

## Radio for scientific farming in India\*

by  
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**Synopsis:** The advancement made by various countries by the effective use of the radio for scientific farming and the scope we have in India by suitably adopting the techniques are brought out. A study made on the Radio Rural Forums of Madras State with particular reference to the convenience of the days, time and period of broadcast and the usefulness of the agricultural topics broadcast is also reported.

**Introduction:** Radio is an important medium of mass communication in extension work in giving agricultural information on weather, storms, means of combating invasions of insects or diseases etc. It has the distinct advantage of giving emergency agricultural information at the quickest time to the largest audience, even several times a day, according to necessity. It has a vital role to play in motivating farmers to take to the latest technological advances in agricultural science, especially in developing countries. It is a recognition of this fact that made the Food and Agricultural Organisation organise a seminar on Farm Broadcasting for Asia and Far Eastern Countries in January-February, 1964 in India in New Delhi, as one of the activities of the Freedom from Hunger Campaign.

To get across messages selected out of the immense agricultural researches to the 360 millions of farmers of India is an arduous task of extension workers. While advanced countries like the U. S. A., Canada, Australia and Japan have forged ahead exploiting the scope of Farm Broadcasting in their countries, India has its problems to solve in this sphere. The All India Radio is doing significant service through its 30 stations by broadcasting in all languages and 48 dialects.

The radio is considered as a medium of entertainment. The radio in rural areas is mostly tuned for the nice music which the rural folk want to hear and enjoy or for an interesting drama or folk lore that is ably presented. The radio is also a powerful medium for learning. To make the farmers understand that they can have access to reliable and useful agricultural information they need when they need it, is very essential at the moment.

**The Radio Rural Forum:** In our country what are known as Radio Rural Forums have been formed at the panchayat level; these are more or less like the Canadian Farm Forums. A group of about 20 farmers constitute as members of the Radio Rural Forum and they gather together near their community radio receiving sets on the prescribed days in a week to listen to the special broadcasts of Radio Rural Forum Programmes, which comprise of two parts. The first part

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is the "Question—Answer time" followed by "the topic for the day". The topics relate to any one of the subjects of Agriculture, Animal Husbandry, Public Health, Co-operation, Cottage Industries, Fisheries etc. The objective is that the Radio Rural Forum members should listen to the topic for the day and then discuss among themselves on the topic as to how far they could adopt what they have listened to, and implement them through their action. These Radio Rural Forums are thus considered as listening cum discussion cum action groups. Doubts, if any, the members have, on the topic listened to, are put in the form of questions and sent to the All India Radio (A. I. R.) which in turn contacts the concerned departmental officials, gets the answers and broadcasts them the very next week during the "Question—Answer time". These forums are thus aimed at having a two-way communication between farmers and experts in the field through the All India Radio.

In so far as the Madras State is concerned the All India Radio, Tiruchirappalli takes care of the rural programme which is broadcast for 55 minutes everyday from 6-20 p. m. to 7-15 p. m. This programme is relayed by the stations at Madras and Tirunelveli. The Radio Rural Forum Programmes are broadcast on every Tuesday and Friday. These begin with the, "Question—Answer time" commencing at 6-40 p. m., lasting for 20 minutes. This is followed by the "topic for the day" from 7 p. m. to 7-15 p. m.

**Materials and Methods of the study:** A study was taken up to find out the views of the Radio Rural Forum members on the following aspects of the Radio Rural Forum Programme:

1. Whether the present time of broadcast of the programme is convenient to them?
2. Whether the present frequency of broadcast are suited to them?
3. Whether the length of the programme in respect of (a) "Question Answer period" and (b) the "Topic for the day", are adequate?
4. Whether the number of agricultural topics broadcast are sufficient; and
5. Whether the answers given and the agricultural topics on which talks given are useful to them?

Being the first time, this study is considered as a "Feeler", to find out how responsive the Radio Rural Forum members are to such a questionnaire sent to them.

There are 142 Radio Rural Forums who had been asking questions on agricultural topics. These forums represent all the districts in Madras State except the Nilgiris. A questionnaire with seven questions was prepared giving 4 choices for each. The Convenors of the 142 Radio Rural Forums were requested to give their choice to each question in an enclosed answer sheet. Out of the 142 Radio Rural Forums 80 of them sent their answer sheets filled in. These 80 forums represent all districts in Madras State except Madurai and Nilgiris. As the sample taken is small the conclusions arrived at are only suggestive of trends.

Though there are 12,522 panchayats in Madras State, it is reported by the All India Radio, Tiruchirappalli that only 682 Radio Rural Forums have kept in touch with them either by way of asking questions or by other correspondence. But, even out of these 682 forums, only 142 forums have asked questions on agriculture, to the All India Radio, Tiruchirappalli referring to topics of the Agriculture Department; therefore it was possible to send questionnaires to these 142 forums only since others, even if referred to, would not be able to give their views on agricultural programmes.

**Observations made from the study:** (i) *Time of Broadcast:* In the Radio Rural Forum Seminar *cum* Training recently conducted at Coimbatore by the Rural Development and Local Administration Department of Madras Government from 18th to 20th August, 1964, when representatives from all Development departments, Staff of the All India Radio and various non-official representatives like Panchayat Union Chairmen and Panchayat Presidents from Coimbatore district gathered and discussed, it was opined that the timing for the broadcast of Radio Rural Forum Programmes should be slightly altered so that farmers could get the full benefit of the programme. The suggestion was to have these Radio Rural Forum Programme from 7-30 p. m. to 8-05 p. m. instead of from 6-40 p. m. to 7-15 p. m. which is considered too early for the Indian farmers to attend.

(i) *Time of Broadcast of Radio Rural Forum Programme in Madras State.*

TABLE 'A'

Time of Broadcast of Radio Rural Forum Programme	No. of Radio Rural Forums for whom it is convenient										
	Chingle- put	S. Arcot	N. Arcot	Trichy	Tanjore	Thiru- nelvely	Kanya- kumari	Coim- batore	Salem	Ram- nad	Total
1. 6-05 to 6-40 p. m.	—	1	—	1	1	4	2	3	—	2	14
2. 6-40 to 7-15 "	5	1	4	2	3	3	—	4	5	—	27
3. 7-30 to 8-05 "	5	1	2	2	4	5	—	3	2	2	26
4. Any other time	—	1	1	1	2	2	—	2	2	2	13

The study indicates that 34 per cent of the listeners prefer the existing time of 6-40 p. m. to 7-05 p. m. while nearly equal number of forums consisting of 33 per cent of the listeners prefer it to be from 7-30 to 8-05 p. m. The rest of the 33 per cent of the listeners who have laid their choice against choices 1 and 4 prefer a time varying from 5 p. m. to 8-40 p. m. Though conclusive indications cannot be arrived at, it is clear that the majority of the listeners prefer a time anywhere between 6-40 and 8-05 p. m. Further detailed studies may be necessary to find out the exact preference of the listeners during summer and winter months.

(ii) *Frequency for Broadcast of Radio Rural Forum Programme.*

Nearly 57 per cent of the listeners prefer to have the existing two days a week broadcast on Tuesdays and Fridays, and 30 per cent of the listeners desire to have only once a week as seen in the table below :

TABLE 'B'

Number of days of Broadcast of Radio Rural Forum Programme	No. of Radio Rural Forums for whom it is convenient										
	Chingle-put	S. Arcot	N. Arcot	Trichy	Tanjore	Thiru-nelvely	Kanya-kumari	Coim-batore	Salem	Ram-nad	Total
1. Two days in a week	8	3	4	3	6	8	—	6	5	3	46
2. Once a week	1	1	2	—	4	5	2	6	2	1	24
3. Daily	1	—	—	2	—	—	—	—	1	1	5
4. Number of days other than these	—	—	1	1	—	1	—	—	1	1	5
											Total 80

(iii) *Length of the Radio Rural Forum Programme.*

Question - Answer Time :

TABLE 'C'

Duration of the Question and Answer period of Radio Rural Forum Programme	No. of Radio Rural Forums who prefer the duration.										
	Chingle-put	S. Arcot	N. Arcot	Trichy	Tanjore	Thiru-nelvely	Kanya-kumari	Coim-batore	Salem	Ram-nad	Total
1. 20 minutes would be adequate	6	1	2	3	5	11	—	5	4	5	42
2. Less than 20 minutes	—	—	—	—	—	—	—	1	—	—	1
3. More than 20 minutes	2	1	2	—	1	1	—	1	2	—	10
4. If so the number of minutes	2	2	3	3	4	2	2	5	3	1	27
											Total ... 80

Majority of the listeners, namely 52 per cent feel that the "Question-Answer period" of 20 minutes, as at present, is quite adequate; while about 34 per cent of the listeners who have specifically laid the duration under choice 4 have expressed the following:

Duration			Number of Radio Rural Forums who desire the duration.
15 Minutes	...	...	2
25 Minutes	...	...	2
30 Minutes	...	...	15
35 Minutes	...	...	2
40 Minutes	...	...	1
45 Minutes	...	...	4
60 Minutes	...	...	1
			27 (34%)

Thus 25 forums out of the above 27 and 10 forums under choice 3 thus consisting of 35 forums or 44 per cent of the listeners desire 'to have the, "Question - Answer time" extended to beyond 20 minutes varying from 25 to 60 minutes. Among them a majority have expressed their desire to have it for 30 minutes. Only 3 forums or 4 per cent of the listeners want the "Question - Answer period" to be less than 20 minutes.

(iv) Topic for the Day:

TABLE 'D'

Duration of the Talk on the Topic for the day	No. of Radio Rural Forums who prefer the duration.										
	Chingle- put	S. Arcot	N. Arcot	Trichy	Tanjore	Thiru- nelvely	Kanya- kumari	Coim- batore	Salem	Ram- nad	Total
1. 15 Minutes would be adequate.	8	1	4	3	6	11	2	7	6	6	54
2. Less than 15 Minutes	—	—	—	—	—	—	—	—	1	—	1
3. More than 15 Minutes	1	—	—	1	2	1	—	—	—	—	5
4. Forums which specified number of minutes	1	3	3	2	2	2	—	4	—	—	19
Total ...										79	

N. B: One forum abstained from giving any opinion.

A great majority of the listeners namely, 67 per cent of them like to have the talk on "topic for the day" for 15 minutes, as is followed now. Of the remaining 25 forums or 33 per cent of the listeners 18 forums like more time to be given; and of these 10 forums have specifically indicated 20 minutes for the talk and 7 forums have indicated that the talk should be extended to 30 minutes.

TABLE 'E'

(v) *Periodicity of Broadcast of Agricultural Subjects in the Radio Rural Forum Programme.*

Periodicity of broadcast of Agricultural Topics in the R. R. F. Programme	No. of R. R. Fs. who desire to have the periodicity										
	Chingle-put	S. Arcot	N. Arcot	Trichy	Tanjore	Thiru-nelvely	Kanya-kumari	Coim-batore	Salem	Ramnad	Total
1. Twice or thrice a month as is done now	3	—	5	1	8	8	1	4	2	2	34
2. Monthly once	1	—	—	—	—	—	—	—	—	—	1
3. More than thrice a month	3	—	—	—	1	1	—	1	3	1	10
4. Forums which specified the number of times	3	4	2	5	1	5	1	6	4	3	34
											Total 79

N. B: One forum abstained from giving any opinion.

While about 42 per cent of the listeners opine that the present system of broadcasting topics on agriculture twice or thrice a month is adequate the choice laid under 3 and 4 by 44 forums contributing to 55 per cent of the listeners have expressed their desire to have agricultural topics broadcast for more than thrice a month. Of these, 32 forums or 40 per cent of the listeners have clearly specified that there should be broadcast on agricultural topics once every week or atleast four times a month in the Radio Rural Forum Programme.

TABLE 'F'

(vi) *Usefulness of Agricultural Topics now Broadcast in the Radio Rural Forum Programme.*

Usefulness of the agricultural topics broadcast during the R. R. F. Programme	No. of R. R. Fs. who have expressed their views										
	Chingle-put	S. Arcot	N. Arcot	Trichy	Tanjore	Thiru-nelvely	Kanya-kumari	Coim-batore	Salem	Ramnad	Total
1. Very useful	8	4	6	3	5	11	—	5	9	2	53
2. Useful	2	—	1	2	5	3	1	5	—	4	23
3. Somewhat useful	—	—	—	1	—	—	1	1	—	—	3
4. Useless	—	—	—	—	—	—	—	—	—	—	—
											Total 79

N. B: One forum abstained from giving any opinion.

It is seen that 66 per cent of the listeners find the agricultural topics broadcast as very useful, and 29 per cent of them have found it as useful. Those who have expressed it as, somewhat useful are just 4 per cent (or 3 forums), and none has found it to be useless.

TABLE 'G'

(vii) *Usefulness of Answers given to questions relating to Agriculture.*

Usefulness of the Answers given to questions relating to Agriculture during the Radio Rural Forum Programme	No. of R. R. Fs. who have expressed their views										
	Chingleput	S. Arcot	N. Arcot	Trichy	Tanjore	Thirunelvely	Kanyakumari	Coimbatore	Salem	Ramnad	Total
1. Very useful	7	4	5	3	7	9	—	4	8	1	48
2. Useful	3	—	1	2	2	2	1	3	1	5	20
3. Somewhat useful	—	—	1	1	1	2	1	3	—	—	9
4. Useless	—	—	—	—	—	—	—	—	—	—	—
											Total 77

N. B: Three forums abstained from giving their opinion.

It is found that in this case also none has felt the answers given by the agricultural department through the All India Radio as useless; while on the contrary, 60 per cent of the listeners have expressed their view as very useful and 25 per cent as useful; and only 11 per cent have stated that it was somewhat useful.

**Discussion:** From the above findings, slight modifications to the Radio Rural Forum Programmes, wherever necessary, as given below, may be considered to be made in the larger interest of the tiller of the soil to whose convenience we should strive, and to whose preference we should cater to in order to increase food production.

1. The time of broadcast be either 6-40 p. m. to 7-15 p. m. or 7-30 p. m. to 8. 05 p. m. because almost equal preference has been shown to these timings. In this context, the fact that the commercial service of Radio Ceylon offers entertaining programme till 7 p. m. should not be lost sight of while considering the adoption of a suitable time for the Radio Rural Forum Programme.

2. The existing practice of broadcasting the Radio Rural Forum Programmes on Tuesdays and Fridays may be followed.

3. The present system of allocating 20 minutes for the "Question—Answer time" and 15 minutes for the "Topic for the day" may be continued.

4. The broadcast of agricultural topics in the Radio Rural Forum Programme may be made more frequently than thrice a month, as at present. There is a trend to show preference to have weekly programmes or at least four programmes every month on agriculture.

5. Since the Radio Rural Forum Programme, with "Question—Answer" given followed by the topic for the day is claimed to be very useful and useful by the majority of the listeners, every effort should be taken to foster this good feeling and interest among the farmers by giving authentic, useful, timely and applicable agricultural information through the Radio Rural Forum Programme in future also.

*Time of broadcasts:* Many radio stations in the world alter their broadcasting time for summer and winter periods. Krishnamurthy (1953), then Officer on Special duty, All India Radio, Trivandrum says, "to catch him (villager) during his hour of leisure we have to follow the sun and not the clock". The timings of the rural broadcasts, therefore, have to be suitably adjusted from season to season.

Douglass (1964) Food and Agricultural Organisation Consultant says that in Saudi Arabia because of high temperature in summer, farming operations are not carried out between 10 a. m. and 4 p. m. during which time farmers are forced to be in their homes or barns and this, therefore, presents an ideal time for broadcasting. In North America, Europe, Japan, New Zealand and Australia, he says, farmers start work early in the morning and usually return to their houses for regular meal break. Extensive studies in these countries have proved that the rural audience listen during the breaks. On the other hand, in Asia, Mexico and certain South American countries, the workers are in the field from early morning to late afternoon practically all the year round. In some of these countries, it is the habit of the rural population to visit coffee shops or meeting houses in the late afternoon after work and this has been found to be an ideal time for farm broadcasts. Neurath (1960), who conducted intensive studies which were sponsored by the UNESCO, the Ministry of Information and Broadcasting and the Tata Institute of Social Sciences, Bombay in his findings says, it was unanimously complained that the present time of 6-30 p. m. is too early and suggests commencing rural programme from 7-30 p. m. which satisfy most people. The present study showed that 6-40 p. m. to 8-05 p. m. is generally preferred by the Madras listeners.

*Making available Agricultural Information to Broadcasters:* Beaty (1964), former Farm Director, Radio Station, WBAP Texas, U. S. A., (now Chief, Radio and Television Service, U. S. D. A.) states that in the U. S. A. broadcast materials are received from the United States Department of Agriculture, State and local experiment stations, from the extension agents, from Farm organisations and breed associations. He adds that these agencies supply the material because the broadcaster asks for it and makes use of it. Another, yet an important source



that gives them useful information for broadcast are the listeners who send in announcements of important farm demonstrations, meetings of farmers' groups, requests for help in alerting consumers to the plentiful supply of a crop.

Ron Powell (1964), Rural Officer of the Australian Broadcasting Commission, says that in Australia the talks, interviews and magazine materials are supplied by each of the 65 Rural Officers employed by the Australian Broadcasting Commission. There are some 26 Officers stationed in country areas who supply most of the programmes dealing with farmers on practical agriculture. The officers stationed in capital cities, he says, generally supply programmes obtained from Agricultural department officials, universities and producer organisations.

Though it is true that in India too Agricultural Information is received from various sources, yet the broadcasters do not have a plentiful supply of agricultural information for them to pick and choose.

**Relationship between the Broadcasters and Farmers:** "No concept of broadcast services to agriculture as they are accomplished in the United States is accurate or complete without an understanding of the rapport which exists between the farm broadcaster and his audience", says Beaty (1964). He goes on to say that in his country (U. S. A.) broadcaster meets the listeners face to face on their farms, in their meetings, at the market place, invites them to the studios occasionally but more often makes on the spot tape recordings with them bringing their views directly to the listeners. Thus between them, they form a bond of mutual interest, mutual trust and acquaintanceship. All the listeners know the hundreds the farm broadcaster does, see and talk with and they feel a personal bond with him because he shows personal interest in them. The farm broadcaster provides reliable information that his listeners want and he does it everyday, while the information is new and timely. He visits his listeners and learns their thinkings, their needs, their likes and dislikes. By gathering much of his information, as they say in the U. S. A., "Straight from the horse's mouth", he establishes his sincere interest in helping them and earns the confidence of the farmers who depend upon him for accuracy and timeliness of information.

In our country the visits of a Producer or Assistant Producer of Rural Programmes are few and far between while comparing with the situation in the U. S. A. But it might also be an impossibility for a country like India to establish face to face relationship and intimate knowledge of, if not all atleast most of the farmers, who form a great majority in population claiming more than 75 per cent as compared to U. S. A. where the percentage is sufficiently low at one per cent. The number of Radio stations is also too few, 30 in India as against 4856 in U. S. A., for them to have adequate number of personnel who could establish such close and constant touch with the greater proportion of the listeners. Madgalkar (1961) Producer of Rural Programmes, All India Radio, Poona says, "more relay stations in the smaller towns of India would be a great help to farmers". He goes on to say that the outstanding success of the Australian Broadcasting Corporation in rural broadcasting is largely due to the fact that programmes are related intimately to

the needs of particular districts". Attempts may therefore have to be made to have more number of Radio Stations in each State broadcasting rural programmes so that the All India Radio staff can have closer contacts with farmers, and more localised agricultural information and specific recommendations suited to the particular area, could be given.

It will also be necessary to give facilities to farmers to listen to the rural programmes on agriculture by making available cheap transistors to all the literate farm families.

**Place of Agricultural Technicians in the All India Radio:** In a country like U. S. A. where a few are engaged in agriculture some of the radio stations have a well rounded agricultural service maintained by a staff of from one to five full-time specialists in the stations' agricultural department. Some, it is said, use broadcast materials furnished by the department of agriculture as their sole service to agriculture, while others use these to supplement their local coverage. It is therefore, but appropriate in a predominantly agricultural country like India to expect to utilise the service of agricultural technicians in radio stations who should be able to develop sources of agricultural information to surpass those used by daily newspapers so that farmers have access to information they need in a "two-way channel" method, when they need it.

**Conclusion:** The radio is to be recognized as an important medium of communication through which farmers could be motivated to adopt scientific methods of farming for increased food production. With this end in view the Radio Rural Forums which are organised at the panchayat level must be strengthened so that farmers could look up for authentic, timely, useful and applicable agricultural information from the radio.

Broadcasting agricultural topics atleast once every week during the Radio Rural Forum Programme will be creating a sustained interest among farmers.

The farmers who are members of the forum must be made to eagerly look forward to listen to the agricultural topics regularly. The Extension Workers must encourage the farmers to discuss among themselves the possibilities of implementing the scientific farming practices in their holding.

The Extension Workers must clear their doubts and help them to adopt the improved recommended practices. Wherever possible, the Extension Workers must show by actual demonstration the scientific methods of farming or take the farmers to a demonstration plot and show them the benefits one could get by the adoption of improved practices. This follow-up work is essential, for without this, the farmers will not be motivated to the "Action" stage.

As done in other countries agricultural information must be made available from various sources in abundance to the All India Radio for them to broadcast timely and useful information to farmers.

Efforts must be taken to have more frequent contacts with farmers in the various districts of the State by the Producers of the rural programme so that intimate knowledge of the farmers and their problems are gained by the Producers to suitably broadcast the programme. It also helps to create rapport between the broadcaster and the listener, the farmer. To facilitate such close contacts and also to give localised recommendations to farmers, more number of All India Radio Stations broadcasting rural programmes, may be necessary in each State. It may also be necessary to supply cheap transistor sets to all the literate farm families.

The possibilities of utilising the service of agricultural technicians in radio stations may also have to be exploited so as to develop easy and quick supply of agricultural information to surpass those used by even dailies.

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