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Background

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1. In discussing the status and productivity of Bulgarian agriculture one should consider the basic fact that in agricultural economy this country is perhaps one of the most overpopulated in all of Europe, if not the world. For example, one square kilometer of cultivated soil in Bulgaria employed 97 persons. For similar activities the following are submitted in order to provide a comparison:

A.	Hungary employs	72	persons	per one square kilometer of cultivated soil
B.	Italy "	90	"	ditto
C.	Germany "	52	"	ditto
D.	France "	48	"	ditto
E.	UK "	30	"	ditto
F.	US "	17	"	ditto

In other words, for each person engaged in agriculture in Bulgaria, available statistics disclose that he is allotted 152 Ares /3.756 acres/ while in other countries the following prevails:

A.	In Rumania	a	person	similarly	engaged	is	allotted	213 Ares
B.	In Italy	"	"	"	"	"	"	258 "
C.	In Germany	"	"	"	"	"	"	352 "
D.	In France	"	"	"	"	"	"	450 "
E.	In UK	"	"	"	"	"	"	1224 "
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2. Another factor which I deem extremely important in view of the present attempts of the Communist Government of Bulgaria to engage in industrial endeavor is the following: ILLEGIB

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A. It was generally known throughout agrarian circles in Bulgaria prior to 1945 that 68 percent of the total population was engaged in agricultural work. Numerous surveys had been conducted in prior years. I recall that [redacted] in conjunction with scientists from the US, made several surveys in order to ascertain what proportion of the Bulgarian population should be devoted exclusively to agricultural work. [redacted] re[redacted]clusion that 28 percent of the Bulgarians engaged in [redacted]g were actually in such stages of employment that the[redacted] only as surplus labor. In other words, 28 percent of [redacted]pulation were unable to provide an adequate living or an adequate income for themselves. We realized that new industries would eventually have to be established whereby this surplus labor could be diverted into gainful and productive employment.

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B. Bulgarian agriculture up to 1945 provided produce far beyond the needs of the nation. Consequently, an emphasis was placed upon export. The income derived from the export of raw agricultural produce was never sufficient to satisfy the basic financial needs of the farming element.

C. Realizing that the economy of Bulgaria was intricately intermeshed with her agricultural yield, we concentrated on the eventual establishment of industries in which raw agricultural materials could be manufactured or developed into either semi-finished or finished products. The ultimate end sought was the creation of new sources of national income.

3. To me, the above has an important connotation for when the Soviet economy and Communism prevailed in Bulgaria, a potential source of labor which they could utilize in their new forms of planning already existed. The previous 28 percent (or surplus laboring element) was ideally suited to the propagandizing schemes of the 'New Order'. In other words, this segment of the population realized full well that under the old Bulgarian economy their future was very dim. Subsequently (in my estimation) this group was ready and willing to accept economic reform which would provide for them a new labor outlet. It is my understanding that the Soviets, that is the Bulgarian Communists, are now employing these peoples in the development of heavy industry -- they are definitely no longer in agricultural fields of work.

Major Food Crops

4. Major food crops produced for domestic consumption in Bulgaria prior to World War II and up to 1945 were wheat, corn and rye. In my estimation these three were the most important of all food crops. We did grow considerable amounts of oats which we fed to our own livestock. Prior to World War II we shipped large quantities of corn and wheat to Western Europe. After these markets were closed, we proved to be one of Germany's largest producers or providers.

5. Exceptionally large quantities of tomatoes, tomato products, strawberries and fruits were grown. The fruit yield was always good and as a consequence excess yields were turned into various varieties of marmalades and jellies.

Income Crops

6. The largest income crop in Bulgaria, perhaps number one in providing national income, was tobacco. Corn may have been a close second. Attar of roses, particularly from Slivna Gora, was exported to various parts of the world, but did not provide as large an income as was generally attributed to this item. Surprisingly, Bulgaria, up to 1945, was an exceptionally large producer of eggs. In fact, at one time one of Bulgaria's Ministers of

Agriculture stated that Bulgarian agricultural economy should not ignore the fact that egg production and egg sales were almost as lucrative as the two aforementioned products. 50X1

7. Bulgarian agricultural production under the New State [the Communist State] has de-emphasized the growth of the previously mentioned crops and vegetables which in prior years had been sold to Western Europe. It is my thought that the curtailment of such production was done under the direction of the Soviet Government because some of the perishable yield of Bulgaria could not be exported to the Soviet Union proper. Consequently, the agricultural industry of Bulgaria is now [1954] devoted to fulfilling the desires and needs of the USSR. ILLEGIB

Plant Diseases

8. A constant source of harassment to agricultural producers was rust. This infection affected the cereals listed above. Its primary victim was corn. Rust, of course, is essentially dependent on the climate of a country for its vitality and development. I can recall that it was particularly bothersome during the periods of humidity which most usually began in the latter part of April and the early part of May. In the event that humidity did not prevail during those months, we had no difficulty in combatting this infection.

9. Another disease which was prevalent up to 1945, a disease which attacked the spores and seeds of kernels of corn turning them black, was the German "Brent". (I do not recall the Bulgarian name for this disease.) Brent and rust were the two most formidable. In order to cope with these diseases, Bulgarian experimental stations undertook several measures. First they attempted to develop a new variety of corn which would prove resistant to these afflictions and secondly, they planned to develop corn which would yield in a shorter growing period. I understand that the Bolsheviks are continuing these experiments and have heard that they have been successful in carrying them out. ILLEGIB

Experimental Stations

10. Experimental stations are located throughout Bulgaria. I would estimate that there are from 30 to 40 spread throughout the country. Three of the larger experimental stations are located at Sofia, Sadovo and at Lukovit. Experimental stations have been established in the areas of greatest production. Each station, of course, specializes in developing technical skill parallel to the types of crops produced in given areas.

Plant Pests

11. I can recall two plant pests which were prevalent in Bulgaria. One of these is what we Bulgarians called the Hobotnitza [grasshopper]. Another animal pest was the well-known Colorado bug. This bug was at no time out of control in the country -- we were always successful in controlling it. I understand that under the Soviet system almost all walks of life have been mobilized to combat the Colorado bug. City dwellers, agricultural workers and students engaged in collecting such insects and bugs and also in assisting agriculturists generally. In my estimation, such activity is the result of Soviet successes in alerting the population of Bulgaria to so-called biological warfare conducted by the "Western imperialists".

12. The only disease or infection which I know that might be considered as a constant threat is the battle with rust. The severity of rust, as previously mentioned, is in direct proportion to the periods of humidity within Bulgaria. In other words, if during the last three weeks prior to harvest of corn there is no humidity, rust can be controlled. If, on the other hand, there is a period of humidity during these last three weeks, the struggle to save corn is terrific.

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13. One of the most developed services rendered by the Bulgarian State of today /1954/ is its protection against plant diseases and insects. One would naturally presume that the Ministry of Agriculture would be the chief organization concerned with plant protection. However, under the New State, all organizations and services which fall under its administration are called upon to render service against plant infection and disease -- even the mayors of the towns and the leaders of the villages are held responsible for such protection. ILLEGIB

14. The Ministry of Agriculture, provincial agriculturists and Bulgarian experimental stations form a nationwide network which descends from the highest level to the village unit. By virtue of such organization the detection of any new diseases or infection reaches from the highest level to the lowest very rapidly. Organizationally Bulgaria is divided into districts, subdistricts, and village units. In each of these categories are located public "agronomes" /agricultural specialists whose mission is to provide agricultural services whenever needed/. I do not know what such people are called under the new set-up, but their work still continues. A similar structure which deals entirely with animal infection and one which is very well developed falls under the cognizance of the veterinary departments which take their orders from the Ministry of Agriculture. ILLEGIB

Treatment and Quarantine

15. With reference to the existence of preparations such as fungicides and insecticides, there is no doubt in my mind that they currently /1954/ exist in sufficient quantity within the country. It must be remembered that Bulgarian agriculture for many years was under the influence and the assistance of the Western world, particularly the US. A number of Bulgarian agricultural scientists who profited from US scholarship funds are currently engaged in teaching and directing agriculture at the University of Sofia. I know definitely that up until 1945 there were existent in Sofia and the border towns, particularly adjacent to Turkey, a number of well equipped bacteriological stations. Actually the bacteriological stations which were located on the Turkish border served a twofold purpose. First, they inspected and controlled produce and products coming into the Balkans from Turkey which in turn reshipped products which she (Turkey) had received from Asia. Actually, these stations served as a standard bearer for other countries of Western Europe for whenever personnel at these stations evidenced a disease or an infestation, they immediately dispatched such information to the neighboring countries, 50X1 50X1

16. Quarantine measures always functioned well in Bulgaria. In fact, we were most successful in preventing the spread of Turkish or Asian animal pests and crop infections to other parts of Europe. However, when Soviet forces occupied the Balkans, particularly in 1945 and 1946, they introduced diseases which were not common to Bulgaria. As an example, they introduced a new variety of hoof-and-mouth disease which we had never witnessed before. They also introduced Siberian venereal diseases which were resistant to modern antibiotics such as sulfa and penicillin.

Plant Pathologists

17. All the experimental stations in Bulgaria were staffed with plant pathologists who had been trained at the Central Institute of the University of Sofia. Until 1945 combat against plant diseases was placed under the direction and control of Prof Dimiter Atanosoff. This professor had established an excellent reputation in Europe in the field of plant pathology. In fact, he was considered an expert. He introduced US methods garnered from his own education while a student in the US and also trained all Bulgarian pathologists in the US pattern. I would say that plant pathology under Atanosoff was highly developed, so developed, in fact, that this field of science was as effective as in any other European country. Professor Atanosoff must have at least 50 first class specialists today /1954/ whom he personally has trained for the past twenty years -- all engaged in plant pathology.

18. In reading today's Bulgarian newspapers and scientific journals, I notice that there has been a transition in Bulgarian thought concerning agriculture. Today [1954] I notice constant mention of means employed in combatting diseases. Such material even appears in the comics. 50X1

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Entomology

19. [redacted] rate workers are available on a large scale. As I previously mentioned, special brigades are engaged to manually remove insects from plant life (at that stage prior to mobility of plant bugs). In addition to manual destruction of bugs, chemical means are employed in combatting insects and other forms of plant pests. (I cannot recall the names of chemical preparations used, but I am positive that the common US types are well known because of US influence.) I cannot recall the use of herbicides in controlling weeds in cereal growth since World War II, but I am positive that none were employed up to 1945.

Genetics and Selection

20. Prior to Soviet influence, genetics and selection in both plant and animal breeding were among the most developed fields in Bulgarian agricultural science and animal husbandry -- thanks to the support of various US research foundations. This situation no longer prevails for Bulgarian professional men, both in veterinary and agricultural fields, issued a declaration in 1949 by which they renounced the Western philosophy of genetics. Further, they apologized for having followed the criminal practices of the Nazis and the Westerners. After this acknowledgment of guilt they overtly aligned themselves with Michurinism, acknowledging that this was the valid philosophy underlying genetics and selection. Today [1954] Michurinism is taught not only on the higher educational plane, but it reaches down into the elementary schools, becoming more intense as the student enters the middle schools [high schools].

Bulgarian Students

21. The educational requirements and standards of the University of Sofia up to 1945, particularly in the department of agricultural science, were very high. Only 70 top scholars from all of Bulgaria were admitted per year. These 70 had manifested their scholastic ability in middle schools prior to acceptance by the faculty of the department of agriculture. Consequently, we had very few failures with the result that each year we graduated approximately 70 top-flight agriculture specialists. With the inception of the New Bulgarian State this situation has ridiculously retrogressed for under the new system hundreds upon hundreds of students with relatively no background have been permitted to enter. I believe that in either 1952 or 1953 the enrollment in the agricultural college was approximately 1500 students. A number of Soviet professors were admitted to the faculty and, as I understand, most of them were not qualified people. The result is obvious. The level of instruction and caliber of students has been woefully weakened with the result that many non-qualified people are working in the field. The Soviets, of course, in creating this situation have not deviated from their well-known adage: "Quantity makes quality".

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