

A NOTE OF COMPARISONS  
OF OCCUPATIONAL DATA IN THE  
AND JOBI CENSUS

BY

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A NOTE ON COMPARISONS OF OCCUPATIONAL DATA  
IN THE 1921 AND 1931 CENSUSES OF BURMA

(1) In this note, a statistical comparison is made between the occupational data of the 1921 and the 1931 Censuses of Burma. The note treats only of Divisional Burma<sup>1/</sup>, as there was considerable change in the efficiency of enumeration, particularly regarding occupations, in the Eastern States. Further, most other statistical data, which may be used for comparison with Census information, is also available only for Divisional Burma.

(2) The population of Divisional Burma increased from 11,698,408 in 1921 to 13,102,048 in 1931. Of this, the number of workers was given as 5,927,138 in 1921 i.e. 50.67 per cent of total population; and as 4,671,666 earners and 793,314 working dependents, i.e. a total of 5,464,980 workers in 1931, constituting 41.171 per cent of the 1931 total population. Thus there was both an absolute and a relative decline in the numbers of the occupied population. The 1931 Census Report says, "These differences are mainly due to changes in the instructions issued to enumerators"<sup>2/</sup>. This seems unsatisfactory and an attempt is made in the following to arrive at a statistical explanation of the difference and to suggest a method of overcoming the difficulty in making comparisons of employment in various classes of occupations between the 1921 and the 1931 Censuses.

(3) The 1921 occupational data is summarised below for workers and dependents by sex, together with the respective percentages to the total population.

Table I.

Occupational Data 1921 Census

	Total	%	Male	%	Female	%
Workers	5,927,138	50.67	3,585,013	30.65	2,342,125	20.02
<u>Dependents</u>	<u>5,771,270</u>	<u>49.33</u>	<u>2,406,610</u>	<u>20.57</u>	<u>3,364,660</u>	<u>28.76</u>
TOTAL	11,698,408	100.00	5,991,623	51.22	5,706,785	48.78

This may now be compared with the age-sex composition of the 1921 population, given below:

Table II

Age-Sex Composition, 1921

Age	Total	%	Male	%	Female	%
0-10	2,908,402	24.86	1,436,102	12.23	1,472,300	12.50
10-15	1,352,915	11.56	696,696	5.95	656,219	5.61
15-50	6,014,995	51.42	3,145,277	26.89	2,869,718	24.53
50-& Over	<u>1,422,096</u>	<u>12.16</u>	<u>713,548</u>	<u>6.10</u>	<u>708,548</u>	<u>6.06</u>
	11,698,408	100.00	5,991,623	51.22	5,706,785	48.78

<sup>1/</sup> Divisional Burma consists of the seven administrative Divisions of the country and excludes the Eastern States, i.e. the Northern and Southern Shan States and Karenni States.

<sup>2/</sup> Page 127 of the report

(4) These two tables suggest that the 30.65% of the total population which consists of the male workers come from the entire male population between 15 to 50 and the greater part of the population between 10 to 15. Similarly, the 20.02 percent of the total population which consists of the female workers are composed of nearly 80 per cent of the female population in the age group 15 to 50.

(5) We may now consider the similar breakdown of the population of 1931 in the following two tables.

Table III.  
Occupational Data 1931 Census

	Total	%	Male	%	Female	%
Earners	4,671,666	35.66	3,398,245	25.94	1,273,421	9.72
Working Dependents	793,314	6.05	370,207	2.83	423,107	3.22
Dependents	<u>7,637,068</u>	<u>58.29</u>	<u>2,919,779</u>	<u>22.28</u>	<u>4,717,289</u>	<u>36.01</u>
Total	13,102,048	100.00	6,688,231	51.05	6,413,817	48.95

Table IV  
Age-Sex Composition, 1931

Age	Total	%	Male	%	Female	%
0-10	3,417,650	26.08	1,697,698	12.96	1,719,952	13.12
10-15	1,492,413	11.39	760,114	5.80	732,299	5.59
15-50	6,704,344	51.17	3,476,639	26.54	3,227,705	24.63
50 & Over	<u>1,487,641</u>	<u>11.36</u>	<u>753,780</u>	<u>5.75</u>	<u>733,861</u>	<u>5.61</u>
Total	13,102,048	100.00	6,688,231	51.05	6,413,817	48.95

(6) A comparison of Tables II and IV show a great similarity in the age sex composition of the population. We may therefore conclude that the difference between the proportions of occupied population in the two censuses is not mainly due to a change in the age-sex composition. Among the male population, the proportion of the male earners is very close to the proportion in the age group 15 to 50, while male "working dependents" are about half the male population between 10 and 15. The position is therefore roughly comparable to that of 1921.

However, the female earners and working dependents together form a much smaller proportion, about less than half the female population of age 15 to 50, in 1931 than in 1921, when it was nearly 80 percent. The main cause of the decline in numbers of the occupied population must therefore be said to be the smaller number of females, relatively to their total population, who were reported to be employed.

(7) It therefore appears desirable to make comparisons of the occupied population only on the basis of the male workers as far as possible. Let us consider now only the male occupied population to see if we get a consistent picture:

Table V

Male Occupied Population 1921-1931

	<u>1921</u>	<u>1931</u>
(a) Total Population	11,698,408	13,102,048
(b) Total Male Population	5,991,623	6,688,231
(c) Percentage of Male in Total Population	51.22	51.05
(d) Male workers*	3,585,013	3,768,542
(e) Male workers as percentage of male population	59.06	56.36
(f) Male workers as percentage of total population	30.65	28.77

\* The workers for 1931 include both Principal workers and working dependents

From the above table, we see that there is now an increase in the occupied population. However, there is a relative decline as shown by (e) and (f). To some extent, this is due to the fact that the male percentage in the population has declined slightly, from 51.22 to 51.05; and particularly the population in the age group 10 to 15, from 26.89 to 26.54. However, this does not completely explain the decline in the percentage of workers among the males.

(8) This decline in occupied population may be studied in further detail by considering it in each Sub-Class of occupations in the Census classification.

Table VI

Male Workers by Occupation Sub-Class, 1921-1931

	1921	1931		Percentage Increase	
		P.W.	W.D. Total Works		
A I Livestock & Vegetation	2,448,752	2,480,323	220,476	2,700,799	10.29
II Minerals	27,433	27,433	1,157	28,590	5.81
B III Industry	271,885	272,605	16,888	289,493	+ 6.47
IV Transport	170,625	185,069	9,519	194,588	+14.04
V Trade	250,177	239,989	8,945	248,934	- .48
C VI Pub. Force	34,787	28,791	27	28,818	-17.16
VII Pub. Admn.	26,418	35,887	240	36,127	+36.75
VIII Professionals	119,575	55,311	93,589	148,900	+24.52
D IX Unoccupied	3,110	5,071	80	5,151	+65.52
X Domestic Sers.	33,785	32,048	968	33,016	- 2.28
XI Misc.	173,667	35,639	1,225	36,864	-78.77
XII Unproductive	25,212	79	17,093	17,172	-31.89
Total	3,585,013	3,398,245	370,207	3,768,452	+ 5.11
Total Population	11,698,408			13,102,048	+11.99

(9) We may now consider Female workers by sub-classes of occupations as in Table VI for Males.

Table VII  
Female Workers by Occupational Sub-Classes, 1921-31

		1921	1931		Percentage Increase	
			P.W.	W.D. Total Works		
A I	Livestock & Vegetation	1,729,113	913,110	170,701	1,083,811	-37.32
II	Mineral	2,959	1,582	1,295	2,877	- 2.78
B III	Industry	197,378	121,937	159,201	281,138	+42.43
IV	Transport	14,862	9,251	2,560	11,811	-20.53
V	Trade	295,037	201,374	70,664	272,038	- 7.80
C VI	Pub. Force	332	4	0	4	-98.76
VII	Pub. Admn.	795	288	11	299	-62.39
VIII	Professionals	15,046	11,427	9,979	21,406	42.27
D IX	Unoccupied	1,105	1,531	100	1,631	+47.60
X	Domestic Sers.	6,854	7,277	2,433	9,710	+41.66
XI	Misc.	69,715	5,486	1,613	7,100	-99.82
XII	Unproductive	8,939	153	4,550	4,703	-47.39
	Total	2,342,125	1,273,421	423,107	1,696,528	-27.57
	Total Population	11,698,408			13,102,048	+11.99

Table VII throws further light on the nature of the under-enumeration of females as workers. It shows that this under-enumeration was most substantial in the first sub-class of Livestock and Agriculture. Thus, while the total decline of the female occupied population was 645,597, that in this subclass alone was 645,302, almost exactly equal. Apart from this there was an increase of 40,861 in the combined classes of Trade and Industry, constituting together an increase of 8% from the 1921 figures. This increase was mostly balanced by decreases in the other subclasses of occupations, particularly subclass XI of insufficiently described occupations. We may therefore conclude that the difference in instructions which led to an underenumeration of female workers had its main effect in the agricultural occupations.

(10) One important feature that must be taken into account in our comparisons relates to the Sub-Classes "Insufficiently Described Occupations". There was a decline from 243,382 in 1921 to 43,964 in 1931. This is one consequence of the many changes made in the occupational classification of the 1931 Census. A significant change relates to the introduction of the classification of 'working dependents', so that persons were assigned as working dependents in some occupations, who might have been classified as belonging to insufficiently described occupations in previous censuses.

This sub-class was further divided into four groups in 1921 and previous censuses, namely (i) Manufacturers, businessmen, and contractors otherwise not specified;  
(ii) Cashiers, accountants  
(iii) Mechanics,  
(iv) Labourers.

It is found that both in the 1911 and the 1921 Censuses, the group labourers constituted over 75% of the Sub-Class of Insufficiently Described occupations.

The great change in this sub-class of occupations has had a number of effects. The 1931 Census Report says, that "The big reduction in the proportion of workers with insufficiently described occupations is largely responsible for the increase in the proportions for the sub-classes, Industry, Transport and Trade". Further, it is also said that this is also the main explanation for the very large increase in the numbers reported under Industry.

Another consequence has been the fact that number of labourers previously entered in the Insufficiently described occupations were put under Agriculture in 1931 so that there was a very large increase under this head.

For this reason, it is desirable to study the general pattern of the numbers engaged in the various classes, excluding the sub-class of insufficiently described occupations. This is done in the following table, for the total workers and for males and females separately.

Table VIII

Occupational Distribution of Population Between 1921 and 1931  
(Excluding Insufficiently Described Occupations)

Occupational Sub-Class	Male		Female		Total	
	1921	1931	1921	1931	1921	1931
I	71.8	72.4	76.1	64.1	73.5	69.8
II	0.8	0.8	0.1	0.2	0.5	0.6
III	8.0	7.8	8.7	16.6	8.2	10.6
IV	5.0	5.2	0.7	0.7	3.3	3.8
V	7.3	6.7	13.0	16.1	9.6	9.6
VI	1.0	0.8	0.0	0.0	0.6	0.5
VII	0.8	0.9	0.0	0.0	0.5	0.7
VIII	3.5	4.0	0.7	1.3	2.5	3.1
IX	0.1	0.1	0.0	0.1	0.1	0.1
X	1.0	0.9	0.3	0.6	0.7	0.8
XII	0.7	0.4	0.4	0.3	0.6	0.4
T o t a l	100.0	100.0	100.0	100.0	100.0	100.0

The general pattern is remarkably similar for the male workers in the two censuses, the big differences occurring in the proportions for female workers and hence reflected in that of the total workers.

(11) We shall now consider the important sub-classes individually. The first sub-class refers to the exploitation of animals and vegetation. This is the biggest sub-class of occupations. In this period, the gross sown area increased from 15,388,668 in 1921 to 17,929,719 in 1931 an increase of 11.6%. Corresponding to this, the male workers in Sub-Class I increased by 10.29 per cent. However there was a decline of 37.32 per cent among female workers; the 1931 Census Report claimed that the main reason for this was the difference in the method of enumeration. It has already been mentioned that the big drop in the numbers in the insufficiently described occupations may have increased the numbers of agricultural labourers in 1931. The changes in agricultural population are further studied in a separate paper on the Agricultural Economy 1924-41.

(12) There was only a small increase in the mining occupations in Divisional Burma, although a large increase was recorded in the Shan States and Karenni. Some part of the increase is due to increased employment in the oilfields.

(13) Industry and Trade occupations may be considered together. Male workers in industry increased by 6.47 per cent, while female workers increased by 42.43 per cent, whereas male workers in trade decreased by half per cent while female workers decreased by 7.80 per cent. The 1931 Report explains that the decrease under Trade may be due to the difference in classification; a person who is entered in the enumeration schedule as a seller of an article is often the maker of the article in Industry or as a seller of the article in Trade. The big increase in Industry in 1931 may be partly due to this. For instance, there was a big increase under Textile industry accompanied by a big decrease under Trade in textiles. This assumption is justified to some extent by the fact that imports of yarn and twist declined between 1920 and 1930.

Another explanation for the increase in the numbers under Industry is that persons previously classified under insufficiently described occupations were now classified under industry. The largest increase occurs among female working dependents classified as textile workers but the 1931 Report discounts this as being a genuine increase.

It must however be mentioned that although the relative position of the Industry group remained the same at the two Censuses, there may have been changes between the two years. This was a period of growing prosperity and there are some indications that a number of industrial establishments were set up. Thus the number of establishments reported under the Factory Act Administration expanded throughout the period, but the employment increased and then declined to the same figure at the two census years.

(14) The comparison becomes more difficult in the case of subsidiary occupations, because of a fundamental change in the tabulation of the results at the two censuses. In 1921, the table gives the number of workers in each occupational group who have subsidiary occupations, but not the type of the subsidiary occupation. In 1931, the corresponding table gives the number of subsidiary workers in each occupational group

is given, but not the principal occupation of these workers. The 1921 table however distinguishes between the agricultural and other subsidiary workers. Therefore only two comparisons can be made; one the relative numbers with recorded subsidiary occupations; and the strength of the subsidiary occupations in agriculture and other sectors.

(15) The following table give the position of the subsidiary workers at the two censuses:

Table IX

The Workers with Subsidiary Occupations

<u>1921</u>	Male	Female	Total
Workers	3,585,013	2,342,125	5,927,138
Workers with subsidiary occupations	398,874	197,597	596,471
Percentage	11.1	8.4	10.1

1931

Principal Workers & Working Dependents	3,768,452	1,696,528	5,464,980
Workers with subsidiary occupations	256,936	97,450	354,386
Percentage	6.8	5.8	6.5

This shows that both for males and for females the 1931 Census showed a smaller proportion of workers with subsidiary workers. Two explanations may be advanced, one to explain the excess in 1921 and the other to explain the deficiency in 1931. The 1921 Census Report mentions that there was a tendency in that year to record the actual occupation at Census date as the principal occupation, and to record the main occupation of the rest of the year as subsidiary. As agriculture and inland fishing had practically ceased, there was a tendency to put this down as subsidiary occupation. This affects such a large sector and may have led to over-estimation of workers with subsidiary occupations. On the other hand, the 1931 Census stated that returns for subsidiary occupations were far from complete, and although special cases are mentioned, there was no attempt to examine the figures in detail. We cannot therefore draw any specific conclusion about change in the relative numbers with subsidiary occupations.

(16) In the 1921 Census, subsidiary occupations were divided into two groups only, the agricultural and others. Agricultural occupations for this purpose included:

- (i) Land owners;
- (ii) Agents, managers, clerks and rent collectors;
- (iii) Cultivating owners, tenants and labourers; and
- (iv) Tsungya cultivators. The basic figures are given in

the following table.

Table X

Principal and Subsidiary Workers in Agricultural Occupations

<u>1921 Census</u>	Male	Female	Total
Total workers	2,277,226	1,665,230	3,942,456
Subsidiary Workers	72,712	39,681	112,393
Percentage	3.2	2.4	2.9

1931 Census

Total workers	2,322,681	878,696	3,201,377
Subsidiary Workers	65,468	16,809	82,277
Percentage	2.8	1.9	2.6

\* Includes principal workers and working dependents.

The decline in the percentage of subsidiary workers in agriculture may be due mostly to the incomplete return of subsidiary occupations in 1931. This decline seems to be the same both for male and female workers.

A corresponding analysis may now be made of other occupations.

Table XI

Principal and Subsidiary Workers in Non-Agricultural Occupations

<u>1921 Census</u>	Male	Female	Total
Total Workers	1,307,787	676,895	1,984,682
Subsidiary Workers	326,162	157,916	484,078
Percentage	24.946	23.329	24.389

1931 Census

Total Workers	1,445,771	817,832	2,263,603
Subsidiary Workers	191,468	80,641	272,109
Percentage	13.243	9.8603	12.021

A comparison of the two tables shows clearly that the subsidiary workers play a greater part in the non-agricultural occupations than in the agricultural. Table XI also indicates a very great decline in the proportion of subsidiary workers in 1931 compared to 1921. There is no information to indicate to what extent this is due to the under-estimation of subsidiary workers in 1931 Census and to what extent there is a genuine reduction in the number of subsidiary workers.

(17) The information in the 1921 Census can also be used to indicate the principal occupations of workers who reported subsidiary occupations. The accompanying table XII shows the percentage of agricultural

and other subsidiary workers in relation to principal workers in each of the Census sub-classes of occupations:-

Table XII

Principal Workers with Subsidiary Occupations

Sub-Class	Total Workers	Number with Subsidiary Works in:-				
		Agriculture	%	Other	%	Total %
I	4,183,997	75,716	1.8	425,468	10.2	12.0
II	23,847	222	0.9	258	1.1	2.0
III	469,263	14,113	3.0	19,993	4.3	7.3
IV	185,487	4,058	2.2	5,351	2.9	5.1
V	545,214	8,455	1.6	22,742	4.2	5.8
VI	35,109	644	1.8	166	0.5	2.3
VII	27,213	5,565	20.4	1,265	4.6	25.0
VIII	134,621	1,027	0.8	2,150	1.6	2.4
IX	4,215	144	3.4	351	8.3	11.7
X	40,639	112	0.3	367	0.9	1.2
XI	243,382	2,602	1.1	5,787	2.4	3.5
XII	34,151	15	0.1	180	0.5	0.5
T o t a l	5,927,138	112,393	1.9	480,078	8.1	10.0

The large proportion of workers in Sub-Class VII: Public Administration who have an agricultural subsidiary occupation is mostly accounted for by village officials and village servants. The second largest proportion of agricultural subsidiary workers occurs in sub-Class IX of persons without an occupation but receiving an income; this however is a small class and not specially significant.

Most of the non-agricultural subsidiary workers come from Sub-Class I which contains the agricultural workers. On the whole 10 per cent of the workers enumerated in 1921 reported a subsidiary occupation.

(18) The 1931 Census gives a different types of information about the subsidiary occupations of such workers. This is summarised in the accompanying table.

Table XIII

Principals and Subsidiary Workers

Sub-Class	Total Workers	Subsidiary Workers	Percentage
I	3,784,610	131,366	3.4
II	31,467	2,549	8.1
III	570,631	108,384	19.0
IV	206,399	49,621	24.0
V	520,972	48,751	9.4
VI	28,822	46	0.2
VII	36,426	5,375	14.8
VIII	170,306	6,750	4.0
IX	6,782	992	14.6
X	42,726	137	0.3
XI	43,964	396	0.9
XII	21,875	15	0.1
Total	5,464,980	354,386	6.5

The largest proportion occurs in Sub-Class IV of Transport workers and especially among Group No. 108 Owners, managers and employeas connected with vehicles drawn by animals. These subsidiary workers are fairly widely distributed all over the country and it is also mentioned in the Census Report of 1931 that all the subsidiary workers in the group were recorded in rural areas. We may therefore conclude that they are principally engaged in agriculture.

The next highest proportion occurs in Sub-class II of Industry, which is a much larger class. The bulk of these subsidiary workers were again recorded in rural areas and relate to the Textile, Wood and Food industries.

On the whole, the subsidiary workers represent 6.5 per cent of all principal workers; this may be compared with 10.0 per cent for 1921. In 1921, 99 percent of these subsidiary workers were recorded in rural areas. This may be compared with the fact that in 1921, 83 per cent of the subsidiary workers had a principal occupation in Sub-Class I.

(19) The main conclusions of the present study may therefore be summarised in the following points:

- I. That the main cause of the decline in the numbers of the occupied population is due to the smaller number of females enumerated as principal workers or working dependents in the 1931 Census;
- II. That useful comparisons can be made between the 1921 and 1931 Censuses by taking only the male occupied population;

- III. That some distortion is due to the fact that the numbers recorded under the class of Insufficiently Described Occupations declined very much between 1921 and 1931, particularly among female workers; therefore, subject to some special adjustments, a better comparison may be made by excluding this class;
- IV. That after such adjustments are made, the occupational distribution of the population at the two Censuses show a remarkable similarity;
- V. That although the method of tabulation of subsidiary workers in the two Censuses prevents the making of any direct comparisons, each Census gives some interesting information for the corresponding year.