

## A MUCH NEEDED LINK IN AGRICULTURAL DISSEMINATION WORK \*

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**Introduction.** In an agricultural country like ours the affluence of the nation is synonymous with the welfare of the cultivators who form the major component. Hence, any scheme for the advancement of this country must take them into consideration and outline ways and means to improve their knowledge and intellect, their customs and habits and their agricultural methods and machinery. It is well known that there is not much money in farming and even if the income is doubled the income may not be large. Still, agriculture, being the main industry of India, should form the foremost problem to be tackled by a sincere economist who has the welfare of the country at heart. The remission of land revenue, the formation of debt conciliation boards, the establishment of land-mortgage banks, the enactment of the Debt relief and Tenancy bills and the introduction of the Prohibition Act are but a few attempts to relieve the distress among farmers. Concentration should be made more towards the enhancement of their agricultural income. The proverbial conservatism of the ryot and his obstinate tendency to tread along his age-old path has to be broken and he must be persuaded to move with the times, study the present conditions of the markets and adopt the various improved and economic methods of cropping advocated by the Agricultural Department. The establishment of Agricultural Colleges and Research Institutes, the patient and sincere toils of the Scientists and the results of all successful investigations are but only half the task, the other and perhaps the greatest task is to disseminate these results in villages. And no results of agricultural research, however important in themselves, can be considered of any value unless and until it is carried to the door of the individual cultivator.

This can be accomplished only by an active campaign against illiteracy and a well planned and intensive programme of propaganda work. But the task is not so easy as it appears to be. The experiences of our agricultural propagandists stare us in the face. The utter disregard displayed towards the Demonstrators, the disheartening caused by the empty chairs in a meeting of farmers and the farmers' antipathy for and distrust of anything new are some of the woeful stories described by the officers. The establishment of a more systematised organisation and a new method of approach seems, therefore, essential.

A review of the steps taken in various countries will, perhaps, give a proper perspective of the subject. The usual methods adopted in all countries consist in the establishment of Agricultural schools and colleges and sending out trained people for propaganda work. The demonstration methods adopted by one and all of these trained men is to approach the villagers,

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give them agricultural talks, demonstrate to them the improved methods, educate them by lantern slides and exhibitions and distribute to them leaflets and bulletins. But there are details regarding the method of organisation and approach which are worthy of emulation.

In Great Britain an advisory centre is established in each of the fourteen provinces. The advisory officers keep in close touch with the work of the Research Institutes and communicate the results to the farmers through the County Agricultural Organisers. There is one agricultural adviser for each subject for each province and one county organiser for each county. The different subjects are handled by the different advisory officers. The county organisers acting in collaboration with a number of non-official organisations like the National Farmers' Union and special associations like Wheat association, Swine association etc., disperse the news to the farmers.

In the Irish Free State the Department of Agriculture employ itinerant instructors in agriculture, poultry keeping etc. and they carry on the propaganda work.

In Japan the work is pushed through by the establishment of various types of agricultural associations and by giving an agricultural bias to the school curriculum.

In the dictatorial states like Russia and Germany the object is accomplished more by compulsory legislation than by persuasion. In the former country the uneconomic system of small holdings was rectified and more than 18,000,000 peasant holdings or 89 % of the total were collectivized in less than 250,000 collective farms in the course of a few years. By this, the introduction of modern agricultural technique was made possible. In Germany a four year plan was formulated by which efforts towards the expansion of agricultural outputs were intensified.

But by far the most well organised system is in the United States of America where work of an intensive nature is being carried out. The work is broadly divided under two main heads.

1. Adult Education in agriculture through evening schools conducted by the United States Department of Agriculture and

2. The Agricultural Extension work administered by the Federal Board.

The agricultural evening schools are required to have a systematic instruction of less than College grade in regular classes which meet at frequent intervals viz. once or twice a week at given centres and usually in the village school, either in the mornings or evenings. A consecutive series of lessons involving lectures, laboratory work, conferences, discussions and occasional field trips is given to the adults who have entered upon a particular farming occupation. Many teachers have found it expedient to close their evening classes with a dinner or picnic. The Conference method of teaching, viz., assembling farmers, in a village, discussing with them their problems, clearing their doubts, and formulating a programme acceptable to them is found more effective.

The extension work consists of practical demonstration and the dissemination of information among men and women through the personal work of county agents, home demonstration agents and technical specialists. Finding that, by sending a few members to lecture to the farmers and by distributing bulletins and leaflets, the propaganda work did not progress, an Act called the Co-operative Extension Act (Smith Lever Act) was passed which provided funds for starting a new organisation to conduct and intensify the programme of extension work. The general plan of organisation is as follows :—

The agricultural extension service is worked by a separate director known as National Extension Director. Under him work federal organisers and subject matter specialists whose functions are to organise the extension service in the several states and study the special problems of the state. These are helped by state extension directors and assistant directors. These are, in their turn, assisted by state supervisors who control the work of a number of county agents.

The county agent who is equivalent to the agricultural demonstrator, organizer or inspector of our country is by far the most important limb of the whole organisation. He lives in the county, studies local problems and gives the farmers necessary advice. When difficulties arise and when new problems crop up he refers to the subject matter specialists and seeks their opinion. He learns the methods and practices of the neighbouring successful farmers and teaches the less competent ones. The best kind of work is done by the 'Farm Improvement programme' under which each farm is separately tackled and the various aspects of cultivation, manuring and suitable cropping advocated. To facilitate his work he organises a number of agricultural societies under the auspices of which meetings are often held for a free exchange of views. A number of special clubs like calf-club, swine club, grain club, poultry club and so on are also started to deal with special subjects.

The extension work does not stop with the fields. It takes up home economics as well. A number of home demonstration agents, who are usually women, are appointed to teach women the proper maintenance of the house and to encourage thrift and economy. Their instruction includes house-planning, dietetics, care of children, needle work, cooking, menu-planning, gardening, knitting and garment-making.

The organisation takes up the education of youths also. A number of boys' and girls' clubs known popularly as 4-H-clubs (4H representing the head, heart, hand and health) are started. The object of the clubs is to arouse in boys and girls during the impressionable age a desire and a liking for agriculture. Special methods are adopted to suit peculiar local conditions. For example the Negro extension scheme is worked with the help of an autotruck movable school fitted with a motion picture outfit and manned by four to six Negro extension specialists.

Thus one of the most efficient and largest organisations manned by over 5700 federal states and county employers, co-operating approximately with



250,000 volunteer local leaders and 1,500,000 Farm and home demonstrators is working in U. S. A. for the emancipation of the village folk; and it is estimated that every year nearly three million farmers and farm houses are being influenced to change their practice for the better. This has been made possible by the introduction of the Agricultural Extension Act which provided more than \$ 23,000,000 a year. In 1937, it rose to nearly 30 millions. The funds are provided mostly by the Federal Government and partly by the states, counties and farm organisations.

In India the work is carried on more by the official block which consists of a Director of Agriculture, assisted by a number of Deputy and Assistant Directors and Agricultural Demonstrators or Inspectors. The usual lines of propaganda work are field demonstrations, lantern slide lectures, exhibitions in fairs and festivals, formation of a few agricultural associations and distribution of seeds and manures. Recently, the touring motor exhibition vans, cinemas and radios have come to their aid in a few provinces.

In Bengal; thanks to the initiative of Mr. Whittikar, the ex-Collector of Chittagong, much help is being rendered by the District Boards, the Courts of Wards, and private agencies who have provided funds for the maintenance of more demonstrators and for starting agricultural institutes. Some of the Boards maintain Demonstration Farms and at times distribute seeds free to ryots. The Government utilised the whole of the rural uplift grant of the India Government for propaganda purposes in 1936-37 and thus intensified the programme.

In Sind a touring propaganda party is formed in addition to the permanent staff which works for six months in a year. Government auxiliary farms are established to demonstrate the usefulness of large scale farming. A new feature is the holding of Farmers' Week. These are held at the agricultural farms where people from different parts of the country gather and get themselves acquainted with the improved methods of farming. The N. W. Ry. grants concessions to the agriculturists and students who attend these weeks.

In Behar and Orissa the work is carried on in the usual lines with the help of agricultural overseers and *kamdars* or *maistries*. Recently the Government has proposed to intensify the work by starting subsidised farms.

In the Punjab, the work of non-official agencies is much in evidence. As many as 2000 village Farmers' Associations are functioning and cultivation is being carried on enthusiastically on improved methods in thousands of acres. The Agricultural colonisation scheme similar to the one started recently at Annamalai University but on a more intensive scale is reported to be a great success in spreading the improved methods of agriculture. To encourage better cultivation prizes are offered to the best cultivator.

Very intensive work is being done in the United Provinces. The villages are made to conduct "Rural knowledge and agricultural schools". Night schools are also held. Much attention is being paid towards displays and exhibitions. Kiosks fitted with seed exhibits, models, photographs and charts

are displayed at railway stations. Agricultural sign-boards giving information on important crops, implements and fruit culture are fitted in railway platforms. This attracts much attention and the department is contemplating to extend it to the busy markets and public offices. Organisations like the "Better Farming Societies" are formed and are given grants-in-aid by the Government. Under the "State Tube-well Scheme" attempts are being made to remodel the holdings, so as to adopt the economic large scale farming, without affecting any change in the ownership. Recently some 500 trained rural reconstruction organisers were appointed to organise panchayats, set up reading rooms, encourage cottage industries and devote themselves to cultural developments of agriculturists and artisans.

In our own province, Madras, the work is fairly advanced though there is a great deal still to be done. The Madras Presidency comprises 26 districts and 221 taluks with a gross area of 91 million acres of which the available cultivable area is 35 million acres. The total population is  $41\frac{1}{2}$  millions. The whole area is being managed at present, by about 150 demonstrators. The amount spent on this department works out to nearly 10 pies per head of population while it is 10 as. per head in U. S. A. This clearly shows the huge difference between the organisations in U. S. A. and Madras.

Before 1930 the work of the Demonstrator was a bit dissipated being extended to more than 200 villages lying under his jurisdiction. This method was changed in 1930 when concentrated work in a few selected centres was begun. Three or four central villages were selected and the work was confined to these and the surrounding hamlets with the object of extending it slowly to other centres. This led to the neglect of a number of other villages and the progress was found to be too slow. In 1934 the activities of the demonstrator were extended to 8 to 10 centres at a time. The effect of this change was clearly seen in the huge increase in the number of demonstration plots which rose from 1746 in 1933-34 to 7554 in 1936-37. As a further step, the Vizag scheme of providing a demonstration maistry for every 5 or 6 villages and intensifying the propaganda work was started in 1935. Under this scheme 63 maistries were appointed to work in the Vizag district as a trial. After a short training at Anakapalle Farm they were posted, seven to each taluk. Each maistry was to live in a central village and look after a group of five villages round about. When appreciable work was done he would turn his attention to another group of villages. In addition, the maistry was instructed to improve sanitation, cottage industries, village cleaning etc. This is the fourth year of its trial and the results are watched with interest.

It is disappointing to note that in spite of the various methods handled by the different provinces Agricultural India is still in a very backward state and the improvements advocated by the Department have not yet penetrated into the interior. There are still millions of ryots unaware of the researches made by the Departments and treading along the same old path. It is evident that there is something lacking in the methods of approach and that

something I conceive to be the human touch. An ex-Director of the Madras Agricultural Department Sri. S. V. Ramamoorthy rightly pointed out in his address to the students of this college that the man should be developed first and foremost. Once the mind is awakened it does not stop there but thinks of newer things.

How is this to be achieved and how can the propaganda work be made more effective? The less intimate the personal contact the less effective the education will be. Lectures, broadcasts, films, bulletins and journals all suffer from this disability. A judicious combination, therefore, of the methods adopted in the various countries so as to suit the local conditions will bring about the desired change.

**Organisation.** A purely non-official body but with an official bias given to it, functioning as *liaison* between the official and the public should be formed. To get this a central club known as the *Farmers' club* should be started in each village with its own president and secretary. The village munsiff should be the ex-officio president. These clubs should be affiliated to the taluk club which should be situated at the Taluk headquarters and the Agricultural Demonstrator should be its ex-officio president. The taluk clubs should be attached to the District club of which the Assistant Director of Agriculture should be the president. These clubs are co-ordinated with the regional farm club situated at the Deputy Director's headquarters and the Deputy Director should be its president. The whole system is then linked on to the Provincial club whose head quarters will be the provincial centre and whose president will be the Agricultural Propaganda and Publicity Officer. Thus a net work of farmer's clubs should be established throughout the whole of the province. Each of these farm clubs should have a *youths' club* attached to it and the village teacher should be made to look after the junior clubs.

The official organisation of the Department should be put to work under a separate officer known as "Agricultural Propaganda and Publicity Officer." A man of agricultural training with experience in propaganda and publicity work is essential. The regional Deputy Directors, the Assistant Directors and the Agricultural Demonstrators will work directly under the officer. The number of Demonstrators should be increased so that one demonstrator is provided for each taluk. The Vizag experiment of posting one demonstration maistry for every 30 villages and which system is being followed in a less intensive scale in Bihar may with advantage be extended to other districts.

**Equipment.** The propaganda officers should be men who not only know their subject well but who feel confident of themselves and their work. A better kind of education is, therefore, necessary for the propagandist. Cottage industries and rural propaganda should form part of the College curriculum. After graduation every prospective extension agent should invariably be posted to an agricultural farm for at least a year before handling any propaganda work. He should then undergo an apprentice course in association with successful extension agents or a post graduate

course in an institution organised for the purpose. The Reconstruction Centre, the Marthandam Rural Development Association and the American Arcot Mission Agricultural Institute at Katpadi are said to be good centres for such training. Recently the Cochin Government has started a Rural Reconstruction School. The *Kamdars* or maistries should also receive training. The short courses instituted in our province and the Punjab can be utilised for the purpose.

The rural agents should also be men who sympathise with the farmers and their problems and who develop a love for the people and for farm work in their hearts. They should possess a fund of patience and perseverance. Such agents should consider the work more as an opportunity to serve his fellow men rather than as a job.

**Method of Work.** The Farmers' Club should form the central pivot round which all the activities are co-ordinated. The Department of Agriculture should carry out the extension work through these clubs only. The functions of the clubs should be diverse, social, educational, agricultural, and industrial activities, home economics and should be taken up side by side.

Social amenities should form one of the main programmes of the club. The local school building or a small shed attached to it may form the meeting place of such clubs. The distribution of radio sets to villages as started by the Madras Government will greatly help in the efficient functioning of these clubs. Rural sports scheme as inaugurated by the Premier of Madras is a step in the right direction not only to attract more people to the clubs but also to serve as deviation from the monotonous toil in the fields. Attempts should also be made to attach a free reading room to the clubs and obtain a few dailies and monthlies for widening the general knowledge of the villagers.

Adult mass education should be taken as one of next importance and night schools should be held often. The local teacher and agricultural officers should take an active part in this. Bihar and United Provinces are going ahead of us in starting "the mass adult education scheme".

Then comes agriculture and cottage industries. Each village or a group of four or five adjoining villages should be tackled at a time. The agricultural extension officer should with the help of his maistry, first of all, make a thorough study of the cultivation and practices in the locality. A country man, if a slow thinker, has, as a rule, profound understanding and a more balanced outlook on life. His daily work involves initiative, responsibility and constructive action and encourages constant thinking the absence of which is so conspicuous a defect of our civilisation. There are still a number of inefficient cultivators but undoubtedly our leading farmers are men of exceptional energy and ability and have, for generations, been leaders in the agricultural world. There is a monumental example of this in the Ceded District ryots whose ingenious and cheap machinery employed in the dry land farming is still unbeaten. The farmers are to be approached



not with a set of predetermined ideas but with a free mind and with the definite knowledge that the farmers are experimenters in their own way and have much to contribute to the up building of the farming and rural life. And the farmers should be made to feel that they are also given a part in determining what the problems are.

The best method, to achieve this, is to adopt the conference method of teaching by which the leading cultivators of the locality should be assembled in the club premises to have a free discussion on the local problems. Generally such conferences should be held once a month or at least once a quarter. It is better if these conferences are ended with a picnic, a musical party or a village drama so that the monotony of the meetings may be broken. The agricultural officer, in consultation with the superior officers should then formulate a programme for which he should get the approval of the farmers themselves. He should, then, start what are called subsidised farms similar to those recently started in Bihar and conduct demonstrations. Two or three "Key farmers" of the village should be approached and persuaded to give a portion of their land for holding the demonstration plots with the assurance that the loss, if any, will be made good by the Government. "Seeing is believing" and if such rural demonstrations are convincing enough the farmer will take them up immediately.

Special subjects should be tackled by the formation of special clubs which will however form the branch clubs of the Farmers' club. This is to develop a concentrated attention on them. In England and America there are swine clubs, calf clubs, poultry clubs, grain clubs, hay clubs and so on. In our own country fodder clubs, poultry clubs, cotton clubs, etc., can be started. The tree planting day initiated by the Minister for Agriculture and Rural Development, is one such means to bring about a concentrated action on a particular problem.

The youths' club attached to the central farmers' club should also be made to function side by side. These clubs should not only form the centres for evening sports and recreation but also as a meeting place for all the children of the village encouraging an *esprit-de-corps* in them. Slowly these youths should be given an agricultural outlook from the beginning such that they may easily take up to newer methods when old. The club life will also promote a certain amount of discipline which will form a strong background for the future citizenship.

Problems other than agriculture should also be tackled by the club. As in U. S. A. the home economy work, cottage industries and rural sanitation should form part of their work. The agricultural officer should be the villager's "friend, philosopher and guide". He should help him in getting financial help from the Government and private sources, in getting the necessary water supply for his fields and in the settlement of village disputes and thus try to assist him in all matters such that he may infuse confidence and trust in the farmer's mind.



Thus, the object of these clubs should be to stimulate better endeavour in not only farming and home making but also in bringing rural people together in groups for social intercourse and study, solving community problems, bringing recreation, debate, pageantry and the dramatic art into the rural community, developing co-operation, enriching the life and broadening the vision of rural men, women and children.

But the propaganda work will not be complete with the starting of these farm clubs alone. It should take other shapes as well. The holding of the Farmers' week in the agricultural farms as in Sind, establishing field crop competitions as in U. S. A.; making the motor exhibition vans more attractive by fitting up a movie or a talkie unit to exhibit films on various agricultural subjects with a rural background given to it; making it compulsory for cinema owners to display a short film on agriculture and rural uplift on their screen before their daily shows; preparing gramophone records dealing with agricultural practices or encouraging private companies like the one in Bombay to prepare these records; and exhibiting kiosks fitted up with posters in railway stations and public offices as in U. P. are the other methods worth trying. In these days of cinema fad the film is the best means of propaganda work. In Africa the film has served a very good purpose in making propaganda work easy.

But there is no end to this propaganda work. It cannot be stopped as soon as a few problems are tackled. For newer problems crop up and fresh things come to light every day. To quote an example, Sir John Russell experimenting on wheat, barley and sugar-beet reports that "deeper ploughing has produced no increased yield" and that no advantage is gained in ploughing deeper than 4 inches; that the effect of cross ploughing, sub soiling, or heavy rolling of seeds for spring sown crops was without effect on yield; that intensive hoeing of sugar beet or kale is detrimental and that two or three hoeings appear to be ample; and concludes that yields are not greatly dependent on cultivation methods. Nearer home, it has been found on the Cotton Breeding Station, Coimbatore "that plots where weeding alone was done recorded the highest weight of kapas. On the other hand stirring the soil with bullock power tended to lower the yield. From the results obtained for the past three seasons it is plain that intercultivation does not help much in conservation of soil moisture as is often thought to be" under Coimbatore conditions. Alway and others opine that intercultivation does not help to prevent evaporation. Thus the age long theories and notions are blown up by modern experimenters. It is for this a continuity in the propaganda work is essential and the organisation should be on a permanent basis. It is for this also refresher courses should be opened and the agricultural officers made to undergo the course once in ten years such that they may be well equipped with new researches and results. A few people should also be sent abroad to obtain a closer knowledge of the progress of research and advisory work in other countries.

All these mean money, and ways and means should be found to provide funds for this most useful work. In addition to Government grants, the District and Local Boards, the Court of Wards and private magnates should be persuaded to give their monetary help as in Bengal. The India Government grant for rural development should be completely utilised for this work. Small subscriptions levied in the numerous farmers' clubs will also add to the fund. The agricultural income tax which is proposed to be introduced in the various provinces can also, with advantage be utilised for this work, as in that case, the farmers will never grumble to have their income taxed. The organisation and its work, as I visualise, is shown in the accompanying chart and I am sure, given a fair trial the scheme is bound to succeed. In these days of despondency any amount spent on agricultural improvements is money well spent. Till now the national policy was consciously or unconsciously anti-rural. The results became manifest in widespread unemployment amongst the agricultural workers followed by a steady drift from the country side to the towns and making unemployment more keen. It is the under development of agriculture that is responsible for a large part of unemployment and a main cause of national impoverishment. A prosperous agriculture for which this country is so well adapted is as essential in times of prosperity as in periods of adversity and a fair share of the national income benefits all. Hence, a more pointed attention should be paid towards the development of this industry.

The organisation which I have recommended will not only help the farmers to increase their income but will bring to them an enrichment of mind and spirit. "A man's wealth lies not so much in his land and his goods as in his hopes and aspirations, his ambitions and dreams. We enrich men when we help them to see and understand the world in which we live. We enrich men when we give them courage and faith in themselves and the work they are doing." All these I conceive, will be the achievements of this organisation and I warmly recommend it to the authorities for early adoption. For "How can he get wisdom that holdeth the plough and that glorieth in the God, that driveth oxen and is occupied in their labours and whose talk is of bullocks", if a helping hand is not stretched out by way of such an organisation.

