# UNIVERSITY OF KENTUCKY

# **COLLEGE OF AGRICULTURE**

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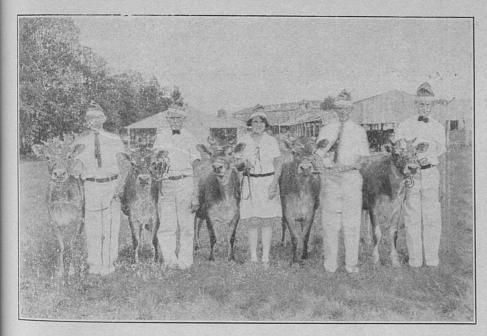
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**Extension Division** 

THOMAS P. COOPER, Dean and Director

### CIRCULAR NO. 271

### THE CORNER STONE OF PROSPERITY



 $^{\rm A}$  wonderful combination of beauty and utility. Scenes like this give hope for a bright future for Kentucky Agriculture.

Lexington, Ky.

October, 1933

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"Agriculture is today, it always has been and it always will be, the chief cornerstone of prosperity of every nation. Every nation in the world, history tells us, that has neglected its agriculture and the preservation of its soil has absolutely been wiped off the map."

—James J. Hill.

### CIRCULAR NO. 271

# The Corner Stone of Prosperity

By T. R. BRYANT

A farm signifies much more than a mere business enterprise. A farm is a place where people live and mingle the home activities with the business, thereby creating a distinct mode of life. Many of the products of the farm are processed on the premises and contribute generously to the subsistence of the farm family without reference to the usual channels of commerce. On the other hand a thoro understanding of business methods is necessary for successful farming. Farm families differ widely in their ability to make the farm provide the necessities, comforts and pleasures that should be legitimately desired.

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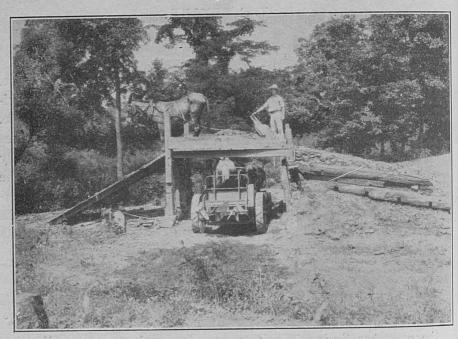
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## The Farm as a Business Enterprise

As a business enterprise a farm may have handicaps which the operator finds difficult to remedy, such as poor soil, poor roads or distance from markets. What the energetic farmer can do to overcome such handicaps and make the most of his opportunities is a matter of interest.

The condition of the land is the first consideration of the farmer. He knows there can be little if any profit in the cultivation of land that yields barely enough to pay the cost of production. Such land is put to pasture or even to forest growth. Care is taken, however, to see that the pasture is improved by proper seeding and fertilization so that it will maintain more livestock per acre. On the better land attention is given to proper fertilization and the use of lime and legumes, while all

manure is carefully saved and spread. The use of tested seeds insures more perfect stands and hence larger yields per acre. Savings are effected in labor because fewer acres are cultivated and because the labor load is more evenly distributed. In the busy season livestock use the improved pastures when the farmer is busiest and in the winter the care of these animals provides profitable winter employment during what would otherwise be



Loading marl with home-made trap-door incline. Marl spread at little or no cash outlay reduces production costs and the land improves each year.

a dull season. This system saves the farmer much of his labor costs. The better land can be improved to such extent that the reduced number of acres will soon give as large total yield as the owner formerly harvested from a much larger acreage. All products are of excellent quality and command the best prices. This farmer has something to sell every week in the year. His tobacco acreage is small but the crop is well cared for. His purebred livestock are profitable in the use of crops because they bring better prices than common stock when they are marketed. High-producing cows and hens produce milk and eggs cheaper

than do scrubs. His cheap but satisfactory poultry house was built by home labor, where hens produce eggs in winter when prices are high. The use of home-produced feed for all classes of livestock reduces feed bills to a minimum.

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#### The Farm as a Means of Subsistence

A successful farmer makes the farm feed the family. The garden is well-planned and produces a wide variety of fruits and vegetables. The surplus is canned or preserved. When hogs



Properly trimmed and properly cured pork helps the "Live-at-Home" program. Pork cut and cured properly is superior to much of that produced in the usual way.

are killed the bacon is cured carefully in the most approved manner and is real breakfast bacon, not the "salt chunks" too often found in farm smokehouses; and the hams are fit for the most discriminating palate. The specter of starvation does not approach a farmstead of this kind, even in times of depression. It goes without saying that this farmer is thrifty. He keeps account of the farm business and determines which enterprises make money and why. He makes a summary of his business at the end of each year and takes an inventory as do other business men.

#### The Farm as a Mode of Life

The children of such a farmer as the one we have been discussing are almost invariably found enrolled in 4-H Clubs. The 4-H club projects are not only of economic importance to farm boys and girls but also prove that country life is interesting and worth while. Not all of the projects they undertake are for



Beating the depression. Specimens of clothing made from flour sacks by 4-H Club girls. They first bleach the sacks, removing the printing, and then dye them, when color is desired. One large mill in Kentucky donated over 20,000 unused flour sacks for the use of 4-H Club girls.

financial profit. Home improvement, construction and use of simple conveniences, planting and beautifying the lawn and other enterprises are designed primarily to make the home a good place in which to live.

The mother in such a home is a member of the Homemakers Club. In her attendance at Homemakers meetings she learns the importance of variety and quality of foods for the well-being dis-

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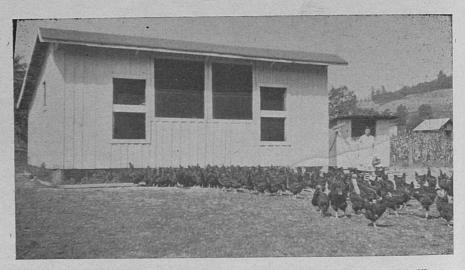
of her family. She gains new skill in matters of clothing such as making over old garments, making new ones and even in making millinery. The appearance of the farmstead as well as that of the family shows the visitor that altho the home may be small and the income not large, the family is succeeding. The life of such a family is full of interests. Their very presence makes for a better community, for wholesome living and enjoyment and has a beneficial influence on young people. From such a community the brightest young people will not try to escape to the city.

#### Cooperative Activities

The intelligent operator of this farm is generally found ready to cooperate with neighbors in plans and projects that have definite objectives, and it is equally certain that he will insist upon having the best information available before proceeding. It is fortunate that such farmers are becoming more numerous. Often there are plans which to be successful require the cooperation of many families in a given locality. In one county, for example, where the improvement of the quality of poultry and eggs was undertaken, it was necessary to increase the percentage and volume of superior poultry and eggs to a degree sufficient to induce buyers to pay other than the same low price for all the The volume of first-class products has now, thru concerted action, reached such proportions that a differential in favor of extra good eggs and chickens can be made. Such action makes possible the changes in marketing necessary to gain still further advantage. The same development has already taken place relative to marketing cream, in many localities. In each instance cooperation and intelligent planning were required. Many improved practices unknown a few years ago have been introduced by extension agents. Vaccination against hog cholera is an instance. This disease which used to devastate herds of swine over whole counties now seems to a large extent to be under control, and epidemics are rarely heard of.

A poultry industry worth \$50,000 a year to Henry County was developed thru the adoption of modern methods. From

December 1, 1931, to June 1, 1932, farmers owning accredited flocks in that county sold more than 1,000 dozens of hatching eggs weekly, for 15 cents a dozen more than the Louisville wholesale price. In the county more than 100 flocks are housed in model poultry houses, built from plans furnished by the Agricultural College. Even in the depression year of 1932, eight model laying houses and 12 brooder houses were built and two houses enlarged. There were 36 accredited or disease-free flocks in the county in 1932 and there are now 44.



A demonstration poultry flock in the mountains. This looks like an excellent antidote for poverty. Such a flock on every mountain farm would add greatly to the earnings of the people.

Nine farmers who cooperated with the county agent last year in demonstrating the value of the clean-chick program raised 92 percent of their chicks to the age of 12 weeks, at a cost of 16 cents per chick. The added income from poultry alone would pay, many times over, the salary of the county extension agent.

O. B. Shain, in the Pine Knob community, Grayson County, traded 20 bushels of seed oats to a neighbor for 100 pounds of Korean lespedeza seed. The 100 pounds of seed were sown on nine acres of land that was reclaimed from waste area during the spring of 1931. The area had previously been seeded to

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wheat and had yielded only 15 bushels on the nine acres. Eleven loads of hay, estimated to weigh eight tons, were harvested from eight of the nine acres. One acre was saved for seed and it produced 442 pounds after recleaning. Mr. Shain is one of the best hillside farmers in Kentucky and is buying abandoned fields adjoining his land which he intends to reclaim with Korean lespedeza.

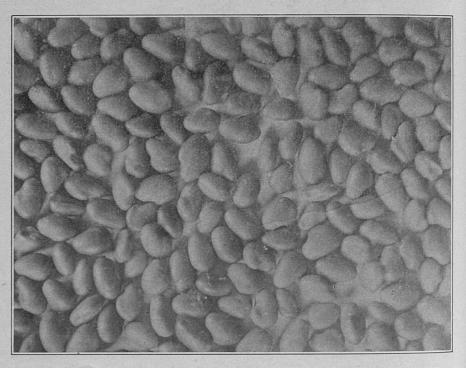


A field of Lucretia dewberries. Among the new sources of cash income suggested by the Extension service are dewberries, raspberries and strawberries.

From an investment of 20 bushels of seed oats worth at the time about \$6.00, Mr. Shain has sufficient legume hay to winter his 20 ewes and several calves. Also he has sufficient seed to sow his entire farm, except the part used for cultivated crops. The nine acres of Korean stubble were drilled in wheat for winter pasture. This farm improvement was accomplished without the use of money. A neighbor threshed the seed for one-fifth of the yield.

4-H Club work has been profitable for hundreds of farm boys and girls. In 10 years 4-H club members in Garrard County fattened 754 calves which sold for \$94,305, and in addi-

tion won \$7,998 in prizes. The Garrard County Club has won the carload grand championship eight times and the single animal grand championship five times, in the 11 years of the annual fat stock show in Louisville. This was done in competition with adult feeders. Garrard County 4-H club boys have won four trips to the International Livestock Exposition in Chicago, eight loving cups and three gold watches, in addition to cash prizes.



Clover seed, magnified. This seed sold at a price one-third higher than that illustrated on the opposite page, but it contained 99 percent pure seed.

Dairy herd improvement associations constitute one of the principal ways in which the Extension Service is helping to improve dairying. Twenty-six dairy farmers form an association in order to have their cows tested for production. Testing tells them when a cow is not worth her keep. She is sold for beef, and the feed she would have consumed is given to good, producing cows. Despite a drop in milk prices from \$2.37 per 100 pounds in 1929 to \$1.23 in 1932, D. U. Wilford, a Graves County farmer, obtained \$59,20 per cow, above the cost of feed, in 1932,

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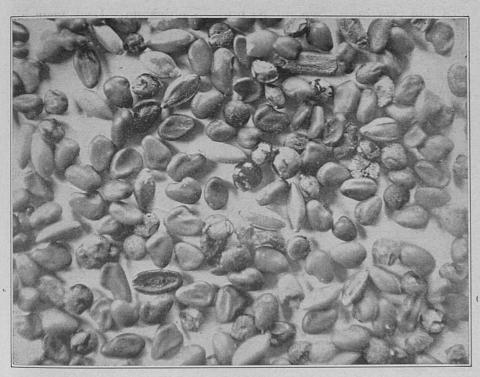
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compared with \$52.80 in 1930. This result was obtained by increased production per cow. During the four years he has been a member of a dairy herd improvement association he has increased production by 3,270 pounds of milk and 143 pounds of butterfat, per cow. Testing enabled him to know the exact production of each cow, to eliminate the unprofitable cows, and to feed the others according to production.



Clover seed, magnified. This seed was offered at a price one-fourth less than that illustrated on the opposite page but, upon examination the bushel was found to contain 12 pounds of weed seeds and 7 pounds of dirt.

Taking advantage of improved practices suggested, Charles Chestnut, a Laurel County farmer, has paid off his mortgage, built a modern house and now has money in the bank. In 1924 he bought 81 acres. At the suggestion of the county agent, he began liming the land in the spring of 1925. Corn yields have increased from 10 bushels to 50 bushels per acre, as the result of the application of lime and superphosphate and the growing of legumes. When he moved to the farm clover would not grow on

it. Last year he cut two tons of good clover hay to the acre. Tobacco yields approximately 1,100 pounds to the acre. In 1930 he grew 2,250 pounds on  $1\frac{3}{4}$  acres, which he sold for 23 cents a pound. In 1931 he grew 2,510 pounds on two acres, and received 12 cents a pound and in 1932 he produced 1,845 pounds on  $1\frac{1}{4}$  acres, which he sold for  $15\frac{1}{2}$  cents a pound.

Mr. Chestnut has acted as leader in the lime and dairy cattle projects. He owns 11 cattle, including a purebred bull. He also has two hogs, two mules and 75 chickens. Last year his nine acres of corn made 450 bushels, and his 13 acres of clover yielded two tons to the acre. A half-acre of garden produces an abundance of vegetables for the family. A half-acre of cane is grown for sorghum and there is an abundance of home-cured pork on hand at all times.

Farm accounts enable a farmer to discover the weak points in his operations. Accounts kept by an Owen County man in 1929 showed that he had produced surplus feed; that his flock of sheep was not producing enough lambs and wool; that his tobacco yields were under normal, and that his dairy cows and poultry could be improved. The poor cows were culled out and production per cow increased from 200 pounds to 320 pounds of butterfat a year. The number of eggs per hen was increased from 75 to 160 a year. He culled and improved his sheep. He had 57 head producing an average of three-fourths of a lamb and four pounds of wool each. He now has 32 head, producing an average of 1½ lambs and six pounds of wool each. Tobacco yields were increased from 800 to 1,360 pounds to the acre.

In home improvement work, members of 20 homemakers' clubs in Graves County cooperated in making ready the home of Mrs. Pryor Overby to enter in the National Better Homes Contest. The women did the necessary painting, made curtains, rugs and awnings, reworked furniture and furnishings, redecorated the house inside and out, beautified the yard, added pitcher pump and sink, and made other changes, in order that the house might be a demonstration of a well-equipped farm home. Eight hundred persons visited the house during the Better Homes Week, and many more inspected it during the

year. In competition with 30,000 other homes in the United States this home received third award and a prize of \$50.00. It is a permanent demonstration of possibilities in improving farm homes at little or no outlay of money.

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Home crafts furnish useful and profitable employment. Members of a Home-Makers Club re-finish and re-bottom chairs.

A. L. McGregor of Marshall County became interested in terracing and procured the help of the agricultural engineer of the College of Agriculture. In a letter to the Extension Division, Mr. McGregor says: "I have 60 acres terraced now on all of my hill land. I estimate the cost not to exceed \$2.00 per acre. It was all done with home labor with no cash outlay. I

would rather sell the farm than remove the terraces. Before terracing I used trash in the drains without any improvement and found it impossible to build up the fertility of certain spots by using manure and clover. Now that my farm is terraced I no longer have a dread of heavy rains and it takes less than half the time to care for the terraces that it took to do the patchwork in the gullies."

G. M. Caudill of Laurel County became interested in Extension Work thru his children, while they were 4-H club members. Three of his sons produced 75 bushels of corn to the acre.

When Mr. Caudill purchased a farm of 114 acres 13 years ago the land would not produce five bushels of corn to the acre, but the use of lime, phosphate and clover in a rotation of corn, wheat and clover, has brought the corn yield to 50 or 60 bushels. Clover yields 1½ tons of hay to the acre. Seventeen acres of corn grown by Mr. Caudill last year made 600 bushels. Six acres of tobacco produced 4,300 pounds, that brought 13½ cents a pound. Eleven acres of clover made 18 tons of hay, while 19 acres are growing Korean lespedeza.

Mr. Caudill follows the practice of using lime and phosphate, growing legumes, keeping a few cows and about 100 hens, grows tobacco for a cash crop, uses a rotation of crops, cover crops, and puts grass on the hillsides. Mr. Caudill is an excellent example of a farmer who is willing to learn and to apply the knowledge of others.

A good illustration of a small, simple cooperative enterprise that shows the possibilities of properly directed cooperation was found last year in Meade County. This was a turkey-marketing project. Farmers who participated received 15 cents a pound for 1,264 turkeys marketed for the Thanksgiving day trade. A pool was formed with the assistance of the county agent and a representative of the department of markets of the University. The best price offered previous to the formation of the pool was 13 cents a pound, which means that cooperation added \$316 to the amount received for the turkeys. The turkeys were sold to a Philadelphia concern, thru its Indiana agent. They were delivered at five loading stations in the county, where they were

graded and weighed and settlement was made with the farmers who raised them.

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Three years ago, Blanche Parker, of Hopkins County, took the 4-H Club pledge, "I pledge my Head to clearer thinking, my Heart to greater loyalty, my Hands to larger service and my Health to better living for my Club, my Community and my Country." In her clothing work she learned to be well dressed



New sources of cash income have often been suggested by the Extension Service. A field of green beans, grown for a canning factory.

at a nominal cost and to construct and care for her clothing and that of other members of the family. She scored among the highest at the county style show.

She gained great proficiency in work with foods. Despite her many home duties and club activities she neglected neither her personal appearance nor her health. At Junior Week she scored 99 plus in the health contest and was sent to the National Club Congress at Chicago to represent Kentucky in the Health Contest.

The Parker family is not bothered by the fear of hunger for Blanche made a "canning budget" for her family and when her project was completed she had provided a sufficient quantity and variety of high-quality products raised at home, to furnish wellbalanced meals for the winter.



Tobacco on land where three consecutive tobacco crops had been grown. Note that the white twist-bud left is a failure from root-rot. The No. 5 right, a variety developed at the Kentucky Experiment Station, made a good crop of high quality. Scott County.

It takes busy people to do things. Blanche takes a full part in community recreational programs and attends 4-H camps and other meetings. For sheer enjoyment and to gain additional useful information she serves as local leader for a 4-H club and is an associate member of the Utopia Club and secretary of the homemakers' club in her community. Recently she was elected county junior leader. Her present projects are advanced clothing work and room improvement. It is needless to say that

Blanche thinks 4-H Club work does much to develop country boys and girls.

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George Harris of Carroll County joined a 4-H Club when he was 10 years old and was a member continuously until he was 19. He successfully carried sheep, hog, dairy and baby beef projects, was county chairman of the baby beef project and president of his local club. Entering the county livestock judging contest, he won a place on the county team, which later placed first in the state contest. The team represented Kentucky in the non-collegiate livestock judging contest at the International in Chicago, which gave him an opportunity to attend the 4-H Club Congress. He was also a member of his county champion demonstration team which participated in the state contest at Junior Week in Lexington. When George was about 16 he was elected president of the Kentucky Association of 4-H Clubs, and represented Kentucky at the first National Club Camp in Washington.

George entered a contest for a scholarship offered by a business man and was awarded one which paid him \$200 during his first year in the Agricultural College. He was placed on the state fat stock judging team and went to Chicago to compete in the collegiate contest. In his senior year he went to the National Dairy Show in St. Louis on the dairy cattle judging team. In this contest he was declared the best judge of Jersey cattle and was awarded a \$600 scholarship for study in some college or university. Last year a fellowship for study in the Department of Agriculture at Washington was offered, open to any 4-H club member in the United States who had completed a four-year course in a standard college of agriculture. George won this fellowship and is now studying in the Department of Agriculture with all expenses paid by this fellowship fund.

The Extension service affects farming and country life in many ways. It employs the demonstration method. It is education delivered to people at home where they work and live and is of immediate benefit without neglecting the more far-reaching cultural and economic values.

Occasionally the statement is made that the employment of

county extension agents increases county taxes. If this were true it would be logical to expect the tax rate to increase when a county agent is employed and to decrease when a county agent is released.

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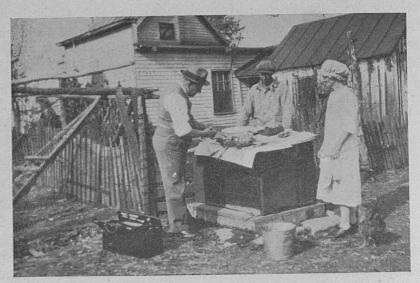
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However, a specialist in taxation who has conducted a careful study of taxation and expenditures in a number of Kentucky counties, including 22 counties that had employed county agents for part or all of the period between 1913 and 1932, said: "There have been 27 original employments of farm agents in these coun-



The Extension veterinarian performing an autopsy to determine the cause of losses in a poultry yard, in order to check them.

ties. The county tax rate in the year of originally employing the agent, increased over that of the preceding year in only nine instances, showed no change in 12 cases and declined in six. Conversely, there have been 11 releases of agents and in only one case was the tax rate in the year after the release less than in the preceding year. In six cases there was no change and in four there were increases. An interpretation of these data suggests that there is sufficient slack in the expenditures and income of most counties so that the amount appropriated for county extension agent work is not large enough to exert any appreciable induence upon county tax rates."

While it is well known that taxes in general have increased greatly in recent years, the increase appears to have been least in those counties that employed county agents regularly. To quote again from the same authority: "In those counties studied where agents have been employed for 18 years or more, the ratio of taxes increased 24 per cent less than they did in those counties that had never employed a farm agent. This lends force to the statement that county extension agents actually increase the earning capacity of the farmers they serve."

In order that public affairs may be handled to the best advantage it is important that reliable information be obtained. The use of funds allotted to the United States Department of Agriculture is a matter upon which a surprising number of people are poorly informed. The following diagram shows the percentage distribution of funds administered by the Department of Agriculture.

In times of economic depression greater effort is put forth to reduce taxation and expenses of government. Every good citizen will lend assistance but he will be careful not to impair unnecessarily the proper functioning of useful and necessary services, especially those which increase the earning capacity of the people.

In several localities in Kentucky where the county authorities have been hesitant about providing the necessary local funds to employ county extension agents, banks or other business concerns have provided the funds. Without exception these banks or concerns have expressed satisfaction with the improved conditions that the extension agents helped to bring about.

The entire state appropriation to support the extension service is approximately one-third of one cent of the state tax dollar. To eliminate or reduce such an appropriation would effect no appreciable saving to the taxpayer but would materially reduce an agency that works for his benefit. Reduction in public expenditures should be made where percentage reductions accomplish appreciable relief without destroying or crippling useful service.

Who profits from Extension Work and who loses? Farm-

ers feel that there is too wide a margin between what the consumer pays for farm products and what the farmer gets. Transportation, processing, handling and other charges make the difference. Many people make their living by dealing in goods produced by farmers. Cooperative endeavors on the part of

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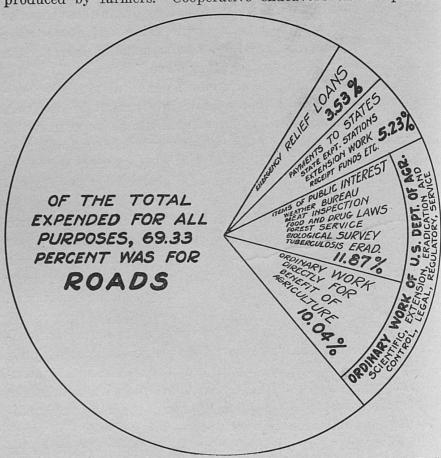


Chart showing percentage distribution of funds allotted to the U.S. Department of Agriculture in 1931. Only a small fraction of the total amount is expended for services that are of benefit solely or mainly to farmers. Most of the funds of the Department are expended for things that benefit the general public.

farmers which reduce the profits of the middle-men do not please certain of these middle-men. They would like to see farmers' cooperatives abolished so that they may proceed with their business unmolested, even in matters of speculation, and in order to accomplish their purposes they have set up a large organization on-

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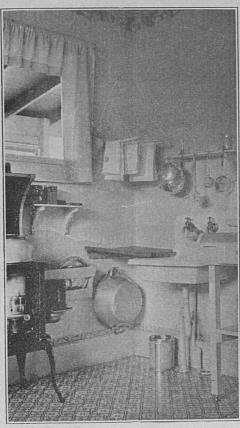
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er to ation with ample money. They seek to take advantage of the demand for economy and even try to enlist farmers in a movement to abolish the extension service for they see in the cooperative activities of farmers, a threat to their business and as the best means of stopping such cooperation they are attempting to do away with extension agents.



Conveniences in country homes reduce drudgery and brighten home life. They can be had at surprisingly small cost.

Kentucky is predominantly a rural state and the people in general are very directly dependent upon the welfare of farm people. In times of distress it is being shown that the extension service is a builder of strength for farm people and thru them for all the people.

The Extension Service is the primary agent in building rural communities and prosperous rural communities are the basis of the economic well being of the State.

