Labor, and especially seasonal harvest labor, has been a major problem of California agriculture since Spanish mission days. The problem has persisted and grown with the industry.

More than half of California's gross farm income of $3.7 billion comes from products that require seasonal labor. In recent years, farm employment has ranged from a low in March of about 265,000 persons to a harvest season high in September of about 450,000.

Until 1964, approximately a third of the peak-period seasonal workers were imported foreign nationals. But in the early 1960's, it became evident that the foreign labor program under Public Law 78 was nearing its end. Farmers and public decision makers faced three important questions: What were agricultural labor requirements in California? What would the farm labor requirements be for the next several years? What adjustments could agriculture make to reduce its labor needs? The governor, through the president of the University of California, called upon the Agricultural Extension Service for a study that would answer these questions. He also asked for recommendations concerning what the California farm labor policy should be.

In many states, a request of this type would be classified as a research project in which the Agricultural Extension Service would not engage. In California, however, extension and research activities are highly integrated. A team approach is nearly always used in studying and trying to solve problems facing agriculture and its associated industries. Generally, problem-solving teams include university researchers, agricultural extension workers, private researchers, growers, and others in the agricultural industry. The role of the Agricultural Extension Service varies from project to project though, in general, it is confined to applied research aspects of a problem and presentation of the results to farmers and others whose decisions put the research information to use.

Before 1962, the California Agricultural Extension Service had confined its interest in the field of agricultural labor to improving work methods and making economic studies of alternative methods.
of production and harvesting of agricultural products. The governor's request opened up areas of public policy which administrators and many extension workers were somewhat reluctant to enter. But since farm labor was the largest problem facing all agriculture in California at that time, it was decided that the requested study was an appropriate area of extension activity.

To set the project in motion, the University Dean of Agriculture and the Director of the Agricultural Extension Service brought together extension specialists and research workers from several disciplines, explained what was desired, and asked the group to develop a plan for a study that would provide answers to the questions asked.

The committee divided the study into six sections. The first dealt with review and evaluation of the existing farm labor supply and its sources. The second included review of trends in production of California farm crops and projections of future production. The third was concerned with evaluating the state of mechanization in both crop production and harvesting. The fourth sought to develop a measure of agricultural labor requirements by tasks, by crops, by month, by county, and to project these labor requirements through 1969. The fifth section dealt with adjustments California agriculture might be able to make to reduce its labor requirements. The sixth section was directed to development and evaluation of alternative solutions to the problem.

The committee's next task was to decide how the information could be gathered. One of the big problems was the obtaining of pertinent data. Complicating the collection was the number of crops grown commercially. California produces nearly 200 different agricultural crops on a commercial scale. Further, production methods and labor requirements for individual crops vary from area to area because of differences in seasons, climate, soils, and availability of water.

The best source of the data, the committee concluded, would be the county farm advisors (extension agents). The committee recommended that the basic data be assembled in the county offices of the Agricultural Extension Service and then compiled, analyzed, and written into a report by an economist at the state level.

The Dean and Director agreed with this. The project got underway, with the Director of the Agricultural Extension Service holding a number of regional meetings of county farm advisors throughout the state. The problem was explained and the cooperation of the county staffs was requested.
Data were assembled as follows: In each county the farm advisors responsible for individual crops asked the assistance of their grower committees. In some counties, as many as fifteen to twenty grower committees were involved. In some cases where the committees were inactive, the committees were either reactivated or a new committee formed.

The county farm advisors explained to their grower committees the request that had been made to the university and the need for farm labor information as a basis for policy decisions. Growers at first were reluctant to involve themselves in a program dealing with farm labor. However, the farm advisors were able to show farmers that the development of a rational farm labor policy required their assistance. Full cooperation was received.

Committees in each county began by first evaluating past trends in both employment of labor and production of crops. Second, they projected future production under two assumptions: (1) that labor was going to be available and (2), that labor would be very scarce. The third step included estimating farm labor requirements, task by task and week by week, for both seasonal and regular farm labor.

After labor requirements had been estimated, each grower committee spent several sessions in evaluating the state of mechanization in the production and harvesting of each crop. In most cases, the committees were aided by university researchers, equipment dealers, and others concerned with farm mechanization. Once the current state of mechanization in an industry had been evaluated, the committees considered possibilities for reducing labor needs.

The county farm advisors assembled data for the crops in their counties and, with the assistance of state extension specialists, put together a package of data for each county. All county packages of data were then collected in Berkeley for preparation of the state-wide report.

Several uses for the material developed. First, it provided information that was used by officials to develop a farm labor program. Second, it provided a basis for estimating the number of foreign workers that would be needed in 1965 and in 1966. But more important than this, the committees at the local level working on the farm labor problem became extremely aware of the need for growers to try to solve their labor problems. This awareness led to the organizing of a number of state committees to work with the university.

For example, a great deal of work on lettuce had been done over the years by both private and public groups. This work was done
piecemeal with no coordination. Growers and researchers knew about this but no one seemed greatly concerned. However, after the county committees completed their analysis, the need for a unified program became evident. A state-wide committee of growers, researchers—both public and private, and extension workers was formed. This committee drew together the people working on lettuce research. Problems that were being studied and others that needed study were discussed. For the first time, a truly coordinated program dealing with the planting of lettuce seed, seed germination, soil crusting, weed control, thinning, harvesting, and packing, was developed. Within less than three years, this coordinated program has solved problems the industry had struggled with for a decade. A new precision planter has been developed, a chemical has been found that will control crusting of the soil, chemical weed control has been introduced, and a mechanical harvester has been developed and is now ready for commercial use. In addition, economic studies were made on the costs and benefits of the alternative methods of performing the various tasks involved in producing, harvesting, and packing lettuce.

The same type of progress has been made with a number of other crops. In addition, these grower committees have either raised money or gone to the state legislature to obtain funds for agricultural problem solving by the University of California.

In addition to the work dealing directly with the production and harvesting of crops, work on other aspects of the farm labor problem was undertaken by the Agricultural Extension Service. For example, one of the problems facing the seasonal farm worker is the decline of employment opportunities as crops are mechanized. The university, working with the local committee in one of the counties, set up a project to find methods of lengthening the number of days of employment for seasonal workers.

In this project, which has completed its third year, two crews were organized. One crew was sponsored by a group of growers, and the second group was organized as a workers' cooperative. The growers, through their association, schedule the workers from grower to grower as labor is required. The cooperative crew, which was set up with the help of the American Friends Service Committee and a grant from the Ford Foundation, employs a field man to seek out employment. The average number of days of employment for most seasonal workers in this central California county is approximately 130 days. The organized crews, with their planned method for placement, have obtained approximately 270 days of employment per year. This has almost doubled the income of the workers.
Another project that has developed from the farm labor program deals with establishing equitable incentive wage rates. A long-time problem of California agriculture in many areas has been movement of workers from crop to crop and task to task because they felt they could make more money—for example, moving from the thinning of peaches to the harvesting of cherries. The Agricultural Extension Service and local farm committee groups have set up methods of collecting and evaluating data and determining incentive wage rates for different types of crops and different types of tasks which would return workers approximately equal wages per hour.

Still another type of project that has grown out of this farm labor program is improvement of the farm worker's skills. This program, which is carried on through the California Department of Employment, the state colleges, and the Agricultural Extension Service, trains workers for many different tasks in agriculture. The training is designed to improve the ability of workers in operating machinery, in pruning grapes and fruits, and in other tasks that require special know-how.

Programs in management training have been held for farmers and their foremen. These programs have been aimed at improving worker-grower relationships and developing broader understanding of labor management.

The advantages to the California Agricultural Extension Service of this broad farm labor program, which has been under way for about six years, can be summed up by stating that the most important aspect has been a reawakening of the Agricultural Extension Service and the College of Agriculture to the responsibility of providing leadership at the grass-roots level in solving problems facing agriculture, its people, and its associated industries.