

INSTITUTE OF CURRENT WORLD AFFAIRS

LLH-18

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Rousse, Bulgaria

September 30, 1985

Fiddling with Bulgaria's  
Agriculture

Mr Peter Martin  
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Wheelock House  
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Dear Peter:

One of the distinctive features of Bulgarian agriculture has been continual experimentation with larger and larger farming enterprises. State planners weren't content with the results of the farm collectivization drive that began in 1958 and ended in 1969. Between 1969 and 1975 they carried out a further concentration, eliminating the 900 collective and state farms and reorganizing them into much larger "Agro-Industrial Complexes". By 1976 there were only 146 of these farming Complexes for the entire country, each with an average of 24,300 hectares of arable land. In addition to crops a Complex would typically have about 8-10,000 cattle, perhaps 40,000 pigs, 15-20,000 sheep, and a couple of hundred thousand poultry.

At the same time outside these Complexes they established three industrial-type fattening organizations for pigs and poultry. For example, Rodopa, one of the two pig-fattening organizations, produced in 1980 one-quarter of Bulgaria's pork with 18 individual farms under its management, each farm producing about 31,000 pigs per year.

Each of the farming Complexes had an upper and middle level of management, plus as many as 20 or 30 "brigades", which were the actual production units, each brigade composed perhaps of 30-100 workers. These brigades were specialized by type of production, with livestock and fodder production handled by separate brigades. Such extreme specialization and concentration has caused some of the same problems in Bulgaria that it has in other socialist countries where it's been tried. It works all right in crop production, particularly for grain, but not for livestock, which needs to be closely integrated with fodder production.

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Raising animals efficiently requires that the right type and right quantity of feed be provided at the right time and this became increasingly difficult to do on Bulgaria's specialized farms. Indeed, in Bulgaria's farming Complexes, transporting feed from the producers to the users has become a serious problem, not only because of the distance between brigades, but also because of lack of communication and coordination between them. The problems with meat production are compounded since specialization has taken place not only within each Complex, but also between regions of the country, with the state livestock farms like Rodopa's located outside the grain-growing areas. Transportation is thus a major bottleneck to efficient livestock production and raising the level of meat output and consumption.

Partly because of coordination and transportation problems, particularly in the mountain regions where large scale doesn't make much sense, Bulgaria has embarked on a modest program of deconcentration. The number of Complexes has now grown to 282, with an average size of 17,100 hectares, the middle level of management has been eliminated, and some additional responsibility has been given to the lower levels, the brigades.

The most important change in the livestock sector has been the trend toward integrating fodder production with livestock in a single brigade, in order to improve coordination. I was told that this was an idea they imported from the Soviet Union, and that about 40 percent of livestock brigades are now of this form. The idea is not only to reduce transportation and coordination difficulties, but to increase productivity by rotating tasks so that each worker not only drives a tractor but also milks cows-- not a new idea on the American farm, but apparently a new one for socialist farms.

Another innovation that seems newer to them than it does to us is encouraging and stimulating private sector production, particularly for livestock. The system seems to work about the same here as it does in Hungary, with individuals receiving young animals, especially pigs, fattening them and selling them back on contract to the socialized sector. In this way the private sector has come to provide 27 % of the meat and eggs marketed by the socialized sector, and 12 % of the milk.

Although sales of privately produced meat to the socialized sector are almost as great in Bulgaria as in Hungary, I found that top officials were remarkably reluctant to admit it, or to downplay in any way the importance and successes of state agriculture. For example, one key research director

in Sofia told me that brigade members were not allowed to raise animals under contract. But when I raised this issue with managers of a Complex I visited in northern Bulgaria, they said this is a normal activity for people in the brigades. Each member in that Complex also gets a certain amount of fodder for his own use, equivalent to what's produced on .4 hectares, and this is used to produce for home consumption as well. So integrating private and socialized agriculture may not be officially stressed, but it's one of the main ways that Bulgaria gets its meat supply.

It's hard to understand what these organizational changes have meant practically until you actually see a farm, however. It took a long time for me to get the official permission needed to visit any livestock facilities, in part for animal health reasons and in part because they seem reluctant to exhibit the technical level of their production. Since I passed some of the time, while waiting for an official visit to be arranged, in driving around the countryside looking at farms, I had a pretty good idea what to expect. But what I was shown officially looked quite different from what I'd seen on my own-- one part of the Complex they brought me to was the neatest and cleanest pig farm I'd ever seen, producing 13,000 pigs in freshly painted barns surrounded by well-manicured lawns and neatly-trimmed flower beds blooming with chrysanthemums and roses. This farm was obviously used for show, e.g., they said they were able to produce one kilo of pork with only 4.8 kilos of feed, whereas the national average is 5.5 kilos.

Even though what they showed me wasn't really all that typical, I was able to get a pretty good idea of how one of their Agro-Complexes is really structured. That particular Complex encompasses 12,200 hectares covering 7 villages. It has 13 brigades, with a combined brigade membership of 1,700 workers, plus an administration and technical staff of 200. Nine of the brigades are attached to a particular village, and perform a variety of activities in the farm unit located in that village, including producing feed and raising animals. Two brigades, the pig farm I visited and an orchard, are highly specialized and located outside villages, and there are two more brigades that handle machinery and construction.

It was interesting for me to see that after all the organizational changes in Bulgarian agriculture, the basic producing unit, the brigade, is still attached to the village where the old collective farm used to be, with probably the same people working in the brigade as used to be in the collective farm. Judging from what I saw around the countryside, they're probably using the same old collective farm buildings, too.

The main additions seem to have been some new specialized units like pig-fattening or vineyards, and new headquarters buildings for the Complex administrators.

Certainly the organizational changes haven't solved all the problems of labor productivity in livestock. The dairy farm I visited had a ratio of 8 cows per worker, higher than I found in Hungary and Yugoslavia. It's not too surprising to find low labor productivity in Bulgarian dairy farms though, because only 30 % of them are mechanized. What is surprising is that Bulgaria has been investing heavily in a breed improvement program, importing high-yielding Holstein dairy stock from the U.S. and Canada. This has helped increase milk production, but they haven't capitalized on one of the main advantages of Holsteins, which is their suitability for machine milking. Bulgaria has made plans to mechanize and modernize, not only in dairy, but in all areas of agriculture, but this phase is moving slowly.

It's moving slowly because Bulgaria's ambition is to become an industrial rather than an agricultural country. It wants to be known as an exporter of machines and manufactures, rather than milk, tomatoes or peppers, so it emphasizes agriculture only to the extent needed to supply industry with raw materials. The numerous organizational changes that Bulgarian agricultural policy makers have made have been oriented largely towards increasing control by planners--it's easier to control a couple of hundred specialized complexes than 900 diversified collectives and state farms. These changes have probably succeeded in consolidating the control of central authorities, and certainly Bulgaria has succeeded in increasing its total agricultural output. But as long as the authorities are content only to fiddle with the organization of agriculture, looking for low-cost, quick-fix solutions for long-term agricultural improvement, efficiency and labor productivity will continue to be serious problems.

Sincerely,



Lana L. Hall