



# CENTRAL ASIAN REVIEW

A quarterly review of current developments  
in Soviet Central Asia and  
Kazakhstan.

The area covered in this Review embraces the five S.S.R. of Uzbekistan, Tadzhikistan, Kirgizia, Turkmenistan and Kazakhstan. According to Soviet classification "Central Asia" (Srednyaya Aziya) comprises only the first four of these, Kazakhstan being regarded as a separate area.

Issued by the Central Asian Research Centre in association with  
St. Antony's College (Oxford) Soviet Affairs Study Group.

PRICE : SEVEN SHILLINGS & SIXPENCE

Vol. III. No. 3.  
1955.

CENTRAL ASIAN REVIEW and other papers issued by the Central Asian Research Centre are under the general editorship of Geoffrey Wheeler, 66 King's Road, London, S.W.3, and David Footman, St. Antony's College, Oxford.

CENTRAL ASIAN REVIEW aims at presenting a coherent and objective picture of current developments in the five Soviet Socialist Republics of Uzbekistan, Tadzhikistan, Kirgizia, Turkmenistan and Kazakhstan as these are reflected in Soviet publications.

The subscription rate is Thirty Shillings per year, post free. The price of single copies is Seven Shillings and Sixpence.

Distribution Agents:

Messrs. Luzac & Co. Ltd.,  
46, Great Russell Street,  
LONDON W.C.1.

# CENTRAL ASIAN REVIEW

## CONTENTS

	Page
<b>Social Conditions</b>	
Wages in Central Asia	184
The Settlers on the New Lands	192
<b>Communications</b>	
Communications in the New Lands	199
The Lanchow - Urumchi - Alma-Ata Railway	204
<b>Industry</b>	
Coal Mining in Tadzhikistan	207
Socialist Realism comes to the Carpet Industry	211
<b>Science</b>	
Science versus Sand : A Botanist in the Turkmen Desert	214
<b>Public Services</b>	
Mother and Child Welfare	221
<b>Public Works</b>	
The Arys-Turkestan Canal	225
<b>Architecture</b>	
Monuments of the Bet-Pak-Dala	229
<b>Cultural Affairs</b>	
The Decisive Step : A Turkmen Historical Novel	236
The Role of the Kazakhs in the Administration of Kazakhstan	244
Soviet Oriental Studies : The Need for Further Development	251
<b>Current Events</b>	
News Items	258
<b>Bibliography</b>	
Recent Source Material : A Selected List	263

## Maps

Kazakhstan	facing page	193
Areas of settlement in the new lands	„ „	195
Communications in the new lands	„ „	201
The Lanchow - Alma-Ata railway	„ „	205
Tadzhikistan	„ „	209
Uzbekistan	„ „	213
Turkmenistan	„ „	215
Kirgizia	„ „	223
The Arys-Turkestan canal	„ „	225

## Illustrations

Monuments of the Bet-Pak-Dala	„ „	231
-------------------------------	-----	-----

S O C I A L   C O N D I T I O N S

---

## W A G E S   I N   C E N T R A L   A S I A

Industrial workers - MTS tractor-drivers - Workers on cotton MTS -  
Workers on cotton kolkhozes - Workers on other kolkhozes - Methods  
of payment - Prices.

Wages in Central Asia are a subject on which comprehensive and precise information is not available in Soviet publications. The following article should not therefore be regarded as an authoritative survey of wages, but rather as a compilation of such information as could be gleaned from the Central Asian daily press. Nearly all the examples quoted appeared during the last six months of 1954 and in the first three months of 1955.

---

Most of the references to wages in the press appear when industrial and agricultural output is at its highest, such as during the harvest, at the end of the year when kolkhozes have their annual reckoning, or at times when supplementary pay or long service awards are given. They seem partly, if not chiefly, to be designed to act as a stimulus to further efforts or to draw attention to the rise in the standard of living.

The wages of industrial workers feature much less frequently than those of workers on the land. The reason for this would seem to be that there is no need to carry on propaganda for increased output in the press; it can be more effectively pursued in the factories themselves. Some figures are given for the pay of miners in Kazakhstan: a driller earned in a specimen month 4,285 rubles - 2,080 on piece-work and 2,205 in "progressive pay", that is, for norms fulfilled. The average earnings are said to be between 30,000 and 70,000 rubles a year;

## SOCIAL CONDITIONS

these yearly earnings include premiums and other additions, and it is not safe to deduce monthly earnings from them. One miner with the title of "the best driller in non-ferrous metal working" earned 67,000 rubles in 1953, having worked 68 per cent more than his norm. It is said to be not unusual for miners to earn 4,000 to 6,000 rubles a month. Against this the average monthly wage of miners at mine No.7 at Karaganda has been given as 1,090 rubles in 1953 and 1,170 rubles in 1954 (1). The same source (1) gave the average monthly wage of a member of a "brigade" working on a coal-cutting combine as 3,500 to 5,000 rubles (in 1954). Many miners own Pobeda and Moskvich cars. Miners at Shor-Su in Uzbekistan are said to earn, on an average, 1,500 to 1,800 rubles a month.

A worker at a Kazakh iron foundry with his wife is said to earn over 3,000 rubles a month; it is added that this is usual, especially among "brigade" leaders, many of whom own motor-cycles, and even cars; a shop-foreman and an engineer have bought pianos. Most of the workers have their own libraries - one collects first editions and has in his flat more than 200 books.

Other information for industrial workers is all of supplementary pay. Most organizations pay out large sums annually in this way, but in the absence of figures for the numbers of workers employed the importance of these allocations cannot be estimated. There are, however, certain examples of supplementary pay given to individual workers: at the Tekeli lead and zinc kombinat, two drivers of electric trains received 4,000 rubles each, a "brigade" leader in the pulverizing department of the concentration plant, 5,000, and a mine foreman, 5,500. The Lenin Metal Works at Begovat paid 3,538 to a steel founder, 6,000 to a senior foreman, and 8,600 to the head of a shop. At Andizhanneft three drillers received 4,000 rubles each.

The most highly paid agricultural workers are the tractor-drivers and machine operators of the MTS. The system for their payment is especially complicated. It has often been revised, the latest revision being after the September Party plenum in 1953 (2). Now, according to the type of machine operated, a worker is credited with four to seven "work-days" (trudodni. A trudoden is the unit of labour) per shift. When he is paid by time, he receives from ten to eighteen rubles per shift; this sum is then multiplied by the number of units of labour ("work-days") with which the worker is credited. When, as is always the case if possible, workers are on "piece work" (which is, in fact, a combination of work by piece and by time), they receive 1 ruble 62½ kopeks an hour, or more if the "tariff" rate (the officially appointed piece-rate) is higher, but not less if it is lower. The resulting total for the shift is again multiplied by the number of "work-days" due. Payment in kind is to amount to at least three

kilograms of grain per "work-day" if the plan is achieved, and two if it is not. Workers at the MTS of cotton-growing regions receive half this amount of grain.

This would appear to imply that in a month of twenty-five working days a MTS worker should earn at least 1,000 rubles, at the lowest rate of pay by time, or 3,500 rubles at the highest rate of pay on piece work. In kind he would earn at least 300 kg. of grain, or half that amount on a cotton MTS. From this are deducted fines, in accordance with responsibility, for wasting petrol, for lack of attention to the servicing of machines, or for non-fulfilment of norms - for this last up to 20 per cent of the total earnings; to it are added premiums and supplementary pay for over-fulfilment of norms.

There are some examples from Kazakhstan of MTS workers' pay which agree broadly with the scale outlined above. Mikhail Lazarev is a brigadir from the Makinsk MTS working at Put Lenina kolkhoz (Akmolinsk oblast). Last year he earned 25,000 rubles and 25,000 kg. of wheat. In addition he received considerable quantities of vegetables and dairy produce, which, with most of the wheat, he sold. His son is a tractor-driver; the family budget reached 100,000 rubles. To make this total, income from his own garden produce and cows contributed. He has bought a car, a wireless set, a gramophone, a milk separator, a sewing machine, furniture and carpets. Other "brigade" leaders on the new lands earned 5,000 rubles in June 1954 (a busy month) and tractor-drivers in their brigades, 3,000.

On a new grain sovkhov at Barvinov in the Kustanai oblast tractor-drivers earned from 2,000 - 2,500 rubles in August 1954; one earned 2,834; another, who, with an S-80 tractor, ploughed 600 hectares of new land, and was in the first wage-class, earned 3,147 rubles. A brigadir earned over 5,000.

The operators of cotton-harvesting machines have a special scale of pay (3). They receive 60 rubles a day on fulfilment of their appointed norm, double pay for cotton harvested beyond the norm. When the norm is not fulfilled, up to twenty per cent of their pay may be withheld at the discretion of the director of the MTS or sovkhov. The norm varies from 600 kilograms per hectare on the first run and 300 on the second run, where the planned potential of the field is 1,200 kilograms, to 1,700 and 800 where it is over 2,500. There is in addition a "seasonal norm", depending on local conditions, by which the operator must harvest from 40,000 to 60,000 kilograms in the season; from one cotton sovkhov to another the norm may vary from 40,000 to 55,000 kilograms. On fulfilment of his seasonal norm, if he has kept his machine

## SOCIAL CONDITIONS

in good condition, a driver receives a premium of half the amount he has earned in the season.

In times other than the harvest season, cotton MTS workers are paid according to the usual combination of time and piece work. On cotton cleaning they are allowed five "work-days" per shift; this pay is subject to a 20 per cent deduction for bad work, or to an increase for over-time at the discretion of the director of the MTS. The pay is the same for spraying the cotton before the harvest to make the leaves fall. For a week before the harvest, when the fields are inspected, the workers are allowed 15 rubles a day. Normally, a brigadir is allowed 1.8 "work-days" per shift, his assistant, 1.5, and the mechanic-rate-fixer, 1.2.

The cotton harvest lasts for two or three months. During that time the basic wage of a machine operator would seem to be something in the region of 1,500 rubles a month, with 750 rubles premium for each month, paid at the end of the season; this would vary up to as much as 2,700 rubles in the case of a brigadir, plus a premium of 1,350 rubles. The harvest period may, of course, vary considerably according to the amount of cotton harvested per day. An example of a day's harvest from the issue of Pravda Vostoka quoted (3) gives 3,300 kilograms, but this is exceptionally high. On the proceeds of the harvest the MTS workers must live for a great part of the year; the guaranteed minimum for the "work-day" is otherwise five rubles in Central Asian cotton MTS.

The cotton kolkhozes generally have a very large income. The Turkmen kolkhoz Bolshevik (Bairam-Ali raion) received a premium alone of 5,000,000 rubles at the end of the harvest. It is well known, however, as a kolkhoz with many members, and the individual share of this may not have been large. In Uzbekistan there are examples of kolkhozes receiving premiums of two, three and four million rubles. However, a specimen budget for Kzyl Uzbekistan kolkhoz (Ordzhonikidze raion) in Uzbekistan gives a total income of about 4,000,000 rubles, but this is for 1947.

The kolkhoz cotton-pickers wages given in the press are, it may be assumed, exceptional; some are clearly so. At a Turkmen kolkhoz (Vtoraya Pyatiletka) the wage for the "work-day" was 18 rubles and 2.5 kilograms of wheat in 1954. The members of one brigade even received 23.75 rubles each. One family received 52,000 rubles, 5,500 kilograms of grain and 1,050 kilograms of sesame in the year; one picker, a woman, earned 10,500 rubles and 2,000 kilograms of wheat. On an Uzbek kolkhoz with an income of 14,000,000 rubles, a family, working 3,500 "work-days", received 62,000 rubles and 8,750 kilograms of grain - that is, about 18 rubles and 2.5 kilograms per "work-day", as on the Turkmen kolkhoz mentioned. On another kolkhoz, also in Uzbekistan, a husband and wife who worked 940 "work-days" were paid

18,000 rubles and 6,000 kilograms of grain - that is, again about 18 rubles per "work-day" and 6 kilograms of grain. The only useful Kirgiz parallel is of a woman who in five days did 75 "work-days". She received 150 kilograms of wheat and 1,050 rubles, suggesting a rate of 18 rubles and 2 kilograms per "work-day".

A fair example of wages on a kolkhoz not specializing in cotton seems to be one from Kazakhstan where the pay for a "work-day" in 1954 was 10 rubles and three kilograms of grain. Most families on this kolkhoz, it was remarked, had a yearly income of 10,000 - 15,000 rubles and from three to four metric tons of grain. Another kolkhoz, also in Kazakhstan, gave out in advance 4 rubles and 2.5 kilograms per "work-day"; the family of a shepherd on this kolkhoz received in the month in question 8,000 rubles and 3,467 kilograms of grain; another, that of a dairyman, 8,197 rubles and 4,040 kilograms. Individual monthly earnings given are 3,000 rubles and 6,000 kilograms of grain; 4,000 and 7,800; 2,700 and 5,000.

A kolkhoz in the East-Kazakhstan oblast, which had sown land previously uncultivated, the grain from which made up 55 per cent of the total harvest, sold 1,280 tons to the State. Its members received three kilograms of wheat per "work-day"; they in turn sold 60,600 kg. to the State from their own allocation. A shepherd and his wife who received 7,000 kilograms of wheat, sold 4,500 of them. The total kolkhoz income was 1,170,000 rubles, 700,000 of this for the crop from the newly-cultivated land. The pay for the "work-day" was six rubles - two in advance. Formerly the payment in kind had been half this year's rate - one and a half kilograms. With the common funds the kolkhoz bought two lorries, several carts and a set of harness - it seems that the kolkhoz is not mechanized. This example seems to be typical of the smaller kolkhozes in Kazakhstan, and gives some conception of the state of the less up-to-date economies.

There is little or no information of such economies in Uzbekistan where most kolkhozes are concerned with cotton-growing, and are more affluent. In 1954 one grain kolkhoz there gave from five to seven kilograms in advance per "work-day". Kirgiz wages are rather smaller. Though there is one kolkhoz which, in 1954, paid 6 kilograms per "work-day", a full wage from another Kirgiz kolkhoz shows 3 rubles, 4 kilograms of wheat, and half a kilogram of potatoes paid out per "work-day" during nine months of 1954. A farm in Tadzhikistan paid out two kilograms of grain per "work-day"; an individual wage of 15,700 rubles for 1954 is given; there is an example of a family receiving a month's income of 3,200 rubles and 3,048 kilograms of grain, and a total family income for 1954 of 25 - 30,000 rubles was quoted as usual in a Tadzhik

## SOCIAL CONDITIONS

kolkhoz.

Animal husbandry seems to bring slightly higher wages, as a comparison of the shepherd and dairyman's wages given above (in Kazakhstan) will show. A Hero of Socialist Labour wrote to Kazakhstanskaya Pravda to say that he had no complaint about his wages - he received that month an advance of 2,000 rubles and 2,600 kilograms of grain, and in the last year had received 47 lambs in lieu of supplementary payment - but that his living conditions were poor. (He said that there were only four shepherds' houses in the Muyun Kum grazing grounds; they had to live in yurts, and old leaking yurts at that.)

There are, unfortunately, no examples of the wages of workers on dairy farms, though there are many examples of premiums paid in kind; 1,500 litres of milk, four calves and eight piglets; 1,397 litres of milk and a calf; 300 litres of milk and a calf (this last example from Tadzhikistan). Dairymaids and cowmen, however, have a wage scale which gives them opportunities to earn more than the average farm-hand (4). A dairymaid, for every hundred litres of milk yielded, is allowed 2.2-4 "work-days", with an extra 1-2.5 at the end of the month, if all is in order, varying according to experience. She is to have charge of from eight to fourteen cows; this means that, on an average, she will work about forty "work-days" a month. A cowman - in charge of the byre - gets 0.7-1.8 "work-days" for every hundred litres plus 0.2-0.4 "work-days" a month. The rate-fixer is allowed 90 per cent of the average dairymaid's total of "work-days". The value of the "work-day" will, of course, be different in each case.

The workers on all kolkhozes are paid by the method of advances at regular intervals - at least weekly - of sums not more than half the amount earned by them during the relevant period, and in the case of cotton kolkhozes to the value of 60 per cent of the produce in that period. There are similar conditions for advances in kind.

It is a strict rule that kolkhoz advances must bear a real relation-ship to the workers' trudodni. Advances on the director's note-of-hand are forbidden, but nevertheless common. Through this, or through the inaccurate estimation of the income of the kolkhoz, either the kolkhoz as a whole, or its members fall into debt. Kuibyshev kolkhoz at Zarbdar in Uzbekistan paid out advances in 1952 on the assumption that the value of the "work-day" would be 8 rubles. In fact, its value turned out to have been only 2 rubles 60 kopeks. Neither in 1952 nor in 1953 was the plan fulfilled, so that in 1954 only 135 members of the kolkhoz out of 1,312 were not in debt to the collective.

Payment in kind is convenient, not only because it is obviously more

economical to supply the needs of the workers on the spot - though, if possible, MTS workers are not paid directly from the kolkhoz where they happen to be working, but through the Government collection point - but because, after the contributions that must be made to the "indivisible fund" the kolkhoz would not have enough money to pay entirely in rubles. The greater part of this payment in kind the workers sell again, either to the Government collection point, or on the kolkhoz market. It is emphasized in the press that it is by so doing that they are able to afford luxuries - the usual articles mentioned are furniture, carpets, bicycles (on some of the richer farms, motor-cycles) and, the most desired of all, wireless-sets, which can receive stations at the wish of the operator, as opposed to the usual relay sets.

It is not clear whether, from the wages given here, income tax should be deducted; it is in some cases stated that this is the sum delivered to the worker by the cashier. All income over 260 rubles a month is taxable.

Information about prices in Central Asia is very seldom given. For prices in Moscow the reader is referred to the article in Etudes et Conjonctures quoted in the sources. Some indication may be given by the official scale of vegetable prices "for the second zone", and so presumably valid in Tashkent, reproduced in Pravda Vostoka (14th August 1954). Potatoes of the 1954 harvest were to be 45 kopeks a kilogram up to 1st November 1954, 60 up to 1st March 1955, and 80 after that. Cabbage was similarly to be 70 kopeks, 1 ruble, and 1 ruble 40 kopeks. A lemon in 1954 cost from 0.75 to 5 rubles according to size; after 1st January from 1 ruble 25 kopeks to 5 rubles 50 kopeks. These seasonal prices are an innovation; before the price was fixed for the whole year on the basis of the harvest season prices. Coal was advertised in Stalinabad in June 1955 at 152 rubles a ton. An isolated example of the price of manufactured goods is that (from Kirgizia) of a pair of women's shoes of unspecified quality. The customer was in this case over-charged, but it seems that the proper price was about 350 rubles.

It is not, perhaps, surprising that there are many instances of persons supplementing their income with the proceeds of illegal activities. A worker at a Kazakh vodka factory, by a skilful manipulation of the forms he had to fill up as storeman, amassed enough money to buy a Moskvich motor-car; he intends to buy a Pobeda. His monthly wage is 410 rubles; but in nine months of 1954 the factory had to write off more than 40,000 rubles' worth of vodka through breakages. Other examples are not so strikingly connected with low wages. There are frequent instances of shop assistants over-charging their customers; one to the extent of 319,000 rubles.

## SOCIAL CONDITIONS

It should be borne in mind that nearly all the examples given in this article are of exceptionally high wages. Nevertheless, the variations between one example and another are sufficient to give an indication of the great differences that exist between one type of work and another, and between workers in the same type of work but in different areas. For instance, it seems that the Kirgiz cotton-worker is poorer than his Uzbek counterpart. But it must be emphasized that such conclusions should be treated with great reserve.

### Notes

- (1) Article by A. Soikin in Kazakhstanskaya Pravda of 6.11.54.
- (2) Article by V. Zakladnoi entitled Oplata Truda Traktornykh Brigad in Pravda Vostoka of 22.3.54.
- (3) Article by B. Myasoutov, head of the labour and wages authority of the Uzbek Ministry of Agriculture, entitled Novyi Poryadok Oplaty Truda na Mashinnoi Uborke Khlopka, in Pravda Vostoka of 21.9.54.
- (4) Article by N. Akelseyeva entitled Sdelnaya Oplata i Novaya Sistema Organizatsii Truda na Molochno-Tovarnykh Fermakh in Pravda Vostoka of 26.8.54.

### Sources

1. Central Asian Press.
2. Raschety s rabochimi i sluzhashchimi. V.A. Goloshchapov. Gozfinizdat, 1952.
3. Organizatsiya raboty traktornykh brigad v khlopkovykh MTS Uzbekistana. V.E. Konkov and S.I. Ushakov. Tashkent, 1953.
4. Finansovoye khozyaistvo khlopkovykh kolkhozov. V.N. Kotikova and G.V. Chernov. Tashkent, 1950.
5. Etudes et Conjonctures, April 1955.
6. Soviet Encyclopaedia.

## S O C I A L   C O N D I T I O N S

## T H E   S E T T L E R S   O N   T H E   N E W   L A N D S

Settlers in 1954 - Specialists - Settlers in 1955 - Allowances paid to kolkhoz settlers - The new sovkhoses - The role of the Party - A typical new lands area - Developments in 1955.

The appointment of Ponomarenko as First Secretary of the Kazakh Communist Party in February 1954 marked the beginning of the real efforts to bring the new lands of Kazakhstan under the plough. It was immediately obvious that even with the most earnest strivings to raise the number and qualifications of agricultural workers, Kazakhstan alone could not provide the labour force required. As it was, there were many complaints that the local inhabitants did not approve the ploughing-up of their former grazing grounds, and were slow to obey the new directives. Towards the end of February, therefore, settlers were already arriving in the northern oblasts of Kazakhstan from other parts of the Union. The first of them were Komsomol members from the Ukraine, the Don and the Kuban, from the Tatar republic, and from Moscow. From Kazakhstan itself 5,000 Komsomol members were said to have volunteered for work in the new lands. (See CAR Vol.II, No.3, pp.214-16.)

Groups of settlers left Armenia and Georgia in March, and again in April 1954; the flow of settlers now, it was claimed, issued from all parts of the Union. The majority of them were young and without families, and so went to found new sovkhoses, where they could be most suitably accommodated. But the already existing kolkhozes in the new lands area, although they fulfilled their plan for the spring sowing, were not increasing their area of land under cultivation at the rate expected of them. The kolkhozes therefore began to receive families of settlers in August. Families continued to arrive in Kazakhstan in September and October, coming in the main from the western oblasts of the Ukraine, from Belorussia and Moldavia - areas where, as one of the settlers said, there is considerable congestion and a kolkhoz of 1,000 hectares is considered large. From October onwards soldiers on the point of demobilization have been encouraged, instead of returning to their former work, to go to Kazakhstan, and many have done so in groups from their old units.

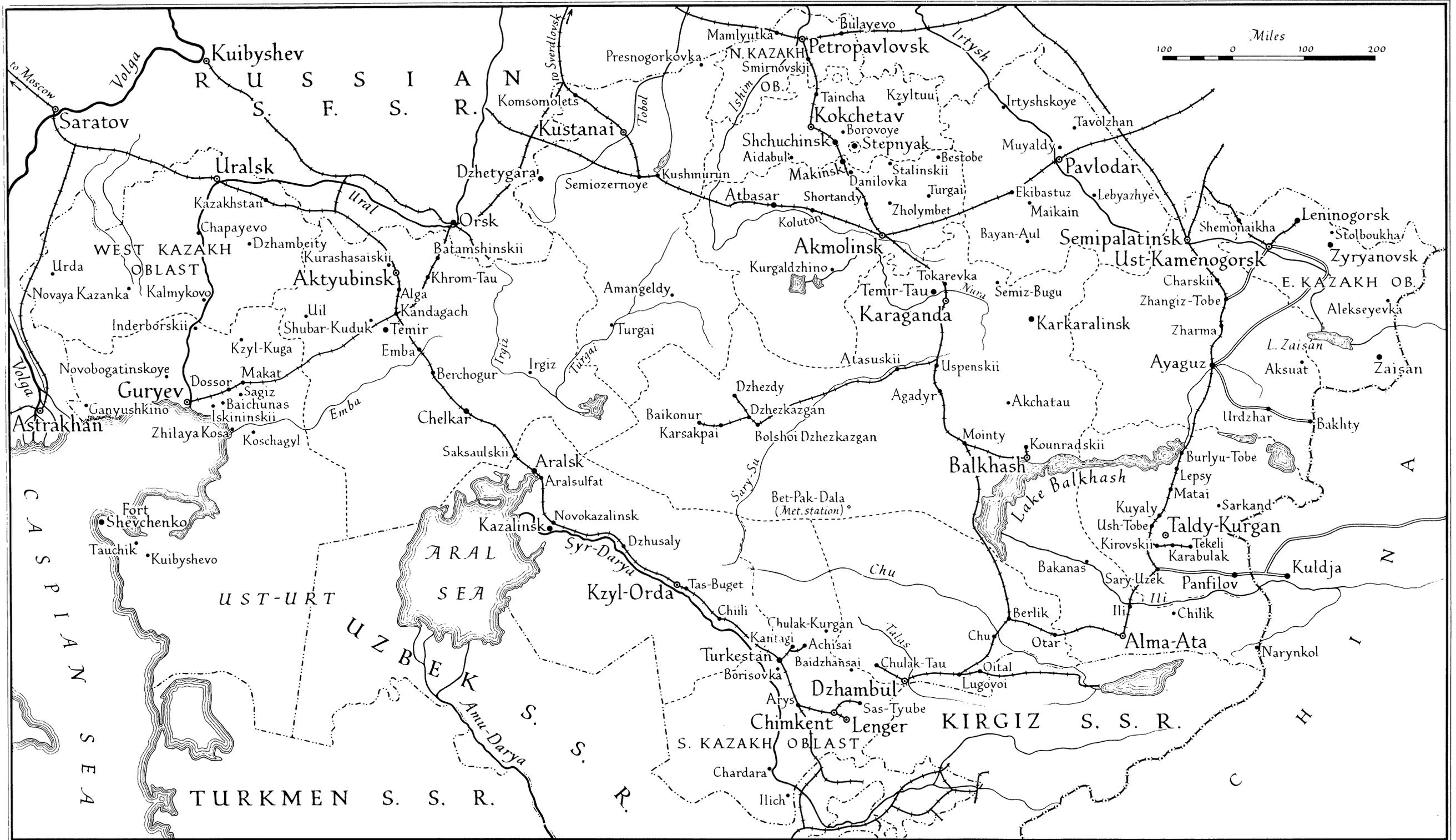
Many "specialists" - MTS workers and agronomists - were sent out to

## SOCIAL CONDITIONS

help with the 1954 harvest. It seems that they were encouraged - though not compelled - to stay, and several sent for their families. During December, building labourers from all parts of the USSR came to Kazakhstan after repeated complaints about the delay in accommodating the new arrivals. Another class of "specialists" which, though not necessarily permanent, have had many new villages and settlements built for them, are the railway construction workers. (See following article.) It seems that it was not until the harvest was already under way that experts were sent out to assess the potentialities of the soil and water of the almost unexamined new lands. The choice of areas for development was presumably made on the basis of earlier surveys; certainly, when the first settlers arrived early in 1954 the land was still covered with the winter snows and such an examination was impossible. The work was begun in the autumn of 1954 by a group of scientists and technical specialists from Moscow and Leningrad sent out by the USSR Academy of Sciences, assisted by members of the Kazakh Academy. In 1954 maps were compiled showing soil and vegetation conditions in the Kokchetav, North-Kazakhstan, Kustanai, Pavlodar and Akmolinsk oblasts, and the difficulties of transport in the Kustanai, Kokchetav and Akmolinsk oblasts were studied. Some, at least, of the results of this work were not published until this year; for example, an exposé of the agricultural possibilities of the Akmolinsk oblast appeared in the April number of the Bulletin of the Kazakh Academy of Sciences in 1955. In May 1955 there were still to be completed zoning projects for all the northern oblasts, a hydrological map of the Pavlodar oblast, plans to combat erosion in the Kustanai and Pavlodar oblasts, and agricultural development plans for the Kustanai, Kokchetav and Akmolinsk oblasts; for this last a new expedition is to be sent out from Moscow to the Akmolinsk oblast. Articles have appeared in the Central Asian press assuring readers that the fertility of the land cannot be exhausted; but the frequency with which new expeditions are formed seems to suggest that soil exhaustion and erosion are a constant source of concern to the authorities, and that scientists will go out to northern Kazakhstan for some years to come.

In January 1955 the whole drive was renewed by a fresh appeal to the members of the Komsomol. They had provided the first settlers from the large towns in February 1954; now, after a mass meeting in Moscow, new volunteers from Moscow and Leningrad began to arrive in Kazakhstan. There were more applications for settlement from Armenia, Latvia and Krasnodar. As in February 1954 there were applications from Kazakhstan itself, and in January 1955, there were several mentions of parties of Komsomol members arriving from such places as Alma-Ata and Chimkent. After January fewer instances of Kazakh settlers are to be found - perhaps because the new lands campaign is in 1955-1956 to be carried into the southern oblasts of Kazakhstan, and there is therefore no need

# KAZAKH SOVIET SOCIALIST REPUBLIC



for settlers to make a long and expensive journey. There was an isolated report in April of a party of Turkmens travelling to work in the Taldy-Kurgan oblast; during April there has been more than one instance in the Kirgiz press of parties of Kirgiz travelling to the new lands of the northern oblasts. The Kirgiz settlement authority, in advertisements giving the terms of employment for building labourers on the new lands of the Pavlodar and Kustanai oblasts, offers applicants free travel and conveyance of luggage to the place of work, a travelling allowance of 10 rubles a day, and a lump sum of from 150 to 300 rubles (1).

The allowances made to settlers in kolkhozes were given in an article in Kazakhstanskaya Pravda (20th October 1954) by Barishpol, the head of the settlement authority in the Kazakh Ministry of Agriculture. A family wishing to move to the new lands must contain at least two persons of working age. To receive the allowances granted, they must produce a settler's card issued when they have been accepted by a general meeting of the kolkhoz to which they have been directed by the authority and when they have been approved by the raion executive committee. All settlers in any oblast of Kazakhstan can receive up to 10,000 rubles credit to build a house from the Agricultural Bank. 35 per cent of this is paid by the State; the rest must be paid back by instalments during the ten years after the first two years' occupation of the new house. If the settler buys an existing house, 35 per cent of the price - to be the pertaining market price - is paid by the State; the rest must be paid to the kolkhoz, or other owner of the house, within eight years at intervals agreed upon by the two parties concerned. 3,000 rubles will be lent to the settler for repairs, with ten years to pay after two years of possession. At the end of these periods the house will be the property of the settler.

The settler is allowed 1,500 rubles to buy a cow, to be repaid during three years after two years' ownership of the cow. The kolkhoz must lend him on arrival grain or flour - to be repaid in kind within three years - 150 kgs. for the head of the family and 50 for every other member of it. For two years the settlers do not pay the agricultural tax, or income tax, or make any deliveries of produce to the State of any kind other than milk. Settlers in the oblasts particularly connected with the grain drive - Karaganda, Kustanai, Akmolinsk, Aktyubinsk, Kokchetav, Pavlodar, North- and West-Kazakhstan - have, in addition to all the above allowances, a lump sum given them of 200 rubles for the head of the family and 100 for every other member.

These allowances are made to settlers in kolkhozes; it is conceivable that the last allowance mentioned may be obtained by settlers in sovkhoses as well. This conjecture is supported by the parallel of

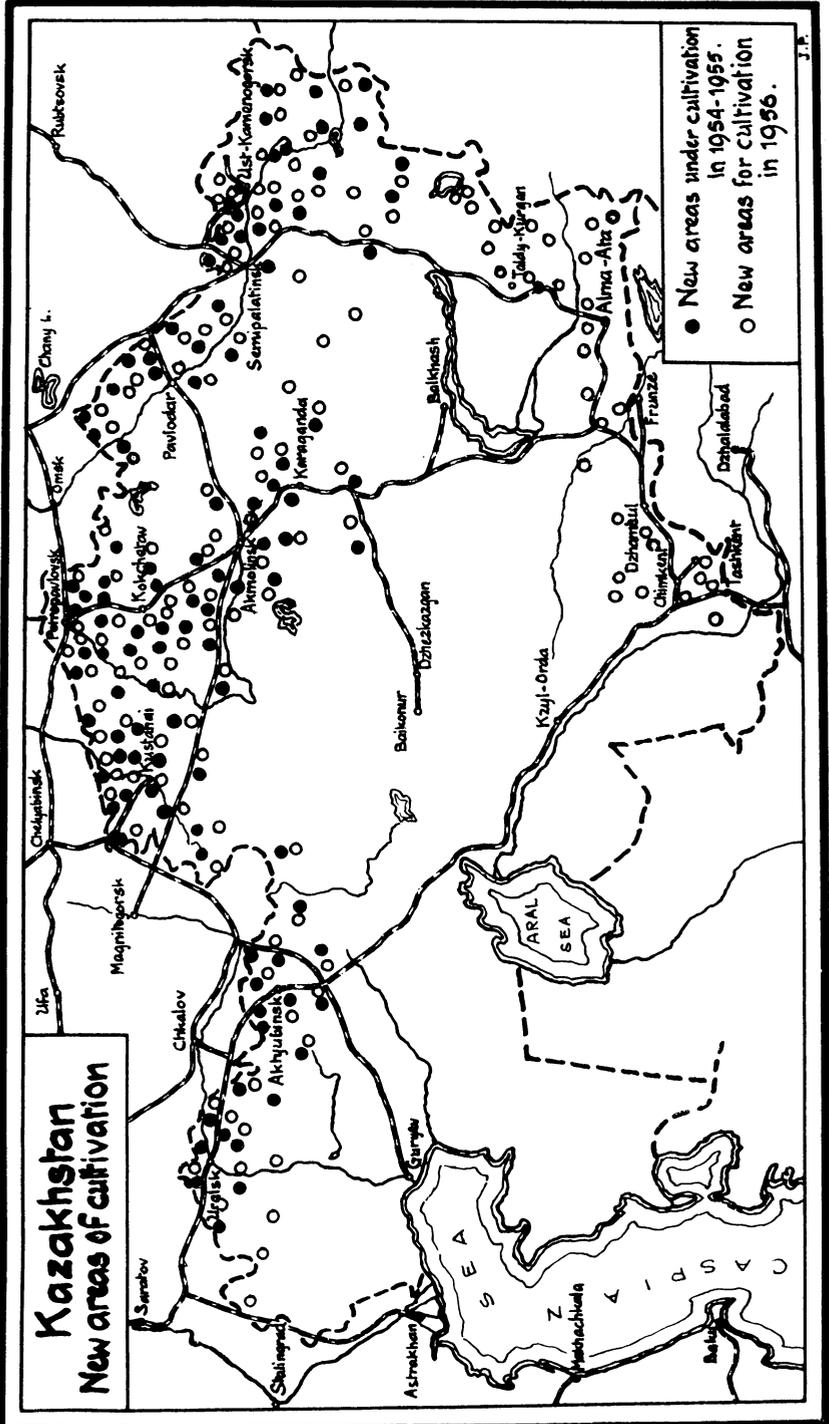
## SOCIAL CONDITIONS

the Kirgiz building labourers described above. Though settlement in both types of farm has continued throughout the winter, more publicity has in 1955 been given to the sovkhoses; indeed, hardly a day sees them unnoticed. It is difficult to establish how many settlers have come; the programme as a whole may require as many as one and a half million. The sovkhoses received 72,000 in 1954 (2), and by April 1955 60,000 more had already arrived. The number to come to the sovkhoses in 1955 has been set at over 135,000. It is noteworthy that settlers with previous agricultural experience, and in particular those from the Ukraine, Belorussia and Moldavia, seem to go mostly to kolkhoses, while on the whole settlers from towns are going to work in the new sovkhoses.

There is no evidence to be adduced from the press that settlement has been other than voluntary. Understandably, only "specialists" - tractor-drivers and others who are needed in any case at such times as the harvest - have been given facilities to go to Kazakhstan on a temporary basis. It appears that settlers are attracted to the sovkhoses by accounts of large profits - and so a larger rate for the "work-day" than elsewhere - or by the glamour surrounding the new venture, which will continue as long as these sovkhoses are the focus of attention in the whole Union. The sovkhoses are continually spoken of as small towns; it is stressed that at first the life is very hard, but that as soon as possible communal dwellings and then individual houses are built at a rate that would be out of the question for even the most prosperous kolkhoz. In 1955 even the first rigours of settlement were to be avoided as far as possible, but the hard winter has not helped the situation. Prefabricated houses are being conveyed to the area in great numbers. In December the all-Union Ministry of Transport began the conversion of old two-axle type railway-wagons into living quarters for settlers. The work was done mostly in the wagon works of Dzhambul, Alma-Ata, Aktyubinsk and Rubtsovsk (in the Altai) with wagons from Tomsk, Ulan-Ude and Barnaul. The normal work of the factory was not interrupted. Komsomol members, noticing that the converted wagons were still far from being homes, hung curtains at their windows and installed shelves of books and sets of chessmen before their despatch. The wagons have showers, sleeping room for eight, and are set on sledge runners to be towed into place by tractors.

The first building to rise in a new sovkhos is usually its hospital; the Komsomol appeal has embraced many newly-qualified doctors. The care of expectant mothers is one of their heaviest responsibilities, as many of the settlers are newly married. Next in priority is the school. Plans have been made by each oblast authority to ensure that there are enough schools to meet each level of development. On the whole, these plans have been realized, although there is naturally a shortage of equipment. The

# Kazakhstan New areas of cultivation



- New areas under cultivation in 1954-1955.
- New areas for cultivation in 1956.

increase in settlement in 1955 is to be met by a reorganization of the whole system and a reassessment of the numbers of schools of each type needed. A new difficulty is that the 1955 settlers have in many cases children of kindergarten age for whom no provision has been made because until now such families have not been eligible for settlement.

The Party is especially strong in the new sovkhoses, and articles on its work there are frequent in the "Party life" columns of Kazakhstanskaya Pravda. Experienced Party workers are sent out with the settlers, and one at least is assigned to each "brigade". Where - at any rate at first - there are few other amusements, the Party meetings and lectures are well attended; letters from well-wishers in all parts of the Union are read aloud. The wall newspaper is a welcome source of news where the state of communications prevents the frequent delivery of magazines and letters. It is the Party organizations that press for, and obtain, film-projectors, gramophones and bath-houses. The building of a new farm from nothing, the cutting of new soil by men to whom the work is often unlike anything that they have known before, provides great scope for "socialist competition" in an exemplary form.

The March elections to the Supreme Soviet found the Party with a new achievement to display. The work on the new lands was set beside the Volga-Don canal and the Moscow underground railway as one of the regime's greatest triumphs. New electoral divisions had to be created. The Tselinnyi division (Ruzayev raion, Kokchetav oblast), described in a recent issue of Kazakhstanskaya Pravda (3), is typical. The Ruzayev raion lies in the middle of the area of greatest activity in the new lands, and will be crossed in many directions by new roads and the new narrow-gauge railways. In the division described there are eight kolkhoses, thirteen grain sovkhoses, and four cattle sovkhoses. In spring 1954, 4,000 Komsomol members came to the raion; by March 1955, there were 7,000 settlers. In this year ten hospitals, five first-aid posts (with a feldsher and a midwife in attendance), twenty libraries, one secondary, two seven-year, and nine primary schools, 25 shops, 14 co-operatives, and nine wireless transmitters with 2,700 receivers were constructed. The sovkhos Tselinnyi, the centre of the division, has 770 members. There are 32 houses and a hostel taking 100 persons. A canteen, a shop, a bakery, a hospital in whose maternity wards "18 little citizens have been brought into the world", a seven-year and an evening school, a post-office, and a "red corner" with a cinematograph and places for 90 are already in existence. The village has electricity.

Most of the sovkhoses of this raion have 30,000 hectares of arable land. In 1955, 29 more are to be built. In 1954 the State spent 2,700,000 rubles on building a new sovkhos; in 1955 it will spend nearly

## SOCIAL CONDITIONS

4,000,000. In all, the new sovkhoses of the raion will cost 112,000,000 rubles - 55,400,000 of this sum will go on the building of dwelling-houses. Tselinnyi sovkhos will build a new school, a kindergarten, a stadium and a park. Water-mains will be laid and street-lighting installed.

It is true that this raion and sovkhos have more than once been singled out as examples in Kazakhstanskaya Pravda. There is no doubt, from long lists of complaints received, that other less-publicized raions and sovkhoses are not as well served. But both these exemplary sovkhoses and the complaints demonstrate the standard of living that is expected. It is by these hopes of rising prosperity, even though accompanied by hard work, that the settlers are drawn to Kazakhstan.

Ponomarenko, in an article in Pravda in October 1954, stressed that already the experience gained in founding the 93 sovkhoses created in that year had shown that at present "the organization of new sovkhoses is the most expedient way of winning the untouched and derelict lands". The number to be made in 1955 was given as 250, but by April 1955 the number of grain sovkhoses in Kazakhstan had reached 124, and 250 more were still to be created. A new stage in the drive opened with the April appeal for "leading cadres" to strengthen the direction of the work of kolkhozes and MTS. This, though an all-Union phenomenon, has caused the replacement of many directors in the new lands, and attention has to some extent been diverted from the sovkhoses during the summer of 1955 towards the progress of this appeal. It is, of course, hardly possible to assess the relative achievements of kolkhoz and sovkhos until the results of the harvest of 1955 appear. It may be significant that the Kazakh Minister of Sovkhoses was dismissed in June (4).

The sovkhoses are now being urged to expand and undertake the raising of stock - a means of ensuring prosperity already suggested at the republican conference of directors of sovkhoses held in January of this year. On the basis of experiments carried out in 1954 by VASKhNIL (the all-Union Academy of Agricultural Sciences) and its Kazakh filial, every new method of soil working, sowing and moisture retainment is to be used to ensure a good harvest in 1955 (5). It is necessary, if only because of the publicity given to the campaign, that every such effort should be made. If the tide of prosperity does not continue to rise in the new lands, and if nothing occurs to distract attention from Kazakhstan, the disappointment of the settlers will be shared by even the most apathetic Soviet citizen.

Notes

- (1) Sovetskaya Kirgiziya of 7. 4.55.
- (2) Voprosy Ekonomiki No.XII, 1954, p.74.
- (3) Kazakhstanskaya Pravda of 5. 3.55.
- (4) Kazakhstanskaya Pravda of 28.6.55.
- (5) Kazakhstanskaya Pravda of 23.11.54.

Sources

1. Central Asian Press.
2. Uchitelskaya Gazeta.
3. Voprosy Ekonomiki.

## C O M M U N I C A T I O N S

## C O M M U N I C A T I O N S    I N    T H E    N E W    L A N D S

Existing roads - Organization of road building - Plans for 1955-57 -  
The new railways - Progress and future plans.

There are, according to the Soviet Encyclopaedia of 1953, about 110,000 km. of road in Kazakhstan, of which 2,400 km. are metalled. Most of this metalled road is in southern and eastern Kazakhstan around Alma-Ata and Ust-Kamenogorsk. It appears that until recently the only metalled roads in the northern oblasts were the tracts from Uralsk to Guryev and from Kokchetav to Atbasar and Antonovka. In ordinary circumstances the normal dirt roads would serve. But when these regions became the "new lands" it was obvious that the problem of communication there would demand something better. Measures were under consideration in March 1954; it was announced that there were to be three new motor-road stations (i.e. MDS. See also CAR Vol.II, No.3, p.275.) to build them - in the West-Kazakhstan, Aktyubinsk and Pavlodar oblasts, eight new transport bases - three of them in Shchuchinsk, Atbasar and Ekibastuz - and 1,500 new vehicles. In July it was announced that eleven new MDS were being built (in the whole republic) but that the authorities managing them, especially in the "new lands" oblasts, were very negligent of their charge.

The responsibility for road construction in the Soviet Union - as elsewhere - rests with a great number of bodies, from the MVD to kolkozhes and village soviets. The "new lands" policy demanded some central control, at least at republican level, but this did not come until late in 1954. The newly constituted MDS came under the jurisdiction of the oblast or town soviets, and these deflected their resources to other, unspecified work; this they did even with tractors transferred from the southern oblasts to their area.

One of the most important areas in the new lands - and one where communications have until now been very primitive - is that between Kustanai and Kokchetav. There is a road between Kokchetav and Volodarskoye which is metalled as far as Antonovka; beyond Volodarskoye the road is rudimentary as far as Peski to the west and to Ruzayevka to the southwest. Even in August this road was at times hardly passable, yet "the traffic on it never stopped day or night". Work on a road from Yelenovka

to Takhtobrod began only in the last days of June. Not a single road in the Kzyl-Tu raion, where more new sovkhoses have been built than in any other, has been repaired since the war. The roads in these areas are especially important in that seven of the eleven raions of the Kokchetav oblast are from 100 to 250 km. from a railway line. During the harvest the grain was carried to the collection points and from them to the main towns by "motor-trains" - lorries with one or two trailers attached. Some of the loads carried amounted to ten metric tons. These motor-trains naturally made heavy going on the existing roads; one, travelling from a kolkhoz near Kamennobrod to the elevator at Kokchetav, did the 290 km. in 19 hours - an average speed of 15 km. or 9 miles an hour. Another did 125 km. in 5 hours 55 minutes - about 21 km. or 13 miles an hour; and these were exceptional speeds.

After the harvest of 1954 a new plan was drawn up and announced by Zhukov, the Kazakh Minister of Motor Transport and Trunk Roads, in an interview with the correspondent of Kazakhstanskaya Pravda on the 25th November 1954. He said that in the three years 1955-1957 2,600 km. of roads were to be built in the northern oblasts of Kazakhstan, 450 km. before the harvest of 1955. First he mentioned the 240 km. road from Yelenovka to Dzhaksy on the Akmolinsk - Magnitogorsk railway, through Takhtobrod and Chistopolye; this had been started in June 1954 (see above); then the 120 km. from Stavropolskoye to Maryevka through Peski - which will be an important junction on the new narrow-gauge railway system - and the road from Kaibagar, on the Akmolinsk-Magnitogorsk railway, through Karasu to Uritskoye, a junction on the projected narrow-gauge railway from Kustanai to Peski. On this last road 20 km. of the earth foundation has already been completed. Work has also begun on a road from Uralsk to Dzhambeity.

These, it seems, are the 450 km. to be finished before this year's harvest. Among roads to be built later are one from Kustanai to Demyanovka and from Maryevka to Petropavlovsk. Zhukov also announced that hundreds of "specialists" had volunteered for the work from the Ukraine, from Belorussia and from the RSFSR; these regions were also providing equipment in great amounts. Asphalt was to be used, and not merely gravel and rubble as before. But the most significant part of his announcement was his description of a new Kazakh Road-Building Authority, to be set up in Kustanai. (This location of the headquarters has caused some difficulty in 1955; it is extremely badly connected with such places as the West-Kazakhstan oblast by telephone or by post.) It is obvious that the circumstances of the 1954 harvest had shown the need for a central authority to override the claims of the many different authorities which had before constructed and repaired roads.

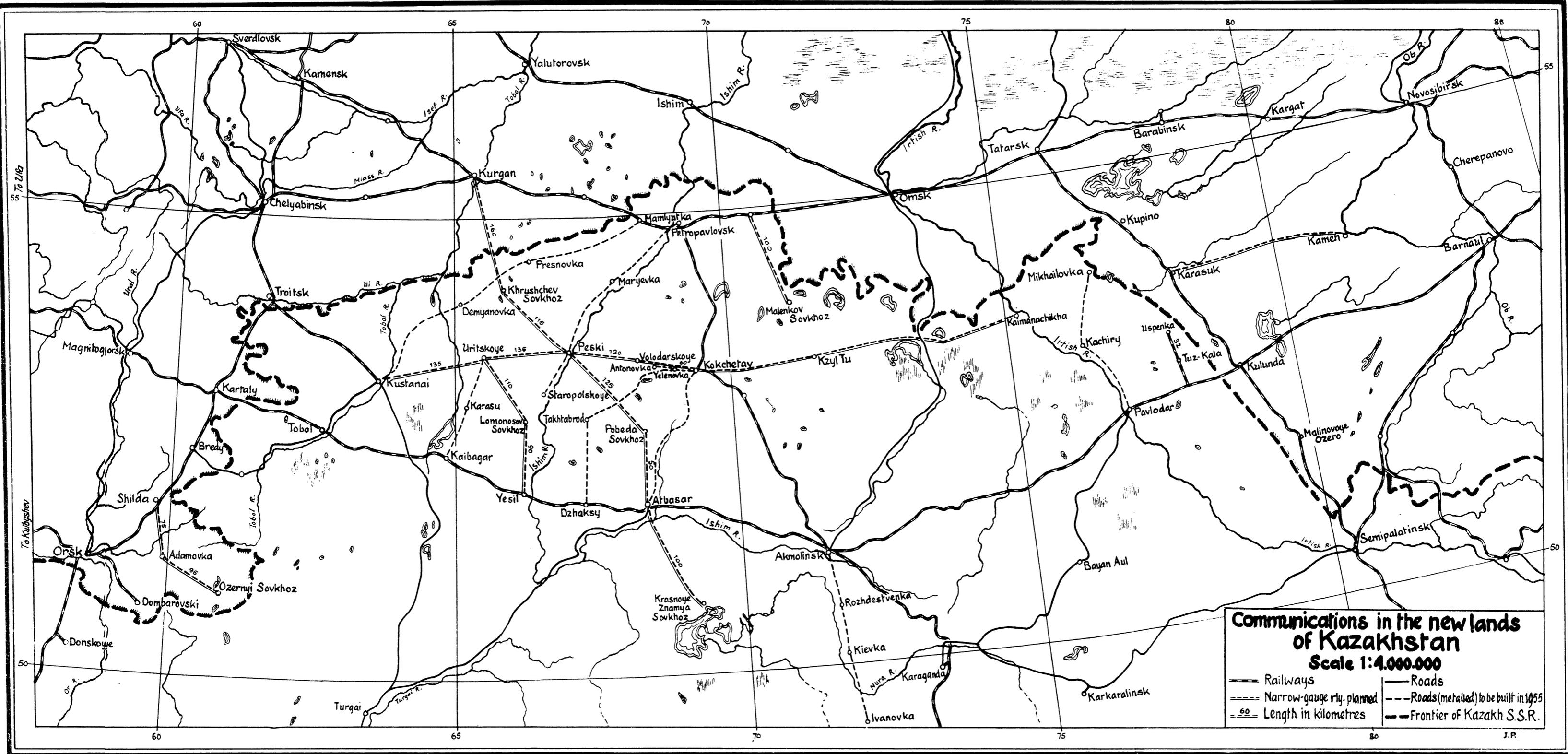
## COMMUNICATIONS

By the beginning of 1955 the demands of road-construction had increased. Pravda Vostoka of the 6th January announced that during this year 590 km. of road were to come into service in the new lands. There were now thirteen new motor-road stations in the republic. This was confirmed by Kazakhstanskaya Pravda on the 29th January, which said, however, that the thirteen new stations were in course of construction, and that 530 km. of road were to be built in 1955 by the Akmolinsk "trust" alone. New roads were spoken of from Akmolinsk to Ivanovka in the Karaganda oblast, to the south, and from Pavlodar to Mikhailovka, on the border with the RSFSR. The road from Kustanai to Demyanovka was to be extended to Mamlyutka on the Trans-Siberian railway. The total for the three years 1955-57 in the new lands was given as 21 roads - 1800 km. in all.

A republican conference of road-builders was held in Akmolinsk in March, where Zhukov reverted to the original figure of 2,600 km. for 1955-1957, but increased the 1955 figure to 700 km. He said that there were now 21 MDS in the new lands and six asphalt works. Over 28,000,000 rubles of the sum assigned for road development were still to be used. There were other speakers from those who had come to help from other parts of the Union. The Kazakh speakers criticized Zhukov for not ensuring that the plans were feasible. He had, they said, overlooked the claims of local authorities to help in road construction. However, the conference finished with an address to the workers of the road-building industry in which the figure of 700 km. was accepted. The figure for 1954 was given as 435 km., 250 of it hard-surfaced; this was two and a half times as much as in 1953 before the new lands campaign. The conference bound itself to achieve the 1955 plan by the 15th October, and in the fifteen days before the end of the season on the 30th to build an extra 80 km. of surfaced road.

At the beginning of November 1954, rather earlier than the parallel plan for road construction, if prompted by the same circumstances, a scheme of railway construction was announced in Kazakhstanskaya Pravda in an article reprinted from the railwaymen's newspaper Gudok ("The Hooter"). Most of the railways described were narrow-gauge, and most of them were in Kazakhstan. 850 km. are to be built by August 1955. In all, by 1957, 2,132 km. of line are to be laid.

The choice of sites for the new lines has been carefully done to involve no major bridging operations other than the crossing of the Tobol at Kustanai, which was unavoidable if the area of greatest development was to be tapped. The crossing of the Ishim at Peski is not at present to be undertaken, but when done will serve a north-south as well as an east-west line. The line going east from Kustanai - the "Central Siberian" line - stops at Kaimanachikha on the left bank of the Irtysh, and the broad-gauge



line from Karasuk to Kamen (in the RSFSR), which at some date it will presumably join, does not cross the Ob.

The progress of the new lines was reported at regular intervals - usually monthly - during the winter, which has this year been prolonged. The surveying of the stretch between Kustanai and Kokchetav began on the 1st October, 1954, and was finished in the month; it was done by a party sent out by the Leningrad Institute of Transport Planning. The work of building the embankment and laying the track between Kustanai and Uritskoye, the section to be completed by August, is divided between two teams. The work of building bridges over the Tobol and the Ubagan, and twelve stations and two depots is to be done by a section from the Ministry of Transport Construction at Chelyabinsk.

By February 1955 several kilometres had been built and the unloading station for the change-over to broad gauge in Kustanai was under construction. In April it was decided to attempt to open the line for traffic by July 15th. A temporary bridge had been thrown over the Tobol at Kustanai and over the Ubagan, and a permanent bridge is in course of construction. The line when completed will carry 16,000 tons a day, or 5,000 lorry-loads.

The line west from Kokchetav to Volodarskoye has not received as much attention in the press. By the beginning of May eleven km. of track had been laid and a bridge constructed over the small river Chaglinka. 50 km. had been laid by the 26th June according to Pravda, which described the line, perhaps mistakenly, as "broad-gauge". East of Kokchetav the building of the embankment was delayed by the frosts, which held the soil together and hindered digging, but the workers found a way to overcome this difficulty, and work is now going well. Both the Kokchetav lines are to be finished now by the 16th July. The whole stretch from Kustanai to Kaimanachikha will be opened in 1957.

The lines from Atbasar were surveyed in November, the Leningrad Institute working north of Atbasar, on the line to Kurgan, and the Moscow Institute - south of Atbasar, on the line to Krasnoye Znamya sovkhov. The survey was completed, as far as the sections of track to be laid by August 1955 were concerned, by the end of October. Work on the embankment began in November on these sections and on the line from Yesil to Lomonosov sovkhov. On these lines, too, the winter caused great difficulties; the excavators and other machines would not work on the frozen earth. However, work went on somehow, and by January, on the line to Kurgan, seven kilometres of embankment had been built.

On the 10th June it was announced that 72 km. of the line from

## COMMUNICATIONS

Atbasar to Krasnoye Znamya sovkhos had been completed, and that the embankment was being extended at the rate of a kilometre a day. On the 26th the line from Atbasar to Pobeda sovkhos had been opened for trial runs.

The line from Bulayevo to Malenkoy sovkhos was surveyed by the planning institute of the USSR Ministry of Transport Construction. Before they finished their work, the building of the embankment had begun and by the end of October 12 km. had been made. The laying of track started on 1st December; by the 18th June 60 km. had been laid. This line, too, is to be finished by July 16th.

The longest line to be built, that from Kurgan to Khrushchev sovkhos, lies mostly outside the Kazakh SSR, and therefore has not been noticed in the local press; Pravda of 26th June, however, said that 80 km. of embankment, 50 km. of track and 120 km. of telephone line had been laid. More strange is the absence of any notice of the line from Yesil to Lomonosov sovkhos.

The report published in the issue of Pravda mentioned gives ground for the expectation that the lines will, despite the unusually severe winter, be completed on the date promised. By 1957, when the plan to build 2,132 km. of line is finished, a new "Central Siberian" railway will be formed from Kustanai through Kokchetav to Kaimanachikha, and the line from Krasnoye Znamya sovkhos through Peski to Kurgan will give the Karaganda coalfields a new outlet. These lines, it has been implied, will at some time be transformed into broad-gauge railways.

### Sources

1. Kazakhstanskaya Pravda.
2. Pravda.

## C O M M U N I C A T I O N S

T H E L A N C H O W - U R U M C H I - A L M A - A T A  
R A I L W A Y

As a result of negotiations which took place at Peking from 29th September to 12th October 1954, an agreement on scientific and technical cooperation was signed between the USSR and the Chinese People's Republic. In addition to providing for large loans of funds and of equipment and for technical assistance from the Soviet Union to China, the agreement provides for the building of two railways, the Ulan-Bator - Tsinin and the Lanchow - Urumchi - Alma-Ata.

The joint Soviet-Chinese communiqué on "the construction of the Lanchow - Urumchi - Alma-Ata railway and the organization of direct communications" was published in the Soviet press in October 1954. It runs as follows:

"In order to strengthen mutual economic and cultural links, the Government of the Union of the Soviet Socialist Republics and the Government of the Chinese People's Republic have agreed that both parties will, in the immediate future, begin the construction of a railway line from Lanchow via Urumchi, in Chinese territory, to Alma-Ata, in Soviet territory. In Chinese territory the building of this railway will be ensured by the Chinese Government, and in Soviet territory by the Soviet Government. During the construction of the above railway in Chinese territory, the Soviet Government will give the Chinese Government every technical assistance. The building of the Lanchow - Yumen section of this railway was started in 1953."

The construction of these railways is not the first example of Soviet - Chinese cooperation in Sinkiang in recent years. Such organizations as Sovkitneft (i.e. "Soviet Chinese oil"), concerned with crude oil production and refining, and Sovkitmetal (i.e. "Soviet Chinese metal"), which deals with the mining of non-ferrous ores and rare metals, have been operating in Sinkiang. In addition to supplying up-to-date equipment and materials, the Soviet Union sent large numbers of qualified technicians to run the organizations and to train local

## COMMUNICATIONS

labour. In accordance with the recently concluded treaty, however, the Soviet Union transferred all her rights in these organizations to China as from 1st January 1955. Her interests are to be refunded by China in goods.

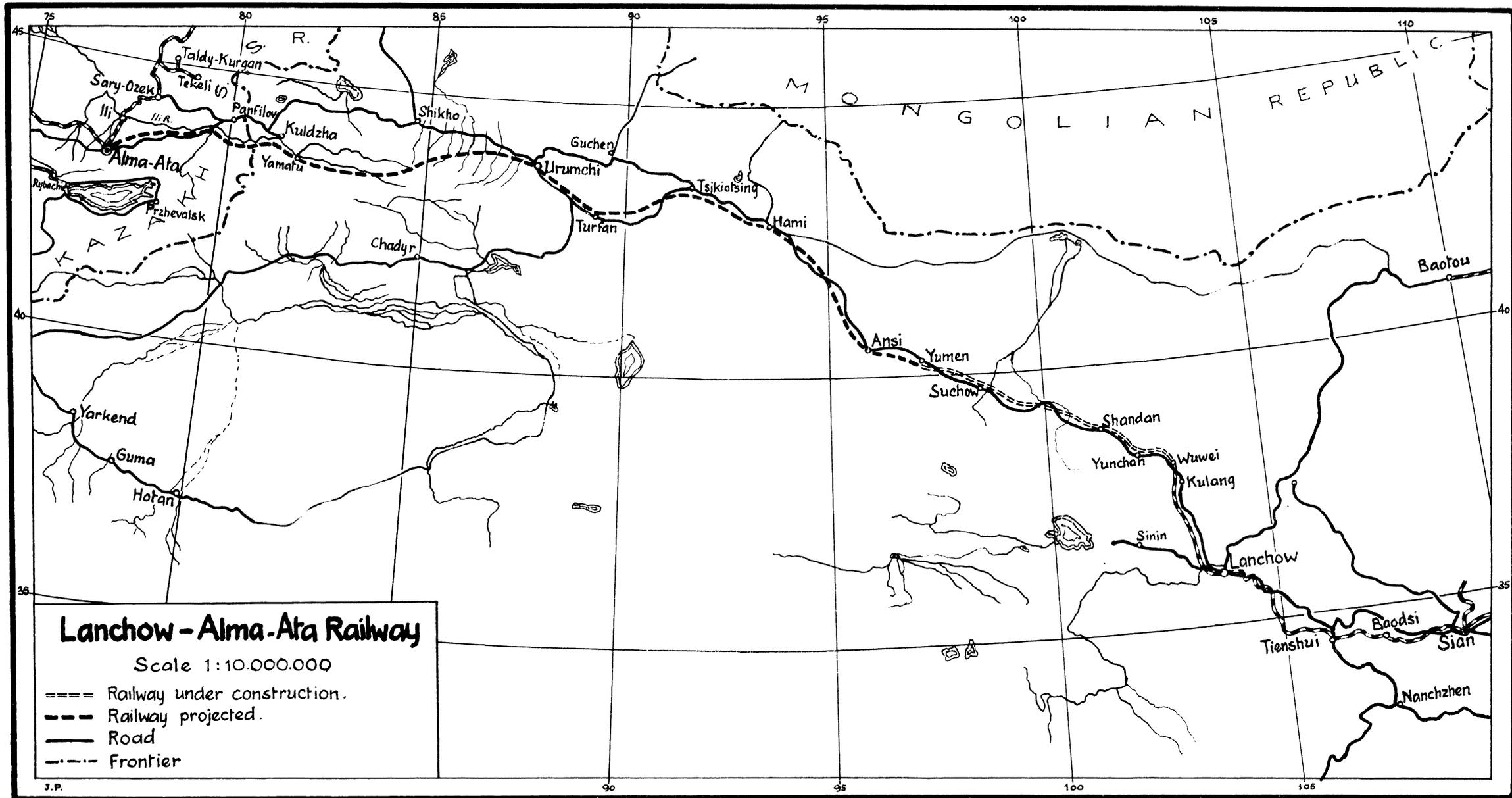
Work on the Chinese part of the Lanchow - Alma-Ata railway was started in 1953, and the first section from Lanchow to Tienshui was brought into exploitation late in the same year. This has enabled twenty times more freight to be carried between these two places than previously when there was only a highway. Lanchow is to become the junction of the Sian line, the Ningsia line and the Alma-Ata line; five railway stations are to be built here. Many new industrial undertakings are under construction in the town, which already has a population of 420,000.

The Lanchow - Tienshui section passes through difficult terrain. There are an average of two bridges per kilometre, and from Ti-Hsui onwards the line has 630 wooden bridges. Between Tienshui and Lanchow the line has 138 tunnels of a total length of 22,920 metres. The line passes the Ushaolin pass at an altitude of 2,900 metres, and at Kulang is the highest railway station in China; it is already in full operation though as yet the only buildings are tents.

In October 1954 the railway reached Wuwei and work was going on 245 km. north-west of Lanchow. Still further north-west the line is to pass through Yumen, the centre of an oil-bearing area, where a new mushroom settlement, Liao-Tsun-Mai, is fast developing. From here the line will pass through Hami and Turfan to Urumchi and thence through Kuldja to Alma-Ata.

Work on the alignment of the Soviet section of the new railway started late in 1954, when several groups of prospectors and geologists came to Alma-Ata. Water is one of the chief problems and prospecting for it is continually going on. By early in 1955, under the chief engineer of the project, Shamrai, places for future stations and sidings were decided upon.

The new railways will have great importance both for the USSR and for China. The Ulan-Bator - Tsinin railway will shorten the journey from Moscow to Peking by more than a thousand kilometres. The Lanchow - Alma-Ata line is of even greater significance for it will open up the valuable mineral resources of the north-western provinces of China. In particular it will make possible the movement of settlers from the crowded eastern provinces to Sinkiang, and so lead to the development of the great natural resources of oil, coal, lead, zinc and other non-ferrous and rare metals



### Lanchow - Alma-Ata Railway

Scale 1:10,000,000

- ==== Railway under construction.
- Railway projected.
- Road
- Frontier

of that province. The railway will also have great importance for south-eastern Kazakhstan and will make possible the cultivation of the fertile virgin lands of the area and the exploitation of the Tau-Chilik and Dzhalanas forests. Commenting on the new agreements, the Chinese newspaper Zhen-Min-Zhibao said: "These railways will create favourable conditions for the economic development of our country and will contribute greatly towards the cooperation and mutual assistance between our two countries."

### Sources

1. Planovoye Khozyaistvo.
2. Vneshnyaya Torgovlya.
3. Ogonek.
4. Central Asian press.

## I N D U S T R Y

## C O A L M I N I N G I N T A D Z H I K I S T A N

Output and organization - Shurab - Isfara - Shurab town - Future developments.

The industrial development of Tadzhikistan was long delayed by the inadequacy of the republic's output of fuel. Today, however, Tadzhikistan has come to produce 90 per cent of the coal it consumes. Wartime and post-war output figures may be seen from the following table:

1913	4,961	metric tons	(1)
1940	210,000		
1945	150,000		
1948	380,000		(2)
1950	448,800		(3)

The 1950 quota was 440,000 tons; the percentage of fulfilment was thus 102, and for 1951 it was 103. There are no precise figures for succeeding years but a reasonable estimate for the 1954 output would be 600,000 metric tons.

The main coal-bearing areas of Tadzhikistan lie on the northern slopes of the Turkestan range, on that tongue of the Leninabad oblast which penetrates into Kirgiz territory. This important mining area is thus divided between the two republics. The coal industry of Tadzhikistan is administered by Tadzhikugol (i.e. "Tadzhik coal"), a subsidiary "trust" of Sredazugol - the Central Asian coal authority which controls coal mining in Tadzhikistan, Uzbekistan and Kirgizia. The chief coal-producing centres of Tadzhikistan are Isfara and Shurab, both lying in the Isfara river valley. In the same area, coal has been located in the Kalan-Garm and Samarkandek valleys. It has also been discovered at Ziddy, about 50 miles north of Stalinabad, where production is said to have already started.

At Shurab, the reserves have been estimated at 300,000,000 tons. There is a Jurassic formation about 800 metres thick; the coal-bearing layer is composed of sandstones, hard clays, clay and coal shale. A single seam, averaging twelve metres thick, is worked.

Mining began in 1901, the coal being carried along the mountain paths on mules and donkeys. Large-scale exploitation began in 1930 with the sinking of the first large shaft - "the First of May". A thermal power-station was built and a new railway line constructed to connect the miners' settlement with Isfara and the Fergana valley. The Shurab coal is of the brown humus type and has a calorific value of 6,863 - 7,150. It is mined by vertical or inclined "columns" varying in depth from 70 to 210 metres. Mine No.8 is the largest; seam B, the seam worked, has an average thickness of 14 metres, while other layers vary from 2.3 to 3.7 metres. There are at Shurab 18 layers in all, three groups of relatively compact seams 0.7 to 3.5 metres thick, and a lower single seam 8 to 21 metres thick. Workings are usually from 30 to 60 metres long.

Tadzhikugol achieved its 1953 quota and saved 700,000 rubles by reducing production costs. During the first eight months of 1954, however, only 96 per cent of the quota was achieved. Mine No.8, for example, was 22,519 tons short in the first seven months. The autumn saw an improvement; in October the output index was, for all Shurab, 103.2 per cent. At mine No.8 it was 121.9 per cent. At mines Nos.1 - 5, 1,493 extra tons of coal were produced between January and October 1954; at mine No.2 there were 3,400 tons of coal produced in the first seven months and 1,434 tons in October.

At mine No.8, 991 tons of coal contained too much slag in September 1954. This was the fault of sections 1, 2 and 4, who had not screened the coal. In the first ten months of 1954 only 86 per cent of the requisite amount of large coal was obtained.

At Isfara the 1954 output was achieved early in November. The output index for the first seven months was 123 per cent; production accounted for only 18 per cent of the cost of the coal. By using the same pit-props many times, 618 cubic metres of timber were saved. The year's economy in power was 519,000 kw.hrs.

Mechanization has been introduced since the war, usually in connection with coal-cutting and underground haulage, but the capacities of the coal-loading machines installed are only utilized to 42.6 per cent. Scraper conveyors have replaced the obsolete shaker conveyors formerly used. A few PK-2 coal combines to cut and load the coal are in use. Mine No.8 has had a high degree of mechanization for the last three years, but the machines are used only to half the extent of which they are capable; the cost per ton of the coal is still four per cent above the plan.

## INDUSTRY

The cyclic graph method of coal-cutting is not in use at mine No.8, but is in use at many of the other pits. It is constantly recommended in technical journals, and Kommunist Tadjhikistana has reproached the local (Tadjhik) newspaper, Kommunisti Isfara, for devoting so little space to discussions of this innovation. In autumn, 1954, none of the mines that have adopted it kept up to plan.

The town of Shurab has become a still growing centre of industry (see CAR Vol.I, No.1, p.37). Besides the coal mines, there are a lime factory, electro-mechanical workshops, a large bakery, and haulage and transport offices. Several schools have been built, as well as professional training establishments, a club, two libraries and two cinemas, public baths, kindergartens, and a park of rest and culture. There are the usual shops and canteens, a new polyclinic and a hospital; water mains have been laid, and there is a radio relay system.

There is, according to Kommunist Tadjhikistana, a recurrent shortage in Shurab, at present, of dairy and market-garden produce. (This despite the statement of Luknitskii, op.cit., that "Shurab has its own orchards, pig farms, rice and vegetable fields at Isfara and Lyakkan, and the kolkhozes of the raion supply the farmers in ample quantity with vegetables and fruit.") The same paper reports a shortage of consumer goods in the town's univermag - no hardware, kitchen utensils, cutlery, glasses or bedsteads, and few electric lamps, irons, wireless sets, cameras, watches, musical instruments, or items of sports equipment.

With the discovery of coal reserves in the Kalan-Garm and Samarkandek valleys, a plan for the development of "Greater Shurab" has been worked out. The Isfara river is to be dammed in the Surkh gorge; this would solve the water supply problem in the new areas to be worked, and would make possible the creation of a new large mining town.

### Notes

- (1) Tadjhikistan. V.M. Bardier. Stalinabad, 1939.
- (2) Pravda Vostoka of 8.8.49.
- (3) Sovetskaya Kirgiziya of 3.6.51.



Sources

1. Tadzhikistan. P. Luknitskii. Moscow, 1951.
2. Srednyaya Aziya. Gosplan. Moscow, 1933.
3. K voprosu o fatsiyakh yurskikh otlozhenii Shurabskogo raiona.  
Yu.V. Stankevich. Tashkent, 1950.
4. Central Asian press.

## INDUSTRY

SOCIALIST REALISM COMES TO THE  
CARPET INDUSTRY

In 1949 a Soviet scholar, S.I. Rudenko, found in burial mounds in Gorno-Altai pile carpets dating back to the first century A.D. These carpets are described as being many-coloured and have designs of griffins, deer and horsemen.

In Central Asia, the territory at present covered by Turkmenistan is the oldest home of the carpet-weaving industry. To the Turkoman tribesmen a hand-knotted carpet served as a saddle-cover by day and a tent-hanging or bed by night. The art of weaving these carpets was handed down from mother to daughter and is still largely women's work today. Carpets are also woven in Uzbekistan and, to a lesser extent, in Kazakhstan and Transcaucasia. Small, smooth-faced carpets with bright floral patterns are produced in the Ukraine and Moldavia.

It has been suggested in some quarters that the weaving of carpets is essentially a peasant craft and that its continued practice indicates a low standard of living and implies a residue of labour unemployable anywhere else. Those who support this view declare that under the impact of industrialization, carpet weaving has declined in Turkey as the new industries are absorbing the materials and the labour. To what extent industrialization has in fact been responsible for a decline in carpet weaving must remain largely a matter of opinion. In the Soviet Union, judging by available information, there appears to be no lessening in the quantity of carpets produced. Large carpet kombinats, equipped with power-driven looms, exist in Vitebsk, Lyuberetsk, Obukhov, and Tiflis. And in Central Asia hand-made carpets are produced in considerable numbers. These carpets are still hand-knotted and women, now grouped in artels, weave them on horizontal or upright looms. Generally the carpets are woven from pure wool, though occasionally with an admixture of camel hair. In Uzbekistan and Afghanistan most carpets are made from the wool of a wild ram (arkhar) which gives the carpet a special lustre and beauty.

The Turkmen carpets: Akhal-Tekin, Beshir, Kerkinsk, Pende and Yomud-are noted for the richness and "harmonious blending" of their colours the prevalence of reds and by their intricate but precise designs. The

characteristic pattern consists of regularly arranged octagons, e.g. the Teke güi (rose) of the Akhal Tekin carpets. According to established authorities such as Cecil Edwards these carpets are not Persian in character. They are rather akin to the red rugs of Transcaspia: Merv, Bukhara, Kizil-Ayak, none of which is Persian. Originally these carpets were woven in the neighbourhood of Ashkhabad by the Atabai, Zhafarbai and Tekke tribes, who in 1933 for various reasons emigrated to north Persia where they still weave carpets of the Bukhara type, though the quality of these carpets has never reached that of the originals.

In the Soviet Union the style of the carpets produced has undergone a change. In 1927 one of the Mary carpet weavers, "a resourceful and enterprising worker", wove into the border of a Tekin carpet a portrait of Lenin with the slogan "Down with the Kalym". Little did she anticipate the effect that her "initiative" was to have; for it established a tradition. The designs of the past have been altered, and carpets with a definite subject theme are now woven on an increasing scale. In 1935 the weaver, Aman Soltan, and the designer, Byashima Murali, - both graduates of a Moscow VUZ - collaborated on a portrait carpet of Lenin which "became famous far beyond the borders of Turkmenistan". Since then portrait carpets have been woven of Stalin, Marx, Engels, Pushkin, Tolstoy, Gorky, and the heroes of the October Revolution, and in March of this year it was reported that portraits of Bulganin and Mao-Tse-Tung were being woven. Indeed, it is claimed that carpet weaving "reflects the progressive way of life of the Soviet peoples" and that it is "national in form and socialist in content". In 1954 on the occasion of the 300th anniversary of the association of Russia and the Ukraine the Turkmen republic sent as its gift to the Ukraine a "beautifully woven" carpet whose central panel bore a portrait of Bogdan Khmel'nitski.

The leading carpet artels in Turkmenistan are situated in Ashkhabad, Bakharden, Geok-Tepe, Kazandzhik and Kizyl-Arvat; in the last mainly large-sized carpets are produced. Judging by the few and fragmentary press reports all the carpet artels appear to be working to full capacity and more than fulfilling their quotas.

According to a report of 16th December 1954 a number of Akhal-Tekin, Beshir, Kerkinsk and Pende carpets produced by these artels were included in exhibitions of industrial goods held in Argentina, Holland, Iceland, Pakistan and the German Democratic Republic. The Ashkhabad artel has also produced the carpet "Friendship of the Peoples of the USSR" which was displayed at the all-Union Agricultural Exhibition in Moscow. The carpet in some 150 colours is 42 sq. metres in size and has over 16m. knots. Designed by Sosmin and Bruzentsov, it combines both

## INDUSTRY

traditional and new elements. Set within the traditional outer border is an inner border of alternating national emblems and cotton plants, which remind the spectator of the "white gold" grown in the kolkhozes of the republic. The central panel depicts "a laughing crowd of people, where Uzbeks and Latvians, Estonians and Bashkirs, Kazakhs and Armenians rub shoulders". According to further reports, the weavers of this artel, inspired by the success that the carpet has had, have now set to work on another carpet with the building of the Kara-Kum Canal as its theme.

Not much is known of the carpet artels in Uzbekistan and such information as is forthcoming refers entirely to the artel Umid (Hope) established in Khiva seven years ago by Bibidzhan Bekieva - a Turkmen. The artel now employs over 200 girls and in 1954, 116 carpets with Khivan designs were woven. A new carpet artel was opened at the end of last year in Urgench.

Central Asian carpets were exported to the West until two years ago; since then, however, the supply has been curtailed. One reason is that the demand in the Soviet Union itself is sufficiently great to absorb supplies.

### Sources

1. Central Asian Press.
2. Ogonek.
3. Soviet Encyclopaedia.

# UZBEK SOVIET SOCIALIST REPUBLIC



## S C I E N C E

## S C I E N C E   V E R S U S   S A N D :

## A   B O T A N I S T   I N   T H E   T U R K M E N   D E S E R T

V Zakaspii (In Transcaspia). By A. Kremenskoi. 126 pp. Geografiz, Moscow, 1954.

A. Kremenskoi, the author, is a "geobotanist", i.e. a student of botany in relation to physical geography, who in 1951 was attached to the Turkmen forestry reclamation expedition organized by Agroles-proyekt, the afforestation planning authority. In his book he describes some of the places visited by the expedition, and, in particular, how botanical science is being used to overcome some of the problems presented by the vast desert expanse of Turkmenistan, notably that of shifting sand.

The expedition was based on Kazandzhik. Its first task was to draw up detailed soil, geobotanical, and afforestation maps of the regions examined, and then on the basis of field work to produce plans for holding back shifting sand in the industrial areas of Turkmenistan. The author's comments and observations refer to the period of the expedition's work preparatory to the drawing up of these plans, and are confined to those areas which he personally examined or merely visited as one of a team of experts.

The first task assigned to the team was the study of the sand dunes near the well of Kaplanli, to the north-east of Kazandzhik. There are not many barkhany (shifting-sand dunes) in western Turkmenistan - they make up no more than five per cent of the total area. They are generally formed near wells. Sheep and camels, as they come to drink, root up the vegetation and break up the soil, and the sand becomes friable and shifting under the action of the wind. The sands near the well of Kaplanli are covered with vegetation, but on some dunes the beginnings of erosion are already apparent. Tongues of shifting sand are creeping down the slopes, undermining grass and bushes. Chains of barkhany of friable sand are beginning to rise in a ring around the well; there are

hollows between the barkhany with strongly developed vegetation. As a rule the plants live in correspondence, forming groups or "associations" of such kind as to be of reciprocal assistance in the struggle for existence.

The peculiarities of the plants of these dry, sandy, and sometimes even salt areas, are extraordinarily interesting. Among these peculiarities are the strong development of the desert plants' root system, which spreads both in a horizontal direction and into the depths of the soil; the replacement of leaves by fleshy green branches to decrease evaporation; the ability of some plants to put out root-like shoots from parts of the stem covered with sand, to ensure growth; and the formation of cases on the roots made from grains of sand cemented with sap, which keep the roots from drying up and contain moisture.

Further away from the well of Kaplanli in the direction of the Kara-Kum desert the sand barkhany grow gradually lower, their crests subside, and the hollows between them are like basins, covered with meagre vegetation. The sand dunes, held together by a covering of grass, are turned, through the grazing of sheep on them, into shifting sands which pile up near dead shrubs and form hills. The sand is blown down from them and covers the hollows and the layer of vegetation.

After study of the erosion thus caused, the experts concluded that it was necessary to forbid grazing in this area and to sow grasses and plant bushes to hold the sands in check. It is possible to break up the sands in one season, but many years are needed to bring them completely under control.

The next task of the author's team was the examination of the salt-marsh desert near the sea in the neighbourhood of the Cheleken peninsula, to the south of Krasnovodsk. Going by motor from Kazandzhik to the station at Dzhebel, the team followed for some distance a so-called takyr. This is a soil layer, frequently encountered in Turkestan, which looks like a layer of grey clay, and which in dry weather becomes as hard as stone and as smooth as asphalt. When watered by rain, or by the spring streams, the takyr become hard to cross because of the stickiness of the clay. Takyr are formed in the deserts by the action of the sun and of water. The large takyr are created by the spring mountain floods. These stream down, washing particles of clay out of the soil and carrying them to the plains below. The lakes forming here quickly dry up and a layer of clay particles settles on their beds; this layer is then compressed and covers the sand like a great coat of clay armour. In a sand desert this process happens in miniature; little brooks, flowing down from the sand dunes, carry with them small particles of clay which then



then settle and form a takyr. In subsequent years new layers are carried down, and so, in the course of centuries, the takyr becomes thick.

The importance of the takyr is that they serve as reservoirs for drinking water. Most Turkmen auls are on the outskirts of takyr where wells can be dug to give water all the year round. A waterpipe about 100 kilometres long is being constructed from the springs at Dzhebel to Cheleken. Near Dzhebel is the mud-bath spa of Molla-Kara; beyond the spa begins the boundless desert bordering the sea.

The Cheleken peninsula is shaped like a bird flying towards the west. The peninsula is 300 kilometres from south-west to north-east and 15 kilometres across; two long tongues of land - the bird's wings - stretch for 20 kilometres on either side. The central part of the western shore is 25 metres high; here there is a small plateau. Cheleken is one of the richest sources of ozokerite in the world; oil, iodine and bromine are also found.

On the path of the expedition made by the author's team lay sand barkhany twenty metres high, whose tops seemed to smoke from the wind, filling the air with a fine clay dust like a yellow mist. Beyond the barkhany lay a small round lake called Porsu-Gel. The lake is devoid of life. Its water is pink and warm and bubbles rise from the bottom. Lake Porsu-Gel came into being in the crater of a small extinct volcano, and the water is coloured by ferrous formations. Around the lake are hot streams whose water contains iodine.

Farther on their journey the team encountered the huge buildings of the ozokerite factory; the mineral is quarried near the works. The buildings are covered with sand; the barkhany have come right up to the factory village of Dagadzhik. Mechanical defences have proved powerless against the sand.

Eighteen kilometres from the factory is the fishing village of Karagelyu, in which the author's team made its home during their work in the area. In the not too distant past, the houses in this village stood on the sea shore, and were built on high piles against flooding by the sea. Now the sea shore has retreated two kilometres away from the village and the piles defend the buildings not from sea water, but from the shifting sand advancing on the village.

The level of the Caspian Sea fell two metres during the ten years 1941 - 1951. It is known from history that there have been times when the Caspian silted up even more heavily; near the sea shore not far from

Baku can be seen the remains of the buildings of the ancient town of Bagavan, which at one time stood a long way from the sea. The strong winds which blow on Cheleken for most of the year have piled up great sand masses in the centre area of the peninsula, which is completely devoid of vegetation. In the shore regions the covering of vegetation has been preserved, including drought-resisting and salt-loving plants.

The team had a difficult task to do in devising a system of afforestation operations for Cheleken. The plants which served to keep the sand in check near the well of Kaplanli could not here be fully employed; plants were needed that would not only resist drought, but live in an area of sand with a heavy salt content. Long and diligent searches were necessary before the author's team found such a plant.

After the completion of this assignment the team was sent to Krasnovodsk to plan the development of a green belt round this city. The author then visited the region of sub-tropical vegetation around Kara-Kala and Kizyl-Atrek, which lies in the valleys of the rivers Atrek and Sumbar. The rainfall in this region is extremely low - only 200-300 mm - and the heat is exceptional - the frost-free period lasts for nearly ten months. Near Kara-Kala, the raion centre, lies the Turkmen Experimental Station of the All-Union Institute of Horticulture, founded in 1927. The station's chief duty is to breed hybrids of wild and cultivated fruit and berry-bearing plants, of a kind to resist the heat and the salt, and yield juicy and edible fruits. Nearly 300 kinds of grapes are cultivated on the station and many types of tree and bush, not only indigenous varieties, but varieties imported from China, Japan, Spain, Italy, Bulgaria, Rumania, and many other countries. The work of the station is widely appreciated. New varieties produced there grow and bear fruit abundantly on the banks of the Amu-Darya in Uzbekistan, in Tadzhikistan and in Georgia. Many types of ornamental shrub are also grown on the station.

Not far from Kara-Kala is a second experimental station - at Kizyl-Atrek. This is the zonal station of the all-Union institute of desert tropical plants. The station lies on the banks of the Atrek, which here forms the frontier with Iran. Besides ornamental shrubs the station has an avenue of African native date palms. There are plantations of many different types of orange and lemon - the first to grow in Turkmenistan, and an avenue of eucalyptus trees - native to Australia. Eucalyptus is the fastest-growing tree in the world: it grows five metres a year even in an area of low rainfall. It yields a valuable medicinal oil, its hard timber makes exceptionally solid sleepers, its bark makes paper pulp, and it contains tannin.

Plants used to check shifting sandI. In the Kaplanli area

Ephedra Strobilacea. An evergreen shrub with thick branches with knob-like swellings. Ephedra has green twigs in place of leaves with a very small evaporation surface.

Ammodendron Conollyi. A bush with silvery foliage. Its thin, elongated leaves are covered with short hairs. This silvery down protects the "sand acacia" from excessive evaporation. When sand accumulates around the plant and covers part of the stem, extra roots grow on the covered part of the stem which penetrate the new layer of sand and strengthen the grip of the bush on the soil. Supported by these new roots the plant grows still higher. If by the action of the wind both new and old roots are exposed, then a new root shoot grows not out of the stem, but out of the exposed roots, and penetrates deep into the sand, seeking moisture; and so the bush still lives.

Aristida Karelini. A perennial grass with brittle bright green leaves. The plant's roots are cased with grains of sand cemented together by sap from the roots. The roots stretch out into long hair-like strands of up to 15 metres.

Smirnovia Turcestana. A small shrub of the bean family.

Agriophyllum Latifolium. A small variety of tumble-weed (?) whose leaves dry up and are replaced by thorns, which impede the growth of shoots and leaves, and thus lessen the evaporation surface.

Haloxylon Persicum. A desert tree found on dunes and banks of sand with a shining, barkless stem thickly covered with branches. It has green shoots instead of leaves. Its roots grow in two directions: horizontally to absorb the moisture from the surface layer of soil, and vertically to reach the deep-lying sub-soil waters. It contains more calorific value than coal. Its timber is very dense - it sinks in water like iron, but its trunk and branches are very pliable.

Haloxylon Aphyllum. A salt-marsh desert plant with a strong stem reaching five and even seven metres in height. "Black saksaul" only lives where there are sub-soil waters nearby. In old river-beds and in hollows scooped out by the wind these plants grow into whole "saksaul forests". Their shoots are dark green, full of sap, and bitterly salt to the taste, gazelles and camels eat them with relish.

Carex Physodes. Sand sedge. Its dense growth covers the bottom of hollows. Up to 500 separate plants grow on one square metre of soil. Its shoots develop out of the rhizome, which is covered with bark and able to withstand the red-hot temperature of the desert sand. The thick brown felt of the roots, which grow out from the rhizome, spread under the surface layer of sand and hold it firmly together.

Salsola Richteri. A shrub growing in salt areas, usually found on dunes.

Salsola Paletziana. A tree three metres in height which grows on sand barkhany. Both varieties of salsola are excellent settlers of sand.

Calligonum. A spherical shrub growing close to the earth which has cylindrical shoots instead of leaves. Its fruit are reddish bristly balls very well suited for planting in sand. In the deserts of Central Asia there are very many varieties of this plant.

Astragalus Ammodendron. Nearly 200 types of this annual semi-shrub grow in the desert.

## II. The plants of Cheleken

Halosnemium Strobilaceum. A salt-loving shrub on whose pliable branches grow shoots with juicy knobs filled with a bitter, salt sap.

Halostachis Caspica. A tall bush with juicy, dark green branches.

Kalidium Caspicum. A pliable, light green bush.

Nitraria Schoberi. A plant which, like Halosnemium above, belongs to the type of salt-loving halophytes which not only do not dislike salt, but need it.

Salsola Arbuscula. An inhabitant of sand not strongly salt, with sparse branches lying loosely on the ground.

Besides these, other plants and bushes are found on Cheleken, but with no great distribution. After careful investigation it was determined that Nitraria Schoberi was the best plant for holding back the Cheleken sands. A sand hill that the team examined proved to be entirely penetrated by it. As the sand piled up the plant grew higher; branches buried underneath the sand did not die off - they only lost their leaves and put out extra roots. The highest branches threw out young shoots on the surface which stretched out thirstily towards the light. The sands

could not engulf the plant; the higher the hill grew, the stronger the plant became. By degrees it enmeshed the hill in its thorned branches and penetrated it with its strongly developing roots. In this way Nitraria settled the sand, and it ceased to shift.

PUBLIC SERVICES

---

MOTHER AND CHILD WELFARE

Organization of welfare services - Children's allowances - Consultation bureaux - Creches and kindergartens - Children's "polyclinics".

In theory the pattern of welfare services in Central Asia is the same as that prevailing in the rest of the Soviet Union. It is claimed that as long ago as 1940, in the Union as a whole 80 per cent of the births in towns and 60 per cent of those in rural areas took place in maternity hospitals. There is, however, no precise information as to how far these high percentages are maintained in Central Asia, especially in rural districts, where primitive conditions must necessarily persist and where tradition still militates against modern innovations.

The organization of welfare institutions in Central Asia took place rather later than in the rest of the USSR, but the industrialization of the area in the years 1930-35 made them more necessary and feasible. It is now the law that for every hundred women employed a factory must provide a creche with accommodation for twelve children and a kindergarten with accommodation for fifteen. At least five per cent of the living-space of a block of flats must be reserved for this purpose. It was at first the policy to provide separate institutions for Muslim children in Central Asia, but this is no longer the case.

Since the abolition of legal abortion for non-medical reasons in 1936, the State has encouraged large families. Since 1944 grants have been made for every child after the second, instead of the sixth, as the practice had been between 1936 and 1944. The winners of Motherhood awards (also instituted in 1944) announced in the Central Asian press are nearly always, from their names, from the native population and not Russians or Ukrainians, and do not do skilled work or work demanding a high standard of education. Sometimes the allowances amount to large sums: for instance, in the last three years, the mother of ten children living in Frunze has received 40,000 rubles in allowances; a Heroine Mother from Chardovar sovkhos in Tadzhikistan, who has twelve children, has received in all over 80,000 rubles.

In 1950 there were over 300 mother and child consultation bureaux

in Uzbekistan and their number is still rising. Z.M. Dzhamalova, the Uzbek Minister of Health, has said that the number of paediatricians in Uzbekistan has been multiplied by six in the last eighteen years, and the number of gynaecologists by three. In Kazakhstan there were 372 bureaux in 1953, 174 of them in rural areas; the urban maternity homes had 2,573 beds and the rural, 1,844; there is an institute for the study of problems of mother and child welfare. The new sovkhoses built in the reclaimed lands have their own maternity homes. There are no recent statistics for Tadzhikistan, but immediately before the war there were 42 bureaux there. In 1954 there were 24 bureaux and eight day-nurseries in the Krasnovodsk oblast of Turkmenistan, and eight new maternity homes have been opened in kolkhozes of the Tashauz oblast.

There were no creches or kindergartens in Central Asia before 1917, and orphanages only in the larger towns; of these last there were ten in Kazakhstan before 1916, the first of them having been opened in 1879. The first kindergarten was opened at Vernyi (now Alma-Ata) in 1917. In 1918 there were ten of them, and in 1921, 115. These figures are for Kazakhstan alone; no data are available for the other republics at this period. By 1953 Kazakhstan possessed 14,110 beds in urban day-nurseries and 7,780 in rural. There are forty such institutions in the Alma-Ata oblast alone. In Kirgizia there were 96 day-nurseries with 2,759 beds in 1940, and 128 creches with 4,724 beds in 1953. The Novotroitsk sugar refinery has a particularly well-run creche; Sovetskaya Kirgiziya has devoted an article to its praise. In the Komsomolabad raion of Tadzhikistan every kolkhoz has a day-nursery. In the same republic, there are day-nurseries for each "brigade" at Kaganovich kolkhoz. In the kolkhozes Kalinin, Molotov, and Malenkov, not one mother is prevented from work in the fields by the need to care for her children. None the less, in many raions of the republic such facilities do not exist, even during the harvest when every able-bodied worker is required in the fields. According to the Tadzhik press, this is the case at two kolkhozes, Stalin and Molotov; at two others the children are improperly fed.

Although the number of kindergartens in Central Asia greatly increased during and since the war, there is still a great shortage. For instance, at Kaskelen (Alma-Ata oblast) there are 2,000 children of pre-school age, but the kindergarten takes only twenty-five. There are hundreds of petitions filed at the raion education office, many of them dating from 1953, and all unanswered. There are, it seems, no funds to expand the old building or to build a new.

Child health is given special attention in "children's polyclinics". In Kazakhstan in 1953, there were 34 children's hospitals with 2,690

## PUBLIC SERVICES

beds and 3,000 beds for children in other hospitals. Here are two examples of the working of the "polyclinics", both cases where these institutions came under criticism. The Second Polyclinic in the Stalin raion of Alma-Ata serves 16 schools and 34 pre-school establishments. It is held in a small flat with only three rooms for consultations, having a total area of 37 square metres.

"Parents - and especially mothers - hoped that new and comfortable quarters would be found for the clinic in one of the recently completed blocks of flats," a mother wrote to Kazakhstanskaya Pravda, "but these hopes were belied, for the polyclinic was offered accommodation four districts away from the nearest tram stop. No better place could be found for the only children's clinic in the raion."

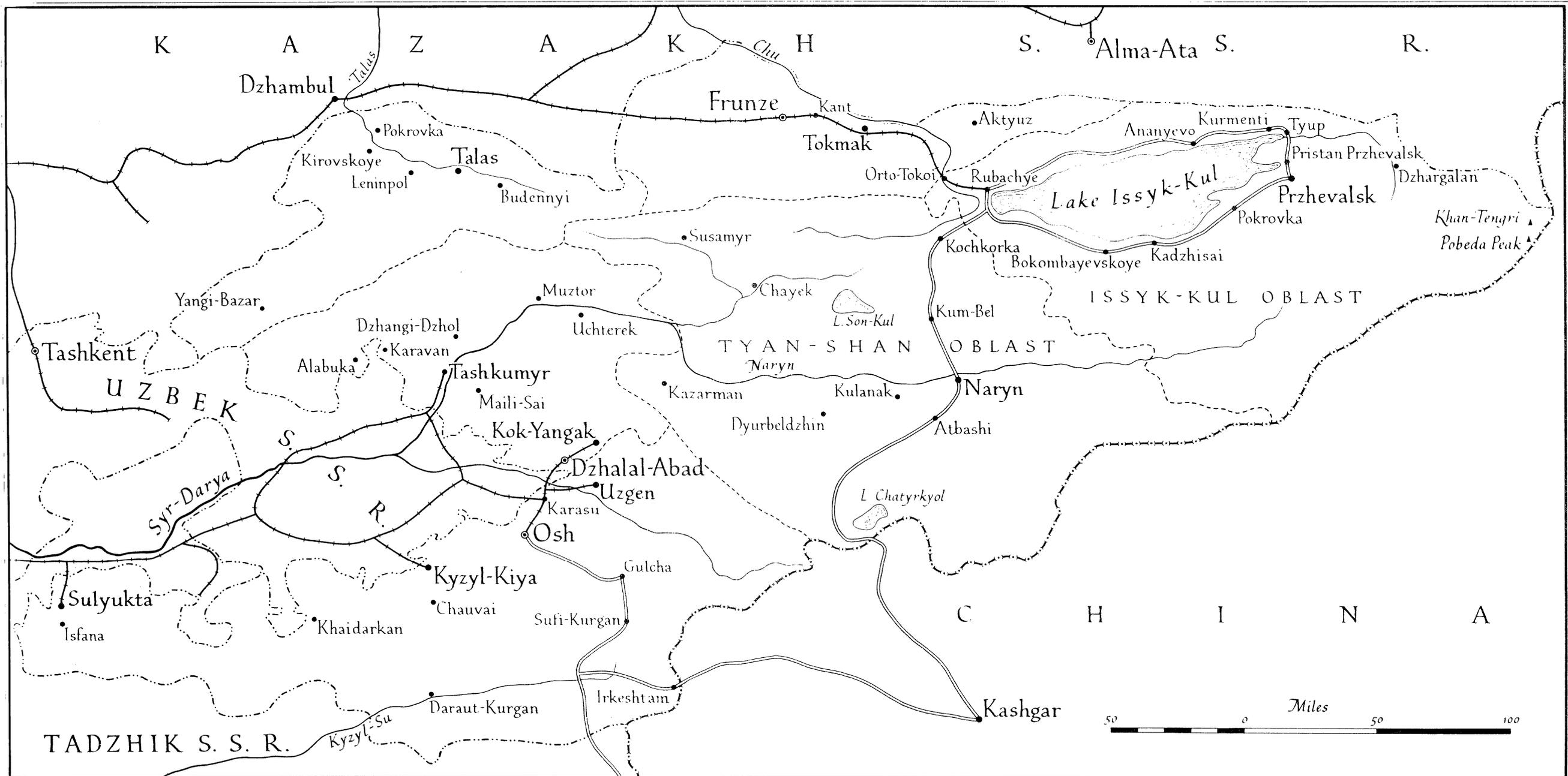
In Turkmenistan the building of the children's polyclinic in the Lenin raion of Ashkhabad took four years and was not quite finished when the staff moved in.

"While it was warm, one could bear with the fifty-six defects found in the new building, but with the cold weather things became much worse. The boilers for the central heating have not yet been installed, and the temperature in the clinic does not rise above 3 to 5 degrees C. The windows and doors have no locks and will not close; in one part of the building the paint is peeling from the floor and the water pipes are leaking, while in another part there is no water at all. For the time being children are being treated at No.1 general hospital where two rooms have been reserved for them. But all the specialists, the registry, and the laboratories are at the new polyclinic. Many parents with sick children are obliged to go from the polyclinic to the hospital and then back again." (This is the substance of a letter to Turkmenskaya Iskra from E. Duplevskaya, the chief doctor at the Lenin raion children's hospital.)

It may not be realized that, through the extreme specialization of the Soviet educational system, these and other deficiencies are more serious than they would be under conditions where every health practitioner has some general knowledge. For instance, a complaint against the oblast authorities in Chardzhou is reported that there is no paediatrician in the Khodzhabass raion. Parents have to take their children, when they are sick, to Kerki - a matter of forty kilometres away.

Yet despite the real substance of the criticisms recorded, it must be acknowledged that the concern for the welfare of the new generation is very great. Though one of the objects of the system of creches and clinics is to release the mother for production as much as possible, the

# KIRGIZ SOVIET SOCIALIST REPUBLIC



opportunity of ensuring that the children have the best attention is recognized as being of primary importance.

#### Sources

1. Sotsialisticheskoye strakhovaniye v SSSR. Moscow, 1953.
2. Public education in the USSR. Y.N. Medinskii. Moscow, 1953.
3. Istoriya pedagogi. M.F. Shavayeva. Moscow, 1953.
4. Detskiye infektsionnye bolezni, ikh lecheniye i profilaktika.  
A.M. Dobrokhotova. Moscow, 1953.
5. Public health in the Soviet Union. N.A. Vinogradov. Moscow, 1950.
6. Doshkolnoye Vospitaniye, 1954.
7. Central Asian Press.

PUBLIC WORKS

---

THE ARYS - TURKESTAN CANAL

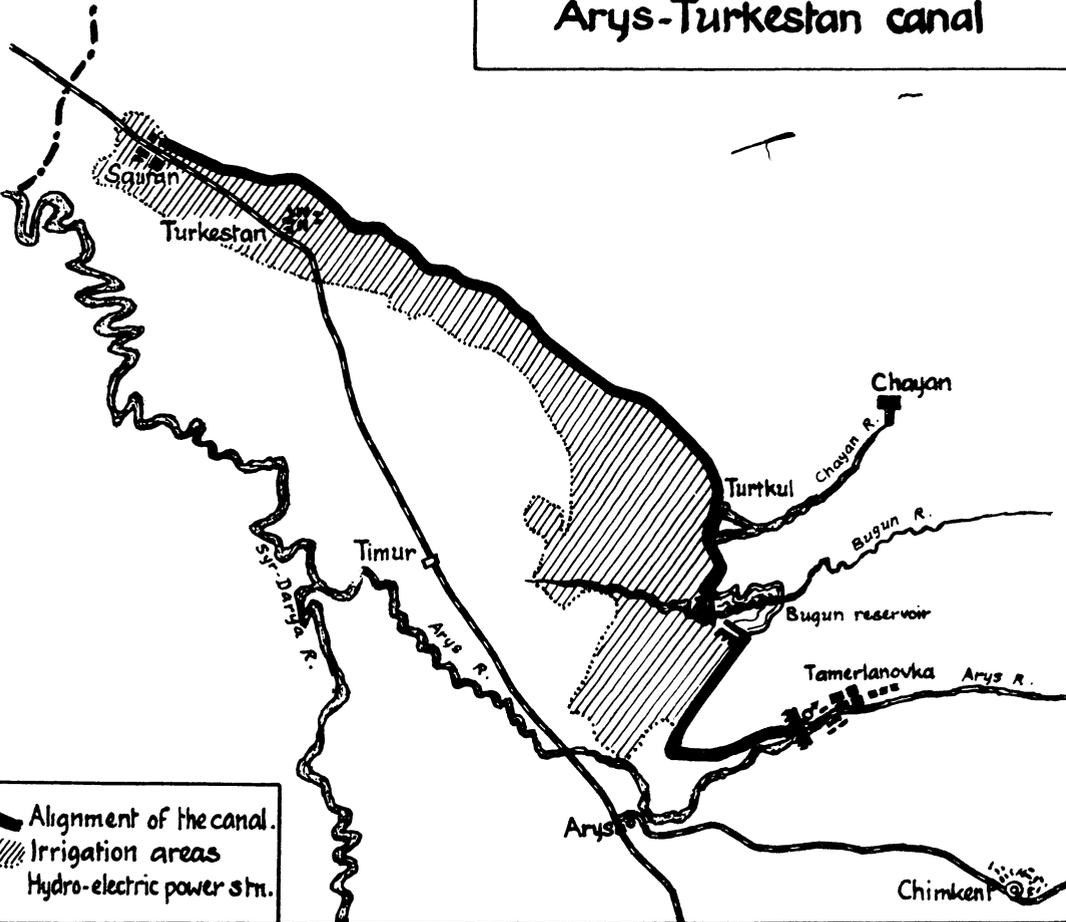
Preliminary announcement and details of the project - Progress reports - Present silence.

On 6th October 1954 a long article, illustrated by a sketch-map, appeared on the first page of Kazakhstanskaya Pravda, written by I. Denisenko, the director of the Kazgiprovoelektro Institute (i.e. Kazakh Institute of Hydroelectric Planning). Of his article the following is an abridged translation.

It is well known that the north-western group of raions of the South-Kazakhstan oblast possess enormous natural resources. There are thousands of hectares of fertile soil, quite suitable for the raising of many crops, including cotton. The mountains of the Karatau range contain great reserves of useful minerals. The area lies along the Tashkent and Turkestan-Siberian railway lines. But these natural resources are at present far from being fully exploited; the impediment to their development is the lack of water. The north-western part of the South-Kazakhstan oblast is in the drought zone of Kazakhstan; precipitation is small - 170 mm. a year, and the dry period long - more than 200 days in the year.

Attempts to increase the water available for irrigation in this region have been made since the second half of the last century, but have all come to nothing. During the years of Soviet rule, and especially in the period of collectivization, great material and financial resources have been spent on the irrigation of this area; large-scale surveys have been made, reservoirs and canals have been built, and the whole irrigation system overhauled; but all this was only a beginning. In 1935, at a Party meeting of cotton-pickers, a Turkestan kolkhoznik, Sharip Niyazov, addressed a request to Stalin to send engineers to bring water from the hills behind the farms to the plains. Something was done in the following years. The Bayaldyr canal, thirty kilometres long and faced with concrete, was built near Turkestan and a reservoir was built at Sasyk-Bulak. But it was impossible to supply the farmers' needs from merely local sources of water.

# Arys-Turkestan canal



— Alignment of the canal.  
▨ Irrigation areas  
⚡ Hydro-electric power str.

The streams of this area, which have their sources in the south-western slopes of the Karatau mountains, have a total yearly flow of only about 300m. cubic metres, of which only 200m. cubic metres is used for irrigation. The search for new sources of water was therefore of immediate importance; the result of the search was a proposal to use the untapped flow of the Arys, a large tributary of the Syr-Darya. Its waters are at present used to any extent only in summer; the unused flow of water in the river basin amounts to 1,700m. cubic metres, 1,000m. of them from the Arys itself. To harness these waters it is proposed to build a canal.

The first obstacle on the alignment of the proposed canal is the watershed between the rivers Arys and Bugun. The canal will circumvent this hill by going towards the town of Arys, and then, taking a sharp turn to the north, it will meet the river Bugun. It will then enter the Turtkul valley and go past Ikan, Turkestan, and Cherkan almost to the boundary of the Kzyl-Orda oblast. The canal will serve, on its left bank, 200,000 hectares of land suitable for the growing of cotton and other crops.

In building the canal it is proposed to use the free flow of the river Arys (730m. cubic metres), the river Bugun (62m. cubic metres), and other small rivers on the south-western slopes of the Karatau (63m. cubic metres), that is, in all 855m. cubic metres. This will be enough to irrigate 117,700 hectares in the Arys, Chayanov, Shoulder, Turkestan and Frunze raions. The area of direct irrigation will cover 70,700 hectares, 63,300 of them newly irrigated and 45,300 under cotton crop rotation. The area of irrigation under feed crops will be increased by 53,800 hectares. The total length of the canal will be 194.5 kilometres, and the capacity of the Bugun reservoir, 370m. cubic metres.

The canal will be started at the river Arys at the Karaspan barrage (near Yermolovka). A regulator here will ensure the proper distribution of the water and there will be a weir. The Bugun reservoir will regulate the flow of the rivers Arys and Bugun. Its area will be 63.5 square kilometres, its length 15 kilometres, and its breadth about 5 kilometres. The dam of earth forming the reservoir will be 5 kilometres long and 17 metres high at its highest point. On the southern side, the reservoir is bounded by the Karadzhant dyke, 3.25 kilometres long and 10.5 metres high at its highest point. The reservoir will be the largest in Kazakhstan.

All power and road construction units, means of communications and civil authorities will come under the canal construction authority. A hydroelectric station with a 2,000 kw. capacity and a thermal power-

## PUBLIC WORKS

station with a 1,000 kw. capacity will be built at Karaspan. Two hydroelectric stations are to be built in the future on the river Arys to supply the whole area; they will have a total capacity of 12,500 kw. A trunk road is to be built along the line of the canal, to form part of a Chimkent-Turkestan road of inter-oblast rating. Belts of trees are to be planted throughout the system of irrigation.

41m. cubic metres of earth will be excavated, 140,000 cubic metres of concrete and ferro-concrete will be used, and there will be 1,500 tons of metal in the construction works. The work will cost a quarter of a milliard rubles. 120,000 hectares of desert will be made fertile; the cotton crop of the area will be multiplied by fourteen or fifteen, and the harvest of hay will rise from 13,000 to 215,000 tons. The canal should be completed in 1957.

. . .

Since the appearance of the above article, there have been a few further reports in the press: on 16th October 1954 it was announced that work had begun on the enlarging of the First of May canal, to the south of Tamerlanovka, to feed the hydroelectric station mentioned by Denisenko. Work had also begun on the Bugun reservoir with twenty excavators. Two settlements were to be built for the workers on the canal, and work on one had already started. The MTS of South-Kazakhstan had promised sixty excavators; offers of help were coming from every adjacent area. The official opening of the work was held on 17th October with a meeting at the reservoir.

After that there was no mention of the canal until December, except for the announcement in November of the opening of a first-aid post at Bugun, which had been reported as already built before the opening in October. On 11th December an article complained that only 200,000 cubic metres of soil had been excavated instead of the 500,000 planned for 1954. The cause was "the prolongation of the so-called organizational period" - by which is apparently meant the period allowed for building the ancillary offices. The Ministry of Waterways should have sent six technicians to lead the work in September, but had not. They were asked for four bull-dozers, two scrapers, and two excavators; they sent one of each. The Ministry of Transport should have sent fifty tip-lorries; they sent none. Their vehicles should have carried 420,000 kilometres-tons; they had done only a tenth of this. Various oblast authorities had not sent the proper help; their equipment had to be repaired at great expense. 250 cubic metres of timber had been received instead of the 3,500 promised. There were many other complaints.

The mobile shops and canteens that provided a background for the solemn opening of the canal on 17th October hurried back to Chimkent as soon

as the meeting was over. To see a recent newspaper the canal workers had now to go fifteen kilometres. The building of a workers' settlement had been unaccountably delayed.

Since December 1954 there has been no mention at all in the press of the construction of the Arys-Turkestan canal, or of the building of the settlements relating to it.

### Sources

Kazakhstanskaya Pravda.

## ARCHITECTURE

## MONUMENTS OF THE BET - PAK - DALA

The following is an abridged translation of an article by G.G. Gerasimov which appeared in Izvestiya Akademii Nauk Kazakhskoi SSR, Issue 5 in the series on mining, metallurgy and refining, and building materials, published in Alma-Ata in 1955.

In the course of its long history, the Kazakh people has created an art and a material culture closely connected with the art and culture of neighbouring peoples, but differing from them in national character and sharply expressed individuality. Many buildings, characteristic of their period, which have been preserved for the present age, should therefore be studied and discussed in print, while the best should be placed under the care of the State. Unhappily, until the October Revolution hardly anyone systematically collected and published material on these monuments, with a few exceptions (see Bibliography). Some of the material collected before and since the war in Kazakhstan has already been published, but there is still room for much work. The creation of a national architecture with a Socialist content is impossible without a comprehensive study of the architectural heritage of the people in question.

The Bet-Pak-Dala desert covers an area of some hundreds of thousands of square kilometres to the north of the river Chu. The severe climatic conditions of this region have in the past hindered settlement, but at various times the desert has been inhabited. This is confirmed by the presence of ruins consisting, for the most part, of mausoleums, sagan, kulup-tas, and other forms of tomb. It will only be possible to speak of the duration of habitation in this area after careful excavation of the various townships.

The mausoleums erected are of various sizes, materials and decoration. The feudal aristocracy erected mainly mausoleums, the poorer people, sagan, and the poorest simply reared tumuli, or erected kulup-tas - small vertical standing stones ornamented with reliefs and inscriptions.

The first monument that we examined was that known as the mausoleum

of Kumukanov. It stands at the foot of the sand-hills of Dzhideli-Konur, and attracts attention among the adobe structures surrounding it by being built of fired brick - a material not typical of this region. It possesses features borrowed from Russian architecture (pilasters, ledges, the high dado), which unhappily applied as they are, have a rather eclectic character. The building has a central dome, but no porch. This kind of mausoleum was common in central Kazakhstan in the eighteenth and nineteenth centuries. It is simple in form; the main façade, facing, according to tradition, towards Mecca, has a small entrance with a semicircular arch. The outer walls of the side and main faces are divided by pilasters into three parts like panels; the pilasters are faced with polished bricks with rounded edges. The dado of the mausoleum is slightly raised above the surface of the brick facing. The bases and capitals of the pilasters are made like simple shelves in polished brick. The cornice surrounding the structure consists of moulded bricks. A little lower than the cornice is set a frieze, two bricks wide, forming a cross-shaped ornament. We consider the use of this motif accidental and in no sense symbolic. It was caused by the shortage of decorative materials: the builder had nothing at his disposal except two or three types of moulded brick.

One of the peculiarities of this mausoleum is the placing of the window, one metre from the floor, in the wall opposite the door. This is not usual in Kazakh mausoleums of this area, as openings for light are mostly made overhead. Another peculiarity of the construction is the use of a brick layer built diagonally across the inside corners, straight up from the floor. This layer forms with the walls an octagon, which rises into the curve of the drum on which the dome rests. In other mausoleums fly-over arches were usually made in the corners to support a spheroid or conoid dome over which an octagon was made to be the base of a half-domed drum. This simplified brickwork has not improved the interior of the structure, making it appear heavy and oppressive. Over the centre of the building is a dome, slightly drawn out into a cone, set on a low drum. The outer surface of the dome is not smooth because of the unevenly and carelessly faced courses, and as a result of the action of the weather it has quickly disintegrated. The floor of the mausoleum is made of fired brick, one course thick, placed flat. In the corner to the right of the entrance there is a trap through which access may be gained to a small crypt under the floor. In it lies the body of a man in a shroud, which has not yet completely decomposed. This has given rise among some superstitious and fanatically disposed persons to the belief that these remains are incorruptible and holy. Because of this, so they say, fanatics sometimes make pilgrimages here.

According to the stories of the shepherds who pasture their flocks of

## ARCHITECTURE

sheep here, Kumukanov's mausoleum was erected at the end of the second half of the nineteenth century. It is thus a comparatively modern structure, but owing to the absence of attention and timely repairs, it is gradually falling into ruin. Architecturally or aesthetically this monument does not stand at a particularly high level, but it is original in construction and has characteristics peculiar to the national architecture of the Kazakh people.

To the north-west of Kumukanov's mausoleum and thirty or forty kilometres from it in the middle of the unpopulated steppe, where one rarely encounters adobe mausoleums, our attention was attracted by a small tomb-like structure of unusual form - the Taichik mausoleum. It lies in a small cemetery (beit) partly overgrown with tall grass. It is built of cheap adobe clay. The clays of this area are poor, sandy and of little use for making high-quality bricks. This material is thus only able to survive in buildings because of the dryness of the climate.

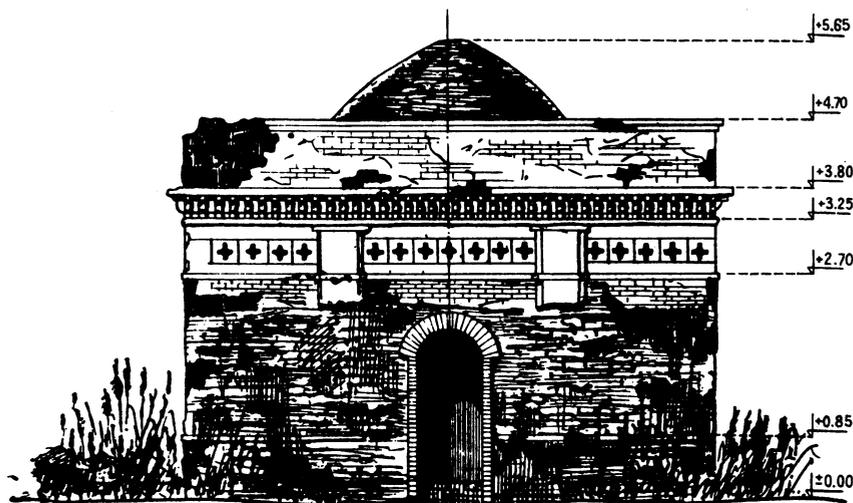
This mausoleum is a central dome-type structure with an identical pattern for all four elevations. They are, as it were, porticoes to a rotunda. The mausoleum has a single chamber and is built in the form of a cube with a drawn-out conoid dome. At the top of the dome a round opening has been left like the tyundyk (smoke-hole) of a yurt. One of the peculiarities of this monument are its four porticoes, which give it an imposing appearance; they are built on projecting buttresses topped by lancet vaults. The entrance is made in the southern wall in the shape of a small opening set 66 cm. above the ground to prevent animals from entering. The orientation of the entrance towards the south or south-east is a departure from the generally accepted rule of a west or south-west position. The intention here was evidently to imitate a yurt, whose entrance is usually made towards the south or south-east (to the lee of the wind).

Inside, projections in the brickwork correspond with the buttresses outside, and are similarly covered by arches. In making the corner arches, to form the transition to the octagon, the buttresses are placed at an angle of forty-five degrees to the wall. The dome rests on an octagonal drum, and is made by the false vault method. Through the action of time, and perhaps because of the nature of the brickwork, the outlines of the inner arches have assumed the shape of a ship's keel, which is not characteristic of Kazakh architecture. Keel-shaped arches are found as isolated examples, but, in general, ancient and non-imitative structures have lancet arches with sharp exterior curves.

At the level of the abutments of the inner arches there is a single row of brickwork around the whole perimeter of the walls like a zig-zag

# SOME MONUMENTS IN THE WESTERN BET-PAK-DALA

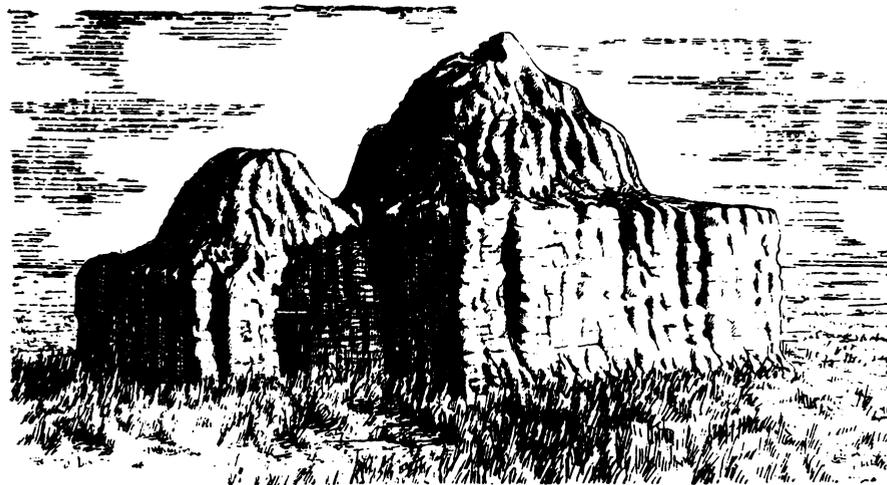
(Reproduced from *Izvestiya Akademii Nauk Kazahskoi SSR*, issue 5 in the series on mining, metallurgy and refining and buildings. Alma-Ata 1955).



Kumukanov's Mausoleum. Main facade.



Taichir Mausoleum. Main facade.



Anonymous Mausoleum of XVIII Century. General view.

belt, by which the builders apparently tried to give life to the interior. There is no plasterwork or decorative architectural detail in the interior at all. The floor is of dirt and set at ground level. On it there are two rectangular stepped sagan: one, of three steps, is raised higher to mark the grave of the head of the family - by tradition buried in the first place in a tomb to mark his position in life - and the other, of two steps, for his wife. Both sagan are plastered with a clay mortar and are in good condition.

The vaults and walls of the arches outside and the surface of the dome were at some time plastered, but have decayed under the action of the weather and the plaster has fallen off. The weathered contours of the structure, the grass-grown and cracked walls and arches give the building a somewhat picturesque appearance. Since there are no inhabited places in the vicinity, we were unable to collect any information about this monument and it is not mentioned in literature. Its date may be set only approximately by its style, the manner of its construction, the material used and its present state. Such features as the simplified construction of the dome and the use of cheap local materials are characteristic of the period of architectural decline in Kazakhstan (from the seventeenth to the middle of the nineteenth century). We are therefore inclined to assign the building to the second half of the eighteenth century.

Not far from the Taichik mausoleum, in the same Dzhideli-Konur area, is another mausoleum of interesting structure. It consists of two buildings in conjunction, one of which, the smaller, serves as an entrance porch, while the other is the burial chamber (gurkhan). Each part of the building is a separately centred composition. We were unable to establish the name of this mausoleum, and therefore call it, in view of its approximate dating, an anonymous mausoleum of the eighteenth century. Its plan is comparatively rarely encountered in Kazakh tomb structures. The building of a two-chambered tomb was evidently dictated by special considerations, and not merely to satisfy the claims of expediency. It seems to us to reflect the ideology of a society, and in particular the wish to provide a place of honour in the second room (gurkhan) for the head of the family, thus, as it were, stressing his position.

The outside surface of the mausoleum is stepped, and consists of three conical rings gradually rising upwards. On top of the large dome, on the analogy of many other tombs, a round opening has been left like the smoke-hole of a yurt, while the dome of the small entrance room is conoid without an aperture. To transform the plan from a square to an octagon the usual and traditional method of transverse arches in the

corners is used. In this connection the construction of the entrance chamber has an original feature, for here primitive wooden imposts are used instead of corner arches to support the dome. In neither chamber is there any plaster on the walls. The entrance to the small chamber is made in the south-eastern wall and that into the burial chamber from the porch in the south-western. To keep unwanted persons and animals out of the rooms, the entrance openings are made with high thresholds. The floors are of earth and are at ground level. The building has no foundations, and is therefore suffering premature dilapidation.

The material used is adobe clay, easily procured on the spot. Despite the low durability of the material, the building, helped by the stout construction of the walls and the absence of rainfall, has well withstood the ravages of time, although the weather has had its effect on the outer surface of the walls. Through the absence of any written sources or oral traditions about this monument, we do not know the exact date of its erection, but, judging by the style, the construction and the state of the building on the analogy of others similar, we can assign it to the first half of the eighteenth century.

The three architectural monuments examined above, different in type, construction, materials, and date of erection, are characteristic examples of the work of national artists of the period lasting from the seventeenth to the first half of the nineteenth centuries. This was a time of political and economic disintegration for Kazakhstan, when frequent civil dissension and economic ruin brought with them a decline in building activity. However, we have inherited several monuments of this period which, although they may not be of great aesthetic value, should not be ignored. All these buildings, like most Kazakh monuments, are orders executed for individuals, unlike Uzbek monuments, which were usually erected by the State or by communities. Here the order would issue from individual representatives of the feudal aristocracy, whose taste and demands had a definite influence on the work of the builder.

Kumukanov's mausoleum has a heavy and badly proportioned appearance. Its architectural and constructional detail has been carelessly finished, with the exception of the cornice, the pilasters, and the entrance arch. But the mausoleum was built according to local practice and popular traditions, whose discovery and study must be our task until we have re-established the history of the development of Kazakh national architecture. The Taichik mausoleum is in this connection unique. Its dimensions are small, but give the impression of an artistically integrated structure. If it had been carried out in good and lasting material (such as, for example, fired brick) its fine architectonics would have been preserved. Its architectural and constructional details are in no way

different from similar elements in other analogous buildings of adobe clay, but they are adapted and executed here with greater taste. The third tomb also attracts attention by its general composition. True, there is not here the compelling quality that we find at Taichik. The mass hugs the earth, there is not the same slenderness and upward direction. Its uniqueness lies in its unusual plan and its large conical stepped dome.

In this article, which gives a description of three little-known monuments in the inaccessible Bet-Pak-Dala desert, the author has tried, by all the means at his disposal, to contribute to the work of collecting and systematizing architectural and historical material for the compilation of works on the history of the national architecture of the Kazakh people before the Revolution.

### Bibliography

1. I.A. Kastanye (Castagne). Nadgrobnye sooruzheniya kirgizskikh stepei. Orenburg, 1906.
2. --- Drevnosti Kirgizskoi stepi i Orenburgskogo kraya. Orenburg, 1910.
3. Captain N.I. Rychkov. Dnevnye zapiski puteshestviya v Kirgiz - Kaisatskiye stepi. 1871.
4. --- Dnevnye zapiski puteshestviya po raznym provintsiyam Rossiiskogo gosudarstva. 1771 (sic).
5. P.S. Pallas. Puteshestviye po raznym provintsiyam Rossiiskoi imperii. 1773.
6. A. Kh. Margulan. Arkhitekturnye pamyatniki v doline reki Kengir. Vestnik AN KazSSR No.11 (32). 1947.
7. --- Iz istorii gorodov i stroitel'nogo iskusstva drevnego Kazakhstana. Alma-Ata, 1950.
8. T.K. Basenov. Arkhitekturnye pamyatniki v raione Sam. Alma-Ata, 1947.
9. --- O sooruzhenii Tas-Akyr. Izvestiya AN KazSSR No.80, Architectural Series, Issue 2. 1950.

## ARCHITECTURE

10. M.M. Mendikulov. Nekotorye dannye ob istoricheskoi arkhitektury Kazakhstana. Izvestiya AN KazSSR No.80 (as above).
11. V.V. Konstantinova. Nekotorye arkhitekturnye pamyatniki po srednemu techeniyu reki Syr-Daryi. Izvestiya AN KazSSR No.80 (as above).
12. G.G. Gerasimov. Pamyatniki arkhitektury Kara-Tau. Izvestiya AN KazSSR No.80 (as above).
13. M.M. Mendikulov. Pamyatniki arkhitektury Kazakhstana s konicheskimi i piramidalnymi kupolami. Arkhitektura respublik Srednei Azii. Academy of Architecture, Moscow, 1951.

## CULTURAL AFFAIRS

## THE DECISIVE STEP:

## A TURKMEN HISTORICAL NOVEL

Reshayushchii Shag (The Decisive Step). By B. Kerbabayev. Moscow, 1952.

The modern Central Asian novel - Summary of the plot of The Decisive Step - A British version of the events described.

Of recent years, and particularly since the war, the creation of popular "national" literatures in the Central Asian republics is a subject which has received a great deal of attention from Soviet publicists. Broadly speaking the aim is to create in local languages literatures which reflect the lives and cultures of the various Central Asian peoples but which conform to a standard Soviet, and usually Russian, pattern in subject matter, spirit, and in style. A favourite medium, and one quite foreign to traditional Central Asian literature, is the novel.

To write with ease and distinction in a new and unfamiliar medium is a task which has baffled some of the world's greatest writers. It is not therefore surprising that the quality of the novels so far produced by Central Asian writers is not remarkable by international or even Soviet standards. Moreover, many of those which have appeared have been criticized with a destructive violence hardly calculated to encourage novelists as a whole. Nevertheless, the appearance of writing not only in a new medium but in languages which until twenty-five years ago had been written very little, and in some instances not at all, must be accounted a literary phenomenon.

Novels by Central Asian writers can be more readily obtained in Russian translations than in their original form. Some of them, indeed, have only appeared in Russian in their full form, and of these The Decisive Step is one. It is, however, obvious that the Russian version represents a faithful translation from a Turkmen original. The Decisive Step, written between 1940 and 1947, is generally considered to be one of the most satisfactory Central Asian novels both from the political and from the literary point of view. Although it has been criticized

for not putting the events of the 1916 Revolt into proper perspective, it is described in the Soviet Encyclopaedia (1953) as "showing the part played by the peasants in the Socialist revolution and their friendship with the great Russian people." In fact, however, the latter theme is hardly treated at all.

The Decisive Step is a narrative of historical events woven round a human story of the most slender description. The hero, Artyk, is made the central character merely as a matter of form and his romance and marriage with Aina are quite irrelevant incidents. Nevertheless, the selection of the novel as a medium does provide an excuse for much lively dialogue. The brief analysis of the book which follows is concerned primarily with the historical part. With a view to setting forth some of the facts about the objects and activities of the Malleson Mission, which figure prominently in the book, some excerpts are appended from an article entitled "The Twenty-six Commissars" written by General Malleson which appeared in the Fortnightly Review of March 1933.

. . .

The story begins in the autumn of 1915 in the village of Gosh, situated on a canal connected with the Tedzhen-Kyal river. Khalnazar-Bai, a rich notable of the village, has just been appointed mirab (water-controller) of the canal.

Artyk, the hero of the story, is the son of a poor shepherd who, being unmarried, has no land of his own. All he has is the plot belonging to his mother; he also rents another plot. He is in love with Aina, the daughter of a well-to-do Turkmen of the same village. He is in revolt against the way in which the land is exploited by the bais and against the unfair distribution of the water. He is particularly opposed to Khalnazar-Bai whom he accuses of corruption in connection with the distribution of the land-plots and with the work on the canal.

Chernyshov, a Russian employee on the railway, informs Artyk of the impending revolution when both the Russian and the Turkmen poor will revolt against their taskmasters, the rich property-owners and bais. In the middle of June an order is received calling up the Turkmens for work behind the lines on 25th June. There is a meeting of protest at which Artyk speaks violently against the Tsar. The Russian military commander is, however, informed by the mayor that the population is quite ready to obey any call-up. News is later received that the Governor-General of Turkestan, General Kuropatkin, has postponed the call-up in order to allow

the harvest to be brought in. Hearing that Guldzhemal Khan, the widow of a former Governor of Turkmenia, is to go to Petersburg to petition the Tsar against the call-up, the villagers begin to collect money for her journey. In fact, however, Guldzhemal Khan never gets beyond Tashkent and all the money is lost. The date of the call-up is fixed for the 30th September 1916.

News of the outbreak of the revolt in Dzhizak reaches Artyk who resolves to take part in a similar revolt in Turkmenistan. The leader of the revolt is a certain Aziz Khan, who is in fact using it as a means of wreaking vengeance on the chief water-controller with whom he has an old quarrel. With Aziz Khan, Artyk takes part in the attack on Tedzhen. This attack, however, is defeated by the Russian military forces, and Artyk is arrested and put in prison. The call-up is then applied by force and a thousand Turkmens are despatched to Russia.

During 1917 there is a severe drought and famine in Turkmenistan, and the peasants receive the news of the Revolution with equanimity. The bays and rich people, on the other hand, are filled with alarm for the future of their property. Under Kerenskii's provisional government, a council of deputies is set up in Tedzhen, but only one of its members, Chernyshov, is a real Bolshevik - the rest being members of the moderate bourgeois opposition. Artyk is released from prison and returns to his village where he marries Aina.

Under the Provisional Government the condition of the Turkmen peasants is no better than before. Artyk, disgusted with the corruption of the cooperative society which is being set up in Tedzhen, decides to work for the overthrow of the Provisional Government. Hearing that he is to be arrested for his opposition to the cooperative society, Artyk proceeds to beat up its president, Kulikhan. At this moment news is received of the overthrow of Kerenskii's government. Turkestan passes into the hands of the Soviets but among them are a number of Social Revolutionaries, Mensheviks and bourgeois nationalists. At this juncture, Aziz Khan returns from Afghanistan whither he had fled after his defeat at Tedzhen. The starving peasants, the bays and rich people rally to him and he promises to protect them. In this way, two parties are set up in Tedzhen - the Soviets headed by Chernyshov and the other party headed by Aziz Khan. Chernyshov tries to persuade Artyk to join the Soviets, but Artyk distrusts them on account of the position still held by Kulikhan. He therefore joins Aziz and is put in command of one of his detachments.

Aziz Khan is visited by a certain Abdulkerim Khan who gives himself out to be an Afghan and an emissary of Habibullah Khan, the Emir of Afghanistan. He tells Aziz that the Emir has decided to profit by the

confusion in Russia and to join Turkestan, and particularly Turkmenistan, to his own country. Abdul Kerim claims to have had conversations with the Khivan Khan, Dzhunaid in Tashauz and to have secured his cooperation. Aziz declares his readiness to support the Emir of Afghanistan.

In December 1917 a congress is convened in Kokand of the peoples of Turkestan, and the autonomy of Turkestan is declared. Niyaz Beg is appointed head of the delegation representing Turkmenistan. On his return to Ashkhabad he is approached by the same Abdulkerim who previously declared himself as an Afghan to Aziz Khan. This time he gives himself out to be a Turk called Hamid Bey and tries to find out how Niyaz Beg would react to the possibility of joining the Turkish forces then attacking in the Caucasus. He also asks Niyaz Beg what his attitude would be to the British if they should appear in Turkestan. To these questions Niyaz Beg gives an evasive reply although he knows that a British mission has already arrived in Meshed.

At a meeting of the National Committee in Ashkhabad, Artyk becomes convinced that this Committee is not concerning itself with the needs of the population and that Aziz Khan is determined to exploit it to his own advantage.

During the temporary absence of Aziz, the Red Guards under the command of Kulikhan attack Tedzhen and Khalnazar-Bai is killed. Artyk with his detachment is obliged to withdraw from Tedzhen. After meeting with Chernyshov, Artyk becomes convinced that in cooperating with Aziz Khan he has acted against the people, and that the Soviets regard him as their enemy.

At the time of Aziz Khan's forced withdrawal from Tedzhen, Kulikhan captured a quantity of arms from him. These he despatches to Tashauz with the intention of selling them there to his own advantage. But Dzhunaid Khan gets hold of these arms and returns them to Aziz, who in the meanwhile has set up his headquarters at Ak-Alan, a few miles outside Tedzhen. Artyk informs Chernyshov of Kulikhan's action, but Chernyshov is afraid to take any steps against Kulikhan on account of his popularity among the Turkmens. Kulikhan arrests Artyk and puts him in prison.

After Aziz Khan's defeat, Tedzhen passes into the hands of the Soviets, but shortly afterwards, the opposition to the Soviet regime in Turkestan begins to grow and Aziz Khan's forces situated near the railway constitute a special danger, as they threaten to cut off communications between Transcaspia and the centre. In order to liquidate Aziz Khan's forces, Osipov, the military commissar of the Turkestan republic, is sent to Tedzhen. But instead of attacking and disarming him, Osipov

enters into friendly conversations with Aziz with the object of obtaining his cooperation. He first promises to place him at the head of the Tedzhen Soviet, and later, begins to talk to him about the British mission in Meshed. Aziz refuses to have anything to do with the British, but at Osipov's suggestion he agrees to join forces with the Emir of Bukhara, provided that the latter agrees to share power with him.

The rest of the book consists mostly of a graphic description of the confused military operations in Turkestan between June 1918 and February 1920. The principal belligerents are the White forces operating from Ashkhabad, Krasnovodsk and Kaakhka, and the Red forces sent by the newly constituted republic of Turkestan. But the issue is complicated by the semi-independent forces under the command of Aziz Khan who, although he had originally started the revolt against Tsarist authorities, associates himself first with the Provisional and later with the White Governments of Ashkhabad. Other complicating factors are the activities of Dzhumaid Khan, operating from the Khorezm oasis, and the presence of emissaries of the Emirs of Bukhara and Afghanistan, and of the Turkish government. By the 21st July, 1918, the whole of Transcaspia was in the hands of the Whites, Soviet rule being confined to the Kushka and the Merv districts. It was just at this time that General Malleon arrived in Meshed to take charge of the Mission there, and much of the book is devoted to the activities of him and his officers, and of the small detachments of the 28th Light Cavalry and the 19th Punjab Regiment which he had at his disposal. The British are represented as being in league with Aziz Khan, to whom Artyk, the hero, continues to adhere, in spite of his hatred of the British. Later, when the British turn against Aziz, Artyk continues to support him declaring that "he can never be friends with the British bloodsuckers and that he spits on everything which emanates from the British".

The object of the Malleon Mission is described as "intervention" and as directed solely against the Bolshevik Government. Apart from the operations of the British Indian troops against the Red forces, the British aid afforded to the White forces is described as unimportant: Malleon simply gives them worthless money and with the same paper money buys up large quantities of valuable carpets, skins and other articles and despatches them across the frontier. The incident of the shooting of the twenty-six Baku Commissars is not described in great detail. It is, of course, assumed that it was organized by the British, but even though he knows this from his friend Chernyshov, Artyk still remains loyal to Aziz Khan who continues to oppose the Red forces. With the withdrawal of the British troops at the beginning of April 1919, the position of the Red forces rapidly becomes stronger. Ashkhabad is occupied on the 19th July 1919 and Krasnovodsk on the 6th February 1920.

The "decisive step", which constitutes the title of the book, is apparently that taken by Artyk when he finally decides to leave Aziz Khan's side after the departure of the British forces. Until this time, however, he is torn between his friendship for Chernyshov and his admiration of Soviet ideals, and his loyalty to Aziz Khan. In fact, his whole career as described in the book is characterized by indecision, which can be explained by the extraordinary confusion prevailing at the time, a confusion which is most tellingly conveyed by the author.

. . .

Great importance has always been attached by the Soviet authorities to the part played by the Malleston Mission in Turkmenistan, and particularly to the incident of the shooting of the twenty-six Baku Commissars. This, it has always been maintained, was the work of the Mission, a charge recently repeated in the current edition of the Soviet Encyclopaedia. In his article mentioned above, General Malleston describes as follows the original objects of the Mission:

"Early in 1918, in view of the serious possibility of a Turco-German incursion in Central Asia, the British and Indian Governments took alarm and began to think of counter measures. A small mixed force under General Dunsterforce was sent from Mesopotamia to Northern Persia, with a view to the capture of Baku. The story of Dunsterforce has been written by its leader, and it is only necessary to say here that, after great difficulties and in face of a minimum of support from the authorities in Mesopotamia, Baku was occupied for a few days, but had to be abandoned because of the advance of superior Turco-German forces.

Apparently at much the same time as this Baku move was decided on, the British and Indian Governments thought of another scheme, in case the first should fail. This was to send a British Military Mission to Russian Central Asia with a view (1) to organize local resistance to a Turco-German advance; (2) to secure, if possible, the Central Asian Railway so as to deny its use to the enemy; (3) to get control of all shipping on the Caspian Sea; (4) to intercept enemy agents, and (5) to counter enemy propaganda."

After describing the appeal for help which he received from the Provisional Government of Transcaspia in July 1918, a body composed almost entirely of the rank and file of the railway workers, General Malleston says:

"Naturally it was a serious thing to embark on hostilities with the Bolsheviks in Central Asia with a mere handful of troops which would be operating at a distance of nearly two thousand miles from the nearest base, Quetta. On the other hand, it seemed hopeless to expect that the Bolsheviks, who in European Russia had now ceased to offer any sort of resistance to German penetration, would give us any facilities to obstruct or oppose a Turco-German advance via Baku and Krasnovodsk into Central Asia. On the whole, therefore, it seemed best that I should be authorized to support the Provisional Government of Transcaspia against the Bolsheviks."

Describing the aid actually given to the Provisional Government, General Malleon writes:

"All the help which could be immediately sent was a detachment of machine guns. These proceeded towards Merv and did great execution. But the enemy was in greater force and continued their advance in the direction of Ashkhabad. A very gallant regiment of Indian infantry, the 19th Punjabis, then stayed further advance. Later, but this was after the incident of the Twenty-six Commissars, by putting in the 28th Indian Cavalry, our forces decisively defeated the Bolsheviks, driving them back in full flight almost to the Oxus."

In dealing with the incident of the Twenty-six Baku Commissars, General Malleon explains that the only connection with, and control over, the Transcaspian Provisional Government which he was able to maintain was through their representatives in Meshed. The Commissars had been sent from Moscow to "liquidate" the situation in the Caucasus before cleaning up Central Asia. Caught up in the Turkish advance, and being unable to escape through the North Caucasus owing to the presence of Denikin and his White troops, they took ship to Krasnovodsk. General Malleon explained to the Transcaspian representatives in Meshed that the British mission did not desire that these Commissars should enter or remain in Transcaspia. But they had no desire to see them murdered. In fact they were much more valuable alive. General Malleon writes of the representatives:

"They agreed about the undesirability of the presence of these people in Transcaspia, but when I went on to ask that they should be handed over to us, alive, they demurred. Finally I had to press the matter strongly and say that if they could not meet us in this matter it might lead to a withdrawal of our assistance. They then said they would do their best to press their Government to accede to our wishes, but that in all probability it was too late, as the

twenty-six were not likely to be alive. 'it is a question,' they said, 'of their lives or ours. If they get to Ashkhabad they will bring about a revolution against us, and then all of us, not a mere twenty-six but many hundreds who helped to clear out Frolov [Ed. i.e. a Bolshevik leader] and his gang, will certainly be slaughtered. Clearly it is better the twenty-six should die, but if you insist we will endeavour to get them handed over to you.'"

And later: "As a matter of fact, it was too late, and nothing we could have done in the time available could have saved them. At that period we had no troops and no British representative in Krasnovodsk, though we had both some weeks later. That port and its immediate neighbourhood was under the control of a Russian named Kuhn, a strong and pitiless man, as he had need to be, since no other sort survived long in the turmoil of the revolution. He kept himself largely independent of the Ashkhabad Government. Having barely escaped with his life from the Bolsheviks in Central Russia, and having had several attempts on it since he had established himself as the ruler of Krasnovodsk, he governed that place with a rod of iron. Whilst according complete individual liberty to everyone he instantly suppressed all political intrigues. To what extent he really received instructions from the Ashkhabad Government in the matter of the Commissars I know not, but I am of the opinion that even without such instructions he would have made away with them. As it was, he appears to have lost no time. He put them on a train ostensibly for Ashkhabad, but a few miles out from Krasnovodsk the victims were made to alight. They were all shot and buried in the desert alongside the railway track. The fate of the Commissars, and the action I had taken to get hold of them, were duly reported to Simla, and I was told to convey to the authorities in Ashkhabad the horror and detestation with which the Government of India viewed this cold-blooded crime."

## C U L T U R A L   A F F A I R S

T H E   R O L E   O F   T H E   K A Z A K H S   I N   T H E  
A D M I N I S T R A T I O N   O F   K A Z A K H S T A N

## P R O B L E M S   O F   " N A T I V I Z A T I O N "   I N   T H E   Y E A R S   1 9 2 0   -   1 9 3 0

Introduction - Early measures of "nativization" - The "functional" method - Education of Kazakhs - Achievements up to 1930 - "Nativization" of the Party - Conclusion - Editorial note.

The following is the substance of an article by A.P. Kuchkin, which appeared in Istoricheskiye Zapiski, No.48, 1954 (published by the Academy of Sciences of the USSR: Institute of History), entitled "The Problem of the Nativization of the Soviet Apparatus in Kazakhstan in the First Decade of the Republic's Existence (1920-30)". The word here translated "nativization" is the Russian korenizatsiya - a word not found in most modern Russian dictionaries. The author of the article gives as a synonym natsionalizatsiya, which is found in dictionaries and in the encyclopaedias, but only with the meaning of "nationalization" in the usual sense. Korenizatsiya was in use during the period covered by the article to describe the process of appointing Kazakhs to responsible posts, or - and this is a meaning hardly covered by the English "nativization" - of seeing that those holding important positions in the government of Kazakhstan had a knowledge of Kazakh.

. . .

The political foundation of the state structure established in the Soviet Union after the Revolution was the soviets. It is with the help of the soviets, and according to the path laid down by Lenin, that Socialism will be built even in backward frontier areas where there is no industrial proletariat; and it was to further this end that the soviets in such areas had to be "nativized", that is, composed of indigenous nationals. This task was one of the first to confront the

newly formed Kazakh ASSR after 1920.

In the beginnings of Soviet power in Kazakhstan, the administration was everywhere in the hands of Russians knowing no Kazakh. All government business was transacted in Russian, while the greater part of the rural population of the republic knew no Russian at all. The Party and Soviet organs of Kazakhstan had thus to train Kazakhs for the republic's administration without resorting to "Kazakhization", i.e. the replacement of the existing administration by one exclusively Kazakh. "Kazakhization", it is true, was one aspect of "nativization", but, at the same time, in areas where there existed groups of other nationalities, these also were brought into the administrative organs.

First, the Kazakhstan Government adopted two official languages - Kazakh and Russian, and in regions of mixed population business and official talks were carried on in both. In the first years of the Kazakh republic the number of trained Kazakhs was negligible, and their training was impeded by the illiteracy of the Kazakhs. The number of literate Kazakhs in 1913 was less than two per cent, and even in 1926 less than ten per cent. The Kazakhstan authorities had a "formalistic" approach to the problem of "nativization" and conducted no wide-scale propaganda campaign, nor did they enlist the aid of the local Party aktivs.

The second session of the IVth meeting of the Kazakh Party Central Committee in 1924 proposed immediate measures of "nativization" - soviets in areas inhabited by Kazakhs were to be entirely composed of "Kirgiz" (Kazakhs) and in mixed areas to have half their members Kazakhs. This decree was used by bourgeois nationalists to serve their counter-revolutionary ends; they demanded the replacement of Russian and Ukrainian Party members in posts of responsibility by themselves. This was counter to the basic Party directives which said that "nativization" must be carried out in conjunction with the preservation and consolidation of the dictatorship of the proletariat and with the education of the local population in the spirit of Marxism-Leninism and internationalism. The "nativization" movement in Kazakhstan must therefore be in the hands of Communists.

The Vth all-Kazakh conference of the republican Communist Party in December 1925 discussed the existing practice of forming local soviets and put forward a motion for the reconsideration of the percentage method of selection. The kraikom of the Kazakh Party, meeting on 8th May 1926, and later the Kazakh Party Central Committee, favoured the introduction of a new method - the "functional" method. This was the filling of those posts in the administrative system, which had the most to do with the public, with Kazakhs or men knowing Kazakh. The Kazakh Party Presidium

meeting on the 27th May 1926 gave the republican Party the duty of listing the posts to be "nativized" immediately, and of creating courses and schools to educate Kazakhs to fill them. Schools were opened for Russians working in the administration to learn Kazakh.

In the case of these "nativized functions" business and accounts were to be transacted in Kazakh. Forty-two posts were marked for "nativization" in the next two years, while 13,000 "functions" were given dates for "nativization". Six courses were organized in the educational year 1926-7 to teach Kazakhs business methods and typewriting, and 335 workers passed them. 1,500 non-Kazakhs attended the Kazakh language courses. To cut short resistance to "nativization" an article was inserted into the Criminal Code laying down penalties for such action.

The bureau of the Party Krai Committee, in its meeting on the 6th October, and the December plenum of the Krai Committee in 1926 remarked on the opposition to nativization on the part of "bureaucrats and civil servants" and on the lack of propoganda explaining the importance of these measures. They therefore pronounced the preparation of qualified Kazakh workers unsatisfactory and opened a new campaign. On the 29th December 1926 the Sovnarkom of Kazakhstan gave the Narkom of education the task of elaborating a plan for organizing courses to prepare Kazakhs for government work and for teaching Kazakh to non-native workers. These courses, lasting six months, were organized in all soviet and cooperatives after the decision of the Sovnarkom of Kazakhstan on the 12th January 1927. Up to 1927 the results of "nativization" had been slight; it had affected only the heads of institutions and the lowest categories of workers, while the average official, who had more than any other to do with the population, was only very slightly affected by "nativization". By 1927, out of 11,068 "functions" in all provinces, 2,567, or 23.2 per cent, had been "nativized", while in republican institutions 195 of 842 "functions" had been "nativized", or 23 per cent. This was pronounced unsatisfactory by the bureau of the Party Krai Committee on the 20th March 1927 and the NKRKI blamed for it. This verdict was upheld by the VIth all-Kazakh Congress of Soviets (March-April 1927) and subsequently by the Party Central Committee.

The Central Committee and the Sovnarkom therefore, on the 14th April and the 17th May, appointed the 1st October 1927 as the date by which all volost executive committees and aul soviets must go over to Kazakh for normal business, and the 1st January 1928 as the corresponding date for mixed districts. At the same time it was declared necessary that all instructions and decrees should be issued in Kazakh and Russian. The VIth all-Kazakh Party Conference, in November 1927, approved the "functional" method of "nativization".

## CULTURAL AFFAIRS

The Krai Committee of the Party, in January 1928, reported that the administration of the republic was 23 per cent "nativized" and the volost executive committees and aul soviets entirely so. The existence of resistance to these measures on the part of central and provincial institutions was again affirmed.

"Nativization" in 1928 progressed unevenly in different provinces - from 34 per cent in the Ural province, to 19 in Syr-Darya, and 13 in Semipalatinsk. The Krai Committee of the Party introduced new measures on the 4th June 1928 to ensure the education of the young Kazakh worker at every level and for extension teaching in Kazakh for officials of the higher levels. Nevertheless, "nativization" developed slowly because of the existence of deviation to nationalism - both Kazakh and Great Russian. Some of these deviations were to be found in members of the Government, although this was not then known. To break this nationalist resistance the Kazakh Party Committee set up a new commission at the January 1929 meeting to initiate and supervise the execution of measures of "nativization". However, the measures taken were insufficient; in March 1929, of 11,879 posts, 2,683 or 22.6 per cent, had been "nativized". In the year 1926, 7,509 Kazakhs were prepared for office and accounting work on special courses; on 21 such courses in 1927, 8,647 men were trained, and in 1928-29, on 13 courses, only 311 men. This sharp decline in the numbers of specialists is explained by the careless selection of men to take the courses, by the lack of teaching equipment and the lack of ability of the teachers, all of which had weakened the interest of those who could have furthered the project.

At the VIIth all-Kazakh Congress of Soviets in April 1929 strong opposition was displayed to "nativization" on the part of heads of institutions. The December plenum of the Krai Committee in the same year pointed out that the whole process was being delayed by the widespread illiteracy still prevailing in Kazakhstan. The general educational level was too low. In the educational year 1929-1930, 130,000 Kazakh children were receiving primary education and about 5,500 secondary education of one sort or another. There were 3,500 Kazakh teachers in primary schools and 600 in secondary schools. About 75 per cent of the teachers in primary schools had only a primary education, and it was this that was responsible for the low general level of the national schools. In 1928 the first establishment of higher education in Kazakhstan was opened - the Abai Teacher-Training Institute in Alma-Ata, and in 1929 the Veterinary Institute was opened there; in 1929-30, 900 Kazakhs were receiving higher education.

The Presidium of the Kazakh Party Central Committee on the 21st January 1930 directed the Government to work out a five-year plan of

"nativization", to force the pace of "Kazakhization", and of the preparation of "cadres" for the construction of Socialism. The achievements in "nativization" up to 1930 are these:

the personnel of the forty-one republican institutions was 20.2 per cent "nativized"; the personnel of local organs of government, 25.2 per cent; and heads of offices, 35.5 per cent. Government directions were issued in Kazakh and Russian and official correspondence was carried on in Kazakh and Russian areas of mixed population, and in Kazakh in areas of purely native population, where the courts and legal actions were entirely "nativized". The percentage of Kazakhs in VUZ, tekhnikums and factory schools was 44.5 in 1927, 46.6 in 1928 and 53.4 in 1929. From 1926 to 1929 altogether about 10,000 Kazakhs received some form of higher education in VUZ, tekhnikums, factory schools or on special courses. Not all of these, however, finished their courses, and not all of those who finished were suitable for the work of "nativization". The number of Kazakhs on the further education courses at times reached 20-40 per cent, but it was remarked that on these courses, and indeed in all the branches of education mentioned, the Kazakhs were subjected to teaching with bourgeois-nationalist tendencies. However, these tendencies had little or no effect. It is a striking tribute to the intensity of the efforts of the Government during the Soviet era that, in 1930, 34 per cent of Kazakh children were receiving some sort of education, where before there had been almost complete illiteracy. There was a set policy of promotion of Kazakhs, when they were sufficiently talented, to executive posts.

The "nativization" of the Party in Kazakhstan accompanied the campaign for the "nativization" of the administration. The number of Kazakhs in the Party rose from 6,645 in 1925 to 18,369 in 1929. The percentage of Kazakhs was in 1925, 30.7, in 1926, 36.5, in 1927, 36.5, in 1928, 37.9, and in 1929, 41.2. The number of Kazakhs in responsible posts rose similarly from 104 in the guberniya Party committees in December 1925 to 240 on the okrug committees in 1929. In 1929 45 per cent of the members of the leading soviets were Kazakhs and 19 per cent of other national minorities, and 52 per cent of all the lower soviets in Kazakhstan were Kazakhs. The growth of the industry of the country also increased the number of Kazakhs taking part in it; in 1926-7 of 46,768 workers in the republic 16 per cent were Kazakhs, and in 1929-30 34 per cent of 163,966. Kazakhs formed 26.5 per cent of all the clerical workers of the republic in 1929.

These figures show that, although much was achieved during the period in question, the main task of "nativization" was completed in subsequent years. The factor impeding progress was the educational backwardness of the Kazakhs. These are the achievements in the field

## CULTURAL AFFAIRS

of education: the number of Kazakhs receiving education in all types of school was 21.7 per cent in 1920-1, 31.2 in 1927-8, and 38.3 in 1932-3. In 1927-8, 140,000 Kazakhs learned to read and write; in 1929-30 almost half a million. Of all Kazakhs 90 per cent were illiterate in 1928, but only 60 per cent in 1930. Towards the end of this year there were five VUZ in the republic, and 60 per cent of their students were Kazakhs; there were 800 various Kazakh cultural institutions, twenty newspapers were being issued in Kazakh, nine magazines, and thousands of books.

"Nativization", despite all the short-comings, had brought the administration nearer to the mass of the people; this was especially the case after collectivization had eliminated the kulaks and bais as classes. The struggle was now not for quantity, but for quality. So in the first decade of the existence of the Kazakh republic, a successful solution of the central problem not only of Kazakhstan, but of the whole Soviet Union, was reached - the problem of the building of Socialism, to make possible a bold and confident progress towards Communism, the peak of human happiness.

. . .

Although the author seems to assume, in his conclusion, that the foundations of the "nativization" policy were firmly laid by 1930, and that the process has since been completed, it should be remembered that since the period covered by the article, the Slav population of Kazakhstan has greatly increased, and that with the settlement schemes attendant on the new lands campaign it is today rising even more sharply. On the other hand, between 1926 and 1939 the Kazakh population dropped by nearly one million and there is no evidence to show that it has since risen. These considerations suggest that in the present situation where already nearly one half of the total population of the republic is non-Kazakh, complete "nativization" of government administration is no longer a practical proposition. The likelihood of more than a minute proportion of new settlers learning the Kazakh language seems almost equally remote.

It is interesting that an article, by Romeo A. Cherot, which deals with the same subject, appeared in the American Slavic and East European Review for February 1955 with the title "Nativization of Government and Party Structure in Kazakhstan, 1920-30". Whereas Mr. Kuchkin has written what is essentially an exposition of successive Party conferences and resolutions, Mr. Cherot has used many valuable contemporary statistical sources, not least among them the complete text of the 1926 census, and gives many more detailed analyses of the national composition of the

various organs of the administration. His figures sometimes differ from those of Mr. Kuchkin, notably in the proportions of Kazakh to Russian in the Party organizations, although these differences are very slight. A list of some of Mr. Cherot's sources is appended below.

Some sources quoted by Mr. Cherot

1. Kalendar-spravochnik i zapisnaya knizhka 1927. Kzyl-Orda, 1927.
2. Materialy k otchetu TsIKa KASSR. Kzyl-Orda, 1928.
3. Vsesoyuznaya perepis naseleniya 17 dekabr 1926 god, VIII.  
Moscow, 1928.
4. Vybory v sovety RSFSR v 1925-26 godu. Moscow, 1926.
5. Dva goda raboty pravitelstva RSFSR 1924-25, 1925-26.  
Moscow, 1927.
6. Natsionalnyi sostav vybornykh organov vlasti RSFSR 1927 goda.  
Moscow, 1928.
7. Natsionalnaya politika VKP(b) v tsifrakh. Moscow, 1930.
8. VKP(b) v tsifrakh. Moscow, 1924-29.
9. Vsesoyuznaya partiinaya perepis 1927 goda. Moscow, 1927.
10. Vserossiiskaya perepis chlenov RKP 1922 goda. Moscow, 1923.
11. Sotsialnyi i natsionalnyi sostav VKP(b). Moscow, 1928.
12. Kalendar-spravochnik i zapisnaya knizhka na 1928 god.  
Kzyl-Orda, 1928.
13. Statistiko-ekonomicheskii obzor. Orenburg, 1923.
14. Obzor narodnogo khozyaistva KASSR 1924 goda. Orenburg, 1925.
15. Obzor narodnogo khozyaistva KASSR 1925. Samara, 1927.
16. Otchet o rabote za 1926-27, 1927-28 gody. Petropavlovsk, 1928.

C U L T U R A L   A F F A I R S

---

S O V I E T   O R I E N T A L   S T U D I E S :

T H E   N E E D   F O R   F U R T H E R   D E V E L O P M E N T

Introduction - Pre-revolutionary Russian orientalism - Achievements of Soviet orientalism - Shortcomings of Soviet oriental studies - Measures for their improvement - Editorial note.

The following is an abridged version of an unsigned article (Za dalneishii podiyem sovetskogo vostokovedeniya) which appeared in Kommunist No. 8 of May 1955. This article is one more indication of the increased attention now being paid to oriental studies in the Soviet Union. Other indications have been the appearance of Smirnov's book Outline of the History of Islamic Studies in the USSR, (analysed in the last three issues of Central Asian Review), the strong Soviet delegation sent to the International Congress of Orientalists held in Cambridge last year, and the new periodical called Sovetskoye Vostokovedeniye (Soviet Orientalism) of which the first issue appeared in May 1955.

. . .

The task before Soviet orientalism is the creative study of the history, economy, and cultures of the peoples of the East. It must explain those great changes that have taken place in the East during the past few decades and reveal the forces and influences that have shaped them.

Pre-revolutionary Russian orientalism in certain aspects far outstripped the work of West European and American orientalists of that time. The works of that great founder of Russian Chinese studies, N.Ya. Bichurin, of the Sanskritist, P.Ya. Petrov, of the specialist in Pali, Prakit, and modern Indian languages, I.P. Minayev, of the turcologist, V.V. Radlov, of the Arabist, V.R. Rozen, and of others have received world-wide recognition and have advanced world orientalism. Despite the historically determined limitations of pre-revolutionary Russian orientalism, with its formal philological approach to the documentary study of the material and spiritual culture of the peoples of the East,

it is noteworthy that a number of Russian orientalists, in contrast to Western orientalists, did not shrink from criticizing colonial policies and protesting against racial discrimination. Moreover, they threw light on several social and economic problems and, to some extent, expressed sympathy for the oppressed peoples of the East.

The progressive, humanist direction of Russian social thought of the pre-revolutionary period had an important influence. Belinskii, Dobrolyubov, and Chernyshevskii displayed a deep interest in the East. V.G. Belinskii persistently castigated West European colonizers when they asserted that China and India played no great part in world history. "China and India are countries in the fullest sense historic" wrote Belinskii, "China is a great phenomenon.. India deserves an honourable place in history."

The October Revolution opened up the widest possibilities for a genuine scientific development of orientalism. Thanks to the unremitting attention which the Party and Government have paid to the development of learning, Soviet oriental studies, steeped in Marxist-Leninist theory and permeated with the best traditions of pre-revolutionary Russian orientalism, have risen to a new level. In the twenties, an all-Russian Association of Orientalists was inaugurated; journals devoted to oriental studies began to appear and special institutes were established in Moscow and Leningrad. In the years following the Revolution were published most of the notable works of such Soviet orientalists as V.V. Barthold, of B.Ya Vladimirtsov, the expert on Mongolia, of the Arabist, Yu. Krachkovskii, of the Sinologist, V.M. Alekseyev, and of the Indian expert, A.P. Barannikov. More recently, Institutes of Oriental Studies have been founded by the Academy of Sciences of the USSR and the Uzbek Academy of Sciences. Relations between orientalists of the People's Democracies and the progressive scholars of other countries have greatly improved and are continually being consolidated. Especially fruitful are the ties with the scholars of China, Mongolia, Poland, and Czechoslovakia. A number of works on various aspects of oriental studies have also been published. Particularly notable is the collective work China in the BSE (Great Soviet Encyclopaedia) edition, to which both Soviet and Chinese writers have contributed. Soviet and Mongol historians have collaborated in a history of the Mongolian People's Republic. The Institute of Oriental Studies of the Uzbek Academy of Sciences has issued the first two volumes of A Collection of Eastern Manuscripts, and Avicenna's The Canon of Medicine which had not previously appeared in any European language. The Institute of Oriental Studies of the Academy of Sciences of the USSR has prepared and issued Chinese-Russian, Urdu-Russian, and Hindi-Russian dictionaries. A collection of articles, The Korean People's Democratic Republic, and a comprehensive study, The Peoples of Africa, have been

published by the Institute of Ethnography. Scholars of the Institute of Oriental Studies are at present engaged in research on the history, economy, literatures and languages of China, India, South-East Asia, and the Arab East. For this, archaeological and palaeographic data, early and late mediaeval sources, and modern documentation on the economic and political development of these areas have been collected. In the Department of History of Moscow University a number of serious works on the modern history of Turkey and the development of capitalist relations in India have been produced.

Nevertheless the development of Soviet orientalism still does not correspond to the demands made on it. Many important problems of great educational and practical significance appear to have been altogether ignored. Our oriental philological studies, especially those dealing with the languages and literatures of the peoples of India, South-East Asia and Africa, leave much to be desired. Our African studies in particular are very badly organized. Experts in African studies - never very numerous - are few and far between. The countries of the African continent are studied only in the Institute of Ethnography, elsewhere Egypt is the only country dealt with.

Research into the history, economy and culture of the African peoples, their struggle for national liberation and the unmasking of the colonial policy of imperialism in Africa is one of the immediate tasks before Soviet orientalism. In the sphere of recent history it is necessary to study the crisis of capitalism in the East, and to expose the specific features of the development and nature of the forces underlying the people's revolution in China, Mongolia, Korea and Vietnam. Other subjects in which research and publication must be developed are: the history of the masses as opposed to that of dynasties and rulers; the formation of the working class and the agrarian problem, which, as is known, underlies the anti-imperialist, anti-feudal movement of the peoples of the East; and the development of the forces of production.

A serious shortcoming of many historical works is the absence of a thorough analysis of the policies of Tsarist Russia in the neighbouring countries of the East. Despite the reactionary nature of the Tsarist regime, the annexation of Central Asia and Transcaucasia to Russia had a progressive significance. The annexed peoples entered into trading relations with a country far more advanced economically; moreover, they encountered not only Tsarist colonizers but came into contact with the working masses and with the representatives of the leading Russian social thinkers of the day. The peoples of Central Asia and Transcaucasia together with the Russian people carried on the struggle against autocracy, and, under the leadership of the Russian working class,

achieved their national and social liberation. In the two-volume work, Novaya istoriya stran zarubezhnogo vostoka, issued by Moscow University, for instance, the authors do not fully reveal the part played by Russia in liberating Bulgarians, Roumanians and other peoples from Turkey. Nor are the colonial policies of the Western powers in the Near and Middle East sufficiently laid bare. A substantial flaw in the many modern histories of the countries of the non-Soviet East is the underestimation of the culture of these people. The problems of its ideological superstructure and the interaction of influences are hardly ever touched upon; and grave errors in the assessment of the role of the national bourgeoisie are allowed to pass. In many works, the progressive aspects of Kemal's struggle against imperialism have been ignored. When considering the part played by Gandhi our orientalists have not always proceeded from the actual (historical) situation in India. Nor do our orientalists adequately investigate the colonial policies in Asia of individual imperialist powers, particularly of America. The problem facing Soviet orientalists consists in revealing the real causes which hinder the development of certain eastern countries.

The availability of essential materials relating to a particular subject under investigation is, of course, an indispensable condition for fruitful study. Hence the need for a thorough improvement in the editing and publication of the invaluable collections of Eastern manuscripts in the Institute of Oriental Studies and other institutions. The issue in Russian of the works of scholars of the People's Democracies in the East would also be of value. The Soviet orientalist must be familiar with the latest achievements not only of other Soviet but of foreign scholars as well. Soviet historians and orientalists, however, do not make full use of the opportunities offered them by our archives, which contain documents and material concerning the external and the internal affairs of the non-Soviet countries of the East.

Soviet oriental philology has not on the whole attained a level commensurate with the problems it has to deal with. Certain of its branches as, for example, the Tibetan language, have been almost completely neglected. Too little work is also being done in the field of South-East Asian and African languages.

Soviet orientalists are required to wage an incessant fight against all manner of falsification and misrepresentation by means of which the imperialists attempt to disarm ideologically the peoples of the East and to "justify" colonial enslavement. Abroad, a number of serious works by scholars of undoubted integrity have been published; along with these, however, others of a pseudo-scholarly type have appeared which openly call for the support of the most reactionary and venal elements. In other

instances "scholars" contend for the active interference of their governments in the internal affairs of other countries on the pretext of giving them military or economic "aid". Particularly zealous in this respect are American "orientalists".

Since the dawn of the Soviet regime there has grown up in our country a whole generation of talented and capable scholars and orientologists. However, the number still falls short of the growing needs of Soviet orientalism. The training of specialists in the philology and economy of China, India, the countries of South-East Asia, and the Arab East is progressing very slowly. We still have very few philologists with a thorough knowledge of oriental languages and sources. Yet such knowledge is essential equipment for a serious student of orientalism as it provides access to all the hitherto unknown sources on the ancient, mediaeval, and modern history of the East and assists in its objective and scientific interpretation.

The legitimate interest which the Soviet people manifest in the foreign East must find a reflection in the curricula of middle schools and higher educational institutions. Unfortunately, in the existing curricula of middle schools far less attention is paid to the history of the Oriental peoples than to that of the West. In the history faculties and pedagogic institutes the history of Western countries receives greater prominence and is studied far more thoroughly. The Ministry of Public Instruction and Higher Education should rectify this position by providing better textbooks for schools and by raising the qualifications for entrants to the Institutes of Oriental Studies and to the universities, as well as the standards of graduates.

To achieve a real improvement in the training of orientologists it is essential not only to strengthen the history and philology sections of the Oriental Departments of Moscow, Leningrad and the Central Asian Universities but to organize properly the employment of specialists who have advanced training in oriental studies.

One of the vital problems of our oriental studies is the coordination of research of the various oriental institutes of the Soviet Union. At present the connections between orientologists of Moscow, Leningrad, Central Asia and Transcaucasia are poor. Various kollektivs are engaged on research work on the history of the Soviet and foreign East but there is lack of cooperation with the leading centres. The Institute of Oriental Studies must become a genuine centre coordinating the work of all Soviet orientologists.

The publication of the new periodical Sovetskoye Vostokovedeniye

has an important part to play in promoting the work of our orientalists. It has before it serious tasks: the interpretation of the main problems of orientalism and the organization of creative discussions. The journal must acquaint its readers with the latest works of foreign orientalists. If it fulfils its tasks, as it must, Soviet oriental studies will be raised to a new and higher level.

. . .

The foregoing article does perhaps rather less than justice to the volume and range of Soviet publications on oriental subjects since the Revolution. As early as 1924 the Leningrad Oriental Institute (since merged in the Moscow Academy of Sciences) began to produce works which, although for the most part written by orientalists of the previous regime, bore evidence of a new approach. The claims of classical antiquity were not to be disregarded, but the main emphasis was to be on modern social and political developments and on the modern as opposed to the classical forms of eastern languages.

Until recently Soviet attention has been focussed principally on the Middle East and on the Muslim peoples living in the USSR, but even before the war some important works were produced on Far Eastern and Indian languages and history. As indicated in the Kommunist article, Africa and South-East Asia have so far been somewhat neglected, but an effort is to be made to make good this deficiency.

Although an idea of the quantity and range of Soviet publications on oriental subjects can readily be obtained from bibliographies and book catalogues, their contents and importance are matters which have so far received scant attention in the West. This is partly due to the fact that the Russian language is not ordinarily included in the linguistic equipment of Western orientalists, and partly because almost all Soviet oriental research is known to be informed by Marxist political considerations. The difference between the Western and Soviet approaches to oriental studies is indeed very marked. Most Western scholars embarking on the study of eastern history, religion, philosophy and ethics, do so in a spirit of sympathy and respect. Soviet scholars, on the other hand, while admitting the importance of eastern cultures, are largely concerned with the process of razoblacheniye or the unmasking of what they regard as the deadening effect of outworn eastern customs and beliefs, which, they allege, have been deliberately perpetuated by Western "capitalist-imperialism". The strictly "scientific" approach on which Marxism insists brings to oriental studies the same kind of enthusiasm which a

bacteriologist brings to the study of the cause, course, consequences, and ultimately to the eradication, of pernicious diseases.

Soviet academic authorities are for their part aware and highly critical of the Western attitude towards oriental studies. They now, however, advocate much closer attention to the work of Russian and foreign "bourgeois" orientalists which they consider contains much that is of value for Soviet scholars. There is so far little sign of a similar realization on the part of Western scholarship. In linguistics and philology Soviet scholarship has produced much valuable work, particularly that dealing with the modern forms of eastern languages such as Arabic and Persian, of which little or no cognizance or advantage has been taken by the West. Again, comparatively little notice has yet been taken by the West of the vast work of elaboration and russification of the Turkic languages of Central Asia and the Caucasus carried out by Soviet orientalists. This work may be repugnant to Western scholars, but it is of great importance and bears evidence of considerable learning and research. The same can be said of much Soviet writing on eastern history and culture. Its accuracy, objectivity and the positive contribution which it makes to learning may be doubted; but its examination is essential if the nature and potentialities of Soviet eastern policies are to be properly apprehended.

The Kommunist article makes it clear that the authorities are by no means satisfied with what has so far been achieved. A great expansion of oriental studies is envisaged and this will evidently include the sphere of classical antiquity in which Western scholars have so far more than held their own.

The increase in Soviet interest in classical antiquity and the evident desire to profit from the works both of pre-Soviet Russian and of Western orientalists might give rise to hopes of an impending change in the Soviet attitude towards oriental studies in general. If the expressed wish for closer intercourse with Western scholars is put into practice there would certainly be a response from the West and much mutual advantage might result. A change in the Soviet attitude is not of course impossible, but judging from the introductory note to the first issue of Sovetskoye Vostokovedeniye, it is not imminent. Although a wider field of study is advocated the negative aims of "unmasking reactionary ideologies" and denigrating Western relations with the East are still to receive high priority.

The first number of Sovetskoye Vostokovedeniye has been received too late for detailed analysis but it is hoped to undertake this in later issues of Central Asian Review.

## CURRENT EVENTS

## NEWS ITEMS

The following news items refer to the first six months of 1955. It is hoped to include as a regular feature of the Review similar items of news which are of interest but on which there is insufficient material for an article. Items are arranged by republics, and a list of abbreviations of their sources is given at the end.

KazakhstanFirst television transmitter for Kazakhstan

The building of a television transmitter in Alma-Ata will begin in 1956 and is to be completed in 1958. It will be housed in a three-storey building, with a 200-metre mast, to be constructed in the grounds of the Alma-Ata tekhnikum of the Ministry of Communications. Transmissions will normally be received within a radius of 60 - 70 kilometres, but to the north of Alma-Ata they should be received up to 180 kilometres away. At present transmission is made from Moscow, Leningrad, and Kiev. A station is shortly to open in Tashkent. [KP. 20th May]

New coal pits at Karaganda

During the first four years of the present Five-Year Plan eight new pits have been opened in the Karaganda coalfield. Twelve more are now being sunk; three of them are in the new town of Sarani, and five in the new area of Churubai-Nurin. The latter eight mines are expected to yield as much coal as the whole of the Karaganda basin does at present. [KP. 10th June]

Exploitation of Kustanai iron ore

Work has begun on the building of the Sokolovsko-Sarbai kombinat near Komsomolsk, not far from Tobol, in the Kustanai oblast. The presence of iron ore here was first remarked in 1950 by a pilot, Surgutanov, who noticed considerable deflection in his compass when he flew over the area. After five years of work by geologists, work has begun on the excavation of a huge quarry, to be 350 - 400 metres deep,

## CURRENT EVENTS

at Sokolovskaya. The companion quarry at Sarbai is to be even deeper. A railway will link the electric railway system of the quarries with the stations of Sokolovskaya, Predotbalnaya, and Fabrichnaya, and with the line from Kustanai to Tobol. A concentration plant will be built near the quarries, from which the ore will be sent to Magnitogorsk or Chelyabinsk. A new town to house the workers is also to be built five kilometres from the works. The plant should come into operation in two or three years. More than 100m. cubic metres of earth will be excavated, and more than 800,000 tons of concrete are to be used to build the kombinat. A concrete plant will be built nearby. [KP. 20th April]

### Uzbekistan

#### Restoration of historic buildings at Bukhara

The restoration of the madrash of Ulugbek, built in 1417-18, has just been completed. The work was done under the guidance of the master-craftsman Shirin Muradov, an honorary member of the Uzbek Academy of Sciences, who has restored the "stalactite" in the gateway to its former state. Thirty-five buildings in Bukhara have now been placed under the care of the State, and in 1955 over 1,500,000 rubles are to be spent on their restoration. In 1954, the corner part of the Miri-Arab mosque, the summer mosque in the Abdulaziz-Khan madrash, the Labi-Khauz tank, and the Khonako Divan-Beg mosque have been repaired. [FV. 5th April]

#### Opening of new irrigation canal

The Iski-Angar canal, 184 km. long, which runs from the Dargom river to the Kashka-Darya river, was opened on 27th April with a ceremony at the head of the canal at the river Dargom. The canal will irrigate 33,000 hectares of land in the Samarkand and Kashka-Darya oblasts, and will water 140,000 hectares of grazing ground. 11m. cubic metres of earth have been excavated to make the canal. The work was done by 20 - 25,000 kolkhoz workers from the adjacent oblasts. At the ceremony the oblast Party secretaries said that over 15,000 Komsomol members had taken part in the building of the canal. [FV. 28th April]

### Tadzhikistan

#### Chance discovery of archaeological remains

Three Kaganovichabad school children have found in the dried-up bed of the Kumsangyr canal the skeletons of an adult and a child together with

a narrow-necked jug, a twined ring, and a ring set with a stone. Archaeologists from the Tadzhik Academy of Sciences have identified the remains as those of nomads who lived in Khuttal in the fourth or fifth centuries A.D. /KT. 11th March/

### Agricultural output for next five years

The Fifth Plenum of the Central Committee of the Tadzhik Communist Party was held on 30th and 31st March 1955. The Second Secretary, N.S. Obnosov, read a report on "Practical means of fulfilling the decree of the January Plenum of the all-Union Party Central Committee, entitled Increasing the output of the products of animal husbandry." In his report he said that in 1960 Tadzhikistan must produce 1m. tons of cotton; the output of meat must be twice that of 1954, of milk 2.4 times, of eggs 1.7 times, and of wool 2.3 times. This would mean, for every 100 hectares of cultivated land, an output of 15 centners of meat, 67 centners of milk, and 175 kg. of wool; and for every 100 hectares of grain sown, an output of 22,000 eggs. /KT. 3rd April/

### Teaching of Russian in Tadzhik schools

A conference lasting three days was held in Stalinabad of teachers of Russian in non-Russian schools. They remarked that Tadzhik pupils were learning to read Russian but not to speak or write it. The existing textbooks were too dull, and grammatical rules were not put in an easily memorizable form. Pupils had far too small a vocabulary at the end of their courses. /KT. 12th April/

### The role of the Party in higher educational establishments

The recently held republican conference of VUZ Party secretaries resolved that Party secretaries must in future be free to engage in Party work without being hindered by their teaching duties. The directors of institutes were all too ready to solve the problems of student delinquency by expulsion; they should take steps to ensure that public opinion among the students discountenanced such behaviour. At the time of the conference there were said to be over 19,000 students in the higher educational establishments of the republic. /KT. 2nd June/

### Central Asia's largest hydroelectric station

The foundations of the Kairakum hydroelectric station, to be the largest in Central Asia, have been completed. Work on this station has been proceeding since 1951. The reservoir basin has been excavated and the frames of the power-station erected. The walls of the basin and the

## CURRENT EVENTS

frames of the buildings are now being covered with concrete. When completed, the station will supply industries in Leninabad and Tashkent with power.

[/KT. 19th May/

### Turkmenistan

#### Afforestation around Krasnovodsk and Tashauz

The heavy rainfall in March has greatly assisted the work of afforestation in Turkmenistan. 13,000 hectares are to be planted in 1955; this year the Krasnovodsk oblast afforestation authority has already planted 2,843 hectares near Dzhebel and Kum-Dag with saxsaul, cherkez and kandym. (See article "Science versus Sand" in this issue of the Review.) The Tashauz authority has planted more than 1,750 hectares of desert around the cultivated regions of the oblast with drought-resisting trees.

[/TI. 6th April/

### Kirgizia

#### New satirical magazine

A new monthly satirical magazine in Kirgiz will soon be published in Frunze, beginning with the number for July. It is to be called Chalkan (The Nettle).

[/SK. 2nd June/

#### Conference of geologists

A conference on the geology of the "polymetals" of Central Asia opened in Frunze on 3rd June under the auspices of the all-Union Academy of Sciences, Ministry of Geology, and Ministry of Non-Ferrous Metallurgy, and of the Kirgiz Academy of Sciences. In the course of the conference more than twenty papers were read by scientists from Moscow, Leningrad, and the neighbouring republics to Kirgizia. The papers were about such subjects as "The tectonic zones of Central Asia", "The study of Upper Palaeozoic stratification and volcanic formations and polimetal ores", and "Hydro-chemical methods of searching for deposits of lead and zinc".

[/SK. 4th June/

Abbreviations

KP for Kazakhstanskaya Pravda

PV for Pravda Vostoka

KT for Kommunist Tadzhikistana

TI for Turkmenskaya Iskra

SK for Sovetskaya Kirgiziya

## B I B L I O G R A P H Y

## R E C E N T   S O U R C E   M A T E R I A L

## A S E L E C T E D   L I S T

The following is a selected bibliography of source material on Central Asia which appeared in Soviet publications in the second quarter of 1955. The list does not claim to be comprehensive and includes only material not used in the body of the Review. The bibliography is divided into sections on agriculture, cultural affairs, geology, industry, and topography.

Agriculture

Antipov-Karatayev, I. & Belyakova, L.

Vsemerno povyshat plodorodiye oroshayemykh pochv Tadzhikistana. Khlopkovodstvo, 1955. No.4, p.20-24. 1,500 words. (The authors describe the means of maintaining the fertility of old ploughland by the "rational" management of the humus content of irrigated and non-irrigated soils. The article includes five tables showing:

1. The rate of accumulation of root mass and humus in a 0-45 centimetre layer of heavy argillaceous serozem.
2. The distribution in percentages of humus and structural aggregates in the irrigated serozem of the Vakhsh Valley depending on the depth of ploughing in of organic matter.
3. The gross cotton harvest in centners per hectare in the Vakhsh Valley in relation to the depth of ploughing in of organic fertilizer.
4. The gross cotton harvest in centners per hectare in the Gissar Valley in relation to the depth of ploughing in a layer of 2-year lucerne.
5. The distribution of humus and structural aggregates in a layer of cultivated and irrigated serozem in the Vakhsh Valley in the spring of 1954.)

Barayev, A. Iz opyta osvoyeniya tselinnykh i zaleznykh zemel v Kazakhstane. Zemledeliye, 1955. No.4, p.9-15. 3,000 words. (The area of the new lands ploughed up in Kazakhstan in 1955 are

given in million hectares and the best means of cultivating various crops are discussed.)

- Dontsov, V. Kak nashe zveno vyrashchivayet 80 tsentnerov urozhaya khlopka. Khlopkovodstvo, 1955. No.3, p.22-24. 1,000 words. (A descriptive account by the Hero of Socialist Labour, Shamurat Musayev of the methods of cotton cultivation in the Akhunbabayev kolkhoz, Keness raion, Kara-Kalpak ASSR.)
- Eremenko, V. & Shchupakovskii, V. Ispytaniye metodov obrabotki pochvy T.S. Maltseva v polivnom i bogarnom zemledelii Uzbekistana. Khlopkovodstvo, 1955. No.6, p.43-46. 1,000 words. (A description of an experiment in land cultivation by the Maltsev method, carried out by the Ak-Karak experimental station.)
- Kazakov, V.E. & Kondakov, S.I. Vozdelyvaniye sudanskoi travy pri oroshenii. Zemledeliye, 1955. No.3, p.18-20. 440 words. (A brief but informative article about the cultivation of Sudan grass in the Alma-Ata oblast.)
- Khanazarov, D. Uspekhi Kara-Kalpakii v razvitii Khlopkovodstva. Khlopkovodstvo, 1955. No.3, p.9-16. 3,300 words. (The author, the Minister of Agriculture of the Kara-Kalpak ASSR, describes the achievements of the leading workers, MTS and kolkhozes. The targets for 1955 are also given.)
- Khodzhamuradov, Kh. Nash opyt vyrashchivaniya vysokikh urozhayev tonkovoloknistogo khlopka. Khlopkovodstvo, 1955. No.4, p.15-20. 2,200 words. (A description of the cultivation of fine-fibred cotton in the Zhdanov kolkhoz, Mary raion, Turkmenistan.)
- Kochetkov, A. Polivy khlopchatnika pri suzhennykh mezhduuryadyakh v Gissarskoi doline. Khlopkovodstvo, 1955. No.6, p.35-40. 1,400 words. (A description of a special method of irrigating cotton in the Gissar Valley. The article includes 9 tables showing the quantity of buds and flowers on one cotton plant in relation to the frequency of irrigation in 1952, 1953 and 1954.)
- Koldayev, A. & Kondratyuk, V. Agrotekhnika pri kvadratno-gnezdovom razmeshchenii khlopchatnika i prodolno-poperechnoi obrabotke. Khlopkovodstvo,

## BIBLIOGRAPHY

1955. No.6, p.17-22. 1,800 words.

(A fairly specialized illustrated article. Describes the square-cluster distribution of cotton and its longitudinal-transverse cultivation in Central Asia, Kazakhstan and Transcaucasia.)

Kovtanyuk, M.S. & Isayenko, N.P.

Rezervy povysheniya urozhainosti yarovoi pshenitsy v severnom Kazakhstane. Zemledeliye, 1955. No.4, p.23-25. 1,200 words. (The authors discuss the various possibilities of raising the harvest of spring wheat in Kustanai grain sovkhov.)

Kropachev, L.P.

Obrabotka pochvy po metodu T.S. Maltseva v Karagandinskoi oblasti. Zemledeliye, 1955. No.5, p.56-58. 1,100 words (A comparison of the wheat harvests in the kolkhozes Stalin, Toksumak, Put k kommunizmu and 30 let Kazakhstana in the Karaganda oblast where Maltsev's methods of ploughing and sowing have been adopted.)

Kulikov, V.

Predevoi agrokompleks v khlopkosovkhozhe "Pakhta-Aral" Khlopkovodstvo, 1955. No.6, p.16-28. 4,300 words. (An interesting and informative article on the achievements and future prospects of the cotton sovkhov Pakhta-Aral in South-Kazakhstan oblast. Technical details on irrigation and methods of planting are given. The article is illustrated.)

Mikhailovskii, O.

Podnyat kulturu lyutsernovodstva v kolkhozakh Uzbekskoi SSR. Khlopkovodstvo, 1955. No.3, p.32-37. 2,200 words. (The author discusses the importance of lucerne and the possibilities of its further development in Uzbekistan.)

Reshetkina, N.

Vertikalnyi drenazh na zasolennykh zemlyakh Uzbekistana. Khlopkovodstvo, 1955. No.5, p.47-50. 1,500 words. (Technical details on vertical drainage of cotton fields.)

Shubin, I.

Opyt kvadratno-gnezdovogo sposoba vyrashchivaniya khlopchatnika v Murgabskom oazise. Khlopkovodstvo, 1955. No.5, p.13-16. 1,700 words.

(A technical article describing the cultivation of fine-fibred cotton of the 2-IZ variety in the Bairam-Ali experimental fields. The article includes two tables showing:

1. The growth and development of cotton in relation to the number of plants in the cluster.
2. Results of experiments in square-cluster sowing of cotton.)

Stasenko, P. & Urman, I.

Puti povysheniya urozhainosti tonkovoloknistogo khlopchatnika. Khlopkovodstvo, 1955. No.4, p.8-14. 2,800 words. (An illustrated, fairly informative article on the cultivation of fine-fibred cotton.)

Troitskii, A.A., Firsov, B.R. & Kreidik, B.M.

Novye progressivnye agrotekhnicheskiye priemy vozdeleyvaniya khlopchatnika v Tadzhikskoi SSR. Tadzhikgosizdat. 1955. 128 pp. (Written by agronomists, the book describes new methods of cotton cultivation. A review of the book by A. Anastasov appeared in Khlopkovodstvo, 1955. No.5, p.61-4. 2,500 words.)

Vagner, K.

Iz opyta raboty agrokhimicheskoi laboratorii vtoroi Yangi-Yul'skoi MTS. Khlopkovodstvo, 1955. No.5, p.21-23. 1,200 words. (The author sets forth the recommendations made by the Yangi-Yul MTS laboratory with regard to the use of mineral fertilizers in cotton cultivation.)

Zakharchenko, V.

Nasyshchnye voprosy melioratsii i osvoyeniya novykh zemel v Turkmenii. Khlopkovodstvo, 1955. No.6, p.60-64. 1,400 words. (An illustrated technical article on the development of new lands in Turkmenistan.)

Zapryagayeva, V.I. Turkestanskaya archa v Tadzhikistane. Priroda, June 1955. p.102-104. 1,200 words.

(An informative, if somewhat superficial, account of the cultivation of arborescent juniper as a means of limiting soil erosion of mountain slopes and attracting moisture.)

### Cultural Affairs

Asanov, A.

Na pastbishche Kara-Kudzhur. Kulturno-Prosvetitel'naya rabota, 1955. No.4, p.29. 810 words. (A brief account of the cultural amenities for stock-breeders in Kara-Kudzhur.)

Gafurov, B.

V.I. Lenin i pobeda Sovetskoi vlasti v Srednei Azii. Kommunist, 1955. No.6, p.74-90. 8,500 words. (A propagandist article containing little significant material. The author quotes extensively from the writings and speeches of Lenin and Stalin seeking to prove their "understanding and creative attitude" to the Central Asians.)

## BIBLIOGRAPHY

- Kunayev, D.A.           Obsuzhdeniye nauchnoi deyatelnosti Akademii Nauk  
Kazakhskoi SSR.    Vestnik Akademii Nauk SSSR, 1955. No.4, p.41-46.  
2,300 words.  
(Annual report by the president of the Kazakh Academy of Sciences.)
- Berdyev, T.B.           Obsuzhdeniye nauchnoi deyatelnosti Akademii Nauk  
Turkmenskoi SSR.   Vestnik Akademii Nauk SSSR, 1955. No.4, p.38-41.  
1,700 words.  
(Annual report of the president of the Turkmen Academy of Sciences.)

### Geology

- Zakharov, S.A.        Proyavleniye sovremennoi skladchatosti v Tadzhikskoi  
depressii. Byulleten Moskovskogo Obshchestva Ispytatelei Prirody:  
otdel geologicheskii, 1955. No.1, p.49-57. 3,300 words.  
(A serious work. Starting with the deformation of river terraces the  
author goes on to prove that the alpine fold formation in south-west  
Tadzhikistan did not cease until the present time and that folded  
structural forms which appeared in the Tertiary period continued their  
development in the Quaternary period.)

### Industry

- Vdovenko, M.I. & Fateyev, E.T.  
                          Kharakteristiki nekotorykh energeticheskikh uglei  
Kazakhstana. Izvestiya Akademii Nauk Kazakhskoi SSR, 1955. No.7,  
p.92-108. 3,500 words.  
(Technical details on:  
1.        Anthracite coals of the Ekibastuz coalfield.  
2.        Brown coals of Shubar-Kuduk.  
3.        Anthracite coals of Yavlonsk.)
- Mikhailova, E.P.     Vykhod letuchikh iz energeticheskikh uglei Kazakh-  
stana. Izvestiya Akademii Nauk Kazakhskoi SSR, 1954. No.7, p.59-  
77. 5,500 words.  
(A highly specialized article. The author describes the production  
of volatile matter from bituminous coals.)

Social Conditions

- Polynin, V.                    Novosely Rudnogo. Ogonek, April 1955. No.14,  
p.9-10. 1,500 words.  
(A superficial, propagandist account of the life of families from  
the Kursk oblast in the new lands of Kazakhstan and of the progress  
so far made in the building of the new town provisionally called  
Rudnyi. The article is illustrated.)

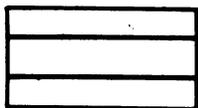
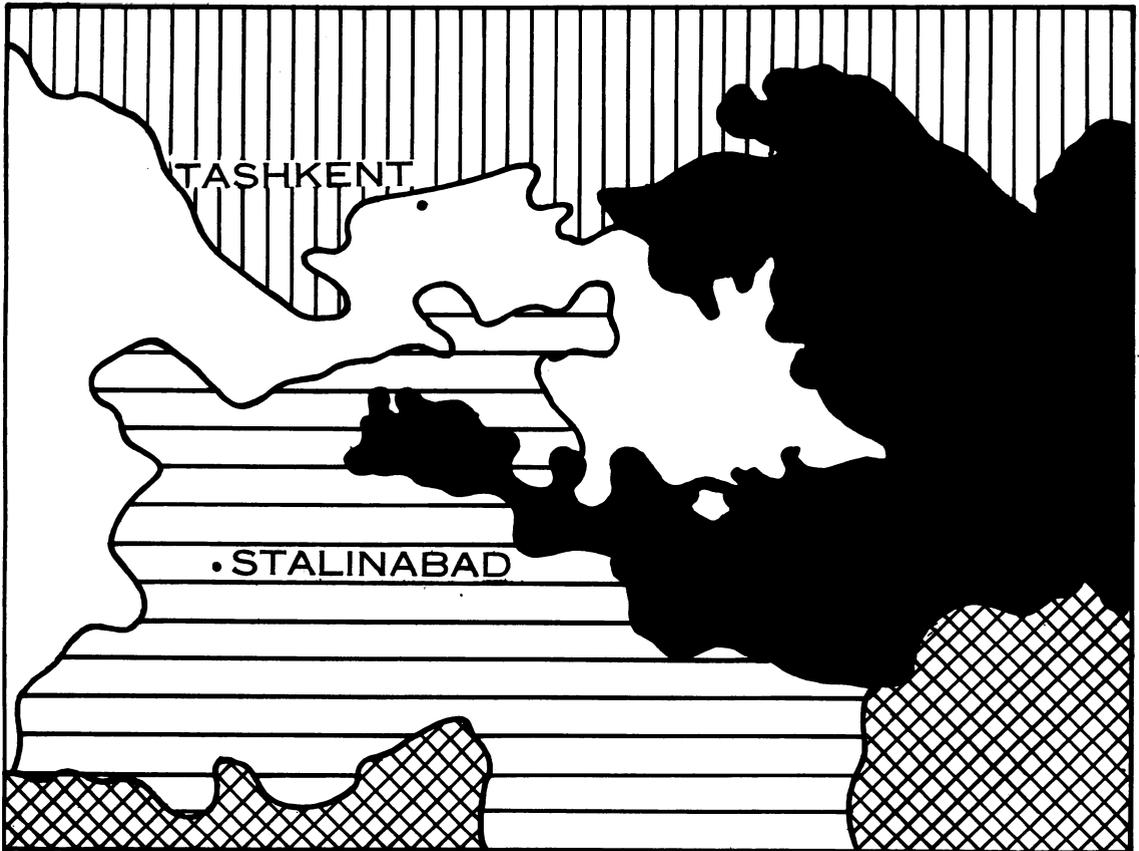
Topography

- Kislov, V.                    Na Vostochnom Pamire. Vokrug Sveta, 1955. No.3,  
p.33-34. 750 words.  
(A brief descriptive article written in travelogue style.)

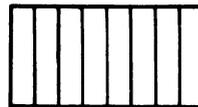


## INTER-REPUBLICAN FRONTIERS

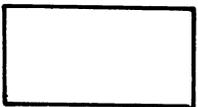
Sketch-map showing the inter-republican frontiers of Uzbekistan, Tadjikistan and Kirgizia, and the interlacing of their territories in the neighbourhood of the Fergana Valley region.



**TADZHIKISTAN**



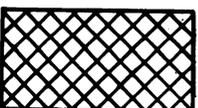
**KAZAKHSTAN**



**UZBEKISTAN**



**KIRGIZIA**



**FOREIGN TERRITORY**

**Afghanistan & China**



The above map shows the area covered by CENTRAL ASIAN REVIEW in relation to the rest of the USSR. The total extent of the area is about  $1\frac{1}{2}$  million sq. miles. According to the latest available figures the total population is about  $16\frac{1}{2}$  millions of whom about 11 millions are indigenous and the remainder settlers from other parts of the USSR.

The total area of the rest of what is generally regarded as Soviet Asia i.e. the Urals Region, Eastern and Western Siberia and the Soviet Far East, is approximately 8 million sq. miles and the population about 37 millions of whom approximately 26 millions are estimated to be indigenous. Thus, whilst Central Asia and Kazakhstan together occupy less than one fifth the total area of Soviet Asia, their indigenous population amounts to nearly two thirds of the total indigenous population of the whole of Soviet Asia.