## RADIO AND AGRICULTURAL PROPAGANDA

## BY T. V. RANGASWAMI

Radio has revolutionized the whole world during the past decade and its importance lies in its immense use for imparting knowledge from a central broadcasting station, simultaneously to millions of people living far apart.

Radio is used in foreign countries for recreation and music, Schools, Police, Business, Municipalities, Agriculture, Trains, hospitals and prisons etc.

Nothing need be said about radio for recreation as it has become a necessary furniture in every household in foreign countries. School radio was a recent introduction for supplementing education taught by the average teacher in the schools. Radio for the use of Police has become almost indispensable in detecting criminals and evil-doers. For businessmen, broadcasting is in many countries a means of effective advertisement. For the press it is readily a source of news and for the seaman it is really a weather prophet. Broadcasting has already become indelibly interwoven into every branch of industry.

Radio in foreign countries, is becoming a useful method of agricultural propaganda. The United States Department of Agriculture has started Radio service for broadcasting agricultural news in the year 1932. Some of the details of the methods of working and the results achieved are given below.

Programmes are arranged by county extension services and broadcasting is undertaken by federal and states agencies. 15 minutes per day, 6 days a week being apportioned for Agricultural news. The details of programmes are modified to suit varying conditions in the state. Information is supplied by local county extension agents so as to give maximum local interest and adaptability. Wherever possible the local county agents to serve as authoritative speakers are allowed to present the programmes. The results are very encouraging from the reports given by the cultivator-listeners. The cultivators while insisting on the continuance of the Radio service, requested the authorities to use proper discretion on the choice of material and more on the way of presenting the information. They are jealous of their radio time and resent the inclusion of uninteresting news which distract their attention. They want the experience-reports of neighbouring farmers. Some of the preferences shown in the method of presenting are, that the programme must be in the form of simple questions and answers, in a form that is easy to listen and follow and in a form which requires the listener's participation with pencil and paper. By this method of Radio service, the propaganda department has been able to quicken the progress of work.

The Spanish Government, in order to increase the number of listeners have introduced broadcasting into the county homes. Government have also decided, that all future agricultural exhibitions must reserve stands for the broadcasting. They declare, not without reason, that a receiving set is an indispensable part of a well-equipped farm, since Radio practically eliminates the isolation of the people living in the country. In Australia, an enterprising businessman wishing to canvas in widely spread rural districts, innovated a travelling broadcasting station. The transmitter is stored in 2 motor cars, one car being the transmitter proper and the other being the studio. oil motor drives the generator which supplies the necessary electric energy. Two folding aerials, 12 metre high carry the 40-metre-long aerial. The aerial is mounted in every stopping place and a complete radio programme is emitted by means of approximately 400 gramophone records which are a part of the travelling broadcasting outfit. Furthermore propaganda is also made to advertise agricultural tools.

Agriculture propaganda in the Madras Presidency and how radio can be used to hasten the work: The present policy of the Madras Agricultural Department is to do propaganda by dissemination of such tested improved methods of agriculture as warrant their applicability to local conditions. There are several barriers in the way of quick progress and ryots taking up to improved agriculture. There are two potent factors mainly connected with the progress of improvement, the adviser and the advised.

The farmers in India live in rural areas removed far away from civilized centres, and with limited amenities for education and learning. The level of the general knowledge of the farmer being very low, it has been a difficult task to infuse into his unroused brain even fundamental improvements of extreme importance. The plea of want of finance cannot be taken as a tangible excuse, as even the most resourceful ryots do not respond to the substantial results shown in their own fields. Illiteracy and lack of means for the spread of knowledge have been against the penetration of new notions and ambitions in the life of the farmer. Traditional customs are also deep rooted obstructions standing in the way of the easy solution of the problem of propaganda.

The condition of the demonstrator is worthy of consideration. With the finance available, the Government have fitted each taluk with a demonstrator, for propaganda purposes. His work is of a multifarious nature, his staff is limited, his jurisdiction is wide and problems to be tackled by him are many. The present system of propaganda has behind it, the idea of central village system, to cater to the needs of a selected few central villages, out of 200 or 250 villages in the taluk. The department has adopted the best possible method. Since it is the quality of the work that leaves a potent result in the mind of the

farmer towards the decision of any improvement, work of an intensive nature should be preferred to that of an extensive nature. Under this system a long time will have to elapse before improvements are taken up, on a mass scale. Some of the practical difficulties that arise may be summarised as follows:

- (1) The demonstrator cannot meet all the ryots of a village at the time of his visit.
- (2) As the demonstrator is a constantly touring man he cannot be available to the ryots when they want him.
- (3) Financing of experiments being an important factor, the demonstrator has naturally and necessarily got to concentrate his work in the fields of a few generous amicable and resourceful farmers, such that he can show a turn out of work to his Superior Officers.
- (4) The demonstrator has other responsible duties as attending to sale of implements and seeds, trial-plots; demonstration-plots and seed farms and he is at the same time expected to introduce one or all the branches of improvements in each central village.

In spite of all these handicaps, the demonstrator receives a ready compliance from the ryots to carry out improvements, but the results are not commensurate with his efforts.

Summing up, we see that the lack of spread of knowledge amongst the cultivators and the various handicaps a demonstrator has, stand in the way and impede the quick progress. What is wanted is acceleration of progress to vie with the rest of the world.

The radio service for agricultural propaganda is cited to produce the acceleration aimed at. As no trial has been given in Madras and as no result of experiments carried out in other parts of India with the same goal in view is yet to hand, we have to imagine a situation when radio is introduced in the rural areas. So, let us imagine that a receiver is introduced in a particular village. The audience gather round the village stadium every evening after the toils of the day are over. An etherial voice in the local tongue is heard giving out

1. Information on market reports, which are important to ryots as they are keen on getting the full worth of their produce and particular about paying the least for their requirements, 2. Information on the general weather conditions that helps them to forecast their programmes for the future, 3. Information on what other farmers are doing in their neighbouring tracts and how improvements in cultivation are effected with specific details, 4. Information as to where seeds are to be obtained; their prices and available quantities, 5. Importance of seed selection, preservation and treatments before sowing to prevent seed borne diseases, 6. Information on the importance of removal of weeds and the various implements used for clean cultivation, 7. Tips on the preservation and application of manures and

the quantities to be used as per requirements of crops, 8. The regularity of supply of water in channels, the height of water, and the duration of assured supply, the improvements on water lifts and mhote wheels, 9. Information of the economical methods of harvest, curing of the produce, conversion of raw into finished products as in the case of cream jaggery preparation and the preservation of the produce for the market, 10. Information on the preventive and control measures of pests and diseases, 11. Information on the safe guarding of cattle against epidemics and such other information as is of use to the ryots.

Thus information and suggestions for improvements are Broadcasted together.

What would be the effect of such an introduction? At first it will attract all the audience as the cinema has done in towns and cities. Will the audience come to the receiver daily and will the farmers carry out the improvements given to them? All this depends upon the material and the way in which it is presented. In short, to make radio popular in villages, the following will serve to be followed.

Necessary relevant information of use to the ryot in a concise and definite manner, (to produce a solid illusion in the mind of the farmer) is to be given out in a way easy to listen, understand and remember. The information should be gathered and supplied by local authorities in order to give local interest and then presented before the microphone of the Broadcasting station to produce authoritative influence. Occasionally popular ryots could be made to report their personal experiences on the effect of these improvements on their own lands. The repeated dinning of useful information at such opportune moments, into the ears of the farmer is bound to achieve the object of the Radio service. Should the information make the ryots believe the receiver, and make them realise its use, success of Radio service is guaranteed.

In this connection it may be mentioned that

- The radio service is not meant to replace the demonstrator,
- The radio service is to be used for extensive propaganda to augment the intensive work of the demonstrator and to tune up the mind of the farmer in rendering the advice of the Agricultural demonstrator more effective,
- The radio service can also be used for many other propaganda in rural uplift, as health, industries, cooperation and economics.

... Radio in India compared to the world. The number of transwitters in the following countries are: United States of America 585, U. S. S. R. 75, Canada 67, Australia 61, Germany 26, Japan 26, Great Britain 14 and India 2. India thus occupies the lowest position, in having for 353 millions of population spread over 5 million square kilometres a total antenna power of only 6 kilowatts which works up to 0013 watts per square kilometre, and 05 the number of receiver per thousand of population. Denmark leads in this respect having 160 per 1000 of population.

Radio was introduced in India in 1927 by private commercial monopoly, but later on taken up by Government. Proposal for the starting of a 20 kilowatt station in Delhi has been approved and work has been started while the increasing of the power of Madras from 2.5 to 20 kilowatts is under contemplation. After the completion of the work, broadcasting in Madras will be considerably improved. Madras which is now not logged ordinarily beyond 50 miles then can be heard 600 to 700 miles off, quite easily, on loud speaker strength.

The following is a suggestion for a small rural radio scheme to be tried in Madras. Install radio receivers in central villages of the districts round about Madras. The Radio receivers should be battery operated, and built of long standing components, using super sensitive circuits of the heterodyne principle, with self adjusting volume control and permanently tuned to the one broadcasting centre and worked by automatic clockwork switches which set the receiver working at a particular hour and stop it after constant interval during which time programmes will be broadcasted. Field reporters in charge of 20 to 30 such sets may attend to the replenishing of batteries, charging of hatteries, and any flaw in the receiver will be reported to the Radio Engineer who attends to the satisfactory reception. The working method of the Radio service has been already given.

The financing of the Scheme is beyond the domain of this paper. It may however be pointed out that when the cost of receivers ranges from 100 to 1000s of rupees, the type of receiver suggested will cost not less than Rs. 300 and the annual working expenses Rs. 70 to 80 for 3 working hours per day including license fees and replacements. The cost of the receivers is rather high owing to the fact, that India is not a manufacturing country and there is a heavy import duty of 50 per cent on wireless goods. Radio research is wanting in India to build receivers suited to local conditions to overcome atmospheric disturb-By increasing the power of existing stations and providing more stations, reception can be improved very much. The finance of the installation of sets in villages may be met partly by different departments of Government connected with rural uplift and partly from funds of Panchayat Boards. If such a scheme is workable and results in success the scheme may be extended in slow degrees by starting more transmitting centres to suit local conditions, paying more attention to linguistic variations.

## Discussion.

Mr. K. Raghavachari said that in addition to the Departmental exhibition vans existing now, which were becoming stale a radio set also might be purchased and tried.

Mr. T. Paramanandem was doubtful about the necessity for investing money in a costly radio equipment, as in his opinion, the village tom tom was good enough for propaganda.

Rao Bahadur G. N. Rangaswamy Ayyangar relating an experience of his in a village, where he saw a motor car with a loudspeaker advertising cafiaspirin, felt it was a very good idea of combining business and service.

The President said that whatever people might say, the radio was bound to come and if we are to be practical men, we must harness the radio idea for propaganda, otherwise other nations will leave us far behind.

## Crop & Trade Reports.

Groundnut—2nd Report—Summer crop—Areas and yield. The area under the summer or irrigated crop of groundnut in parts of the Madras Presidency during the five months of January to May 1935 is estimated at 67,000 acres. When compared with the area of 77,400 acres estimated for the corresponding period of last year, it reveals a decrease of 13'4 per cent. The crop has been harvested in most places. The yield is reported to be below normal in all the districts except Nellore. Trichinopoly and Madura where it is reported to be normal. The total yield is estimated at 57,000 tons of unshelled nuts as against 66,700 tons during the corresponding period of last year.

Early crop—Area and yield. The area under the early crop of groundnut (mostly unirrigated up to the 25th July 1935 in the districts of Salem and Coimbatore is estimated at 96,000 acres. When compared with the area of 127,000 acres estimated for the corresponding period of last year, it reveals a decrease of 24 per cent. The decrease is due to late and insufficient rains. The condition of the crop is generally satisfactory. The total yield is estimated at 44,100 tons of unshelled nuts as against 61,100 tons estimated for the corresponding period of last year.

Price. The wholesale price of groundnut (shelled) per imperial maund of 822/7 lb. as reported from important markets towards the close of July 1935 was Rs 6-4-0 in Cuddalore, Rs. 5-10-0 in Vizagapatam, Rs. 5-8-0 in Vizianagaram, Rs. 5-4-0 in Vellore, Rs. 5-2-0 in Guntur and Cuddapah, Rs. 5-1-0 in Salem, Rs. 4-15-0 in Nandyal and Rs. 4-10-0 in Adoni. When compared with the prices of June 1935, these prices reveal a fall of 12 per cent in Vizagapatam, 11 per cent in Salem, 10 per cent. in Vizianagaram, 7 per cent. in Vellore, and 1 per cent. in Nandyal. The prices remained stationary in the other centres.

Sugarcane-First Report. The average of the areas under sugarcane in the Madras Presidency during the five years ending 1933—1934 has represented 3.7 per cent of the total area under sugarcane in India.

The area under sugarcane up to the 25th July 1935 is estimated at 108,650 acres. When compared with the area of 104.080 acres estimated for the corresponding period of last year, it reveals an increase of 4.4 per cent. There has been an increase in area in the Circars (Guntur excepted), Cuddapah, Chingleput, South Arcot, Chittoor, North Arcot and the West Coast which has been partly counter-balanced by a decrease in area in Guntur, the Deccan (Cuddapah excepted). Salem, Trichinopoly, Madura and Ramnad. The increase in area in Kistna is attributed to the opening of a sugar factory at Vuyyur.

The condition of the crop is generally satisfactory.

The wholesale price of jaggery per imperial maund of 82 2/7 lbs. as reported from important markets towards the close of July 1935 was Rs. 8-1-0 in Nandyal,