

Development of Agricultural Societies.

BY N. S. KULANDAISAMI PILLAI.

Assistant Director of Agriculture, Trichinopoly

Agriculture as an art, is almost as old as the creation of the world. Agricultural Science however is of recent origin and as it has to draw upon all the other sciences for its advancement, it had necessarily to wait for the development which has been taking place only during the last one or two centuries. The problems connected with agriculture are incapable of easy solution, for the practices are so diverse that they would baffle any scientist.

In an old agricultural country like India, where the practices are the growth of centuries and vary not only from tract to tract but almost from village to village, it takes a lot of time to understand the rationale of each practice and suggest improvement.

The variations that could be noticed in a small area of the Cauvery Valley, for instance, could give you an idea of the divergencies in the agricultural practices.

When one farmer ploughs his lands, manures them well, and transplants his paddy crop, another simply floods his fields and broadcasts paddy with no preliminary cultivation whatever. While one lets in water into his field one evening and ploughs and transplants before the next his neighbour ploughs his field for a fortnight but at intervals and then transplants. Again, when one prefers Perum Samba, another chooses Nellore Samba.

When such differences exist in the cultivation of one crop like paddy in a very small tract, you may imagine the magnitude of the problems which a handful of workers scattered over the country, have to face and tackle.

Agriculture is the mainstay of the country, but it is the most neglected of all industries. There has been little or no progress in the agricultural practices for centuries. If an Indian Farmer who had lived some centuries ago were to be brought back to life now, and left in his native village, he would continue to do his work as ever before, without a wit feeling himself out of time with the farming methods of his brethren. This stagnation and inertia of centuries could be overcome by the leaders of the local public taking an intelligent interest in agriculture and awakening the mass conscience.

No other method is more suitable to attain this end than the Co-operative Movement. The Intelligentsia have been avoiding agriculture, considering it probably beneath their dignity and have been leaving the work to third rate men. This is one of the causes for the present degenerate state of agriculture. Agriculture, is, as A. D. Hall puts it, "a gamble with the season" especially in large tracts of our country which are entirely dependant on rainfall. It is probable that frequent failures have driven people to neglect it; but no nation could long afford to remain without gambling with that arch-gambler Nature. True it is that, in the wake of failures, wisdom should dawn upon one. But that wisdom should not take the wrong turn of avoiding it. On the other hand, it should arm us with the power of beating Nature hollow on her own ground. There is an impression prevailing almost throughout the country that agriculture is not a paying business and this feeling is also responsible for diverting average men away from agriculture. For solving the present unemployment problem in our country, the Committee which deliberated upon its causes and the solutions, suggested that the people should go back to the land; but the people are quite in different to do so, as their views on farming as a business, are based on misconceptions. It is therefore necessary to demonstrate to the public that farming is as paying a business as any other. It is true, that princely profits cannot be derived from agriculture but it is equally true that sudden crashes as in trade will never befall a farmer. Agriculture can only assure at all times a steady income as a gift from mother earth.

In the present transitional stage of the country, agriculture is in the melting pot as everything else. To what extent the products from the crucible would be better than those put into it originally will depend upon our skill.

Now coming to the question, which is the subject of this paper, the greatest problem that is confronting the Agricultural Departments is the imparting of education in Scientific Agriculture to the illiterate millions, distribution of leaflets and bulletins. Villager's calendars, etc., containing facts and figures on agricultural improvements are, no doubt, useful in themselves, but only one in a hundred will profit by them. Agricultural shows, and exhibitions held and lantern lectures given during festive occasions may tend to enlighten a few ryots. What is wanted is ocular demonstration.

Demonstrations held on Government Farms at Government expense are always looked upon by the ryot with some sort of suspicion. The superiority of a crop will be attributed to some costly method or a manure which an ordinary ryot cannot afford to adopt. This was the practical difficulty experienced by the officers of the Agricultural Department. To get over this difficulty, ryots interested in agriculture were induced to run demonstration plots in their own lands at their own expense but under the supervision of the departmental officers. This system, no doubt, had the desired effect of removing from the ryots' minds, the erroneous notion that the superiority of the crop was due to some special causes other than the improved methods or the strain of seed or the manure; but the progress of work was not commensurate with the trouble taken for, in most cases, only the ryot who run the demonstration farm profited.

With a view to give a wider publicity to agricultural improvements recommended by the department, attempts were next made to induce Co-operative Credit Societies to carry out demonstrations on the lines mentioned above. Several societies readily undertook this work but even here only the President or the Secretary or solitary members of the society who run the demonstration, were benefited. The reason is very simple—a credit society consists of members whose object is to borrow money. Though agriculturists themselves the members bestow little or no thought on improving the time-honoured agricultural practices and thus bettering the crop-yield. This gave a clue to the solution of the problem—the problem of creating confidence in the work of the department and of educating them to follow the improvements. A society, consisting purely of members interested in agriculture and solely depending on agriculture may bring out the desired effect. With this object in view a society was started at Lalgudy in 1925 which was blessed by the then Development Minister Sir. Sivagnanam Pillai, who kindly lent his name to the Society which is known as the 'Lalgudy Sivagnanam Co-operative Agricultural Society.'

The object of this Society is to cultivate lands according to modern agricultural methods, with the idea of demonstrating to its members and to the general public their advantages and to encourage the cultivator of the tract with the use of improved implements, better seeds, manures etc., recommended by the Department.

To attain this object, about 10 acres of double crop wetlands were taken on lease by the Society on a fixed annual rent of 30 kalams or 2800 lb. of paddy per acre. In the first year, during both the seasons, the advantages of individual improvements such as economic planting, ploughing with improved plough, use of strains, etc., over the local method were demonstrated in two fields. The advantages of all improvements in combination were also demonstrated in three separate fields. Barring a few trials, the rest of the area was cultivated according to the improved method. The season for both the paddy crops was rather unfavourable. Owing to summer showers, the 'Veppal' as it is popularly known, was lost and the yield of the first crop was considerably affected. The fortune of the second crop was no better. The continuous rains in November and December encouraged the multiplication of insect pests which ravaged the crop and reduced the general yield.

In spite of the adverse seasonal factors, the demonstrations proved a success. This stimulated the interest of the members and the public alike. After paying the rent of the lands, i. e., at 2800 lb. per acre and meeting all the cultivation expenses, the society realised a small net profit of Rs. 50.

In the second year at the request of the Society, the demonstration of each improvement separately was discontinued, as the members began to have faith in the several improvements and as these involved a lot of labour and expenditure. The demonstration of all the improvements combined versus the local method was done in two acres. Except for a small area which was reserved for some trials, the whole area was cropped according to the improved method.

Although the results of the demonstration in the second crop were not convincing as those of the first, the total yield was greater than in the previous year.

During the third year 2.25 acres were cropped according to the local method and the rest were put under improved method. The marked feature of this year's results is that with the lowest cost of cultivation the highest yield was obtained as will be evident from the following statement:—

| Description of crop. | Area cropped. Ac. | Total cost of cultivation. | Total net yield in lb. | Lease paid to landowners. | Balance of grain lbs. |
|----------------------|----------------------|----------------------------|------------------------|---------------------------|-----------------------|
| | | Rs. | | | |
| 1925-26 I Crop ... | 8.63 | 384 | 21,985 | 13,965 | 8029 |
| II Crop ... | 9.50 | 408 | 20,362 | 13,870 | 6492 |
| 1926-27 I Crop ... | 8.63 | 442 | 22,206 | 13,965 | 8241 |
| II Crop .. | 9.50 | 366 | 25,555 | 13,870 | 11685 |
| 1997-28 I Crop ... | 8.53 | 328 | 24,146 | 13,965 | 10181 |
| II Crop ... | 9.50 | 400 | 26,648 | 13,870 | 12778 |

The notion that the methods suggested by the Department are costly and the fear that was lurking in the minds of many that the methods adopted may tend to deplete the soil of its permanent fertility has been corrected by the progressively higher yields obtained ever since this block of land was taken by the society and cultivated under the guidance of the Department.

Apart from doing demonstration work the Society has also acted as seedsmen and dealers in manures of proved value and improved implements. In the first year of its existence the society distributed nearly 9375 lb of seed, in the second year 4690 lb and in the third year 14,500 lb.

The reputation of the society as a supplier of good seed has spread to the neighbouring taluks of Trichinopoly and Tanjore and enquires are pouring in.

The society took up the work of stocking and distributing manures seriously only in 1926-27 and the following table gives the quantity sold during the three years of its existence:—

| Manures. | 1925-26 Lb. | 1926-27 Lb. | 1927-28 Lb. | Value Rs. |
|------------------------------|----------------|----------------|----------------|--------------|
| Bone-meal | ... 10,192 | 15,680 | ... | ... |
| Concentrated Super-phosphate | ... 672 | 21,280 | 98,628 | 9,010 |
| Ordinary superphosphate | ... 160 | 1,256 | 22,336 | 1,477 |
| Ammonium sulphate | ... 10 | 31,600 | 319,592 | 31,203 |
| Sodium nitrate | ... 112 | 606 | 2,709 | 172 |
| Potassium sulphate | | 112 | ... | ... |
| Potassium chloride | | 125 | 168 | 14 |
| Coconut manure mixture | ... 2,240 | ... | ... | ... |

It has gone a step further this year and has taken up the Agency of Messrs. Brunner Mond and Co., with a view to secure to its members and to the general public the manure at as cheap a rate as possible.

The society intends adding another important item of work to its function. It has applied to Messrs. Kirloskar Brothers, Ltd., for the agency for selling their improved ploughs and other implements and it has also resolved to maintain a breeding bull.

I have put before you briefly an account of the work done by the Co-operative Agricultural Society and I leave it to you to judge whether it is or is not fulfilling the object with which it was started. Personally I am convinced that even if three demonstrators had been posted to this sub-circle of Lalgudi the propaganda work turned out by the society could not have been done.

Having started with 36 members with a share capital of Rs. 305 the society has now on the roll 89 members and a share capital of Rs. 1100. The Society has a substantial reserve fund of Rs. 2000. It has been able to engage a clerk and a trained head cooly.

True it is that during its infancy the society depended much on the agricultural department for help and guidance. But now I am confident that the society is able to stand on its own legs with only occasional advice. Time is not far when this society will be able to secure the services of a B. Sc. Ag. and will stand as a training ground for the students of this College.

After the model of Lalgudy Sivagnanam Co-operative Agricultural Society, six more societies have been started in the Fifth Circle—one of them bears the name of our popular Director of Agriculture Mr. Anstead. Except one or two all others are functioning fairly well.

Before concluding this paper, I wish to acknowledge publicly the hearty co-operation evinced by the President Mr. Meenakshisundaram Mudaliar and the other managing Directors of the Society. They had full confidence in my suggestions and followed them very closely.

The successful working of the society is also due in a very large measure to the timely visits of the Director of Agriculture and his encouraging words and sound suggestions.