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Private and Social Farms in Slovenia

Mr. Peter Bird Martin Institute of Current World Affairs Wheelock House 4 West Wheelock Street Hanover, New Hampshire

Dear Peter:

Rural women work hard in Slovenia. The reputation of hard-working farm women is such that Slovenian farmers are finding it increasingly difficult to find wives. Marriage brokerage agencies exist especially to help young farmers find a marriage partner willing to live and work on a farm. Not that farm life doesn't have its economic rewards. Farms in Slovenia, the northwestern republic of Yugoslavia, are relatively prosperous -- average farm income there is 35% higher then the average farm income for Yugoslavia as a whole -- and many of Slovenia's farmers have built large. new houses, well-furnished and modern, most with television. Much of the success of Slovenian farms must, however, be attributed to the contribution of farm wives. Because 80% of Slovenia's farmers work off the farm (i.e., deriving at least 20% of total family income from off-farm work.) much of the management and labor for the farm operation is provided by women.

Women's contribution is very apparent on the dairy farms I visited south of Ljubljana, the capital of Slovenia. These are private farms, owned and operated by individuals rather than by the state. One farm, located in the wooded hills overlooking the Ljubljana Valley, is run by a young couple with two children. The husband works full time as a butcher in the local cooperative while his wife handles all the feeding, milking and cleaning of 11 dairy cows, each of which produces an average of 4,800 liters of milk per year. This is a high yield compared to the average 2,200 liters per year for Slovenia as a whole. She sells the milk to their cooperative for a fixed price and, in return, is able to purchase feed for the cows from the cooperative at favorable terms. This farm uses relatively large amounts of purchased feeds, which consist mostly of corn, pelletized sugar beet by-products, and some protein concentrates. Both husband

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Another dairy farm, some 30 kilometers southwest of Ljubljana, is run by the wife of a professor of agriculture. She milks 14 cows that each produce an average of 5500 liters of milk per year, which is sold to the local cooperative for cheese production. The farm has belonged to the family for more than 300 years and now produces corn, hay and a variety of beets used for fodder. Some 10% of the farm income comes from the sale of eggs from more than 100 chickens, a rather unusual activity for this region, as is the farm's raising of sheep for wool and mutton. This farm wife produces on the farm 80% of the food that the family consumes.

These part-time farms are cost minimizers, using a minimum of purchased inputs, and a maximum amount of family labor. All the private farms in Yugoslavia are restricted to a maximum farm size of 10 hectares of cultivated land (15 hectares in mountain regions,) so any gains in farm income have to come through more intensive production rather than expanding in size. That is, the only option available for the farms to increase income is to produce more milk per cow and more corn per hectare by using labor, especially family labor, more intensively.

Full-time private farmers also try to minimize costs. but don't have to rely as much on other family members for labor. They too are limited by the 10 hectare size limit. but are able to develop a more diversified set of activities to increase their incomes. Additional income-producing activities are especially important for dairy farms, since Slovenia's Institute of Agriculture estimates that a farmer would need about 20 milking cows for complete income subsistence from the farm. Twenty cows are far more cows than the vast majority of Slovenian dairy farmers have. So if a farmer does not work part time in the town, he must find ways to generate income additional to that provided by his cows. Particularly notable are the forestry and woodworking operations. (A private farm is allowed a limit of sixteen hectares of land in forest in addition to 10 hectares of cultivated land.) One of the farmers I met, for example, with only 7-8 dairy cows but with some land in forest, derives a considerable portion of his income from the sale of wood to his forestry cooperative and judging from the thicket of antlers and bear skins on his farm house walls, from hunting. Another farm, and one of the most progressive I visited, has prospered by expanding into the fattening of beef cattle, into custom land preparation for neighboring farms, and has even started to grow a little wheat.

But except for this one very progressive farmer, who continually pesters Slovenia's agricultural extension agents for the latest in farming techniques (even, when I was there, for a solar heating system to dry hay,) I thought the level of technical innovation and experimentation with new animal breeds to be only moderate. Host dairy farms are still using the traditional Slovenian brown-gray breed-- only occasionally are herds improved with higher-producing Holsteins or with Simmental crosses. The advantages of the free-style barns for milk cows are recognized, but I saw only one farmer who had adopted the system for his new barn.

The small size, low technologies and diversified activities of the private farms are in sharp contrast to the socially-owned farms, which are highly specialized, largescale production units. Although 85% of Slovenia's farms are private. the socially-owned estates are important in total agricultural production. For example, they produce 10% of Slovenia's milk with only a little over 3% of the dairy cows. Yields up to 6,000 liters of milk per cow, per year are common. By using sophisticated production technologies, the socially-owned farms have been able to obtain high output with relatively little labor. One very impressive social farm I saw milked 250 cows and farmed 200 hectares of corn and hay used as feed for the cows, using a total of only 20 full-time workers, including three managers. Their Holstein-Friesian stock had been imported from the U.S. and Israel and their milking and manure-handling facilities were fully automated.

Still, size has its problems. The volume of manure available is greater than the farm can effectively use on its own 200 hectares, so proper disposal is a constant concern. Labor problems also exist. It's difficult to hire Slovenes to work on the farms and to work with animals-workers for the large social farms have to be imported from other regions of Yugoslavia. Most are Bosnians who have come up from the south to work for higher wages. But during harvesting season when longer days are needed, it's hard to induce these workers to work longer hours. With average salaries of 20,000 dinars per month (about \$164 per month at the current U.S./dinar exchange rate, a salary which compares favorably to salaries in industry,) the social farm workers do not feel a pressing need to work longer or harder.

The most serious problem of the very large-scale farms in Slovenia is that they've been inserted into the landscape without always considering how they fit economically and ecologically. The very large farms cannot, like the small private farms. fulfill most of their own feed requirements. Feedstuff supply is a particular weakness of the factorytype livestock breeding operations of Emona, the largest agri-business in Slovenia. (Emona is a combination of more than 50 production, marketing, retail and services businesses. many of which are farms. Each individual business, or more exactly, labor association, is managed by a council of workers. Emona itself is then managed by representatives from these councils.)

Emona's largest pig farm is located just on the outskirts of Ljubljana. This is a very highly technologically sophisticated farm, competitive with other pig-breeding facilities around the world and Emona is able to export its design to developing countries and to other countries in eastern Europe. The modular design of the farm makes it possible to cut labor requirements to one-half and permits the production of high-quality animals for slaughter. But with 85,000 pigs, getting enough corn and soybeans for feed is a problem. Emona gets most of the 24,000 or so tons of the corn it needs from private farms in the Voyvodina. the grain-growing region of northeastern Yugoslavia, but soybeans have to be imported and in some years, even the corn supply is uncertain. This problem is not unique to Emona's Yugoslavian farm. Nigeria, for example, contracted for a 150,000 pig breeding facility from Emona, but had to post-pone its building plans when it realized that the cost of importing the feed for so many animals would be prohibitive. Emona also has not solved the manure disposal problems on its pig farm. Currently the manure is simply being dumped in the river nearby.

Large-scale and socially-owned farms are, nevertheless, an important development priority in Yugoslavia. Every new Federal five-year plan calls for the expansion of the sociallyowned estates. Such expansion is the only way Yugoslavia can produce more food with a decreasing supply of farm labor. During the past 30 years, the number of people moving out of Yugoslavian agriculture and into industry or some other nonfarm employment has regularly exceeded the natural population growth in agriculture. From 1971-78 the agricultural popula-tion fell from 38.2% to around 30% of the country's total population. This means that there are fewer farmers and fewerlaborers on the farm to produce food. If farm output is to continue to increase, farms of sufficiently large scale, perhaps under social ownership, are needed to obtain a higher food output with fewer labor inputs.

Sincerely, Jana L. Hall Lana L. Hall

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