

Official Papers

Larger Yield in the Community Development Areas?

Rabi Crop Estimate Survey 1954-55 — A Report on the Community Project and National Extension Service Areas. By the Directorate of National Sample Survey, issued by the Community Projects Administration, Government of India.

Reviewed by B H Joshi

OVER-FULFILMENT of the target for food production during the First Plan period has given rise to much speculation. Widely divergent views have been expressed regarding the role of favourable monsoons and the effectiveness of the measures for agricultural development in realizing these higher levels of output. It is not possible to estimate directly the increase in production due to implementation of agricultural programmes independent of the influence of favourable monsoons. But a comparative study of yields in similar regions with different rates of, outlay per acre over a series of years can be of great value in ascertaining the contribution of various developmental measures to higher production.

A survey on these lines has been carried out in the Community Development areas under the guidance of the Directorate of National Sample Survey for estimating yield rates of principal rabi crops in 1954-55. The survey was spread over 14 States of the Union covering 36 Community Project Blocks (C P) allotted in 1952-53, 24 Community Development Blocks (C D B) allotted in 1953-54, and 74 National Extension Service Blocks (N E S) allotted in 1953-54. The sample thus included, in all, 134 blocks, out of a total of 291 blocks. Altogether, 6,110 crop-cutting experiments were planned of which 2,953 were for wheat, 770 for barley, 2,141 for gram and 246 for rabi-jowar. The results of the survey were compared with the average yields of the districts in which the sample blocks were situated. The table below gives a summary of the important results.

The above results would not have

attracted much attention but for the controversy raging over the adequacy of the targets for food production for the Second Five-Year Plan. As a compromise between a 40% increase in food production suggested by Mr Nehru, and 15% increase as originally provided in the Plan, the Agriculture Ministers gathered at the Mussorie Conference have decided upon an increase of 25% in food production. When the planning for consumption goods is production potential-oriented, the coincidence between the target fixed at Mussorie and the results of this survey in the C D P and NFS regions do not appear to be merely accidental.

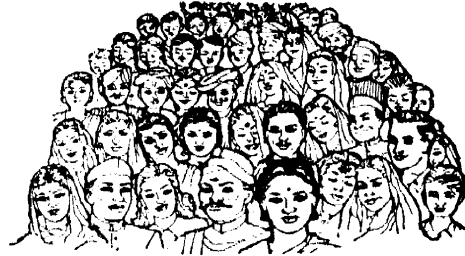
The consolidated figures for all the three development regions, show (last row of the table) in general, a 25% increase in yields of rabi crops. There is, however, a great divergence in the percentage increases in yields in the three types of development blocks. For instance, the increase in yield of gram and barley in the Community Development block is very much more than the increase in the Community Project blocks. When subjected to test of significance, the yield rate for gram in the latter is found to be significantly lower than either of the other two. This only shows that the increase in yields is not always commensurate with the increase in total outlay per acre. The only explanation for this apparent contradiction can be either that an inappropriate set of weights were assigned in the preparation of the survey estimates or bias in sampling or a non-optimal utilisation of resources.

The authors of the Report are good enough to have pointed out the serious limitations of the survey.

Among these are a large degree of non-response, and the lack of adequate supervision. Only about 62.4 percent of the total number of crop-cutting experiments initially planned were actually carried out. Much of the success of crop-cutting surveys depends upon timely arrangements which, unfortunately, the project administrative machinery was slow to realise. The lack of co-operation between the revenue and project administrations has also detracted from the value of the results. A serious non-response cannot but affect the representative character of the estimates. The data obtained as well might not be wholly reliable, because of inadequate supervision of the field work by the block officers. But the most important shortcoming of all is that the set of weights used in preparing the overall estimates was based on information obtained only from the sample blocks and not the entire population of blocks. When the average yield in the development areas have been found to vary from 607 lbs in Madhya Pradesh to 1386 lbs in PEPSU in the case of wheat, from 476 lbs in Madhya Pradesh to 187.1 lbs in Punjab in the case of gram, and from 774 lbs in Bihar to 1214 lbs in Rajasthan in case of barley, unless an appropriate system of weightage is chosen the findings of the survey may either greatly exaggerate or grossly underestimate the overall rise in yields. In view of the large regional variations, the data must be carefully sifted, together with proper regional adjustments, before the results can be utilized for gauging the production-potential of the country for food-grains.

SURVEY ESTIMATES OF AVERAGE YIELDS AND COMPARISON WITH GENERAL YIELD RATES

| Category | Wheat | | | Gram | | | | Barley | | | | | |
|----------|--|--|-------------------|-------------------------------------|--|--|-------------------|-------------------------------------|--|--|----------------------|-------------------------------------|----|
| | Survey Estimate average yield lbs/acre | Yield from Genl. C. E. Survey lbs/acre | (2)-(3) x 100 (3) | Sampling error of survey estimate % | Survey Estimate average yield lbs/acre | Yield from Genl. C. E. Survey lbs/acre | (6)-(7) x 100 (7) | Sampling error of survey estimate % | Survey Estimate average yield lbs/acre | Yield from Genl. C. E. Survey lbs/acre | (10)-(11) x 100 (11) | Sampling error of survey estimate % | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| C.P. | 1000 | 789 | 26.7 | 3.3 | 683 | 604 | 13.1 | 3.8 | 1242 | 1120 | 10.9 | 7.8 | |
| C.D. | 923 | 792 | 16.5 | 3.7 | 836 | 566 | 47.7 | 8.7 | 957 | 731 | 30.9 | 5.1 | |
| N.E.S. | 806 | 735 | 21.9 | 2.3 | 760 | 606 | 25.4 | 3.8 | 981 | 818 | 19.9 | 3.9 | |
| Combined | 933 | 748 | 24.7 | 1.7 | 752 | 601 | 25.1 | 3.0 | 1035 | 817 | 26.7 | 3.3 | |



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