

AN OVERVIEW OF ALABAMA AGRICULTURE

by

R. D. Rouse*

Ladies and gentlemen, I'll add my word of welcome to that of the President. We are certainly delighted to have you on campus and in spite of the weather conditions, I hope your stay will be pleasant. I just have to mention one or two things about our President. He's gone, so I am at liberty to do that. He is also serving this year as President of the National Association of State Universities and Land Grant Colleges. I didn't see that on the list. We are pleased that he is taking this leadership role in this organization. I couldn't help but relate all these 13ths to two or three other 13ths. As you know, we have worked for the past year or so on some revised legislation at the national level for research and extension and teaching in agriculture, and it just happened in both the House and the Senate bills this is Title XIII. I was invited to give an analysis of these bills to the Department of Agriculture. They chose May 13 for that presentation. So, maybe the 13th is a pretty good number, and I hope your meeting this year is a great success.

You see with the President, like you've just heard, I've got problems. You've all heard the wag that the Dean's challenge is to keep the President talking to keep him from thinking and to keep the faculty from talking where they can think. My problem is that I've got a President who can talk and think both. It's not been too bad because in the last three legislatures he has been able to get \$8 million for modernization of our field research facilities around Auburn. We are just really getting under way with most of these, so you will see some facilities that are archaic and some that are not quite occupied and some that are just being occupied. But, the fact that we are in a building program is real encouraging to us. I'm afraid you will also have to make the observation that we need some of this attention to our Meats Laboratory area that Dale makes his headquarters. You will see some plans for some expansion of this. We recognize that this is one area that has not been given adequate attention. We elected our President to the Honor Society of Ag-

riculture this past year. We wanted to say thank you for all he's done for agriculture, but we also wanted to let him know the job wasn't done. We will be working on some of these other areas as we go along. We operate under the philosophy that the quality of the program depends on the quality of the people. We think the quality of the people—the quality of the faculty and staff—depends upon three major considerations. Ability to pay a competitive salary has to be a factor; ability to provide competitive facilities has to be a factor; and we think a major factor is a commitment to a program of excellence by the administration, by the faculty and staff. This is the one we work on continuously as we work on the other two.

This is such a wonderful auditorium to hold a meeting, we could not resist the opportunity of giving you something to look at rather than just listen to me talk. Our Research Information staff and Extension Information staff have pooled their abilities and put together a 15-minute slide presentation to tell you something about our program in Alabama. The projector operator is also the slide-taker and had a major part in the composition of this presentation, so Roy Robinson, if you can hear me, we're ready to roll on this presentation.

Narration for slide presentation:

From sun up to sun down and into the night, Alabama's agricultural team is hard at work.

A team made up of farmers and agri-businesses supported by Auburn University's teaching, research and extension efforts.

A team working hard to help keep us the best fed, best clothed, and best sheltered nation in the world.

Hard work is nothing new to Alabama farmers; they've been doing it since pioneer days.

Their hard work has brought about great changes in the past few decades.

Family farms are growing in size, but steadily decreasing in numbers.

The mule and the one-horse plow are gone . . . re-

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placed by powerful tractors with multi-row planting, cultivating, and fertilizing equipment.

Gone are farm flocks, laying eggs of all sizes and colors.

Now, poultry operations house thousands of birds, producing eggs of uniform size, color, and quality.

Broilers are capable of gaining a pound for every two pounds of feed they eat.

Soybean farming is no longer a few acres of Laredo or Ootootan varieties grown for hay.

Corn no longer yields just 15 bushels per acre.

Now, soybeans are bred for each region of the state and cover one and one-half million acres.

Alabama's 780,000-acre corn crop averaged 62 bushels per acre last year.

In the past, the major farm forestry practice was an annual burning of timberland to provide grazing for sheep and cattle.

Thanks to improved farm planning and cultural practices, forestry now provides nearly 122 million dollars in additional farm income.

Similar growth could be cited for hogs, cattle, fruits, nuts, vegetables, and other farm enterprises.

The changes in Alabama agriculture are good.

They reflect a steady growth of the industry to meet the food and fiber needs of our country.

Changes in Alabama's farm industry have caused changes in the Auburn University School of Agriculture.

Qualified graduates must now be trained for such diverse agricultural roles as production agriculture, research, farm credit organizations, agricultural communications, leaders to guide farm-related organizations.

The core of agricultural teaching is still crop production, livestock, dairying, and poultry.

Yet the classroom has seen as many changes as production agriculture.

Varieties, breeds, and materials come and go continuously.

New academic programs are being added.

New teaching techniques developed to utilize modern technology.

Computers are used in several teaching areas.

Electron microscopes help students understand cell structure.

Dynamometers show students the effect of soil structure on plow design.

Forestry students learn to estimate timber volumes using satellite photography.

Horticulture students learn how artificial light can help produce mums on football weekends.

All of these teaching programs are bolstered by economic studies.

Agricultural instruction at Auburn has an international flavor.

The fisheries program has attracted worldwide interest.

Students from five continents.

Enrollment in the School of Agriculture has doubled in the past ten years.

Undergraduate degrees are now offered in 19 areas, masters degrees can be earned in ten areas and Ph.D's in eight.

The instructional program in agriculture is a complex one.

Classroom teachers often are also active researchers.

This dual role benefits both teacher and student. It challenges teachers to keep up with innovations in their fields, and students get the latest research information.

This type of education is demanded.

Results prove that our efforts are successful.

Alabama agriculture is a one and one-half billion dollar business.

By developing good minds and providing sound training, the School of Agriculture will help business stay strong.

Auburn University's Agricultural Experiment Station is another vital part of Alabama's agricultural team.

Farmers of today have one thing in common with farmers of 100 years ago.

Neither have the expertise to conduct needed research, nor the time nor the money to do it.

In 1883, the Alabama Agricultural Experiment Station began research projects.

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Early work was conducted on fruits, crops, and livestock.

Today, research projects are conducted on a wide range of subjects: from radar tracking of wild turkeys; to computerized tractors.

Early research information was often hand-delivered by the researchers.

Today, a diversified set of publications, newspaper and magazine articles, and electronic media are used to get new information to the agricultural industry.

The research program has grown along with Alabama agriculture.

Main station headquarters are still at Auburn, but 20 research units now blanket the state.

The mission of the Experiment Station system is based on service and includes: Establishing and maintaining permanent and worthwhile agricultural and forest industries, improving rural life, and increasing agriculture's contribution to the good life for all Alabamians.

To meet these goals, Auburn researchers are constantly seeking information, striving to overcome present problems and to anticipate and avoid future ones.

To help them provide answers, a modernization and relocation of facilities is underway.

Some research projects are being moved to the new E. V. Smith Research Center: A 3,200-acre facility located on I-85, halfway between Auburn and Montgomery.

Field crops research; fruit, nut, and vegetable crops; dairy and beef cattle nutrition; beef cattle breeding research is to be conducted there.

The main station research facilities are also being upgraded.

Experimental solar heated swine and poultry houses are now operational.

A poultry field research lab, a model swine production research unit, a forest products lab has also been built.

As a result of this relocation, more land will be available for wildlife, fisheries, and forestry research.

Research pays off.

Economists say additional investment in corn and soybean research will return over 30 percent annually.

Dairy research will return 33 percent, and swine research 50 percent.

Researchers at Auburn are working day and night to make these investments pay off for Alabama agriculture.

Research information is of little value unless it is implemented by farmers and agri-businessmen.

This is where the third member of the team comes in—the Alabama Cooperative Extension Service.

The Extension Service has for many years shown farmers how to efficiently and productively use available information.

The Smith-Lever Act of 1914 created the Extension Service.

Its mission is to extend research technology to every county in the state, to bring back to the campus new or additional research problems, and to serve, in Alabama, as the agricultural arm of the United States Department of Agriculture.

To accomplish this mission, a highly trained staff of specialists support and strengthen staffs in each county.

Specialists work in such areas as: Ag Engineering, Agronomy, Agricultural Economics, Natural Resources, Pest Management, Animal Husbandry, Horticulture, Home Economics, 4-H Youth, and Community Resource Development.

They prepare the latest knowledge available in a form that farmers can use.

And you can bet this technology and knowledge are helping Alabama agriculture.

For example: Computers are used by extension to help farmers make management decisions, least-cost ration formulations have been developed for poultrymen, swine, and dairy producers, swine demonstration units have been established statewide, and a boar testing station and farrow-to-finish production units are getting established.

A feeder pig program was initiated in 1961.

In 1976 feeder pig sales in Alabama brought in nine million dollars.

The Extension Program is geared to help both large and small farmers—and the backyard gardener.

Nearly 100,000 copies of the extension Vegetable Gardening Handbook have been distributed.

Enterprise and whole farm demonstrations are conducted for limited resource farmers.

Extension work in agriculture includes agri-busi-

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ness: Farm-oriented enterprises accounted for 3½ billion dollars in sales last year.

Management and production technology workshops are conducted regularly to help farm co-ops and other agri-businesses.

Expertise is also provided to aid farmers in filling out complicated income tax returns.

Extension plays an important role in educating farmers on safe and efficient use of agricultural chemicals.

A cotton pest management program developed by Alabama Extension has become a nationwide model.

The techniques developed in the model are being extended to soybeans, peanuts, and pecans.

Extension helps agri-businesses, such as cotton gins, to comply with clean air standards, and livestock producers to meet pollution requirements for waste control.

Extension's efforts are also helping develop the state's rural communities.

Land use planning education programs assist com-

munity leaders in understanding the impact of state and national land use policy on agriculture.

Alabama's coastal resident community will soon feel the benefits of a program to help develop the state's fishing industry.

Extension educational and technical assistance has contributed to the development of the state's inland grain elevators and the expansion of grain facilities at the state docks at Mobile.

Extension helps producers and other clientele set goals to guide our efforts.

Impact 80 is such a program.

It sets goals for Alabama agriculture which will allow the state to meet its obligations to a growing world.

Extension, along with the School of Agriculture and the Ag Experiment Station, do much, much more for Alabama farm industry.

This service team realizes that in today's modern, technological world a system of cooperative research and education is indispensable . . . a system that promises a brighter tomorrow for all the people of Alabama.