
**On
N. Khrushchov,
Fertiliser,
and the Future of
Soviet Agriculture**

by

A. H. EVANS

Published by
The Committee to defeat Revisionism
for Communist Unity

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This pamphlet deals with the present crisis in Soviet agriculture, examines its causes, and advances methods by which it could be overcome

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FOREWORD

At last the chickens are coming home to roost. Khrushchov's agricultural plan is being shown up for what it is: a plan of almost criminal stupidity, cunningly foisted upon him by unknown individuals. The question arises: from what quarter were ideas suggested to Khrushchov? Once we pose such a question another inevitably leaps to the mind: who would benefit by a gigantic agricultural failure in the Soviet Union? But before we develop this matter it might be well to glance at Stalin's views on agriculture after all, he headed the Soviet State for almost 30 years.

Basically, Stalin's views were clear: to improve traditional farming methods through adopting modern lea-farming to Soviet conditions. Coupled to this Stalin introduced the shelter-belt plan, a plan to modify the dry steppe-lands and the lower Volga area through tree-planting. There was nothing basically unusual about planting wind-breaks, they are common sight almost everywhere. Coupled to this traditional method of modifying climate, making it more amenable to man's needs, went a plan for the development of the hot desert-lands of S. Kazakstan, Usbekistan, Tadjikistan, Azerbaijan and Armenia.

Dams were constructed for power and irrigation, canals channelled and priority given over to certain indispensable crops, particularly cotton and the Kol Sagy. Within a short time this policy of concentrating on industrial crops had freed the Soviet Union from having to rely on capitalist importation—which could be cut off in time of war—of cotton, and gave the Soviet Union a natural rubber base.

Finally, it should never be forgotten that under Stalin's leadership the Soviet Union established a firm industrial base; without such a base modern agriculture becomes a dream—witness India.

Khrushchov broke with the Stalin agricultural line, he shifted emphasis away from the hot desert lands and away from lea-farming. First, he fought for the opening up of the virgin lands—and this part of his agricultural policy was fought out within the higher organs of the Soviet State. But the second half of his policy, that to create a maize-cum-livestock centre in the Ukraine and parts of Russia proper where did that come from? In the pamphlet the reader will find a minute examination of the requirements of maize. Suffice to point out here that natural conditions in most of the Soviet Union, including the Ukraine, had traditionally made maize a crop of secondary importance compared with wheat, and other grains such as barley, oats and rye.

In 1957, Khrushchov visited the U.S.A. for his Camp David talks, he also made a trip to Iowa, the foremost cornbelt State, where maize grows and ripens to perfection. All signs point to the fact that it was there, in Iowa, that Khrushchov became enthralled with the idea of transforming the Ukraine into another Iowa, encouraged, with little shadow of doubt, by his hosts, wealthy farmers.

As we recall, Khrushchov visited the homestead of Mr. Garst, and Mr. Garst made a number of visits to the Soviet Union. Mr.

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Garst knows the requirements of maize like the palm of his hand; he gave advice and the advice was wrong and infinitely harmful to the Soviet Union. Khrushchov took the advice, revelling in the sense of his own omnipotence. Khrushchov has openly proclaimed his friendship with this wealthy farmer, as he proclaimed his friendship and admiration for the representative of U.S. imperialism, the late Kennedy. And it is on the record that Khrushchov over-rode the opinion of Soviet agronomists and collective farmers. Khrushchov has much to pay for.

A few words in conclusion on the contents of this pamphlet. The Open Letter to the Albanian Party of Labour was written in October 1962. The letters to Jack Dunman contain a particularised examination of certain aspects of general agriculture as well as a critical evaluation of Khrushchov's own agricultural line. Since this analysis has been substantiated by history, the Committee to Defeat Revisionism, for Communist Unity thought their re-issue worthwhile.

The opening essay brings this agricultural record up to date, and brings into being the author's own views regarding future development in certain fields of Soviet agriculture.

ON THE CRISES IN SOVIET AGRICULTURE

1956 saw a sharp turn in the agricultural policy of the Soviet Union. In that year, N. Khrushchov defeated internal opposition to his main political line, and his plan to bring the virgin and long fallow lands under the plough was received with great enthusiasm by the Soviet working class and a part of the intelligensia. It was watched with keen interest by people outside the Soviet Union. This impetuous attack on tens of millions of acres of land was a colossal undertaking without historical precedent. For example, the American West had taken at least a generation to open up land of comparative size, which by 1963 had reached 100 million acres, three times the amount of total agricultural land in England, Scotland and Wales.

An undertaking on this gigantic scale would have been impossible unless the Soviet Union had an industrial base capable of turning out the necessary instruments of production, tractors, reapers, combines etc. It was a fact that the Soviet Union did possess such a base, particularly insofar as heavy industry was concerned. Already, by 1956, the Soviet Union had advanced to second place in world production of heavy industry, only the U.S.A. could boast of greater output.

In addition to possessing this powerful industrial base the Soviet Union had reserves of cadres capable of at least initiating on a large scale the opening attack on the virgin lands. Within a two year period some 40 million acres had been brought under the plough, mostly in N. Kasakstan. Enthusiasm was high and volunteers poured into the virgin lands from the cities, many, of course, with little practical experience of farming or of machinery.

What opposition there was to the plan is not clear, all we can say is that there was opposition, expressed by silence at meetings at which Khrushchov spoke. Khrushchov bitterly attacked Williams—the classical Russian exponent of lea-farming, particularly of grass culture. He claimed that Williams's ideas departed from the best European agriculture, that it led to great tracks of land being kept in unprofitable grass and in long fallow which became weed infested.

Coupled to the opening up of the virgin lands went a drive to install maize as the primary grain in the Ukraine and other parts of the Soviet Union. The Ukraine, long the wheat granary of old Russia and of the Soviet Union, became a centre of secondary importance as far as wheat and other grain crops, such as barley, oats and rye, were concerned. Maize, coupled with a huge increase in sugar-beet production—which Khrushchov preferred to other root crops such as the Swede (rutubaga) fodder-beet and mangold—drove wheat and the other grains off millions of acres where they had formerly been the main staple.

Without doubt, in theory, on paper, a good case could be made out for the opening up of the virgin lands, and for the drive for maize and sugar-beet production. It looked so reasonable, and to an exuberant man such as N. Khrushchov the plans must have appeared extremely enticing. The virgin lands would be given over to wheat production, the Ukraine and parts of Russia proper would concentrate on maize and sugar-beet, which in turn would be the base for a rapidly expanding livestock industry. As we recall, Khrushchov asserted with the utmost confidence his belief that by 1961 the Soviet Union would have caught up with the U.S.A. in meat per capita production; he believed that the Soviet Union was on the eve of super-abundance as far as food was concerned.

Why were these optimistic expectations not fulfilled? Why are there breadlines and food shortages of all kinds in the Soviet Union at this precise historical moment? Why is Khrushchov buying grain wherever he can lay hands on it? These are the questions that every sincere socialist must ask. The Soviet Union is dear to us all, October will remain forever engraved in the heart of mankind. It is precisely for this reason, that we are Socialists, that it is essential to examine Khrushchov's agricultural policy in considerable detail.

Wheat Requirements

First, let us consider N. Kasakstan. Is it suitable for the growing of wheat? But first, what are the basic requirements of this basic crop, of wheat? And we shall be compelled somewhat later to ask the same question regarding maize. Wheat requires a certain amount of moisture, either from heavy winter snow or else from rain, during its formative period. It can stand a wide range of temperature, from the cool of the British summer to the brimstone heat of an interior California valley, and is also resistant to drought providing it has received a good head start. Wheat will grow on almost any type of soil, but it does well *only* on soils which contain a good deal of nitrogen. Wheat requires a growing season long enough for it to fulfil its function, reproduce itself. Aside from these two main

requirements, sufficient moisture and a long enough growing season, other factors must be brought into the picture. For example, the climate at harvest time; heavy rains can lead to disaster. But here again specialised knowledge is what counts. Machinery can be used on light or medium soils when they would bog down in heavy. Then there are the questions relating to disease, especially when you are dealing with giant acreages. In many parts of the world hail does great damage, beating the wheat into the ground. Knowledge, to be true knowledge, is always particularised, only in this way can exact generalisation be arrived at.

N. Kasakstan

Here is a description of N. Kasakstan written by a Soviet geographer: "A feature of the climate (N. Kasakstan) is the pronounced seasonal variations in temperature, rapid switch from summer to winter and vice versa, and also changes in temperature in the space of a day. The swift change from one season to another necessitates an exceedingly high rate of spring field work and in gathering the harvest. *A delay of a few days in sowing or harvesting can cause grave damage.*" In general, the climate of N. Kasakstan can be compared with that of the prairie provinces of Canada, particularly Alberta. It is largely flat, sometimes undulating, and slopes to the north. There are no protective mountains between it and the Pole. However, the soil structure of N. Kasakstan in no way resembles that of the Canadian prairie provinces, upon which millions of buffalo, herds of deer and antelope, fed on the tall buffalo grass. The decomposition of the root system of this grass over long periods of time led to the formation of humus, which in turn led to a busy abundance of micro-organisms, the inter-relationship of which gave man a fertile soil eminently suitable to the growing of wheat.

The soil of N. Kasakstan was light, thin, and scanty in organic life. It was also seriously deficient in nitrogen, without which wheat becomes sickly and anaemic looking. Two fairly good crops largely drained the soil of its slight fertility and of almost all its nitrogen, those of 1956-7. Other facts must now be brought to light. Temperatures in N. Kasakstan can shoot to the level of 100 degrees Fahrenheit and even more. This fact, coupled to the breaking up of the original knit-together soil structure, has led to a dust covering inches thick. When the wheat is taken off, or where it has failed to grow, winds sweep this dust into the heavens, drivers must use lights even in daytime, and if there was any fertility left it is now almost completely finished. Such are the facts.

Fertilisers

Can fertilisers restore N. Kasakstan to the point where it can produce economically sound wheat? N. Khrushchov is stating that the government of which he is the outstanding figure made a mistake, "even a serious mistake" in not building plants capable of turning out huge amounts of fertiliser, particularly nitrogen. Self-criticism is good, but we must admit that once the horse has bolted locking the barnyard door won't do much good. It is doubtful if all the nitrogen in the world would turn N. Kasakstan into an area capable

of assuring bread to the Soviet people. As has been pointed out, you have a very poor soil coupled to weather so bad the harvest literally becomes a yearly gamble. Even in Alberta one crop in four is all they expect, and if it were not for government subsidy the province, as far as large scale wheat growing was concerned, would be left to the high winds. The building of fertiliser plants on the scale envisaged by Khrushchov is a waste of Soviet resources and could be used in other directions with far greater benefit. For example, the development of hot-house agriculture to be brought up to a scale at least equal to that of Holland, preferably five or six times, or even more, as great.

Maize

Turning to maize, what sort of crop is it? Without doubt, one of man's most valuable, both as a staple of man's own diet and as a staple for animals. Unlike wheat, which will flourish in many varying climatic conditions, maize is far more choosy. Maize demands a growing period to full plant development of not less than sixty frost free days. It is a gross feeder, and heavily favours a climate with a couple of months of hot, humid nights, with high day temperatures. The U.S. 'corn-belt' favours these conditions, particularly parts of Illinois, Missouri and Iowa. These regions consistently break all records for yield, they rarely know bad crop failures, just as, further north, N. Dakota, because of extremely heavy winter snow and cloudless, hot summers, has never known a calamitous wheat harvest. Such regions are exceptional, they set a standard for the rest of us to strive towards—through building up our own soils, through overcoming natural difficulties.

Maize will not reach full maturity in most regions of the Soviet Union, the frost-free period is too short. Hence, in the Soviet Union the maize is harvested in its milk stage, and is converted, together with most of the plant, its leaves, into silage. Silage is a rich and wholesome food for stock, used, in the main, as a supplement, an additive to the main diet, generally grass, grazed during the growing season, or converted into hay for barnyard and winter feeding. In warm or hot desert lands with plenty of water for irrigation, lucerne (alfalfa), a legume, is plentifully used, for it gives at least five heavy cuttings per year. Root crops, such as fodder-beet, swedes (rutabaga) mangolds, form important sources of food supply in N. Europe, though less in the U.S.A. Kale and bulk green crops, which stand up well to wet and frost, are popular in N. Europe. But as we are not presenting a thesis on general agriculture we won't do more than touch on the importance of the pulse, potatoes, and, in suitable surroundings, sweet potatoes, peanuts, etc.

Maize and the Ukraine

There can be little doubt that Khrushchov's agricultural planners visualised turning the Ukraine and part of Russia into giant maize-producing centres, thus laying a base for extensive animal husbandry—particularly cattle and hog production. The Ukraine, famed for the richness of its black soil, was to give over the job of raising wheat

to N. Kasakstan, and was to concentrate on maize and sugar beet.

Sugar Beet

Khrushchov directed particular attention to the sugar beet, apart from its usefulness to man in the form of sugar. Somehow or other an idea formed and hardened into the belief that because of the high sugar content, sugar beet was to be pushed at the expense of such other roots as the mangold. This may have been due to the expectancy of thinning being done away with by introducing the one seed sugar beet. In practice this has not happened, the one seed sugar beet is still in the experimental stage.

Overlooked, or ignored, was the fact that Swedes, fodder-beets and mangolds are far heavier producers than sugar-beet—particularly the mangold. This more than overcomes their lower sugar content. It would appear that Khrushchov completely overlooked the animals' digestive system its ability to convert a starch into sugar, for example.

Khrushchov and lea-farming

Khrushchov attacked Williams and those who followed his advice with great bitterness. He asked, "The question arises, why was it that Stalin picked on the lea-farming system although it was contrary to the vast experience accumulated in the west?" This statement of N. Khrushchov is not supported by fact. Lea-farming is traditionally British, its main impetus and development took place here. The revolution in agriculture, the break with strip-farming, the break with large areas under bare fallow, improvement of grasses, the elevation of root crops, all these made possible the carrying over of stock, put an end to late autumn slaughter necessitated by lack of fodder.

And all of this complex rests on soil, man's understanding and treatment of it. To poo-poo soil structure, as Khrushchov does, play down humus, forget the soil with its teeming life, to start to rely on the building of fertiliser plants—as Khrushchov is now about to do—to ape, for that is what it is, bad U.S. technique, that technique which leads to erosion, to dustbowls, is senseless.

The fact is that Soviet science as a whole has not paid as much attention to agriculture as it should have. They failed to drive home to Soviet authorities the need to study deeply the most advanced, far-advanced, west European farming theory and practice, particularly that of Holland, Denmark and Britain. Unfortunately, Soviet scientists and agronomists maintained silence in the face of N. Khrushchov's agricultural plan, his determination to shift wheat to N. Kasakstan, maize to the Ukraine, to attempt to convert the latter into another Iowa, although all thinking people must have known that natural conditions made this a complete impossibility.

No short cut

There is no short cut to the solving of the Soviet Union's agricultural problems, but there are perfectly feasible steps, already time-tested, which would enable Soviet agriculture to take a long step in this direction. Of crying need is to raise the output of traditional

crops well suited to ecological demands, such as wheat, barley, oats and rye. Much wider use should be made of root crops, of bulk crops such as kale, which stand up well to severe conditions. Grass should be brought back to its correct place in modern lea-farming, bare fallow should not be tolerated.

After all, it is only because of much higher yield that Britain, not a particularly rich agricultural country, one with a fairly long winter, with much waste land unfit for the plough and even pasture, nevertheless raises enough food to feed 40% of its population, roughly 22 million people. Under Socialism this percentage could be raised by 15-20% without much trouble.

There is no reason whatsoever why the Soviet Union cannot, as an example, raise its hot-house production by 'a big leap forward,' ensuring to the people of Leningrad, Moscow, Kiev and other such cities a plentiful, all-year-round supply of vegetables. But this is an impossible dream as long as Soviet leadership is enthralled by an *idée fixe*: the conquering of space. Socialists must be uneasy about such programmes as moon-shots when we know that two-thirds of the world's population suffer from under-nourishment, or, as in the case of tens of millions in India, face death from hunger.

The Soviet Union, the first Socialist state in history, needs to re-examine all aspects of its agricultural policy. N. Khrushchov's opening up of the virgin lands must be largely written off, to pour fertiliser into these spaces would be throwing good money after bad. Similarly with the question of maize and of its conversion into silage. That part of the Khrushchov programme too must be written off as a failure. Maize must be restored to its correct place in the field of Soviet agriculture, and no longer dominate the scene. So with sugar-beet, other root crops must be recognised and placed in true perspective.

Finally, the overall objective of Soviet agriculture should be based on modern, scientific lea-farming, along with more and more emphasis on indoor, hot-house agriculture, which is completely indifferent to the vagaries of weather.

N. KHRUSHCHOV, FERTILISERS, AND THE FUTURE OF SOVIET AGRICULTURE

The capitalist press has given fairly good coverage to news about Soviet agriculture now coming out of the Soviet Union—December 1963. It is also to be noted, in passing, that the capitalist press is no longer gloating over Soviet mistakes or setbacks as in the days of Stalin. Khrushchov openly acknowledges that a bad food situation has arisen inside the Soviet Union, so bad that it has led to bread rationing. But evidence is piling up that it is not only a question of the shortage of bread, many other primary food products are scarce, almost unobtainable in the shops. Khrushchov is now admitting that there has been a downward trend for a number of years in returns from the virgin lands, and blames this on bad weather, and on irresponsible and stupid local leadership. Not being able to do

more than swear against the weather he has tackled the question of bad local leadership with his usual energy: by open abuse and public sacking. A point to be observed is this: these men he has sacked on so many occasions were of his own choosing, and he was Commander-in-Chief.

It might be of interest to examine what kind of mistakes were made by these local followers of the Khrushchov line. One group in the Tselinny region got the public sack from a ranting Khrushchov because they had failed to inform him that many of the volunteers in the virgin lands had no knowledge whatsoever of machinery, combines were left standing in the fields in need of this or that adjustment. "Why didn't you tell us," shouted Khrushchov, "we would have supplied you with 30,000 mechanics from the Ukraine!" Are we being unfair when we remind Khrushchov of his own working class background? He never lets other people forget that fact. Surely Khrushchov should have known that many of the people flooding into the virgin lands did so under the excitement of a carefully whipped up campaign, that many of these young people came from offices, were chefs in kitchens, people with no formal or practical knowledge of complex machinery? But even with industrial workers, Khrushchov should have realised that modern industry is so complex that specialisation is an absolute necessity. You can teach a person to drive a tractor without much trouble, but not a mechanic capable of keeping the tractor in running order.

And if it comes to making exact parts, even a fitter is of little use, you need a machinist. Yet Khrushchov blamed his subordinates for not being able to foresee difficulties which he himself failed to see! In other parts of this pamphlet the questions relating to weather are taken up in considerable detail, so we won't waste space on that problem.

What is new in the developing agricultural situation in the Soviet Union is Khrushchov's insistence on fertiliser and the necessity to increase sharply the output of chemical fertiliser. He says, "We made a mistake, even a grave mistake, in not building fertiliser plants." Without doubt, Khrushchov is trying to create the impression that all would have been well in the virgin lands if only plenty of nitrogen had been there.

But would it? No, and for this fundamental reason: the soil in most of the virgin lands was so lacking in basic organic and inorganic nutrient that no amount of chemical fertiliser would have made up for its inherent barrenness. The small fertility there was exhausted by the taking off of two, or possibly three, crops, and even these only measured up to rather poor dry-land cultivation—4 to 7 bushels per acre. There is only one way of raising the fertility of a poor soil—or an exhausted one, for that matter: by bringing the land under grass, by establishing good coverage. This process can be aided by inorganic fertilisation; once it has been established, the soil can be further enriched by animal grazing.

After a number of years, say 4 to 7, this grass can be ploughed into the soil, humus is formed, and with it micro-biological organ-

isms find a media for rapid reproduction, a true soil structure suitable to the requirements of man comes into being and can be further developed.

All is not well

Should Khrushchov be allowed to develop his new madness, fertiliser as the all-in-all, the Soviet people will be pouring another torrent of wasted sweat down the stream. It is already apparent that all is not well in Soviet industry, it stands to reason that a man capable of ignoring the advice of his own countrymen about N. Kasakstan would also take hasty and ill-judged steps in relation to industry. The Soviet Union is in danger of developing a lop-sided industry—as indeed is every Socialist country which has followed Khrushchov's advice to tie their industry to that of the Soviet Union. But this paper deals with agriculture, Khrushchov's blunders in industry must be left for another time. And since the writer has dealt with agriculture in other places in this pamphlet, repetition here would be needless.

The Future of Soviet Agriculture

Whether we speak of industry or of agriculture, one factor must be taken into consideration: our total resources decided by the all-round level of social development, resting on its economic base. When funds are allocated, questions must be asked, even a small capitalist must carefully consider capital expenditure. How much more so a government? Various interests press their views upon the central authority, and this is also true for socialist societies as well as for capitalist. Of course, it goes without saying that the pressures in a capitalist society, the ones that really count, come from this or that trust, from this or that section of finance-capital. The most a capitalist state can do in the form of protecting national interest is to hold in some sort of check the most greedy and rapacious, those who would betray the interests of the capitalist class as a whole for the benefit of themselves.

Recognising the limitation on national planning under capitalism, handicapped by the very nature of their society, its predatory appetite, its cannibalism, nevertheless it must ask itself the question: what spending comes first? And why is it necessary? Is it not obvious that if this is true for capitalism it is, or should be, a thousand times more true for Socialist states, where national planning in the interests of the people is the *raison d'être*.

While certain types of spending are necessarily an unavoidable evil in Socialist societies—arms expenditure, for to disarm when a great deal of the world is still capitalist would be tantamount to suicide—there are other types of spending, of allocating extremely large funds, around which wide spread discussion takes place. Herein lies the danger in Socialist societies, that unless general discussion is encouraged, participated in at all social levels, bureaucratic decisions at top level become a bad substitute for democratic centralism, and funds are channelled off in directions harmful to the development of the social system as a whole.

Even in Socialist societies there are individuals and groups pleading for special consideration and, either out of ignorance or through gross disregard of society as a whole, more than ready to walk off with state funds. Then, of course, there is the state's fundamental attitude to science, to the arts, to heavy industry, or to light industry. Thus, in the Soviet Union, the generosity of the state to the arts is the envy of artists in capitalist lands. The Bolshoi never has to scratch for pennies, as is all too often the case with us. And what is true for the arts in the Soviet Union is also true for science, immense sums are regularly placed at their disposal, and, in the main, scientists themselves allocate the placing of the funds.

Aspects of Science

This has a bad side, as well as a good. Science is international, its flows almost unhindered across frontiers; on the whole it is indifferent to troops and garrisons, it cannot be contained, by reason of its very nature, within a state boundary. So much for the objective aspect of science, the trouble crops in when we deal with the subjective, the attitude of scientists to the special needs of a Socialist society as against a capitalist society. For it is obvious that each of these hostile societies must develop and possess a science to suit its own particularity, even though much of the basic knowledge is common to both.

Too many scientists in the Soviet Union have forgotten the fact that their duty, first and foremost, is to the Soviet state, to aid it in developing Socialism. There is far too much camaraderie between Soviet scientists and those of the west. The great majority of scientists in the west come from the upper classes, and have a living standard comparable to their station in life. Those who have fought their way up from the depressed classes have been brain-washed in the process of climbing, for such institutions as Oxford and Cambridge exist for one purpose only, to protect the interests of bourgeois society, to furnish it with thinking and administrative strata. That individuals break through the pressure of family background and institutional training is another matter, the point to be remembered is that they are escapees, not the norm. Soviet science was forced to take up the subject of rocketry, but in developing rocketry Soviet science became fascinated with the idea of conquering space, in fact the entire country got caught up with it including the state apparatus. Soon, national prestige crept into the picture, and it began to smell more and more of pride and chauvinism rather than of Socialism, for a senseless race to the moon between U.S. imperialism and the Soviet Union got under way, became a startling reality. Khrushchov claimed that his victories over the U.S. with the sputniks increased the prestige of the Socialist camp, but, since it also helped in retarding agricultural development—as this writer will show—what prestige was gained is now lost by the news of bread-lines in Moscow.

Soviet Science and Agriculture

Soviet science has been brought into being, cherished and developed

for one purpose and one purpose only: to forward the development of Socialism within the Soviet Union, and by so doing enormously advance the ideological pull of Socialism in other lands. One cannot help but feel sometimes that this goal has been lost sight of by many a Soviet scientist, one feels that they are living in a scientific glass house, rather than in a developing socialist system with its trials and tribulations, the slashing storms of real life. Dubra seems a far cry from the barrenness of the virgin lands. Science is class science, let us make that clear, even as literature, at bottom analysis, is class literature; both literature and science conform to the needs of a ruling class, nor can they be in any way divorced from the all-over pressure of class ideology.

Society and Technique

Capitalism is the first system of society whose technique has allowed the development of crops under indoor conditions, and with a fair degree of success. The growing of crops indoors, the regulating of temperatures to correspond to the particular crop need, has, so far in very small part, freed man from the vagaries of climate. The foremost country in the world in indoor culture is Holland, with a varied and well-advanced development of many forms of indoor climatic control. There is no reason whatsoever why the Soviet Union, at today's level of production, should not advance to the premier position in hot-house culture. The Soviet Union has a technical base far superior to that of Holland's; it can command infinitely greater resources; its collective system allows it much greater freedom of movement, of the power to concentrate material values at any given point.

There is little doubt, if the Soviet Union had thrown the same amount of applied energy into developing indoor agriculture, in establishing factories for the production of vegetables etc., as it did for its sputnik programme, Holland would already have been left far behind. There is no practical reason why such cities as Moscow, Leningrad and Kiev should not be able to supply themselves with a significant proportion of their vegetable requirements.

Outdoor Agriculture and Soviet Science

What science could do with means *already at hand* for indoor agriculture it could also accomplish for outdoor agriculture. Sheep raising, for example, should have been widely introduced to the European Russian central and northern plains, along with greater emphasis on root crops and bulk green crops such as kale. A good deal of hog production could be brought indoors, near to large cities, utilising to the full the latter's waste products from homes and dining rooms.

Far too much time and energy has been consumed and wasted on selective work. A Kostromo cow may be the world's heaviest milker with a fairly high butter-fat content, but is the time to establish such a breed necessary at this precise historical moment, when we already have excellent heavy milking breeds such as the Holstein and Friesian? Let Socialist science take the best it finds in highly developed

capitalist agriculture and use a little more imagination and practical drive to carry it to the peak of perfection in Socialist lands.

That was the methodology employed as far as Soviet industry was concerned, Stalin brought into the Soviet Union specialists from the west in considerable numbers to help in the development and completion of the first and second five year plans. But Khrushchov, who has made agriculture his speciality, who has boasted that it would shortly surpass the U.S.A. in per capita output of main essentials, such as meat production, has been content to accept the "advice" of a rich U.S. farmer "an expert in maize." The readiness with which Stalin turned in a *practical* fashion to the latest in capitalist technique differs so widely from Khrushchov's ideas on the subject it is amazing it hasn't been noticed before.

On this point Khrushchov may not be wholly blamed, for Soviet agronomists were pretty well convinced that there was little the west could teach them. The selectivists, enthralled in their own particularisation, often being Marxist theorists of a high order, undertook time consuming and expensive work that often paralleled work already highly developed in the west, which merely needed transferring to Soviet soil. For example, it is doubtful if the Kostromo breed of cattle is worth the effort to establish this breed. There are other splendid milk breeds in the world, breeds which will well compare to the Kostromo as regards all round efficiency as a producer.

Beef Breeds

No Soviet agronomist has noticed that pure beef breeds are wasteful luxuries in Socialist societies. They were developed to satisfy the palate, grace the tables, of the wealthy in bourgeois society. The meat that 80% of the population of Britain consumes comes from dual purpose animals, cows that produce quantities of milk and, when butchered, furnish meat. Furthermore the medium and heavy milking breeds give from 200 to over 300 lbs. more per carcase than the pure beef animals of the Hereford type.

But even this is not all. The milkers, because they are larger than the beef type, also furnish us with more leather, for the hide is larger, and more glue from the hooves, for the hooves are larger! Yet the subject is not as yet exhausted. The medium and heavy milking breeds are on the whole heavier producers than the small milkers, such as the Jersey. The higher fat content of the latter is offset by this increased milk production. Yet Khrushchov is still importing expensive Herefords and Jerseys from Britain!

There is little doubt, Soviet science as a whole has shown little interest in agriculture, they have relied, solely and completely, on specialists to carry things on. These specialists are sometimes far more interested in riding a hobby-horse than in tackling and solving agriculture on a broad front. These agricultural specialists should have energetically resisted Khrushchov's senseless opening-up of the barren virgin lands. They should have vehemently protested against his plan to turn the Ukraine into another Iowa. Soviet

agricultural scientists should have turned for help to their colleagues in other fields, should have convinced them of the senselessness of the Khrushchov agricultural line.

Finally, Soviet science has made great advances, it has deservedly won the respect of the Soviet people, its duty is to express an opinion on N. Khrushchov's agricultural line, his reckless determination to defend it via the building of giant fertiliser plants. In the face of determined attack from Soviet science Khrushchov and his clique of supporters wouldn't last a day. Hurry forward that day!

OPEN LETTER TO THE ALBANIAN PARTY OF LABOUR

Dear Comrade Hoxha,

May I be allowed to congratulate the Albanian people, through the Central Committee of your splendid Marxist-Leninist Party, on the 17th anniversary of the liberation of Albania by her own wonderful effort from all forms of capitalist exploitation.

Time has proven that when a people take the Socialist road, hold steadfast to the banner of Marxism-Leninism, no trials and tribulations, no matter how grave, will swerve it from its course and ultimate total victory.

Comrades, you are going through grave difficulties, enemies are trying to goad you, gloating in the fact that the criminally rash action of N. Khrushchov has inevitably led to a grievous breach in the front of socialism, and could lead to even graver results. Nevertheless, I am confident that this mad act of N. Khrushchov in breaking off diplomatic relations with the Albanian people in no way represents the real feelings of the great Soviet people. Time will inevitably prove this, and the wait will not be long.

N. Khrushchov will over-reach himself in other directions—and has already done so, as time will prove—and show to the Soviet people that he is totally unfitted for the grave post of responsibility he now holds. Khrushchov is rash, impatient and headstrong. He has every single one of those negative qualities with which our beloved Lenin once reproached Stalin for having. There is a horrible coarseness in Khrushchov, kulak-like in its savage ferocity. He beats people, spits them in the face. This was brought out so well the other day, when he addressed the Leningrad meeting of Collective farmers and scientists, venting his hatred of them in an uncontrolled outburst, because he had failed to convince the audience of the soundness of his, Khrushchov's, position.

And that viewpoint? Fundamentally: to transplant U.S. agricultural technique to Soviet soil. Forgotten, completely ignored, are sharp climatic differences, topography, soil structure, and—last but not least—man's attitude to man. Two per cent of U.S. farms produce one-quarter of her total commercial output. (American Agriculture Bulletin, British Government agricultural publications.) Khrushchov has friends among these great capitalist farmers—he has boasted of it—but what of their sweated labour? As for U.S. farm output,

Khrushchov seems completely ignorant of the fact that three European countries' output of primary grains and foodstuffs—grasses, legumes and roots, as well as the transference of this food into animal produce, such as meat, butter and cheese—is well above that of the U.S. Only in maize and soya production is the U.S. ahead, and that due solely to exacting climatic conditions. Even in production of rice per acre the U.S. lags behind such countries as Italy and Spain, while the output per acre of wheat, barley and oats, in Denmark, Holland and Britain, is more than a third greater than that of the U.S. I deal at some length with agriculture, Comrade Hoxha, because N. Khrushchov has bluffed many honest people into believing that he is an expert in this field. Capitalist farming methods in the U.S. differ in many ways from those of Western Europe, and has been largely determined by the huge land-mass of the U.S., coupled to highly favourable natural conditions over most of the country. For example, the natural grass-lands of the Dakotas (Buffalo-grass) coupled to constant, very heavy winter snow and hot, dry summers, is perfect hard-wheat country, and gave 30 bushels to the acre without an added ounce of fertiliser. Compare such natural conditions (and they are duplicated in the mid-west for maize) with the New Lands in Siberia, where natural conditions are even harsher than on the Canadian prairies, whose farmers think themselves well-off if they gather in a good harvest once in four years. It is doubtful if an average of 7 bushels per acre is reached on these new lands, into which tremendous amounts of capital has been poured, and this fact, rather than a rehashing of Stalin's shortcomings, was the real basis of the dispute between Molotov and Khrushchov.

Let us examine U.S. capitalist methodology, which has, within 75 years, almost completely destroyed the natural forest, largely coniferous, which covered most of Michigan, Wisconsin and Minnesota. And for every foot of timber rationally used, 20 feet went up in flames. The huge groves of splendid hardwoods further south, with trees such as the black walnut, are but a memory, while the remaining timber reserve in Idaho, Washington and Oregon have had their heart eaten out. The lumber barons are now looking to the redwoods of California with the eyes of wolves.

Not 70 years has elapsed since the first plough bit into the virgin grass of the Dakotas. Today, half the tonnage of those early years, and going downhill despite heavy fertilization. And what is true of the Dakotas is true of much of Kansas, Nebraska, the panhandle region of Texas. Virgin grass ruthlessly uprooted, and then a reliance, blind and stupid, on chemical fertilisers linked to good weather. When the latter fails the wind blows and deserts come into being, as in the early '30s. I hope with all my heart that the Soviet people, the people of Russia and the Ukraine especially, will not lightly toss away the heritage of European tillage for a Yankee's fool's paradise.

It should be pointed out that in those regions where the growing season is long, with exceedingly high temperatures, methods eminently suitable to temperate zones would be an absurdity. In such regions

arable farming to the point of totality can be successfully applied, as in the Imperial Valley of California. In such regions heavy investment is more than warranted, for in such lands you produce 2-3-4 crops per year, in the case of lucerne (alfalfa) five heavy cuttings are entirely feasible. Thus you can establish the so-called "City Dairies" which supply Los Angeles and its environs with an abundance of dairy foods. On top of this, of course, when you have power from the dams, industry springs into action.

When mistakes are made they must be squarely faced and analysed, thus we learn to avoid similar, or even worse errors and blunders. N. Khrushchov is an extremely forceful personality, an extrovert who plainly delights in holding the stage. For example, I know of no speech delivered by Lenin over two hours in length. Nor was Stalin a lover of oration. And from my examination of the great Marxist, Mao Tse Tung, I noted that he, too, was in favour of reasonable brevity. I remain unconvinced that the problems of the Soviet Union today are as grave as those which faced Lenin and his successor, Stalin. Particularly in Lenin's day. War, a raging civil war, intervention, famine, pestilence. How modest was Lenin, how he saw to it that the work was divided, so as to draw in and encourage others to shoulder responsibility! What a difference now, seemingly Khrushchov has no trust in anyone—or so one would judge by his 6 hour orations. What was perfectly in order in the time of Pericles, becomes perilously close to insanity in our day.

Khrushchov has stressed to the point of dangerous stupidity certain failings in the personality of Stalin, failings that were true. Nevertheless, a tree is judged by its full strength, not by a broken limb. Stalin's failings were more than counter-balanced by his share in routing the kulaks, by his insistence on heavy industry. In order to accomplish these two primary aims it was essential to smash internal opposition, to struggle fiercely for Party Unity. Factionalism, in the persons of such as Trotsky and Bukarin, was in danger of tearing the Communist Party (Bolsheviks) to pieces. Without that Party, steeled in countless battles, shaped by the undying Lenin, victory for Socialism would have been impossible. The iron will of Stalin, his grasp of essential theory, had much to do with routing the enemy. To play these historical facts down, belittle them, to take the body of the man who so largely shaped them, to cast his body as that of a dog, secretly, in dead-of-night, into a wall—even the Kremlin Wall—is to do an ill-service to the struggle for world Socialism and the ultimate brotherhood of man.

Negative Side

No one denies that N. Khrushchov has given service to the Soviet Union, hence service to world Socialism, but it must be pointed out that his negative side weighs far heavier against him. N. Khrushchov has to all appearances an intensely practical eye, but his practice—and it is limited, like that of most so-called practical men—is badly linked to theory, and stinks of Yankee pragmatism. Without sound Marxist theory all practice will

inevitably turn into its opposite, will produce bad practice, divorced from reality, and furnish itself with an equally bad and even servile theory to support it.

Khrushchov is looking at the Soviet Union as a world of its own, where 20 years from now, the standard of living of its people will be the highest in the world. This high standard of living will so attract the majority of people living under capitalism they will become converted to Socialism and bring such pressure to bear that capitalism will voluntarily give up the ghost! That is what is meant, that is why right opportunists and revisionists the world over are hailing almost hysterically the New Messiah, Khrushchov! And why, in a public press interview (*Sunday Times*, 15th January, 1962) the Prime Minister of Great Britain, Mr. Macmillan, warned the U.S.A. to have patience with Khrushchov, "who faces a difficult task, having broken with orthodox Marxism."

N. Khrushchov's statement that some capitalists may resist is taken for its worth, as an after-thought, an aside. The principle involved in the Khrushchov line, its main feature, its essence, is the transition of the capitalist world peacefully toward Socialism.

No analysis of classes, no study of class ideology, of class psychology. Not a murmur of the role of the State, or savage and ever-intensifying class war which is constantly wracking the capitalist world. For example, in West Germany, the Communist Party is outlawed, a form of fascism suitable to the country is being developed, with social democracy playing its historical role of treachery and concealed betrayal. In France the handwriting is on the wall, fascism is on the march, aided and abetted by the traitorous de Gaulle regime paving the way, spreading mysticism and confusion. Without massive aid from without, the chance of the French working class heading off the fascist threat is slim. For no reliance can be placed on the French Socialist Party or the petty-bourgeois groupings. The capitalist class of France, that same identical class which shot down in one week of bestial revenge 30,000 immortal Communards, will savage our French brothers and sisters, torture and murder at will, Communists and others, in an orgy of blood-letting.

India

How possibly can anyone remain silent in the face of these things, approaching almost hourly? How is it possible for a Statesman, a Great Statesman—as Khrushchov sincerely thinks he is—to completely ignore factors such as these. How can one ignore, remain silent—even more, greet rapturously, as a genuine People's Democracy, a country such as India? Sell it modern weapons at cheap rates of interest, when even the blind can see India is developing into a powerful capitalist State? Yet Ajoy Ghosh openly states his support for that greatest of humbugs, the arch-hypocrite, the so-called Pandit, Nehru! The same man who hasn't stepped forward an inch in the struggle to overcome the filth of India's religions, with its accompaniment, the horrible, soul-destroying caste system.

Kerala was the warning of what to expect from Ghosh and renegades like him—and their like are still to be found, unfortunately, inside all Communist Party's without exception, particularly those of Western Europe, with its long and evil heritage of social democracy. Preaching that it was possible, in caste-ridden India, quite feasible, to build a Socialist State in Kerala without being forced to resort to defending arms against the reactionary central authority of the Brahmins, headed by their High Priest, Nehru! That self-same Nehru who threatens People's China with war, whose armed forces have already crossed China's frontiers, whose airmen will, presumably, be flying the latest models of Soviet aeroplanes. Yet entire Communist Parties are silent about such things, lulled into false security by the overwhelming power of Mr. Khrushchov's 6-hour orations!

Ghosh, and people such as he, are blood-brothers to such as Bernstein, Kautsky, Bukarin. In short, an opportunist and revisionist of the right, against whom Lenin thundered. As Lenin warned so repeatedly, the main danger is always from the right, particularly in those countries with long tradition of bourgeois parliamentarianism, and countries such as India, who, in true lickspittle fashion, have "modelled" their constitution, as closely as circumstances warranted, on London and the West. For, when all is said and done, social democracy is nothing more or less than a continuation of bourgeois democracy, as exemplified par excellence by the British Labour Party and its ideological parent, the Fabian Society. The influence of this notorious social democratic society on leaders of the British Communist Party, such as Emile Burns and Palme Dutt, is overwhelmingly evident, and it is through the influence of this brand of social democracy that Ghosh developed his particularity. As we remember, an understanding of particularity brings the general into truer perspective, a point which muddle-headed comrades seem unable to grasp.

Coddling

In stressing the struggle for peace, N. Khrushchov is doing peace an ill-service, for he ignores, obstinately, stupidly, the dangers to peace arising constantly out of the very nature of capitalism. Through doing this he is encouraging Communist Parties in the West to pacifist illusions—witness their open support of outright pacifist organisations under religious influences and direct leadership—while there is grave danger of the Soviet people themselves adopting a petty-bourgeois, philistine attitude to things outside their own border. Over-emphasis on physical well-being, even to the point of coddling, adds to this danger. "One can't have Communism without plenty of steak!" That is what Khrushchov is constantly reiterating, but the point is, one can. In the struggle for the steak, in the toil and hardship necessary to attain it, a Communist spirit comes into being and is constantly enriched and developed. Reject this view and you reject Communism, you show a dismal, indeed, an almost total ignorance, of Marxist philosophy, which teaches us

that the new comes into being as the result of tiny, often-time-unnoticed quantitative steps, so well illustrated by Engels in *Antis Duhring*. The new quality is at all times dependant on quantitative change. But then, N. Khrushchov relies entirely for his philosophical interpretation upon such creatures as Leonid Ilyichin, who has stepped forward as foremost Marxist theoretician of the Khrushchov era, and has repayed his elevation by this kind of utterance: "All Khrushchov's speeches on questions of art contain sharp criticism of all shortcomings, an irreconcilable attitude to hostile tendencies, criticism which is combined with a feeling of concern and care for every Soviet artist." That is the hogwash, here is the truth: at the last Congress of Soviet writers, 1961, Khrushchov took the rostrum, confessed he knew nothing of literature—"too busy reading Ambassador's reports!", then in the next breath—literally so—proceeded to admonish the assembled writers and critics—they were a bit too critical, harsh on young writers! Sad to relate, not a murmur of protest at such an attitude. Few people have the type of brain which can master philosophy, Khrushchov is not among them.

No Pleasure

I take no pleasure in dealing with all I have touched on, in pointing out that, even granted the impossible, "20 years of peace", the base of capitalism, much of it fascist capitalism, will be much broader than it is today. To industrialised U.S.A. and Western Europe add India, Indonesia, Latin America the Arab Lands, and Africa. All these countries, with very few exceptions, have taken, or will take, the capitalist path of development unless checked by the enslaved people's with powerful help from the socialist world.

I may be accused of putting things too sharply. Perhaps my indignation over Soviet "fashion parades", when most of mankind lives wretchedly, is misplaced. Likewise my reaction to N. Khrushchov's emphasis on bodily comfort and ease. I do not believe that the elaborate menus I saw in Moscow, inherited from the Czar—without quantitative or qualitative change—that I could see—are suitable to a Communist society. At least, to the stage we are reaching for. I believe such menus as I saw, with their choice of 16 soups, are an offence to hard-working, energetic and healthy people. So, for that matter, is the inordinant haste to reduce the working day far beyond natural requirements for physical and mental recuperation.

I cannot believe that such a sort of slothful order entered the minds of those countless heroes who gave their all for the creation of a socialist society, and for the creation of the Soviet Union. The very thought of an idle, lazy, self-perpetuating society would have filled Lenin with loathing. Yet I, an ordinary worker, a driller on a building site, am forced to think of these things when I read the speeches of N. Khrushchov. Without fire there would be no smoke.

Here in Britain, the fog of deliberate obscurity clouds the real issues between your comrades and N. Khrushchov. Our main avenue of truth comes via Peking, from those same comrades who have so

wisely led their peoples to victory after victory over all enemies. Those Chinese comrades who took such practical steps back in 1949, before the civil war was over, to destroy the cult of the individual. And that cult is still wracking us, as I illustrated with my quote of Leonid Ilyichin's.

Finally, of this I am convinced, the Soviet people have been through soul-shaking experiences. I believe they will see through Khrushchov's essential shallowness, will take the whip out of his hand, break it into a thousand pieces, restore the Leninist concept of a free press, of free speech, and recall Khrushchov's days with a blush of shame, as the man who was ready to divide and split, without a moments hesitation, the Socialist world.

Please allow me, in conclusion, to offer you a hearty handshake, and through you the entire toilers of your brave and splendid country.

Yours Fraternally,

A. H. EVANS.

To: Mr. Jack Dunman,
Agricultural Department,
British Communist Party.

29th August, 1962.

Dear Mr. Dunman,

I have carefully read your article—Problems of Soviet Agriculture, in the journal, *Marxism Today*, August 1962. The figures you accept to illustrate your article are extraordinary. I will comment on them.

You say: "The fertile Kuban was instanced by Khrushchov. Last year it had 2,250,000 acres of grass and 1,250,000 acres of grain maize. The grass only produced 17½ cwt. per acre of hay; but it could have produced 40 to 64 cwt. of grain per acre."

Let us first deal with grass. From the figure you give, 17½ cwt. I take it that this represents permanent pasture land, what we term "meadow-hay." The corresponding figure for Britain is 21.5 cwt. over the last 10 year period. But the British figure for grass under ley—land ploughed periodically and sown—is 30.1 cwt! When you recall that maize is an annual, a gross feeder, a hater of frost, demanding in cultivation, the balance in favour of maize is by no means as heavy as your figures indicate. Furthermore, there is the question of soil erosion. In Continental climes rain falls abruptly and heavily, with terrible emphasis. I am not arguing against arable farming—not being an opinionated fool—I merely point out the obvious; that over-emphasis on it can lead in bad years to dust bowls à la Kansas, circa 1932-35. Where the rainfall is very light, almost non-existent, as in Imperial Valley, California, arable farming comes into full possession, for you rely, solely and completely, on plentiful irrigation—but that is another matter. The Kuban is no Imperial Valley.

But the figure I gave for ley grass production is not the whole

story. Lucerne (Alfalfa), under British conditions, gives the interesting figure of 43.6 cwt. per acre over the last 10 year period. But even this is not all. Under conditions of unlimited irrigation—where the fields can be flooded at will—in hot climes with long or year-round growing seasons, five heavy cuttings annually is common—as in Imperial Valley, California. The great City Dairies of Los Angeles are based on Lucerne largely trucked in from Imperial Valley. And when we recall that these grass crops are gatherers of nitrogen, makers of humus; when we recall that they can be interlaced with legumes, it is well-nigh criminal to play them down, minimise their role, as does Khrushchov.

Turning to your figures on maize—a most useful and praiseworthy crop—it is an exacting crop. I find that the figures you reproduce, 40 to 65 cwt. of grain per acre, is vastly in excess of any figures I have run across. The average U.S. yield of grain maize per acre over the last 10 year period is 21 cwt. Few farms, even in Iowa, top 38 cwt.

Turning to root crops, Khrushchov is devoted to the sugar beet as animal fodder. He compared the per acre output with potatoes, which sugar beet slightly tops. Khrushchov fails to note—or characteristically ignores—the fact that although potatoes in White Russia, where he was speaking, gives only one crop annually, further south, in many parts of the country, two crops annually are quite possible. In which case potatoes would be a cheaper feed than sugar beet. But, aside from potatoes, there are many other root crops. Here are some figures: (British) Sugar beet—11.3 tons per acre; Swedes (Rutabaga)—15.1 tons per acre; Mangolds—20.3 tons per acre. Cattle literally droll over mangolds, while sheep can be pen-fed, even in severe climates, such as the Moscow region, largely on swedes. Animals have food preferences just as humans, chickens at a pinch will eat any kind of grain, but watch them gobble maize! Or try feeding a mountain lamb meadow hay—they won't touch it. To ignore and play down root crops which have proved their worth because some chemist has pointed out the high carbohydrate content of sugar beet is daft—not all animals are as fond of sugar as Khrushchov seems to be—nor are they all pigs, willing to stick their snouts into any kind of swill.

Problems

The agricultural problems confronting the Soviet Union have no short cuts. It is all very well to speak of man conquering nature, a little less vanity of this kind is badly needed. We will reach the Moon, Mars, Venus, long before we learn how to control a driving chinook, or a sharp early frost that can sweep across an entire Canadian province and reduce millions of acres of splendid hard wheat to next year's kindling.

Facts must be faced. Canada, if it had a population of 60,000,000, would have to import wheat. On an average there is one good crop out of four. In recent years, the farmers there have tried to better things, beat the early frosts, by a system known as "swarthing"—

cutting the grain before it ripens, the theory being that it will finish maturing on the stalk. But this necessitates heavy investment in new types of machinery, the combine becomes useless. Swarthing has also been introduced in the Soviet Union, though I am sorry to say without mentioning the Canadian farmer.

Under capitalist conditions, wheat raising in Canada is understandable, but can that be said for the U.S.S.R? Can a Socialist state be satisfied with one decent crop out of four? Soviet authorities, under the urging of Khrushchov, have ploughed up some 35,000,000 acres of land in N. Kazakhstan, yet the climate there is harsh and unpredictable, at least as bad as that of the Canadian prairie provinces. Here is how it is described by a Soviet geographer: "A feature of the climate (N. Kazakhstan) is the pronounced seasonal variations in temperature, rapid switch from summer to winter and vice versa, and also sharp changes in temperature in the space of a day.

The swift change from one season to another necessitates an exceedingly high rate of spring field work and in gathering the harvest. A delay of a few days in sowing or harvesting can cause grave damage." In short, I see no reason to believe that at this precise historical moment the Soviets can overcome the natural handicaps of climatic conditions in N. Kazakhstan. One crop in four can be expected, not more.

You spoke in your article about Stalin and the tragic mistakes arising from the great man's theory of history. I am afraid that the mantle has been inherited by Khrushchov, who seems to rely completely on intuition, while his vanity and conceit are things to marvel about. His knowledge of agriculture is amateurish, based largely, it would appear, on his erroneous belief that U.S. agriculture leads the world.

But to solely blame Khrushchov for the fact that Soviet agriculture lags far behind industry—and it has its many splendid successes—would be making things too easy. Name calling must be based on facts, else it is worthless and will quickly be proven so. My own personal dislike of 6 hour speeches—or even four—may be a personal idiosyncrasy, possibly arising from the ease with which I have seen countless demagogues in the political and trade union movement deprive an audience of every vestige of commonsense. It would appear that Khrushchov's short-cut to solving Soviet agricultural problems, the opening-up of N. Kazakhstan, met with little or no opposition from the population at large. Still less from intellectuals who, presumably, should know something of the demands of wheat, still more about the climate of N. Kazakhstan.

The capital investments in that area must be colossal. If most of that investment had been shifted further south, into the hot desert lands, the return would have necessarily been slower, but it would have been a thousand-fold. An Imperial Valley would have come into being, 10, 20, yes, 40 times the size of the original. I fully realise that tremendous efforts are being made to extend the irrigated area, all I point out is that this development of S. Kazakhstan would be

far in advance, bearing the plums of victory, if northern Kazakhstan had been left as a task for another, later, generation.

The fact is that Soviet science as a whole has neglected agriculture. The Soviet intelligentsia, wrapped up in highly specialised fields, afraid, as all specialists with few exceptions are, to look into a "neighbours fence,"—for fear of ignorance, ridicule or offence—satisfied to the point of smugness with its accomplishments—and they truly are very great indeed—failed to drive home to Soviet authorities—the practical politicians—the need to study the most advanced, far-advanced, West European farming theory and practice.

Not once, in all my readings of Soviet periodicals dealing with agriculture, not once in the controversies raging around biology, not once have I heard Rothamsted mentioned, nor any similar institute in the west. Yet Rothamsted has a history of careful scientific experimentation and field practice in all branches of agriculture going back 130 years.

Much work has undoubtedly been duplicated, time thrown down the river, by the distrust which I. V. Minchurin had for western experimentation and methodology. I agree with Minchurin's basic criticism of Mendel, but Luther Burbank's empiricism cannot be ignored or dismissed. His methods of heavy fertilisation and selection en masse suited the climate in which he worked, and gave to the U.S.A. new fruits, berries, and the two-crop potatoes. Personally, I find little sense in wasting time trying to move sensitive plants, such as the peach, far to the north, to climes where even the apple tree runs into difficulties in years of extreme frost. Indoor culture is a far more sensible way of tackling and overcoming that problem, and as caloric energy sharply increases this problem of plant sensitivity will solve itself. But even there one should exercise care and judgment, not act on the impulse of a thoughtless moment, as Khrushchov is so fond of doing. To move plants such as the peach to the north is hardly worth the trouble, but to breed a strain of sugar-cane able to withstand occasional light frosts is another matter, for sugar cane culture cannot be contained within any sort of indoor frame. Success would release millions of acres now sown to sugar beet, as the sugar cane is a far heavier producer than beet. One further point and I will close: Khrushchov is now urging the farmers of N. Kazakhstan to go in and develop animal husbandry. A cow in that territory, a scrub cow at that, would require close to half a ton of hay fodder per month for an 8 months period, and enclosed shelter for that entire period. Is it not time, high time, that a protest was made?

Khrushchov stated that the U.S.A. would starve to death without maize. I give you some statistics which proves the utter silliness of such a remark.

U.S. figures for 1959-60, in short tons—20 cwt.

Maize	..	..	..	..	99,735,000
Wheat	..	..	..	..	30,735,000
Oats	..	..	..	..	15,234,000
Barley	..	..	..	..	9,044,000
Rice	..	..	..	..	1,575,000

I have no recent figures for soya production, but this crop, almost unknown 30 years ago, is today a staple. In 1950 the tonnage approached 9,000,000. As for hay, I estimate U.S. yield, including lucerne, to reach at least 25,000,000 long tons. Exact British figures, excluding lucerne—of which our acreage is very small—comes to 7,012,000 long tons—1959-60. In addition, we must remember the tonnage of grass grazed.

In addition to the crop mentioned, large acreages are given over to potatoes, sweet potatoes, peanuts, sugar beet, pulses and cotton. Compared with us, the U.S. output of roots is very small, kale and such bulk crops almost non-existent. When you remember that much land is set aside for what is euphemistically termed "land-bank," the productive capacity of U.S. agriculture becomes apparent.

It is my own opinion that millions of acres now under maize—outside the maize belt proper—would, under Socialism, be given over to other crops more suitable to the ecology of the given areas. I have seen maize growing in Arizona and California pitiful to look at compared with the stuff I've seen in Iowa. It is for this reason that the average yield per acre of U.S. maize barely tops such countries as Italy, 25.1 cwt. per acre, against U.S. 26.1 cwt. per acre—for 1959-60. (I believe I gave you an incorrect figure for U.S. maize production in my letter. I looked down the wrong column. The above is correct).

You may ask why U.S. farmers grow such maize. Part of the answer is the low level of technique in the South, grip of tradition in other parts, cost of water for heavy irrigation necessary for lucerne, etc.

I charged Khrushchov with making a silly assertion. I apologise to him, it was far from being silly, it was cunning. The Soviet Union, like the U.S.A., must have maize or all is lost! Do you wonder that I am losing my respect for this man?

Khrushchov paints a completely false, idealist, picture of agriculture, so many acres under the plough, so many tons coming back. But life is not that simple. Man has not yet conquered climate. China has had three disastrous crop failures; Canada, as I pointed out, has turned to swarthing; Australia periodically suffers from drought, which literally decimates the herds. We, too, know what a wet summer can do.

At this very moment of writing, the news has come through from the Soviet Union that N. Kazakhstan is facing another disastrous harvest. According to the cable from the 'Daily Worker' correspondent on the scene, wheat is laying in swarths or still standing, too late to be gathered in. And thieves, he tells us, are pillaging unguarded fields.

Yes, blame must be fixed where it belongs: on to the shoulders of the petty-bourgeois philistine Khrushchov, the lover of warm climes, the man primarily responsible for opening up N. Kazakhstan, for pillaging, just as surely as the thieves, the fruit of Soviet labour, wasting it stupidly, criminally, in N. Kazakhstan, then, as the snow

falls, turning as a savage on to the farmers, blaming them, robbing them of self-respect, undermining their confidence in a Socialist future. Millions of tons of hard-won steel, the sweat of the Soviet worker, gone into reapers, binders, specially-built combines, attempting to do the impossible: gather in steady harvests in a harsh climate with thin and scanty soil barely covering the salt-pans.

Khrushchov appeals to the youth for sacrifices, reminding them of their father's days. It comes badly, this call for sacrifice, from a man who spends growing periods in soft and easy climes, at Yalta. Nevertheless, I owe him an apology on one score: he does speak up for more attention to sheep and pig production. But since he strongly urges more cattle production, the tremendous increase quite possible within a short period for pigs and sheep will be held back, for fodder will have to be spread among all three.

Of crying need is to raise sharply the productivity per acre of safe crops, such as rye—to a slightly lesser degree, barley and oats. These are splendid crops and, brought up to the level of the best W. European production, would do much to solve the feed problem. Unfortunately, all Khrushchov can see is maize silage and sugar beet. Silage, not maize grain, for even Khrushchov is forced to concede that maize won't mature in most Soviet areas. Off-hand, I would say that for every ton of dried lucerne, four would be needed of silage, and concentrates would still be needed on top of this.

In conclusion, I ask you in all sincerity to place what I have said before your farming friend, or others who make a living directly out of agriculture. If I have mis-stated things they will quickly prove me to be wrong, and that will be that. But if I am right in the main—and please remember, my basic views on agriculture are shared by many an agronomist in the Soviet Union—if you recall the silent reception given Khrushchov's speech, when he almost lost control of himself, when he threatened them with force—then a question of major political importance confronts you and your comrades.

Yours sincerely,

A. H. EVANS.

5th September, 1962.

Dear Mr. Dunman,

Thank you for your comment and Khrushchov's report on agriculture—which I hadn't read. I would be more than pleased to have this discussion broadened out, and to meet you. As you correctly remark. Soviet agriculture is politics on a world scale. I am pleased to hear that you have a farming friend returning shortly from a Soviet visit. Put these two questions to him. Why maize for silage is not grown to any significant extent in this country. Why sugar beet—the root—has not displaced other crops in this country for animal fodder.

I will comment, briefly, on Khrushchov's remarks. But first, let me clarify my own position. I contend that wheat, just as maize, demands a certain number of frost-free days. On the basis of statistics, on data covering temperature, rainfall etc., it could be decided by an impartial body whether N. Kazakhstan was suitable for wheat raising. I regard, at this precise historical moment, all talk of early ripening wheats as irrelevant, for despite all efforts none so far has succeeded in beating early frosts.

I stated that due to this factor—early frosts—the Canadian farms have introduced the system known as swarthing—cutting the wheat before it ripens. I pointed out that this step necessitated an extremely heavy investment in new capital for machinery suited to the demands of swarthing. I strongly suspect that swarthing dominates much of the method of harvesting in N. Kazakhstan. Khrushchov mentions the Tselinny Territory—where, I believe, some 35,000,000 acres has been brought under the plough—more than the entire Canadian wheat acreage, 28,000,000 acres at its 1940 peak. Khrushchov speaks of “the productivity of a self-propelled combine when threshing windrows formed by a 10-metre reaper.”

A combine harvester is a universal machine, it cuts, reaps and winnows the wheat simultaneously. If I am correct in my suspicion, then tens of thousands of reapers have been manufactured because of the necessity of swarthing the grain against early frosts. Also, is the combine which threshes the wheat the old combine, such as we see in our fields, or is it a new designed threshing unit? In any case, if I am correct about the reapers, all of Khrushchov's talk of saving metal and man-power is—camouflage. And please remember, swarthing gives you no guarantee of a sure harvest, for the wheat must reach a definite stage of development, and if the frost comes, its gone.

I hope that my suspicions are unfounded, for not even my distrust of Khrushchov—for his readiness to split the socialist world—hides the valour of the Soviet people from my sight.

The problem of opening up the new lands should not have been decided by politicians, nor even by decision of the Central Committee. Soviet science has matured itself, it has deservedly won the trust and confidence of the people. The Academy of Soviet Sciences as a whole, in possession of full data, should have voiced its opinion.

I do not believe that the opinion would have been over-riden. For the first time in the history of man, science has emerged, in one single place, in the Soviet Union, as an objective force largely independent of subjective wishes to this or that group. The power of the highly gifted orator, of the spoken word, of the magical swayer of multitudes, will pale before the collective wisdom of all-conquering science. No longer will men look upon another man as a god, with eyes of stupid worship. The "great man" theory of history will become dead as a dodo, thank god.

Lea-Farming

Khrushchov bitterly attacks Williams, accusing Williams and his followers of using the State to crush opposition. Can you blame me for wondering—is Khrushchov's hand as clean as all that? Williams may have narrowed the concept of lea-farming, payed insufficient attention to ecology, failed to fully realise that true lea-farming is not hostile to arable farming, both are close team-mates. But if Williams under-rated the plough it is equally obvious that Khrushchov's own knowledge of lea-farming is lop-sided.

Here are some British figures, 1959-60. Total production, United Kingdom: Wheat, 2,711,000 tons; Barley, 3,170,000 tons; Oats, 2,138,000 tons; Potatoes, 5,556,000 tons; Turnips, swedes and fodder-beet, 8,870,000 tons; Sugar beet, 5,742,000 tons; Mangolds, 3,578,000 tons; Hay, 8,063,000 tons. In addition, small acreages amounting to less than 500,000 acres were in field beans and peas, kale, rape, vetches etc. Bare fallow is very low, 366,166 acres. It should be noted that 8,975,303 acres out of a total acreage, excluding rough grazing, of 28,831,563 acres, were in grass for grazing. This is lea-farming as we know it.

Please don't get the idea that I am insensitive to the best in U.S. agronomy. Far from it. I once, during a somewhat full and busy life, owned an acre of youngberries and blackberries in California. I have yet to find soft-fruit such as I found in the U.S.A. I had a couple of rows of thornless blackberry with fruit as long as your little finger, full of juice and the richness of life, The youngberry, the still more splendid boysenberry—nothing are found to touch them in our shops, or, I am convinced, in the Soviet Union. Yet the Americans, on the whole, are disdainful of the soil, have little affection for it. But this too is explainable, a capitalist society with no roots in a medieval past, and plenty of space which leads to land waste.

We in this country are in a way more fortunate. We were "blessed," at the early dawn of industrialisation, with a virile, hunting aristocracy, and a squirearchy which took keen interest in the soil. The Soviet Union inherited a past shameful in its indifference to land, and a peasantry to go with it. A general explanation of everything is no good, or rather, it is only a sumation. Knowledge is found through examination, close and minute, of the particular.

Natural Conditions

Soils, such as Khrushchov praises in the Kuban, in Iowa, have

their laws of development about which we know all too little. It is the job of the agronomist to improve, make it suit the needs of man to an ever greater degree. The fen soils of Norfolk produce double, and, in exceptional cases, nearly three times the national average. Yet Khrushchov wails because the same sort of thing happens in his country. He lays the blame, solely and completely, on indifferent or poor cultivation. The hill farmers in my own Wales are good tillers of the soil, each field is known by name, its requirements tended to as a young mother tends her first born. Despite this, a less careful farmer in Norfolk will out-produce the hill farmer. Yes, careless cultivation needs stressing. I remember a very rich clay-land, almost a doby, in California. Unless cultivated at the precise moment, you had a hard-pan where even a nematode couldn't make a living. But that is a far different story from using the whip over the backs of people where natural conditions are not favourable. It is difficult for me to believe that farms in the same soil-region, lying back-to-back, exhibit the tremendous differences in output to which Khrushchov refers. If that is so, then I would recommend the trial, public trial, of the leading personnel of farm 'A' for indifference to a neighbour, for hostility to Socialism. Then I would recommend the arrest and public trial of all leading personnel in farm 'B' for criminal negligence, for laziness, and conduct detrimental to Socialism.

Less words, careless words, and more deeds, careful deeds, should be our motto.

Well, Mr. Dunman, I seem to have covered more ground than I intended, but that is life, always the unexpected crops up. I don't know what your reaction will be to my criticism of Khrushchov. It cannot be helped. That is the way I see things. I mentioned in my first letter to you what I thought of animal husbandry in N. Kasakhstan. I still recall the cows in my uncle's barn in Wisconsin and how sorry I was to cut their feed because we were running out of fodder. Ordinary commonsense—if there is such a thing—let alone marxist dialectic, should convince anyone that barn-feeding for seven to eight months a year is scarcely an economic proposition.

Should you, after a study of what I write, still wish a meeting, I would be only too pleased. If your farming friend is an intelligent man, as I hope he is, with a sound grasp of farming, perhaps you would let him read this letter. I assure you I would value his opinion.

Yours sincerely,

A. H. EVANS.

KHRUSHCHOV'S 20-YEAR PLAN

It would be unforgiveable to allow this historical moment to pass into limbo without a passing reference to N. Khrushchov's 20-year Plan, which the Novosti agency unfolded to an astonished world in the year of our Lord, 1962. Breath-taking, awe-inspiring, a coup de main, *triumph extraordinaire!*—I like that—such were a few of the adjectives from admirers.

But what struck one, as time passed, was the coolness by which the Plan was greeted by conservative opinion. There was none of the venom, the spitting hatred, which greeted the first 5-Year Plan, little of the more cautious approach which greeted the others. Why? For it is plainly evident that here was a golden opportunity to mock Socialist "planning," to tell people that pie-in-the-sky was all Socialism was good for. The opportunity was lost to the conservatives—and so-called Socialists—because they were fully aware of the implications involved. When you deal with the bourgeois of today you deal with sophisticated men, that must never be forgotten. They are being driven off the historical stage not because they have become indifferent thinkers politically but because the universal laws of social movement are beyond their control. The bourgeois, and those who crawl beside them, the social-democrats of all vintages, know that long-term national planning is impossible even to Socialists and their States as long as capitalism remains a living force to be contended with. Not because they have at long last grasped one of the essentials of Marxism, laws of universal movement, but because their practice has proved to them that war is inescapable as long as their system exists.

Who, in 1900, could have foreseen 1920? The most that even the genius of Lenin could see was that revolutionary moments would occur, that a political Party was needed to take advantage of those "moments." That was his life-work.

Who, in 1920, could have foreseen 1940? In 1940, 1960? Yet millions upon millions have swallowed Khrushchov's cant and humbug, millions upon millions to whom Socialism is dear and precious. That is why it is incumbent upon all such people to heed the words of Oliver Cromwell: "By the bowels of Christ, gentlemen, I beg you, think again!" For this man, Nikita Khrushchov, has broken, completely broken, with Marxism-Leninism, not because he deliberately set out to do so, but because the brain he brought with him into this world was not a good enough instrument to master philosophy, to understand and follow the ever-moving laws of dialectic. How could that be expected of this man who, in mid-sixties, confesses his complete ignorance of literature and the arts?

But the brain of Khrushchov possesses and feeds upon one thing to an inordinate degree: vanity, the belief in his own ego. And, because he possesses that most dangerous gift, oration, because, at bottom, he is a calculating, hard and ruthless man, he has attracted like minds, men who have forsaken Marxism-Leninism, and for basically the same reason. Also, it is well to

remember the power of family ties, of class alignment; to recall that tens of thousands of living Russians still under 70 received their basic impressions, their image of life, from Petersburg. The deeds of Peter the Great, and not the battleship Potemkin, is what stirs them, and will, to their dying day. A marriage takes place, unholy and filthy, of people from the working class, greedy for power, hating ordinary labour, mad to climb, with the intellectual dregs of the old, whose Russian chauvinism stinks to the heavens.

Khrushchov epitomises in his person the consummation of that marriage. He is capable of any and all treachery, first to the Soviet people, then to the toilers of the world. He, and all he stands for, will be destroyed by the march of history, over which he has no control.

Not eighteen months has gone by since the writing of the above essay on N. Khrushchov's famous Twenty Years Plan. And it became famous, if by fame we mean splashing headlines in much of the world's press, lengthy comment in publications, interviews on television and on the radio.

Much of the Communist press of Europe, such as the *Daily Worker*, *l'Humanité*, *l'Unita*, accepted the Plan without question, poured congratulations *ad absurdum* on to the author of the Plan, treated it as already half-way to successful completion.

Now the Plan is no more, not even a whisper appears in the press of those who praised it so highly. But one thing remains: an object lesson to all thinking people, to never forget what obstinate stupidity coupled to monstrous pride can accomplish even within a Socialist state. Cry havoc indeed when ignorance, pride and egotism, to the point of madness, is in naked power.

Khrushchov, and all he stands for, must be destroyed. It is the duty of the Soviet people to remove this man and his supporters before they devour more of the wealth created by two generations of Soviet people, before he undermines the very foundation of the Soviet State itself.