69	31.92	24.73	25.37	1	7	29.52	33.05	
3	- 4	29.44	31.12	28.48	32.73	38.25	31.64	42.86	30.77	29.33	31.88	
		27.32	27.67	26.12	27.92	29.58	30.17			26.99	27.90	ì
14	10	34.78	37.10	22.80	26.80	52.57	47.80	241.38	142.86	32.59	35.13	
172	100	27.15	29.34	19.95	21.79	41.66	41.92	666.67	561.80	26.05	28.04	
14	11	28.37	27.25	19.90	20.17	22.54	25.81	400.00	220.00	27.24	26.31	
83	69	31.24	32.33	21.60	24.35	26.41	25.92	2	2	29.85	31.21	
		31.33	28.34	20.65	21.19	10.05				30.10	27.55	
	1 0	29.47	28.40	19.72	28.23	8.43	11.85		1.49	27.43	28.24	
1	1	29.58	27.19	13.19	16.39	8.70		5.29	37.04	28.13	26.25	
1		34.78	34.77	23.28	19.08			6.10		33.09	32.71	
141	144	30.49	32.01	29.30	32.96	38.70	41.09	2	7	30.64	32.83	
2	1	24.93	30.16	29.02	35.59	30.75	36.29	39.22	21.28	26.68	32.28	
4	2	29.42	30.22	27.98	26.75	4.02		666.67	400.00	29.18	29.60	
38	28	29.97	29.97	29.35	37.14	46.56	47.02	32.18	205.88	29.95	31.29	
		27.74	27.77	37.82	35.97	55.56	44.12			29.03	28.87	
29	13	27.50	26.38	31.81	33.01			?	7	28.12	27.29	
1,499	1,235	30.15	30.40	27.05	30.60	30.50	29.93	89.25	183.32	28.89	30.58	
		.:										

? Figures incorrect due to misclassification.

NOTE.—The population of Military Cantonments by different ages cannot be excluded as it is not shown separately in the census returns.

ANNUAL FORM No. V.

CANCELLED AND INCORPORATED IN ANNUAL FORM No. IV.

ANNUAL FORM No. VI. DEATHS REGISTERED FROM DIFFERENT CAUSES AND BIRTHS REGISTERED IN THE DISTRICTS (RURAL CIRCLES) OF THE PUNJAB DURING THE YEAR 1930.

ANNUAL FOR DEATHS REGISTERED FROM DIFFERENT CAUSES AND BIRTHS REGISTERED IN THE DISTRICT

1	2	3		4			5	6	7	8	9	10		
		Jo sm		Винт	HS.									
Number.	RURAL CIRCLES.	Population according to Census of 1921.	Males.	Females.	Total.	Birth rate per 1,000 of population.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhoa.	Respiratory diseases.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13	. 14	15
	AMBALA DIVISION.													
1	Hissar	725,870	17,208	14,795	32,003	44-09	15	336		13,280	179	821		
2	Rohtak	696,915	17,987	16,361	34,348	49.29	20	222	2	15,818	233	1,460	2	
3	Gurgaon	625,926	15,703	13,998	29,701	47-45	11	263		16,448	393	1,442	14	
4	Karnal	747,506	14,017	12,246	26,263	35.13	2	98	12	14,296	567	1,209	1	
5	Ambala	578,883	13,522	12,140	25,662	44.33	11	216	**.	6,326	122	7,133	••	
6	JULLUNDUR DIVISION.	14,788	182	176	358	24.21		**		123	24	. 84		
. 7	Kangra	754,151	14,847	13,884	28,731	38.10	2	34		9,631	2,453	4,526	4	
8	Hoshiarpur	855,109	19,920	17,982	37,902	44.32	137	585	57	19,835	394	1,590	4	
9	Juliundur	708,601	16,947	15,785	32,732	46.19	43	63		15,117	126	1,099	7	
10	Ludhiana	484,267	12,058	10,860	22,918	47.33		117		8,833	71	773	2	
11	LAHORE DIVISION.	982,160	21,634	18,996	40,630	41.37	2	474		19,203	290	1,899	9	
12	Lahore	766,738	18,634	16,357	34,991	45.84	59	321		14,797	112	569	12	
13	Amritaar	743,126	20,137	18,133	38,270	51:50	43	122		15,307	283	1,735	5	
14	Gurdaspur	773,416	20,973	19,256	40,229	52.01	6	116	262	14,802	459	1,227	4	
15	Sialkot	755,553	19,976	17,907	37,883	50.14	6	158	209	14,370	273	2,419	1	
16	Gujranwala	531,961	13,317	11,845	25,162	47.30	9	96		15,692	74	473	1	2
17	Sheikhupura  RAWALPINDI DIVISION.	587,523	15,077	13,303	28,380	48-30	2	58		13,479	39	259	2	
18	Gujrat	768,049	16,655	14,727	31,382	40.86		290		15,085	104	1,413		
19	Shahpur	644,132	12,790	10,998	23,788	36-93		57		15,623	244	1,477		
20	Jhelum	443,802	9,086	8,163	17,249	38.87	3	145		9,882	89	886	3	
21	Rawalpindi	483,045	9,778	8,583	18,361	38-01	52	26		9,299	1,598	1,236	4	
22	Attock	486,533	8,708	7,347	16,055	33.00	26	26		11,440	28	604	3	
23	Mianwali MULTAN DIVISION.	328,270	7,415	6,276	13,691	41-71	6	7		9,585	42	315	3	
24	Montgomery	674,976	17,502	14,897	32,399	48.00	4	223		17,921	75	505	8	
25	Lyallpur	882,310	24,195	22,254	46,449	52.64	-39	39		19,557	274	796	9	
26	Jhang	513,545	10,261	9,003	19,264	37.51		10		11,191	93	1,047	1	
27	Multan	765,841	16,308	13,601	29,909	39.05	3	91		19,852	30	622	3	
28	Muzaffargach	536,715	6,787	5,663	12,450	23 - 20		2		14,491	79	276	1	
29	Dera Ghazi Khan	417,609	6,052	5,089	11,141	26.68		8		10,265	74	172	4	
	Total	18,277,320	417,676	370,625	788,301	43.13	481	4,203	542	391,548	8,822	38,467	107	1

No. VI-A (RURAL CIRCLES).

## RURAL CIRCLES) OF THE PUNJAB DURING THE YEAR 1930.

JURIES.				The Part of the Pa												_
		1			*			RAT	TO OF DEA	THS PE	n 1,000	OF POP	LATION			
23	by				cause		31		-	hora.	-			From all	cawsss.	
Wounds and accidents.	Snake-bite and killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths from all causes.	Cholera.	Small-pox.	Plague.	Fever.	Dysentery and Diarrhora.	Respiratory diseases.	Injuries.	All other causes.	For the year.	Mean of previous five years.	Number,
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
. 55	1	1	66	4,777	19,474	0.02	0.46		18:30	0.25	1-13	0.09	6.58	26.83	31-34	1
61	9	3	80	3,494	21,329	0.03	0.32	0.003	22.70	0.33	2.09	0.11	5.01	30.60	36.58	1
279	6	1	326	6,558	25,441	0.02	0.42		26.28	0.63	2.30	0.52	10.48	40.65	38-62	18
19	2	1	26	5,402	21,612	0.000	0.13	0.02	19-12	0.76	1.62	0.03	7.23	28.91	39-21	
-				3,032	16,840	0.02	0.37		10.93	0.21	12.32		5.24	29.09	33.59	
"				153	384		***		8.32	1:62	5.68		10.35	25.97	22.08	
600	20	5	634	3,920	21,200	0.002	0.05		12.77	3.25	6.00	0.84	5.20	28-11	30.84	1
101	20	8	136	3,357	26,091	0.16	0.68	0.07	23 · 20	0.46	1.86	0.16	3.93	30.51	31.43	1
167	4	2	181	3,368	19,997	0.06	0.09		21.33	0.18	1.55	0.26	4.75	28.22	27.33	8
16	2		20	5,009	14,823		0.24		18.24	0.15	1.60	0.04	10.34	30.61	30-12	
155	24	7	198	6,064	28,130	0.002	0.48		19.55	0.30	1.93	0.20	6.17	28.64	26-63	
			101							103	100				200310	
136	36	3	191	4,357	20,786	0.05	0.42		19:30	0.15	1-26	0.25	5.68	27.11	27.20	
164	19	12 8	205 199	4,384 6,534	22,079	0.06	0.16	0.34	20.60	0.38	2.33	0.27	5·90 8·45	29.71	34.74	
162	12	3	179	3,203	20,817			0.28						27.55	30-15	
152	55	3	211	1,850	18,405	0.02	0.18		29.50	0.14	0.89	0.40	3.48	. 34 - 60	30.81	
133	54	5	194	2,320	16,351	0.003	0.10		22.94	0.07	0-44	0.33	3.95	27.83	25.23	
	14.1										1				100	
179	15	3	198	3,311	20,401		0.38		19.64	0.14	1.84	0.26	4.31	26.56	23.59	
212	29	1	246	2,170	19,817		0.09		24.25	0.38	2.29	0.38	3.37	30.77	26.81	1
169	26	1	199	1,800	13,004	0.01	0.33		22.27	0.20	2.00	0.45	4.06	29.30	25-91	1
188	28	1	221	821	13,253	0.11	0.05		19-25	3.31	2.56	0.46	1.70	27-44	24.60	0
192	13		211	1,022	13,357	0.05	0.05		23.51	0.06	0.96	0.43	2.10	27·45 33·41	30.55	6
	199				10,000		4	-	20 20	0.10	0.00	11		00 11		1
	u		100	0.555	01.000	0.41	0.00	36	00.77	0.11	0.71	0.15	0.00		95.65	8
246	48	1	306 236	2,596 4,985	21,630 25,926	0.01	0.33		26:55	0.11	0.75	0.45	3.85	32.05	25.65	
178	35	5	220	2,521	15,082	0.01	0.02		21.79	0.18	2.04	0.43	4.91	29-37	25.79	
286	50	1	343	2,227	23,168	0.003			25-92	0.04	0.81	0.45	2.91	30-25	26.17	1
68	22	1	92	418	15,358		0.003	O.,	27.00	0.15	0.51	0.17	0.78	28.61	25-99	18
44	44	1	100	470	11,089		0.02		24.58	0.18	0.41	0.24	1-13	26.55	23-17	1
4,380	602	79	5,265	91,089	540,417	0.03	0.23	0.03	21-42	0.48	2.10	0.29	4-98	29-57	29.40	

ANNUAL FORM

### DEATHS FROM DIFFERENT CAUSES AND BIRTHS REGISTERED

1		2		3		4			5	6	7	8	9	10	111	
-			i	o t		Braru	8.									
Number.	1	Towns.		Population according Census of 1921.	Males.	Females.	Total.	Birth rate per 1,000 of population.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhosa.	Respiratory diseases.	Males.	Females.
1		2 -		3	4	5	6	7	8	9	10	11	12	13	14	15
	HISSA	R DISTRIC	er.													-
1	Hissar			21,415	417	380	797	37.22	53	23	9.	335	15	69		
2	Hansi			15,425	408	353	761	49-34		47		261	26	64		
3	Bhiwani			33,270	695	676	1,371	41.21	1	18		386	85	63		
4	Sirsa			16,241	295	232	527	32.45		16		157	34	45		
5	Fatchbad			2,313	36	33	69	29.83		3		25	3	10		
6	Budhlada			2,276	53	44	97	42.62				26		1		
			CVE									4	25			
		AK DISTRI	2000	07.010	200		11 055	10.70	00	10	2000		-	110		100
7	Rohtak	10.50		25,240	698	557	*1,255	49.72	20	19	**	365	38	140		
8	Jhajjar	11.55	000	10,800	279	243	522	48.33	1	2	****	107	28	63	1:00	
9	Beri			7,454	225	190	415	55.67		19	***	154	30	29		
10	Gohana		**	5,107	112	90	202	39-55	1	3	**	71	5	29		
11	Bahadurg	garh		5,955	171	116	287	48-19	1			115	11	23		
12	Sonepat			12,981	317	329	646	49-77		5		221	12	33	1	
13	Mehm			7,820	223	178	401	51.58	**			143	5	- 54		-
	GURGA	ON DISTR	ICT.		100									16.	10	
14	Rewari			23,129	618	575	1,193	51.58		3		285	38	125		
15	Palwal			9,352	257	266	523	55.92		11		191	20	37		
16	Firozpur	0.000		4,542	112	117	229	50.42				130	25	18		
17	Hodal			5,854	138	155	293	50.05		14		166	1	24		
18	Ballabgar	h		3,721	92	84	176	47:30		10		87	8	14		
19	Faridabac	1		4,337	113	92	205	47:27				- 60	2	9		
20	Hidyatpu	r Chhaoni		5,142	63	41	104	20.23		18		20	5	30		
91	KARN	AL DISTRI	CT.		3193						1000	196		1000	1-9	
21	Karnal			22,845	510	474	984	43.07	1	7		399	12	63		
22	Kaithal			15,477	373	336	709	45.81	1	16		234	9	33		
23	Panipat			27,343	657	630	1,287	47.07		43		342	54	132		
24	Shahabad			11,329	254	236	490	43.25				137	7	46		
25	Thanesar			4,226	75	55	130	30.76	1	3		95		12		
38								100 P	DE ON	100			1911	1900	10	
-		LA DISTRI	CT.	135 1 34	100	16=	100	or the	12 14	1/2	1000	400	191	3 400	1	
26	Ambala			28,581	573	525	1,098	38-42	2	1		247	28	133		
27	Jagadhri			11,544	349	272	621	53.79	7	1		361	24	58		
28	Burya	11.55		3,574	84	73	157	43.93				46	4	25		
29	Sadhuara			7,630	210	173	383	50-20	1	15	1000	49	14	90	**	
30	Rupar			7,606	194	182	376	49-43				70	5	36		
31	Kharar			4,091	104	109	213	52.07		8	0000	51	10	32		
10000		The state of the s	Commence of	Part of the last o	The second second	THE RESERVE		A CONTRACTOR OF THE PARTY OF TH	Section 1	THE REAL PROPERTY.	-	desirable desirable	CONTRACTOR OF THE PARTY OF THE	The state of the state of	-	

No. VI-B (TOWNS).

IN THE TOWNS OF THE PUNJAB DURING THE YEAR 1930.

-	11			12	13						14			-		15
	-	-														
INJURIO			_		cause			RATIO	OF DEATE	IS PER 1,0	CO OF POP	ULATION.				
denta	killed				m all					and	ancs.			From al	l causes.	
Wounds and accidents	Snake-bite and killed by wild beasts.	Rabies.	Total.	All other causes,	Total deaths from all causes.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery Diversions.	Respiratory diseases.	Injuries.	All other causes.	For the year.	Mean ratio of previous five years.	Number.
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
				379	874	2:47	1.07		15*64	0.40	3.22		17:70	40.81	42.67	1
				233	631		3.02		16:92	1.69	4.15		15.11	40.91	50.11	2
				802	1,355	0.03	0:54		11.60	2.55	1.89		24.11	40.73	46.00	3
				137	389		0.00		9.67	2.09	2.77		8.44	.23.95	33.04	4
				13	54		1:30		10.81	1:30	4:32		5:62	23.35	34.67	5
			2.5.5	9	36	**			11:42		0.44		3.95	15.82	Not available	6
1	1		2	237	821	0.79	0.75		14:46	1:51	5.55	0.08	9.29	32.53	30.54	7
2			2	188	391	0.09	0.19		9.91	2:59	5.83	0.19	17:41	36:20	40.89	8
1			1	132	365		2:55		20.66	4.02	3.89	0.13	17:71	48.97	38.96	9
				42	151	0.50	0.25		13:90	0.58	5.68		8:22	29:57	44.92	10
				53	203	0.12			19:31	1.85	3.89		8.80	34.09	49.74	11
1			2	96	369		0.39		17.03	0.95	2.24	0.12	7:40	28:43	45.99	12
. 2			2	41	245				18:30	0.64	6.91	0.26	5:24	31.33	36.39	13
							10 N								Total State of the	1-3
2		1	3	194	648		0.13		12.32	1.64	5:40	0.13	8.39	28'02	33.42	14
1			1	158	418		1.18		20:42	2:14	3.96	0.11	16.89	44.70	46.79	15
1	1		2	48	223				28.62	5*50	3.06	0.44	10.57	49.10	48.75	16
1			1	64	270		2'39		28:36	0*17	4.10	0.17	10.53	46.12	44.28	17
. 1			1	38	158		2:70		23*38	2.15	3.76	0.27	10.21	42.46	41.87	18
				17	. 88	**			13.83	0.46	2.08		3.92	20.29	27.44	19
.50		**	**	25	98	**	3:50		3.89	0.97	5.83		4.86	19:06	Not available	20
	- 1 23			194 4	1 300	43	14 8				F P			100 110		122
***				216	698	0.04	0.31		17:47	0.23	2.76		9.46	20.55	43.00	21
				161	454	0.08	1.03		15.12	0.28	2.13		10.40	29.33	46.58	22
2			2	379	952		1:57		12.21	1.97	4.83	0.07	13.86	34.82	50.16	23
				126	316				12:09	0.62	4'06		11.12	27.89	32.71	24
				26	137	0.24	0.71		22.48		2.84		6.12	32.42	27.73	25
-	-			-	1 YE	17 19		1							2	1
100	-	1	-	291	702	0.07	0.03		8.64	0.98	4.65		10.18	24.56	28.17	26
	**!3			116	567	0.61	0.09	***	31.27	2.08	5.02		10.02	49.12	48:44	27
		**	**	38	113	0.01			12.87	1.15	6.89		10.63	31.62	33.28	28
				99	268	0.13	1:97		6.42	1.83	11.80		12.98	35.12	34.47	29
				100	211				9.20	0.66	4.73		13.15	27.74	34.21	30
				39	140		1.96		12.47	2.44	7.82		9.23	34.22	Not	31
	10		1	25			100								available	

ANNUAL FORM
DEATHS FROM DIFFERENT CAUSES AND BIRTHS REGISTERED

1	2		3			4		5	6	7	8	9	10		
No.			to t		Bra	THS.							100		
Number.	Towns.		Population according Census of 1921.	Males.	Females,	Total.	Birth rate per 1,000 of population.	Cholera.	Small-pox	Plague.	Fevers.	Dysentery and Diarrhaes.	Respiratory diseases.	Males.	Females.
1	2		3	4	5	6	7	8	9	10	11	12	13	14	15
	SIMLA DIST	RICT.					1000000			100					9100
32	Simla KANGRA DIS	enter.	26,149	386	359	745	28.49	1	9	**	32	49	194	2	
			9 501				05.54								
33	Kangra Dharamsala		3,581	60	68	128	35.74			**	46	5	21		
34			529	45 10	32	77	25·12 32.14		1		31	1	37		
35			3,421	53	7	17	27.77			**	5	1	10		
36	HOSHIARPUR TRICT.		0,421	- 03	42	95	21.11		1	••	18	5	.28		
37	Hoshiarpur		21,285	470	448	_918	43.13	37	34		254	56	103		
38	Khanpur		2,701	61	54	115	42.58	20			27	2	6		
39	Hariana		5,205	108	88	196	37:66		26		70	6	2		
40	Garhdiwala		5,196	61	44	105	20.21		10		38	9	10		
41	Dasuyah		3,889	135	135	270	69.43		3	6	66	11	23		
42	Tanda Uramar		8,362	237	182	419	50.11	2	10		122	19	24		
43	Miani		4,934	113	89	202	40.94	3	4		85	8	13		
44	Mukerian		2,346	67	81	148	63.09				72	5	20		7
45	Una		4,603	55	57	112	24.33	17			37	1	10		
46	Anandpur		3,522	45	60	105	29.81				44	9	16		
47	Garhshankar		5,196	85	65	150	28.87				77		11		1
48	Jaijon		2,042	34	37	71	34.77		3		32	2	16		
49	Shamehurasy		3,029	72	52	124	40.94	**	2		28	8	10		
77	JULLUNDUR TRICT.	DIS-									1				
50	Juliundur		59,085	1,586	1,534	3,120	52.81	51	25		689	159	422	2	
51	Kartarpur		8,512	203	227	430	50.52	4			178	34	85		
52	Bungah		5,089	127	105	232	45.59	1			87	3	13		144
53	Rahon		5,947	159	117	276	46.41				135	5	18		
54	Phillour	10-0	4,696	146	112	258	54.94		9		102	2	41		**
55	Nurmahal	and.	6,845	179	191	370	54·05 42·72	1	2		61	15	119		:
56	Nakodar		9,434	214	189	403	44.02		13		143	3	22		
57	Nawanshahr LUDHIANA DIS	TRICT	5,316	115	119	234	44 02	2	1		73	7	27	1	::
**		anning!	51 000	1.000	1 21=	0.450	47.28	1	67	TES	***	111	10 39	1	
58			51,880	1,238	1,215	2,453 829	46.75		34		526	81	341		
60			17,731 8,379	202	226	428	51.08		2		130	18	55	•	
61	Khanna		5,365	115	80	195	36-35				146	4	14		**
OI.	FEROZEPORE		0,000	113	30	100					43	9	23		*
67	TRICT.	1	1. 19	,	10 14			1	-		don of				
62	Ferozepore		29,695	697	599	1,296	43.64	11	9		278	64	236		
63	Zira		4,622	125	75	200	43.27		1		63	6	18		
64	Dharmkot		5,960	134	126	260	43.62		6		98	8	24		

No. VI-B (TOWNS)—CONTINUED.

IN THE TOWNS OF THE PUNJAB DURING THE YEAR 1930.

	1	1		13	13					14	-1					15
Injun	IES.				Auses.			R	ATIO OF D	EATHS PER	1,000 of	POPULATIO	ON.			
idents.	killed 8.			2	m all ca			1		and	4808.			From all	саныев.	
Wounds and accidents	Snake-bite and killed by wild beasts.	Rables.	Total.	All other causes.	Total deaths from all causes.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery Diarrhora.	Respiratory diseases.	Injuries.	All other causes.	For the year.	Mean ratio of previous five years.	Number,
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
12			14	232	531	0.04	0.34		1.22	1.87	7.42	0-54	8.87	20.31	19-71	32
				3	75				12.85	1.40	5.86		0.84	20.94	22.51	33
				3	73		0.33		10-11	0.33	12.07		0.98	23.82	21.79	34
					16				9:45	1.90	18:90			30.25	40.08	35
				11	63		0.29		- 5-26	1-46	8-18		3.22	18-42	Not avail- able,	36
				99	583	1.74	1.60		11.93	2.63	4.84		4.65	27:39	27.18	37
				16	71	7-40			10.00	0.74	2-22		5.92	26-29	32.88	38
1			1	9	114		5.00		13.45	1.15	0.38	0.19	1.73	21-90	24.32	39
1		1	1	16	84		1 92		7:31	1.73	1.92	0.19	3.08	16.17	16.13	40
1			.1	28	138		0.77	1:54	16-97	2.83	5-91	0.26	7.20	35.48	44.43	41
				36	213	0.24	1.20		14.59	2.27	2.87		4.31	25.47	32.55	42
				10	123	0.61	0.81		17.23	1.62	2.63		2.03	24.97	29.79	43
1			1	11	. 109				30.69	2.13	8.53	0.43	4.69	46.46	52-94	44
				9	74	3.69			8.04	0.22	2.17		1.96	16.08	23.98	43
				21	90				12:49	2.56	4.54		5.96	25.55	27-26	46
4			5	4	97				14.82		2.12	0.96	0.77	18-67	14	47
1 1			1	7	61		1.47		15.67	0.98	7.84	0.49	3.43	29.87	avail.	48
				25	73		0.66		9-24	2.64	3.30		8.25	24.10	Not	45
1				#00	2.075	0.00	0.10							3/1/	90 8	
37		1 3 3 3	41	688	2,075	0.86	0.42	**	11.66	2.69	7.14	0.70	11.64	35.12	30.26	5
1 2		1	3	42	346	0.47			20:91	4.00	9.99	0.35	4.93	40.65	33.48	5
2			2	25	131	0.20		**	17.10	0.59	2.55	0.39	4.91	25.74	21.62	5
2	1000	220	1	16	174		**		22.70	0.84	3.03		2.69	29.26	27.88	5
1			1	54	209	0.15	1.92		21.72	0.43	8.73	0.21	11.50	44.51	35.22	5
1			2	30	230	0.15	0.29		8.91	2.20	17:38	0.29	4.38	33.60	27-67	5
	9.0		4	68	253	0.38	1.37		15.16	3.20	2.33	0.42	7.21	26.82	27.35	5
	2	**	3				0.19	100	13.73	1.32	5.08	0.56	4.89	26-15	Not avail- able.	5
	1		1	563	1,580	0.02	1.29		10.14	1.56	6.57	0.02	10.85	30.45	30.75	5
1	1		1	356	594		1.92		7:33	1.02	3.10	0.06	20.08	33.50	32-58	5
				137	303		0.24		17-42	0.48	1.67		16.35	36.16	27.50	6
				39	114				8.01	1.68	4.29		7-27	21.25	21-36	6
1	1			-							1			1		
1	0		10	230	838	0.37	0.30		9.36	2.16	7-95	0.34	7:75	28-22	23.42	6
1	2		2	53	143		0.22		13.63	1.30	3:90	0.43	11-47	30-94	30.72	
1	1		1	28	164		1.01		16-44	1.34	4.03		4.70	27-52	1 35.35	

ANNUAL FORM

#### DEATHS FROM DIFFERENT CAUSES AND BIRTHS REGISTERED IN THE

-			-	14		Allis Fi		1	· · ·	75155 2414	D BIKIT	1	1	1	
1	2		3			4		5	6	7	8	9	10		
			5		Bn	eries.						ora.		-	
Number.	Towns.		Population according Census of 1921.	Males,	Females.	Total.	Birth rate per 1,000 of population.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrohora.	Respiratory diseases.	Males.	Females.
1	2		3	4	5	6	7	8	9	10	11	12	13	14	15
	FEROZEPORE DIS													1	
65	Muktsar		10,539	322	252	574	54-46		1		135	10	65		**
66	Fazilka	**	13,829	364	305	669	48-38		23		267	14	86		
67	Moga	**	14,145	293	288	581	41.07		36		191		40		
68	Abohar		8,916	180	134	314	35.22		6		101	2	10		
69	Gidarbaha		5,178	89	58	138	26.65				55	8	20		
70	Guruhar Sahai		430	27	27	54	125:58	**	1		12	1	5		
71	Jalalabad		3,833	129	118	247	64-44	**	9		61	5	22		
0 9	LAHORE DISTRICT	2.												1	
72	Lahore		257,295	5,666	5,063	10,734	41.72	119	89		2,550	611	1,829	5	1
73	Chunian		7,642	145	139	284	37-16				175	7	44		
74	Khudian		3,344	85	77	162	48-44				46	5	17		
75	Kasur		31,018	843	739	1,582	51.00	1	4		407	30	117	2	
76	Khem Karan		6,152	183	154	337	54-78		6		127	1	20		
77	Patti		10,439	275	291	566	54.22				163	7	52		
78	Baghbanpura-Bhogiwal		10,251	221	255	476	46-43	31			179	5	47		
79	Ichhra		3,584	101	68	169	47-15	3			27	5	16		
80	Pattoki Mandi		3,836	102	114	216	56.31		2		55		3		
81	Kot Rai Buta Mal and Azamabad.		3,191	30	31	61	19-12				2				
82	Niaz Beg		2,960	42	39	81	27:36		1		44		2		
83	Padhana		4,606	105	89	194	42.12				53	15	6		
84	Sur Singh		5,674	149	131	280	49.35				45	- 6	23	1	
= 1	AMRITSAR DISTRIC	T.						-					30.5		
85	Amritsar		157,031	4,393	3,817	8,210	52+28	15	45		2,464	. 115	2,151	11	2
86	Majitha		5,664	158	131	289	51.02	2	1		90	6	24		
87	Jandiala		7,464	210	193	403	53.99	17	18		128	14	20		
88	Tarn Taran		5,988	206	137	343	57.28	2			58	7	22		
89	Ram Dass		3,553	123	116	239	67 - 27		1		112	2	7		
90	Sultan Wind		5,572	139	143	282	50.61				88	6	36		
41 15	GURDASPUR DIS	3-					113 14	1 37					1000	-	
91	Gurdaspur		8,906	209	174	383	43.00	1	13.79		108		1 33	1	13
92	Dina Nagar		4,047	132	137	269	66-47	1 119			1000	9	20	**	
93	Pathankot		7,353	174	205	379	51.54	1	1	**	81	5	10	::	
94	Dalhousie		1,457	21	205	42	28-83	1000			131	14	31		
93	Batala		26,122	773	780	1,536	58-80				-50	4	13		*
98	Dera Nanak		4,333	117	102	219	50.51	1000			516	24	66		
10			4,000	***	102	219	55.01				77	7	10	1	

No. VI-B (TOWNS)—continued.
TOWNS OF THE PUNJAB DURING THE YEAR 1930.

					1	1				and the second						
	11	4-0		12	13		1			1	4					15
INJURI	ES.				uses.				RATIO OF	DEATHS P	ER 1,000 c	OF POPULA	TION.			1
ceidents.	killed ts.				om all ca			-	1	peu	diseases.		١.	From a	ll causes.	
Wounds and accidents.	Snake-bite and killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths from all causes.	Cholera.	Small-pox.	Palgue.	Fevers.	Dysentery Diarrhova.	Respiratory d	Injuries.	All other causes.	For the year.	Mean ratio of previous five years.	Number.
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
			-						-	-						-
1													a men	ACUSTION OF THE PERSON OF THE		
6	1		6	137	301		0:09		12.81	0.95	6.17	0.09	8.44	28.56	30.44	65
1				102	533 369		1.66		19:31	1.01	6.22	0.43	9.91	38.54	32.80	66
2			2	11	132		2:55	1111	13.50	0.22	2.83	0.22	7.21	26.09	20.35	67
4			4	32	119		0.07		10.62	1.54	3.86	0.22	6.18	14.80	8-30	68
1			1	10	30		2:33		27.91	2.33	11.63	2.33	23 - 26	69.77	Not	70
3			3	86	186		2.35		15.91	1.30	5.74	0.78	22.44	48.53	avail-	71
1												1 2000	205535	OWA, PER		
114	3	3	126	2,794	8,118	0.46	0.35		9-91	2.37	7.11	0.49	10.86	31.55	31.86	72
7			7	83	316				22.90	0.92	5.76	0.92	10.86	41.35	37-11	73
				20	88		2		13.76	1.50	5.08		5.98	26.32	43.96	74
13			15	258	832	0.03	0.13		13.12	0.97	3.77	0.48	8-32	26*82	33-57	75
1		3.	1	49	204		0.98		20.64	0.16	3.25	0.16	7.96	33.16	34-10	76
2			2	103	327		10.00	217"	15-61	0.67	4.98	0.19	9.87	31.32	32.72	77
3	1	ŧ	4	60	326	3.02	11.20		17.46	0.49	4.58	0.39	5.85	31.80	33.66	78
1		9	1	16	68	0.84	1100		7.53	1.40	4.46	0.28	4.46	18-97	14-12	79
		1		18	78	**	0.52		14.34	13.13	0.78		4.69	20.33	32.48	80
		1	110	2	4		18.000	110	0.63		TITLE		0.63	1.25	9	81
				4	51	1.	0.34	111.	14.86	10	0.68		1.35	17:23	available.	82
1			1	17	92		10.0		11.51	3.26	1.30	0:22	3.69	19-97	Not av	83
2			3	59	136			PO	7.93	1.06	4:05	0:53	10.40	23-97	J ×	84
1. 19		4	00				entra :	1	111	101	BH.	100		chalend	o vit	
109		3	125	1,054	5,969	0.09	0.29		15.69	0.73	13.70	0.80	6.71	38.01	42.61	85
2	1		3	30	156	0.35	0.18		15.89	1.06	4.24	0.53	5.30	27.54	37.78	86
				32	229	2.28	2.41		17.15	1.88	2.68		4.29	30.68	32.90	87
2			2	28	119	0.33			9.69	1.17	3.67	0.33	4.68	19.87	21.04	88
1			1	5	128		0.28		31.52	0.56	1.97	0.28	1.41	36.03	Not	89
1		1	2	41	173			-1.	15.79	1.08	6.46	0.36	7.36	31.05	able.	90
100		-	1 14		1	1 47	10.90		100	THE	6,11				2	
2			2	54-	194	0-11	100		12-13	1.01	2:25	0.22	6-06	21-78	26-97	91
1			1	42	140		0-25		20.01	1.24	2:46	0.25	10-38	34.59	50-01	92
7			7	93	277	0.14			17.82	1.90	4.22	0.95	12.65	37-67	44-96	93
				8	32				4.80	2.75	8.92		5-49	21.96	18:94	94
6			6	160	772				19.75	0.92	2.53	0.23	6.13	29.55	37.67	95
3	2	0	6	30	130		20133		17.77	1.62	2.31	1.38	6.92	30.00	28.48	96
-	_		-	-		The second									8.	B. C.

ANNUAL FORM

# DEATHS FROM DIFFERENT CAUSES AND BIRTHS REGISTERED IN THE

1		2		3					.5	6	7	8	9	10		
Ti				9		Вівт	ns.						į.	-22		
Number.	To	WNS.		Population according Census of 1921.	, Males.	Females.	Total.	Birth rate per 1,000 of population.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhora.	Respitratory diseases.	Males. 53	cid Committee
1		2		3	4	5	6	7	8	9	10	11	12	13	14	1
	GURDAS TRICT—C	SPUR D	IS.													
97	Dhariwal			3,351	96	87	183	54.61		2		43	14	19		I
98	Sujanpur			4,756	92	104	196	41.21				74	6	22		1
99	Narot			2,095	58	. 50	108	51.55				33	8	10		l
100	Fathegarh			4,559	114	104	218	47.82		16		62	6	6		l
101	Qadian			4,448	117	107	224	50.36	1			66	2	11		ı
102	Sri Gobindp	ur		2,971	79	58	137	46-11		15		49	2	9		ı
	SILAKOT	DISTR	ICT.							1			130	-	1	ı
103	Sailkot			56,018	1,742	1,609	3,351	59.82		6	6	761	127	513	1	۱
104	Baska			6,283	25	24	49	7.80				8	1	2		ı
105	Jamke			3,621	101	81	182	50.26	5			43	2	27		ı
106	Pasrur			6,909	212	169	381	55.15	1	5		67	12	52		ı
107	Zaffarwal			3,873	89	70	159	41.05				18	4	31		ı
108	Narowal			5,343	160	155	315	58-96		7		87	14	34		ı
109	Sambrial			3,324	66	53	119	35.80		1		23	1	2		1
110	Sahowala			3,410	79	82	161	47-21		5		39	3	12		١
111	Begowala			3,697	111	95	206	55.72		3		44	6	10		١
112	Bhopalwala			3,767	123	83	206	54-69		1		25	1	9		1
113	Mitranwali			3,177	88	66	154	48-47				55	1	. 12		ı
114	Badomali			2,849	66	46	112	39-31	11	7		35	6	5		ı
115	Kalaswala			2,846	57	72	129	45.33			1.	28	8	17		ı
116	Daud			3,285	58	47	105	31.96		1		41	1	2	1	ı
117	Chawinda			4,979	139	118	257	51-62		15		45	8	59	1	1
	GUJRANY		IS-											1		ı
118	Gujranwala	RICT.		37,887	1,044	826	1,870	49.36	5	10		741	51	150		1
119	Wazirabad			18,645	416	335	751	40.28	36	8		168	3	60	1	1
120	Eminabad			5,816	137	113	250	42.98	4			97	3	5	1:.	
121	Kila Didar			2,544	75	57	132	51.89				9		12	1	1
122	Akalgarh			5,147	105	118	223	43.33	1			85	7	20		۱
123	Ramnagar			4,632	86	58	144	31.09	1	1		90	1	17		1
124	Sohdra			4,250	117	98	215	50.59		7		50		6		1
125	Hafizabad			8,854	181	167	348	39.30		14		153	2	36		
126	Pindi Bhati			3,845	86	58	144	37-45				73		10		
	SHEIKHU			TAN-	90				4	173		3 8	1	19.3		
127	Khangah D	ogran		5,201	40	26	66	12.69				26		1		
128	Sangla			5,961	98	86	184	30.87	4			41		6		
129	Sharakpur			4,127	115	99	214	51.85	2			63	10	18	1	1

No. VI-B (TOWNS)-CONTINUED.

#### TOWNS OF THE PUNJAB DURING THE YEAR 1930.

1	n			12	13	1				14						15
INJURE	es.		-		uses.			RATIO	OF DEATH	es per 1,00	00 of Pop	ULATION.				I
ents.	Bed				all ca					and	909			From al	l causes.	
Wounds and accidents.	Snake-bite and killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths from all causes.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery Diarrhes.	Respiratory diseases.	Injuries.	All other causes.	For the year.	Mean ratio of previous five years.	Number.
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
			7	4												-
2			2	52	132		0.60		12.83	4.18	5-67	0.60	15.52	39.39	1	97
				50	152				15.56	1.26	4.63		10.51	31.96	9	98
1			1	35	87				15.75	3.82	4.77	0.48	16.71	41.53	Not available.	99
				27	117		3.51		13.60	1.32	1.32		5.92	25.66	ot av	100
2			2	18	100	0.22			14.84	0.45	. 2.47	0.45	4.05	22.48	×	101
1		1	2	20	97		5.05		16.50	0.67	3.03	0.67	6.73	32.65	)	102
17		1	19	344	1,776		0.11	0.11	13.58	2-27	9-16	0.34	6-14	31.70	35.37	103
- 1			1	2	14				1.27	0.16	0.32	0.16	0.32	2.23	17-19	104
2			- 2	7	86	1.38			11.88	0.55	7-46	0.55	1.93	23.75	26.51	105
3			3	50	190	0.14	0.72		9.70	1.74	7.53	0.43	7.24	27.50	27.76	106
1			1	19	73				4.65	1.03	8.00	0.26	4.91	18.85	27-47	107
3			3	36	181		1.31		16.28	2.62	6.36	0.56	6.74	33.88	33-28	108
1			1	1	29		0.30		6.92	0.30	0.60	0.30	0.30	8.72	21.00	
1			1	14	74		1.47		11.44	0.88	3.52	0.29	4.11	21.71	16.13	1
	. 1		1	8	72 50	2.5	0.81		6.64	0.27	2.70	0.27	2·16 3·45	19.48	20.12	
1		**	1	22	91				17:31	0.31	3.78	0.31	6.93	28.64	34.69	
1			1	10	75	3.86	2.46		12-29	2-11	1.75	0.35	3.51	26.33	19:59	1
				24	77				9.84	2.81	5.97		8-43	27.06	26.87	115
				13	58		0.30		12.48	0.30	0.61		3.96	17.66	20.64	116
2			2	21	150		3.01		9.04	1.61	11.85	0.40	4.22	30.13	27.48	117
				100											TO BE	-
23	. 1		24	363	1,344	0.13	0.26		19.56	1.35	3.96	0.63	9.58	35.47	36.75	1
6			6	89	370	1.93	0.43	**	9.01	0.16	3.22	0.32	4.77	19.84	21.90	119
2			2	11	122	0.70			16·68 3·54	0.52	0·86 4·72	0.34	1-89	20.98	26.41	
1	130	**	2	19	167	0.19			16.51	1.36	3.89	0.39	10-10	32.45	26.35	122
3	1.0		3	33	146	0.22	0.22		19-43	0.22	3.67	0.65	7-12	31.52	28.89	123
	1			17	80		1.65		11.76		1.41		4.00	18.82	25.18	124
5			5	32	242		1.58		17.28	0.23	4.07	0.56	3.61	27.33	18-91	125
1			1	18	102	R			18.99		2.60	0.26	4.68	26.53	23.04	126
.,	5			100	100		BE S									
	***			3	30				5.00		0.19		0.58	5.77	6.31	127
1	1		1	6	58	0.67			6.88		1.01	0.17	1.01	9.73	4.70	128
2			2	58	153	0.48			15.27	2.42	4.36	0.48	14.05	37:07	32-37	129

ANNUAL FORM

### DEATHS FROM DIFFERENT CAUSES AND BIRTHS REGISTERED IN THE

1	2	3		4			5	6	.7	8	9	10	14	
		3	110011	BIRTH	ıs.									
Number.	Towns.	Population according Census of 1921.	Males.	Females.	Total.	Birth rate per 1,000 of population.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhora.	Respiratory diseases.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
130	SHEIKHUPURA DIS- TRICT—concluded.	1,545	48	33	81	52.43		1	#I.	30		2		
131	Chuharkana Mandi	3,847	55	45	100	26.00				13	1	7		
132	Nankana Sahib	11,733	138	134	272	23.18		7		57	2	8		
133	Shahdara	4,998	122	88	210	42.02		4		58	1	12		
134	Sheikhupura	3,487	120	80	200	57:36		1		27	3	10		
	GUJRAT DISTRICT.	1.00		9		483		19			3			
135	Colort	21,974	640	609	1,249	56.84	17			393	41	124	1	
136	Jalalpur	10,792	258	246	504	46.70		5		153	10	72		
137	Kunjah	7,240	163	155	318	43.92		9		88	5	34	1	
138	Dinga	6,014	101	99	200	33.26				63	6	11		
139	Kharian	2,949	70	84	154	52.32	0.10	1		46	6	18		
140	Malkwal	4,717	54.	65	119	25.23				111	1	21		
141	Lalamusa	2,311	71	56	127	54.95				56	2	10		
	SHAHPUR DISTRICT.	2 1 /2	1 12	196		1								
142	Shahpur	4,590	73	67	140	30.50				73	13	38		
143	Sahiwal	6,582	118	115	233	35-40				137	3	56		
144	Bhera	17,027	269	279	548	32.18	10			365	38	136		
145	Miani	5,965	108	72	180	30.18		1		152	1	39		
146	Khushab	10,009	201	204	405	40.46		1		146	30	70	1	
147	Sargodha	17,728	349	294	643	36.27	2	4		83	40	82		
148	Shahpur Civil Station	2,481	35	32	67	27.01				14	5	70		
149	Bhalwal	4,082	48	68	116	28-42				29	8	23		
150	Nurpur	5,117	104	74	178	34.79				54	3	16		
151	Silanwali	2,205	44	28	72	32-65				14	2	15		
691	JHELUM DISTRICT.	100	1	10						111				
152	Jhelum	14,422	292	284	576	39-94		3		90	17	80		
153	Pind Dadan Khan	9,919	171	151	322	32.46		3		171	12	38	1	
154	Chakwal	7,425	136	139	275	37.04		1		80	6	27		
	RAWALPINDI DIS- TRICT.	12 10				1				1	-			
155	Rawalpindi	55,251	1,342	1,290	2,632	47-64	10	2		757	87	430	1	1
156	Murree	2,397	25	23	48	20.03				20	1	8		
	ATTOCK DISTRICT.		7											
157	Pindigheb	9,419	187	138	325	34-50				136	3	35		
158	Hazro	8,408	181	135	316	37.58	3	16		103	3	41		
159	Campbellpur	3,669	107	74	181	49.33		1		21	3	12	1	
-				-		-		-		-			-	

No. VI-B ((TOWNS)—continued.

### TOWNS OF THE PUNJAB DURING THE YEAR 1930.

-									-				-		1	_
	11			12	13					14				-		15
[SJURII	4		1		ఠ			RATIO	OF DEATH	S PER 1,00	0 of Popu	LATION.			70	
lents.	killed				from					and	diseases.			From all	causes.	
Wounds and accidents.	Snake-bite and killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths causes.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery Diarrhova.	Respiratory dis	Injuries.	All other causes.	For the year.	Mean ratio of previous five years.	Number.
- X	Sn	-8	T	- F	<u> </u>	5	S	H	Fe	O D	. N	- E	P	- E	W	×
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
	1 14			4	37		0.65	- 311	19:42		1:29		2.59	23.95	24.21	130
				17	38		0 00		3.38	0.26	1.82		4.42	9.90	12.28	131
				23	97		0.60		4.86	0.17	0.68		1.96	8:27	9:07	132
7.				30	105		0.80		11.60	0.50	2.40		6:00	21.01	Not	133
				12	53		0.29		7.74	0.86	2.87		3.44	15.20	avail-	134
100	. 104									100				17 1 32	1 × 1	1111
6	01		7	157	739	0.77			17.88	1.87	5.64	0.35	7.14	33.63	32.22	135
4			4	86	330		0.46		14.18	0.93	6.67	0.37	7.97	30.28	31.36	136
1		1	3	58	197		1.24		12:15	0.69	4.70	0.41	8.01	27.21	30.91	137
1			1	15	96		00		10.48	1.00	1.83	0.17	2:49	15.96	17:06	138
1			1	22	94		0.34		15.60	2.03	6.10	0.34	7:46	31.88	1	139
2			2	21	156				23.23	0.51	4.45	0.42	4.45	33.07	Not avail-	140
2			2	3	73		15		24.23	0.87	4.33	0.87	1.30	31.29	able.	141
				Tre.				-	10.	(6)					The second	
				10	145			10	15:00	0.02	0.00	0.45	4.14	31.20	28.71	142
3	. 18	**	2	19	145			11.	20.81	2.83	8.28	0.46	2.73	32 -97	34 '67	143
6	1		7	146	702	0.59	11		21.44	2.53	7.99	0.41	8.57	41.53	34 '76	144
1	. 101	1	2	6	201		0.17		25.48	0.17	6:54	0.34	1.01	33.70	33.53	145
5	1		6	35	288		0.10		14.59	3.00	6.99	0.60	3.20	28.77	10000	146
5	100		5	51	267	0.11	0.53		4.68	2.26	4.63	0.28	2.88	15.06	14.03	147
	0.00			8	97				5.64	2.02	28 · 21		3.22	39.10	1	148
5	. DI		5	13	78		***		7.10	1.96	5.63	1 .22	3.18	19.11	Not	149
	1		1	9	83	12.	13	(8)	10.55	0.59	3.13	0.50	1.76	16.22	able.	150
2		1	3	7	41				6.32	0.91	6.80	1.36	3:17	18:59	J	151
	. 20			SOLA"			. 6	11 0	0			1,65	1,3		THE ME	- 111
6	00		6	97	293		0.21		6.24	1.18	5.22	0.42	6.73	20.32	25 45	152
2			3	27	254		0.30		17:24	1 .21	3.83	0.30	2.72	25.61	29:40	153
6			6	42	162	1	0.13	· / 6 6	10.77	0.81	3.64	0.81	5.66	21:82	25:56	154
	- 01			10			11 8	n t	1 8	3	1			1000	3	101
24	20	1000	26	431	1,743	0.18	0.04	M	13.70	1.57	7.78	0.47	7.80	31 .55	29.38	155
100	. 0		20	7	36		2.	19.11	8:34	0.42	3.34		2.92	15.02	14.10	156
*				1		1	1 2	-27 2	1	- 0			32		11 11	1
5	. 3		5	12	191		*		14:44	0.35	3.72	0.23	1.27	20.28	23.78	157
1	1.0		1	39	206	0.36	1-90	'	12-25	0.36	4.88	0.12	4.64	24.50	24.90	158
17	8		18	20	75		0.27		5.72	0.85	3.27	4.91	5.45	20.44	14 45	159
No.																_

ANNUAL FORM

### DEATHS FROM DIFFERENT CAUSES AND BIRTHS REGISTERED IN THE

1	2		3					5	6	7	8	9	10	-	
			3		BIRT	ns.			1			i	-	-	
Number.	Towns.		Population accoding Census of 1921.	Males.	Females.	Total.	Birth rate per 1,000 of population.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhoes.	Respiratory diseases.	Males.	Females.
1	2		3	4	5	6	7	8	9	10	11	12	13	14	15
	MIANWALI DIS	TRICT.													
160	Mianwali		9,115	248	201	449	49.26		1		99	1	24		
161	Bhakkar		6,193	99	95	194	31 · 33		7		105	14	37		
162	Isa Khel		6,172	116	90	206	33.38	88	1		109	1	23		
163	Kalabagh		8,455	151	124	275	32.53	36		4.	130	2	11		
	MONTGOMERY TRICT.	DIS-													
164	Montgomery		14,601	193	178	371	25.41		14		. 80	13	46		
165	Kamalia		8,916	228	190	418	46.88		2		192	11	10		1
166	Pakpattan		7,218	176	190	366	50.71		1		245		19		
167	Okara		4,975	110	77	187	37.59		2		27	4	15	1	
168	Chichawatni		2,100	43	35	78	37.14				24		8		
169	Arafwala		1,000	39	38	77	77.00		1		23	1	9		
511	LYALLPUR DIS	STRICT.					1/1	- 1	1						
170	Lyallpur		28,136	526	474	1,000	35.54	1	7	0.1	497	17	132		1
171	Gojra		7,622	134	110	244	32.01				78	1	25		
172	Samundri		1,575	38	40	78	49.52				.38	4	2		
173	Tandlianwala		3,674	98	81	179	48.72	2			38	4	9		
174	Chak Jhumera		3,340	65	74	139	41.62				46	2	5		
175	Toba Tek Singh		5,041	67	59	126	25.00				39	1	4		
176	Jaranwala		4,244	77	82	159	37.46				73	6	16		
89.0	JHANG DISTR	ICT.	10 to		- 17	411		4							
177	Jhang-Maghiana		30,139	717	657	1,374	45.59		8		365	56	160	1	
178	Chiniot		17,513	450	455	905	51.68	1			292	27	.95		
179	Ahmadpur	dia.	4,045	64	65	129	31.89				43		13		
180	Shorkot		5,317	130	129	259	48.71				114	2	18		**
10.0	MULTAN DIST	RICT.	M44 10		1 10		=			1			10		
181	Multan		89,162	1,934	1,935	3,869	43.39	1	62		1,156	284	991		
182	Shujabad	110	6,730	123	116	239	35 · 51	1			117	18	50		
183	Jahanian	H	822	15	4	19	23.11				6		1		
184	Mian Channu	400.	2,294	39	45	84	36.62		1	1	51	·	12		
185	Khanewal		5,647	55	56	111	19.66	21	1		45	9	15		
186	Kahror		6,039	117	79	196	32.46		1		58	7	33		
187	Kabirwala		1,245	19	18	37	29.72		11		33	2	5		
188	Burewala		1,231	10	8	18	14.62				9	1			
189	Talamba		3,048	93	83	176	57.74		1		44	3	5		
190	Mailsi		2,002	34	23	57	28.47		5		19	2	8		
191	Vehari		113	1		1	8.85				3		3		
-										1.00	- Control	101		1	

No. VI-B (TOWNS)—continued.

TOWNS OF THE PUNJAB DURING THE YEAR 1930.

-				DOMING							-			-		
1	1	-		12	13			10000	-	14	L				-	15
INJURD	es.				Auses.			RATIO	OF DEATH	S PER 1,00	00 of Popu	LATION.				
dents.	illed				all co			,		pue	ases.			From all	causes.	
Wounds and accidents.	Snake-bite and killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths from all causes.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery an Diarhora.	Respiratory diseases.	Injuries.	All other causes.	For the year.	Mean ration of previous five years.	Number.
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1			1	33	159		0-11		10.86	0.11	2-63	0.11	3.62	17-44	15.05	160
				29	192		1.13		16.95	2.26	5.97		4.68	31.00	36-59	161
1			1	39	262	14.26	0.16		17.66	0.16	3.73	0.16	6.32	42.45	23.95	162
3			3	26	208	4.26		-	15.38	0.24	1.30	0.35	3.08	24.60	25-17	163
		1							1		lone!	1 3	15		- (4)	
6			6	38	197		0.96		5.48	0.89	3-15	0.41	2.60	13-49	11.90	164
3	1		5	85	305		0.22		21.53	1.23	1.12	0.56	9:53	34.21	31.07	165
				33	298		0.14	**	33.94		2.63		4.57	41 - 29	44.78	166
6			7	11	66		0.40		5.43	0.80	3.02	1.41	2.21	13.27	21.83	167
				4	36				11.43		3.81	**	1.90	17-14	Not avail-	168
				8	42		1.00		23.00	1.00	9.00		8.00	42.00	J able.	169
12			13	202	869	0.04	0.25		17-66	0.60	4.69	0.46	7-18	30.89	14.16	170
2			2	36	142				10.23	0.13	3.28	0.26	4.72	18-63	13.80	171
				1	45				24.13	2.54	1.27		0.63	28.57	34.67	172
	**			7	60	0.54			10.34	1.09	2.45		1.91	16-33	1 4	173
1			1	14	68				13.77	0.60	1.50	0.30	4.19	20.36	available.	174
.:				4	48				7.74	0.20	0.79		0.79	9.52	Not a	175
				35	130				17.20	. 1.41	3.77		8.25	30.63	1 "	176
1	To it	342.2	10	216	817	a mari	0.27		12-11	1.86	5.31	0.40	7-17	27-11	28.02	177
10	4		12	193	622	0.06	0.27		16.67	1.54	5.42	0.80	11.02	35.52	33.62	+
4	10000		4	13	73				10.63		3.21	0.99	3.21	18.05	24.38	
2		1	3	30	167				21.44	0.38	3-39	0.56	5-64	31-41	Not avail- able.	180
85			85	538	3,117	0.01	0.70		12.97	- 3-19	11-11	0.95	6.03	34.96	34.73	181
2			2	41	229	0.15			17.38	2.67	7-43	0.30	6:09	34.03	35.39	182
					7				7.30		1.22			8.52	7.54	183
			•••	14	78		0.44		22 - 23		5.23		6-10	34-00	12.38	184
				6	97	3.72	0.18		7.97	1.59	2.66		1.06	17.18	10.48	185
2			2	15	116		0.17	**	9-60	1.16	5-46	0.33	2.48	19-21		186
1			1	11	63		8.84		26.51	1.61	4.02	0.80	8.84	50.60	able.	187
					10		0.99		7-31	0.81	1.64	0.33	5.25	8.12	Not available.	188
1		**	1	16	70 52		0·33 2·50		9-49	1.00	4.00	0.33	8.99	25.97	Not	190
		* **			6				26-55	1.00	26.55			53.10		191
1									20 00						1	

ANNUAL FORM
DEATHS FROM DIFFERENT CAUSES AND BIRTHS REGISTERED IN THE

1	2		3		4			5	6	7	8	9	10		
			٤	1	Bir	THS.						· e		ar.	
Number.	Towns.		Population according Census of 1921.	Males.	Females.	Total.	Birth rate per 1,000 of population.	Cholera,	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhose.	Respiratory diseases.	Males.	ció
1	2		3	4	5	6	7	8	9	10	- 11	12	13	14	
	MUZAFFARGA TRICT.	ARH DI	3.												-
192	Mugaffargarh		5,38	86 82	71	153	28-41				111	7	16		ı
193	Khangarh		3,18	4 44	47	91	28.58				97	9	13		ı
194	Alipur		3,45	4 83	81	164	47.76		1		105	6	27		ı
195	Leiah		8,4	6 170	162	332	39-17		2		283	6	24		ı
196	Karor		3,50	9 61	46	107	30-23				147	. 1	2		ı
197	Kot Adu	et 18	5,26	86	70	156	29-62		1.00		103		8		ı
198	Khairpur Saada	to is	2,4	7 36	34	70	28-26				35	7	6		١
	DERA GHAZI DISTRI	KHAN CT.	1 10		I de sal		Marin 2				13	13		**	
199	Dera Ghazi Kha	n	20,7	31 429	394	823	39-70				340	52	35		ı
200	Jampur		7,3	7 165	174	339	46.33				141	15	32		ı
201	Dajal		5,7	15 136	143	279	48:31				170	13	38		ı
202	Rajanpur		3,9	86	77	163	41-12				187	4	35	1	ı
203	Kot Mithan		3,20	14 51	40	91	28-40				127	9	9		ı
204	Kot Chhutta		2,43	31 55	34	89	36-61				81	2	20		
205	Vahoea		. 2,4	88 45	52	97	38-99	3			99	19	3		
206	Taunsa		5,5	33 82	65	147	26-57		4		96	1	3		
	Total		2,240,2	86 52,095	47,125	99,220	44.29	700	1,138	12	30,829	3,425	13,211	36	-
	Total of the Pro	vince	20,517,6	06 469,771	417,750	887,521	43-26	1,181	5,341	554	422,377	12,247	51,678	143	ĺ

No. VI-B (TOWNS)—concluded.

TOWNS OF THE PUNJAB DURING THE YEAR 1930.

4	11			12	13					14				1000		14
URIE		* 1			rnsce.	THE R	100	RATE	O OF DEAT	ня рев 1,0	00 of Pot	ULATION.	les ing	dental to		
dents.	killed	-			n all ca					and	ases.			From all	саньев.	
Wounds and accidents	Snake-bite and killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths from all causes.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery Diarrhou.	Respiratory diseases.	Injuries.	All other causes.	For the year.	Mean ratio of previous five years.	Number.
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	3
8	10	1		- 1				1			1				The same	
				. 9	143				20.61	1:30	2.97		1.67	26.55	24-43	1
.				11	130				30.46	2.83	4.08		3.45	40.83	42.15	1
				. 15	154		0.29		30.58	1.75	7.86		4.37	44.85	33.84	
3	1	1	5	24	344		0.24		33 - 39	0.71	2.83	0.59	2.83	40.59	29.47	
				7	157				41.54	0.28	0.57		1.98	44.36	38.60	
3			3	1	115				19.56		1.52	0.57	0.19	21.83	15.68	
:	:			13	61				14-13	2.83	2.42		5.25	24.63	Not avail- able.	000
3			3	124	554				16.41	2.51	1.69	0.14	5.98	26.73	24.20	1
2			2	64	254				19.27	2.05	4.37	0.27	8.75	34.71	34.36	ı
1			1	49	271				29.44	2.25	6.58	0.17	8.48	46.93	43.74	1
			1	43	270				47-17	1.01	8.83	0.25	10.85	68.12	35.37	1
				38	183				39.64	2.81	2.81		11.86	57.12	32.83	-
	1		- 1	37	141				33.32	0.82	8.23	0.41	15.22	58.00	1.	
	1		1	16	141	1.21			39.79	7.64	1.21	0.40	6.43	56-67	Not	
2	1		3	4	111		0.72		17:35	0.18	0.54	0.54	0.72	20.06	able.	
755	24	16	838	18,012	68,165	0.31	0.51	0.01	13.76	1.53	5.90	0.37	8.04	30.43	30-19	-
,135	626	07	6,103	109,101	608,582	0.06	0.26	: 0.03	20.59	0.60	2.52	0.30	5.32	29.66	29.48	-

ANNUAL FORM No. VI-C.

BIRTHS AND DEATHS REGISTERED IN THE CANTONMENTS OF THE PUNJAB DURING THE YEAR 1930.

							XXX	civ														
		Number,	20	1	01	60	4	10	9	. 7	00	6	10	=	27	13	11	15	16	11	18	
ndod	lo 000,	Ratio of births per 1	19	38	27	119	53	120	99	19	44	57	16	40	30	31	13	21	90	10	10	59
oq1	gaisub	Total births registered year.	18	1,386	87	35	36	13	87	170	825	334	65	40	133	023	19	208	75	*	99	4,073
-ndo	d to on	Ratio of deaths per 1,0 lation,	17	22	31	65	62	12	17	16	23	18	16	30	10	18	11	11	,	60	00	19
		Total deaths from all can		5885	86	17	35	13	01	145	929	262	16	85	36	130	91	292	15	60	49	2,709
-				234	53	1-	-	01	01	19	24	20 02	6	- 1	1.	26	*	06		-	-	700
		All other causes.	15		-			-			01	1		9		_		01	-	-	01	76
		LesoT	11	:	26	:	:	:	:				:	9	:	:	-		:	:		
ES.	bliw y	Snake-bite and killed by beasts.	13	:	20	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	ă
INJURIES		Wounds and accidents.	12	:	01	:	:	:	:	1	01	-	:	9	:	:	:	-	:	:	09	12
	Science.	Females.	=	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
	Scie	Males.	10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	-	:	:	:	1
		Respiratory diseases.	6	230	:	10	:	:	:	-	22	:	65	:	:	:	:	103	9	:	10	375
	.,	Dysentery and Diarrhoea	00	않	-	.00	9	:	-	10	56	10	;	-	:	6	01	-	:	:	0.9	100
		Fevers.	7	382	18	8	18	69	19	98	531	101	7	1-	8	98	10	98	6	60	88	1,471
		Plague,	9	:	:	:	;	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
		Smallpox,	9	60	. :	-	;	:	:	-	-	:	:	:	:	-	:	:	:	:	:	1-
		Cholera.	4	1	:	:	:	:	:	:	:	9	:	:	:	63		:	:	:	:	01
jo sn	to Cens	Population according 1921.	60	36,356	3,212	1,745	1,581	1,064	1,318	9,019	18,941	14,606	976	816	3,430	7,123	1,500	27,657	4,190	874	060'9	140,630
				:	:	:	:	:		:	:	:	:	:	:	:	:	:	:	:	:	:
				:	:	:		:	:	:	:	:	:	:	:	:	:	:	:	:	:	7
		EN 15.																				Total
		CANTONMENTS.	G8	:	:	:		:	:	:		:	:	:	:	:			:	:	:	
				:	:	:	:	:	:	:	:	:	:	:	:	:	:	:		:	:	
				Ambala	Kasauli	Dagshai	Subathu	Jutogh	Dharmsala	Jullandur	Ferozepore	Labore	Amritaar	Dalhousie	Bakloh	Sinlkot	Jhelum	Rawalpindi	Campbellpur	Murree	Multan	
3			1	1 An	2 K	3 De	Su	5 Ju	6 Di	7 30	8 Fe	9 La	10 Az	II Do	12 Be	13 Si	14 Jh	15 Ra	16 Cs	17 M	18 M	
		Number	-	1											7.7		-	1	1	- 10	9.54	

ANNUAL FORM No. VII. DEATHS REGISTERED FROM CHOLERA IN THE DISTRICTS OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1930.

ANNUAL FORM

### DEATHS REGISTERED FROM CHOLERA IN THE DISTRICT?

1	2		3	4							5
			OF REGIS-	VILLA	GES.						Мов
Number.	DISTRICTS.	Number in each district.	Number from which deaths from Cholera were reported.	Number in each district.	Number from which deaths from Cholera were reported.	January.	February.	March.	April.	Мау.	June.
1	2	3	4	5	6	7	8	9	10	11	12
1	AMBALA DIVISION.	20	3	960	,			1			
2	D. 1. 1	28	6	722	1	**				**	
3	Gurgaon	20	1	1,351	1				1		
4	17	23	5	1,390		.,					11
5		24	6	1,714	7	**					.:
6		20	1	208					1	1	1
	JULLUNDUR	3		200	**	**				1	
	DIVISION.		1	119 5.07	MAIN	TATY	Tab				1000
7	Kangra	19	2	709	2					1	A3/2.
8	Hoshiarpur	26	10	2,108	51		1			5	
9	Juliundur	17	12	1,221	14						19
10	Ludhiana	15	1	840							
11	Ferozepore	31		1,497							
	LAHORE					-					-
10	DIVISION.								1000		
12	Lahore	36	15	1,117	24		1				3
13	Amritsar	19	13	1,035	32	**		2		4	4
14	Gurdaspur	29	6	2,246	3						
15	Sialkot	28	5	2,053	4		٠				
16	Gujranwala	22	7	1,212	7			1	1	1	
17	Sheikhupura  RAWALPINDI DIVISION.	22	4	1,212	2						••
18	Gujrat	21	1	1,436							
19	Shahpur	27	2	985					2		1 12
20	Jhelum	15	2	888	2					2	
21	Rawalpindi	14	10	1,170	19				1	10	2
22	Attock	14	3	618	6				No.		19182
23	Mianwali	16	4	375	3						27
	MULTAN DIVISION.										
24	Montgomery	30	3	1,833	4						
25	Lyallpur	24	5	969	5						26
26	Jhang	15	1	981							
27	Multan	31	7	1,641	3					4	19
28	Muzaffargarh	25		848							
29	Dera Ghazi Khan	25	1	713							
	Total	639	136	34,052	194		2	3	6	29	112
-					-					- Same	

No. VII. OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1930.

0							6			7		8	9
rus.						a man	TOTAL.		PEI	O OF DEA B 1,000 O PULATION	F	previous	
July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.	Mean ratio per 1,000 for previous five years.	Number.
13	14	15	16	17	18	19	20	21	22	23	24	25	26
15 1 2 	28 22  2 5  1 156 73	26 18  3 9 		N		43 25 8 4 19 1	26 18 3 1 2 	69 43 11 5 21 1 2 216 102	0·10 0·06 0·02 0·01 0·05 0·03 0·01 0·22 0·15	0·07 0·05 0:01 0·003 0·01 	0·08 0·06 0·02 0·01 0·03 0·02 0·02 0·23 0·13	0·12 0·08 0·23 0·07 0·13 0·004 0·38 0·08	3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
01	1 11	- A	1	1		1 11	2	1 13	0.003	0.004	0.01	0.19	1
5	124 24 3 13 18 3	48 37 6 5 35	5 1	2 1 5	1	126 51 6 13 28 5	67 28 3 10 28 3	193 79 9 23 56 8	0·20 0·10 0·01 0·03 0·08 0·01	0·14 . 0·07 . 0·01 . 0·03 . 0·10 . 0·01	0·17 0·09 0·01 0·03 0·09 0·01	0.83 0.21 0.08 0.06 0.06 0.09	1 1 1 1 1 1 1
17 17 11	9 6 1 16 18	8 2  5 9	  			8 4 1 32 16 62	9 8 2 30 13 68	17 12 3 62 29 130	0·02 0·01 0·004 0·11 0·06 0·33	0·02 0·02 0·01 0·12 0·05 0·40	0·02 0·02 0·01 0·11 0·06 0·36	0.08 0.25 0.19 0.05 0.01 0.06	1 1 2 2 2 2 2 2
2 ····································	1 2	 11 	1	# 		23  20	19 1 6	4 42 1 26	0·01 0·04  0·04	0.05 0.004 0.02	0·01 0·04 0·002 0·03	0·18 0·14 0·07 0·02 0·02	St. M. M. M. M. M.
3						1	2	3	0.003	0.01	0.01	0.002	-
83	543	367	23	11	2	690	491	1,181	0.06	0.05	0.06	0.18	

ANNUAL FORM

### DEATHS REGISTERED FROM SMALLPOX IN THE DISTRICTS

1	2		:	3	4								5
	1 1980			CLES OF TRATION.	VILL	AGES.							Mon
Number.	Districts.	The second secon	Number in each district.	Number from which deaths from small- pox were reported.	Number in each district.	Number from which deaths from small- pox were reported.	January.	February.	March.	April.	May.	June.	July.
1	2		3	4	5	6	7	8	9	10	11	12	13
	AMBALA DIVISION								1				
1	Hissar		28	28	960	650	52	59	45	60	61	83	31
2	Rohtak		20	17	722	35	41	22	33	46	56	43	11
3	Gurgaon		23	20	1,351	87	15	41	69	93	60	33	6
4	Karnal		24	14	1,390	20	21	1	5	17	69	39	2
5	Ambala		20	18	1,714	82	19	23	31	30	53	51	17
6	Simla		3	1	208				2	3	3		1
	JULLUNDUR DIVISION.												
-	The second secon	(0)	10		709		1	2				9	
8	Kangra		19	9 21	2,108	19	118	42	2	- 5	7	105	60
9	Hoshiarpur Jullundur		26 17	14	1,221	306	23	13	37	69	130	7	18
10	r . n		15	12	840	40 45	59	.21	5	10	13	27	13
11	Ferozepore		31	26	1,497	1,015	39	40	20 42	29 65	22	97	70
			31		2,,,,,	1,010			42	65	134		
	LAHORE DIVISION							3.0					
12	Lahore		36	26	1,117	265	41	26	30	49	71	66	55
13	Amritsar		19	16	1,035	76	34	112	15	16	20	25	22
14	Gurdaspur		29	20	2,246	67	22	.15	23	11	25	28	8
15	Sialkot	**	28	22	2,053	127	13	21	11	17	40	26	15
16	Gujranwala		22	15	1,212	14	8	5	12	15	15	20 5	16
11	Sheikhupura RAWALPINDI		22	17	1,212	29					7	9	10
	DIVISION.												
18	Gujrat		21	17	1,436	199	28	31	25	38	38	44	27
19	Shahpur		27	12	985	33	30	4	3	5	6	8	4
20	Jhelum		15	14	888	4.8	35	21	11	14	15	21	19
21	Rawalpindi		14	8	1,170	15		7	1	3	3	6	1
22	Attock		14	8	618	20	20	4	3	1		1	11
23	Mianwali		16	8	375	7		1	1		4	3	5
	MULTAN DIVISION		3.1				0.0		The second	Hamil			100
24	Montgomery	16	30	27	1,833	83	28	21	21	21	44	25	30
25 96	Lyallpur	**	24	14	969	32	1	1	5	12	22		11
26 27	Jhang		15	6	981	10	2				3	6	1 22
28		**	25	25	848	67	1	5	6	8	26	19	33
29	Muzaffargarh Dera Ghazi Khan		25	7	713	8		1	***	2		1	
	- Committee Committee	0.0	20	1	713				**	4			1
	Total .		639	445	34,052	3,401	675	472	458	643	947	798	492
_						9,101	1999		100	010	021	1	1

No. VIII.

OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1930.

TOTAL.    November of Personal Properties   Personal Properties	0						6		7	-		8		9	10
14         15         16         17         18         19         20         21         22         23         24         25         26         27           10         24         3         6         9         238         205         443         161         213         0-55         0-54         0-54         0-64         0-65           6         2         3         4         3         150         111         270         81         154         0-38         0-31         0-49         0-47         0-00           2            133         94         73         167         54         70         0-21         0-19         0-20         0-22           5         4         2          6         125         116         241         47         105         0-35         0-41         0-22         0-22           2         5         2         1          20         16         36         3         4         0-05         0-04         0-05         0-12           2         5         2         1          20         16         36	ns,						TOTAL.		DEATHS	AMONG	P1	ER 1,000 OF		r previous	
10  24  3  6  9  238  205  443  161  213  0·55  0·54  0·54  0·65  6  2  3  4  3  159  111  270  81  154  0·38  0·31  0·35  0·19  2    166  153  319  90  191  0·45  0·49  0·47  0·68  1   13  94  73  167  54  70  0·21  0·19  0·20  0·22  0·25      166  125  116  241  47  105  0·35  0·41  0·38  0·23    1  1  7  2  9  1  1  1  0·25  0·15  0·22  0·24    1	August.	September.	October.	November.	December.	Males.	Fomales.	Total.	Under one year,		Males.	Females.	Total.	Mean ratio per 1,000 for five years.	Number.
6 2 3 4 3 159 111 270 81 154 0·38 0·31 0·35 0·19 2 166 153 319 00 191 0·45 0·49 0·47 0·08 13 94 73 167 54 70 0·21 0·19 0·20 0·22 5 4 2 6 125 116 241 47 105 0·35 0·41 0·38 0·23 7 2 9 1 1 1 0·25 0·15 0·22 0·24 1 2 5 2 1 20 16 36 3 4 0·05 0·35 0·41 0·38 0·23 1 2 2 5 2 1 20 16 36 3 4 0·05 0·44 0·05 0·44 0·05 0·14 2 2 3 8 20 10 21 370 307 677 222 279 0·74 0·72 0·73 0·91 8 4 4 8 33 60 113 25 53 0·12 0·17 0·14 0·26 2 7 1 7 12 126 94 220 65 106 0·40 0·38 0·39 0·45 18 20 14 7 20 235 271 566 171 307 0·49 0·56 0·52 0·37 1 2 2 1 2 2 1 1 2 31 113 96 209 58 122 0·24 0·24 0·24 0·24 0·24 0·38 0·39 10 4 3 3 9 17 05 92 187 52 92 0·18 0·22 0·20 0·48 6 5 5 5 2 79 71 150 39 62 0·17 0·19 0·18 0·27 11 2 12 31 13 96 209 58 122 0·24 0·24 0·24 0·24 0·24 0·24 0·38 8 7 1 2 12 31 40 71 22 40 0·09 0·14 0·19 0·18 0·27 11 2 12 31 40 71 22 40 0·09 0·14 0·11 0·63 1 3 33 30 63 16 32 0·08 0·09 0·09 0·78 3 33 30 63 16 32 0·08 0·09 0·09 0·78 3 33 30 63 16 32 0·08 0·09 0·09 0·78 3 33 30 63 16 32 0·08 0·09 0·09 0·78 3 33 30 63 16 32 0·08 0·09 0·09 0·78 3 33 30 63 16 32 0·08 0·09 0·09 0·78 3 33 30 63 16 32 0·08 0·09 0·09 0·78 3 33 30 63 16 32 0·08 0·09 0·09 0·78 3 33 30 63 16 32 0·08 0·09 0·09 0·78 3 33 30 63 16 32 0·08 0·09 0·09 0·78 3 33 30 63 16 32 0·08 0·09 0·09 0·78 3 33 30 63 16 32 0·08 0·09 0·09 0·78 3 33 30 63 16 32 0·08 0·09 0·09 0·78 3 33 30 63 16 32 0·08 0·09 0·09 0·09 0·78 3 33 30 63 16 32 0·08 0·09 0·09 0·09 0·78 3 33 30 63 16 32 0·08 0·09 0·09 0·09 0·78 3 33 30 63 16 32 0·08 0·09 0·09 0·09 0·78 3 33 30 63 16 32 0·08 0·09 0·09 0·09 0·78 3	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
6 2 3 4 3 150 111 270 81 154 0·38 0·31 0·35 0·19 2 166 153 319 90 191 0·45 0·49 0·47 0·08 13 94 73 167 54 70 0·21 0·19 0·20 0·22 5 4 2 6 125 116 241 47 105 0·35 0·41 0·38 0·23 7 2 9 1 1 1 0·25 0·15 0·22 0·24 1 2 5 2 1 20 16 36 3 4 0·05 0·44 0·05 0·44 0·05 0·14 27 38 20 10 21 370 307 677 222 279 0·74 0·72 0·73 0·91 8 4 4 8 33 60 113 25 53 0·12 0·17 0·14 0·26 2 7 1 7 12 126 94 220 65 106 0·40 0·38 0·39 0·45 18 20 14 7 20 235 271 566 171 307 0·49 0·56 0·52 0·37 1 2 0·37 1 12 12 31 13 96 209 58 122 0·24 0·24 0·24 0·24 0·24 0·38 0·39 10 4 3 9 17 05 92 187 52 92 0·18 0·22 0·20 0·48 6 5 5 2 79 71 150 39 62 0·17 0·19 0·18 0·27 11 2 12 31 13 96 209 58 122 0·24 0·24 0·24 0·24 0·24 0·24 0·24 0·															T
2            166         153         319         90         191         0·45         0·49         0·47         0·08              13         94         73         167         54         70         0·21         0·19         0·20         0·22           5         4         2          6         125         116         241         47         105         0·35         0·41         0·38         0·23                7         2         9         1         1         0·25         0·15         0·22         0·24           2         5         2         1          20         16         36         3         4         0·05         0·04         0·05         0·14           27         38         20         10         21         370         307         677         222         279         0·74         0·72         0·73         0·91           18         4          4         8         53         60         113         25         53         0·12	10	24	3	6	9	238	205	443	161	213	0.55	0.24	0.54	0.65	1
	6	2	3	4	3	159	m	270	81	154	0.38	0.31	0.35	0.19	2
5         4         2          6         125         116         241         47         105         0·35         0·41         0·38         0·23                7         2         9         1         1         0·25         0·15         0·22         0·24           2         5         2         1          20         16         36         3         4         0·05         0·04         0·05         0·14           27         38         20         10         21         370         307         677         222         279         0·74         0·72         0·73         0·91           8         4          4         8         53         60         113         25         53         0·12         0·17         0·14         0·20           18         20         14         7         20         295         271         566         171         307         0·49         0·56         0·52         0·37           26         14         8         17         20         231         192         423         96	2		***			166	153	319	90	191	0.45	0.49	0.47	0.08	3
2         5         2         1           7         2         9         1         1         0·25         0·15         0·22         0·24           2         5         2         1          20         16         36         3         4         0·05         0·04         0·05         0·14           27         38         20         10         21         370         307         677         222         279         0·74         0·72         0·73         0·91           8         4          4         8         53         60         113         25         53         0·12         0·17         0·14         0·26           2         7         1         7         12         126         94         220         65         106         0·12         0·17         0·14         0·26           18         20         14         7         20         231         192         423         96         252         0·36         0·40         0·38         0·93           10         4         3         9         17         95 92         187         52         92		**	1.44	1.	13	1000	100000			10000			10001120111	111223463	4
2 5 2 1 20 16 36 3 4 0.05 0.04 0.05 0.04 1.27 38 20 10 21 370 307 677 222 279 0.74 0.72 0.73 0.91 8 4 4 8 53 60 113 25 53 0.12 0.17 0.14 0.26 2 7 1 7 12 126 94 220 65 106 0.40 0.38 0.39 0.45 18 20 14 7 20 295 271 566 171 307 0.49 0.56 0.52 0.37 18 20 14 8 17 20 231 192 423 96 252 0.36 0.40 0.38 0.39 0.45 10 4 3 9 17 95 92 187 52 92 0.18 0.22 0.20 0.48 6 5 5 5 2 79 71 150 39 62 0.17 0.19 0.18 0.27 11 2 1 12 31 113 96 209 58 122 0.24 0.24 0.24 0.24 0.54 3 1 3 5 73 63 136 41 78 0.21 0.23 0.22 0.68 8 7 1 2 12 31 40 71 22 40 0.00 0.14 0.11 0.63 13 33 30 63 16 32 0.08 0.09 0.09 0.09 0.78 3 33 30 63 16 32 0.08 0.09 0.09 0.09 0.78 3 33 30 63 16 32 0.08 0.09 0.09 0.09 0.78 3 33 30 63 16 32 0.08 0.09 0.09 0.09 0.09 0.78 3 33 30 63 16 32 0.08 0.09 0.09 0.09 0.09 0.78 3 33 30 63 16 32 0.08 0.09 0.09 0.09 0.78 3 33 30 63 16 32 0.08 0.09 0.09 0.09 0.09 0.78 3 33 30 63 16 32 0.08 0.09 0.09 0.09 0.09 0.78 3 33 30 63 16 32 0.08 0.09 0.09 0.09 0.09 0.78 3 33 30 63 16 32 0.08 0.09 0.09 0.09 0.09 0.78 3 33 30 63 16 32 0.08 0.09 0.09 0.09 0.09 0.78 3 33 30 63 16 32 0.08 0.09 0.09 0.09 0.09 0.78 3 33 30 63 16 32 0.08 0.09 0.09 0.09 0.09 0.08 0.47 4 34 12 246 31 15 0.05 0.08 0.09 0.08 0.47 1 1 1 9 7 16 5 9 0.05 0.06 0.03 0.03 0.05 0.04 0.04 0.22 15 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	. 5	4	2		6										1
2         5         2         1          20         16         36         3         4         0.05         0.04         0.05         0.14           27         38         20         10         21         370         307         677         222         279         0.74         0.72         0.73         0.91           8         4          4         8         53         60         113         25         53         0.12         0.17         0.14         0.26           2         7         1         7         12         126         94         220         65         106         0.40         0.38         0.39         0.45           18         20         14         7         20         231         192         423         96         252         0.36         0.40         0.38         0.93           10         4         3         9         17         95         92         187         52         92         0.18         0.22         0.20         0.48           6         5         5          2         79         71         150         39         62 <td></td> <td></td> <td></td> <td></td> <td></td> <td>7</td> <td>2</td> <td>9</td> <td>1</td> <td>1</td> <td>0.52</td> <td>0.12</td> <td>0.22</td> <td>0.24</td> <td>  '</td>						7	2	9	1	1	0.52	0.12	0.22	0.24	'
27			18	100						31	1			I Hall	
8       4        4       8       53       60       113       25       53       0·12       0·17       0·14       0·26         2       7       1       7       12       126       94       220       65       106       0·40       0·38       0·39       0·45         18       20       14       7       20       295       271       566       171       307       0·49       0·56       0·52       0·37         26       14       8       17       20       231       192       423       96       252       0·36       0·40       0·38       0·93         10       4       3       9       17       95       92       187       52       92       0·18       0·22       0·20       0·48         6       5       5        2       79       71       150       39       62       0·17       0·19       0·18       0·27         11       2       1       12       31       113       96       209       58       122       0·24       0·24       0·24       0·54         3       1        3	2	5	2	1	The state of									100000	
2         7         1         7         12         126         94         220         65         106         0·40         0·38         0·39         0·45           18         20         14         7         20         295         271         566         171         307         0·49         0·56         0·52         0·37           26         14         8         17         20         231         192         423         96         252         0·36         0·40         0·38         0·93           10         4         3         9         17         95         92         187         52         92         0·18         0·22         0·20         0·48           6         5         5          2         79         71         150         39         62         0·17         0·19         0·18         0·27           11         2         1         12         31         113         96         209         58         122         0·24         0·24         0·24         0·54           3         1           3         13         4         7         0·24 <td< td=""><td></td><td>11</td><td>. 20</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>100000</td><td>31</td></td<>		11	. 20											100000	31
18         20         14         7         20         295         271         566         171         307         0·49         0·56         0·52         0·37           26         14         8         17         20         231         192         423         96         252         0·36         0·40         0·38         0·93           10         4         3         9         17         95         92         187         52         92         0·18         0·22         0·20         0·48           6         5         5          2         79         71         150         39         62         0·17         0·19         0·18         0·27           11         2         1         12         31         113         96         209         58         122         0·24         <			1000	0.50					100				100000		10
26		-			1990			100					(6)77.7		11
10	10	20	14			200					- 11		0.02		100
10								420		252	0.00	0.40	way he	0.02	1:
6 5 5 5 2 79 71 150 39 62 0·17 0·19 0·18 0·27 11 2 1 12 31 113 96 209 58 122 0·24 0·24 0·24 0·24 0·54 3 1 3 5 73 63 136 41 78 0·21 0·23 0·22 0·68 8 7 1 2 12 31 40 71 22 40 0·09 0·14 0·11 0·63 14 17 12 12 15 52 153 152 305 80 178 0·35 0·39 0·37 0·73 15 15 15 15 15 15 15 15 15 15 15 15 15		1000	110000		397				10	1000					1:
11				3188811	198			(18)		- 1000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				1
3       1        3       5       73       63       136       41       78       0·21       0·23       0·22       0·68         8       7       1       2       12       31       40       71       22       40       0·09       0·14       0·11       0·63         4       1       2       15       52       153       152       305       80       178       0·35       0·39       0·37       0·73         3           33       30       63       16       32       0·08       0·09       0·09       0·78         3        4       3       6       68       84       152       41       95       0·28       0·36       0·32       0·50         2          5       14       14       28       9       12       0·05       0·06       0·05       0·28           3        21       22       43       16       25       0·08       0·09       0·08       0·47          1       1			1			10000		1330			100000			0.54	14
4       1       2       15       52       153       152       305       80       178       0·35       0·39       0·37       0·73         3           .3       30       63       16       32       0·08       0·09       0·09       0·78         3        4       3       6       68       84       152       41       95       0·28       0·36       0·32       0·50         2          5       14       14       28       9       12       0·05       0·06       0·05       0·28           3        21       22       43       16       25       0·08       0·09       0·08       0·47          1       1         9       7       16       5       9       0·05       0·04       0·04       0·22         18       10       7       9       9       120       123       243       54       149       0·31       0·38       0·34       1·27             4<							63	136	41	78	0.21	0.23	.0.0	0.68	10
4       1       2       15       52       153       152       305       80       178       0·35       0·39       0·37       0·73         3           33       30       63       16       32       0·08       0·09       0·09       0·78         3        4       3       6       68       84       152       41       95       0·28       0·36       0·32       0·50         2          5       14       14       28       9       12       0·05       0·06       0·05       0·28           3        21       22       43       16       25       0·08       0·09       0·08       0·47          1       1         9       7       16       5       9       0·05       0·04       0·04       0·22         18       10       7       9       9       120       123       243       54       149       0·31       0·38       0·34       1·27             4<	. 8	7	1	2	12	31	40	71	22	40	0.09	0.14	0.11	0.63	1
4       1       2       15       52       153       152       305       80       178       0·35       0·39       0·37       0·73         3           33       30       63       16       32       0·08       0·09       0·09       0·78         3        4       3       6       68       84       152       41       95       0·28       0·36       0·32       0·50         2          5       14       14       28       9       12       0·05       0·06       0·05       0·28           3        21       22       43       16       25       0·08       0·09       0·08       0·47          1       1         9       7       16       5       9       0·05       0·04       0·04       0·22         18       10       7       9       9       120       123       243       54       149       0·31       0·38       0·34       1·27             4<		1 1											and the same		
3          33       30       63       16       32       0.08       0.09       0.09       0.78         3        4       3       6       68       84       152       41       95       0.28       0.36       0.32       0.50         2          5       14       14       28       9       12       0.05       0.06       0.05       0.28           3        21       22       43       16       25       0.08       0.09       0.08       0.47          1       1         9       7       16       5       9       0.05       0.04       0.04       0.22         18       10       7       9       9       120       123       243       54       149       0.31       0.38       0.34       1.27            4       34       12       46       31       15       0.07       0.03       0.05       0.69         2        1       2       2       9       9	4	1	2	15	52	1 130	152	305	80	178	0.35	0.39	0.37	0.73	1
3        4       3       6       68       84       152       41       95       0·28       0·36       0·32       0·50         2          5       14       14       28       9       12       0·05       0·06       0·05       0·28            3        21       22       43       16       25       0·08       0·09       0·08       0·47          1       1         9       7       16       5       9       0·05       0·04       0·04       0·22         18       10       7       9       9       120       123       243       54       149       0·31       0·38       0·34       1·27             4       34       12       46       31       15       0·07       0·03       0·03       0·05       0·69         2        1       2       2       9       9       18       7       10       0·03       0·03       0·03       0·26         12       5       9			100			33	30	63	16	32	0.08	0.09	0.09	0.78	1
3      21     22     43     16     25     0.08     0.09     0.08     0.47        1     1       9     7     16     5     9     0.05     0.04     0.04     0.02       18     10     7     9     9     120     123     243     54     149     0.31     0.38     0.34     1.27          4     34     12     46     31     15     0.07     0.03     0.05     0.69       2      1     2     2     9     9     18     7     10     0.03     0.03     0.03     0.05       12     5     9     17     31     74     99     173     38     113     0.15     0.25     0.20     0.41        1       1     4     5     1     2     0.003     0.02     0.01     0.30       4      2     1      7     5     12      9     0.03     0.02     0.03     0.05	. 3		1000	. 3	6	68	84	152	41	95	0.28	0.36	0.32	0.20	20
18     10     7     9     9     120     123     243     54     149     0·31     0·38     0·34     1·27          4     34     12     46     31     15     0·07     0·03     0·05     0·69       2      1     2     2     9     9     18     7     10     0·03     0·03     0·03     0·26       12     5     9     17     31     74     99     173     38     113     0·15     0·25     0·20     0·41        1       1     4     5     1     2     0·03     0·02     0·01     0·30       4      2     1      7     5     12      9     0·03     0·02     0·03     0·50	. 2	,.			5	14	1000	28	100	4000	43.00		100000000000000000000000000000000000000	100000000000000000000000000000000000000	2
18     10     7     9     9     120     123     243     54     149     0·31     0·38     0·34     1·27          4     34     12     46     31     15     0·07     0·03     0·05     0·69       2      1     2     2     9     9     18     7     10     0·03     0·03     0·03     0·03     0·26       12     5     9     17     31     74     99     173     38     113     0·15     0·25     0·20     0·41        1       1     4     5     1     2     0·03     0·02     0·01     0·30       4      2     1      7     5     12      9     0·03     0·02     0·03     0·50				3		1				100	33.2	100000000000000000000000000000000000000	100	10000	2:
18	***	1	1		**	9	7	16	9	9	0.05	0.04	0.01	0.22	-
15 4 34 12 46 31 15 0.07 0.03 0.05 0.69  2 1 2 2 9 9 18 7 10 0.03 0.03 0.03 0.26  12 5 9 17 31 74 99 173 38 113 0.15 0.25 0.20 0.41  1 1 4 5 1 2 0.003 0.02 0.01 0.30  4 2 1 7 5 12 9 0.03 0.02 0.03 0.50	10	10	7	9	9.	120	123	243	54	149	0.31	0.38	0.34	1.27	2
2 1 2 2 9 9 18 7 10 0·03 0·03 0·03 0·03 0·26 12 5 9 17 31 74 99 173 38 113 0·15 0·25 0·20 0·41 1 1 4 5 1 2 0·003 0·02 0·01 0·30 4 2 1 7 5 12 9 0·03 0·02 0·03 0·50		1		12.77	1193	233	1 1 1 1 1 1 1 1	1	100	- 1	300.00			5553	2
12 5 9 17 31 74 99 173 38 113 0·15 0·25 0·20 0·41 1 4 5 1 2 0·003 0·02 0·01 0·30 4 2 1 7 5 12 9 0·03 0·02 0·03 0·50					35.0	9	9	18	7	10	0.03	0.03	0.03	0.26	2
4 2 1 7 5 12 9 0.03 0.02 0.03 0.50			1 100	17	31	74	99	173	38	113	0.12	0.25	0.20		2
4 2		1				1	4	5	1	2		19 10	100	Maria Maria	2
	. 4		2	1		7	5	12		9	0.03	0.02	0.03	0.50	2
192 155 89 132 288 2,818 2,523 5,341 1,526 2,778 0.25 0.27 0.26 0.50	-	-			288	2,818	2,523	5,341	1,526	2,778	0.25	0.27	0.26	0.50	

ANNUAL FORM

#### DEATHS REGISTERED FROM PLAGUE IN THE DISTRICTS

-01								8	+				
1		2			3		4						5
	1			Circ c REGIST	F	VILI	LAGES,	7				3	IONTHS,
Number.	Service Pro-	DISTRICTS.	Total Control of the	Number in each district.	Number from which deaths from Plague were reported.	Number in each district.	Number from which deaths from Plague were reported.	January.	February.	March.	April.	May.	June.
1		2		3	4	5	6	7	. 8	9	10	11	12
1							2						
-	AMBA	ALA DIVIS	ION.	-								199	
1	Hissar			28		960		**					
2	Rohtak			20	2	722	2		**	1		1	
3	Gurgaon			23		1,351							
4	Karnal	-201-0	44-0	24	1	1,390	4				12		
5	Ambala			20		1,714		.,					
6	Simla			3		208							
*	JULLU	NDUR DIV	ISION.	100						1		6	
7	Kangra	60.0	31/0.	19		709							1.
8	Hoshiarpu	E 112000	1100.	26	2	2,108	10				6	18	340
9	Jullundur	10.0	Militare.	17		1,221			**		**	100	***
10	Ludhiana	21.0	30/3**	15		840	1						11
11	Ferozepore			31		1,497							
21	LAHO	ORE DIVIS	ION.	48.10	1								
12	Lahore			36		1,117					**		
13	Amritsar	100-11		19		1,035	33		1	**	***	65	1
14	Gurdaspur			29	3	2,246	40	2		72	110	88	18
15	Sialkot	**.		28	5	2,053	1 1600	1	4	23	64	100	and the same
16	Gujranwel			22		1,212							
17	Sheikhupu	ra AWALPINI	 VT	22		1,212				***			
	K	DIVISION.	,,,										
18	Gujrat			21		1,436							
19	Shahpur			27		985							• ••
20	Jhelum			15		888		**				***	
21	Rawalpino	li		14		1,170							
22	Attock			14		618			**			***	
23	Mianwali			16		375							
	MUL	TAN DIVIS	ION.	1824	1000	The state of			-				
24	Montgome	ry		30		1,833					.,		
25	Lyallpur			24		969						***	
26	Jhang			15		981						***	
27	Multan	1010		31		1,641							***
28	Muzaffarge			25		848		"				**	7.0
29	Dera Ghaz	i Khan		25		713				••	**	***	
	60-0	Total	1374	639	13	34,052	89	3	5	96	192	172	19
		20101								-			

No. IX-A.

OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1930.

Total   Ratio of Deather   Fire 1,000 of   F	-0.00	-			-		1	6			7		8	9
13	arma .	density and	70940	allies	1	on Doctor	-	ott, ment	- product	P	TO OF DE	ATHS		_
13	ly.	gust.	ptember.	tober.	vember.	rember.	les.	nales.	al.				un ratio per 1,000 for pr ve years.	Number.
					-				-	-	-		-	THE REAL PROPERTY.
	10	14	10	16	17	18	19	20	21	22	23	24	25	26
		1 8	- 1 =		0					-		- 101110	000	
									1.			- min	3.68	1
				4.5			1	1	2	0.002	0.002		6.63	2
			"		3.								2.71	3
							4	8	12	0.01	0.02	0.01	7.90	4
													2.52	5
		17												6
												alerra	000	
					**		1000	1000	*0.00	1 22 3		STORES OF	Rudoc I	7
			***			39	25	38	63	0.05	0.09	1000	1000	8
							1 1						1.01	9
	10.			**									double	10
					**								1.27	11
		-											1.50	
							1000		30.			12 110	100	12
													32	13
				1 199		30		1883	1000				1 1 1	15
						46.	1 1	1000	1 70				mosts of	16
							1 100	1		-		10.00		17
		-		1			1 1	11	1111	. 1		Arres	STATE I	9
		100	. I w									Lit band by		0
	Utto	00.55	21 55 078	12.01	1152		11	**	300		***			18
	**	1 1000	. "	**				**			**			19
				**		.,		**				**		20
		100		**				**						21
		1	-	11811		177		1000000	1 330		10000	1000		22
	1		- "	**	200			***				**	And the second	23
					7	The last	1 1		100			-		24
				30		No. of the		1000	1000			Law I		25
		1000000		7200		111118		No.	333			1000	100	26
		1				10000			1000			100000		27
		100	1	1									0.02	28
2 16 40 226 218 554 0:02 0:03 0:03 1:61		30	1 10					The second second					0:001	29
9 16 49 998 318 554 0:02 0:03 0:03 1:61					-			-		-			-	
	12.	01	XI ** 115	2	16	49	236	318	554	0.02	0.03	0.03	1.61	

STATEMEN

# MONTHLY STATEMENT OF PLAGUE OCCURRENCES IN BRITIS

207	the terms of the second		7			MONTH	LY SIA	EMENT	OF PLA	GUE OC	CURREN	CES IN	BRITIS
-		JAN	UARY.	FEBR	UARY.	Mai	вси.	AP	RIL.	М	AY.	Ju	NE.
Serial No.	Districts and Punjab States.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deat hs.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Hissar												
2	Rohtak					1	1			1	1		
3	Gurgaon												
4	Karnal							17	12				
5	Ambala							1					9
6	Simla									***			100
7	Kangra												
8	Hoshiarpur Jullundur							6	6	20	18		
9	The state of the s		**								ï		
10	Ludhiana	00.35		1 -									
12	Lahore												4.
13	Amritsar					1							
14	Gurdaspur		2	30	1	121	72	204	110	65	65		1
15	Sialkot	2	1	11	4	67	23	142	64	124	88	10	18
16	Gujranwala												
17	Sheikhupura												
18	Gujrat												
19	Shahpur												
20	Jhelum												
21	Rawalpindi												
. 22	Attock												
23	Mianwali											.,	
24	Montgomery	**											
25	Lyallpur						/						
26	Jhang												
27	Multan Muzaffargarh								**				
29	Muzaffargarh Dera Ghazi Khan			**	100					***			
51	Total Britaih Districts	2	3	42	5	189							
1	Patiala						96	370	192	210	172	10	19
2	Bahawalpur										de		
3	Jind					1		8	5	6			
	Nabha												
. 5	Kapurthala		[										
6	Sirmoor (Nahan)												
7	Malerkotla			100									
- 8	Faridkot												
9	Pataudi		44										1.
10	Kalsia		**								4		
11	Dujana			100									
12	Nalagarh												
	Total Punjab States							8	5	6			
	GRAND TOTAL	2	3	42	5	189	96	378	197	216	172	10	19

No. IX (b).
DISTRICTS AND PUNJAB STATES IN THE PUNJAB DURING THE YEAR 1930.

JUL	Y.	Aug	UST.	SEPTE	MBER.	Осто	BER,	Nove	MBER.	DECE	MBER.	To	PAL.		1
Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Serial No.	REMARKS.
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
													ATTENTO	1	
												2	2	2	
														3	
												17	12	4	119
												1		5	1112
			**							**				6	- 32
												*****	1000	7	
250.1			**			`				49	39	75	63	8	1 5
227 1				**	15.47	**16		***	AT	10.				9	
221.1					2.5	**				12	**	1		10	1 =
273.1														11	1
231														12	1
61						***	0							13	1 9
						9	2	13	9			442	262	14	
						2		11	7	16	10	385	215	15	1 2
														16	1 8
														17	1 4
										"	**	**		19	0
				1									"	20	1 2
												1.0	uvia :	21	
**				**						88	.,			22	-
										1				23	1.
														24	1
	1													25	100
												1		26	100
	. "		**		**	**					1	1		27	1
													min	28	
													200	29	
1100	***				111.1						40		554	-	
	0				- **	11	2	24	16	65	49	923		1	
***					***					1		1		2	
11.5	1.0							1			1	14	5	3	
185	1.00			**						***				4	
150	***	1 "			200							1		5	
	1						1			**		1		6	1
93	1 1						1	1				1		7	-
550	1			11111			1 "					1	1	8	
1150		"		1000		1			1		1			9	1
	1		10	1885	***						1			10	101
1000	1.			1	***	1					1			11	1
*20.				1		1		1	13.			1	4.	12	
							-					14	5		-
**	10 4. 1	A Comment	20.55			11	2	24	16	65	49	937	559		

ANNUAL FORM

#### DEATHS REGISTERED FROM FEVERS IN THE DISTRICTS

						4						5
The state of	Starte.		0	CLES F RATION.	VILE	AGES.	ed legal	illusti (	Semila	And Is	dia Can	Mon-
190	10 10		riet.	which Fevers	riet.	which Fevers	18	100		191	1 10	- 65
	Districts.		Number in each district.	d. Fe	Number in each district.			1 14				
		- 18	ı eacl	deaths from were reported.	s each	umber from deaths from were reported		-		7		
per.			per it	ber aths	beri	aths re re	ary.	February.	ai			
Number.			Num	Number deaths were r	Num	Number deaths were r	January	Febr	March.	April.	May.	June.
1	2		3	4	5	6	7	8	9	10	- 11	12
	AMBALA DIVISI	ION.	-							- d		-
1	Hissar		28	28	960	785	1,382	1,175	1,443	849	855	1,406
2	Rohtak		20	20	722	722	1,712	1,219	1,155	1,541	1,831	1,583
3	Gurgaon		23	23	1,351	1,351	1,299	984	1,109	1,487	1,649	1,458
4	Karnal		24	24	1,390	1,390	1,236	940	857	972	1,415	1,424
5	Ambala		20	20	1,714	1,714	437	389	351	522	680	748
6	Simla		3	3	208	123	19	8	13	10	.16	10
	JULLUNDUE DIVISION.		100	1850	0	41 3				1		
7	Kangra		19	19	709	709	794	699	704	804	1,032	769
8	Hoshiarpur		26	26	2,108	1,991	1,519	1,093	1,243	1,531	1,968	1,810
9	Jullundur		17	17	1,221	1,159	1,155	1,034	1,072	1,173	1,703	1,521
10	Ludhiana		15	15	840	790	917	675	556	729	807	873
11	Ferozepore		31	31	1,497	1,492	1,609	1,302	1,371	1,483	1,701	1,526
	LAHORE DIVIS	ION.										
12	Lahore		36	36	1,117	1,114	1,558	1,146	1,170	1,253	1,817	1,656
13 .	Amritsar		19	19	1,035	1,035	1,472	1,117	983	1,189	1,827	1,663
14	Gurdaspur		29	29	2,246	2,246	1,340	935	844	1,070	1,434	1,333
15	Sialkot		28	28	2,053	2,053	1,403	1,045	1,031	1,027	1,772	1,417
16	Gujranwala		22	22	1,212	1,212	1,994	1,257	1,088	889	1,594	1,467
17	Sheikhupura		22	22	1,212	1,212	1,309	879	849	888	1,472	1,265
	RAWALPIND DIVISION.	I								-		
18	Gujrat		21	21	1,436	1,436	1,878	1,457	1,267	1,097	1,232	1,282
19	Shahpur		27	27	985	985	2,835	1,816	1,364	1,195	1,295	1,323
20	Jhelum		15	15	888	888	1,326	1,137	927	679	798	725
21	Rawalpindi		14	14	1,170	1,170	1,394	1,058	807	680	813	732
22	Attock		14	14	-618	618	1,811	1,484	1,065	815	710	750
23	Mianwali		16	16	375	375	1,484	1,004	891	715	712	673
- 4	MULTAN DIVISI	ON.	1-	20.00		10					9	1 17
24	Montgomery		30	30	1,833	1,833	1,765	1,314	1,277	1,338	1,544	1,366
25	Lyallpur		24	24	969	969	1,377	1,185	1,134	1,498	2,630	2,085
26	Jhang		15	15	981	942	1,871	1,086	821	792	880	983
27	Multan		31	31	1,641	1,641	2,984	2,275	1,903	1,484	1,825	1,502
28	Muzaffargarh		25	25	848	848	2,445	1,815	1,257	888	1,168	969
29	Dera Ghazi Khan		25	25	713	543	1,824	1,476	1,342	897	801	702
	Total		639	639	34,052	33,346	44,149	33,004	29,894	29,495	37,981	35,021

No. X. OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1930.

*							6			7		8	9
ns.						Australia	Total.	- III	P3	TO OF DE	OF	previous	
July.	August.	Soptember,	October.	November.	December.	Makes.	Females.	Total.	Males.	Pemales.	Total.	Mean ratio per 1,000 for five years.	Number
13	14	15	16	17	18	19	20	21	22	23	24	25	26
										3201	1710.2.	ASTRI.	-
1,101 1,014 986	966 1,222 1,062	1,330 1,545 1,835	1,352 1,525 2,381	1,345 1,440 1,750	1,266 1,207 1,387	7,749 8,949 8,980	6,721 8,045 8,407	14,470 16,994 17,387	17:79 21:44 24:42	17.63 22.67 26.76	17:72 22:01 25:49	19.25 21.80 21.67	1 2 3
842	815	1,312	1,857	1,839	1,994	7,942	7,561	15,503	17:51	20.16	18:71	22.79	4
455	637	. 728	888	671	644	3,698	3,452	7,150	10.24	12:29	11.14	12.98	5
14	13	16	23	6	7	82	73	155	2.97	5:47	3.79	3.85	6
635	776	985	898	811	824	5,160	4,571	9,731	13.13	12:30	12.72	13.49	1
1,410	1,722	2,376	2,248	1,901	1,966	10,903	9,884	20,787	21.86	23.05	22.41	22.04	1
1,336	1,492	1,531	1,557	1,540	1,471	8,493	8,092	16,585	18:87	22.26	50.39	18.88	1
686 1,246	1,439	913	1,011 2,095	985 2,267	857 2,294	5,134	4,544	9,678	16.10	18:27	17:05	16.24	1
1,240	1,455	2,131	2,000	2,207	2,2.74	10,978	9,486	20,464	18:33	19.74	18.96	15 '65	1
1,336	1,644	1,934	1,750	1,673	1,733	9,945	8,725	18,670	15.62	18:17	16:72	14.29	1
1,301	1,759	1,872	1,746	1,698	1,620	9,574	8,673	18,247	18:46	21 -16	19 '65	22.61	1
1,027	1,226	1,727	1,906	1,656	1,551	8,332	7,717	16,049	17.82	20.30	18.93	18:30	1
1,038	1,163	1,481	1,518	1,434	1,360	8,175	7,514	15,689	17:31	18:94	18:06	19:09	1
1,084	1,175	1,544	1,561	1,789	1,716	9,082	8,076	17,158	26.05	29:38	27:52	21.30	1
962	1,056	1,254	1,273	1,298	1,289	7,346	6,448	13,794	20.91	23 - 26	21.95	16.79	1
1,150	1,090	1,221	1,384	1,399	1,538	8,596	7,399	15,995	19.60	19:19	19:41	15:76	10
1,010	977	1,011	1,085	1,355	1,424	8,708	7,982	16,690	22.21	24 '35	23.18	18.96	1
587	573	744	844	907	976	5,324	4,899	10,223	22.14	20 '84	21.50	17.80	2
572	581	694	816	912	1,017	5,344	4,732	10,076	18:28	19.05	18-64	15.75	2
736	636	645	760	1,041	1,247	6,166	5,534	11,700	23.23	22.20	53.03	19.88	2
539	579	678	764	946	1,043	5,305	4,723	10,028	27 -92	28.08	28.00	24.42	2
934	1,173	1,553	1,889	2,152	2,207	9,730	8,782	18,512	24:73	27.41	25.93	18.87	2
1,544	1,791	2,005	1,756	1,802	1,559	10,333	10,033	20,366	19:77	24.28	21.76	17:44	2
1,313	1,104	1,233	1,599	1,914	1,243 2,257	6,218	5,787	12,005	20:35	21.83	21.04	17.65	2
810	764	895	1,276	1,468	1,617	11,462 8,360	9,931 7,012	21,393 15,372	23.65	24.85	24 '20 '	20:35	2
603	470	651	776	927	1,037	6,402	5,104	11,506	24 .87	26.98	24 '53	20.08	2
27,028	29,344	36,646	39,441	40,023	40,351	222,470	199,907	422,377	19.85	21.47	20.59	18:67	

ANNUAL FORM

### DEATHS REGISTERED FROM DYSENTERY AND DIARRHŒA IN THE DISTRICTS

1 Hi 2 Ro 3 Gu 4 Ka 5 An 6 Sin 7 Ka 8 Ho 9 Jul 10 Lu 11 Fer	DISTRICTS.  2 MBALA DIVISI issar ohtak urgaon iarnal	OON.	Number in each district.	Number from which of deaths from Dysen- tery and Diarrhora were reported.	Number in each district.	Number from which of deaths from Dysen- tery and Diarrhora were reported.						Mon
1 AM 1 Hi 2 Ro 3 Gu 4 Ka 5 An 6 Sin 7 Ka 8 Ho 9 Jul 10 Lu 11 Fer	MBALA DIVISI		-		mber in each district.	r from which as from Dysen- and Diarrhora reported.						
AM 1 Hi 2 Ro 3 Gu 4 Ka 5 An 6 Sin 7 Ka 8 Ho 9 Jul 10 Lu 11 Fer	MBALA DIVISI		3	4	_ X	Number deaths tery were r	J anuary.	February.	March.	April.	May.	June.
1 Hi 2 Ro 3 Gu 4 Ka 5 An 6 Sin 7 Ka 8 Ho 9 Jul 10 Lu 11 Fer	ohtak				5	6	. 7	8	9	10	11	12
1 Hi 2 Ro 3 Gu 4 Ka 5 An 6 Sin 7 Ka 8 Ho 9 Jul 10 Lu 11 Fee	ohtak		23									
3 Gu 4 Ka 5 An 6 Sin 7 Ka 8 Ho 9 Jul 10 Lu 11 Fer	urgaon		28	28	960	709	23	10	. 7	28	20	33
4 Ka 5 An 6 Sin 7 Ka 8 Ho 9 Jul 10 Lu 11 Fee			20	20	722	104	36	8	16	19	34	18
5 An 6 Sin 7 Ka 8 Ho 9 Jul 10 Lu 11 Fes	arnal		23	23	1:351	148	25	12	8	16	17	22
7 Ka 8 Ho 9 Jul 10 Lu 11 Fee			24	23	1,390	140	17	17	18	32	59	13
7 Ka 8 Ho 9 Jul 10 Lu 11 Fes	mbala		20	19	1,714	89	10	5	6	17	18	15
8 Ho 9 Jul 10 Lu 11 Fee	JULLUNDUR DIVISION.		3	3	208	24	7	6	1	8	11	14
9 Jul 10 Lu 11 Fer	angra		19	19	709	709	241	172	160	168	204	256
10 Lu 11 Fee	oshiarpur		26	23	2,108	397	16	19	21	45	59	42
11 Fee	allundur		17	17	1,221	104	20	9	8	31	35	34
16 30	udhiana		15	15	840	49	8	6	5	24	38	13
LA	erozepore		31	24	1,497	1,385	31	22	27	34	43	33
La	AHORE DIVISI	ON.			-							
12   La	shore		98	90		200			-	108	150	88
	mricear		36 19	29 19	1,117	85	53	33	46	35	150	27
	urdaspur		29	29	1,035	287	21	21	22	25	54	33
733	alkot		28	28	2,246	297	37	13	9	28	70	25
1000	ujranwala		22	17	2,053	231	14	The same of	10	14	17	14
992	heikhupura		22	16	1,212	18	2	3	3	5	6	3
	RAWALPIND DIVISION.	200	-	10	1,212	18	2	3	3			
1000	ujrat		21	17	1,436	102	13	5	10	15	31	28
	hahpur	**	27	27	985	162	36	21	23	18	39	46
	belum	**	15	15	888	68	5	6	3	9	12	11
	awalpindi	**	14	14	1,170	903	184	155	158	137	130	127
	ttock		14	11	618	30		2	2	5	5	5
100	ianwali		16	13	375	32	4	2	3	2	4	3
	ULTAN DIVIS	ON.							1		4	
750	ontgomery	**	30	26	1,833	41	. 17	12	- 5	4	10	10
	yallpur	**	24	22	969	195	96	49	17	7	32	19
9290	hang		15	14	981	147	23	10	11	9	34	12
7375	ultan	**	31	22	1,641	136	48	17	25	26	21	18
300	uzaffargarh	**	25	21	848	53	15	5	2	2	5	12
29 De	era Ghazi Khan	***	25	23	713	44	47	15	27	7	8	6
-	Total										-	-

No. XI.

OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1930.

							6			7	-	8	9
rus.							TOTAL.	7	PE	O OF DEA	OF.	r previous.	
July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.	Mean ratio per 1,000 for previous five years.	Number.
13	14	15	16	17	-18	19	20	21	22	23	24	25	26
24 17 22 69 17 2	53 57 50 104 13 8	46 52 100 82 29 7	37 47 104 82 29 4	31 34 75 101 23 2	30 24 41 55 25 3	177 209 250 364 108 41	165 153 242 285 99 32	342 362 492 649 207 73	0·41 0·50 0·68 0·80 0·30 1·49	0·43 0·43 0·77 0·76 0·35 2·40	0·42 0·47 0·72 0·78 0·32 1·78	0°39 0°34 0°57 0°40 0°37 1°03	3 4 8
203 39 35 4 23	200 60 47 10 30	226 79 49 23 43	202 71 30 19 66	241 48 31 12 27	192 31 25 21 29	1,163 304 209 106 219	1,302 226 145 77 189	2,465 530 354 183 408	2·96 0·61 0·46 0·33 0·37	3·50 0·53 0·40 0·31 0·39	3·22 0·57 0·44 0·32 0·38	3·80 0·07 0·40 0·44 0·24	10
75 29 33 21 10	81 40 56 68 22	42 49 71 67 19	49 39 94 64 16	44 46 96 55 5	35 26 39 40 6	442 273 308 264 74 27	362 160 252 204 67 29	804 433 560 468 141	0·69 0·53 0·66 0·56 0·21 0·08	0·75 0·39 0·66 0·51 0·24	0·72 0·47 0·66 0·54 0·23	0·80 0·50 0·90 0·52 0·31 0·10	1 1 1 1 1 1
24° 38 12 96 3 13	10 44 19 112 3	6 30 19 142 3	13 32 12 128 6 7	16 35 7 134 2	4 25 9 183 1 5	90 233 68 928 18 36	85 154 56 758 19 24	175 387 124 1,686 37 60	0·21 0·59 0·28 3·17 0·07	0·22 0·47 0·24 3·05 0·08	0·21 0·54 0·26 3·12 0·07 0·17	0·22 0·33 0·30 2·22 0·07	1 1 2 2 2 2 2
5 6 12 37 9	9 13 20 41 18 8	8 18 12 41 23	4 15 14 40 8 13	11 12 14 19 11 13	9 25 7 23 5	64 157 98 187 46 104	40 152 80 169 69 85	104 309 178 356 115 189	0·16 0·30 0·32 0·39 0·15 0·40	0·12 0·37 0·30 0·42 0·27 0·40	0·15 0·33 0·31 0·40 0·20	0·13 0·17 0·47 0·34 0·16 0·30	2 2 2 2 2
897	1,210	1,318	1,249	1,154	936	6,567	5,680	12,247	0.59	0.61	0.60	0.54	

ANNUAL FORM

### DEATHS REGISTERED FROM RESPIRATORY DISEASES IN THE DISTRICTS

01	1 2	-		3	-	4			-			5
	1	OUG.L		CLES OF RATION.	Villa	LAGES.						MONTHS.
Number.	DISTRICTS.		Number in each district.	Number from which deaths from Respi- ratory Diseases were reported.	Number in each district.	Number from which deaths from Respi- ratory Diseases were reported.	January.	February.	March.	April.	May.	June.
1	2		3	4	5	6	7	8	9	10	.11	12
	AMBALA DIVIS	SION.										
1	Hissar	0.0	28	28	960	715	44	61	50	152	147	130
2	Rohtak		20	20	722	597	229	132	149	138	167	170
3	Gurgaon		23	23	1,351	602	290	174	150	120	104	105
4	Karnal	(Text)	24	24	1,390	700	168	96	73	163	226	124
0.5	Ambala	(0.0)	20	20	1,714	1,714	644	469	449	439	615	671
6	Simla	Owel	3	3	208	184	22	9	8	13	23	32
	JULLUNDUI DIVISION.	R										
7	Kangra		19	19	709	709	419	350	345	325	391	452
8	Hoshiarpur	Dec.	26	26	2,108	1,126	207	179	183	149	122	89
9	Jullundur		17	17	1,221	379	199	173	185	153	151	115
10	Ludhiana	· me	15	15	840	126	260	164	124	156	182	33
11	Ferozepore		31	28	1,497	1,415	410	338	304	234	166	130
	LAHORE DIVISION.											
12	Lahore	03.40	36	35	1,117	533	552	346	265	251	248	240
13	Amritsar		19	19	1,035	963	401	290	276	295	345	279
14	Gurdaspur		29	29	2,246	823	292	107	51	46	87	85
15	Sialkot	10.0	28	28	2,053	1,119	395	285	261	209	256	211
16	Gujranwala		22	22	1,212	247	191	109	65	43	38	26
17	Sheikhupura	03.0	22	22	1,212	188	65	38	24	19	25	18
	RAWALPINI DIVISION.	"						1		1		
18	Gujrat		21	21	1,436	621	334	227	177	130	132	• 139
19	Shahpur	1240	27	27	985	531	337	268	181	158	125	88
20	Jhelum	0.00	15	15	888	388	176	137	112	51	62	51
21	Rawalpindi		14	14	1,170	893	362	233	157	136	84	78
22	Attock	***	14 .	14	618	250	103	106	70	38	42	39
23	Mianwali -		16	16	375	83	66	83	32	27	21	25
	MULTAN DIVIS		30	29	1,833	211	127	108	72	56	38	21
24	Montgomery		24	29	969	643	150	150	138	84	100	52
25	Lyallpur	***	15	15	981	617	269	145	137	125	87	65
26	Jhang		31	30	1,641	982	264	254	154	141	127	114
28	Muzaffargarh		25	24	848	141	88	64	38	34	12	27
29.	Dera Ghazi Khan		25	23	713	74	58	53	41	28	19	16
	15 g Total		639	630	34,052	17,574	7,122	5,148	4,271	3,913	4,142	3,625

No. XII.

OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1930.

						-	6			7		8	1
la la	acrob				1000	LINT I	TOTAL.		P	TO OF DE. ER 1,000 OPULATION	OF.	r previous	-
July.	August,	September.	October.	November.	December.	Makes.	Females.	Total.	Males.	Females.	Total.	Mean ratio per 1,000 for previous five years.	
13	14	15	16	17	18	19	20	21	2:2	23	24	25	12
								22		-1			T
80	100	115	71	63	60	563	510	1,073	1-29	1.34	1.31	2-10	
92	98	107	102	217	230	1,017	- 814	1,831	2-44	2.29	2.37	2 · 23	1
91	100	102	158	138	167	943	756	1,699	2.56	2.41	2.49	2.64	-
77	122	73	177	151	45	800	695	1,495	1.76	1.85	1.80	2.12	1
515	446	749	801	865	844	4,034	3,473	7,507	11.18	12.36	11-69	11.67	1
28	35	45	26	18	19	166	112	278	6.01	8.40	6.79	0.47	1
				1955		131				4.4	100	13 1	ı
369	339	393	392	446	401	2,292	2,330	4,622	5.83	6.27	6.04	5.96	ı
88	102	144	151	150	290	1,114	740	1,854	2.23	1.73	2.00	2.61	
118	162	150	130	125	185	1,068	778	1,846	2.37	2.14	2.27	2.35	I
60	72	21	27	56	51	676	530	1,206	2.12	2.13	2.12	2.83	
130	114	107	117	154	221	1,383	1,042	2,425	2.31	2.17	2.25	1.88	
				1550	igi								١
116	186	155	189	263	334	1,808	1,337	3,145	2.84	2.78	2.82	3.35	
302	425	304	354	353	371	2,120	1,875	3,995	4.09	4.57	4.30	4-29	ı
59	57	72	139	213	246	825	629	1,454	1:76	1.65	1.71	5-15	1
179	- 274	243	278	300	315	1,825	1,381	3,206	3.86	3.48	3.69	3.53	1
32	49	32	35	48	121	541	248	789	1:55	0.90	1.27	1.92	1
19	12	17	12	24	50	188	135	323	0.54	0.49	0.51	0.60	1
0012	100	a lag		Will.		880	1 11 12				2011		1
95	60	73	88	91	157	963	740	1,703	2.20	1.92	2.07	2.49	
75	61	68	108	187	366	1,161	861	2,022	2.96	2.63	2.81	1.58	
73	59	43	56	84	127	625	406	1,031	2.60	1.73	2.17	2-22	
77	63	66	72	95	251	887	787	1,674	3.03	3.17	3.10	2.92	
45	25	47	34	48	95	380	312	692	1:45	1.27	1.36	1.46	
19	23	29	26	33	26	232	178	410	1.22	1.06	1.14	1.12	
90	11	11	24	52	72	400	212	612	1.02	0.66	0.86	0.64	
20 35	27	26	47	71	109	518	471	989	0.99	1.14	1.06	0.77	
51	40	48	70	109	187	801	532	1,333	2.62	2.01	2.34	1.82	
95	71	75	99	137	214	1,024	721	1,745	2.11	1.80	1.97	1.36	
15	18	24	13	24	15	225	147	372	0.73	0.57	0.65	0.43	
15	9	20	21	28	39	208	139	347	0.81	0.66	0.74	0.49	1
2,970	3,160	3,359	3,817	4,543	5,608	28,787	22,891	51,678	2.57	2.46	2.52	2.66	

# ANNUAL FORMS

A-VACCINE

STATEMENT No. I .- SHOWING PARTICULARS OF VACCINATION

-	T		lud- and g to	districts	stors ear.	Torus			VAC-	P	RIMARY V	ACCINATIO	N.
			(exc)	of dist	vaccinators ut the year.		S VACCINA		ber of persons vac- each vaccinator.			Successful	
Serial No.	Division.	(a) Districts excluding Municipal towns. (b) Municipal towns.	Population of districts ing Municipal tow Municipal towns acceensus of 1921.	Average population per square mile.	Average number of va employed throughout	Males.	Females.	Total.	Average number of 1 cinated by each va	Total.	Under one year.	One year and under six years.	Total of all ages.
1	2	. 3	4	5	6	7	8	9	10	11	12	13	14
1 2 3 4 5 6		(a) Districts excluding Municipal towns.  Hissar Rohtak Gurgaon Karnal Ambala Simla	730,459 704,735 631,068 747,506 582,974 14,788	157 265 301 265 341 405	11 14 20 14 15	23,352 27,185 35,557 32,067 28,393	15,708 17,246 23,472 19,122 17,145	39,060 44,431 59,029 51,189 45,538 No local	3,551 3,174 2,951 3,656 3,036 staff is	29,011 29,152 22,240 23,809 20,680 employed.	23,818 22,035 15,527 19,501 14,162 Vaccina	4,325 3,890 4,699 2,496 4,485 tion is p	28,235 25,963 20,304 22,249 18,753 erformed
	10	Total	3,411,530		74	146,554	92,693	239,247	3,233	124,892	95,043	19,895	115,504
1 2 3 3 4 4 5 6 6 7 7 8 8 9 9 10 11 12 13 14 15 16 17 7 18 8 20 22 23 24 25 26 27	AMBALA DIVISION.	(b) Municipal towns.  Hissar Hansi Bhiwani Sirsa Rohtak Jhajjar Gohana Bahadurgarh Sonepat Beri Rewari Palwal Ferozpur Hodal Ballabgarh Faridabad Karnal Kaithal Panipat Shahabad Thanesar Ambala Jagadhri Burya* Sadhaura Rupar Simla	21,415 15,425 33,270 16,241 25,240 10,800 5,107 5,955 12,981 7,454 23,129 9,352 4,542 5,854 3,721 4,337 22,845 15,477 27,343 11,329 4,226 28,681 11,544 3,674 7,630 7,606 26,149		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	497 629 489 349 638 467 178 195 382 322 561 234 129 166 87 152 2,848 347 855 428 233 1,344 358 62 614 297 3,075	217 341 491 255 564 237 96 103 289 173 475 289 121 113 72 104 1,152 267 723 228 47,5 228 121 133 328 121 133 328 121 133 328 121 133 134 135 136 136 137 137 138 138 138 138 138 138 138 138 138 138	714 970 980 604 1,202 704 274 298 671 495 1,036 523 250 279 159 256 4,000 614 1,578 656 327 2,386 581 112 945 435 3,628	714 970 980 604 1,202  671  1,036 523  4,000 614 1,578 } 983 2,386 581  945 435 3,628	542 709 974 588 1,202 477 227 522 373 996 414 218 228 142 167 1,081 525 1,454 402 141 1,143 490 112 317 252 450	413 604 741 413 1,152 210 191 207 480 259 870 373 185 202 132 140 674 413 1,223 324 443 31,00 245 200 260	64 35 141 149 34 85 26 8 8 32 62 60 13 5 9 9 9 9 9 124 19 10 168 31 8 8 7 11 11 11 11 11 11 11 11 11	504 641 884 567 1,186 302 221 215 512 390 190 211 141 159 804 496 1,386 344 496 1,25 466 108 258 217 398
		Total of Municipal towns	371,127		17	15,936	8,741	24,677	1,452	14,383	11,426	1,395	13,088
		Total of Ambala Division	3,782,657		91	162,490	101,434	263,924	2,900	139,275	106,469	21,290	128,592
1 2 3 4 5		(a) Districts excluding Municipal towns. Kangra Hoshiarpur Jullundur Ludhiana Ferozepore	761,682 897,772 713,917 489,632 997,561	77 413 568 391 252	13 13 10 12 20	48,607 24,757 23,863 26,290 30,254	32,653 14,653 12,810 16,012 19,500	81,260 39,410 36,673 42,302 49,754	6,251 3,032 3,667 3,525 2,488	23,740 27,816 25,735 19,153 35,575	15,990 19,404 21,520 16,223 29,018	5,799 5,124 1,417 1,851 4,715	21,983 25,307 23,178 18,181 34,094
9		Total	3,860,564		68	153,771	95,628	249,399	3,668	132,019	102,155	18,906	140,710
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	JULLUNDUR DIVISION.	(6) Municipal towns, Dharmsala Hoshiarpur Tanda Urmar. Jullundur Kartarpur Banga Rahon Phillaur* Nurmahal Nakodar* Ludhiana Jagraon Raikot Ferozepore Zira Muktsar Fazilka Moga Abohar Total of Municipal towns	3,065 21,285 8,362 59,085 8,512 5,089 5,947 4,696 6,845 9,434 51,880 17,731 8,379 29,695 4,622 10,539 13,829 14,145 8,916			701 937 167 2,749 180 93 76 150 137 199 1,182 713 298 1,026 419 334 352 820 613	111 587 165 2,562 190 89 98 149 101 175 1,259 799 228 876 176 161 323 561 478	812 1,524 332 5,311 370 182 174 299 238 374 2,441 1,512 526 1,902 595 495 675 1,381 1,091	1,524 1,770 370 370  814 1,512 526 1,902 595 495 675 1,381 1,091	89 827 329 2,697 358 170 149 150 238 345 1,389 1,073 369 1,286 322 301 664 522 1,088	57 609 271 2,072 272 129 143 113 174 277 998 868 333 892 267 232 504 349 786	32 196 34 227 19 16  19 16 28 234 71 25 202 37 53 19 103 296	89 814 305 2,572 303 156 143 137 206 321 1,242 1,050 358 1,149 315 295 541 493 1,088
		Total of Jullundur Division	4,152,620		84	164,917	104,716	269,633	3,210	144,385	111,501	20,533	134,320
_												-17	tion Act

### (vaccination).

### DEPARTMENT.

IN THE PUNJAB PROVINCE DURING THE YEAR 1930-31.

	Re-v	ACCINATION.		PERCENT SUCCESSFO IN WHICE RESULTS KNOW	UL CASES IN THE WERE	vaccinated lation.	PERCENT. UNKNOWS TO TOTAL	CASES .	AVERAGE NUMBER OF SUCCESSPUL NATED DUB VIOUS FIVE	PERSONS LY VACCI- ING PRE-	AVERAGE A NUMBER OF FROM SMAI DURING PRI FIVE YEA	L-POX EVIOUS	
Unknown.	Total.	Successful.	Unknown.	Primary	Revaccination.	Persons successfully vacc per 1,000 of population.	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.	Serial No.
15	16	17	18	19	20	21	22	23	24	25	26	27	28
286 1,408 1,331 1,090 1,369 by the s	10,074 15,539 36,789 27,409 24,858 pecial staff,	7,232 7,668 27,172 17,223 13,807 Punjab.	597 2,815 4,052 4,688 4,960	98-29 93-58 97-11 97-93 97-11	76:31 60:26 83:00 75:80 69:39	48.55 47.72 75.23 52.80 55.85	0.99 4.83 5.98 4.58 6.62	5.93 18.12 11.01 17.10 19.95	25,098 25,497 40,721 35,914 23,700	34·36 36·18 64·53 48·05 40·65	438 137 61 143 132	0·00 0·19 0·10 0·19 0·23 0·07	1 2 3 4 5 6
5,484	114,669	73,102	17,112	96.73	74.93	55.28	4.39	14.92	150,930	44.24	912	0.27	
25 21 37 13 16 168 14 7 2 2 40 0 21 5 11 11 1. 5 17 2 2 3 4 4 5 12 12 12 12 13 16 16 16 16 16 16 16 16 16 16 16 16 16	172 261 6 16 16  229 37 71 151 126 44 109 32 51 17 89 2,922 89 124 254 186 1,243 91  628 183 3,178	142 79 2 14  72 20 30 73 77 6 69 32 44 5 67 510 69 112 67 41 -755 8  479 122 497	20 116  1  80  11 36 15 12 4  4  2 12 319 4 7 7 36 50 10 7  11 12 14  12 12 12 13 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	97-49 93:17 94:34 98:61 100:00 97:11 99:10 97:73 98:46 96:70 98:56 95:35 91:79 98:60 99:30 98:15 88:55 95:20 98:79 90:53 97:56 98:60 96:08 99:08 82:43 91:18 97:07	93·42 54·48 33·33 93·33 48·32 54·05 50·00 63·48 69·37 18·75 65·71 100·00 93·62 33·33 87·01 19·59 81·18 95·73 30·73	30·17 46·68 26·63 35·77 46·99 34·63 47·19 41·14 45·07 53·53 41·81 49·08 43·56 43 43·56 43 43 43 43 43 43 43 43 43 43 43 43 43	10·72 2·11 1·21 5·05 6·14  2·99 16·00 0·76 3·51 5·47 41·84 0·17 1.02 2·68 8 1·26 5·56	11·63 44·44 6·25 34·93 15·49 23·84 11·90 27·27 3·67 13·48 10·92 4·49 5·65 14·17 26·80 7·69 6·53 10·38 56·99	883 556 955 443 1,353 302 179 178 306 252 902 398 194 245 155 190 1,150 885 1,566 455 121 1,893 521 88 292 446 2,454	41 · 23 36 · 05 28 · 70 27 · 28 53 · 61 27 · 96 35 · 05 29 · 89 23 · 57 33 · 81 41 · 59 42 · 56 42 · 71 41 · 85 41 · 66 43 · 81 50 · 34 57 · 27 40 · 16 28 · 63 66 · 23 45 · 13 24 · 62 38 · 27 58 · 64 93 · 85	12 13 13 13 2 3 13 14 11 	3:46 0:97 0:51 1:05 0:24 1:67 0:59  0:13 0:21 0:22 0:68 0:27  0.53 0:84 0:48 0:48 0:48 0:48 0:48 0:49 0:48 0:	1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 100 111 122 133 144 15 166 17 7 17 20 20 21 22 22 22 22 22 22 22 22 22 22 22 22
774	10,309	3,392	2,617	96.17	44 · 10	44141	5.38	25:39	17,422	46.94	245	0.66	_
6,258	124,978	76,494	19,729	96.67	72.68	54122	4.49	15:79	168,352	44.51	1,157	0.31	-
1,733 2,227 1,396 533 986	57,520 11,594 10,990 23,149 14,179	28,969 6,648 4,689 7,147 7,700	13,855 2,227 1,400 5,967 2,616	99.89 98.90 95.23 97.64 98.57	66°34 70°97 48°89 41°60 66°59	66:89 35:59 39:03 51:73 41:90	8:01 5:42 2:78	24:09 19:21 12:74 25:78 18:45	34,931 25,322 22,731	70:95 38:91 35:47 46:42 34:07	831 133 171	0°14 0°93 0°19 0°35 0°34	
6,875	117,432	55,153	26,065	98.08	60.36	46.08	5.21	22:20	171,016	44.30	1,580	0.41	
2 10 96 12 8 8 2 7 20 15 86 9 8 8 23 7 6 6 114 8	29 1,052 439 157 616 273 194		50 73  226  2 4 111 2 3 125 30 9 26 43 1 1 11 41	100°00 98°67 95°61 98°89 87°57 96°30 97°28 95°80 94°50 97°27 95°32 98°68 99°17 90°97 100°00 98°36 95°91 100°00	49·63 57·37 66·67 79·23 58·33 60·00 52·38 30·43  46·15 37·97 78·24 85·81 59·66 58·70 87·56  80·81 100·00	138 01 55 06 36 71 75 55 36 42 31 83 25 96 38 12 30 06 35 30 30 72 77 27 57 88 50 55 97 36 44 00 39 12 81 58 122 36	3 0.24 3 3.04 5 3.56 2 3.35 3 4.71 1 34 6 7 9 8.40 4 .67 9 8.40 1 0.84 2 6.19 7 0.84 2 17 1 79 2 17.17 3 1.79 3 1.79 3 1.79 3 1.79 4 1.79 5 1.79 6 1.79 7 1.79	6.92 10.47  8.65  16.67 16.00 7.38 100.00 10.34 11.88 6.83 5.73 4.22 15.75 0.52 100.00 4.77	816 384 3,433 274 134 258 324 193 273 2,001 951 391 1,579 200 550 498 715 314	144 '21 38 '34 45 '92 58 '10 32 '18 26 '35 43 '38 68 '99 28 '94 38 '57 53 '63 46 '66 53 '17 43 '27 52 '19 36 '01 50 '55 35 '22	14 21 22 7 7 7 7 7 7 7 7 7 7 1 10 7 15 17 15 15 16 8 8	0°33 0°66 2°51 0°37 0°82 1°38 1°18 1°49 0°15 1°06 1°45 0°96 0°24 0°51 1°13 0°90	10
433	7,870	4,783	657	97:02	66:31	56:02	3.50	8.3	5 13,730	47:01	267	0.91	
7,308	125,302	59,936	26,722	97:99	60.80	46.78	5.06	21.33	184,746	44:49	1,847	0:44	1

### STATEMENT No. I.—SHOWING PARTICULARS OF VACCINATION

			exclud- s) and ding to	districts	vaccinators at the year.		TAL NUMBER ONS VACCINA		persons vac- secinator.	P	BIMARY V	ACCINATION	ON.
1			ricts (exclutowns) a according	Jo.	f vace		TACCIA:		persor			Successful.	
Division.	(a) Districts exc Municipal to (b) Municipal to	ywns.	Population of districts (exclud- ing Municipal towns) and Municipal towns according to census of 1921.	Average population per square mile.	Average number of va- employed throughout	Males.	Females.	Total.	Average number of persons vi	Total.	Under one year.	One year and under six years.	Total of all ages.
2	3		4	5	- 6	7	8	9	10	11	12	13	14
	(a) Districts exclusion Municipal tous											700	
	Lahore Amritsar Gurdaspur Sialkot Gujranwala Sheikhupura		793,933 763,903 795,596 800,664 561,233 621,295	415 583 449 721 270 197	12 14 16 15 12 11	26,474 41,768 45,812 26,754 15,797 27,868	18,183 24,537 29,846 17,417 10,362 17,760	44,657 66,305 75,658 44,171 26,159 45,628	3,721 4,736 4,729 2,945 2,180 4,148	32,945 30,058 35,578 30,700 20,478 23,893	29,818 22,706 29,280 24,439 15,640 18,888	1,501 4,237 3,675 3,776 2,399 2,306	31, 27, 33, 28, 18, 21,
	Total		4,339,624		80	184,473	118,105	302,578	3,782	173,652	140,771	17,894	160,
LAHORE DIVISION.	(b) Municipal to Lahore Chunian Kasur Khem Karan Patti Bhagbanpura Amritsar Jandiala Gurdaspur Dinanagar Pathankot Dalhousie Batala Dera Nanak Sialkot Pasrur Narowal Gujranwala Wazirabad Eminabad Sharakpur Total of Municipal Total of Lahore D  (a) Districts excl	l towns	257,295 7,642 31,018 6,152 10,439 10,251 157,031 7,464 8,906 4,047 7,353 1,457 26,122 4,333 56,018 6,909 5,343 37,887 18,645 5,816 4,127 674,255 5,013,879		8 1 4 1 1 4 1 1 1 1 1 1 1	16 725 435 1,436 121 308 258 12,522 1,310 976 525 126 28 572 827 4,872 681 400 3,152 023 112 69 46,378	8,929 134 1,075 117 299 150 7,603 1,164 644 121 144 24 548 270 4,105 325 299 2,866 402 32 69 29,320	25,654 569 2,511 238 607 408 20,125 2,474 1,620 646 270 52 1,120 1,097 8,977 1,006 699 6,018 1,325 144 138 75,698 378,276	3,207  2,511  5,031 2,474 1,620  1,120 6,018 1,325 144  3,028	11,609 213 1,464 238 444 348 11,404 390 476 244 261 48 1,109 249 2,983 285 230 2,128 668 76 133 35,000	8,983 162 1,268 208 357 251 6,960 294 378 219 210 19 608 168 2,741 180 218 1,789 443 52 112 25,620	2,019 23 120 25 43 72 2,184 58 57 21 40 13 110 71 232 41 111 279 145 10 5 5 5,579	11, 1, 11, 2, 2, 33, 193,
	Municipal tou Gujrat Shahpur Jhelum Rawalpindi Attock Mianwali  Total  (b) Municipal to	ens.	778,026 662,607 451,227 483,045 490,723 328,270 3,193,898	322 161 172 267 123 66	14 20 14 13 8 7	31,955 15,722 37,863 42,448 21,271 14,855	15,907 9,645 13,568 19,575 12,274 9,979 80,948	47,862 25,367 51,431 62,023 33,545 24,834 245,062	3,419 1,268 3,674 4,771 4,193 3,548 3,225	30,178 19,365 17,883 16,169 16,665 13,175	23,748 11,949 12,337 12,566 11,733 12,070 84,403	3,574 4,985 2,612 2,966 3,599 553 18,289	27, 17, 16,0 15,0 15,1 12,7
RAWALPINDI DIVISION.	Gujrat Jalalpur Kunjah Dinga Sahiwal Bhera Miani Khushab Sargodha Jhelum Pind Dadan Khan Rawalpindi Murree Pindigheb Hazro Campbellpur Mianwali Bhakkar Isakhel Kalabagh Total of Municipal		21,974 10,792 7,240 6,014 6,582 17,027 5,965 10,009 17,728 14,422 9,919 55,251 2,397 9,419 8,408 *7,859 9,115 6,193 6,172 8,455		1	941 202 136 149 230 419 73 369 902 1,691 548 2,334 278 186 587 513 1,001 212 106 65	524 166 134 283 183 299 36 232 487 742 138 1,059 110 151 172 257 230 66 100 53	1,465 368 270 432 413 718 109 601 1,389 2,433 686 3,393 388 337 759 770 1,231 278 206 118	1,465  413 718 109  1,389 2,433  1,697 388  770 1,231 278	975 329 270 297 281 498 109 451 921 567 274 2,052 194 333 390 150 537 96 197	921 278 215 220 115 252 55 265 628 306 123 1,673 89 270 170 170 96 374 53	25 40 23 30 154 228 37 103 268 314 66 370 24 49 171 51 1124 39 63 13	2,0
100	a a maintipai	di Divi-	240,941		12	10,942	5,422	16,364	1,364	9,036	6,309	1,992	8,6

DEPARTMENT.

IN THE PUNJAB PROVINCE DURING THE YEAR 1930-31-CONTINUED.

	RE	VACCINATIO	x.	SUCCESSF IN WHIC	S WERE	y vaccinated lation.	PERCENT UNKNOW TO TOTAL	N CASES	AVERAGE NUMBER OF SUCCESSFULI NATED DUR VIOUS FIV.	PERSONS LY VACCI- ING PRE-	AVERAGE A NUMBER OF I FROM SMAL DURING PR FIVE YE.	L-POX EVIOUS	
Unknown.	Total.	Successful.	Unknown.	Primary.	Re-vaccination.	Persons successfully vaccinated per 1,000 of population.	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.	Serial No.
15	16	17	18	19	20	21	22	23	24	25	26	27	- 28
672 1,930 1,550 1,706 1,635 2,056	11,712 36,247 40,080 13,559 5,712 21,751	6,288 19,447 20,701 8,045 3,043 10,181	2,852 7,839 7,758 2,353 1,227 4,213	98'09 96'74 98'37 98'25 96'43 97'79	70°97 68°46 64°05 71°79 67°85 58°05	47:79 61:08 68:09 45:63 37:80 50:51	2:04 6:42 4:36 5:56 7:98 8:61	24:35 21:63 19:36 17:35 21:48 19:37	29,574 36,837 30,734 28,414 20,259 23,567	37:25 48:22 46:17 25:49 36:10 37:75	710 276 188 425 347 283	0.89 0.36 0.24 0.53 0.62 0.61	11 2 3 4 5
9,549	129,001	67,705	26,242	97.72	65:85	02.00	5.50	20.33	175,385	40.41	2,329	0.24	
330 14 27  32 16 129 12 16   11 2 379 2 1 19      	14,045 356 1,047  163 60 8,721 2,084 1,144 402 9 4 11 848 5,994 469 3,890 657 68 5	7,359 12 282 72 29 5,415 923 617 311 3 2 4 536 5,784 240 349 2,830 344 48	3,535 41 13  30 17 1,134 630 114 30 3 3 1 2 80 156 223 39 187 36 11	98.78 98.49 96.94 97.90 98.30 97.29 98.91 94.18 96.74 100.00 100.00 78.26 98.49 99.60 100.00 98.30 100.00 98.30 100.00 98.30	70·02 3:81 27·27  54·14 67·44 71·37 63·48 59·90 83·60 50·00 66·67 44·44 69·79 99·08 48·19 81·16 76·42 55·39 84·21 100·00	71:90 27:22 54:00 37:87 45:69 34:34 105:50 171:36 119:25 137:14 34:41 26:08 27:68 180:48 180:48 156:49 72:66 108:37 129:44 50:59 19:94 29:32	2·84 6·57 1·84 ·· 7·21 4·60 1·13 3·08 3·36 4·21 4·17 0·80 0·03 6·67 1·79 8.98 10·53 9·02	25 17 11 :52 1 :24 28 :33 13 :00 30 :23 9 :97 7 :46 33 :33 25 :00 18 :18 9 :43 2 :60 30 :93 4 :81 5 :48 16 :18 60 :00	20,750 342 1,764 266 286 427 11,207 418 495 192 368 117 1,043 150 5,050 371 421 2,584 619 173	80.65 44.75 56.87 43.24 27.40 41.65 71.37 56.00 55.58 47.44 50.05 80.30 39.93 34.62 90.15 53.70 68.20 33.20 29.75 42.89	287 77 15 4 6 12 171 1 4 1 4  41  40 33 72 88 47	1 · 12 0 · 92 0 · 48 0 · 65 0 · 57 1 · 17 1 · 69 0 · 13 0 · 45 · 0 · 25 0 · 54 	10 11 11 11 11 11 11 11 11 11 11 11 11 1
1,108	40,698	25,162	6,285	98.76	73-12	86:96	3.17	15:44	47,220	70.03	690	1.02	
10,657	169,759	92,867	32,527	97.89	67-67	57:18	5.11	19.16	222,605	44:40	3,019	0.60	
2,056 1,698 1,316 399 622 352	17,688 6,002 33,548 45,854 16,880 11,666	9,164 2,200 18,634 27,717 11,593 9,732	3,084 811 7,116 5,539 1,788 777	98·81 97·00 97·01 99·24 96·57 99·40	62:75 - 42:38 - 70:50 - 68:75 - 76:82 - 89:37	47-46 29-18 76-91 89-78 55-19 68-47	6:81 8:77 7:36 2:47 3:73 2:67	17:44 13:51 21:21 12:08 10:59 6:66	31,161 24,503 21,218 24,838 22,191 19,387	40:05 36:98 47:02 51:42 45:22 59:06	573 477 210 111 220 60	0.74 0.72 0.47 0.23 0.45 0.18	
6,443	131,638	79,040	19,115	98:03	70:24	57:59	5.68	14.52	143,298	44.87	1,651	0.52	1
12 3 20 25 2 3 3  69 8 17 16 2 7 10  19 	490 39 135 132 220 150 468 1,866 412 1,341 194 4 369 620 694 182 9 3	295 13 60 58 132 24 212 1,195 208 504 110 3 3,53 3,53 3,63 617 175 7	94 9  35 4  34 75 266 105 162 8 1 15 92 46 7 2	99:27 97:55 96:00 97:06 97:49 97:37 100:00 97:38 99:23 98:36 94:96 99:80 97:33 98:66 99:92 98:66 99:23 98:66	74·49 43·33  60·00 45·31 60·00  20·69 53·94 74·69 67·75 50·38 59·14 100·00 99·72 66·86 95·22 100·00 100·00 100·60	56:93 30:67 33:15 53:87 5:01 36:06 18:27 39:56 63:06 120:37 45:67 47:78 121:82 34:29 38:01 63:62 124:08 43:11 28:35 13:96	1·23 0·91 7·41 8·42 0·71 0·60 0·87 3·00 5·84 0·10 3·61 3·00 0·67 3.54 13.20	19·18 23·08 25·93 3·03 ··· 22·67 16·03 14·26 25·49 12·08 4·12 25·00 4·07 14·84 6·63 3·85 22·22	1,331 471 380 218 317 900 132 647 1,249 1,162 343 3,951 183 397 224 714 759 140 192 188	60·57 43·64 52·49 36·25 48·16 52·86 52·13 64·64 70·45 79·88 34·58 71·51 76·35 42·15 26·64 194·60 83·27 22·61 31·11 22·24	5 15 5 1 13 24 10 14 6 5 1 38  1 10 2	0·23 1·39 0·69 0·17 1·98 1·41 1·68 1·40 0·34 0·35 0·10 0·69  0·11 1·19 0·55 0·11 0·16 0·32 1·77	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 1 2
240	7,328	4,412	955	98-64	69.23	54.32	2.66	13.03	13,888	58.66	169	0.71	1
6,683	138,966	83,452	20,070	98.07	70-19	57:36	- 5.46	14.44	157,186	45.82	1,820	0.23	1

pur cantonment.

### STATEMENT No. I.—SHOWING PARTICULARS OF VACCINATION

		COCK CONTROL		celnd- and ing to	districts	pators year.		CUMBER OF 1	PERSONS	vac.	Pat	MARY VAC	CCINATION	
				districts (exclud- pal towns) and owns according to 21.	2	vaccinators at the year.	V.	CCINATED.		of persons vac-		8	uccessful	
Serial No.	Division,	(a) Districts exclu- Municipal tow (b) Municipal town	ms.	Population of distri- ing Manicipal towns a Manicipal towns a	Average population per square mile.	Average number of vaccinators simployed throughout the year.	Males.	Females.	Total.	Average number of printed by each va	Total.	Under one year.	One year and under six years.	Total of all ages.
1	2	3		4	5	6	7	8	9	10	11,	12	13	14
-		(a) Districts exclu Municipal town												
1 2 3 4 5 6		Montgomery Lyallour Jhang Multan Muzaffargarh Dera Ghazi Khan		683,051 900,184 522,907 788,282 544,459 428,061	154 339 168 149 94 88	24 22 12 23 10 17	22,089 32,257 21,958 35,523 41,786 92,145	17,006 19,549 15,252 24,821 30,843 57,777	39,095 51,806 37,210 60,344 72,629 149,922	1,629 2,355 3,101 2,624 7,263 8,819	35,671 37,460 18,073 32,817 21,306 62,196	29,744 29,115 13,184 20,722 13,264 30,653	3,330 3,768 2,224 5,875 3,844 15,946	33,757 33,284 16,384 29,355 20,119 55,834
		Total		3,866,944		108	245,758	165,248	411,006	3,806	207,523	136,682	34,987	188,733
		(b) Municipal tou	ens.					-						
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	MULTAN DIVISION.	Montgomery Pakpattan Lyallour Gojra Kamalia Jhang-Maghiana Chiniot Multan Shujabad Muzaffargarh Khangarh Alipur Leiah Karor Dera Ghazi Khan Jampur Dajal		14,601 7,218 28,136 7,622 8,916 30,139 17,513 89,162 6,730 5,386 3,184 3,434 8,476 3,539 20,731 7,317 5,775 3,964		1 1 2 1 1 4 1	1,268 493 715 645 241 2,154 402 8,559 125 212 38 102 1399 64 683 1,236 1,873 486	701 160 1,166 352 123 660 282 4,796 34 62 128 63 466 634 982	1,969 653 1,881 997 364 2,814 684 13,355 212 398 72 164 267 127 1,149 1,870 2,855	1,969 653 941 997 2,814 684 3,339 212  1,149	1,035 332 996 256 287 1,154 567 4,119 154 261 72 118 253 88 836 630 1,136 309	534 256 704 179 166 668 192 2,617 126 90 58 104 193 69 698 361 685	129 70 288 71 26 271 318 922 17 120 11 14 56 19 108 69 219 81	772 331 994 252 201 950 513 3,940 225 69 118 251 88 812 442
19		Rajanpur Kot Mithan	::	3,204		)	70	145 53	631 123	)	120	189 71	21	291 97
		Total of municipal t		275,047		14	19,505	11,080	30,585	2,185	12,723	7,960	2,830	11,513
		Total of Multan Di		4,141,991		122	265, 263	176,328	441,591	3,620	220,246	144,642	37,817	200,246
		Total of districts municipal staff.	and	20,525,986	211	490	998,577	616,273	1,614,850	3,296	825,029	619,715	123,394	770,543
		Total of special staff	ī			17	45,450	31,333	76,783	4,528	22,019	8,411	9,162	19,155
		Total of Cantonment	tstaff	130,124		7	19,464	9,055	28,519	4,074	7,016	4,902	1,432	6,622
		Total of Dispensary	staff			,	2,340	1,360	3,700		1,711	1,221	279	1,557
		Political staff, Dera ( Khan,	Ghazi	26,758		1	2,669	1,834	4,503	4,503	2,593	1,065	836	2,458
		GRAND TOTAL		20,682,868	211	515	1,068,500	659,855	1,728,355	3,356	868,368 (a)	635,314	135,103	800,335 (b)

(a) Difference between number of operations and number of persons (b) These figures include 29,918 primary successful vaccination of persons

SUM

	OF P	NUMBER ERSONS INATED.	Total nu of opera perfor	TIONS	PRECENTAGE OF SUCCESSFUL CASES IN WHICH THE RESULTS WERE KNOWN.		
	Primary.	Re-vaccination.	Primary.	Re-vaccination,	Primary.	Re-vaccination.	
By District, Cantenment and special staff (Statement No. I).  By Dispensary staff (Statement No. I)  By other agencies, if any (Political staff, Dera Ghazi Khan),	863,337 1,711 2,593	856,815 1,989 1,910	864,064 1,711 2,593	856,815 1,989 1,910	97·97 94·65 98·24	68·76 66·48 89·83	
Total	867,641	860,714	868,368	860,714	97.96	68.80	

### DEPARTMENT.

## IN THE PUNJAB PROVINCE DURING THE YEAR 1930-31-CONCLUDED.

	Ru	-VACCINATIO	os.	PERCEN SUCCESSF IN WHITE RESULTS RNOV	CH THE S WERE	y vaccinated lation.	PERCENT UNKNOW: TO TOTAL	N CASES	AVERAGE . NUMBER OF SUCCESSFUL! NATED DUR VIOUS FIVE	PERSONS LY VACCI- ING PRE-	AVERAGE AND NUMBER OF 1 PROM SMAL DUBING PRE FIVE YEAR	L-FOX VIOUS	
Unknown,	Total.	Successful,	Unknown.	Primary.	Re-vaccination.	Persons successfully vaccinated per 1,600 of population.	Primary.	Re-vaccination.	Namber.	Ratio per 1,000.	Number.	Ratio per 1,000.	Serial No.
15	16	17	18	19	20	21	22	23	24	25	26	27	28
1,646 3,471 1,415 2,945 1,166 6,125	3,424 14,346 19,214 27,527 51,323 87,794	1,272 8,252 15,074 14,185 37,687 47,702	1,262 3,164 2,226 5,913 6,310 17,223	99:21 97:93 98:36 98:27 99:90 99:58	58 · 83 73 · 80 88 · 73 65 · 63 83 · 72 67 · 59	51·28 46·14 60·16 55·23 106·17 241·87	4:61 9:27 7:83 8:97 5:47 9:85	36·86 22·05 11·59 21·48 12·29 19·62	29,621 42,304 26,959 38,461 41,493 48,942	43 · 37 46 · 99 51 · 56 48 · 79 76 · 21 114 · 33	880 600 85 279 162 226	1·29 0·67 0·16 0·35 0·30 0·53	1 2 2 2 4 4 4
16,768	203,628	124,172	36,098	98.94	74.12	80.92	8.08	17.73	227,780	58.90	2,232	0.58	-
118 1 1 3 69 199 26 78 3 3  2  17 177 83 18 23	934 321 885 741 77 1,660 117 9,236 58 137  46 14 39 313 1,240 1,719 322 3	348 283 786 660 19 723 48 7,208 52 110 36 9 39 194 345 839 99	253 18 36 39 43 306 13 825 21 10 2 25 731 440 100 2	84·19 100·00 99·90 99·60 99·22 99·48 94·82 98·85 90·56 100·00 100·00 100·00 100·00 100·00 100·00 100·00	51 10 94 39 92 58 94 02 55 88 53 40 46 15 85 70 89 66 94 83 100 00 75 00 100 00 67 36 67 78 65 60 44 59 100 00	76·71 85·48 63·26 119·65·51 24·67 55·51 32·03 125·03 29·42 62·20 21·67 35·89 30·67 35·89 48·53 107·56 32·28 98·39 98·39 98·39 98·49	11·40 0·30 0·01 1·17 24·01 17·24 4·59 3·23 0·65 13·41 4·17  2·03 28·10 7·31 5·83 19·17 7·14	27·09 5·61 4·07 5·26 55·84 18·43 11·11 8·93  15.33  21·74 14·29 58·95 52·60 31·06 66.67	1,150 535 4,204 584 586 1,984 705 4,877 309 336 131 316 711 305 2,038 564 1,500 851 675	78.76 74.12 149.42 76.62 65.72 65.83 40.26 54.70 45.91 62.38 41.14 92.02 83.89 86.18 98.31 77.08 259.74 214.68 210.67	12 10 35 4 18 27 34 79 5 2  3  1 2 1	0.82 1.39 1.24 0.52 2.02 0.90 1.94 0.89 0.74 0.37  0.14  0.14 	11 11 11 11 11 11 11 11 11 11 11 11 11
909	17,862	11,802	2,864	97 · 45	78:69	84 . 77		-	-			0.60	-
17,677 48,583	780,495	135,974	38,962 138,010	98.85	69.84	59.40	5.82	17:59	250,141 983,030	47.89	2,470	0.50	
2,397	54,817	25,219	-11,005	97.62	57:56		10.89	20:08	55,892				
260	21,503	9,135	5,237	98.02	56:16	121 .09	3 · 71	24:35	7,715	59 - 29	15	0.15	
66	1,989	1,164	238	94.65	66.48		3.86	11.97	3,600				-
91	1,910	1,493	248	98-24	89.83	147.66	3.51	12.98		Notava	ilable.		
51,397	860,714	485,734	154,738	97-96	68-80	62-18	5.92	17:98	1,050,237	50.78	10,328	0:50	

vaccinated equal 727 which represents secondary operations, of six years and over six years of age.

### MARY.

VACCINATE VACCINATE		SUCCE	SSFULLY.	ful vacci	partment	of each	
Vaccinators em-	Persons vacei. nated by each vaccinator.	Under one year,	One year and under six years.	Ratios of successful vacci- nations per 1,000 of population.	Total cost of Department.	Average cost	Remarks.
-					Rs. A. P.	Rs. A. P.	
514	3,347	633,028	133,988	61 - 94	3,34,394 6 4	0 4 2	- 044
	1 21 1	1,221	279			**	The second second
i	4,503	1,065	836	147-66	277 9 0	0 1 1	
515	3,356	635,314	135,103	62.18	3,34,671 15 4	0 4 2	100

### APPENDIX TO STATEMENT No. I.

STATEMENT SHOWING THE DETAILS OF THE VACCINATION OPERATIONS PERFORMED BY THE SPECIAL AND CANTON MENT STAFFS ACCORDING TO LOCALITIES DURING THE YEAR 1930-31.

1	2	3	4	5				6			1	7	-	•	8		9	10
-	1		vaccinators employed ar.	vaceinated,			PRIMARY	VACCINAT	10N.		RE-	VACCINATI	10%,	PROBE OF SUC FULL CA WHICH SULTS KNO	CESS- SES IN EE-	OF U	CENTAGE NENOWN SES TO L CASES,	
		Name	accin.				Suc	cessful.		1			I	1	1	1	1 14	
	Districts.	of localities.	22	l Jersons			der	over	1							100	1 3 8 4	
			verage number throughout the	ber of		year.	apun po	o pu	200	-	1			1	tion.	13	tion.	
			ge no	number		one	ear at	ans a	of all	oun.	1 3	seful.	OWB,	1	ccina	Ė	celas	
No.			Avera	Total	Total.	Under	One year and six years.	Six years and six years.	Total	Unkno	Total.	Successful	Unknown.	Primary	Re-vaccination	Prima	Re-vaecination	No.
- N	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
-		THE VA	CCIN	TIONS P	ERFORS	(ED B	Y THE S	PECIAL	STAFF A	RE INCI	UDED I	N STATE	MENT	No. I	1			
1	1)	Mandi State	1	21,371	3,499	789	1,898	557	3,244	235	17,872	10,408	3,303	1	1	1	1	, 1
9	Kangra	Suket State		4,950	1,407	860	456	9	1,325	72	3,543	1,052	414					2
8	1) 5	Nalagarh State		1,691	1,326	885	262	10	1,157	150	365	253	22					3
4		Bilaspur State		6,969	799	438	262	17	717	44	6,175	2,840	1,478				**	4
6		Rawingarh State Tharoch State		162 543	90 370		68	164	232	138	173	64 30	81					5
7		Keonthal State		7,461	1,587	62	984	281	1,327	253	5,874	2,552	1,548					7
8		Darkoti State		26	6		1	5	6		20	13	7					8
9	Simla	Dhadi State		60	87		17	20	37		23	4	18					9
10		Bhajji State		580 89	580 29	89	299	62	450	126 27	60						10	10
11		Bhagai State		333	38	14		3	26	12	295	48	108					12
18		Bhagat State		368	368	67	207	3	277	70							1.6	13
14		Khaneti State		442	375	1	137	116	254	119	67	28	14					14
15		Simla Tahsil		109	108	65	11		76	24	1	1						15
16		Kotgarh Sub- Tansil.		192	185 288	14	83 231	15	253	43	170	43	5					16
17	1	Kothai Tahsil  Pataudi State		639	666	495	45		540	86	3	***	58					18
11	1	Sirmoor State		19,837	7,041	2,643	3,240	141	6,024	772	12,798	3,941	3,115					10
20	Ambala	Kalsia State		861	731	558	89	5	652	67	142	37	10					20
21	Rohtak	Dujana State		1,170	1,136	634	391	16	1,041	70	38	13	6				****	21
22		Talagang Tahsil		4,040	226	117	97	9	223	3	3,814	2,671	348	**			**	22
24	The state of the s	Multan town Batala Town		1,760	636 245	150	199	70	613	16	1,503	655 378	173 268					23
25	1	Murree Town		392	197	110	69	10	189	3	195	110	8				1	25
20	} Rawalpindi {	Murree Canton-		141	49	34	14	1	49	- 77	92	56				1	1.00	26
		ment,		-	-	-							-	-		-		
	1	Total	17	76,783	22,0193	8,411	9,162	1,582	19,155	2,397	54,817	25,219	11,005	97.62	57.56	10.89	20.08	
		THE VACCINATIO	ONS P.	ERFORM	ED IN C.	ANTON	MENTS 1	BY THE		T STAFF	ARE IN	CLUDED	IN ST	ATEMEN	T No.	I.		
1	Attock	Campbellpur		30	39	22	6		28	1			1			1 1	1.119	1
19)		Total		30	30	22	6		28	1	1000			96.55	100	3.33	The state of	
							1											555
		INATIONS IN CA			1,247	1,094	TAIN TH	EIR OW	1,241	NATORS 1	ARE SH	OWN SE	PARAT					1
2	Kangra	Ambala		1,338	1,241	1,000	140					20	32		-:-			2
3	Juliundur	Jullundur	1	12,621	289	161	130	11	282	7	12,332	6,132	252				2000	3
4	Ferozepore	Ferozepore	1	735	686	581	70	12	663	2	49	28	2					4
5	Lahore	Lahore	1	7,997	936	409	247	34	690 18	176	7,061	1,625	4,696			./		5
6	Amritaar	Amritaar*		1,020	18	15	61		203	3	50 814	563	144				12	7
7 8	Sialkot Jhelum	Jhelum*		720	368	322	17	12	351	12	352	258	34		**			8
9	Rawalpindi	Rawalpindi	1	3,336	2,819	2,004	616	115	2,735	57	517	362	34					9
10	Multan	Multan	1	239	235	154	81		235		4	4						10
11	Ambala	Kasauli*	**	147	20	7	9	4	20		127	50	15					11
12	\ south	Sabathu*		145	99	29	38	42	91	'2	60	34	8					12
13	Simla	Solan*		2	2		2	46	91								1.	14
		-	-		-				-	1			-	-		-		-
1		Total	7	28,519	7,016	1,902	1,432	288	6,622	260	21,503	9,135	5,237	98,02	6.16	3,71	24,35	
					-	*Pe	riormed b	y medical	staff,		10000	St. E.		o la sel		1		

A-VACCINE DEPARTMENT. STATEMENT No. II-SHOWING THE COST OF THE DEPARTMENT IN THE PUNJAB PROVINCE DURING THE YEAR 1930-31.

### STATEMENT No. II,-SHOWING THE COST OF THE DEPARTMENT IN THE

1	2	3							4		
							Exten	DETURE.			
No.	Districts.	Super- vising Officers.	Pay.	Super- inten- dents of Vacci- nation,	Pay	Vaccina- tors.	Pay,	Peons, etc.	Pay.	Total pay of establishment,	Travelling allowances.
1	2	3	4	5	- 6	7	8	9	10	11	12
			Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.	Rs. A. P.	Rs. A. P.
1	Hissar			1 1	669 11 0	15	6,563 7 0	4	266 15 0	7,500 1 0	1,272 7 0
2	Rohtak			1	790 0 0	16	4,855 13 10			5,645 13 10	234 1 0
3	Gurgaon			1	568 0 0	22	6,596 2 0	4	444 10 0	7,608 12 0	571 9 0
4	Kamal			1	752 9 0	18	6,767 10 0	3	295 4 0	7,815 7 0	485 9 0
	Ambala			1	636 0 0	20	6,458 11 8	3	298 14 9	7,393 10 5	366 15 0
6	Simla					1	a)728 0 0	1	180 0 0	908 0 0	
7	Kangra		١.	1	892 7 0	13	4,356 11 0			5,249 2 0	375 5 0
8	Hoshiarpur			. 1	622 2 0	14	4,220 0 0	·		4,842 2 0	762 0 0
9	Juliundur			1	840 0 0	15	5,464 2 2	3	456 14 0	6,761 0 2	421 1 0
10	Ludhiana			2	1,528 0 0	17	5,076 0 0	2	180 0 0	6,784 0 0	490 1 0
11	Ferozepore		**	1	640 0 0	27	8,827 0 0	4	334 8 0	9,801 8 0	531 12 0
12	Lahore			2	1,777 12 0	22	6,698 1 8	3	543 12 0	9,019 9 8	1,844 5 0
13	Amritear			2	1,410 0 0	19	6,953 7 0	8	1,932 0 0	10,295 7 0	682 3 0
14	Gurdaspur			1	991 5 0	18	5,962 15 0	2	238 0 0	7,187 4 0	420 3 0
15	Sialkot			1	1,124 6 0	22	5,597 4 0	4	479 8 0	7,201 2 0	1,044 14 0
16	Gujranwala			1	890 0 0	15	5,548 9 0	2	337 0 0	6,775 9 0	414 12 0
17	Shelkhupura			j	972 0 0	11	3,427 9 3			4,399 9 3	676 9 0
18	Gujrat			1	810 0 0	15	6,012 11 0			6,822 11 0	336 9 0
19	Shahpur			2	910 12 0	24	5,917 15 0	1	96 0 0	6,924 11 0	380 14 0
20	Jhelum			1	480 0 0	15	4,020 1 0	1	90 0 0	4,590 1 0	661 0 0
21	Rawalpindi			1	664 0 0	17	6,164 10 0	3	636 0 0	7,464 10 0	300 0 0
22	Attock		-	1	722 5 0	9	2,851 0 0	1		3,573 5 0	1,040 0 0
23	Mianwali			1.	972 0 0	9	2,486 13 9			3,458 13 9	448 6 0
24	Montgomery			5	2,436 0 0	26	6,365 15 0	1	228 0 0	9,029 15 0	937 1 0
25	Lyalipur			1	420 0 0	25	9,217 9 6	3	426 0 0	10,063 9 6	705 8 0
26	Jhang			1	409 8 0	14	3,657 7 0	2	168 0 0	4,234 15 0	392 4 0
27	Multan			2	1,087 11 0	29	5,836 7 0	7	701 0 0	7,625 2 0	- 1,006 10 0
28	Muzaffargarh			1	660 0 0	10	3,464 10  Q			4,124 10 0	523 14 0
29	Dera Ghazi Khan			1	1,020 0 0	19	5,492 6 0	1	84 0 0	6,596 6 0	300 0 0
	Total			37	25,696 8 0	497	1,55,589 0 10	63	8,411 5 9	1,89,696 14 7	17,645 14 0
	Special Staff, Punjab	(c) 1	16,809 12 0	2	2,040 0 0	15	5,105 2 0	2	336 8 0	(e)26,398 10 0	3,463 6 0
	Vaccine Institute Political Staff of Dera	(d) 1	12,157 2 0			(/) 8	4,343 8 0 (g)	3	713 7 0	(e)21,665 3 0 	1,982 13 0
	Ghazi Khao. Total	2	28,966 14 0	2	2,040 0 0	24	9,448 10 0	5	1,049 15 0	48,063 13 0	5,069 12 0
	GRAND TOTAL	2	28,966 14 0	29	27,736 8 0	521	1,65,037 10 10	68	9,461 4 9	2,37,760 11 7	23,315 10 0
-		1		-	-						

Average cost is calculated on the total (a) Including cost of 1 male vaccinates (b) Including Rs. 72 on account of (c) Assistant Director of Public Health,

<sup>(</sup>e) Including Rs. 6,558-6-0 on account (f) Including 2 Laboratory Assistants (e) The pay of the vaccinator is held

#### DEPARTMENT.

### PUNJAB PROVINCE DURING THE YEAR 1930-31.

				5				0	7	8
				PAID 1	TROM					
Contingencies,	Total cost.	Imperial Funds.	Provincial Punds.	Local Funds.	Municipal Funds,	Cantonment Funds,	Total,	Number of success- of success- nations and re-vaccina- tions.	Average cost of each suc- cessful case.	No.
13	14	15	16	17	18	19	20	21	22	23
Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.		Es. A. P.	
2,786 3 0	11,558 11 0			9,422 8 0	2,136 3 0		11,558 11 0	38,300	0 4 10	1
1,942 13 3	7,822 12 1		.,	6,796 13 10	1,025 14 3		7,822 12 1	36,661	0 3 5	2
2,260 11 6	10,441 0 6			9,378 0 0	1,063 0 6		10,441 0 6	49,751	0 3 4	3
1,586 9 0	9,887 9 0		370 3 0	6,889 0 0	2,628 6 0		9,887 9 0	43,381	0 3 8	4
2,017 14 6	9,778 7 11	'	408 10 0	7,434 10 0	1,398 12 2	536 7 9	9,778 7 11	37,435	0 4 2	5
359 15 0	1,267 15 0				1,267 15 0		1,267 15 0	1,145	1 1 9	6
3,563 7 0	9,187 14 0			9,187 14			9,187 14 0	51,375	0 2 10	7
2,331 5 0	7,935 7 0		,	7,828 7 0	407 0 0		7,935 7 0	33,434	0 3 10	8
1,412 15 5	8,595 0 7			6,017 6 2	2,403 10 5	174 0 0	8,595 0 7	40,089	0 3 5	9
2,280 0 0	9,554 1 0		208 9 0	7,297 6 0	2,048 2 0		9,554 1 0	28,777	0 5 4	10
1,692 11 0	12,025 15 0			8,811 12 0	3,041 11 0	172 8 0	12,025 15 0	47,686	0 4 0	11
2,435 3 3	13,290 1 11			6,501 10 6	6,373 7 5	424 0 0	13,299 1 11	61,704	0 3 5	12
4,823 6 8	15,800 0 8		215 10 0	10,450 0 8	5,132 6 0	2 0 0	15,800 0 8	64,543	0 3 11	13
2,323 3 6	9,930 12 6		173 12 0	8,748 0 0	1,009 0 6		9,930 12 6	57,588	0 2 9	14
2,460 15 0	10,706 15 0		222 1 0	8,074 4 0	2,188 11 0	221 15 0	10,706 15 0	47,146	0 3 8	15
1,061 15 0	8,252 4 0			6,596 7 0	1,655 13 0		8,252 4 0	27,175	0 4 10	16
1,622 3 0	6,698 5 3			5,741 10 6	956 10 9		6,698 5 3	31,657	0 3 5	17
1,879 5 6	9,058 9 6			8,381 9 6	677 0 0		9,058 9 6	39,097	0 3 8	18
665 14 0	7,971 7 0			5,887 7 0	2,084 0 0		7,971 7 0	21,904	0 5 10	19
1,627 6 9	6,878 7 9		30 1 0	6,236 8 3	611 14 6		4,878 7 9	37,503	0 2 11	20
1,797 12 0	9,562 6 0	-		6,692 7 0	1,817 0 0	1,052 15 0	9,562 6 0	49,396	0 3 1	21
(6)1,071 0 0	5,684 5 0		99 5 0	5.585 0 0			5,684 5 0	28,648	0 3 2	22
779 14 0	4,687 1 9		3 12 0	4,460 0 0	215 5 9	8 0 0	4,687 1 9	24,169	0 3 1	23
1,734 8 6	11,701 8 6			10,402 8 6	1,299 0 0		11,701 8 6	36,766	0 5 1	24
3,240 1 6	14,009 3 0		62 3 0	11,337 3 0	2,609 13 0		14,009 3 0	44,448	0 5 1	25
1,230 2 6	5,837 5 6			5,689 5 6	168 0 0		5,857 5 6	33,692	0 2 9	26
2,885 15 0	11,517 11 0		130 10 0	8,593 10 0	2,727 5 0	66 2 0	11,517 11 0	55,125	0 3 4	27
1,702 15 0	6,351 7 0		59 0 0	6,189 3 0	103 4 0		6,351 7 0	58,751	0 1 9	28
1,793 0 11	8,689 6 11		1 000 10 0	7,736 10 1	952 12 10	0 657 15 0	8,689 6 11	1,07,677	0 1 3	-
57,368 6 9	2,64,711 3 4		1,983 12 0 30,694 5 0	2,12,067 5 6	48,002 2 1	2,657 15 9	2,64,711 3 4 30,694 5 0	12,35,023	0 3 5	
832 5 0 15,340 14 0	30,694 5 0 38,988 14 0		38,988 14 0				38,988 14 0	44,374	0 11 1	
54 0 0	277 9 0	277 9 0					277 9 0	3,951	0 1 1	
16,227 3 0	69,960 12 0	277 9 0	69,683 3 0				69,960 12 0	48,325		
73,595 9 9	3,34,671 15 4	277 9 0	71,666 15 0	2,12,067 5 6	48,002 2 1	2,657 15 9	3,34,671 15 4	12,83,348	0 4 2	

number of successful vaccinations and re-vaccinations performed by the District, Municipal, Special, Cantonment and Political Staff Dera Ghazi Khan,—ride Statement No. I, from 30th April 1990 to 31st October 1930 and 1 female vaccinator from 1st October 1930 to 2nd November 1930 at Rs. 30 per measure each, pay of 1 peon for 6 months.

Punjab (Technical) Vaccination.
Institute, of pay of 6 clerks.
and 1 Veterinary Assistant,
up pending sanction of the Punjab Government,

COMPARATIVE STATEMENT No. III.—SHOWING THE NUMBER OF PERSONS PRIMARILY VACCINATED AND THE NUMBER OF THOSE PERSONS WHO WERE SUCCESSFULLY VACCINATED IN THE PUNJAB IN EACH OF THE UNDERMENTIONED OFFICIAL YEARS.

PERSONS PRIMARILY VACCINATED,

	,bolealoof,	Zempot successfully v
		Total number.
	, botenbook	Zumber successfully v
		Total number.
	sodnated,	Number successfully ve
	-	Total number.
	sectanted,	Number successfully v
0	in I	Total number.
-	.betealese	Number successfully v
1		Total number.
0	.hodenbod.	Number successfully v
0 1	ntip	Total number.
	acdnated,	v vilubesessus redminX
		Total number.
_	"boteniose	Aumber successfully v
-	- Walter	Total number,
	, batenbae	Zamper anocestally v
_	34	Total number.
	accinated.	Zumpez sneocestully ve
1		Total number,
185	,betafico.	Zempea successingly va
-	Innat s	Total number.
bed	stully vaccina	evones redman egeravA
-		Average total number.
		STABLISHEST.
-		Estan

YEAR ENDING 31ST MARCH.

1	1931.	19,165	777,105	v:::::	1,557	1,458	800,035
	190	910,22	842,045		1,711	2,593	848,368 800,235
		21,411	. 675,287	:	1,511	1,260	
3	1930.	53,206	811,662	:	1,680	1,340	870,908
	6	22,00	644,735 597,630 643,867 708,116 636,105 701,513 640,254 746,488 688,803 823,81 ; 751,869 788,379 842,045 777,105	:	1,826	:	705,169 858,983 783,902 873,908 807,621
	1929.	33,550	18,628	- :	1,910	11:00	186,858
	- mi	14,597	688,803	:	1,769	: :	705,169
	1928.	16,617	746,488	:	1,980	:	765,094
1	· ·	15,240	640,254	:	1,540	17.	657,036 765,094
	1927.	17,063	515,107	:	1,752	1 11 11	720,328
	2	31,475	636,195	;	3,473	11	622,086 670,640 621,962 747,162 671,143 720,328
	1926.	102,201	708,116	- H	5,845	: 1	747,162
	_	196. 101	597,402	:	275		596'139
	1925,	181,32	643,867	:	- 8	1	010,640
		21,633	597,630	:	22		986'559
	1924,	28,648	644,735	:	820		674,200
	4	11,217	570,328	:	841	:	988,386
	1923.	291,45	GES,884 573,885 002,081 557,000 GES,957 570,328	:	25	1	542,215 568,694 650,958 594,417 625,079 576,958 649,053 588,386
	el.	17,634	557,660	.:	1,064	1111	576,358
	1922.	11,884	002,081	:	1,164	i in	625,079
	-	19,230	573,893	:	1,294	1:	594,417
	1921.	53,628	1887	:	1,426	:	850,058
	1920.	97,569		1,269	11,324	1 : 1	169,800
	1867 to 1920.	105,735 97,869 25,628 19,230	402,342 398,732	1,630	14,510	:	510,015
		:	,	2 200	4 4 5	* 100	9 10 10 10
		:	antonmer	:	:	ord Khan)	Total
			diet and 6			(Den Glu	
-		Government	District, Municipal and Cantenment Staff	Indian States	Dispensaries	Political Staff (Dera Ghazi Khan)	

NOTE. - The figures from 1867 to 1962 are taken from Annual Vaccination Reports of the Province as constituted during that period.

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at a			1	
AGE C	INATORS.	Re-vacci- nation.	18	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
PERCENTAGE OF	SUCCESS REPORTED BY VACCINATORS.	Primary.	17	15-7-7-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-
8	standents	Be-vacei- nation.	16	\$2555
NTAGE OF CASES FOUR CCESSFUL TO TOTAL NUMBER INSPECTED.	By Superintendents of Vaccination.	Primary.	15	
PERCENTAGE OF CASES FOUND SUCCESSFUL TO TOTAL NUMBER INSPECTED.	r Health Civil I Medical Health.	Re-vaci- nation.	14	### ### ### ### ### ### ### ### ### ##
Pa	By District Health Officers, Civil Surgeons and Medical Officers of Health.	Primary.	13	88.98 98
10	stendents sation.	Re-vacci- nation.	12	2552 - 4883 - 44 - 45 - 55 - 55 - 55 - 55 - 55 - 5
INSPECTION UMBER TED.	By Superintendents of Vaccination.	Primary.	п	125 125 1 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2
PERCENTAGE OF INSPECTIONS TO TOTAL NUMBER VACCINATED.	t Health Civil d Medical Health.	Re-vacci- nation.	10	828.8.4
Pici	By District Health Officers, Civil Surgeons and Medical Officers of Health.	Primary.	6	2
	ntendents ination.	Re-vacei. nation.	œ	4,614 12,865 7,774 10,513 2,082 2,6413 2,682 11,833 11,833 11,833 11,833 11,833 11,833 11,833 11,133
TOTAL NUMBER INSPECTED.	By Superintendents of Vaccination.	Primary.	-	26,785 26,785 26,785 3,604 14,603 13,183 20,783 41,733 10,744 5,738 5,73
TAL NUMBER	Health Civil d Medical Health.	Re-vacci-	9	1,614 5,326 7,548 1,212 929 929 9236 9,336 9,336 1,067 1,712 9,754 6,738 1,679 1,712 1,712 1,712 1,712 1,714 1,679
To	By District Health Officers, Civil Surgeons and Medical Officers of Health.	Primary.	2	2,845 2,662 2,662 2,662 2,662 2,662 2,713 6,713 2,835 2,835 2,838 3,738 3,738 3,738 3,738 3,738 6,748
		Re-vacci- nation.	7	10,577 10,577 10,577 10,577 10,984 11,894 11,294 12,243 18,243 18,243 18,243 18,610 17,873 17,873 17,873 17,873 17,873 17,873 17,873 17,873 17,873 17,873 18,610 17,873 18,610 17,873 18,610 17,873 18,610 18
	TOTAL NUMBER OF PERSONS VACCINATED	Primary.	60	28,008 24,408 24,408 28,827 28,827 28,827 21,806 21
	DISTRICTS.		91	Hissar Robtak Gargaon Karnal Ambala Simla Hosharpur Jullundur Ludhianu Ferozepore Laboro Garganusar Sialkot Gurjanusala Shahpur Shahpur Shahpur Antritaar Garjrat Shahpur Shahpur Shahth Manwala Shahpur Attock Manwalangah Montgomery Lyallpur Dera Ghazi Khan Bavalangah Mattan M

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### STATEMENT No. V.

STATEMENT SHOWING THE ANNUAL NUMBER OF SUCCESSFUL VACCINATIONS AND THE ANNUAL RATIO OF DEATHS FROM SMALL-POX PER 1,000 OF POPULATION IN EACH DISTRICT OF THE PUNJAB FOR FIVE YEARS ENDING 1930-31.

		1	1926-	27.	1927-	28.	1928	29.	1929-	30.	1930-	31.	
Number.	District.		Number of successful cases.	Annual ratio of deaths from small-pox per 1,000.	Number of successful cases.	Annual ratio of deaths from small-pox per 1,000.	Number of successful cases.	Annual ratio of deaths from small-pox per 1,000.	Number of successful cases.	Annual ratio of deaths from small-pox per 1,000.	Number of successful cases.	Annual ratio of deaths from small-pox per 1,000.	Number.
Nan	1111111	-	Nu	- Y	Na	- P	N.u.	An	N o	An An	- X	A .	N
1	2		3	4	5	6	7	8	9	10	11	12	13
1	Hissar		23,844	0.74	23,656	0.35	32,449	1.07	30,519	0.64	38,300	0.56	1
2	Rohtak		21,537	0.02	26,876	0.50	30,728	0.40	39,748	0.30	36,661	0.35	2
3	Gurgaon		42,364	0.02	58,998	0.01	35,790	0.01	40,487	0.26	49,751	0.29	3
4	Karnal		35,439	0.59	38,774	0.32	46,483	0.06	49,975	0.35	43,381	0.20	4
5	Ambala		23,362	0.28	22,694	0.29	28,218	0.09	37,203	0.53	36,098	0.27	5
6	Simla		2,927	0.12	1,891	0.20	2,471	0.27	2,395	0.34	895	0-17	6
7	Kangra		55,782	0.22	57,896	0.18	59,837	0.14	51,433	0.02	51,375	0-04	7
. 8	Hoshiarpur		31,649	1.27	36,067	1.03	41,041	0.95	38,733	0.76	33,434	0-61	8
9	Jullundur	-	27,478	0.35	29,605	0.13	31,751	0.14	34,123	0.20	33,675	0.11	9
10	Ludhiana		23,082	0.60	22,520	0.22	28,632	0.12	33,188	0.72	28,777	0.26	10
11	Ferozepore		31,351	0.22	33,019	0.12	41,764	0.24	44,188	0.22	46,995	0.53	11
12	Lahore		53,264	1.42	45,752	0.65	52,749	1:01	64,514	0.28	59,389	0.38	12
13	Amritsar		38,780	0.67	51,253	0.44	55,870	0.47	58,559	0.32	64,504	0.19	13
14	Gurdaspur		33,766	0.52	36,488	0.29	39,900	0.24	51,183	0.21	57,588	0.12	14
15	Sialkot		27,795	0.86	35,196	0.21	34,093	0.54	37,552	0.25	46,380	0.38	15
16			22,011	0.81	24,746	0.93	24,689	0.89	23,219	0.29	27,175	0.17	16
17	Sheikhupura		21,746	0.74	28,544	1.24	24,309	0.53	24,631	0.23	31,657	0.16	17
18	Gujrat		31,439	0.74	34,416	0.59	37,672	1.03	34,945	0.61	39,097	0.40	18
19			28,293	0.90	27,633	0.36	31,838	0.80	24,027	0.88	21,904	0.06	19
20			19,492	0.31	21,488	0.20	21,344	0.16	33,939	0.42	36,894	0.53	20
21	1		26,184	0.20	26,823	0.12	34,723	0.24	28,763	0.30	46,299	0.02	21
22			22,309	0.48	24,297	0.37	24,000	0.18	25,378	0.38	28,648	0.07	22
23			20,132	0.45	21,485	0.08	21,305	0.04	20,245	0.06	24,169 36,766	0.06	23
24			30,004	3.10	32,065	1.03	34,235	0.59	33,201	0.33	44,448	0.07	24
25			48,283	1.38	51,317	0.86	49,434	0.12	40,744	0.10	33,692	0.07	26
26		"	25,097	0.28	32,490	0.07	33,688	0.13	32,875 39,901	0.09	54,886	- 0.26	27
27			38,537	0.71	46,705	0.22	44,161	0.03	47,964	0.03	58,751	0.02	28
28			43,686 42,132	1.58	44,088	0.60	70,803	0.09	103,364	0.04	107,677	0.11	29
29	Dera Ghazi Khan		42,102	1 08	32,408	0.00	70,803	- 00	103,304		,		
	Total		891,765	0.75	969,190	0.43	1,057,507	0.42	1,126,996	0.34	1,219,266	0.24	
	Special Staff		59,138		31,761		78,107		55,172		44,374		68
9			4,596	0.14	5,804	0.13	6,446	0.02	9,100	8 12	15,757	0.05	
12.5	Dispensary Staff		2,500		2,751		3,114		3,187		2,721		19%
	Political Staff, Dera Ghazi Khan.										3,951		
	GRAND TOTAL		957,999	0.74	1,009,506	0.43	1,145,174	0.42	1,194,455	0.34	1,286,069	0.24	

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