Reprint from the Journal of the Royal Central Asian Society, Vol. XXVIII, Part II. April, 1941.

# THE DEVELOPMENT OF INDUSTRY IN SOVIET ASIA

By VIOLET CONOLLY



10/83 SIML THE DEVELOPMENT OF INDUSTRY IN SOVIET ASIA

#### By MISS VIOLET CONOLLY

Luncheon lecture given on January 22, 1941, Brig.-General Sir Osborne Mance, K.B.E., in the chair.

R. CHAIRMAN, LADIES AND GENTLEMEN,-The subject on which I have the honour to address you to-day would make a fascinating film. It would show the great goldfields of Siberia, the Lena River and the Altai Mountains, the enormous cotton plantations of Central Asia, the building of the Turksib Railway through the sand deserts of Turkistan; it would show stretches of road construction in remote places such as the road which now links Stalinabad with Khorog in the Pamirs, the drab, grey wastes of the Kara Bougaz Gulf, where the largest mirabilite deposits in the world are now being transformed into a dozen chemical compounds; the many new towns of the Soviet Arctic, which, like the timber port of Igarka, have sprung up like mushrooms during the last ten years. It would show cargo ships penetrating the dangerous passage of the North Sea Route from Murmansk to the Far East-a route which is now regarded by the Soviet Government as a commercial highway from east to west and vice versa-thus after centuries actually realizing an Elizabethan dream. In fact, this imaginary film would present all the varied scenes of a colossal industrial development in climates ranging from the Polar Circle to the semi-tropical regions of Turkistan. Such a film would undoubtedly be spectacular and full of local colour, but a talk about the facts of expanding iron-mines, metallurgical plants, cotton mills, and suchlike things with even a minimum of statistical paraphernalia is a very different and drier task. However, I will try to sketch out in this talk what is now being done under Soviet auspices in Central Asia and Siberia with the minimum of statistics. And, indeed. frankly I would rather be your Aunt Sally for questions, which I hope will be provoked by this talk, than your lecturer to-day.

Well, to get back to the Soviets and Central Asia, I suppose it is necessary, in the first place, to define the scope of the subject. Soviet Asia geographically falls into three separate sections, each with its own 152

BY

**HSIJ** 

DELH

resources and special problems. These three sections are: Siberia, from the Urals to Lake Baikal and including the long Arctic coastline and hinterland in the same latitude; secondly, the Soviet Far East and the very important Soviet Pacific coast with the islands running from Vladivostock along the coast of Kamchatka up to the Big Diomede Island in Bering Strait; lastly, and perhaps most important of all, Soviet Central Asia, that mysterious country extending from the shores of the Caspian Sea through Turkmenistan, Uzbekistan, and Kirghizia and the great central land mass of Kazakhstan; right to the frontiers of Western China; closed for years to foreign travellers save a very privileged few by the Soviets, Central Asia was more accessible to Europeans in the days of Marco Polo.

In this huge area the Soviets, since the inauguration of the first Five-Year Plan in 1928, have been busily engaged in the biggest programme of industrial development now taking place anywhere in the world. It has been well said by one of the most impartial and expert observers of Soviet Asia that no group of men tried to do so many things at once in any period of history, except, perhaps, in war-time. The crudity and, indeed, often cruelty of the machinery employed to put through these Soviet plans for the development of Soviet Asia, the brutal disregard for human life and local custom (like the wholesale disruption of nomad life) and the record of blundering in the execution of projects little and big, which can be easily discovered if sought for, with all those slips between the cup and the lip which are inevitable in Russia, must in no wise blind us to the magnitude of the tasks which the Soviet Government has undertaken, and the vision behind many of these great schemes. To accomplish Soviet industrialization in record time, simple peasants, callow engineers, and Central Asian nomads and natives, who have never before handled any machinery, have, willynilly, been pitchforked into highly complicated industrial processes. But on that side of the Soviet system I will not dwell now, save to say that it has necessarily been very expensive in men and materials and caused many major hold-ups and hitches.

To deal with the Siberian area in particular. It should be remembered, in the first place, that Siberia is the great centre of Soviet nonferrous metallurgy, containing vast reserves of copper, bauxite, lead, zinc, and, most important of all, gold. During the Five-Year Plan, period since 1928, many new plants have been built to develop these resources, and vast quantities of expensive modern machinery imported from the United States, in particular, to develop them. Soviet propa-

ganda has a great deal to say about its geological discoveries since the Revolution, but in point of fact the non-ferrous resources of Siberia were virtually as well known to the old régime as they are to-day. The great difference lies in the tempo of their exploitation and the progressive manner in which they are now being developed. From the output of the giant plants of Kirovgrad, Krasnouralsk, and Karabasch in the Urals the annual Soviet production of copper has risen enormously; it might be still higher if the Communists had not frequently rejected expert advice for their own ideological notions. Copper imports continue from America, but there is no reason why Soviet Russia should not ultimately be independent of them when all the giant plants of Siberia and Central Asia, whose total capacity is planned to aggregate 500,000 tons annually, are working to full capacity. The iron and steel production of the Urals and Siberia still lags behind that of the Ukraine, but there is a huge concentration of giant non-ferrous combines-producing copper, nickel, aluminium, molybdenum-east of the Urals, while neither non-ferrous deposits nor non-ferrous industries exist to any extent in the Ukrainian or Central Russian provinces. This is a most important point in any consideration of Soviet Russia's vulnerability to invasion from the West, involving the geographical location of her basic industries. During the second and third Five-Year Plans the intensive development of Siberian machine building, coal and iron, and non-ferrous industries was strongly emphasized in Soviet policy. This drive was reflected in a sharp increase in the production of Eastern pig-iron, steel, and non-ferrous metals.

Nevertheless, it should be noted that, in spite of the expansion in Siberian industry, the increase in Ukrainian heavy metallurgical production has been both absolutely and relatively far greater than in the Eastern provinces of Russia during the same period.

As far as fuel is concerned, neither the Far East nor Siberia has any appreciable oil resources (apart from the minor wells of Sakhalin), but there are great coalfields at Karaganda in North-Western Kazakhstan and in Kuznetsk, midway across Siberia, where the population has been pushed up in recent years. The important metallurgical plants at Magnitogorsk in the Urals, which formerly had to rely on Kuznetsk, over 2,000 km. away, for fuel supplies of coal and coke, will be supplied by the end of 1942, according to the Plan, equally by the Karaganda and Kuznetsk mines; this means a reduction of well over 1,000 km. in the transport haul involved. There has been a good deal of talk in Soviet economic circles about a new metallurgical centre in Eastern Siberia, where there are rich deposits of iron ore north of Irkutsk. But as the mines lie 500 km. from the nearest station on the Trans-Siberian railway, little has yet been done to develop them. Tungsten and tin are among the deficient metals in the U.S.S.R., but in the remote area of Trans-Baikalia, on the borders of Buriat-Mongolia and Outer Mongolia, the largest tin and tungsten deposits in the U.S.S.R. are now being actively exploited by a "giant" combine at Djhida.

Until a few years ago, nickel has always been regarded as a deficient metal in the great mineral resources of Russia. Now in the frozen tundra of the Arctic Circle, at Norilsk on the Yenisei, the Soviets have discovered and opened up very large nickel deposits. Smolka, the Austrian journalist, who has written such an interesting book about the Soviets in the Arctic, tells how this inaccessible nickel-mining camp is supplied by air with food and many other lightweight commodities. When the other nickel mines at Norilik and Monchegorsk in the Arctic Circle are being worked to capacity, it is estimated that the Soviet Union will rank second after Canada as a world producer of nickel, though ten years ago its production amounted to nothing.

Siberia has long been romantically famous for its goldfields, which are scattered between the Southern Urals, the Altai Mountains, the lower reaches of the Lena River, and the remote Kolyma mines on the Pacific coast. We are luckier in regard to this Soviet industry, as far as accurate information is concerned, than in the case of most others, for John D. Littlepage's vivid and expert chronicle of his ten years' work reorganizing the Soviet gold industry for Stalin has no parallel in the contemporary history of the Soviet Union. In his admirable book, In Search of Soviet Gold, this American mining engineer has given us first-hand testimony of the great possibilities of the Soviet gold industry in Siberia and Central Asia, and of the "wrecking" activities he personally witnessed in the lead- and copper-mines of the Urals and the Altai. Though honourably withholding the closely guarded secret of the actual figure of gold production in the Soviet Union, there can be no doubt, from his account of the industry, that production has increased enormously in recent years and now stands second in the world after that of the South African goldfields. Many of the more cramping Soviet restrictions on initiative and enterprise have been deliberately set aside in the case of gold prospectors in the wilds of Siberia and the Far East, who enjoy very much the same kind of freedom they would have in a "gold rush" in Alaska, so long as their finds are reported to the Soviet Government and the gold handed in. These starateli, as they

are called, have been encouraged to prospect new areas and push up the gold output by the bait of far better stocks of food and other commodities than are available for Soviet workers in the ordinary workshops and mines.

Passing from Siberia to the immense Soviet Far East with its virgin forests, and undeveloped, only partially prospected natural resources of many kinds, we reach a much less progressive and still very under-populated area. But here also the Soviet Government has many ambitious schemes of development, not the least interesting of which was, perhaps, the establishment in 1928 of a Soviet home for the Jews of the world in Birobidjan. Under the three Five-Year Plans many light industries such as cement, food, and fish preserving, glass- and brick-making, and so on for local needs have been started. And the entirely new town of Komsomolsk-on-the-Amur, with nearly eighty thousand inhabitants in 1939, has sprung up in a few years. One of the high spots of the second and third Five-Year Plans was the establishment of a Far Eastern metallurgical industry for a "giant" plant called Amurstroi in Komsomolsk-on-the-Amur. The Moscow planners have set this plant the task of supplying all Far Eastern requirements in iron and steel by 1940-1941, though up to the present these heavy metals had always to be imported from hundreds of miles away. In fact, however, things are very much behindhand in the construction of this plant, and after four years' dawdling it has now scarcely got a roof over its head. Originally it seems to have been planned by people in Moscow with very rudimentary information about the local fuel and ore resources on which it was eventually to work. Now that the Bureya coalfields which were to supply the coking coal have been more exactly surveyed, it has been discovered that, though enormous in extent, they consist very largely of brown coal, which will require expensive treatment before it can be used for coking purposes in the new plant, if at all. In spite of a lot of inflated rapportage about the geological iron reserves of the Far East, it is now known that they are extremely small, and the ore contains a low percentage of iron. So Amurstroi is also in difficulties about its future ore supplies. It is typical of Soviet planning that, even after the foundation-stones have been laid and the plant is scheduled to start production, there is still considerable obscurity regarding such essential raw materials as coal and iron.

The position with regard to non-ferrous minerals in the Far East is more promising than with regard to ferrous. Lead-zinc mines have long been worked at Tetiuke, north of Vladivostok, and the Soviets have now established a polymetallic combine to work the local lead, zinc, and silver resources. The lead is smelted locally, but the zinc still travels (or did in pre-war days) for several months overseas to the Ukrainian zinc plant at Konstantinovka, the only non-ferrous plant in Central Russia.

The present state of tension in the Far East brings the island of Sakhalin, the only oilfield now being exploited in the Soviet East, with its Soviet and Japanese oilfields, prominently into the international picture. It was recently rumoured that the Soviets may demand the return of Southern Sakhalin, ceded to Japan by the Treaty of Portsmouth in 1905, as the price of a non-aggression pact with Japan. Further north there have been many reported discoveries of oil on the North Siberia coast and in Kamchatka, but no commercial results are yet being yielded by these wells. Sakhalin is now connected with the mainland by a pipeline from Okha, and in these island fields Japanese and Russians work side by side in a checker-board arrangement in the concession area. In 1938 it yielded 1.2 per cent. of the total Soviet oil production, or almost 400,000 tons. Formerly all this oil had to be used in a crude state because there was no oil refinery in the Far East; now a new cracking plant has been erected at Khabarovsk, and another with a capacity reported large enough to supply all the requirements of this region is being constructed at Nikolaevsk-on-the-Amur. A third refinery is planned for Komsomolsk. Nevertheless, Soviet plans have not advanced so far as to make this area independent of imported oil. Both the growing industrialization of the country and the state of tension surrounding the Soviet armed forces on the Soviet-Manchurian frontier demand large supplies and reserves of oil. Apart from oil and industry, Soviet achievements in the Far Eastern region include the double tracking of the Trans-Siberian trunk line throughout its entire length; the value of this work cannot be overestimated, for, in spite of Soviet planning, this region is still largely dependent for many supplies on Siberia and Central Russia, and places a heavy strain on East-bound transport.

The economic development of Central Asia is even more striking than what the Soviets have achieved in Siberia, where Russia has a long record of economic activity. In many fields a start was only made after the Soviet revolution in Central Asia. There the native Kazakhs, Uzbeks, Tadjiks, Turkmens, and other indigenous peoples carried on their local handicrafts and tilled their crops of cotton in the same way for centuries, without the intervention of modern methods of machinery. All this was abruptly changed by the advent of the Soviets. Significant of the changes to come in the lives of these peoples was the new division of this vast Central Asian territory into five Soviet republics: Kazakhstan, the largest of the five, with an area approximating to Europe; Uzbekistan, great cotton reservoir of Russia, and the most thickly populated of the republics; Turkmenistan, incorporating the former Emirats of Bukhara and Khiva, where in the sandy wastes of the Caspian shores a great new chemical industry has been constructed, and in the sand deserts the Soviets have discovered important rubber-bearing plants which have been made the basis of the Soviet natural rubber industry; Tadjikstan, a relatively small republic about the size of Great Britain, containing the highest mountains in the Soviet Union, the roof of the world, bordering on Afghanistan and China and narrowly separated from India; Kirghizia, somewhat bigger than the combined area of Belgium, Holland, Austria, and Switzerland, bordering on Sin Kiang and famous for its herds of sheep and cattle.

The cotton-fields of Central Asia have been enormously expanded under Soviet auspices, with the result that, whereas more than 50 per cent. of Russia's cotton supplies were formerly imported, virtually no cotton now comes from abroad. Owing to this expansion, Russia is now the third greatest cotton-growing country in the world, ranking after United States and India, both in area and production. Irrigation has largely contributed to the extension of the cotton-fields, and, if Soviet plans for the next ten years materialize, millions of acres of arid desert land will be irrigated for cotton growing. The opening of the great Fergana Canal last year in Uzbekistan, hailed as a national festival all over Russia, was one of the most practical efforts to realize these large-scale irrigation plans. It should be pointed out, however, that the greatest expansion in the area under cotton took place during the first Five-Year Plan, when the cotton area rose abruptly—and extremely arbitrarily as far as the wishes of the local population were concerned-from about two and a half million acres to nearly five million acres. There has been little increase since this time, though the yield per acre has risen enormously. The little republic of Tadjikstan is the centre of the Soviet Egyptian cotton growing. Not only have the Soviets expanded cotton growing in Central Asia, where it has been grown from time immemorial, but they also have inaugurated a cotton textile industry there which was formerly heavily concentrated in the Central Russian areas of Moscow and Ivanovo, the Russian Manchester. In recent years new spinning and weaving mills have

been established at Fergana in Eastern Uzbekistan, Ashkabad in Turkmenistan, and in Tashkent, the capital of Uzbekistan.

The expansion of the cotton industry in Central Asia has called for large supplies of nitrogenous fertilizers. In order to manufacture these fertilizers locally, the Chirchik chemical combine on the Chirchik River, 40 km. from Tashkent, with an annual capacity of 160,000 tons, was planned. This plant is regarded as one of the biggest constructional schemes in the U.S.S.R.; it was specially noted by President Kalinin in his commemoration panegyric of the Revolution, last November, as one of the major achievements of the Soviet Union of 1939-1940; and later *Pravda* proudly announced that the first deliveries of nitrogenous fertilizers had been despatched to the Fergana cotton-fields.

The list of minerals and precious stones found in Soviet Central Asia, according to rather vague information in Soviet publications, seems endless-gold, silver, lead, copper, zinc, diamonds, even radium, as well as coal and oil. But there is no doubt about the richness and future possibilities of at least the copper, zinc, and lead resources of this area. Both in Kazakhstan at Balkhash and Djheskasgan, and in Uzbekistan at Almalyk (some 75 km. south of Tashkent), great mines of first-class copper ore are now being exploited. The Diheskasgan (150,00 tons annually) and Balkhash copper combines are planned on a large scale, the latter to produce 175,000 tons of raw copper annually. These resources were well known in pre-Soviet Russia, but the unfavourable climatic conditions, the uninhabited nature of the country in which they were situated, and the general difficulties of development in these circumstances delayed their exploitation until the Soviet régime, with a characteristic disregard of such human problems, whipped them into life. The largest mines of zinc and lead in the Soviet Union are in Central Asia-one valuable mining property at Ridder in Eastern Kazakstan, and another polymetallic combine at Chimkent, north of Tashkent in Uzbekistan.

It is rather typical of the slipshod methods in Soviet planning that this large combine at Chimkent should have been constructed on a scale far beyond the productive capacity of the lead-zinc mines at Achi-sai, which should supply it and are now in danger of being exhausted in a couple of years. They were only later properly surveyed and discovered to be much smaller than was originally believed.

I am afraid time is running out, and so many other Soviet plans and schemes for Central Asia must pass unnoticed in this brief survey. A full record would require a book for adequate treatment, and not a

lecture such as this. I can only hope to have indicated the signposts of this vast subject, but before concluding there is just one point I should like to note.

I have deliberately omitted any reference to the political side of Soviet activities in Asia or elsewhere, because it would carry me out of my depths to a very obscure if undoubtedly important hinterland to this subject. We who do not live in Russia know very little about the byways of political intrigue in that country or how it affects economic plant or development. But there is one indirect political aspect of the Soviet development of Central Asia which should be mentioned. To the south of the Soviet republics of Turkmenistan, Uzbekistan, and Tadjikstan lie the semi-feudal countries of Iran, Afghanistan, and India, where wages are low, social conditions not ideal, and workers have little say in their industrial lives. What will be the effect on the millions of "toiling natives," in these countries over the frontier, of the new ideas and progressive measures in Soviet Asia, is a question asked by many. It has been assumed by many protagonists of the Soviet Union that the ideas and ideology which have literally transformed the face of the earth in Soviet Asia would spread like wildfire in the still "unemancipated" countries to the south; that the peoples of these countries would be stimulated to revolt and discontent when the record of Soviet achievement reached their homes and fields. Logically, this would seem to be a very likely result, but there is one factor which is likely to be overlooked by the merely logical-and logical to the wearing of blinkers, I submit, are the dyed-in-the-wool supporters of the Soviet Union abroad. Soviet achievement, so manifold and undoubted in many ways, and including the Soviet work for education, hygiene, emancipation of women, might, in fact, have attracted millions of poverty-stricken Iranians inter alia to the Soviet fold if it were not for the constant stream of tell-tale refugees slipping across the frontier from the Soviet Union and all telling the same tale of ruthless oppression, semi-starvation, and Olympian disregard for the wishes and ways of the Central Asian native, and in particular for his deeply rooted Moslem faith. In the words of the poet, "the best is yet to be" in the U.S.S.R. But up to the present time there is this other tragic side to Soviet achievement, which the inhabitants of the neighbouring countries are never allowed to forget, in the physical presence of the runaways from Stalin's paradise.

The CHAIRMAN: One rather feels that one would like a large-scale

map in front of one with the paper we have just heard written, so that we could follow it line by line on the map and gradually digest the geography of it.

But I think that the main feature that has been put before us is the fact of this enormous development with its ultimate success in spite of the delays inherent to the initial difficulties of labour and materials and possibly also to the Russian character and ignorance. So that I think that, even on general grounds, we have ample scope for discussion, and the meeting is now open for discussion.

The following question was put: What are the possibilities of supplying Germany over the Siberian Railway with raw materials for her war industries, both from internal sources and imported sources?

Miss CONOLLY: I would rather limit the question to the possibilities of supplying Germany than deal specifically with the state of transport over the Siberian railways. I should have thought, if the Russians were supplying Germany, the last thing they would want to do would be to haul goods from Vladivostok all the way across Siberia, except in cases where it was absolutely necessary to supplement local resources for this purpose.

Take the question of cotton. Russia does not need to import via Vladivostok or elsewhere. If you estimate the capacity of the Soviet mills in terms of the cotton crop, there seems to be a surplus of cotton which might be sent to Germany without complicating the domestic position. But I do not think it is proposed to supply the whole of Germany's needs. In any case, judging by Soviet Russia's own needs. I would be very much surprised if the original terms of the Soviet-Berlin Pact were kept on the economic side. Certain commodities like metals may be imported from America for the Far Eastern development and the Siberian supplies sent to Germany, but I doubt if supplies imported from Vladivostok wholesale could be sent to Germany. I do not think the Amur railway would stand the strain. I believe it would be impossible to send very large supplies by that route, from what we know of the state of the rolling stock, though I admit our information on this point is very inadequate. I think some of the copper imported from America possibly did go to Germany. It was in excess of Russia's normal requirements, but then Russia's defence needs have also increased latterly.

Imports have been increasing during the last few years.

Brigadier-General Sir PERCY SYKES: When I was in Central Asia many years ago the Tsar's estates were very large, and they started this

cotton industry. Then when the Soviet came in they increased it enormously, as our very able lecturer has pointed out. The result was that the people there were starving. I remember a very hardy traveller had to take all her food from Moscow and could not buy anything because all the people in Tashkent were only allowed to feed the workers.

That has a most important result, for if Russia wished to invade Afghanistan they have no wheatfields anywhere near; the farms have all become cotton-growing plantations.

There is one other little point I would mention, which is not generally known—namely, that all the gold of India came from Siberia. India itself in the early days produced no gold at all. All the gold they got came from the north and was paid for by the spices and products of India.

A Member said: With regard to the first question, during the last war we did import into Russia via Vladivostok very considerable quantities, and we used the Trans-Siberian Railway, which was more or less a single line. For a long time it was the only means of getting goods into Russia during the winter-time.

With regard to the import of particular commodities at the present time, without any question Russia is importing tungsten by that route. She is also importing copper by that route.

As to old Russia having thought of most of these plans for development, that is perfectly true. The Soviet have only put these into operation, as the lecturer said, but the thing which held back development in the old days in Russia was the difficulty of the falling capital. If you have unlimited capital and if you have the power of forcing labour, you can do many things which you cannot do if you have to make a scheme efficient. For instance, take the development of the Arctic. Russia has done an enormous amount in this way, but as a commercial proposition I am quite sure the development of the Arctic does not pay and that the money would have been very much better spent in Russia in the development of what she lacks so much-transport. The most inefficient service is transport, but instead of developing that she has developed the Arctic. From a political point of view the development of the Arctic is most useful. It provides Russia with a means of getting from the West to the East via the North Sea Passage, and for that reason alone it pays Russia to run industries up there on a non-commercial basis.

I would like to thank the lecturer very much indeed for the infor-

mation she has given. She has had to cover an enormous field, and I am sure that she has interested us all very much. (Applause.)

MEMBER: May I ask a question which arises out of a book I have lately read, which dealt with the splendour of the Soviet's achievement for the underdog in Russia, by which they hope to go beyond Soviet boundaries and to lead to similar changes in Iran, Iraq, and other countries, including India. The book I read was *Stalin's Russia*, and its author was a friend of Trotzky.

The picture he drew was somewhat like this. That Lenin started in Russia a certain dictatorship by the proletariat, and the organization of industry began on that basis. Stalin came along in due course and found that industry on those lines was running very badly, that it wanted a good deal of tuning up. The result was that he elaborated a stiffening up by official or bureaucratic control of all these activities, and, according to the author, we have now arrived at this stage, that Socialism as generally understood, or proletariatism as was generally understood to have been introduced in Russia, has practically vanished; that in the place of the old capitalist employer you now have a State employer, and that the State is a far harder taskmaster for the worker than the private capitalist ever can be or is ever likely to be, partly because the State has no control from above over itself, whereas every private capitalist has some sort of control over him.

According to this picture, the lower classes are in a far worse condition in Russia than they have ever been before. I do not know whether the lecturer can perhaps throw any light on this control of the worker.

Miss CONOLLY: I think the book you refer to, *The Crisis of Stalin's Socialism*, by Max Eastman, is a very excellent one, even though its immediate object was anti-Stalin propaganda. Max Eastman's point is definitely confirmed by the trend of recent Soviet labour legislation. There has been a constant effort to get more out of the worker and to restrict his freedom in every way. Chapter and verse to prove that point can be produced from labour decrees in Russia during the last year.

MEMBER: Did you say they are producing synthetic rubber in Russia?

Miss CONOLLY: I did not refer to synthetic rubber, as it is not made in Central Asia. What I referred to was the natural rubber the Soviets are now extracting from the small rubber-bearing plants in Russian Asia. The synthetic rubber is made from limestone, coke, and potato

alcohol, and in all there are three processes being used. I believe the U.S.S.R. does import rubber, but about 70 per cent. of Russia's requirements before the present war were supplied by domestic synthetic rubber plants—an entirely new industry.

Sir HASSAN SUHRAWARDY: I cannot speak with the authority and knowledge with which the others have spoken, as I have not visited Russia, but there is one aspect to which I may invite the attention of the house and the lecturer—namely, this impact of the influence of Soviet Russia on my own country, India, and the adjoining country of Afghanistan. For many years we had the Russian bogey. We were brought up to think that Russia was a great menace to our safety, and all the trouble of invasion that we ever envisaged was to come through the Khyber Pass, as had happened for centuries past.

Then came the Russian Revolution, and the Soviets said: "The underdog in Russia has been given a very much better chance and a better life. We will give the same to the workers and the poor everywhere." These statements had an influence in the North-West Frontier Provinces, and even as far east as in Bengal we found repercussions of those ideas. Actually Soviet agents have been found by Government, working amongst the mill hands and workers round about the riparian mill areas in and around Calcutta. This has strengthened the Congress organization, and, under Mr. Abdul Ghaffar Khan, the North-West Frontier Province became a Congress-governed province. But through the efforts of the Muslim League and some other leaders who have travelled widely and have had their vision widened by experience, the Indian Muslims understand the true position. They also realize one great factor-the geographical factor of Japan being so near and so powerful, and a very important naval Power, and anxious to expand. The appreciation of these facts has led to the recognition of the importance of Singapore, which has now become our most important Eastern frontier naval base.

India, as we can see from the map before us, has a very big exposed sea line, and all the sea coast there is vulnerable to the attack of any Power like Japan who would like to attack. Japan is now an Axis Power, and we do not know what Russia is going to do. She calls herself a great Eastern Power, and she is sitting on the fence. We say she is our friend. The British Commonwealth of Nations does not want to come into conflict with Russia, but at the same time we must realise that, whereas Japan is a great menace to us, in the same way Russia can be a great menace also. Therefore the Indian politician realizes that the best interest of India will be served by being so united economically and politically with Great Britain that we can get the naval, the air, and the mechanized army support of this great Commonwealth of Nations, which among all the nations of the world to-day is offering the right to live one's own life and is fighting the fight of freedom so heroically and single-handed against all odds.

That is one thing which I would like to point out, that the Indian and the Afghan politicians realize the great gain that can come to them from British friendship, because, after all, unless politics are based on a recognized principle of friendship and interdependence they are no good to anybody. That was one point which the lecturer, perhaps wisely, did not speak about. (Applause.)

Miss CONOLLY: I am glad you do not seem to believe in the old bogey of the Soviet invasion of India. Of course, India being further from the Soviet frontier, propaganda among workers is more effective.

The CHAIRMAN: It remains for me to express what I am sure you would all like me to do, our very hearty thanks to the lecturer for the most interesting lecture we have heard and for provoking so interesting a discussion.

The Russian problem is so stupendous that it is extraordinarily hard to get on to any aspect of it without getting bogged in the main considerations of what Russia really does mean and will mean for the world's history.

We have heard some remarks about the alteration of the original Communist principle as regards the employment of labour. What one feels one would like to be able to size up, if it is possible, is the relative importance of the three ingredients in incentives to action, which I should summarize very briefly as gain, fear, and service. Originally, undoubtedly, fear predominated, and I suppose it does at the present time; that is to say that there is compulsion, and if you do not do your job, or do it badly, you get shot up. That must be in the background, I suppose, a great deal. Now one hears that they are giving incentives: people get extra pay for harder work and more successful work; and there is the hope of earning increased pay, far greater in proportion to the normal minimum pay than in any other country in the world.

Finally, you have the ideal, which is brought out again and again in Miss Conolly's book,\* by instances of the enthusiasm of the people

\* Soviet Tempo, by Violet Conolly. London, 1937.

of the country for their new régime. She makes the remark, which is very significant, that one of her fellow-travellers said that the true Communist is the one who thinks only for future generations. This is a very tolerable definition of service, and it would be very interesting as regards our own future economic and international development, after this war, to have a study of how far these three motives are operating in Russia, with an analysis of any special conditions which would effect the application of the lessons learnt that way to other countries.

I hope you will express in the usual way your thanks to Miss Conolly for her most interesting paper.

The vote of thanks was carried by acclamation.



