

Lehmann Tells Plan for Farm Electrification

Rotarians Hear Results Of Rural Power Sur- vey; Extension De- pends on Use, Cost.

Rural electrification, and the problems of bringing its benefits to the farmers were discussed before the members of the Urbana Rotary club at their Luncheon Meeting Tuesday by Prof. E. W. Lehmann, head of the department of agricultural engineering in the University of Illinois.

"Farmers are interested," he said. "It is largely a question of finding sufficient, practical application with adequate use to justify it from the standpoint of cost to them and return to the power company."

A 1934 estimate places the total of electrified Illinois farms at 43,570, of which 29,330 were on power lines and 14,240 had their own unit plants. To the farmer electricity shows its value in economy, ease of operation, efficiency, better working conditions, and value in the farm home for light, refrigeration, cooking and running water.

Four Problems

The four problems of rural electrification named by Professor Lehmann were economic, the cost of line and equipment, the farmers' ability to pay, and the effect of density or number of farmers to the mile. Second is the engineering problem, to reduce cost of lines, reduce losses, and adapt power to the work of the farmer.

Third is the problem of agricultural production, of the uses of electricity; and fourth, the problem of education. "Results of the work of agricultural experiment stations bring to light possibilities for the use of electricity that heretofore had not been dreamed of by either farmer or utilities," the speaker said.

Use Is Most Important

One kilowatt hour of electricity at 5 cents will wash 66 pounds of cloths, separate 2,000 pounds of milk, milk 36 gallons of milk with an electric milking machine, pump 800 gallons of water from a shallow well, churn 72 pounds of butter, cut a ton of silage, or grind 15 bushels of corn. Electricity can also be used for incubating eggs, brooding chicks, or germinating seed corn.

"Labor and power are the biggest items of farm operating expense," Prof. Lehmann said. "When we economize on land and equipment and power, which multiply the efforts of the farm worker, the result is cheap labor and a lower standard of living."

Pointing out that "success depends on use," he briefly named the agencies interested in pushing rural electrification, at present the labor being the Rural Electrification administration, a lending agency of the federal government.