

Official Papers

Progress at Suratgarh

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The Central Mechanised Farm at Suratgarh, Report 1956-58, Ministry of Agriculture, Government of India.

EVERYONE is agreed that the economic future of India depends largely on an increase in agricultural production. The total yield from the land must rise more rapidly than the number of people who have to live upon them. This rise in production can be obtained either by an increase in the productivity per acre (whether this is achieved by improved agricultural methods, by irrigation, or by the extensive use of fertilizers) or by an extension of the area under cultivation.

The same problem has faced a large number of other countries in recent years, especially in Asia. Most of them have depended largely on extension of the cultivated area for the necessary increase in production. This has been the case, for instance, in Russia, where in spite of the most vigorous efforts, the actual yield of food crops per acre has been disappointing. In China it has been reported that there has been a very large increase in production per acre but the figures given are so extraordinary that I venture to doubt whether the yields claimed have been obtained on any large scale. In Turkey figures for the last 20 years show that the large increase in total production has been almost entirely the result of extension of area rather than of increase in yield per acre. This fact is so striking that I venture to quote official figures for some of the most important crops :

	Yield per hectare 1936-40	in kiloes 1956-58
Wheat	1059	1059
Barley	1170	1277
Maize	1383	1184
Rice	2105	1959
All cereals	1098	1117
All pulse crops	859	903

Limited Scope for Extensive Cultivation

In fact, it would not be unfair to say that in the countries of Asia, with the exception of China whose statistics I think are unreliable, in-

crease in production has been almost entirely obtained by increasing the area under crop. I do not doubt that this is probably a temporary phase and that a big increase in yield per acre will be obtained by irrigation, improvement in the type of crop grown, and more extensive use of artificial fertilizers.

The possibility, however, of achieving the necessary increase in production by an extension of the cultivated area in India is far less than that in Russia or China. The boundaries of India are more or less fixed by ranges of mountains or deserts while Russia had the whole of Siberia and most of central Asia as potential cultivable land. China can extend her cultivation, though not without difficulty, into the vast areas in the north west and thus increase production. But in India the vacant areas are limited. There is a certain amount of cultivable land in the Himalayan Terai and in Rajputana and Central India, which could be used if adequate water was available. Apart from these regions there are not many possibilities of extending cultivation. The largely jungle tracts of the Eastern Ghats have such poor soils and such irregular formations that it is doubtful whether it will be possible ever to use them for cultivation to a much greater extent than is done now.

Significance of Suratgarh

This makes the work at the Suratgarh Central Mechanized Farm of special interest because, with the recent increase in the land in Rajputana commanded by irrigation schemes, it has indicated a method of getting a return quickly from an area where otherwise development might take a long time. The establishment of this farm, the largest in Asia, has been made possible by the gift of agricultural machinery by the Soviet Union. This report of what was achieved at Suratgarh by 1958 gives promise of a valuable contribution to our knowledge of the best way to utilise for cultivation land under similar condi-

tions. Where the Suratgarh farm now is there was previously no cultivation, partly owing to lack of water and partly to the way in which an arid area such as this tends to develop sandhills and a general topography which make it almost impossible for an ordinary farmer to bring the land into use. The presence of water has made agriculture possible and the large-scale implements have enabled the rapid preparation of much of the area which would otherwise have been almost useless.

Yields per Acre

The report under review tells of the area cultivated and the crops grown in 1956-8. There were actually 3,000 acres under crop, in the *rabi* season of 1956-7, nearly 1,900 acres in the *kharif* season of 1957 and 2,500 acres in the *rabi* season of 1957-8. The yields obtained are not outstanding, but it must be remembered that they were obtained in a new area and by pioneers in the use of the equipment provided. The yields per acre of the more important food crops were as follows, compared with the official averages for the Punjab :

	Suratgarh mds	Punjab (average, irrigated) mds
1956-7 <i>rabi</i>		
Wheat	12.4 to 22.8	12.6
1957 <i>kharif</i>		
Jowar	5.4	6.7
1957-8 <i>rabi</i>		
Wheat	6.4 to 8.8	12.6
Barley	9.2	—

There are no indications that the yields will be greater than those that are obtained in the cultivated parts of the Punjab except with paddy, and the area under this crop was so small that it is difficult to draw any conclusion from the figures given. The results, however, do show that in this desert land, which was not cultivated before, yields can be obtained which at least compare with yields in the same part of the country under irrigation.

It will be seen that the development of the farm is not taking place very fast, and so far the chief crops grown have been mustard in the *rahi* season and *Jowar* in the kharif. But if the area under crops can be rapidly increased and if, as should be the case, the yield per acre can be raised substantially, the farm will have at least provided a valuable guide to what can be done in a previously desert tract.

Large Cooperative Farms

But the question now arises as to how far Suratgarh may be a guide for the entire country. The inevitable conclusion is that the farm does show the way to a rapid increase in the area under food crops in unoccupied regions where water has recently become available. The key words in this conclusion are 'rapid' and 'unoccupied'. I have no doubt that when water becomes available there will be, in any case a slow extension of cultivation into such areas by energetic peasants like the Jats of the Punjab. But if an area is already largely under cultivation no one would think of removing the present peasant population in order to create large state farms such as that at Suratgarh. In such a case the only way to use the mechanized equipment available, as at Suratgarh, would be to create large cooperative farms in which, as in the Russian collectives, the peasants would be essentially labourers on a large estate in whose management they would have little part. A few of the larger owner-cultivators would be influential enough, owing to their large holdings or other factors, to demand an active part in the running of the farm, but by and large the owners would become labourers who would draw their share of the profits but whose pride in the ownership of land would tend to vanish. Even if such a scheme could be made acceptable to the present peasants, it would mean such a revolution in the relationship of the people to the land that it would change the whole economy of the country.

The only justification for the adoption of such a policy would be the assurance that it would lead to a large increase in the yield from the land. The yields at Suratgarh do not suggest that yields much higher than those now obtained under peasant cultivation in Punjab would be possible.

While the establishment of the Suratgarh mechanized farm is of

great value in showing a quick method of developing a new area where water has been recently supplied, its value as a guide to what can be achieved over the greater part of India is limited. I am very glad the Suratgarh experiment is being made, and it is probable that in the end a higher yield will be obtained there than is customary in

the adjoining regions of the Punjab and that it may lead to a generally higher standard of cultivation in that region, largely by the economical use of water and by the demonstration of higher yielding varieties of crop and of the value of artificial fertilizers. But that is for the future.

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