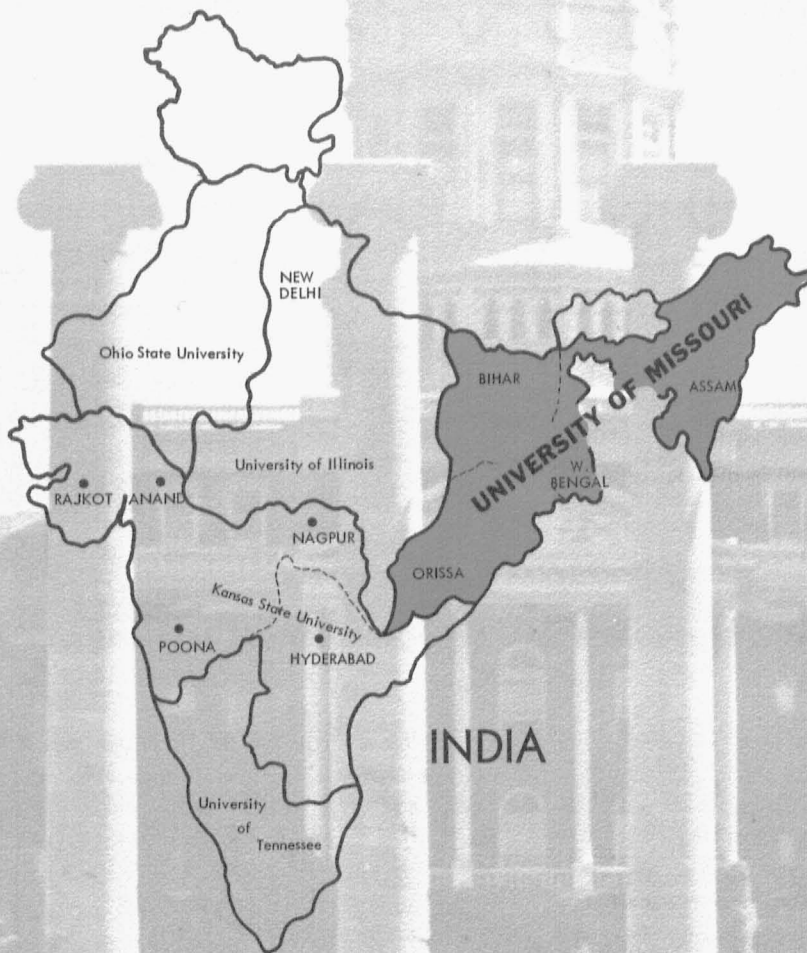


The University of Missouri

# *Goes to India*



B752 June, 1960  
University of Missouri  
Agricultural Experiment Station

**Why Are We There?** "Probably the most important reason for this program, as well as other aid programs being conducted by the United States in India, lies in the fact that India is the only nation now operating under a constitutional democracy in all of South Asia. India is the second most populous nation in the world, standing next to Red China in number of people. India also borders on Red China. Here is a direct contest between the democratic form of government and communism, and nations all over the world are observing this competition very closely. Anything within reason that the United States can do to enable India to be a successful democracy should be done."

This statement by John H. Longwell, Dean of the College of Agriculture, gives more than sufficient cause for all Americans to do all they can to help India. But let us consider the role of our state University. Why is the University of Missouri, in particular, along with four other land-grant institutions in the Midwest, taking such a leading role in current technical aid to India?

the University of

**Six University of Missouri College of Agriculture staff members are now in India helping develop research, teaching and extension programs at agricultural colleges in the states of Assam, Bihar, Orissa, and West Bengal.**

**This work is being done through a contract with the Indian government and supported by the International Cooperative Administration**

*Research Institute, Ranchi Agricultural College, Ranchi*



■ Among the most cherished words in our nation's history are these from Lincoln's Gettysburg address:

*"... that government of the people, by the people, for the people shall not perish from the earth."*

Lincoln had this same thought in mind in 1862 when he signed the Morrill Act, granting new lands to state governments to support state colleges of agriculture and mechanical arts.

In the less than 200 years since our nation came into being our form of government has not perished; we have moved from a humble origin to a leading power.

In this long procession to the peak of prestige which our nation holds today, it is doubtful if there has been a single greater step than this adoption of the land-grant college plan.

After the nation "conceived in liberty, and dedicated to the proposition that all men are created equal," became a reality, more than 80 years passed before the possibility dawned that sons and daughters of the common man—mostly farmers and artisans then—might have opportunity for higher education.

#### **Sought "Education for All"**

Washington had mentioned the need, and Jefferson had actively espoused the idea that if this nation were to thrive, education must be available to *all*.

The few wealthy tradesmen and landowners could afford the price of sending their offspring to private schools like Harvard, Yale, and William and Mary. But

# Missouri GOES TO INDIA

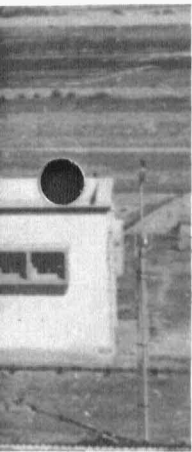
(ICA). The ICA pays all costs of this program by providing an advance fund (\$175,000 in our case) and replenishing it as expenditures are made. Thus, while the University has the responsibility for the proper use of the expenditures, **FINANCIAL RESOURCES OF THE UNIVERSITY ARE NOT INVOLVED.**

As another part of the education development program, 35 men from India's institutions

have come to the University of Missouri to study our methods or take graduate work.

A total of \$27,082.80 worth of books and \$193,120.94 worth of equipment has been ordered by the University of Missouri for the educational institutions of India. A seventh member of the University team has been recruited pending his approval by the government of India.

*Bihar, India.*



## Many Nations Adopting Our Land Grant College Methods

the "common man"—the farmer and the artisan—could not afford this.

Years of discussion passed before the big step was made to bring higher "education for all" near to reality. The first Morrill Bill, "Granting Lands for Agricultural Colleges," was introduced in 1857. Congress passed the bill but President Buchanan vetoed it. John S. Morrill tried essentially the same bill again after a new President came into office. It was approved this time, in 1862, by President Abraham Lincoln.

The law granted 30,000 acres of land for each Congressman and Senator, or the income from it, whether sold or retained, as support to an agricultural and mechanic arts college within each state.

Agricultural experiment stations were added to the colleges in 1887 to seek new knowledge through research for the faculties to teach. Then in 1914 the agricultural extension service was added to take the new discoveries of research to people on their farms.

### Other Nations Seek Our Formula

This program of research and education has been so successful that nearly all nations of the world have studied it and seek our help in setting up similar programs. Our land grant colleges should give them this help.

Peace and security cannot be insured until a vast majority of people of every nation are free from want. Around two-thirds of the world's people



*Ranchi College students transplanting rice by Japanese method, setting plants in rows so they can be cultivated with ani-*

*mal or tractor-drawn machinery. Old random method necessitated inefficient and inadequate hand weeding.*

still go to bed hungry. Men cannot think of peace, freedom and justice when their families are starving.

Eighty to 90 percent of the people in the underdeveloped countries are farmers. Thus the bulk of the people in these countries need the kind of scientific information agricultural colleges can furnish. In the interest of humanity it is the duty of our land-grant colleges to help them establish the framework needed to get this knowledge.

### **Critical Choices Being Made**

All over the world people have learned of the ways of Americans. They have seen our motion pictures. Missionaries have told them about us. Travelers among their own people have returned with wondrous tales of this country. They have heard of these better ways and they want to use them.

In one phase of the University's contract with India we are helping bring some of their leaders to this country to see for themselves that a satisfying life is attainable under the doctrine that government is made for people, not people for the government. We are trying to encourage them to accept the basic philosophies which form the American pattern of life.

In another phase of the program, the University is helping India start agricultural research and education services similar to ours. It is a vast undertaking and the

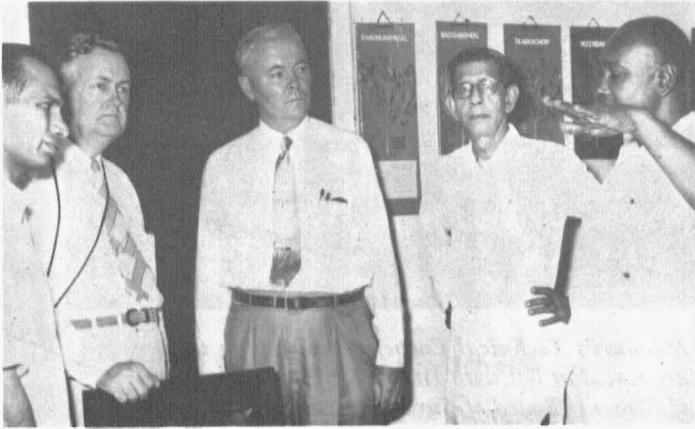
land-grant college system may take just pride that every person, regardless of position, who is employed in effectuating the purposes of the land-grant college law, has a place in this great movement.

### **New Land Grant Universities**

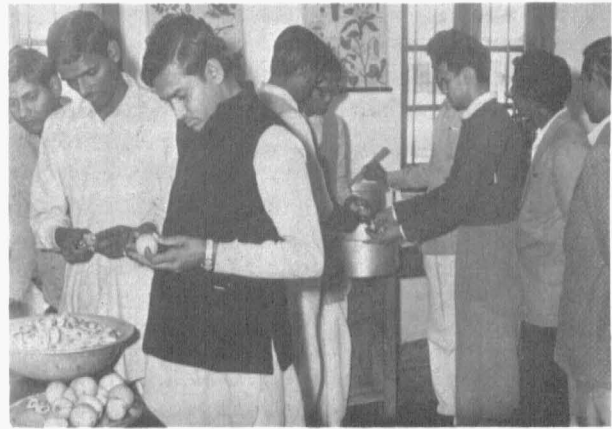
New universities patterned after the U. S. Land Grant Institutions are being planned. In contrast to the location of existing colleges at different places, these new institutions will have on the same campus Colleges of Agriculture, Veterinary Science, Arts and Science, Home Economics, Education and Engineering with other colleges being added later. An enabling act has been approved by the West Bengal Legislature for such an institution at Harringuta, 35 miles northeast of Calcutta. Orissa is likewise planning such an institution at Bhubaneswar, where the Agricultural and Veterinary Colleges are now located on the same campus.

### **Contract With ICA Approved 1957**

The Board of Curators of the University of Missouri considered the recommendation of the president of



*B. W. Harrison and Dean J. H. Longwell discussing plans with West Bengal College of Agriculture faculty members.*



*This horticulture class at Ranchi Agricultural College is studying food preservation methods.*

the University, Elmer Ellis, and approved a contract with the International Cooperation Administration, effective March 7, 1957, to furnish certain services to educational institutions of India. Costs of this service are reimbursed to the University by the International Cooperation Administration.

The Contract provides for three broad aspects of assistance:

- (1) Staff members of the University to go to India to advise Indian educational institutions.
- (2) Books, educational equipment, and other educational needs to be purchased and sent by the University.
- (3) Selected faculty members of educational institutions of India to be brought to the University of Missouri for advanced instruction.

Prior to the signing of this contract, Dean John H. Longwell of the College of Agriculture and B. W. Harrison, State Agent of the Agricultural Extension Service, had spent some months examining the situation and developing a work plan for a University of Missouri-India program.

The Plan covered the states of Assam, Bihar, West Bengal and Orissa. (See map.) Host institutions were named in these states and a total of seven staff members of the University of Missouri were indicated as needed to properly assist the colleges and schools of the area.

Four other land-grant institutions, Ohio State University, University of Illinois, Kansas State University, and the University of Tennessee, have similar contracts

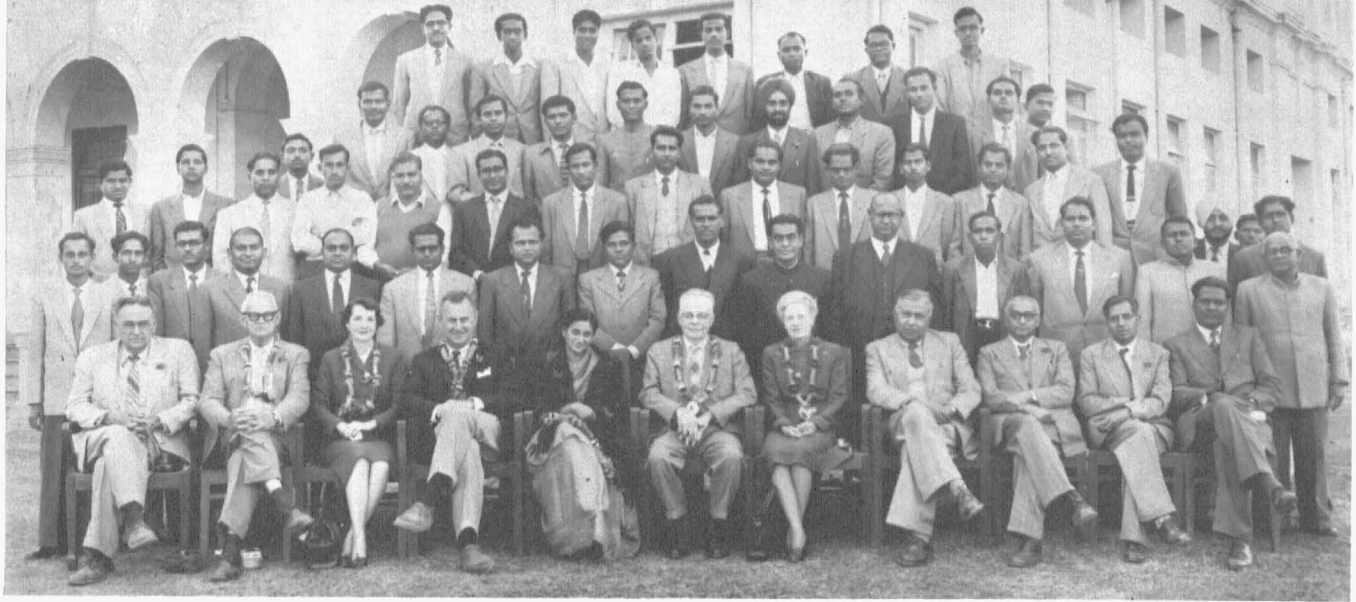
and each is responsible for similar educational work in another region of India.

Dean John H. Longwell returned to India in the fall of 1958 to inspect the work being done. Following is his statement of the problem and University of Missouri objectives in India.

"This program is directed toward assisting the people of India in developing a program through which they can increase food production to meet their own needs. Presently, Indian agriculture is quite primitive for the most part and the nation's food production is limited both in variety of products and amount required to meet the total food needs of the nation. In most years there is a food deficiency in some part of India and the majority of Indians are not well nourished.

"A program such as the one the University of Missouri is participating in is obviously a long-time program. Apparently, it will also be necessary to assist India in a short-time program to effect a rather rapid increase in food production if their total needs are to be met out of their own food supply. This emphasizes the need for development of an extension program similar to the one that developed in the United States. . .

"India is faced with many very serious problems. They have approximately 400 million people in a land area slightly more than 40 percent that of the United States. When Indians gained their independence in 1947 they estimated that about 85 percent of the population was illiterate. The Indian leaders recognized this as a problem of first importance and have made a very strong



*Occasion for this picture of the staff of the Bihar Veterinary College and Livestock Research Station at Patna was a visit from University of Missouri President Elmer Ellis and Mrs. Ellis (seated at center). Drs. O. Ulrey and Arnold Klemme of*

*Missouri's Technical Cooperative Mission team are seated at left with Henry Andrae, University of Missouri Board of Curators member, and Mrs. Andrae.*

effort to provide universal education for Indians. According to their present estimates they have reduced illiteracy to about 70 percent. It was necessary for them to train teachers, provide the physical facilities and even stimulate a desire among Indian people for an education. Both primary and secondary education and adult education programs are being developed in India.

#### **Per Capita Income \$60**

"The economic situation in India also is serious. A majority of Indians have a very small income and low standard of living. The average per capita income in India is equivalent to about \$60 per year.

"The caste system is another serious problem in India. This system has developed through many generations and centuries, and will not be materially changed in a few years. The Indian Constitution does state that caste shall not be a barrier to opportunity for employment, education, or other activities. It does not attempt to abolish castes, it recognizes them and says that castes shall not interfere with the opportunity of an individual to improve his situation. Some progress is being made in this program.

"The large number of cattle in India constitutes another problem. Many Hindu sects believe that man does not have the right to deprive any animal of life. The cow is placed in an especially high position because she is considered to be the foster mother of the race, since she provides milk for the small child. For this reason there is a widespread prejudice against the use of any kind of animal products for food and particularly for the use of beef. Some cattle are used to produce milk and many oxen or bullocks are used for work animals.

#### **Cattle Unproductive**

"As a general rule cattle are very poorly cared for. Even the bullocks used for work and the cows which are expected to produce milk are very poorly fed. The cows are kept in unsanitary conditions and the quality of the milk produced is extremely poor. The average milk production of an Indian milk cow is about 600 pounds per year. (This compares with 6,438 pounds in the U.S. and most large, specialized dairy farms average 10,000 pounds or more per cow.) Although many cattle are owned and receive some care, many of them are simply strays, belong to no one and roam where they please.

"It is estimated that the total population of cattle and water buffalo is well in excess of 200 million head and that they are increasing at the rate of approximately 10 million a year. Some efforts are being made to solve this cattle problem, but the religious prejudices and general attitude toward cattle held by Indians make progress in this direction very slow.

"It is evident that these relatively unproductive animals are consuming food that is produced on land that had better be in production of human food. Most of the Indian Leaders recognize this situation, but find it very difficult to overcome the prejudices of the local people. Politicians often make a great deal of use of this attitude toward cattle in developing their own campaign programs.

#### **Poor Sanitation Another Problem**

"Poor sanitation is another one of India's problems. Internal parasites and infectious disease occur quite generally throughout the nation. This also is recognized as a serious problem by the Indian leaders and some progress has been made in improving sanitary conditions in

villages and cities. The caste system and illiterate prejudices enter into progress in this area also. Many Indian villagers, who have been accustomed to dipping their household water out of the very filthy pond in the village, frequently refuse to use the clear water that comes out of a properly constructed well, fearing it may have been poisoned by contact with the steel pipe or in some other way be injurious to them. Similar prejudices are held toward fertilizers and improved farm tools.

"Another serious obstacle to any educational program lies in the large number of different languages and dialects found in India. Fourteen languages are officially recognized by the Indian Government. No one knows how many local dialects there are which are intelligible to only a relatively small group in a locality.

### English Taught in Schools

"English is the language of educated Indians and English is being taught in the secondary schools and generally used in colleges and universities. Because of strong national pride many politicians object to the use of English as a national language and a law has been passed by the national government making Hindi the national language. It is quite likely that English will continue to be used generally among educated people in India and that Hindi will also become a fairly widely used language within the country.

"Rate of population increase in India is another serious problem. With the present population of approximately 400 million people and an annual increase of eight or 10 million there is serious question whether any increased food production will keep up with the larger number of people to be fed each year.

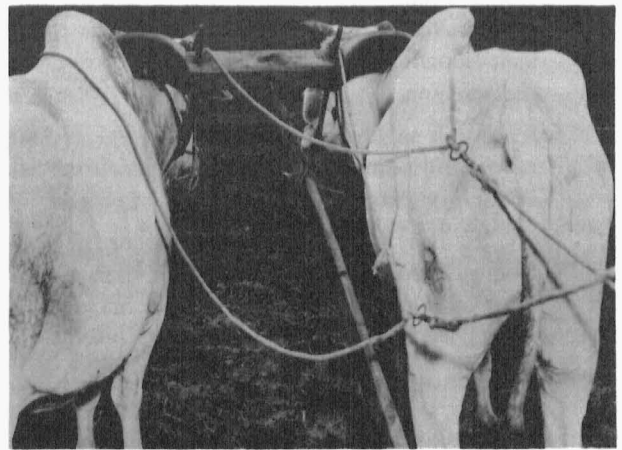
"Better nutrition and the successful efforts at improved sanitation and disease control result in lower death rate and longer life span. This accelerates the rate of population increase. Because of this situation a great deal of consideration has been given to birth control in India. Apparently some success on a local basis has been made in this program, but nationally it has not yet had a material effect in reducing the rate of population increase.

President Ellis, who, with Henry Andrae of the Board of Curators, visited India early in 1960 to study the effectiveness of the program, says that the former University of Missouri students who have returned to India to accept prominent places in their institutions report most approvingly of their experience at the University of Missouri.

Lingaraj Misra, who had been a student of the Agricultural Extension Service and home economics system here, had 30 members of his village present to meet President Ellis on a visit to Orissa.

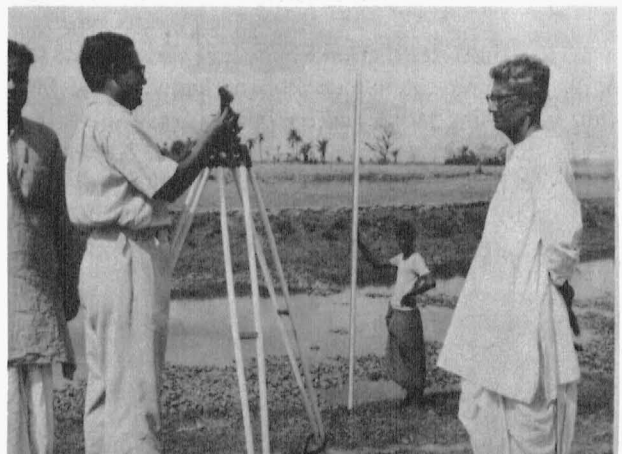


*Testing garden tractor at Bihar Agricultural College. Fields are too small for our sizes of farm tractors.*



*Demonstration of use of reins at the Assam Agricultural College.*

*A demonstration on surveying a drainage ditch in West Bengal supervised by Prof. Davis of the Missouri Technical team.*





*This portable irrigation pump with diesel engine is being used at the college experiment station in Bihar.*

The third report of Dr. Klemme states, "Activities of the University of Missouri Technical Cooperation Mission team have been directed to the achieving of the objective of the Indo Inter-Institutional Agreement." The Missouri TCM technicians have assisted in—

1. Selecting and planning study programs for participants for advanced study in the United States in research, teaching, and extension.
2. Preparing lists of books and equipment not available in India to be selected by the University of Missouri for use in India's colleges to better equip their laboratories and libraries for modern research and teaching.
3. Serving in an advisory capacity on college organization and administration, and in teaching, research, and extension.

Mr. C. K. Ray, secretary of agriculture for the state of West Bengal, says in his "Report of the Observational Study Tour of Some Land-Grant Colleges of America During October to December 1958":

*"the administrative set-up of the proposed new university will have to be on lines different from the existing University of West Bengal. With regard to the administrative set-up I would recommend the Missouri pattern in broad outline with such modification as present day conditions require."*

This illustrates that under the able direction of Dr. A. W. Klemme the influence of the University of Missouri is reaching far beyond the boundaries of this state.

Dr. Klemme's report reveals that, "Through the policy of the Technical Cooperation Mission of the University of Missouri, many improved varieties of vegetable crops (tomatoes, beets, carrots, cauliflower, broccoli, cabbage,



*Dr. K. C. Bhan, horticulturist, and B. K. Bhattacharjee, irrigation engineer, inspect concrete tanks used to control depths of water on rice experiments in Calcutta area.*

soya beans, melons, cantaloupes, and sweet corn) have been introduced into India."

### **Hybrids Increase Corn Yields One-Third**

Hybrid corn, US 13, planted in November, 1958, at Tollygunge, Calcutta, irrigated and fertilized, and harvested in March gave a yield of 64.22 mounds (one mound = 82.4 pounds). North Carolina 27 averaged 66.08 mounds. This compared to a local corn variety planted at the same time which gave a yield of 39.8. In other words, the hybrids increased yields of corn more than a third in West Bengal.

Irrigated Ranger, California, red clover, and sweet and ladino clover have been introduced and are making excellent growth. "Atlas and Sart Sorghum grew vigorously at the Kanapara Livestock Farm in Assam," says Dr. Klemme.

Another important accomplishment is the introduction of the small garden tractor and accessory equipment, including a moldboard plow. These tractors are introduced to the agricultural colleges primarily so students may be taught the use and care of mechanized equipment. Another purpose is to enable research on economic feasibility of using mechanized equipment on the small holdings of India, thus replacing bullock power and releasing land for the production of human food.

Among other equipment received at Assam Agricultural College were a two-plow Massey Ferguson tractor, moldboard plows, disc plows, and a fertilizer grain drill.

### **Need Fertilizers and Irrigation**

Water from reservoirs, deep wells, and rivers is now being used for irrigation. Soil tests indicate the fertilizers





*Oxen-drawn border drag made by villagers for building contour borders for surface irrigation.*

and, on many soils, limestone are needed for the best growth of crops. Everett Davis, the group's specialist in irrigation, is giving demonstrations and assistance to the Indian farmers on the use of irrigation.

Professor Clarence E. Stevens who was assigned for two years to Assam Agricultural College at Jorhat was comparing the Merry Tiller Tractor with bullock power.

Activities of Mr. Stevens included building a puddler for the Merry Tiller Garden Tractor. He also designed and made a mudguard to protect the engine from mud and water thrown in the paddy (rice) fields. Stevens gave a demonstration of how bullocks respond to reins so they could be more useful in cultivation. He developed an experiment to demonstrate the value of a combination of practices required for maximum acre yield in rice.

### **Mrs. Stevens Helps Organize Library**

Mrs. Stevens was of great help, too. She spent about 240 hours guiding the college library staff, helping them catalogue their books according to the Dewey Decimal System.

Dr. O. Ulrey lists 71 reports on educational policies, programs, activities, and conditions that have been prepared from April 1 to September 30, 1959. Many of these were mimeographed and used partly for lectures in classes at Ranchi Agricultural College, and partly for journals.

One report by Dr. Ulrey, covered the teaching system of India, which is based on a lecture method. In this the teacher lectures and rarely uses the discussion method by which the student himself brings out and firmly fixes in his mind facts he is attempting to learn.

Dr. Ulrey emphasizes that since all examinations are sent in from outside the institutions, the teacher is likely to feel that he needs to prepare his students to make a



*Here is a completed contour border made with the drag. Everett Davis, center, is the Missouri team's technician working with these irrigation experiments.*

good showing in the final examinations. This of course, is quite contrary to the American system where the instructor gives short examinations and quizzes to the pupils on the material which he is giving to them.

### **Need Change in Examinations**

One of the difficult objectives of the University of Missouri program in India is to persuade the Indian educational administrators that the instructors should be responsible for the examinations and the questions they give, rather than having them sent in from some distant point with all educational institutions being subjected to the same examinations.

Dr. Ulrey says, "if quizzes and reports were required each week, and if all these counted for the final mark in the course, the learning process would tend to acquire consistent work habits. Regular quizzes and reports improve the efficiency and capacity of the student. Consequently, the final examination period could be reduced to one week or ten days, which would provide more time for classes of all types." "External examinations," Ulrey says, "do not encourage high standards or scholarship—since the major objective of the student is to pass the final examination. Such examinations do not accurately measure difference in industry, ability, and knowledge of students about specific subjects and do not encourage high morale among either students or teachers."

Dr. Ulrey has conducted many demonstrations of the value of vegetable crops. About 30 different varieties of vegetables in majority field crops from the United States were tried during a rainy season, mid-June to September. About  $\frac{2}{3}$  of an acre of potatoes,  $\frac{1}{3}$  acre of true varieties of sweet potatoes, and  $\frac{1}{3}$  acre of true varieties of ground nuts (peanuts) were planted. Dr. Ulrey says the sandy clay loam responds rapidly to good treatments (mulch, manure, fertilizer, lime and deep cultivation.)"

# the Missouri Team in India

The first University of Missouri staff member to go to India was Dr. Arnold W. Klemme, specialist in soil fertility and management. Dr. Klemme was designated as Group Leader (later as Contractor's Chief of Party), with headquarters at Calcutta. Upon Dr. Klemme rests the greatest responsibility for the success of the effort.



From Calcutta he visits the various schools, coordinates their activities and discharges other responsibilities. His wife, Lois, accompanied him to India.

Clarence E. Stevens, Agricultural Engineer with his family, Dorothy, his wife, and daughter and son, was second to go to India. His post was at the Assam Agricultural College at Jorhat, where he spent two years, then returned to the University of Missouri.



Dr. Orion Ulrey came to the University of Missouri from Michigan State University to join the staff going to India as "Visiting Professor of Agricultural Economics." Dr. Ulrey has devoted his services to India while stationed at the Bihar Agricultural College in Ranchi. Mrs. Ulrey and daughter Sara are with him.



A fourth member of the party had long experience as an irrigation engineer, an asset of great value to India since food production is one of the greatest problems. Everett H. Davis is taking to the Agricultural Colleges of India the knowledge of irrigation he used in extension work, particularly in the irrigation sections of Idaho. Mrs. Davis and their two sons are in India.



The fifth member of the Missouri group was no stranger to the Extension Service of this state. Ide P. Trotter spent 12 years as a field crops specialist in the Missouri College of Agriculture before going to College Station, Texas. As he was lately associate dean of the graduate school, his title and activity will be college administration consultant, particularly in connection with the establishment of a new Rural University at Bhubaneswar. Mrs. Trotter is with Dr. Trotter.



The sixth member was a Missouri County Agent, Walter T. Wilkening, from Montgomery City, although born at Oak Ridge in Cape Girardeau County. He will advise on teaching of Extension work in Sabour, in the State of Bihar. Mrs. Wilkening and their two small sons are with him.



■ Another aspect of the work of assisting Indian educational institutions is in the supplying of books, circulars, and bulletins. University of Missouri personnel select and purchase these supplies in the United States for use in India. In addition, veterinary and laboratory equipment, microscopes, charts, surgical tools and x-ray, have been purchased on request for the Indian agricultural institutions. These supplies are delivered through the Director of Supplies and Disposals, 6 Espalade East, Calcutta, India.

The following ICA expenditures have been made for publications and equipment for educational institutions of India:

<u>Name of School</u>	<u>Equipment</u>	<u>Publications</u>
Bihar Veterinary College	\$17,950.73	\$ 944.10
Bihar Sugarcane Research Inst.	4,533.73	864.99
Bihar Livestock Research Sta.	11,518.14	567.51
Bihar Agri. College, Sabour	10,548.08	1,623.74
Bihar Agri. College, Ranchi	9,079.17	3,338.79
Assam Agri. College	26,181.25	5,116.61
Assam Veterinary College	15,880.52	3,228.42
Orissa Agri. College	17,557.26	245.23
Orissa Veterinary College	24,215.65	1,774.14
Bengal Veterinary College	14,242.53	1,542.81
West Bengal College of Agri.	333.68	4.95

Further purchases are now in progress as follows:

<u>Name of School</u>	<u>Equipment</u>	<u>Books</u>
Bihar Veterinary College	\$3,330.33	\$ 189.31
Bihar Sugarcane Research Inst.		68.03
Bihar Agri. College		1,056.43
Ranchi Agri. College	600.00	586.58
Assam Agri. College	1,313.88	1,145.58
Orissa Agri. College	2,282.03	4,477.58
Orissa Veterinary College	2,389.00	294.10
Bengal Veterinary College	7,000.00	14.00
West Bengal College of Agri.	24,164.96	

The above does not include a large amount of material still to be furnished.

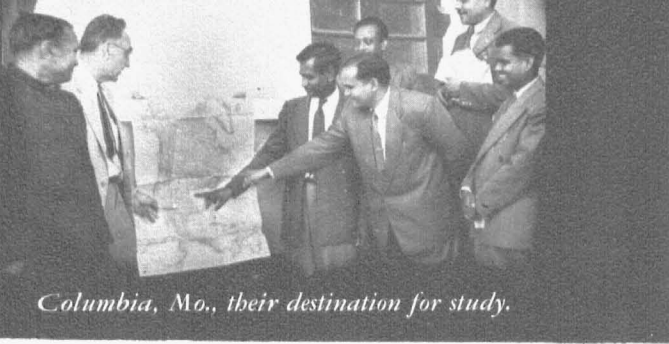
# ICA Funds Spent

for  
Publications and Equipment  
for  
Educational Institutions  
in the

# MISSOURI INDIA

# Program

# TRAINEES FROM INDIA



*Columbia, Mo., their destination for study.*

■ The original work plan called for 12 participants to be sent to the United States from Region Three. This recommendation has been far exceeded. A total of 35 visitors from India have been brought to Missouri under this contract. A few have come only for observation and have stayed for a very short time. One, Dr. B. C. Roy, Chief Minister, West Bengal, spent only a few days and only a small part of his expenses were borne through contract funds. He was accompanied by his secretary, Mr. Bhattacharjee. Mr. B. C. Roy, as Chief Minister of West Bengal, is the executive officer equivalent to the governor of a state under our system of government. With him came Dr. D. M. Sen, secretary to the Ministry of Education, and Dr. C. K. Ray, secretary to the Minister of Agriculture in that state.

Principals of schools in India, M. C. Das of Jorhat, K. C. Mukerjee of Calcutta and Hans Raj Kapur of Bihar came to the University of Missouri for observation of this and other educational institutions and then returned to India.

S. B. Chattapadhyay, a Doctor of Philosophy, came to this and other institutions, to observe American methods of research and teaching. Under the direction of Dr. E. L. Pinnell, of the Field Crops department, Dr. Chattapadhyay went to the University of Wisconsin at Madison for a period of study and research along his line, then went for extended tours of the United States, visiting the USDA Experiment Station at Beltsville, Md., Purdue University, University of Minnesota, University of Arkansas, University of Nebraska, Texas A & M, Texas Rice Experiment Station at Beaumont, Crowley Rice Experiment Station at Baton Rouge, La., Louisiana State University, USDA Glendale, Md., University of California, University of Oregon, University of Pennsylvania, International Botanical Congress, Montreal, Canada, and University of Hawaii.

The following participants have completed a year's work at the University of Missouri.

Lingaraj Misra	Agricultural Extension & Rural Sociology
	Orissa College of Agriculture
Meheswar Mishra	Dairy Technology
	Orissa Veterinary College
Ram Prakash	Genetics & Plant Breeding
	Bihar Agricultural College
B. N. Sahoo	Food Hygiene
	Orissa Veterinary College
J. D. Padhi	Agricultural Engineering
	Orissa College of Agriculture
D. R. Sarker	Extension Education & Farm Management
	West Bengal Agricultural College
M. S. Das	Veterinary Biological Products
	West Bengal Veterinary College

P. B. Kuppaswamy	Veterinary Pharmacology & Physiology
	Bihar Veterinary College
P. D. Das	Veterinary Pathology & Bacteriology
	Assam Veterinary College
Bhagwati P. Srivastava	Soil Science
	Bihar Agricultural College

All of these men received their Master's degree.

S. S. P. Sinha of Sabour, Bihar, is now a candidate for Doctor's degree, specializing in Entomology, as are Harihar Sinha of Sabour, in Soils, and Damodar P. Srivastava of Ranchi, in Field Crops.

Dr. Rama S. Singh is here for purposes similar to S. B. Chattapadhyay. He is observing our methods of research and will observe teaching and research methods in other institutions before he returns to India.

In addition, the following are now enrolled in the University as participants from India:

Name	India School	Subject Studying
Allauddin Ahmad	Bihar Veterinary College	Veterinary Pharm. & Therapeutics
Sasanka Barooah	Assam Agri. College	Agri. Education & Research (Horticulture)
Paresh C. Ghosh	Orissa Agri. College	Agri. Education & Research (Soil Fertility & Plant Nutrition)
Priya R. Ghose	Assam Veterinary College	Agri. Education & Research (Splanchnology, Mycology, Arthrology of Gross Anatomy)
Shakti P. Maity	West Bengal College of Agri.	Agri. Engineering
Ananta Mishra	Orissa College of Veterinary Science	Agri. Education & Research (Vet. Med. & Allied Subjects)
Jibananan Mohanty	Orissa College of Veterinary Science	Agri. Education & Research (Veterinary Anaesthesia)
Dina B. Mukherjee	West Bengal Vet. College	Agri. Education & Research (Vet. Surgery & Radiology)
Saroj K. Mukherjee	Bihar Vet. College	Veterinary Biochemistry
Nihar R. Panigrahi	Orissa Agri. College	Agri. Ed. & Research (Genetics & Plant Breeding)
G. K. Roychoudhury	Assam Veterinary College	Veterinary Clinical Medicine
Muruli D. Sarma	Assam Agri. College	Agri. Farm Organization (Farm Business Management & Crop Production Techniques)
Mohammad Sharifullah	Assam Agri. College	Entomology & Zoology (Insect Control, Esp. Biological Control)
Bhabendra N. Thakuria	Assam Veterinary College	Agri. Education & Research (Animal Physiology)
Devendra K. Singh	Ranchi Agri. College	Agri. Education & Research (Agri. Economics)
Krishna P. Singh	Ranchi Agri. College	Agri. Education & Research (Dairy & Poultry Husbandry)
Basuedo Singh	Bihar Agri. College	Agri. Education & Research (Library Science)

(Transferred to Rutgers, New Brunswick, N. J. as a candidate for a Master's degree)

Another group is being organized in India by Dr. Klemme after consulting with principals of the schools involved. This group is expected during 1960.