

But an easier and more definite program for a large increase in the meat supply involves the eradication of the cattle tick, of tuberculosis, and of hog cholera. The Federal Department of Agriculture inspects meats passing into interstate commerce. In one year it condemned three hundred thousand entire carcasses of animals and five hundred and sixty thousand parts of carcasses. Of fifty-seven million animals inspected in 1914, five hundred and thirty-three thousand were found to be infected with tuberculosis. This disease is increasing. It is estimated that hog cholera caused a loss in 1913 of over six million hogs valued at more than sixty millions of dollars, and that the cattle tick causes an annual loss of from forty to one hundred or more millions of dollars and prevents the proper development of the live-stock industry in the infected area.

The Government is vitally interested in the control and eradication of these diseases, and for the current year appropriated more than a million and a half dollars for this service and for the development of the dairy industry and animal feeding and breeding, to say nothing of the large item for meat inspection. The most significant new piece of legislation was the appropriation of a half million dollars for hog cholera, which is being used for experimental and other demonstrations in the control of this disease and for the inspection of serum and the protection of the farmer against impotent products.

The work of tick eradication is continued. It has resulted in the clearing up and freeing of 223,000 square miles, an area exceeding that of Georgia, Florida, Alabama and Mississippi combined, or as great as that of Germany or France. At the same rate, with intelligent co-operation, the remaining area, double that of Texas, or that of Germany and France combined, will be free within fifteen years.

Assisting Dairymen.

Every effective thing that may be done to stimulate the live-stock interests in general will, of necessity, react favorably upon the great industry, the dairy industry, in which you are immediately and specially concerned. The importance of this great interest the Government fully appreciates, involving as it does the handling of twenty-one millions of cows, an annual product of approximately six hundred millions of dollars in value, more than half a billion pounds of butter, half a billion pounds of condensed milk, and a third of a billion pounds of cheese. It is needless for me to tell you that dairying has made marked advance in recent years, but there is much to be done and the Government is making every effort to assist. It is studying how to reduce cost and to eliminate waste, to develop in those concerned careful business habits, the keeping of exact records and the definite knowledge each day of how their business stands. It is urging the grading of all dairy products, the elimination of waste in milk delivery, the organization of the milk supply, the extension of co-operation in buying and selling, and the extermination of disease in cows, especially of tuberculosis. Along these lines lies the hope of development and profit both to the producer and consumer.

Within the year Congress has enacted a measure of even vaster significance and greater consequence. I refer to the Smith-Lever Extension Bill, which, in my judgment, is one of the most significant educational measures ever adopted by any government. It recognizes a new class of pupils—a class composed of men and women working at their daily tasks on the farm. The Government takes the adult farmer and farm woman, as well as the farm boy and girl, as its pupils. It provides for an expenditure of over eight millions of dollars, partly by the States.

Personal Contact of Science and Farmer.

It incorporates the most efficient method of conveying information to the farmer, and through the healthful process of co-operation between the State and the nation, places the

brains of these two great agencies at his disposal, insures efficiency, and eliminates waste and friction. I yield to no man my appreciation of the value of scientific investigation and research, but I am convinced that the great task confronting us now for the betterment of agriculture is to bring to the average farmer what the experts and the best farmers know and to induce them to apply it. If we could secure this we should revolutionize agriculture; and this is the object of the Smith-Lever Bill. It aims to reach the farmer by personal contact, and above all, to bring assistance to the farm woman who has been too long neglected as a factor in the agricultural life of the nation.

But vital as are these problems of production, even more urgent are the problems of marketing and distribution. It has become clear to students of agriculture that further production in many directions waits on better distribution, and that in this field fundamental problems of justice and injustice are involved which demand solution. The time has come to conceive agriculture in all its relations, to conceive it as a unit and not to attend to merely one or a few of its phases. The Government has been quick to see these things. Urgent problems have been pressing upon it for solution, problems of marketing, of distribution, of good roads, of rural finance and of rural sanitation and health, and the Department of Agriculture has rapidly tended to become, as it should, a great Department of rural economics and of rural life.

Work of Congress.

The Congress now sitting has appropriated two hundred thousand dollars for the study of marketing, passed the Cotton Futures Act, made increased provision for the investigation and promotion of good roads, and has pushed nearly to the point of completion measures for the standardization of grain and for the supervision of its sale in interstate commerce, for the standardization of cotton and for a permissive warehouse system for the leading staple crops. The Office of Markets, although only recently created and necessarily requiring time for the consideration of its projects and especially for the securing of an efficient staff of experts, has conducted investigations in a great variety of directions, furnished much information to those seeking it; and it will at no distant day extend aid through bulletins and as rapidly as possible through demonstration.

It is investigating the proper methods of grading and standardization, packing and shipping, the marketing of special products, transportation and storage problems, city marketing and distribution, including farmers' municipal wholesale and retail market houses, the direct dealings between producers and consumers, and co-operative production and handling of products.

It is giving special attention to such details as dockage in the sale of grains, and to the methods and practices of large terminal markets in the practice of mixing. It would unduly detain you if I were to attempt even to outline the other great measures to which I have made reference, such as the Grain and Cotton Standards Acts, the Cotton Futures and the Warehouse Bills. I shall have to dismiss these measures with the intimation that their object is to do justice as between producer and consumer, to guarantee that the producer shall get a just price for the specific product which he offers for sale, and to the consumer that he shall get the specific product for which he pays his price, that normal and orderly processes shall prevail in the distribution of farm products, and that there shall be added incentive to the farmer to increase in the fullest measure not only the quantity but the quality of his product.

Good Roads.

Intimately involved in both the production and distribution of products is the matter of good roads. Good roads are prerequisite not only to economical production and distribution but also to the furtherance of the educational, social, and sanitary life of the farming dis-

tricts. The great need is for roads which shall get products from the farm to the nearest railway station and enable the farmer to haul when he can not be busy about his sowing and reaping, and to haul at a lower rate. The railway will continue for an indefinite time to be the national highway. The emphasis is needed on the community road. It is estimated that it costs twenty-three cents per ton mile to haul under existing conditions on the country road, and that this could be reduced by half if the roads were improved. The question is one partly, of course, of means or of funds, but even more largely of methods, of instrumentalities, and of administration.

The nation today is spending annually the equivalent of more than two hundred millions of dollars for roads, an enormous increase in the last decade. Much of this is directed by local supervisors and it is estimated by experts that of the amount so directed anywhere from thirty to forty per cent is, relatively speaking, wasted or misdirected. The first requisite, therefore, is for efficient expenditure and administration, and so far as the Federal government is concerned, to project it into the situation so as to safeguard the expenditure and to perfect the administration. The Office of Public Roads is at present doing everything in its power to promote the economical building of good roads, and especially to assist in the development of proper administration.

Local Administration.

The difficulties are presented mainly in the sphere of State and local administration. Less than half the States at present have an expert highway commission, and none have expert county commissioners. If direct Federal aid is to be extended it should be done only under such conditions as will guarantee a dollar's result for every dollar of expenditure.

It is clearly undesirable to discourage State and local initiative. Co-operation between the State and the Federal government is requisite. The State should be the lowest unit with which the Federal agency should deal, and the representative in every State should be an expert highway commission. An automatic check to assaults on the Federal treasury should be provided, and the requirement that each State makes available at least twice as much as is appropriated by the Federal government should be imposed. If there were the further provision that the Federal funds should be limited to construction projects and that before Federal money is made available for any projects, those projects shall have been mutually agreed upon by the Federal agency and the State Highway Commission, with clear understanding as to methods of construction, specifications, materials, and the development of a State system, great benefits might result and dangers would be reduced to a minimum. This same principle of co-operation is embodied in the Smith-Lever Extension Bill; and, in my opinion, in intelligent co-operation of this sort many of the problems which are presented by our dual form of Government will find solution.

Not Invasion of State Rights.

It is objected by some that such injection of the Federal Government in the administration, in some way, involves an invasion of State autonomy. If there is danger here, the easiest way for a State to obviate it is by not seeking Federal funds, but if people do demand Federal money they cannot easily decline to have its proper and efficient expenditure safeguarded, and surely the people of the nation have a right to the best knowledge and service of the thoughts of all their governmental jurisdiction. All these exist for the people, and all should have, if they have not, the sole and exclusive desire to serve the people. Such are the lines along which the present government is seeking to solve this vital problem.

The Government recognizes as well the broader aspects of rural life. It knows that the genius for organization which has done so much for industry in the nation can be brought to prevail in the sphere of rural life and of agriculture. Ex-

treme individualism in agriculture has had its day. There can be no question that the key to the solution of many of the problems of rural life will be found in some form of concerted action or of co-operation. Some form of organization is as inevitable as it is desirable. Without it the farmer cannot have adequate schools or social life; without it he cannot secure good roads; standardize his products or economically market them; without it he cannot have the proper health facilities or lay the credit foundations which will enable him to secure capital at more reasonable rates. The Congress has recently given concrete expression of its appreciation of these phases of rural life by placing at the disposal of the Department of Agriculture the fund for the study of co-operation, and not only as it affects marketing, but also as it affects other phases of rural activities and especially as it affects rural credits.

The Farmer's Credit.

In addition to recognizing, as the President expresses it, that the farmer "is the servant of the seasons," and that, therefore, not as a matter of discrimination but as a matter of equal justice, peculiar consideration should be had for his circumstances and of his credit needs, by providing in the Federal Reserve Act, for a longer period of maturity for farmers' loans and for loans on farm mortgages by national banks within certain limits, Congress has spent many weeks maturing a measure for the creation of land mortgage banks and the Department of Agriculture has made a special study of co-operative credit associations for the small farmer. There is every reason to hope that in the near future valuable and helpful action will be taken in these two directions.

Nothing short of a successful attempt to secure these larger results in the rural life of the nation, to organize it, to make it profitable, healthful, comfortable, and attractive, can satisfy any thoughtful and patriotic man. It is the only sure way of developing and retaining in the rural districts of the nation an adequate number of efficient and contented people.

Contented People.

That the thought and action of the nation must be along these lines is made clear by the facts I have recited and by the further fact that while the population of the nation in the last 15 years has increased 23 millions, the strictly rural districts have shown an increase of less than 6 millions. We cannot neglect the higher things to which the material minister and which if secured would render much of our other effort unnecessary.

The greatest undeveloped resources of any community is its people, and if we devoted more attention to the conservation and development of the people we should be relieved of much of our concern for the conservation and development of our natural resources.

An awakening of the mental and spiritual faculties is prerequisite to the success of any educational enterprise, and therefore along with our attempts directly to increase the production of material things, we must minister to the minds and spirits of the rural population. In short, we must see to it that the finer results and the higher things of civilization are not the peculiar possession of urban peoples,—that they do not pass by or over our struggling rural masses.

We must see to it that there is within reach of every country boy and girl an opportunity for a sound elementary and secondary school training, that the rural family be protected in its health against the ravages of insects and of disease; that the load be lifted in some measure from the struggling women of the farm, and that the wholesome social attractions of life be made more freely to abound. Any expenditure of effort or money in this direction will not be a burden but an investment, and with such protection, the farmers of this nation need not fear the competition of the world and the nation need not fear for its permanency.