

Size of Agricultural Holdings

—Actual and Optimal

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WHAT is the right size of land holdings? Which is actually the most representative size of cultivating unit today in the States? How are the cultivating families and the cultivated area distributed in different size groups of holdings? Answers to these questions are vital to the proper understanding of the agricultural economic problems of the country. The size of holdings is usually the most important single factor determining the income of farmers, their standard of living, savings, rate of capital formation, etc. Thus, credit is closely linked with the size of holding. The repaying capacity of the fanner and so his credit varies almost in direct proportion with the area of land owned by him. The cultivating unit or size of holding has also an important bearing on the intensity of farming and hence, on the yield per acre. Too heavy demand for maintenance in the case of holdings of inadequate sizes inevitably leads to the depletion of capital needed in farming. This has an adverse effect on the cultivation and the productivity of the land. Lack of full information concerning the size of cultivating unit and its distribution in different size groups in different States is mainly responsible for controversies regarding redistribution of land and ceiling on the size of holdings. Unfortunately, even now, when the country is so earnest about agricultural planning, necessary data on land holdings are non-existent. In fact, the study of agricultural holdings has received inadequate attention and has lacked expert handling.

In estimating the average size of holdings, very often the distribution between the agriculturists and many small-holders who follow agriculture only as a subsidiary occupation, e.g. agricultural labourers, village menials, artisans, etc., is not fully appreciated. In consequence, the average size of agricultural holding is under-estimated. On the other hand, the assumption that the size of the family of agriculturists is the same as that of other groups of population, is not quite correct. Our investigations show that it is larger than that of "other groups. This is also supported by the preliminary investigations into agricultural labour conditions recently conducted by the

Central Government in various states and by independent private rural surveys. Therefore, to calculate the number of agriculturist's families on the basis of the average size of family for the total population and to deduce from it the average size of holding would mean under-estimating it.

Some of the investigations in this field have mistaken *khala* for agricultural holdings, while others have confused the latter with the number of persons as recorded in Part I of the *khatauni*. Our study of nineteen villages in Kanpur district showed that the number of persons as recorded in Part I of the *khatauni* was 2,037 while their families and so their holdings numbered only 987. The total number of holdings inclusive of sub-tenants recorded in part II of the *khatauni* and also the unrecorded *batai* tenants whose holdings were ascertained by actual investigations, was 1,135.

An investigation into the size of holdings in four districts covering 147 villages was conducted by us during 1946-50. These were selected on random basis after dividing each district into agricultural homo-

geneous regions. Single village studies have been made in several other districts of UP and the results obtained agree fairly closely with the results obtained in the four districts. The percentage distribution of the cultivating families or holdings in different size groups of holdings is given in Table I.

The figures in columns 'B' show the percentage distribution of holdings when those below one acre have been excluded. In the case of Kanpur district 37.8 per cent of the holdings were below one acre, 26.9 per cent between 4 and 8 acres and 7.8 per cent above 8 acres. Excluding those below one acre, the percentage distribution of holdings was 29.9 between 1 and 2 acres, 28.7 between 2 and 4, 26.6 between 4 and 8 and 14.4 above 8 acres.

It will be seen that the average size of holdings declines as we proceed from West to East UP. It varies from 6.5 acres in Meerut, and 5.8 acres in Bulandshahr to 2.96 acres in Kanpur and 2.7 acres in Ghazipur, when all the cultivating families whether following agriculture as principal or subsidiary occupation are taken into account. Although a number of the cultivat-

Table I—Percentage Distribution of Holdings

Class interval	Meerut		Bulandshahr		Ghazipur	
	A	B	A	B	A	B
Below 1 acre	23.9	—	25.9	—	41.5	—
1 — 2.5 acres	19.3	25.3	12.7	17.1	27.6	47.2
2.5 — 5 „	18.5	24.2	18.2	24.6	18.3	31.3
5 — 7.5 „	12.2	15.9	14.1	19.0	5.6	9.6
7.5 — 10 „	8.1	10.6	9.2	12.4	3.0	5.1
10 — 15 „	7.2	9.6	10.3	13.9	2.4	4.1
15 — 20 „	3.9	5.2	4.0	5.4	—	—
Above 20 „	6.9	9.2	5.6	7.6	1.6	2.7
Average size of holdings in acres	6.5	8.47	5.8	8.96	2.7	4.27

Table II—Distribution of Holdings

Class of interval	Bulandshahr	Ghazipur
	% of total	% of total
Below 1 acre	1.4	7.8
1 to 2.5 acres	3.2	18.6
2.5 to 5 acres	9.8	23.0
5 to 7.5 acres	13.6	11.1
7.5 to 10 acres	12.4	11.7
10 to 12.5 acres	9.9	5.4
12.5 to 15 acres	8.9	1.6
15 to 20 acres	10.6	4.1
Above 20 acres	30.2	16.7

ing families with holdings between 1 and 2 acres follow agriculture as subsidiary occupation, particularly in West UP, even it cultivating families with holding below one acre who depend for their livelihood mainly on labour, village service, cottage work, etc., are left out, the average size of holding rises to 8.47, 8.96, 4.43 and 4.27 acres in Meerut, Bulandshahr, Kanpur and Chazipur districts respectively.

Table 11 gives the percentage distribution of total cultivated area in different size groups of holdings.

As a pilot survey, the results are revealing. The size of holdings in the case of cultivating families following agriculture as principal occupation is not so unsatisfactory as has been made out by many writers on this subject. Table 1 shows that among the cultivating families following agriculture as principal occupation, more than 50 per cent have holdings above 5 acres in the western districts. Even in Ghazipur, a district in eastern UP, more than 23 per cent of the families have holdings above 5 acres. Holdings above 4 acres in Kanpur form 41 per cent of the total.

The distribution of the total cultivated area in different size groups of farming units is still better. The figures in Table II and single village studies in several other districts show that only about 4 to 6 per cent of the total cultivated area in the western districts of UP, 8.7 per cent in Kanpur and 26 per cent in Ghazipur district are cultivated in holdings of less than 2 or 2.5 acres. Even in the districts of eastern UP, the farming unit for more than 40 per cent of the cultivated area is more than 5 acres. In Kanpur district, 58.5 per cent of the total cultivated area is cultivated in more than 4 acre holdings. In western districts about 40 per cent of the land is cultivated in more than 5 acre holdings.

These figures should go a long way in correcting the commonly held belief that most of our land is cultivated in very tiny holdings. In fact, so far, the difference between the percentage distribution of cultivating families and that of cultivated land in different size groups of holdings has not been given proper emphasis despite its important bearing on the issue of individual *versus* joint farming.

At present farming is mainly dependent on bullocks for motive

power. Mechanisation of agriculture in areas already under cultivation is not envisaged for the present or in the near future on any large scale. In the circumstances, co-operative joint farming as against individual farming does not offer much scope for economy in expenses of cultivation in the case of holdings of more than 7.5 acres. This is especially true of tracts with irrigation facilities where due to intensive cultivation, a smaller area is commanded by a pair of bullocks. Moreover, co-operative joint farming creates fresh difficulties of management and may lower labour efficiency as the spirit of collective responsibility and joint management is yet little developed. Thus the prospective gain from economy in expenses may be very largely offset by loss in managing efficiency and may therefore lead to decline in production.

From Table II it will be seen that in western UP about 72 per cent, of the land is cultivated in holdings above 7.5 acres and a change-over from individual to co-operative farming in the case of these holdings is not likely to result in an increase of productive efficiency. Also, the benefits of co-operative joint farming in the case of part-time farmers with holdings of less than one acre are not very certain when we take into consideration the intense desire of every family to retain some small area for individual cultivation, even when it voluntarily pools the rest of its land for joint-farming. This clearly establishes the value of the data regarding the distribution of cultivated area in different size groups for coming to a right decision in regard to the future place of small-holders who are part-time farmers and of those who have holdings above 7.5 acres *vis-a-vis* co-operative joint farming. It will also be useful in marking out the areas with holdings below six or seven acres where the development of co-operative farming is more urgent from the point of view of increased efficiency and production.

To conclude, the study of agricultural holdings either by census-method, i.e., complete enumeration or by random sampling is most urgent, especially on the eve of far-reaching measures of land reform and agricultural planning. No financial or organisational difficulties of any appreciable magnitude are involved in undertaking such an investigation. The necessary information can quite easily be secured from

the village records in collaboration with the village panchayats. In view of the wide variation in the percentage distribution of holdings in different size groups in the different areas, it may be stressed that the investigation should be on a regional basis. An average for the whole of any State is useless for evolving a rational policy.

It is encouraging to note that the survey of agricultural holdings occupies a prominent place in the Agricultural Census which is shortly to be undertaken in the States. A pilot survey of agricultural holdings is being conducted this year in UP. It is hoped that the survey of holdings will be comprehensive enough to provide a clear picture of the distribution of not only families in different sizes of holdings but also of the cultivated area.

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