

## A Reply to Critics

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The activities of the Agricultural Department, are often subject to criticism, in the press, on the platform, and also in the legislative chambers. The object of this note is to meet those criticisms by explaining the handicaps which the Departmental staff have to face in the course of execution of their duties. Before proceeding to examine the most common criticisms levelled against the Department, it seems desirable to place before the reader an idea of the number of officers employed and their jurisdiction, to enable him to realise the nature of such handicaps and judge for himself whether the criticisms are justified or not.

The Department, as at present constituted, has two main functions to perform viz., *Research* and *Propaganda*. The activities of the research side are confined to the Agricultural Research Institute located at Coimbatore and also at different farms situated all over the presidency. For the purpose of propaganda, the presidency is divided into four circles and in each circle a technically trained officer styled as Agricultural Demonstrator is placed in charge of one taluk.

It may be safely assumed, that in this Presidency, each taluk on an average comprises about 150 villages and as already pointed out, all these villages will be in charge of one Demonstrator who will be assisted by two skilled coolies. It is impossible for a single individual to cover this wide area, extending on a modest estimate over 300 square miles and tackle all the ryots who will easily number a few thousands. The criticisms one often hears or reads of, are (a) the Agricultural Demonstrator is not to be seen, (b) the existence of the Agricultural Department is not known to the ryots, (c) the Agricultural Department has done next to nothing, (d) the recommendations of the Agricultural Department are too costly for an average ryot to adopt and (e) the money spent on the Agricultural Department is not commensurate with the benefits derived by the ryots.

(a) *The Agricultural Demonstrator is not to be seen.* Prior to 1931, the method of propaganda in vogue was, the Demonstrator was allowed to tackle as many ryots as possible all over the taluk. The result was the jurisdiction being so wide, the ryots could not be frequently met and consequently there was no continuity in the work started in any one place. In order to rectify these defects and with a view to concentrate the work which is essential for the introduction of improvements, the policy was changed.

In accordance with the present policy, each Demonstrator is expected to select eight villages, on the basis of one village for each *firka* in the taluk, and concentrate work not only in those villages styled as "central villages" but also in the surrounding villages situated within a radius of

about five miles. The number of villages now tackled will be about 50 for each taluk. The work is concentrated in those eight groups of villages for a period of three to five years and then a fresh batch of villages are tackled. In addition to the work carried on in those fifty villages, if any calls are received from other villages in the taluk, the Demonstrator is expected to attend to them.

On the basis of the present policy it will take about 15 to 25 years to tackle all the villages in each taluk. It has often been the experience of workers in rural reconstruction schemes that when once the "guiding hand" is removed, things revert to the old order and therefore it is essential that there is continuity in work. The critics will do well to recognise these facts and strive to increase the strength of staff for each taluk, so that not only all the villages can be tackled at the same time, but also there can be continuity in the work which is once started.

(b) *The existence of the Agricultural Department is not known to the ryots.* People who generally make this criticism have the Revenue Department in the background as a standard for comparison. It is a fallacy to compare the Agricultural Department with the Revenue Department which has a staff in each and every village in the taluk. It is not possible for a single officer to make his presence felt all over the taluk as the table below will indicate :—

|   | Staff of                          |  |
|---|-----------------------------------|--|
|   | Revenue Department.               | Agricultural Department.   |
| Village.                                | Karnam and Munsiff.               | Nil.   |
| Firka.                                  | Revenue Inspector.                | Nil.   |
| Taluk.                                  | Tahsildar.                        | Demonstrator.  |
| Division (Group of two to four taluks.) | Sub-Collector or Deputy Collector | Nil.   |
| District.                               | Collector.                        | Nil except Vizagapatam. (There are 13 Assistant Directors for 25 Districts). |

Sir John Russell, F. R. S., Director of the Rothamsted Experiment Station, England, who recently toured and examined the various agricultural research schemes in progress, in different parts of India financed by the Government of India, remarked in an article on "Science and the Indian Peasant", contributed to the *Journal of the Royal Society of Arts*,

"What India needs now, is not so much new scientific knowledge about general agriculture, but fuller use of existing knowledge and the working out of methods to reduce the present wide gap between the ordinary cultivator and the experimental farm".

This gap can be bridged only by increasing the staff employed on propaganda side. If this is accomplished, the critics will have earned the gratitude of thousands of ryots who are now outside the fold of the activities of the Department.

(c) *The Agricultural Department has done next to nothing.* One has to study the work done by the Department only on two major crops viz., Paddy and Sugarcane—the two important representatives of the 'subsistence' and 'money' crops, to realise the uncharitable nature of this criticism. The Department has nearly sixty strains of Paddy suitable for cultivation under different conditions. These strains are never distributed unless their yield is at least, ten per cent over that of the local variety which they are intended to replace. In addition, some of the strains fetch better price in the market than local variety due to purity of stuff, fineness of grain and other qualities. It is found impossible to arrive at, even to an approximate extent, the spread of Departmental strains in the Presidency. The demand for the seed is so great that the Departmental farms are not able to meet them and consequently the supply has to be arranged from ryots who grew them in the previous season.

In the case of sugarcane the achievement of the Department is much more spectacular. Almost the entire area in the Presidency is under varieties introduced by the Department from time to time. Many more such examples can be cited.

(d) *The recommendations of the Agricultural Department are too costly for an average ryot, to adopt.*

The economic side of any improvement advocated by the Department has always received the first consideration before introduction. The improvements advocated may be broadly classified under three groups viz., (i) Cultural—to reduce the labour bill, (ii) manurial—to increase the net profit (iii) varietal—to increase yield. There is a large demand for seeds of strains, evolved by the Department especially in the case of paddy, cotton and groundnut which the Department is finding difficult to meet.

The Loans issued by the Department for the purchase of implements has increased from Rs. 130 in 1931—32 to Rs. 18,188 in 1938—39. Several examples of other improvements advocated, which have been easily adopted by ryots can be cited to prove that they are not costly.

(e) *The money spent on the Agricultural Department is not commensurate with the benefits derived by the ryots.*

In this Presidency, the area under Paddy and Sugarcane according to the season and crop Report for 1937—38 was 10,140,831 and 97,965 acres respectively. Assuming for argument's sake that the departmental paddy strains have spread only over 5 per cent of the total area (i. e.. 507041 acres) and the value of the increased yield obtained is only about Rs. 5 per acre, annual gain to ryots by growing the improved paddy strains alone will roughly be about Rs. 25,35,205.

Similarly in the case of sugarcane, a crop practically the entire area of which is under departmental varieties, the annual gain to ryots will roughly be about Rs. 48,98,250, assuming that the value of increased yield due to

cultivation of departmental varieties is about Rs. 50 per acre—a very low figure.

The annual budget grant of the Agricultural Department is Rs. 21,065,00—much less than a modestly estimated profit from either paddy or sugarcane and that in a single item of improvement advocated in both the crops viz., growing of improved strains evolved, or introduced by the Department. Figures speak for themselves, hence no further comment is necessary.

5. It is sincerely hoped that critics of the Department will bear these facts in mind and endeavour to 'bridge the gap' as advised by Sir John Russell by enabling the Government to increase the staff on the propaganda side, which seems to be the only way to improve the lot of the peasant.

#### Molasses as Food.

Experiments concluded at the Massachusetts Institute of Technology show that old-fashioned molasses is about the best food known for treating nutritional anaemia, the kind of anaemia due to improper diet. *Science*, Vol. 90, October 27, 1939.

*Whereas molasses has 6.1 parts of usable iron per 100,000 parts by weight, spinach has only 0.5, beef liver has 5.6; oatmeal 4.6; apricots, eggs and raisins following in that order. Usable iron was computed, not total content, for only that iron which the body can use to manufacture hemoglobin is valuable. Both chemical and biological tests on rats were used.*—*Science*, Vol. 90, October 27, 1939.