

MR. RAI PRITHVIRAJ

Mr. Prithviraj is Deputy Director of Agriculture for Hyderabad State. In his present position he is in charge of all sections of the Directorate including research sections, Grow-More-Food Section, Manure Section, and Accounts and Administration. He is 50 years old and he obtained his university education in agriculture in India. Mr. Prithviraj is a very fine gentleman with a very tolerant and philosophical sort of mind.

One interesting aspect of Mr. Prithviraj's interview is the importance he attaches to work with rural women and the observations he made of that work here. (See pp. 2, 4, 6) Mr. Prithviraj comments, as do almost all the other interviews, that more time should have been spent in Washington for a thorough study of the organization of the extension service. Mr. Prithviraj also recommends for future study programs that time be allowed to study publications and bulletins before the subject in question is discussed. (See p. 5)

Mr. Prithviraj's comments on the value of Tuskegee and the seminar in the cultural approach to extension work are especially interesting.

EVALUATION INTERVIEW WITH MR. RAI PRITHVIRAJ
DEPUTY DIRECTOR OF AGRICULTURE
HYDERABAD STATE, INDIA

Q. When you arrived in the United States what were your personal objectives for this study trip?

A. I was nominated for this trip by the Hyderabad government to study the extension organization in the United States. We are working to make our extension service more applicable towards the Grow More Food Drive under the Five Year Plan of the Government of India. That is my main objective. Also, I wanted to study as to what are the best methods adopted by the U.S. Department of Agriculture to impart the results of research to the farmers carried on by the agricultural experts.

Q. What are some of the problems you face in extension work in your state?

A. In our state we are carrying on extension work, of course in a different way, and so far the present method is called the propaganda which is working along the same lines as the extension work in the United States. We have got the Director of Agriculture of the State and he has got three deputies in the first class cadre assisting him in the research work at the farms, the Grow More Food and Propaganda work, and the Procurement and Distribution of Manures and Fertilizers. Besides this, we have one agricultural engineer and a publicity officer. At the district level we have the assistant director of agriculture who in turn is assisted by a graduate assistant at each Taluk. Each Taluk is subdivided into about ten to fifteen zones and a trained field man is kept in charge of each zone, consisting of about ten to fifteen villages. In every Taluk we have got about three to four Godown (stores where we stock our improved seeds). We have an agricultural college affiliated to the Osmania University and the Director of Agriculture is the ex-officio Dean. We have different experts who carry out our research like the economic botanist, the wheat specialist, rice specialist, the oil seed expert, chemist, entomologist, and pathologist who work under the guidance of the Director of Agriculture on different problems concerning our state. This is in short the set up of the agriculture and agricultural extension service in my state. We have 16 districts and therefore 16 assistant directors, one for each district and about 240 graduate assistants and nearly 800 fieldmen. Our main problem is to increase the production of food grains either by means of bringing additional land into cultivation or by using improved seeds and manures. So far there are about 12 million acres of fallow land which was partly fallow because it was weed infested or the people have not the financial resources. Under the Grow More Food Program we are now supplying tractors on Taccavi (loan) and many more well to do cultivators have gone in for tractors and are using them on their own lands and also hiring them out to their neighbors. It is planned to bring about four million acres under cultivation of food crops and two million acres under cotton. This is why our staff has been increased and our budget also. Up to 1948-49 only about two million, 200 thousand rupees were sanctioned for the department besides provision of seven million, 500 thousand towards loans for the cultivators. It was in 1949-50 that this budget provision was enhanced

and six million rupees for the salaries, contingencies and subsidies and 17 million, 500 thousand for loans were provided to carry on the extensive program of Grow More Food. (Also see remarks on Tennessee.)

Q. What was the value to you of the study in Washington D.C.?

A. At Washington we could study the set up of the extension organization at the federal level and as to how the Director or Extension is assisted by the various experts and the sectional heads who have a general control over the various extension works in the states. I for myself feel that the time limit was very short and especially the time allotted to study the various sections was not more than half an hour. Had it been more we would have been able to have a better understanding going into further details about the set up, its functions and responsibilities. (Did you pick up any ideas that might be of use to you in your own work?) Well, to me the home economics and the home administration staff was a new item for study as this has been totally neglected in our part. It helps in two different ways, first in organizing the youth who will be the future farmers and also in bringing around the women folks to look into their household affairs economically and socially. It was of late that we in our part have started the womens social service and the Womens Food Advisory Council. They are helping in arranging our kitchen gardens and in acquainting people with subsidiary food, demonstrating how to prepare foods, and so on.

Q. Do you have any suggestions for ways the study at Washington could have been improved?

A. At least one day should be devoted to one section at a time so that a thorough study of the organization could be made.

Q. What was the value to you of the study in Tennessee?

A. The progress that the TVA has made was more appealing to me because it has given a very great impetus to the farmers by providing electricity throughout the state at a cheaper cost. That has helped the cultivators mostly in handling their machinery, their dairy, and also to a greater extent in managing their household requirements. This has served the community as a whole and it is because of this step taken by the government that the condition of the farmers of this area to me seems to be much better off. It has also helped in developing more industries and handicrafts which naturally go to add to their income. The extension organization of the valley was also studied and the work of the 4-H clubs and the community development work in relation to farm and home programs was also studied in detail and to me it appears that the program is working very satisfactorily and is of great advantage to the farmers of that area. Here I would like to mention that the Department of Agriculture and its extension service have not much difficulty in imparting to the cultivators the new objectives and the results of the various research as nearly 100% of the population is literate and have got one common language. This makes matters very simple for the Department as it has only to deliver the goods in the shape of some leaflets, bulletins or newsletters and naturally the cultivators adapt these recommendations more easily. It is only when they find some difficulty that they have to invite the country agent or the experts of the section concerned. Our task

in this direction in our own country to achieve the same objective becomes laborious and requires a lot of patience on the part of the agricultural people as only 10 to 12% of the population is literate and in each state there are not less than three to four different languages. (Did you pick up any ideas that might be of use to you in your own work?) Well, we have a similar project called the Vizamsagar Project which has a commanded area of 275,000 acres. The hydro-electric work is in progress and we hope to supply electricity at a cheaper rate and naturally develop our industries in that part. A similar project but a major one in the Raichur district called Thungbhadra Project will be completed in about a year's time and this will be one of our biggest projects in the area.

Q. Do you have any suggestions for ways the study in Tennessee could have been improved?

A. No, I think the Tennessee program was quite all right.

Q. What was the value to you of the study in Auburn, Alabama?

A. We were first shown about the fisheries but I have got a special man for that problem. I was simply interested in taking down the preliminaries. Our state has recently organized a fisheries department and the breeding of different kinds of fish is being carried on by this department. The various big and small tanks especially in the Telengana tract of the state have been well organized and the fish are brought to big cities and supplied to the people at a very cheap rate. We have got one of our best fish breeds called Maral.

Then we studied the different crops (peanuts), cultural operations, pest control, but it was a surprise to me to see that the experts dealing in different aspects did not know the technical operations and perhaps, in my opinion, they have to depend upon the agronomist. In my opinion every expert whether he be an entomologist or a chemist should know the primary techniques of cultivation, the varieties used, and the different cultural operations. I hope I may be excused for this remark but I personally feel that one should have this much knowledge. The lecture on the use of visual aids in extension teaching was one of the most interesting lectures that we had during this period. It was very appealing and the way in which Mr. Brown and Mr. King demonstrated different visual aids was remarkable and worth adopting. I wish we had had some more such lectures to add to our knowledge about these visual aids.

Q. Do you have any suggestions for ways the study at Auburn could have been improved?

A. What I would think is that so much time was not needed on the fisheries because we are not much concerned fisheries, and as I have just said, more time on visual aids.

Q. What was the value to you of the study at Tuskegee, Alabama?

A. The progress made by the Negro people in improving their agriculture and in adapting all the improved methods of farming were very much appealing. The extension service is also designed on similar lines as in other states and in so far as I can see is working very efficiently. Having Negro people in the extension service in my opinion has helped

a good deal in imparting the techniques to the Negro farmers because it is generally true that people have more faith in their own people and in their own culture. It also helps me in having similar action in my place when I deal with the different people. This would help us in dealing efficiently with people of the different tracts having different languages and different cultures. No doubt we are following the same practice at present but still more efficient arrangements will be done on the lines as followed in Tuskegee. It was really a surprise to me to see that there was a high percentage of literacy among the Negroes; they had their own university and college and naturally it is an inspiration for us to follow the same lines. The extension organization in this area has been able to teach to the Negro families better living, better sanitation, and preserving their own food stuffs according to their needs.

Q. What suggestions do you have for ways the study at Tuskegee might have been improved?

A. None. I thought it was a very effective program of study there.

Q. What was the value to you of the study in Missouri?

A. The first week we stayed in Columbia studying the organization of the extension service there. The special feature of the Missouri program was the balanced farming and the credit system working in the state. We had a chance to study the various systems of credit like the FMA, FHA, and others and what interested me most was the timely monetary help given to the cultivators. In our parts the routines are so laborious that they take a lot of time till the man gets his desired loans and sometimes he either gets it after his operations are over or he fails to get it entirely. When I go back to my state I will put up suggestions to the government on the lines as are being worked out here and request our government to make necessary improvements on the present procedure of advancing loans. During our two weeks stay at Columbia we also attended a county agents conference and were able to know as to how a program is chalked out and how administrative matters are settled in such conferences without any delay and how the county agents are acquainted with the different problems by experts. We were sent to Pemiscott county to study in detail the organization of the extension service and the needs of the farmers and how best they get their difficulties solved through the extension service and the county agents. Unfortunately our group had not the chance to stay with any particular family but the county agent, the home agent, both for the whites and the Negroes took us around to different families who had settled recently and had organized their farms very efficiently. A few of them had cleared all the loans that they had taken to improve their farms and to construct better houses for their living. It is really a surprise to we people from India to see that the American farmers are a thousand times better than ours in the way that they have got better houses, better living, and have got all the amenities of life like cars, radios, running water, refrigerators and what not that a citizen enjoys in big cities. (Did you pick up any other ideas that might be of use to you besides the credit system?) Well, the home economics has played a very important part and I am of the opinion that it will help a good deal in our own country if we make a sincere effort in this direction. The farmers have got their own organization where they join together and consider their own problems and call for all necessary help from the extension staff. The work is more on a constructive basis as they know that it is in their own interest first and then in the interest of their own country. This spirit of cooperation among the farmers is unique and is worth trying in our parts, too.

Q. What suggestions do you have for ways the study at Missouri could have been improved?

A. I wish we had been given the opportunity to stay with particular families. Otherwise the program was good.

Q. What was the value to you of the seminar in human relations and cultural anthropology conducted by Dr. Spicer in the New Mexico and Arizona area?

A. We too in our country have different tribes who have different cultures, different faiths and different traditions. The program that was arranged for us to study the different cultures of the Pueblos, Navahos and the Spanish Americans gave us an idea about the method of approach in the extension work. These three different cultures having different traditions and faiths have different adaptations and naturally, therefore, it becomes necessary that our teachings in regard to extension, farming and home administration should be in a way that they can accept without any prejudice and adopt in the best manner in their own interest. What I find among such tribes both here and in our own places is that once they are thoroughly convinced of the improvements that we are going to suggest they readily accept. So long as they are not well convinced of the recommendations made by any extension worker, they do not at any cost take up the new recommendations nor accept them in principle. So the method of our approach must be in the simplest form and demonstrated in the best practical way and must not be in conflict with their beliefs. That seminar of the week was a good idea and is of great use in a way that it helped us in expressing our own views and in finding out the views of the other people taking part in the seminar. With such mutual discussions we find out where we agree and where we do not and then also try to convince each other about the various points of difference. At Truchas we stayed with a Spanish family to go into details about his farming methods and also the home economics side. Luckily we had a chance to see two or three of the best farmers who were having about 20 to 40 acres of their own land and how they were carrying on the work without any outside labor. It was very surprising to note that only the older folk were looking after the farm work while the younger ones were trying to earn something from the nearest industrial area in the shape of daily wages. That way they could not give full time attention to their own farms and perhaps due to this negligence on their farm they could not get better returns from their farms and even they were spending a good deal in producing the quantities that they are now getting. Some effort in this direction should be made by the government to decentralize industries so that the energy of these young folks is not wasted in running down to the industrial area which is situated at a far off distance and in neglecting their own farms in the way that they are doing at present. The farmers in this area are cautious and are also aware that with a little more attention and with better practical methods they can earn much more than what they are earning at present, but the temptation of getting a little higher income from industry is for the present coming in their way. These two problems of the cultural approach and the problems of the Truchas farmers were what interested me during this week.

Q. What suggestions do you have for ways the seminar might have been improved?

A. None especially about the seminar. It was good. But I do have some about the study trip as a whole. I think that necessary literature in the form of printed matter both in regard to the research work carried on and about the extension work and its activities should be provided to the parties first so that they can go through the same carefully and then discuss the problems in a better way. This applies to the whole study tour. In the present situation we had very little time to go through the literature that was supplied to us or even if we did go through that we could not discuss matters which required further clarification. It would be better if this suggestion is kept in mind for the future. We needed more time to read over what we had received in the form of written material and much more time to have discussions. (Any other suggestions?) Instead of having a program during the whole day it would be better to have a four to five hour program of study and the rest of the time should be given to go through the printed matter or the literature that is supplied. Otherwise it becomes very laborious and people do not get time

to study the literature supplied to them from time to time. These are my general suggestions.

Q. In summing up, looking back now over the whole tour, do you feel that this study trip has met the objectives you outlined in the beginning of this interview?

A. What I could learn from this study tour fulfills my objectives. No doubt all that I have learned will not be applicable to my country but still I hope that I can take initiative in three different matters given below. (1) Starting the home economics side and organizing the 4-H Clubs. (2) Organizing the current extension system along the lines followed in the USA. (3) In arranging dairy farming, poultry and allied industries during the off time of the farmers. (How do you mean?) For the present the farm people are mostly concerned with farm produce and poultry and dairy could be a supplementary income. We have started two community centers and also a training center for the in-service men within the state. Two more community centers were to be established in the different tracts. Either they may have been established by now or they will be established in the near future. We people from India are obliged to the Ford Foundation for giving us this chance to study the extension organization in the United States and their achievements, as this should help us in formulating our extension program and in developing our own country both economically and socially. No doubt people from different parts of my country have come here for higher studies but so far none had been here to study the extension work carried on by the USDA, and it is for the first time that we people from India have come for this study which can be beneficial to us directly and will indirectly serve our own country when we go back to our respective states and make the best of what we have seen and learned here during this period. I wish many such institutions as the Ford Foundation would come forward to mutually help each and every country so that our relationships as human beings will get stronger and so that we can work together in the cause of peace and prosperity among the various countries of the world.

DR. J. C. RAMCHANDANI

Dr. Ramchandani is Director of Agriculture for Saurashtra State. In this position he has control of all the activities of the Department of Agriculture of his state. His previous experience has been as a rice mycologist, a botanist, and Deputy Agricultural Production Advisor to the Government of India. He received his undergraduate degree in agriculture in India and his PhD in England. Dr. Ramchandani is an extremely friendly, communicative person and he made many friends all during his tour. He is a very well trained agricultural technician.

Dr. Ramchandani mentions lack of time and opportunity for individual study (see p. 4) and he feels that at least half of the time allotted to a tour should be allowed for individual contacts. He specifically mentions the study in Washington in this respect. Dr. Ramchandani makes the same recommendations as did Mr. Deale in the programing of a large group into small sub groups with a chance to meet three or four times in a seminar. (See p. 6) This again points out the lack of opportunity for participation and the feeling of rigidity that goes along with a large group study.

If group study is to be encouraged for its convenience in planning and administration more thought should be put into providing for participation and for helping the individual feel that it is his study rather than something that was forced on him, or that was set up for him to follow through rather automatically. Again I feel that Dr. Ramchandani's suggestions for periodic seminars should be incorporated in any group study because such seminars would promote participation and the opportunity for the group to lead its own discussions and its own evaluation.

EVALUATION INTERVIEW WITH DR. J. C. RAMCHANDANI
DIRECTOR OF AGRICULTURE
SAURASHTRA STATE, INDIA

Q. When you arrived in the United States, what were your own personal objectives for this study trip?

A. The object of my coming here was not to pick up or learn the technical knowledge of agriculture but to learn the methods and the manner and the means you utilize for putting across to the cultivator the whole agricultural knowledge. I want to get the fundamentals and with due modifications utilize them in my state. In addition, I want to collect and if possible take home with me handy appliances for transferring agricultural knowledge to my people. Last but not least, I want to understand the Americans, how they tick, and how they react to us in general. Close and sympathetic contacts will create the good will and understanding between our two nations. I should say that I have been more than satisfied so far in all these objectives because, you see, so far I have been able to get what I wanted and what I thought I would be able to achieve. (Would you explain what you mean by handy appliances?) To take an example, in my state the soil fertility has gone down very badly due to continuous washing by heavy rainfall limited to a short period of three months or so. The problem is to put this defect right by use of fertilizers and for this it is necessary to have quick analytical methods by which one could advise the cultivators what particular elements are short in their soil. I have been able to pick up such an appliance which could give a cultivator almost on the spot what is the deficiency of his soil and thereby avoid considerable amount of wasteful use of fertilizers. Similarly, home appliances for home canning and preservation would be very useful to the housewife to conserve vegetable and fruit products when they are in large supply and utilize them at times of scarcity which is often the case. This will considerably avoid waste and thereby give better nutritional value to the people.

(Would you elaborate on what you mean by methods and the manner of putting agricultural knowledge across to the cultivator?) After seeing the county agents and home agents in actual operation particularly in the state of Missouri I found how a county agent works. He is considered as a friend of the farmer. He sits with him, talks with him, not as an official but more like an elder brother studying his difficulties, sharing his sorrows, and worries and trying to give him his best quietly and gently. He even goes as far as to work with him in the field with his sleeves rolled up and dirtying his hands just as much or perhaps more than the cultivator himself. One could see why the cultivator not only respects him but almost loves him. He appears more as a member of the family and this is not individual but general for the whole of his county. One could see that everyone knows him by his pet name, not the usual formal name. That is the way I would like my men to work — what I call the human way.

The technique of visual demonstrations has been highly developed here and the way it was explained at Auburn has left a very prominent mark on me. This technique will have to be slightly modified under our conditions and effectively used for the good of our people. No doubt we have been doing it in our own way but quite a few points were very suggestive and useful.

Q. What are some of the problems you face in extension work in your state?

A. The question is interlinked. What is extension after all? All the branches of agriculture are under my control in my state — research, education, soil conservation, and extension. I have got an integrated program for the whole state. My three problems which I am tackling with the greatest amount of activity are water conservation, soil conservation, and the distribution of and proper use of manure. Then on the livestock side, development of better breeds both for milk and draft. On the educational side, proper organization of the

agricultural school for training of cultivators. In my state I am not putting up what I call higher education in agriculture but more practical education which an average cultivator will be able to absorb and take back and utilize straight on his farm. It is more practical than theory. We are also organizing research and specialists in every line of agriculture. Dairy and its by-products is another of our big problems which needs to be properly developed and organized and marketed. We are also organizing poultry development which is at present in a very primitive state.

(How does extension fit into all this?) All these items of work which need to be developed are being tackled by the extension staff in an integrated matter as there is a unified command. There is a single agency working, not a dual agency. Hence the work is much more smooth and easy and the workers in different lines have their defined position and assist each other properly and with understanding. It is the normal procedure with the Director of Agriculture that the program for the year is chalked out at the headquarters where the officers of extension, soil conservation, education, and research assemble and plan out the integrated program for the year and once the program is laid down it is carried out according to plan and reports submitted every fortnight and in case any officer considers that a change is necessary in his particular line he may do so with the approval of the Director of Agriculture. But this sort of modification rarely arises.

(How do you think it will be helpful to study methods and techniques of extension here?) Our extension men are more theoretical I would say than practical men and they need to get down to the earth. (How will you approach that?) You see, that comes by example from others. Some people are like that and others are not, so by example of those who do meet the cultivator on their level and do work on the practical side I hope it will influence others. That is more a mental process of transformation. One way which I have thought of and which I would like to approach the Government of India for is to get a unit comprising of a practical soil conservation man who has actually done the work with his own hands, a county agent and a home agent with the necessary equipment for doing their individual work to come to my state and under the supervision of one leader who could work with my extension people carry out the work as they do in their own country with proper understanding of the cultivators and thereby show by actual demonstration not only how to carry our extension work but give them the practical background of what they are supposed to do in all the aspects of agricultural development.

In this trip extension takes a second place. What is extension? It is mainly proper human relationships and what we have come to study are those human relationships and to understand Americans. The two and a half days I spent in an American home in Missouri were more important than the rest of the trip. They showed me real American life. I wanted to see your home life because it is the people and the home life of Americans that has made it a great nation.

Q. What was the value to you of the study in Washington D. C.?

A. That gave us the orientation of what your extension work is. That was the main thing. We studied the administrative side of extension. (Did you pick up any ideas that might be of use to you in your own work?) Well, that gave us background only. You pick up only when you see it in operation. That week gave us the background of a huge organization. Your organization is so big that we cannot think of it in that manner. Where we employ one person for something, you perhaps employ fifty. I asked one fellow in your extension office in Washington, "How many people work here?" The reply was, "Half of them." The magnitude of your organization is so great that we simply get flabbergasted and our first reaction is how can we do it with such a small manpower and so little facilities. In Washington we mainly got the idea of your tremendous organization.

Q. What suggestions do you have for ways the study in Washington might have been improved?

A. We are such a big group that I don't think you could have done it any better than you did to handle a group as large as ours, but for the future I would consider that after giving general orientation to the whole group for a day or two, individual attention for a certain period should be allowed so that individual problems could be discussed with the specialists and for this we had very little time. I could have done with one day extra or one day free to do this. That is the only thing which I feel would have been useful and I would have benefited from it. This defect has been overcome during the rest of the trip with people in the various states.

Q. What was the value to you of the study in Tennessee?

A. What I have liked very much there is the spirit of brotherhood, sympathy and trying to help people. You see community feeling, helping other people, and your centralization around a kind of church is a very good thing because every human being has a kind of religious feeling, even a man who doesn't believe in a God. When you get around together in a church there is a cementing or common factor. The peaceful atmosphere of the church gives peace of mind and I think it is easy to bring people together under such conditions. We have got temples in India but we have not yet built up community life around religious centers but it would be a good idea to use this temple as a place where you can bring in community life and community activity. We have not done it so far. (Did you pick up any other ideas that might be of use to you in your own work?) I think the main idea was seeing people work together under what I call the divine influence. I think the spiritual atmosphere rounds off some of the corners that are not easy to round off otherwise. Differences seem to be settled easier. That is one of the big things I felt from the study in Tennessee. Another thing I noticed and which impressed me was that little school we visited where an intense agricultural bias was given to those little children and they were getting more of a liberal education. They were being taught about people of other countries and taught the brotherhood of men throughout the world. This kind of education brings more world brotherhood. I wish our little children were taught the same and I have some thoughts that I will pass on to our schools. In other words, this universal education should be all over the world. These are some fundamental ideas that have hit me in Tennessee. The other thing which is very well thought out is the extension work as organized in Tennessee. It seems very well organized and in good hands like Dr. Walrath. Many a time very beautiful things are put down on paper but don't work, but here we found extension workers loved and respected and known by the people. They seemed to be at one with the people and were really helping people improve their life. That is a great practical achievement. We have also done in my country crop competitions but we found here community development competition and the system of how to evaluate their development and have contests and prizes.

Q. What suggestions do you have for ways the study in Tennessee might have been improved?

A. None at all.

Q. What was the value to you of the study at Auburn, Alabama?

A. I have already mentioned the visual aids. We also saw their fishery development which was interesting but at present has no direct bearing on my state because most of my people are vegetarians and it would not be possible to mesh fish culture. I also got some idea about work on peanuts and cotton. These are two big crops in my state. The methods employed for improving yield and quality might be useful

in my state.

Q. What suggestions do you have for ways the study at Auburn might have been improved?

A. You see, in all these places we toured too much and it was not very useful. I would say that out of the whole period of study half of the time should be for group work and the other half should be for individual work so that individuals could get in contact with people and specialists who can help individuals the most and can remain as contacts in the future. That is a general statement for all the places we visited. We needed more time for individual contacts.

Q. What was the value to you of the study at Tuskegee?

A. It is really a tribute not only to the Negro but to the White man because this sort of Institution would not have been possible but for the mutual and sympathetic understanding of the two American races. This Institution is the ray of hope not only for the American civilization but for the rest of the world. It is the right beginning for the ultimate goal of unity in diversity. We may be of different races and religions but ultimately we are all the same. Color makes no difference and religion should make no difference in the higher values of life. One could see the pride of the Negro in his achievement and the spirit not fully awakened to the future of his race. He can stand up on his legs and say "I am a free man." The little time which I had with some individuals privately I could see that the intelligent Negro understands his responsibility and is prepared to contribute to the good of the country and be friends with others. It was fairly obvious to see there was a certain amount of mental reservation and the great desire to see that one day they will be equal in every respect and there will be no separate entrances for them. One of them felt that how great will be the day when a Negro could aspire to be President of the United States. Who knows, it may come true.

(Did you pick up any ideas that might be of use to you in your own work?) Yes. The idea of community home canning and preservation which eliminates wastage of equipment and time and makes it easy for any housewife to come across and get her individual canning and preservation done in the community kitchen. That was a good idea because that could easily be applied in our state where the cultivators live in groups rather than individually on the farms. Another thing which struck me was the vocational training in so many useful arts which could be copied in our country. This is being done to some extent but could be expanded on a much larger scale.

Q. What suggestions do you have for ways the study at Tuskegee might have been improved?

A. The study there was very good. I do think that the White American should take more steps to help the Negro get over his inferiority complex which is very demoralizing. This will take a long time but there should be more conscious effort and I think the thing could be expedited.

Q. What was the value to you of the study in Missouri?

A. I mentioned Missouri in the beginning when I said there we got into contact with farm homes and saw the county agent in actual work. I was able to live two days and two nights with an American family. With the county agent we visited farms and saw the county agent and the home agent sitting with farmers and helping them to work out their problems and working with the balanced farming program and trying to assist the farmer instead of forcing a program on them. They wanted certain things done and they helped them to do it, working as a friend and philosopher, giving the farmer suggestions and letting him work out his own salvation. They gave him

ideas making him think they were his own ideas. The county agent at Charleston had a good way of sending out information to the cultivators by regular talks on the radio and personal circular letters. The system of questions and answers on the air was working very well. Three members of our Mission who went to Charleston contributed two talks on the radio. The county agent shot the questions and we supplied the answers. One of us dealt with the past of India, the other with the present, and I discussed the future. I believe this system of question and answer programs is good for extension and could be copied.

(Did you pick up other ideas that might be of use to you?) As I mentioned, the personal contacts the extension agents have with the farmers. We also went to a Kiwanis Club meeting where we talked about India. This is good that people from organizations like this meet people from outside and make wider contacts and friends. And this goes back again to human relations. If and when any delegation comes from any country do not confine them only to the subject matter for which they have come; give them a little bit about the rest of America so that they go back with wider knowledge, broader background and do ^{not} only conceive of America in the same way as the seven blind men touching the elephant, every one thinking that he knows the elephant and everyone else is wrong. Many a time a lop-sided picture could be taken away from America without these contacts.

Q. What suggestions do you have for ways the study in Missouri might have been improved?

A. As I have already said before, I wish I had had more time to talk to individuals. Unfortunately there is always too little time.

Q. What was the value to you of the seminar in human relations and cultural anthropology conducted by Dr. Spicer in the New Mexico and Arizona areas?

A. The suggestions made by Dr. Spicer in his talks with us have direct correlation with the extension work which we have to carry out with the people of the states. They will certainly have very good value. (In what way?) In my state a large number of people follow a religion called Jainism. They are a group whose philosophy of life is non violence. It plays a very great part in the every day life of the people. Many modern ideas of agriculture are not easy to put across because of their religious sentiments, particularly in the development of livestock. The factor of non violence creates a difficult position in the application of methods of cattle improvement and cattle disposal. It will require considerable delicate handling of new innovations to persuade and convince them of the utility of methods of cattle improvement, particularly the use of artificial insemination.

The state of Saurashtra is a little unique from other states as it is an integrated state from 202 small and big states of the old princes. These princes have had different origin. Some were original local rulers and others came from outside as invaders, and as such, it is a real heaven for an anthropologist. Today a common rule is bringing about the unity of the whole state and this transformation will be an interesting study from an anthropological point of view. General records are being kept but this state has no anthropologist as such and in the absence of an anthropologist some of the interesting points may be missed and it would be desirable in the interest of the state and country as a whole that someone well qualified in the line makes a study at this early stage and compares it again after a lapse of five or ten years on how the changes are being effected.

(Did you pick up any ideas that might be of use to you in your own work?) Well, the general approach was indicated. You cannot force things. You have to use the natural forces and channel them. There are no hard and fast rules for any particular situation. General suggestions are very helpful and if and when a particular situation arises those ideas will be translated to fit the characteristics of the people of the state.

We also visited the Pueblo villages and so on. My trip to the Spanish American villages and the Pueblo villages in general was very instructive. One could see that the Spanish Americans had taken greater advantage of the extension facilities than the American Indians. The American Indian appeared not so self reliant and as such he needs more attention than the other two groups. It was observed that they were anxious to have governmental support regarding assured water supply and better marketing of their produce. This was a general requirement of the whole region but the Spanish Americans were more enterprising and ^{were} managing their things fairly well. But the American Indian did not take any organized action to market their produce satisfactorily. They desired that the government should take up this, which is not always easy. Personally, I would suggest that the extension officers persuade someone in the American Indian community to take up the marketing of produce of his people and there is sufficient scope for establishing a good business by anyone who is prepared to give time and energy to it. This will be a quicker method of achieving the objective, marketing their surplus fruit which was found to be rotting on the ground. Of course, in the long run, cooperative marketing will be the best solution and that will give a better return to the farmer, but failing that the above suggestions of individual enterprise may serve the purpose.

Q. What suggestions do you have for ways that seminar might have been improved?

A. The same general thing that I have already told you applies here too, and that is that a study like this would be more effective in smaller groups. A big group cannot get as much out of it as small groups can. I would suggest also that after we had the talk by Dr. Spicer the group could have been split up into parties of three or two for a longer time than we did and talk and stay with people and then again have a seminar together. And I don't think there should be any night seminars. This is a general suggestion for the whole trip. Another general suggestion is that at Washington more time should have been given for greater orientation and more intimate contact with the specialists as Washington is the nerve center of your country. Every aspect of agricultural extension and other agricultural activities should have been more thoroughly studied and it would not have been very necessary to study in detail the individual state agricultural extension set up. After this thorough knowledge at Washington the group could have been broken up into smaller sub groups and sent to individual states for detailed study and longer periods of stay. After a fortnight the sub groups could have met at a central point and held a two day seminar with the other sub groups studying in other individual states. Similarly these seminars could have been carried on from time to time after each period of study. This would have resulted in a distribution of about three states to each sub group for study and three seminars and a final grand seminar could have been held at Pasadena. This arrangement may have given us more information and more individual study and the members of the delegation in each sub group would have something to contribute. Under the present arrangement the contribution is of a uniform pattern because we met the same people and studied the same subject matter and lacked individual contact with people.

Q. Looking back over the whole trip now, do you feel that this study tour met the objectives you outlined at the beginning of this interview?

A. Well, I have been personally more than satisfied considering the short time and the rushed program. I have picked up quite a few ideas which will be useful to my state; I have not the least doubt about it. I am going back a wiser man.

These are the general points on which I gathered useful information. (1) Handling of livestock development. (2) Happy and cordial relationships of the extension worker with the farmer. (3) Community organization centered around a religious

organization. (4) The application of visual aids for extension and other agricultural activities. (5) Organized home canning and preservation on a community basis. (6) Vocational training. (7) Quick soil analytical methods, soil fertility analysis. (8) Method of soil and moisture conservation. (9) How the interests of the vegetable and fruit farmers are protected by the government by stabilized market prices. (10) The better methods of holding fairs in the interest of livestock and agriculture. (11) The methods used for development of backward areas in New Mexico have great bearing on conditions in my state.

One point that has struck me the most is that this nation is alive from the child to the old man and they join hands for a good cause. The government and the people are one. And a nation which has got so much vitality has hope for greater things. The nation is really vital, living and bubbling with life and it was really an eye-opener that age is no restriction to your joining into the general activities of the nation. It has been a pleasure to see clean, nice, happy people.

MR. S. C. ROY

Mr. Roy is Agricultural Extension Commissioner for the Ministry of Food and Agriculture of the Government of India, a position comparable to the Director of Extension in the U. S. Department of Agriculture. His experience has been as a Professor of Botany and Head of the Department of Biology at Kanpur Agricultural College, Assistant Director and later Deputy Director of Agriculture in United Provinces, Assistant Agricultural Commissioner to the Government of India's Indian Council of Agricultural Research, Secretary to the Indian Central Sugarcane Committee, Director of the Indian Institute of Sugar Technology at Kanpur and Director of Intensive Cultivation of the Government of India. He received his university education in India and in England. Mr. Roy is a very diplomatic person, a fine speaker, and intensely interested in the development of extension work in India.

The beginning of Mr. Roy's interview gives much interesting background information on Indian agriculture and the position of extension work. His interview is also extremely interesting from the point of view that Mr. Roy is in the key position in the development of an Indian National Extension Plan.

One interesting point that seems to have been Mr. Roy's philosophy about his tour is that no matter how good a program or study tour is planned, it is up to the individual to get as much from the opportunity as possible. This is certainly true.

Mr. Roy's interview is a very positive one and worth reading in its entirety.

EVALUATION INTERVIEW WITH MR. S. C. ROY
AGRICULTURAL EXTENSION COMMISSIONER
MINISTRY OF FOOD AND AGRICULTURE
GOVERNMENT OF INDIA

Q. When you arrived in the United States, what were your personal objectives for this study tour?

A. I would like to give a little background first of my conditions. The picture of Indian agriculture is a picture of innumerable small farmers farming on very small holdings. We have here and there slightly bigger men but they are rare. These men are very poor and by and large illiterate. Therefore, the problem is within this background to raise the living and yields in their holdings. This, incidentally, is the biggest share of extension work, that is, the raising of crop yields. We know fully well, however, that extension is education for freedom so that we can have no wants, a happier life and so on. By extension we mean, as I see it, education of the people for citizenship and to build up better home and better families and better youth. We have given the place of importance to agriculture because 90% or over of our village people are farmers. This is the objective -- to build better Indian men and women by improving the composite whole, the village lands, fields, crops, everything about them and their surroundings so that they feel that something different has happened and that they have a say in everything. They are the people who make government. This is the objective as I visualize it. Today we have got very unsanitary surroundings; the environment is not very pleasing to the eye; there are diseases; and the amenities are not very many. Farming is a way of life. The cultivator has to practice it whether he likes it or not, yet the roll of the farmer in my country is perhaps more important than in any other country because of the fact that today we import large quantities of food and unless the whole nation believes that he is the fringe between food and famine and everything has to be done in order to make him use his land on the basis of scientific knowledge which research has established, the nation will not get the proper land use and therefore will remain backward in its agriculture. Now, this is the whole story. In my country, although agriculture departments in each state within the standards of organization these states possess, have been doing work and although on the research side we have very valuable results, these results have not gone across to the farmers on the mass scale which would make a marked change in the situation in so far as crop and animal production is concerned.

Now in every scientific research there are three stages. The search for knowledge. This is continuous and eternal and it goes on. From time to time truths come out which are applicable for the human benefit. The next stage is to get these truths or the results of research proved for application to different regions of a vast country and the third and most important stage is to get that truth made suitable for different regions and for all the people. Now, in the first stage we have such truths, quite a few of them. For the past 20 years through a research organization at the federal level called the Indian Council of Agricultural Research we have been financing research for almost all the crops -- food and cash, and animal husbandry, poultry, and so on. Good results are available. In most cases these results have been proven, but when we come to the mass application, somehow there is a great scope for getting these applied when everyone takes them up. Similarly we have central institutes of research, like your Beltsville, which we call Indian Agricultural Research Institutes, the Indian Veterinary Research Institute and so on which have established very valuable results which can give great benefit to the country if these can be universally adopted. The same is the case of many of the state research institutes.

Now, we used to have in different states district agricultural workers doing propaganda work for the benefit of farmers and getting improvements adopted, but the government officials emerged with independence from a sort of police state to a welfare state. In other words, previously, they were looked upon with a certain

amount of suspicion when they went to the farmers and now they have to be their friends, guides, and philosophers. This made the government at the center and the states feel the want of an extension organization. They feel that there must be an organization in the center (center means federal) and in each state of which the feature will be dedication to a spirit of service to the farmers in order that every member of this organization is fully acquainted with the farm people, know their difficulties, take them with the men in all stages of planning for the improvement of farm life. In other words, the organization is to give the utmost importance to the fact the the people for whom things are being done should know all stages of what is being done, that the plans are theirs, and their active participation in the formation of all plans for the development of their agriculture, home conditions, life, everything, and it is they who have the biggest say in the matter. The extension agents come in to help them with knowledge which is available to make improvements in their villages, on their farms, and to make them feel what they want for the development of their homes and their farms and to get answers on how such development can be done. In other words, if information on improved varieties of crops was wanted, or an improved breed of animal was wanted, or again if remedial measures against crops and diseases were required, it would be the duty of the extension agent in the village to find these for the farmer. In finding these, he will seek the guidance of the specialist, that is, the research person and very often he will tell the farmers to see the improved varieties, or the improved measures advocated on his own holdings and satisfy himself before he can take it up on a larger scale. Such demonstrations by one or two go-ahead men will, by their example, convert other farmers in the village to adopt the improvements whether it be crops or practice. Thus, we have in mind in our Indian organization the close relationship between the generalist, that is, the village extension agent, and the specialist, and it will be quite dignified for the village worker if he cannot find the ready answer to tell the farmer that he will try and seek an answer to his problem.

Now I might say something about the organization that we are trying to develop. The extension organization of the center today consists of a very small nucleus. There is an agricultural extension commissioner with the Ministry of Food and Agriculture and it is expected that a few sections or departments dealing with administration and technical will be given to him. It is nothing compared to the extension organization in the United States in the USDA. Within our limitations of finance, we have, however, to build up a modest organization in which different sections will look after and coordinate the agricultural extension activities in the whole country as is so admirable here. It is a case of a very liberal gesture for the people and the government of India. In the states a senior officer of the agricultural department has been appointed as the Joint Director of Extension and his function will be to look after the extension activities of the whole state and particularly the agricultural extension work in the recently established community projects under the the Point IV and the Ford Foundation scheme. The point is that recently 55 of these community projects have been allotted to different states in India. Each of these projects comprise 300 villages or 300,000 acres of land of which 60% or over depending upon the location of a project will be cultivated land. Previous to this with financial support from the Ford Foundation, 15 projects one third the size of these community projects, that is, covering 100 villages or 100,000 acres of land, were established. Now, a community project is made up of three blocks; each the size of a Ford Foundation Project. The objective in all these projects is to educate the men for freedom. In other words, so build up the village in all its aspects that people feel that freedom has made the difference. The majority of the villagers being farmers, agricultural development through agricultural extension activities will form the most important part of the whole business. The objective is to be achieved through trained multi-purpose village workers and the approach to the village is through multi-purpose cooperative

societies. This is the basis. Trained personnel is scarce and any amount of knowledge and material resources will be useless unless the proper quality of human material available. You can give the money, the resources, but if you have not the right men you can't do anything. The Ford Foundation, the TCA and the Government of India, and the governments of the states have therefore pooled their knowledge and resources and have and are going to establish 30 training centers where suitable persons with suitable background will be trained as multi-purpose village workers. All the blocks of the community projects obviously cannot be taken up simultaneously and therefore the intention is to apply the extension activities to a block of each community project. The other blocks will be taken up for development the moment trained personnel become available from the training centers mentioned above. Previous to independence the ultimate agents of different nation building departments of the government -- irrigation, agriculture, and so on -- separately approached the farmer, individually, and very often confused him by such a one sided approach. It is felt that for a poor country like ours a multi-purpose village level worker knowing bits of everything, that is, a generalist, always supported of course by specialists would be able to gain the confidence of the farmers than a number of different agents. Therefore, in the training courses, while emphasis is given to agriculture, he has to know things about village sanitation, cottage industry, cooperation, livestock, housing and so on, so that to this one man the farmers can look up to with confidence for their troubles.

One of the basic principles on which training is imparted, is that no village worker can be a demonstrator or a teacher unless he has practiced the improvement he advocates himself with his own hands. The other important feature is that he is assigned an area of operation or beat which is within his physical ability to cover. The multi-purpose village level worker has been slotted five villages and he is expected to have his headquarters within a village. Above these men, for a group of 20 to 25 villages, there is a more experienced type of man who is known as the supervisor and he supervises and guides the work of the village level workers under him. As I have said before, it is the duty of these men to take the people with them in the planning of all improvements whether these effect individuals or the whole community. In other words, if he is to advocate simple improvements, he approaches the men on the usual extension methods. If on the other hand, an improvement like a drainage channel or the building of a road or a community center is to be planned, he would take the recognized leaders of the village and sit down with them and formulate the plans for improvement. The people at all stages must feel that it is their work and that the official agents are there to help and guide in its execution. This feature was absent in the past and a lot of suspicion in the minds of farmers for the agricultural staff is due to the fact that his council was not taken in the building up of things, whether improvements of crops, houses, anything which was stated to be for their good. In other words, they felt that things were imposed upon them.

As the cultivating community in India by and large consists of small farmers with small holdings, they must organize themselves into multi-purpose cooperative societies in order to get the best out of their production and even to make such production possible. The approach to the village, therefore, is through multipurpose cooperatives.

The Five Year Plan has stressed that increased agricultural productivity is an inevitable must for India, that every available ounce of national energy must be dedicated to the goal of agricultural self sufficiency and that all other components of economic development, however urgently desired, must take a subordinate place in the list of national objectives. The plan proposed a four pronged approach to the achievement of self sufficiency in food. These are, more land, more water, more fertilizers and plant nutrients, and better agricultural methods. Under the head, more land, it is proposed to reclaim through the work of a central tractor organization land infested with grass or over run by scrub jungle and allot it to farm families.

This is going to add to our food resources and also to help the rehabilitation and resettlement of refugees who have come to the country on partition.

Second, irrigation is a major element in Indian agricultural planning. All possibilities for increasing the availability of water have been intensively explored. The action program falls into three heads: major irrigation schemes, tubal projects, and minor irrigation schemes. In all these directions projects have been thought out carefully and these are under execution. All these will bring about additional acreages, and what is more important, will enable intensification of production on the existing area thereby increasing the present level of acre yields in the country.

Third, the soil of India has been under cultivation for thousands of years and it is correct to say that there have been great inroads into the soil bank. Land has had little enrichment in recent centuries from organic material because the fuel value thereof for the short run has been greater than its fertilizer value and because green manuring is not as universal as one would like to see it. Our plans take stock of both the long term and the short term requirement of soil nutrients. In the long run, soil depletion must be countered by soil enrichment programs of enduring effect. In the short run synthetic soil enrichment through artificial fertilizers is of great value. Therefore, under the plan my country proposes to do all it can afford to do in the way of fertilizer application, utilizing all indigenous fertilizer supplies and supplementing that with imports from abroad.

Fourth, the prevailing techniques of farming have a great scope for improvement and our average yields can be greatly increased by the adoption of these improved practices. Therefore, there is a definite plan to improve the technique built up of universal use of improved seed; encourage the adoption of improved implements; teach through literature and through demonstrations the advantage of applying fertilizers; and encourage the more effective use of available draft power. Through all these means better agriculture can be established leading to greater yields of crops. This is the main field in which the extension workers will have to play a very great role in the immediate future. The objective in all the community projects all over the country is to put across through suitably trained men all these better practices.

Q. This gives us excellent background information. Now, what were your own personal objectives for this study tour?

A. My general objective in being on this trip is to see the organization of the USDA in all its detail and particularly its extension service. What are the different sections of the extension service. How is the perfect coordination maintained between the Director of Extension and his officers, the State Directors of Extension and the personnel of the country wide extension net-work. I had a fairly good theoretical idea of this thing, but unless one actually sees it working, both at federal headquarters and in the states and counties, it would be impossible to appreciate the perfect coordination that exists. The manner in which this program for the Mission has been arranged is an example of that coordination. That is my main objective, because that is the thing which we have to organize within the limitations of our finances.

The second great objective which I keep before me is to study the philosophy of extension. How the extension workers equip themselves by constantly evaluating themselves and their knowledge to deal with a human approach because extension works for the benefit of fairly well to do and developed farmers as well as the under developed, illiterate and poorly equipped farmers in this country; also. To me the methods of approach to the people in different stages of cultural development is much more important than the instructional approach. In other words, the way people constantly change under extension, the way approaches change to suit the different stages of development. These are some of the things which interest me tremendously, for I feel that extension is not a thing that can be initiated over night by legislation. It is a continuous process and its approaches will have to change from time to time to suit both the extension agent and the people for whom

he is trying to do things, as these people themselves gradually step up the ladder in the stage to where a standard of living is developed. So it is a self evaluation all the time and also the changing of the approaches to suit the different stages in the gradual development of the same set of people with a particular pattern of culture. Now, we have got in India all grades of culture in different parts of the country and the approach to all these very variable stages of culture will have to suit not only the people of that culture at the time the extension agents begin their work, but will have to be modified continuously to suit their continuous progress in development. For instance in Assam a certain philosophy of approach will have to be developed for the under developed tribes with their low organization of culture and this system will have to be modified at all stages of the development of a tribe in a manner that it fits in with the different stages of development at different stages of our work. Here we are dealing with human material which should, if our work is all right, quickly change and for each successive appreciable change our approaches must be modified in order that we are successful in what we are trying to do for them.

On the other hand, in the states like U.P. and Bihar where the farmer is the possessor of a wonderful culture which has crystalized through centuries, where he has plenty of initiative, and has perhaps reached a stage of stability, there will not be any quick modifications in the methods of approach. This does not, however, mean that if a certain improvement which has been advocated over a long time is not being taken up, the extension worker should not critically analyze himself and evaluate that particular approach to find out what exactly is preventing that approach from being successful. It will be futile for him to go on preaching a method or a practice without ascertaining the reason which stands in the way of the improvement being taken up.

Q. Do you have any other objectives?

A. Some of my other objectives are to carefully examine the organization through which extension information is built up and disseminated to the people, how proven results of research are collected, how they are written up in simple language which appeals to the people, and how these have been distributed. Here, again, the intention is to apply it with modifications to our conditions within the limitations of our findings. We have with the cooperation of the Ford Foundation decided to call a big conference in India of officials, non-officials, farmers, and others interested in agricultural information and some of the organization of the information service in this country which I shall see will help me in placing knowledge at the disposal of that conference to build up a suitable extension information agency in our country. It will be useful to apply the U.S. model to India because here, as in our case, the Federal Research Center at Beltsville, the Land Grant Colleges, individual farmers, and private institutions all are doing very useful research. It is the interest of every one of these to insure that beneficial results reach the producer of raw material, that is the farmer. We have a great deal to learn from the extension information agencies of this country, and apply some of their methods to our conditions.

Throughout my visits to the fields, the farms, the community centers and other places so far, I was struck by the fact that the extension activities in this country are not one sided and that the extension agents, whether they belong to the county or to the higher levels in the organization, all visualize that unless the farm family is tackled as a whole, perhaps the extension people are not doing a square job. Thus while they have the home economics side being looked after by the home worker, while Point IV activities are developing in their own way and while the farmers are made to fully benefit by adopting on their farms improvements in agriculture, the central objective is to reach the farm family as a whole. In other words, as far as I have been able to observe, in this country, extension will be

considered lop sided unless the farmer is constantly improving his standard of life by increasing his production and what is more important, by getting adequate returns for this production. And the additional income is being constantly applied to the improvement of his family, namely, better clothes made in the family, better food prepared for the family, useful daily needs preserved properly and kept in storage and so on. And the children of the family work as a community through the 4-H Clubs to become useful members of the family directly and useful future leaders of the nation. In India emphasis is on increased production alone at the moment. All agricultural development through extension activities will be utterly useless unless the farmer gets a better price for his produce and unless the additional money in his pocket is utilized in making his family, his children and his environment happier.

I am convinced that a direct result of our visit should be on our return to make a great drive in all the states for the formation of youth movements like the 4-H Clubs and also to train up suitable home making personnel. I know that in some states, for example, Mysore and others, there are good centers of the nature of 4-H Clubs already working but there is much room all over the country for a great deal of development in this sphere. I realize that in building up home making agents there will be a great deal of difficulty, mainly in getting the proper initial material for the training. The Ford Foundation has taken out an expert in home demonstration to India and she is already trying to establish a school for home makers (and rural science) at the Allahabad Agricultural Institute, Naini. One of the features here, as far as I know, is that well selected couples are being trained, the man to take up normal extension work and his wife to get trained as a home economist. To my mind it will be useful for my colleagues in the Mission from each state to recommend to their states on return that a few suitable potential home makers be nominated for training at Naini as a beginning. I must state here, however, that the methods which these people are to follow after training and therefore the course of their training will have to be carefully worked out because in India, unlike the USA, these persons in the beginning will have to approach the farm family with very simple things like the proper looking after of children, a few principles of sanitation, making of preserves like jams and jellies, and perhaps the working of a few simple types of cottage industries. It must be realized, however, that the farm wife in India does a tremendous amount of work for her husband and for her children and if she is left out of the picture I fear the process of development will be slow because apart from directly taking up the improvement within her sphere, the farmer's wife in India as in any other country has a great influence on the farmer himself, taking up agricultural improvements quickly.

One more objective. At all stages of our tour so far we have found the American farmer to be fairly well to do, owning holdings anything between 30 to 200 acres or more, fully alive to his own personal advantages from a particular improvement advocated or recommended to him by the extension agent and fully organized to get the best benefit out of the adoption of a recommendation or from adjusting his agriculture to a change made necessary by circumstances, as for instance turning over from arable farming to permanent pasture. In India this trend, whether as an individual farmer or as a farmers organization, will have to be brought about through government assistance. In India the large majority of farmers are poor. They have, therefore, no holding power and are completely at a loss when they have to deal with the very well organized buying agents. I found, for instance, in Tennessee a very useful farmer tobacco cooperative which through a small fee taken, re-dries and stores the produce of tobacco of the farmers of the locality and sells the material when best prices would be available. We were told that in a year of surplus production, for a very reasonable rent, the surplus will be held over and sold when in the next season prices are attractive. In India while the objective should be to educate men to join themselves in such organizations, for quite a long period co-operatives will have to be very carefully initiated through men assigned to a locality as cooperative inspectors who will give the initial training to the

multi-purpose village workers in building up the coops for taking the place of voluntary organizations that we saw in this country. We have in our country excellent examples of such cooperatives, e.g. the sugar cane cooperatives in U.P. They were built up with government assistance of the nature I defined before and I was intimately associated with such organizations from its very start in 1935. Some of these today are doing very well and have built up a large capital and possess their own buildings. This was possible because sugar cane was a cash crop and though it will be somewhat difficult to build up similar cooperatives to deal with other crops, there is no other way to give the farmer in India the strength from which he can gain as a farmer then through his becoming the member of a well functioning cooperative society.

Lastly, I was very impressed by visits to two community centers in Tennessee. The Washburn and the Chatata Valley community centers. As far as I could see the members were all well to do farmers and they all met once a fortnight as a rule and met as a community to discuss the various things that affected their lives and built up a detailed program of the many ways in which each member of the community could learn something from the other for the good of the whole community. I think that there is a great scope in my country for building up such community centers. Of course, the exact nature of such centers and the things they will deal with will vary, but the central objective will be there, namely, each person in the community looking up to and learning something from the successful members of the community and each competing with the other in a healthy manner so that the level of the whole community rises for the good of the nation. We were shown typical examples of such healthy rivalry amongst community centers, of which there are large numbers in Tennessee. I had also the good fortune of seeing Mr. Moore, the leader of the Chatata Community Center, and the way Mr. Moore conducted the meeting in our presence was of great education to me. I could see that every member of the community was proud of his leadership and he brought out for our benefit during the short time of our stay at the center the qualities of each man and woman he asked to speak to us to tell us his or her contributions to the community center. I think my colleagues in the Mission will each give his personal thought to the building up of such community centers in our country to suit the peculiar conditions of our country. Such centers may organize small agricultural fairs, be the agencies through which prizes may be offered to the winners in crop competitions which we have in our country and in short I wish that such centers may build up a very alive sphere of fruitful community life in our villages. The local school teacher and where there is such a school, the local school mistress, and also the potential farm leaders of the locality will of course be the most important persons in such community centers in my country.

Q. What was the value to you of the study in Washington D.C.?

A. As I said, I found the great thing that a group of men, very well chosen, have been assigned to a few sections of work under a man to whom they have given their utmost loyalty for one objective and that is lifting up of people. I am speaking of the extension service, of course. By getting more for their efforts and by utilizing that increase of money for their happiness, the farmers are helped in lifting themselves by the extension service. In other words, a little more production, either directly through crop yields, or indirectly through livestock is used in getting additional equipment, in adding to their comforts at home with equipment which makes the individual enjoy the fruits of labor more. In some cases the whole community joins hands in getting these things. For example, the Appalachian Electric Cooperative in Tennessee. So I come to the great philosophy of Mr. M. L. Wilson that extension activities with a view to increasing income through additional production, by adopting improvements of science and then what is most important, utilizing that for raising the standards of living, for getting the things that make life either as individuals

or as a community. Examples are as individuals, a tractor or some kind of equipment, various appliances for the home and so on, and as a community, a beautiful church can be built up by community contributions and for building up schools and other things which help the community rise up as a whole. The individual and the community are very important items that made this nation and the aggregate result of all this is the rise of the nation. So in Washington I found loyalty to the extension leader and the way in which he inspires them. (Anything else about that week of study in Washington?) I think the manner in which we were received gave me the impression that like a country, the world is one, and as in a country if there is a grease spot in one place, I don't think the nation is quite all right unless that spot has been washed away. So in human happiness in the world today, there cannot be a great deal of ever lasting peace if in certain parts of the world there is hunger, misery and equalor.

Q. What suggestions do you have for ways the study in Washington might have been improved?

A. I don't have any. You could perhaps make it more detailed and so on, but I think the whole thing depends on how much the party who comes here takes from it.

Q. I think you have already covered the value to you of the study in Tennessee, so lets go on to Auburn, Alabama. What was the value to you of the study there?

A. There is a great scope for developing inland fisheries in my country and the literature which we have got giving information on fertilization of ponds, on stocking ponds with different varieties of fish, and in general on the management of inland fisheries will have application in states like Orissa, West Bengal, and Assam. I think the representatives of these states would do well to discuss their experiences on return with the Director of Fisheries in these states and place at his disposal all the literature in their possession. I consider the demonstration of visual aids materials and methods extremely good. With material prepared to suit our own conditions the procedure given to us would be of universal application. I think Professor King's lecture to us was most useful.

Q. Do you have any suggestions for ways the study in Auburn might have been improved?

A. No.

Q. What was the value to you of the study in Tuskegee?

A. Tuskegee showed me what inspiration and great leadership and a spirit of service to the people can do for a community. Perhaps in spite of certain basic difficulties from which that community suffered due to various reasons. It showed me that without an emotional attachment to an ideal, it is difficult to make a great strides in human development within a short time. I have in mind the examples of Booker T. Washington and Washington Carver. Their greatest contribution is not so much the achievement of certain things in their life time but their having inspired a band of young men and women with a little of their own fire for work for their people so that the improvement of the Negro race through this Institution has become a continuous process and trained men are available all the time to carry on the work started by these two men. I think all of us can take the example of Tuskegee, and that is that there must be inspiration to do good things for one's people and that there must be absolute dedication towards achieving that objective. In terms of race development the two great leaders have achieved immortal places. In terms of material well being for their own self and their families they could have been much

better off had they elected to develop on their own different professions. My point is that they sacrificed themselves for service to the people. The same as in other places we found here also to a marked extent what the educational principles of extension are doing for a community which till comparatively recently was at the base line so far as development and resources are concerned. Some of the families we visited demonstrated to us how quickly standards of life can improve if the approach is correct and if that approach is made through trained workers belonging to the community itself. This is in contrast to the extension work in the case of the American Indians. I had occasion to mix intimately with some of the teachers at this Institute and I found that some of the men like Neal, Dean Potts and others were motivated by the noblest of sentiments for developing their race. This is the greatest contribution that Tuskegee makes for its people.

Q. What was the value to you of the study in Missouri?

A. We stayed the longest in Missouri. Here in groups the members of the Mission got a chance to stay with families of farmers and in this manner they had intimate association with the farmer and his family in different counties, having different agricultural characteristics, e.g. corn, cotton, dairy, livestock and pasture and so on. From the reports I have received from my men it can be said that this direct study was most instructive. The experiences with suitable adjustment will be of help in our state programs. We had talks on balanced farming by Professor Bebermeyer. Also Dr. Albrecht personally took us around to his permanent plot experiments and showed us how certain one-sided experiments dealing with production alone did not take into account the very important point that production without aiming at the quality of the produce from the human or animal nutrition point of view may be defective. We had another lecture from Frank Grayham on the organization of the state directorate of extension and the relationship between the state and the federal organization. This will be of use to me in developing similar relationships in my country. In my opinion it would have been better if instead of two days or one day, people could spend a week with farm families. That would have given them a greater insight into the life of farmers and the manner in which they take the best out of extension.

Q. What was the value to you of the seminar in human relations and cultural anthropology conducted by Dr. Spicer in the New Mexico and Arizona areas?

A. We spent a week with Dr. Spicer and the modus operandi of our work during this week was that Dr. Spicer gave us the fundamental points that have to be kept clearly in view in extension work with different cultural groups. In this area the prevailing cultural types were the Spanish Americans, the Indians and the Anglos. Each of these had deep rooted cultural characteristics in them and the Doctor pointed out that if extension did not recognize these characteristics and did not adjust the approach and the methods to meet these characteristics, achievement of results would be slow. In order to study this we had an occasion to distribute ourselves and stay with farm families of the Spanish American and Indian cultures. I stayed with a Pueblo Indian farmer and met almost all of the leaders in that village and I realized the truth of Dr. Spicer's basic points. We had also an occasion to see intimately Navaho Indian reservations and the way in which the Indian agency works in these reservations, particularly in the sphere of agricultural development. The extension staff in the case of the Pueblo village of Nambe is done by people of Spanish American extraction both in the sphere of home economics and the other extension branches. I got the impression everywhere that the sooner the agent or even sub agent is taken from the community itself the better will be the effect of extension work on these communities. In our summaries of findings

which we gave at the end of the period of study, I, at least, tried to impress on this very important point, and in fact I invited Mr. Wilson's attention to this. We also suffer in our country from this basic difficulty, that is, lack of trained men belonging to an underdeveloped community to which the extension approach is to be made. However difficult, we have to face the task of using men and women of a community with particular and deep rooted cultural characteristics to deal with extension in that community.

Q. What suggestions do you have for ways this seminar might have been improved?

A. Here again a greater length of stay with the communities would have been better for the group studying the cultural background of the community and the result of the extension approach to them. This, however, is easier said than done because the conditions under which, at any rate the Pueblo Indians with whom I stayed, lived are such that a particular student will have to make sure that he will willingly and gladly suffer some hardships and personal inconveniences for his study. I am sure however, that a longer stay in my case with the farm family would have been worthwhile. The other important point I noticed was that all the Indians were deeply conscious of their own culture and its characteristics and appeared to me wonderfully honest people who are still trying to maintain the basic principles of their culture in their own way. The impact of the modern American life on this ancient culture is by itself a great field of study. The two Indian schools which I visited and where I mixed with little Indian girls and boys were examples of great inspiration to me. I found the rate at which the young people of the communities in these schools were developed. At both these places the direct leadership of 4-H Clubs were vested in the school mistress and in my estimation these two ladies, both Anglos, were doing wonderful work. This was possible for them because of their ideal for service for these people and for their having completely associated with the parents of their wards. I found that both of them were very proud of their work.

In California I felt very proud of the fact that there were 200 Indians from my country who were doing farming on their own. Most of these people had come to this side thirty or more years back and were examples of good farmers. One of them was the largest cotton grower in the area. Some of them have married Mexican girls. Their daughters have married Americans, yet in spite of all this, they were all eager to learn about India and how it is advancing in different spheres. We had an occasion to visit their Temple and talk to most of them. I felt that there was a great deal of scope for a closer association amongst them and certainly for a greater contact with the extension agents.

Almost the last of our visits was to the laboratory at Riverside doing research on salinity and alkalinity. Drs. Wilcox and Bernstein gave us the organization of the place and took us around the experimental plot and the green house. I have not had time to study these experiments in detail but the objective of the whole laboratory is such as to make its work of great importance to us. There are big states in India where the problems are the same as are worked on in this laboratory, and the results achieved here may be of states like West Bengal, U.P., Mysore, West Punjab and Pepsu. All these areas have extensive irrigation projects bringing in certain of the problems which this laboratory is attacking. The results may also be of use to places like Orissa, Bombay, and West Bengal where salinity and its affect on crops offers a big range of problems. The whole of the Sundarbans in West Bengal, the west coast of Bombay and parts of Orissa are subject to salinity in the soils due to the encroachment of sea water. In these states through salt resistant varieties and through different methods of leaching and washing, steps are being taken to produce a particular kind of farm management in saline soils. I am sure the representatives of these states would get valuable material from the work of this station.

Q. Looking back over the whole trip now, has this study tour met your personal objective which you outlined at the beginning of this interview?

A. Yes, at the end of the tour I think I can say that broadly the objectives I had in view when I came here to study have been met. I think we have all gained by a study of the philosophy underlying extension work in this country and we are certainly going to profit by the different approaches which extension has for the different people of this country. We have of course to adjust these approaches to the varying needs in the different parts of my country, but the basic purpose of extension as I found it being the education of the people for their own benefit and ultimately for the benefit of the states, its detailed working as we studied them throughout the tour in the three aspects of general extension, home economics, and dealing with youth will be of great value to me. Further the organization at the federal level, the organizations at the state and the county level and the manner in which these organizations adjust to each other, the defects which we saw at one or two places, and getting the best out of these organizations are all going to be of great help to me in developing the newly established extension organization in my country.

The Ford Foundation as I know it is dedicated to the cause of human welfare. I think its spirit is that so long as there is starvation and poverty in any part of the world there cannot be lasting peace. It has therefore given its resources to different parts of the world irrespective of the race, creed, or color of the beneficiary to promote human welfare. India is one of the places where they have given assistance and our visit is a part of this urge to promote human welfare. The Foundation has collaborated with the Government of India and the United States Government in starting fifteen extension projects and thirty extension training centers in India. It is also going to finance in the agricultural field the addition of extension wings to five agricultural colleges. The ultimate objective is to institutionalize extension in India. The Ford Foundation's representative in India, Dr. Douglas Ensminger, with whom I work in the closest collaboration, is animated by lofty sentiments, and no better person could have been selected for the job. We have worked with him closely and have established most of the centers mentioned above with record speed. I am sure this visit of the State Directors of Extension and the representatives of the Central Government will bear fruitful results in the projects already started.

MR. SUKH RAJ SABLLOK

Mr. Sahllok is Deputy Director of Agriculture (Extension) for Himachal Pradesh State. He has also worked as Farm Assistant in charge of Agronomical Research in various government research stations and olive plantations and later did extension work in several districts of India. He was Secretary of the Fruit Growers Association in Simla. He received his undergraduate and graduate degrees in India. Mr. Sahllok is an extremely alert and interested man and he put all his energy into getting as much out of this study trip as possible.

Mr. Sahllok also felt the lack of opportunity for participation. (See p. 5) He also recommends splitting a large group into small groups for study. He also felt that it was a fairly hurried program which probably points out the fact that perhaps Americans are more accustomed to a fast pace than people of other cultures.

EVALUATION INTERVIEW WITH SUREH RAJ SABLON
DEPUTY OF AGRICULTURE (EXTENSION)
HIMACHAL PRADESH STATE, INDIA

- Q. When you arrived in the United States what were your personal objectives for this study tour?
- A. I came from a state which has been integrated with the independence of India and is one of the most backward states in India. Since this state formed a territory of small feudal states before integration, there was practically no department of agricultural research in that area. Everything had to be started from scratch and we had to apply results of research obtained in other states with similar agricultural conditions. Thus, we were anxious to get all possible recommendations on agricultural development and material from all quarters of India and also from the world to apply the same in our state. Thus it was valuable to accept this opportunity to study extension work in the United States. The conditions in Himachal Pradesh are peculiar and quite different from those in other states. Thus, we could not apply much of the results of agricultural research obtained in the other states. The climatic conditions in most parts of the state are ideally suited for the cultivation of fruits like apples, pears, peaches, etc., as well as for the growing of potatoes, beekeeping, etc. The fruit cultivation and bee keeping industries have been developed to a considerable extent in the United States and agricultural conditions here being identical with those in my state, a visit to this country for agricultural and extension studies is sure to be a useful one. In fact, the pioneer in introducing delicious varieties of apples in our fruit growing area (Kotgarh) was an American from Philadelphia (Mr. S. C. Stokes) and that part of my state is indebted to the late Mr. Stokes for introducing a most valuable cash crop.
- In particular I was interested in the improved horticultural practices and beekeeping, and application of the results of research to the farmers. The farmers of my state are generally poor, illiterate, but receptive. The subject of anthropology and human relations like those tried in this country amongst the American Indians will have far reaching effects in bringing about agricultural improvements in my state. The women folk in my state are heavily burdened with household as well as agricultural work from morning until evening and I am very anxious to improve their lot on the lines followed by the home economics extension work in the United States. They have to collect their own fuel and prepare meals for the entire family besides attending to their agricultural operations for the main part of the day. Any improvement in their kitchen and other home economics will be a great asset to my state. Of course I wanted to study the organization and working of the extension service. And another thing, on account of heavy rainfall and sloping fields in my state combined with the discriminate cutting down of forest trees, there is considerable erosion and depleting of soil going on in my state. The studies in anti-erosion measures and building of soil fertility has also been an important object of my study. The means of transport and marketing in my state are very primitive and undeveloped and studies in this connection have also been useful to me. Besides this, the keeping of poultry and development of livestock has been useful. So these were my objectives in connection with the kind of problems we have in my state.
- Q. What was the value to you of the study in Washington, D. C. ?
- A. The preliminary studies of geographical conditions, organization of the extension service at the federal level, and the research at Beltsville were studied while we were in Washington. This background was absolutely necessary to follow the studies further in the states. (Did you pick up any ideas that might be of use to you in your own work?) At Beltsville in the Bureau of Plant Industry, Soil, and Agricultural Engineering I picked up the growing of cover crops for the control of anti erosion and ways of increasing the productivity and increasing livestock production.

the poultry farm Dr. Bird, head of the division gave some useful hints for breeding poultry for eggs and table produce. The analysis of a rural situation and means to develop it was very useful -- the talk by Mr. Warner. The technique explained in the orientation by way of asking questions and getting answers to those questions by the local data has been useful. That is a very good way of getting at the bottom of problems and removing barriers that are in the way of development. Also the latest technique for the control of locust by spraying aldrin 60% liquid concentrate is also useful although spraying by airplane has not much future in my country at present. The set up of the extension services at the federal basis is highly specialized in this country which it may not be possible for us to take up fully for some time to come.

Q. What suggestions do you have for ways the study in Washington could have been improved?

A. The studies have been gone through rather hurriedly and it would have been more useful to have spent more time for getting a true picture of the background at the federal level and its actual working. It would have been much better if literature for this study had been in our hands much earlier to enable us to get ideas about what I was going to learn in a new country visited by me for the first time.

Q. What was the value to you of the study in Tennessee?

A. The TVA in Tennessee has developed ^{the} agricultural and industrial side of that state to a considerable extent by harnessing the streams and generating power from the water which would have otherwise resulted in waste by way of erosion, etc. In my state there are several streams and rivers which can be utilized for the generation of electricity in the similar manner. The TVA has done great service to the Tennessee Valley and the technique of their working to benefit the farmer will also be useful for my state as and when we develop hydro-electric power. The brief study of vocational agricultural education at Washburn was interesting and will be useful for my state for imparting basic elementary training in agriculture to the younger generations. A visit to the several farms in Tennessee was interesting but most of the practices followed there may not be applicable to my state due to very small holdings and limited resources of the poor cultivators. The growing of legumes and application of phosphate fertilizers for building up the soil fertility may be useful in the orchard areas of my state.

Q. What suggestions do you have for ways the study in Tennessee might have been improved?

A. I can say generally that we were shown the beef livestock farms in which I was least interested and this time could have been spent more usefully in knowing more about TVA and the power dams.

Q. What was the value to you of the study in Auburn?

A. The fish culture in my state has a great future on account of a network of streams and rivers and the study of fish culture in Auburn will be useful for the fishery section of my state. The material and ideas taken at Auburn in this connection will be imparted to the officers concerned by discussion to the officer concerned in my state. The fertilization of ponds and the methods of eliminating unfruitful fish are useful in particular. The control of weeds in fish ponds by the method explained at Auburn will be usefully applied in my state. The studies in propaganda and publicity material for taking results of research to the uneducated by display of slides, charts, and pictures is very useful for a backward area like my state. Some of the appliances and models will be useful in teaching work. The work at the tillage laboratory was interesting for the local conditions but has no future for my state due to limitations of introducing heavy machinery in small terraced fields.

of small holdings in that area.

Q. What suggestions do you have for ways the study at Auburn might have been improved?

A. The technique of preparing charts and pictures, slides, and other visual aids should have been studied further to give practical shape to this useful method in my state instead of having to enter into correspondence about it at a later date.

Q. What was the value to you of the study in Tuskegee?

A. In order to overcome the racial differences amongst the white and Negro people, the state of Alabama has usefully separated the extension service for the Negroes to meet their felt needs. A giant extension service would not have been of such useful results. This idea can be applied in other places in India and if necessary anywhere. The local workers can be more useful in extension work and this problem has been very well solved in Tuskegee. The idea of self help instilled in my mind in Tuskegee will have far reaching effects in my state. I am surprised to see the houses built by the poor farmers with low cost under this scheme of self help under the guidance of the administration. The middle man's profits have been altogether eliminated and it has been possible for farmers in general to go in for model houses and household appliances like improved kitchens. The contentment achieved by the poor farmers by having their own shelter will encourage them to develop their agriculture, etc., peacefully. The community canning center is very useful for the farmer and other citizens to can their fruits and vegetables with the least possible cost and without spending unnecessary time at home in this operation. This community center has not been fully utilized and I think it is due to greater distance from which the farmers are required to come to avail service at this only center. The development of more centers like this may attract the farmers in large numbers. The small farmers in Tuskegee are self supporting and grow enough food, vegetables, butter, etc., for the household requirements. They supplement their income by working in other professions when free from the farm and thus make their both ends meet in a decent manner. The farmers with small holdings in my state can be developed on similar lines of self sufficiency and self help. Lapedesa has been recently introduced in this area and it has proved useful for binding the soil and building up its fertility. This legume will also be useful in my state for pastures under heavy erosion.

Q. What suggestions do you have for ways the study at Tuskegee might have been improved?

A. None. I think it was fine.

Q. What was the value to you of the study in Missouri?

A. The studies in Columbia have been useful in the following ways. 1. The balanced farming scheme is first of its kind to be under study for me. The program of balanced farming provides all the requirements of the farmer and keeps up the soil fertility at the same time. The extension service prepares programs and plans for the farmers willing to come under this scheme and it is followed accordingly. The income of farmers has increased by about 50% by this system. 2. My personal visit to Stark's Nursery in Louisiana, Missouri, has enabled me to pick up the latest technique in propagation of fruit plants, raising of dwarf stocks to being quick results to the growers, the spraying of trees by modern insecticides against insect pests and diseases, the thinning of fruit by the application of chemicals, etc. I wish I had spent at least about a week at this nursery or at any other such stations to pick up further details in this connection to enable me to give a push to this important industry in my state. 3. The studies in the office of the state PMA have been useful in the way of assuring production and returns to the farmers. The

object of soil conservation program financed by the FMA is to encourage and promote the production as also to conserve the soil fertility to produce adequate crops. 4. The study of the working of the county extension office at Carthage was useful in getting first hand knowledge of the extension service on the spot. The relations between the county agent and the farmers to develop their agriculture and in meeting their felt needs in their way of farming as well as home economy have been useful. The county agent was almost a member of the farmer's family by winning their confidence and this has been a living example of an extension worker to me. 5. The results of soy bean trials and introduction of hybrid corn tried at South Farm can also be applicable in certain parts of my state. 6. The 4-H Clubs and their working at various centers has been a useful study for me. I had an opportunity to discuss their way of working with the 4-H Club leader and members. In this way the younger generations can select a line for their future career from the very start and can pick up best from their leaders for their respective programs. I am impressed by the competitive spirit in which the young generations are working through 4-H Clubs to become good citizens for the future. The award of ribbons and prizes in the competitions has far reaching effects on the youngsters. 7. The farmers days organized by the county agent, i.e. beef day, poultry day, crop day, are very useful for bringing together the farmers in exchanging information and study of what their neighbors are doing. The county agent and the livestock man, etc., impart useful new ideas to the farmers at such occasions. These occasions should be organized to the great benefit of farmers in the respective states in India. 8. The study in working of daily programs of the farmers in his house as well as in the field has given some useful ideas to me after staying with Mr. Lee Smith for about 20 hours in the Carthage area. 9. The useful work being done in the adjoining vocational agricultural school has been interesting as one of the students farming an area of 40 acres in the school farms earned enough to buy a tractor from the net savings earned by him. He will be a typical farmer on completion of his studies in the school. The example of such practical student for other students is very good.

Q. What suggestions do you have for ways the study in Missouri might have been improved?

A. I feel that some more time should have been given for work with the county agents to further study the way of their working in the various phases. I have just a birds-eye view of the situation and further study would have brought further useful information.

Q. What was the value to you of the study in human relations and cultural anthropology conducted by Dr. Spicer in the New Mexico and Arizona areas?

A. The study of cultural relations with Mr. Wilson and Dr. Spicer has been very useful in propagating the ideas of extension amongst the backward masses. The technique explained by Dr. Spicer in bringing development amongst such farmers by removing the customary and social barriers has been useful. I wish I had a background of published literature in this connection for picking up further details in this connection. The anthropology as now explained by Dr. Spicer is a regular science and requires much deeper and elaborate studies. The results would have been more useful amongst the American Indians if the technical staff for their guidance had been appointed from amongst them or at least the officers should have known their language in the reservation areas. Since the farmers in my state are equally backward and illiterate, the subject of anthropology will be useful in extension work in my state. We can apply the same technique. I am not satisfied with the idea of working against resistance from farmers as in the case of certain recommendations from the Indian Service. This was further confirmed by my personal inquiries here

stock of sheep and other animals which it was desired to reduce to improve the economic conditions of the American Indians. This is because it was done against their wishes and no alternative useful program was placed before them. Before enforcing any recommendations even at the risk of resistance, there should be an equally useful program for the farmers to follow to get the desired results.

Q. What suggestions do you have for ways that seminar week might have been improved?

A. I think this seminar would have been more useful if Dr. Spicer and Mr. Wilson had had more time to talk and listen at leisure instead of hurrying through the program as had to be done.

Q. Do you have any other general suggestions about the trip as a whole?

A. 1. The delegation should not have been of such a big size to enable individuals to exchange ideas with teachers and demonstrators more efficiently and thoroughly. The large number of members in the delegation was a hinderance to some extent in this connection. 2. The delegation should have been split into small groups for study at various places of interest to their respective states. This would have saved unnecessary time spent in running by bus from one place to the other. 3. Sundays should have been kept freer for relaxation of the members. The demonstrators and teachers have been changing so many times in a day and it was boring for the members to catch a large amount of ideas poured upon them.

Q. In conclusion, looking back over the whole tour, do you feel that this study trip has met the objectives you outlined in the beginning of this interview?

A. Yes. The objectives of my study here have been fulfilled except that I had no opportunity to see modern bee keeping work which has been developed so much in this country. It is a pity that I have not been able to see a single bee hive during the long tour of 7,000 miles in the States.

The following studies and ideas taken up during my tour can be immediately brought into application in my state. 1. The 4-H Club movement. 2. The home economics side of the rural development. 3. The improved horticultural practices and control of insect pests. 4. The technique of extension service and its organization.

Finally, I am highly indebted to the Ford Foundation and Mr. M. L. Wilson for the facilities provided to undertake this useful trip to the states and my visit will go a long way to improve the lot of poor farmers in my state. I shall feel proud of what I have studied and what I will carry back to my poor brethren in the far off country in the interior of the Himalayan Mountains.

MR. RAM SAHAY

Mr. Sahay is Deputy Development Commissioner in Uttar Pradesh State. He received his undergraduate and graduate training in India and after serving in the Indian Army during World War II he joined the Indian Administrative Service, and he was allotted to the State of Uttar Pradesh. For the past three years he has been closely associated with the Pilot Community Development Projects at Etawah, Gorakhpur and other places in his state and has recently been instrumental in setting up one of the first Ford Foundation Training-cum-Extension Projects for the training of supervisory staff at Bakshi-ka-Talab near Lucknow. Mr Sahay is 36 years old and is an extremely intelligent and intense young man.

Mr. Sahay's comments on pages 4, 7, and 8 are worth reading. He feels that the program was so full that there was little time and inclination to discuss with one another and evaluate what they had seen in terms of their own conditions at home. He also mentions what I would term a feeling that the program was not entirely theirs in that he feels that there was not enough consideration taken of what they already knew. However, one must consider that a program must be developed before a group arrives in the United States. I do feel that this attitude would not have existed among the Indian Extension Leaders if there had been more active participation and opportunity for discussions and evaluation. When one participates actively in a study program one feels that it is really his, although it has been set up and arranged by others.

EVALUATION INTERVIEW WITH MR. RAM SAHAY
DEPUTY DEVELOPMENT COMMISSIONER
UTTAR PRADESH STATE, INDIA

Q. When you arrived in the United States, what were your personal objectives for this study tour?

A. In my own experience in extension work in my state I have found that the greatest stumbling blocks to the progress of extension work are two: (1) the properly trained extension worker, and (2) the program coordinated not only from the point of view of planning but also in its execution. I, therefore, consider that my study in the U.S.A. of methods of training extension workers both new and in-service and the way in which the various field activities which would affect the life of a villager such as those in the field of agriculture, animal husbandry and veterinary, health, education, and food might greatly help me in carrying out our program of extension work in my own state and under our own conditions. As the effect of work of the extension service must be measured at frequent intervals to serve as a guide line for future action, a corrective for mistakes, and to provide a measure of achievement, I consider my study of evaluation methods in the extension service in the U.S.A. would also benefit me greatly. Unlike evaluation items where mathematical yardsticks can be easily applied, the field of extension provides the problem in that there are many intangibles which can only be measured after a long period of time and when success or failure is rather marked. I feel that in the U.S.A. where they are already ahead with a program of evaluation I shall be able to pick up many valuable tips which might enable me to formulate such a program with particular reference to our own extension work in my state.

In addition to these items of which I want to make a special study, I intend to concentrate my attention on the working of the following activities in the U. S. extension service. 1. The organization and working of the 4-H clubs. Apart from working on the adults in our rural areas I consider it of utmost importance for the future of extension in my state that we must right now start working with the youth to train them to become better farmers and better citizens so that as they grow up they provide us with that great band of local leaders without whose active and conscious cooperation and effort a mass movement like the extension service cannot really succeed. In spite of the best effort of the extension workers paid by the government it will be these voluntary local leaders on whom will depend the future progress of our rural areas. I, therefore, want to see how you here under your conditions of education and living organized your youth in 4-H Clubs to see what we can do under our conditions.

2. Organization of the extension service and the interrelationship with the Land Grant Colleges. I want to study this especially with particular reference to the background of the growth of extension service in this country. We in our country, especially in my state, which has been a pioneer in evolving the organization and methods of the new extension service, cannot naturally transplant the U.S. organization and system, but I am sure a study of the extension organization in this country would help me develop ideas on organization of our own extension service around the present existing structure. This study of extension organization here would also help me to see what degree of importance has been given under the circumstances to the various limbs of the organization and how they function in coordination with each other.

3. Interrelationships with other agencies serving the rural areas. This actually forms part in my mind of the first special item of my study mentioned above, that is, coordination. While on the one hand I would study coordination of the various limbs of the extension service itself, on the otherhand I wish to study and observe the coordination of the various agencies serving the rural people from the point of view of that single goal -- improvement of the life of the rural people through methods and techniques which will be self perpetuating and which as far as the

governmental organizations are concerned will avoid overlapping and contradictions.

4. Rural Electrification Administration. Experience has taught me that no widespread program of extension work in agriculture is possible to be sustained without fulfilling the greatest felt need of most of our backward areas, that is irrigation. While a certain amount of irrigational facilities are possible through masonry wells, large areas of land can be provided with water only through power and irrigation. In my state the government has already in hand a plan of harnessing the Rihand River to provide irrigation and power. It will provide nearly 100,000 kilowatts of electric energy which will be available for use in the eastern areas of my state of Uttar Pradesh. Rural electrification will then be an important phase of development of this plan. Though not a technician myself, I feel that with my background of physics I will not only be able to pick up the highlights of the organization and working of the REA, but some of its technical aspects as well. I may find the knowledge useful at some later date as I believe that a combination of rural electrification and extension service activities will really serve to change the face of my country side.

5. The working of the home economics section of the extension service. I am not directly connected with women's welfare work in my state but I have been closely associated with its working in the Pilot Projects there. Just as without the youth taking part in extension service, we cannot really be a success in the future work in the villages without work amongst the women folk. Without it we would be only going half way. Without women's welfare work tying in closely with the program of extension work in my state, we would only succeed in reaching half the rural population. In your country the home economics activities are an integral part of your extension service. That is not yet so in my state, but I feel that some workable integration is bound to come to make extension work a success there. For my own edification, therefore, I am interested in learning the working of home economics programs. I am sure it will help me to develop ideas suitable for conditions back at home.

These are the items of special study which I had planned to observe before I landed in your country. I am sure as the study tour progresses I will find occasion to study and observe many other angles of not only your extension service and its workings, but also of the life here itself.

Q. What are some of the problems you face in extension work in your state? You have already mentioned some of them.

A. Our problem of rural areas flows in a vicious circle. There is poverty, ignorance, disease, each with its own ramifications, and each acting as a cause and effect on the other. Over 85% of our population live in the rural areas and are engaged in agriculture in one way or another. Agriculture may, therefore, be rightly termed the backbone of rural economy. We have to break this vicious circle somewhere before we can hope to achieve our objective of transforming the face of our country side and insure a high standard of living for our rural population. Betterment of agriculture, not only to provide more food for the country which is our immediate objective, but also to provide means to our agriculturalists to tackle his other problems of improved living, better health, and better education in the long run has, therefore, become the spearhead of our extension program.

In the old days there existed in our villages a highly developed form of local self government which adequately met the needs of those times. During the last 200 years this feeling of cooperative living and community activity has declined to a vanishing point. In a poor country like ours where resources, especially local resources, have become scanty, we still have in our rural areas a surplus of one commodity which if properly channeled and used will greatly help our program of rural development. We hold practically an inexhaustible source of man power in our rural areas which could be utilized in community works like

the building of rural roads, community centers, schools, hospitals, and the like. The second main field of extension activity, therefore, could, I feel, be in the field of social education, and that includes adult literacy, in the rural areas to develop the minds and widen the horizons of the villagers. Our social education program would thus aim at educating the villagers not only in the field of agricultural animal husbandry, public health and sanitation, and citizenship in general, but also in cooperative work and cooperative activity. We already have in my state a set up authorized by law known as the Panchayat system which needs to be guided and developed through the education of the rural population. The activities of the extension service I am sure will greatly help the establishment of the Panchayat system in my state.

Extension is in itself education so in general we might say that we are going to meet our three main problems of poverty, ignorance and disease through a process of education of our people.

Q. What was the value to you of your study at Washington D. C.?

A. One cannot study the working of any organization unless one is fairly conversant with details of how the organization has been set up and how its various limbs are interlinked with each other, especially at the top. Our stay at Washington and the study we made there of the various activities of the different departments of the extension service were not only useful, but imperative from my point of view. We gathered how the U.S.D.A. works through the Land Grant Colleges in its extension service, how the Land Grant Colleges conduct their three fields of activities, i.e. research, teaching and extension. We learned the working of the division of home economics at the top level as well as that of the 4-H clubs. It was interesting to see how the extension service also cooperates with the Rural Electrification Administration of the U.S.D.A. in improving the economic status of the home life of the farmer. Before we could go further to see the U.S. farm people at work, it was also necessary to get an insight into their society and customs before we could appreciate in the field some of the angles of farm activities and the operation of farm organizations and farm bureaus. Dr. Longmore's lecture, therefore, was of special interest to me in this direction.

Mr. Kenneth Warner's talk on the problems of the adolescent, analysis of a rural situation, and the blueprint for a plan of work helped a great deal in my understanding of the operation of the extension service in the field. Other divisions of interest to me at the U.S.D.A. were those of Field Studies and Training, Division of Extension Information, Division of Field Coordination and the Division of Agricultural Economics and the Farm Credit Administration. The visit to Beltsville was also very instructive. There is, however, one point I must make at this juncture. The research activities that we saw being conducted and the results attained thereby would only be applicable to the conditions that exist in this country. From the point of view of soils, climates, crops, as well as cattle, poultry or fish, etc., that have been developed here, it is not possible for us to take back the results of research here except in a most general way indicating the lines of work to apply them to the extension work in our own country.

I firmly believe from what I have seen of our own research activities in my country in the various fields of agronomy, entomology, and animal husbandry, that we have today enough research work done the results of which could keep our extension service effectively busy for the next ten years, provided we manage to learn and apply the methods and techniques of carrying those results of our research to the villager in a manner that will be acceptable to him.

(Did you pick up any ideas that might be of use to you in your own work?) The very organization and the very fact that you have found it necessary to divide the extension work into the various divisions and your method of coordinating the work of those divisions has been very useful to me and I am sure the details of

of their working not only during the orientation period that we spent at Washington but also in their operations in the field which I saw during the subsequent days of my study tour could be helpful in the working of our own extension service in my state.

Q. What suggestions do you have for ways the study at Washington might have been improved?

A. I think we could have, from my point of view, certainly profited by a few more days at Washington in the U.S.D.A. studying in a little greater detail some of the working of the various divisions of the extension service that we were introduced to. For example, from my personal point of view I would have like to have spent more time with the Division of Training and Evaluation and in farm credit and agricultural economics than I could. This would have been an extension of the idea which eventually made the sponsors change our program in the last day from mere class room lectures to a tour of discovery, but about ten minutes for a group of four people with each division was not sufficient to enable us to cover the activities of the division to the extent to which I would have personally liked.

Q. What was the value to you of your study in Tennessee?

A. In the Tennessee Valley we saw how power and flood control have completely transformed the life of the people and how the most modern conveniences are obtainable in the farthest rural homes by the extensive use of electricity which has risen from 3% in 1933 to about 80% now in the rural areas. It was also interesting to see how with the advent of power the area has become highly industrialized leading to the establishment of the Oakridge Atomic Energy Plant. The use of refrigeration both on the farm and in marketing has in turn helped the farmer in this area to get better prices for his farm products. It was also interesting to see how the TVA apart from being the authority to produce power, achieve flood control and work navigation in the area has cooperated with the Land Grant College in putting the extension service in the area on a firmer basis through help which it has been gradually withdrawing as the extension service and the farmer have managed to get more and more on their feet.

(Did you pick up any ideas that might be of use to you in your own work?) In Tennessee we were also able to see the operation of farm credit organizations. We have our own difficulties in providing easy and cheap farm credit to the villager but there is no doubt that this study has shown the activities of farm credit organizations to be one of the main bulwarks of the success of farming in the U.S.A. A special reference may be made to the instances of what we saw in the Chatata Valley community in this connection where Mr. Moore starting from scratch ten years ago through the help of the farm credit organization has become the owner of a 175 acre farm with a nice home on it and has paid off all debts through which he acquired the farm and the home by a process of self help during the last ten years. Here was a real example of the extension service helping the man to help himself which was very uplifting.

Q. What suggestions do you have for ways the study in Tennessee might have been improved?

A. These suggestions would actually apply not only to the study we made in Tennessee but also to the rest of the study tour itself. The study program did not give us any time to absorb and digest what we saw. To put it crudely, it was more of a cramming process and so tight that at the end of the day, generally speaking, people were too tired to discuss with each other what we had seen or to sit down for an hour or so alone and evaluate the day's study in terms of our own conditions.

back at home, except in a very general way. It will be appreciated that it is necessary for us to arrange the telescopic impressions of our tour into a useful pattern to enable us to fit and absorb the knowledge for use in our conditions in India.

Q. What was the value to you of the study at Auburn, Alabama?

A. At Auburn we made a very detailed study of the audio visual methods used in extension work and saw one of the largest experimental farms on fishery development in the states. The work of the extension service in the U.S.A. is made very much easier by the fact that the farmer here is a literate person. He is able to read various directives and bulletins issued by the extension service and act accordingly. His mental horizon is also wider than that of his counter part in India. He is, therefore, able to take the initiative in his own hands and act on suggestions put out through these bulletins or letters once he is convinced that the county agent is working for his welfare. In India until we achieve a higher degree of literacy our general methods of propagation of ideas will have to depend very largely on audio-visual methods in addition to close personal contacts between the extension worker and the village people. The details of the various audio-visual methods were, therefore, very interesting from my point of view and I am sure most of them can be used in my country, too.

Q. What suggestions do you have for ways the study at Auburn might have been improved.

A. None.

Q. What was the value to you of the study at Tuskegee?

A. At Tuskegee I got further insight into the working of the 4-H organization and home economics extension work. Also there was a very interesting organization that we came across at Tuskegee which was the Rural Life Council and its activities help to tie up action and research, determine socio-economic trends, and determine the cultural and psychological barriers of the people in accepting the technological advances and adopt methods for the extension workers to successfully work in the process of human change. The project of self help housing was of great interest to me. Back in my state the housing in rural areas has been having our attention for some time and we have evolved certain patterns for constructions which can be put up cheaply and by the villager himself with as little technical assistance as possible. I expect what I saw in the self help rural housing program at Tuskegee may further help us in our program of rural housing.

Q. What suggestions do you have for ways the study in Tuskegee might have been improved?

A. None. I think it was loose enough so that we had a lot of opportunity to talk to the various divisional heads and the extension service.

Q. What was the value to you of the study in Missouri?

A. In the state of Missouri we had the longest halt. We went into the organization of the extension service and its working in this state, especially its balanced farming program. In addition we learned the working of the FMA and the soil conservation service. Unfortunately we did not get much opportunity to study the working of these two organizations in detail. We again looked into home economics and 4-H activities as carried out in this state. The most interesting talk given to us at the University was by Dr. Albrecht, the famous soil research scientist. I hope it may be possible for the Professor to come across to India some day because

I feel with his approach to the problems that it is not poor land but mostly poor land management that is behind poor yield in agriculture. His advice to us on the spot would be very useful.

I was a little surprised to find that we in India have made a start in our extension service from the basic idea of balanced farming put out to us at the University of Missouri. The greatest surprise was that the idea of the multi-purpose extension worker at the village level had not been fully developed and utilized in the extension service in the U.S.A. except in the state of Missouri and one or two other states. Back in India we are starting with the idea of the multi-purpose village worker who should be able to advise the farmer and make a balanced farming program for him with his help. The activities of the PMA in controlling crop insurance, price control and production laws and loans to the farmers as well as the financial side of rural electrification made me feel that a large share of the "education" of the farmer is in the hands of the PMA workers and parallel to those of the extension service. The two organizations are supposed to work closely in cooperation with each other, but I noticed that in practice their alleged closeness was superficial. The balanced farming program cannot be successful without close cooperation of the extension service with the PMA as the PMA decides the areas to be planted under grain or grass according to a national plan. I can see that a national plan enforced from Washington can become detached from the reality of local situations and that is where the extension service which is purely a local affair in its operation can be a guiding factor in the making of that plan. From these considerations I feel that in making a program of study for us, closer contact with the PMA workers in the field should have also been arranged. From the point of view of our country where the educational aspects of extension work cannot be so easily divorced from its executive aspect and still produce results we would have liked to study not only the educational approach to extension work but also the approach of those who carry out the executive work controlling and operating production policies, production areas, enforcement of soil conservation measures, purchase of surplus grain, operation of subsidies and loans and even the actual working of land reclamation measures through bulldozers, etc. We would have liked to have seen a little more of the operation of the soil conservation service, too. What we saw, however, was useful and I was very interested to learn the steps in working out a balanced farming plan with the farmer as well as the three other lines of work of extension in Missouri, i.e. public policies, youth work, and health and recreation with their focus on the farm.

- Q. Do you have any other suggestions other than the ones you mentioned for ways the study in Missouri might have been improved?
- A. Part of the time we spent in Missouri might have been more profitably employed in Washington. Of course if the program in Missouri had included a longer program with the working of the PMA and SCS as it operates in the state, we might have had to find the extra time for Washington, suggested by me, from somewhere else.
- Q. What was the value to you of the seminar in human relations and cultural anthropology conducted by Dr. Spicer in the New Mexico and Arizona areas?
- A. Dr. Spicer's seminar on human relations was as interesting to me, or more so, as the organization and activity of the rural life council in Tuskegee because I believe that lack of adjustment in extension methods to customs and values of the people amongst whom one operates would be a major cause for failure to achieve success in one's work. Apart from the basic principles, the seminar gave us ample material to judge the background in which the extension service is operating among the various tribes of American Indians. Armed with this background we were able to have a better insight into extension work as carried out among the Navahos, the Pueblos, and the Hopi Indians. Our tour of the Indian reservations and the

study of the work in the Fruitland project was useful to me in a negative manner. I got from this tour of the Indian reservations that perhaps the extension workers of the Indian Service have not paid that much attention to the human relations angle in their work as they might have done. To give a specific instance, when we visited one of the farmers in the Fruitland project we found that he was using sheep dung to cover up a small culvert instead of using it as farmyard manure. On inquiry I found that the Indians in general in that area objected to the use of farmyard manure and fertilizers due to their certain cultural beliefs. I would have expected that in its life time of nearly 15 years the Fruitland project would have succeeded in getting such an important item in its agricultural program as the use of farm yard manure put across to the American Indian cultivator in a larger percentage than was apparent in the inquiries I made. Perhaps the extension worker in these reservations and in this project have been working on this problem and it is only a question of time until they succeed in putting the idea across. That is more than likely in view of the 40 year experience of extension work in the United States, but that leads me to the point I want to make here and the lesson that I have learned in our tour of the reservations. My spirits rose 100% when I realized that comparatively speaking the rate of progress achieved by us in our extension program in my state working through adjustments to the local cultures and values has been comparatively speaking many times faster than has been the case in an area of this country with decades of experience in extension work behind it. This lesson is all the more important to me because there are times when I and some others back home start feeling that we are not going fast enough. The visit to the Indian reservations and the study of the extension work there gave me a better prospective into the time factor involved in successful extension work. The final seminar conducted by Dr. Spicer at the Grand Canyon greatly helped me and I hope others also in crystalizing my ideas that I have expressed above.

I would also like to mention that irrigation agriculture around Phoenix in Arizona and in the Imperial Valley showed us how people in an area with very low rainfall and desert conditions have contrived to make the area productive in agriculture. I wish we could have given a little more time to that study of irrigation practices in this area because we in our own country have also quite a large canal system in some areas and I feel that a more detailed study would have been helpful.

- Q. Do you have any other general suggestions about the study tour and program as a whole?
- A. The program of our study tour has given me the impression that there was an attempt to try to show us everything possible in the short time at our disposal. This is a very laudable approach; however, it has resulted in a very tight program and situations which if they could have been avoided might have made this study tour more useful. As I have suggested in the body of this interview, if we could have taken a little more time in the orientation period at Washington rather than going through a process of repetition which loses its value when overdone, I think the tour would have been even more effective. I am afraid some of it was over done because in every new place we went we always spent some time to start from the "A" of extension work in America. It would have been better if some knowledge on our part was presumed once we had gone through the orientation period at Washington and also because we have come here after doing a certain amount of extension work in our own country, too, so that any special features peculiar to the state or the Land Grant College could have been made the starting point for discussions. Then again I would rather see and study things fewer in number but more relevant to my objectives of study rather than try to see and study everything. In our short stay in the country we could not have studied everything even if we had wanted to and, therefore, this selective study could have been made easier. Some important

chains of thought start from things which may be small or simple or which may not seem very important to the people here. As I have already mentioned I would have liked more time to develop it in my own mind with reference to conditions with which I am familiar. This tight program also did not give us time to associate amongst ourselves and discuss what we had seen during any day. To me it is not a question of what you may know which you may want us to learn, but what we do not know. A greater knowledge by our program makers, therefore, of what we already know back in India in organization, methods, and techniques of extension work would have helped greatly in making this program more interesting, free of repetitions and less tight.

Q. Looking back over the whole trip now, do you feel that this trip has met the objectives you outlined at the beginning of this interview?

A. Except for certain items like the working of your training program and evaluation programs in extension work and farm credit organizations including the PMA, the working of the Rural Electrification organization, I feel I have been able to study my objectives in the manner I could in the limited time allotted to those items in the program. I have already given in the body of this interview my reactions to the various studies I made on this tour with special reference to those objectives of studying the organization of extension and its working, the working of 4-H Club activities, farm credit organizations, and the coordination of all the agencies serving the rural people.

I feel that this trip has enabled me to understand the basic factors operating in this land which are behind the success of American agriculture. As I see them they are these: (1) Ownership of the farm. (2) Easy and cheap credit facilities. (3) Efficient and reliable supply lines for the requirements of farms like seeds, manures, etc. (4) The know-how supplied by the extension service. (5) The do-how supplied by the American farmer in the sense of his work within the farm and the profits sunk back to improve it. (6) Cooperative marketing facilities. (7) The O.P.S. program. (8) The operation on the executive side of the PMA and the SCS. (9) The development of local leadership. (10) The activity of the 4-H organization. (11) The farm implement industry of your country. (12) Fairly evenly distributed rainfall all year around.

In my state the ownership of the farm by the cultivator himself is becoming a reality and I expect more and more farmers would like to make improvements now on the land they own without fear of losing the farm at the sweet will of an intermediary who has now been abolished, i.e. the landlord. Credit facilities in India have not been easy for the farmer both because in most cases there was not enough security available and also because there is not enough money for the state government to undertake the program. A study into how these facilities to the farmer in my state can be increased to enable him to improve his land and his agriculture could now be the next step. Besides the problem of credit there are of course many other problems such as those of irrigation, consolidation of holdings, improvement of storage and marketing conditions, supply of good quality seeds and fertilizers and the development of the methods and techniques of the extension service which confront us as problems in the development of our agriculture come up. These problems will have to be solved by us in our own way but this study in the United States has, I feel, equipped me better to tackle those problems and find their solutions.