

PLAN OF WORK FOR PROJECT NO. 10.

AGRICULTURAL ENGINEERING.

1923

I. Phases to be emphasized in 1923 -

1. Home water supply and sanitation.
2. Terracing.
3. Drainage.
4. Farm Buildings.
5. Eggs' Club Short Courses.

The bulk of the time will be spent on the above mentioned projects. Others projects in agricultural engineering will be handled only in response to a direct call for assistance from the county agents or farmers.

II. Organization.

1. When practicable the projects will be submitted thru the agent to the Farmers Union, Farm Bureau, Home Economics Clubs, or other local associations.

2. The county agent or home demonstration agent will have general supervision over all projects in his or her county. He, or she will select the demonstrators for each project in the county and make all preliminary arrangements so that the specialists' time will not be taken up with preliminaries that the agent can well do.

3. These projects will be planned as far as possible to cover as much of the state as a whole as is practical. Each demonstrator will be required to keep cost data and results of the demonstration in order that these results can be published to show the superiority of these practises over the old methods. In most cases the results of demonstrations are self evident and passers by can see the evident result of the demonstration. This is especially true in the case of drainage, terracing, and farm buildings.

III. Propaganda and Publicity.

Publicity for each of the projects will be obtained through personal visits to the farmers, addressing farmers meetings, bulletins, blue prints, circulars and personal letters, newspapers, farm journal articles, etc.

IV. Summary of Projects.

1. Home Water Supply and Sanitation: The object of this project will be to demonstrate the most economical and practical method of getting running water in the farm home, and improving the sanitation around the home.

This project will be carried on in cooperation with the Home Economics Department through the home demonstration agent. The agent will select a number of farmers in her county who are anxious to get running water in the home. The engineer from this department will then visit the county, and in company with the agent will visit the selected demonstrators and advise on the kind of system to install, the method of installation, and an estimate of the cost.

## 2. Plan of Work for Project No. 10.

2. Terracing: The object of this project will be to demonstrate the best methods of preventing the loss of soil through soil erosion or soil washing. This project will be conducted in the several Southern Piedmont counties where soil erosion is a serious problem. The agent will select a few good demonstrators, advertise the time of demonstration, and make all arrangements necessary for a good and effective demonstration. The engineer will lay off the terraces on the fields selected and construct one model terrace for each demonstration in order to teach the farmers how to do the work themselves.

### 3. Drainage:

a. Tile Drainage: The object of this project will be to demonstrate the methods of tile draining wet farm lands. A few tile demonstrations will be put on in those sections needing drainage the most. The agent will select the demonstrators and the engineer will make a survey and prepare a map showing the location of tile lines, sizes, etc., together with an estimate of the cost. When the farmer has the tile and is ready to start work, the engineer will stake off the system and instruct the farmer in the proper method of procedure.

b. Drainage of large Areas: In some counties of the state there are large areas including numerous farms which need large drainage ditches for the proper drainage of the section. In such sections where the farmers are anxious to get proper drainage this office will give the agent assistance on the organization of a drainage district. The drainage division of the U. S. Department of Agriculture will also be asked to assist with the district organization work.

4. Farm Buildings: The object of this project will be to demonstrate the efficiency of building modern farm buildings. A number of new plans will be drawn up during the year and the department will cooperate with other departments of the Extension Division in preparing plans and bulletins. For instance the Horticulture Department has requested us to prepare plans for a small apple packing house. The Animal Husbandry Department has requested us to prepare a bulletin on hog houses and equipment, and the Poultry Department has requested us to prepare a bulletin on poultry house construction.

V. About every other week in the year will be devoted to the water supply project. About six weeks in the fall of the year will be devoted to the terracing project, and about six weeks to the <sup>drainage</sup> terracing project; the balance of the time will be devoted to the farm buildings project, and other special calls for assistance along such lines of work as, water power development boys club short courses, tractor schools etc.