large-scale commercial family farms. Another set of programs would be needed to provide jobs for some people now on small farms and in small towns, and to provide training opportunities for those jobs with-

out aggravating existing problems of large cities.

A more difficult policy issue arises if research shows that factory farms can produce food and fiber significantly at lower cost per unit of output than the most efficient commercial family farm. Then, the American people have to decide whether there are sufficient social benefits accruing to society in general from keeping a minimum number of families on farms to justify the cost of subsidizing inefficiency in agricultural production.

Senator Nelson. Are you aware of any studies by agricultural econ-

omists on the unit cost production of any particular products?

Professor Peterson. There are studies on wheat, for example, and to other products which have been made on commercial family farms.

Senator Nelson. Would those be corporate farms?

Professor Peterson. Not on corporate farms. There have been studies of different sizes of family farms, but not the large-scale family farms against the factory farm or the nonfarm corporation engaging in agricultural production.

Senator Nelson. Has that been because the information wasn't available to the researcher or just because it hasn't been undertaken by

anvbody?

Professor Peterson. The information has not been available because such farms, until fairly recently, have been quite few in number. Another reason is that most agricultural economists come from family farms originally and are subject to the same biases in regard to family farms that other people with similar backgrounds will have, the kind of biases we heard expressed here today several times. The recency of the development, the fewness in number and lack of availability of

information has so far prevented research of this type.

Among the possible benefits—social benefits would be the slowing down or even the reversal of the farm-to-city migration and lower public costs for solving urban problems. This is a social benefit that should be weighed against the social cost of subsidizing certain minimum populations on farms or in rural areas. Other social and political benefits have long been attributed to farm life. These are difficult to quantify through empirical research, and have lost much of their significance in an urban society. We can talk about the benefits of family farm life and what it does to the human spirit, but, when only 5 percent of our population lives on farms, such benefits are certainly not available to very many people if, in fact, they do actually exist. However the values of space and clean air of the countryside should not be underestimated in planning future industrial development.

Programs to implement a policy of keeping people in rural areas or even of encouraging city-to-rural migration could range from subsistence farming—this would be the cow-sow-hen approach—to guaranteed annual incomes to financial incentives for relocation of industry and urban-rural labor movement. The latter two make more

sense today than a back-to-the-farm program.