

Reconciliation of Food Statistics

(By A Statistician)

Since food statistics can only provide food for thought and not for hungry mouths, a statistician invites the reader to chew the figures of per capita availability of food grains in the 'reporting' and 'non-reporting' areas that he has derived by a combination of the population census and the food output.

These are tentative suggestions for the official statisticians to think over,—Ed.

IN the present state of confusion in food statistics, when widely divergent sets of figures are periodically released to the public by different departments of the Government, any attempt at setting out the variety of official statistics might perhaps add to the existing confusion by presenting yet a third or a fourth set of figures of food output divergent from those already available. Fortunately, however, food statistics in general are today so much suspect with the man in the street that any new set of figures is likely to produce little more than some harmless amusement for him. It is against this background that we make bold to attempt a brief analysis of the available 'official' (ie, the Food Ministry) Food Statistics. We desire not to present any new set of figures, but to provide some food for thought to the statistician who has to do the "cooking" of the figures. And let us frankly confess that it will need some cooking of the widely dissimilar statistics before we can hope to be even reasonably sure that we are not annually consuming 65 million tons while we are (ostensibly) producing a mere 45 million and importing around 3 million!

The following is largely an attempt at analysing the total area under different crops; the problem of yield rate is avoided here. The tables on the next three pages attempt at a two-fold analysis:

(i) The data given in the Census Paper No 2, issued by the Registrar-General, regarding population and details of land utilisation in different homogeneous regions of the country have been re-arranged State-wise. This is a mere matter of presentation to the reader more familiar with the political divisions of India than with homogeneous regions,

(ii) The data released by the Directorate of Economics and Statistics of the Ministry of Food and Agriculture, relating to output in 'reporting' and in 'non-reporting' areas, and the estimates of popula-

tion in 'reporting' and 'non-reporting' areas as given in the Census Paper No 2 have been set off in order to determine (a) the extent of complete absence of any data, and (b) the degree of reliability of the "official" statistics of foodgrain output.

As a warning to those who may wish to run away with the sketchy analysis presented here, the following facts must be brought out:

(i) Land utilisation statistics vary in reliability from area to area. In places these are based on detailed *patwari* records, and in places these are but conventional estimates. Thus, for instance, we have long had land utilisation statistics in Bihar, but the detailed crop survey in 1948-49, and after revealed an under-estimation of more than 33 per cent in the estimates of total area cultivated in Bihar, as given in land utilisation statistics until the institution of the crop survey.

(ii) Land utilisation statistics are relatively more accurate in the temporarily settled areas. In the permanently settled areas, the land utilisation statistics tend to be conventional estimates (and most frequently under-estimated).

(iii) Apart from Mysore, and a part of Hyderabad, land utilisation statistics in most Part B States and in the merged territories (in Part A States) would be of the conventional variety.

The first duty of the food statistician would, therefore, appear to be a detailed classification of the entire, geographical area into areas where land utilisation statistics are conventional estimates, and statistics are available. This, it would be (dear, can only be attempted at the Government level, and is not possible for any individual or even an institution to carry out, since the classification will at places, have to be carried out with the *tehsil* as the unit of enquiry (though by and large, it can be conducted with the district as the unit).

The next task would probably be more complicated. It would re-

quire a detailed analysis, crop-wise, of areas for which ICAR crop-cutting surveys are available. Where area and outturn statistics are reasonably firmly established, it might be profitable to compare state-wise (not region-wise) and crop-wise the 'consumption' estimates as given in the National Sample Survey against the production estimates thus meticulously built up. This would not only be a pointer to the validity or otherwise of one or the other set of figures; it would also provide a reasonably accurate estimate of foodgrain output in at least a part of the country.

These are tentative suggestions for the official statisticians to think over. No one will deny the importance of the problem of securing accurate food statistics; no one—the statistician least of all—will deny the complexity of the problem. While leaving the statistician to put forward the most reasonable sets of figures that he may, we leave the reader to chew the figures of *per capita* availability of foodgrains in the 'reporting' and the 'non-reporting' areas as derived by a combination of the population census and the food output figures. Since food statistics can only provide food for thought and not for hungry mouths, we refrain from further comments.

Back Issues,

Feb 2 and Mar 1, 1952

Will readers who do not need them kindly mail back the issues of February 2, and March 1, 1952? These are required in order to complete the set of Village studies, for which there is urgent demand from universities and research institutions in India and abroad.

Back issues will be paid for.

POPULATION AND LAND UTILISATION IN THE INDIAN UNION :

State	Total population 1951 Census (000)	Approximate population (in 000) in area for which land utilisation statistics are available	Area under rice (000 acres)	Area under wheat and barley (000 acres)	Area under jowar, bajra and ragi (000 acres)	Area under other food-grains incl. maize, gram and other pulses (000 acres)
1	2	3	4	5	6	7
<i>Class 'A' States:</i>						
Assam	9044	9044	3964	2	‡	268
Bihar	40226	40226	13916	2709	649	9101
Bombay	35956	35956	3161	2103	18757	6083
Madhya Pradesh	21248	21248	8732	2476	4978	9087
Madras	57016	57016	10611	13	8417	6534
Orissa	14646	10150	5466	7	334	923
Punjab	12641	12641	424	3382	2511	4780
Uttar Pradesh	63216	63216	8239	13208	5504	15678
West Bengal	24810	24810	9490	158	12	1189
TOTAL	278803	274307	64003	24058	41162	53643
<i>Class 'B' States:</i>						
Hyderabad	18655	18655	1392	395	7645	6761
Jammu and Kashmir	4410†	4410	497	647	122	1029
Madhya Bharat	7954	7954	311	2216	3322	3094
Mysore	9075	9064	775	3	2586	1712
Pepsu	3494	3494	39	1036	783	1421
Rajasthan	15291	9278	17	1287	3264	2446
Saurashtra	4137	2091	22	203	2244	134
Travancore-Cochin	9280	9271	1019	‡	9	93
TOTAL	72296	64217	4072	5787	19975	16690
<i>Class 'C' States:</i>						
Ajmer	693	693	‡	69	132	123
Bhopal	836	836	47	503	154	488
Bilaspur*	—	—	—	—	—	—
Coorg	229	229	87	....	3	2
Delhi	1744	1744	‡	68	80	73
Himachal Pradesh	1109	1109	109	411	41	405
Kutch	568	568	....	23	394	95
Manipur	578	—	—	—	—	—
Tripura	639	639	381	....	....	1
Vindhya Pradesh	3575	3575	1097	1107	321	1702
TOTAL	9971	9393	1721	2181	1125	2889
<i>Class 'D' States:</i>						
Andaman and Nicobar Islands	—	—	—	—	—	—
Sikkim	138	—	—	—	—	—
Indian Union (excluding 'D' States)	361070	347917	69796	32026	62262	73222

† Derived from *Census Paper No. 2*, issued by the Registrar-General of India, 1950. Crop area figures are mostly averages over a number of years (see *Census Paper No. 2*).

CROPPING PATTERN IN AREAS FOR WHICH VILLAGE PAPERS ARE AVAILABLE

Total area under food-grains incl. pulses (000 acres)	Area under food crops other than food-grains and oil-seeds (000 acres)	Area under oil-seeds (000 acres)	Area under fodder crops (000 acres)	Area under cotton (000 acres)	Area under jute and other fibres (000 acres)	Area under tea, coffee, tobacco, and other misc. crops (000 acres)	Total area sown (000 acres)
8	9	10	11	12	13	14	15
4234	748	346	8	32	204	508	6080
26375	1275	1017	....	17	392	58	29133
30104	1073	3872	4257	2491	86	479	42364
25273	419	2738	478	2949	110	12	31975
25575	1838	5586	469	1566	192	832	35960
6730	337	275	13	9	54	169	7587
11097	486	493	2087	322	23	41	14550
42629	3042	816	1850	148	223	110	48819
10849	905	276	21	‡	321	295	12669
182866	10123	15419	9183	7534	1605	2504	229137
16193	597	4784	42	2224	314	44	24199
2295	47	92	41	24	6	48	2553
8943	175	961	36	1218	68	41	11439
5076	389	640	169	55	11	308	6648
3279	170	124	701	218	6	291	4790
7014	695	743	431	91	15	335	9337
2603	104	411	27	481	....	64	3690
1121	895	696	45	15	‡	258	3031
46524	3072	8451	1492	4326	420	1389	65687
324	25	20	9	13	‡	15	406
1192	23	92	276	21	4	1	1608
—	—	—	—	—	—	—	—
92	29	‡	‡	....	....	41	163
221	14	3	33	‡	‡	1	274
966	25	24	2	1	‡	12	1031
512	6	11	210	5	....	‡	764
—	—	—	—	—	—	—	—
382	7	20	....	23	13	11	457
4227	56	499	55	4	7	2	4850
7916	185	669	585	67	24	83	9553
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
237306	13380	24539	11260	11927	2049	3976	304377

* Figures for Bilaspur are lumped with figures for Himachal Pradesh.

† Estimated population.

‡ Below 500 acres.

1951 CENSUS AT A GLANCE: POPULATION IN THE INDIAN UNION ¶

STATE	Total land area according to the Surveyor-General	Land area for which village papers are available	Land area for which village papers are not available	Total population 1951 Census	Approximate population of area for which village papers are available	Approximate population not covered by village papers in L. U. statistics	Gross area sown with crops according to L. U. statistics (for area for which village papers are available)
	(000 acres)	(000 acres)	(000 acres)	(000)	(000)	(000)	(000 acres)
1	2	3	4	5	6	7	8
<i>Class 'A' States:</i>							
Assam	54408	33400	21008	9044	9044	—	6393
Bihar	45011	44790	221	40226	40226	—	29133
Bombay	70318	70212	106	35956	35956	—	42363
Madhya Pradesh ..	83374	83149	225	21248	21248	—	32194
Madras	81786	80799	987	57016	57016	—	36345
Orissa	38487	20582	17905	14646	10150	4496	7324
Punjab	23922	23164	758	12641	12641	—	14136
Uttar Pradesh ..	72582	72074	508	63216	63216	—	49228
West Bengal	19696	19549	147	24810	24810	—	13011
TOTAL	489584	447719	41865	278803	274307	4496	230127
<i>Class 'B' States:</i>							
Hyderabad	52588	52927	—	18655	18655	—	24199
Jammu and Kashmir ..	59379	8002	51377	4410§	4410	—	1664
Madhya Bharat	29746	27625	2121	7954	7954	—	11440
Mysore	18873	17385	1488	9075	9064	11	6596
Pepsu	6450	6371	79	3494	3494	—	4790
Rajasthan	83332	20671	62661	15291	9278	6013	9450
Saurashtra	13729	5849	7880	4137	2091	2046	1013
Travancore-Cochin ..	5852	5349	503	9280	9271	9	3046
TOTAL	269949	144179	126109	72296	64217	8079	62198
<i>Class 'C' States:</i>							
Ajmer	1546	1561	—	693	693	—	406
Bhopal	4402	4406	—	836	836	—	1608
Bilaspur*	—	—	—	—	—	—	—
Coorg	1015	1012	3	229	229	—	171
Delhi	370	366	4	1744	1744	—	274
Himachal Pradesh ..	6979	2241	4738	1109	1109	—	1031
Kutch	10703†	5003‡	5700	568	568	—	764
Manipur	5522	—	5522	578	—	578	—
Tripura	2580	2634	—	639	639	—	457
Vindhya Pradesh ..	15107	14356	751	3575	3575	—	4850
TOTAL	48224	31579	16718	9971	9393	578	7561
<i>Class 'D' States:</i>							
Andaman and Nicobar Islands	—	—	—	—	—	—	—
Sikkim	1756	—	1756	138	—	138	—
Indian Union	807757	623477	184692	361070	347917	13153	301886
(excluding Class 'D' States)							

¶ Derived from *Census Paper No. 2*, issued by the Registrar-General of India, 1952. Col. (8) is derived from *Agricultural Statistics of India*, Vol I, 1952.

* Figures for Bilaspur are lumped with figures for Himachal Pradesh.

† Includes 5.3 million acres of Rann.

‡ Includes 61565 acres for which cultivation details are not available.

§ Estimated population.