

# INAUGURAL ADDRESS

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Professor Maitra and his colleagues, the office bearers of the Indian Society of Agricultural Statistics and distinguished participants!

It is indeed a great honour for me to have been invited to inaugurate this function. When Professor S.K. Roy saw me at Mohanpur and invited me to attend this function I felt somewhat apprehensive because of my lack of knowledge of statistics. But I thought that since the office bearers of the Indian Society of Agricultural Statistics have decided after matured deliberations to invite me to this function, they must know what they are letting themselves in for.

Statistics, like mathematics, is a tool which is quite versatile and can be applied to many fields of human activity. Agriculture is one such field where it has been applied with success. But I think at the outset it may not be out of place to mention the major steps that were taken by the then kings and administrators to ascertain agricultural data accurately. As you are aware, in olden times the income of the king was mainly derived from agricultural produce and as a matter of policy it was incumbent on the king to assess his share of the produce at such a figure which should not be too low or too high. If it is too low then he would be depriving himself, if it is too high then it would give rise to unrest. In our country during the Hindu period, I don't know by what method, the king's share was fixed at one sixth of the produce. And naturally, they must have applied some method to ascertain what was the actual produce or could be the produce. Unfortunately, we don't know anything about the methods employed by them. Coming to the medieval period of history, we come across Sher Shah whose one of the main claims to be remembered is that he is said to have carried out a revenue survey for not only of ascertaining the extent of area under his control but also to find out the average produce in different areas, again for the purpose of assessment of revenue. Then we hear the name of Todar Mal, Revenue Minister under Akbar who is supposed to have

refined Sher Shah's method. He divided the country in to Sarkars, each Sarkar being expected to pay a revenue of one crore dams. Dam was a copper coin, the lowest unit of currency. And he also fixed at that time the average produce per pargana, which was the lowest unit of revenue administration at that time. But that was also a fairly extensive area. But one thing they lacked and that was how to assess in a bad year the extent of shortage and that led to recurrent famines during which many people died. Except for taking adhoc decisions regarding remission of revenue the administration, the emperor or king could do very little. Coming down to more recent times we find that in Bengal, undivided Bengal, as it was then, Mr. Ishak of the Indian Civil Service carried out a plot to plot survey to find out the nature and produce of each plot of land of Bengal. It would surprise you to know that till now the data compiled by him has not been bettered by anybody. This I found out when as the State Editor of District Gazzetteers I tried to revise the chapter on agriculture and I found that everybody actually had copied from what he did, nobody had tried to correct his record by another survey inspite of all the changes that must have taken place in land use. As Professor Maitra has mentioned, statistics came to be applied to agriculture by Professor Mahalanobis. At that time it was absolutely necessary for the Government to know the extent of shortage so that planning for import of foodstuffs could be done on some realistic basis. In fact, inspite of all that effort the estimate was seldom very accurate as it would be revealed by a remark that was passed by the Secretary of the Department of Food, Ministry of Food, Government of India at one time. Some foreign dignitaries asked him about the actual requirement of food and his reply was 'I do not know. Whatever I import that is eaten up.'

Again, at the present time you find that on one side our storage places bursting with rice and wheat, and at the same time in the country side you find undernourished people. Some explanation for this phenomenon will have to be found out. Otherwise our tall claims for having surmounted the food problem would not be very realistic. We can only say that there is a surplus if something is left over after everybody has been adequately fed. If that is not so, then you cannot say there has been really a surplus.

Agricultural statistics naturally need not confine itself only to the estimates on regard to the production of various agricultural crops including food crops. Statistics may also be applied to find out the extent of rural indebtedness and, in fact, the Reserve Bank of

India has been bringing out reports on that subject periodically. There again, you know, we administrators were used to be left with the suspicion as to how much reliance to place on the data because what we found on the ground some times did not tally with what was written in the reports. Of course it is understandable because statistical forecasts are always made within the limits of some error, it is never  $X$  but is always  $X \pm$  somethings,  $a$  or  $b$ . We only hope that with improvement in the methodology the accuracy of statistical forecast in these fields would improve so that administrative decisions taken on the basis of such data would be really realistic and not based on, let us say, somewhat accurate guess work. In fact, this is precisely what takes place even now in the agriculture departments of various states. The statistical department comes out with one forecast and the agriculture department comes out with another forecast. And the two are so widely variant that those who are in charge of decision making, are left in sore perplexity. This has happened again and again at least in West Bengal. One possible reason for such variations between the forecasts in regard to agricultural produce made by the Bureau of Statistics and the Department of Agriculture may be the absence of up to date information on the total acreage under cultivation and multicropping, as a result of which samples can not be drawn with sufficient accuracy nor can the results calculated from the data compiled from such sample survey be related accurately to the universe from which such samples are drawn. Well, let me hope that with the passage of time better methods would be developed and the forecasts will be more and more accurate so that those who are in charge of the destiny of this country would be able to take decisions which would truly result in the welfare of the people.

I would like to thank all of you, distinguished scientists, for the honour you have done me in choosing me to deliver the inaugural address. With these words I inaugurate this session.