

Issyk-kul	2,500.	Alakul	600.	Chukchagyr	260.
Piasino	2,410.	Dengiz-Citter	560.	Barun-torei	210.
Zaisau	1,490.	Abyshkau	540.		

The following were Mr. Venikof's rough estimates in 1860 of the areas of land in Asiatic Russia, unsuitable for settled life.

	sq. miles.
Steppes in Western Siberia, and in the Orenburg region,	753,000
“Tundras” (marshes) and frozen land in Western and Eastern Siberia,	.. 2,584,000
Mountainous country and highlands in the Thian-Shan, Alatau, Sayau, Altai, Yablonoi and Stanovoi Mts. &c.	431,000

Total, English miles 3,768,000

In other words, the extent of country unfitted for harbouring a settled industrious population in Asiatic Russia, constitutes two-thirds of the whole country; the rest or 1,930,000 square miles is less than European Russia, and throughout that extent the only portions that are naturally capable of attracting voluntary settlers are: 1. Sahalin. 2. The basin of the Amoor, and especially the Usowri district. 3. The Trans-Baikal region south of that lake. 4. The Minousiusk district. 5. The Western portion of the Altai, and 6. The sub-mountain zone of the Trans-Ili and Trans-Chui regions.

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NARRATIVE REPORT OF THE TRANS-HIMALAYAN EXPLORATIONS, MADE DURING 1868, DRAWN UP *by Major T. G. MONTGOMERIE*, R. E., G. T. SURVEY OF INDIA, FROM THE ORIGINAL JOURNALS &C., OF THE TRANS-HIMALAYAN EXPLORING PARTIES.

[Recd. 15th December, 1869.]

Early in 1868, preparations were made for sending an exploring expedition beyond the eastern watershed of the Upper Indus river.

The explorations of the *Pundits* during 1867, had supplied tolerably certain information as to various Tibetan districts lying between Rudok and the Thok-Jalung gold field, and between the latter and the Tadum monastery, on the great Lhasa road; more vague information had also been received, as to an upper road

running from Thok-Jalung through various gold fields to the great Tengri-noor, or Nam-tso-Chimbo lake, and thence to Lhasa : several traders had been met with who had actually travelled along this upper road, but they were all rather reluctant to tell the Pundits much about it, being afraid of spoiling their market. Having the above information to go upon, Major Montgomerie decided upon sending the exploring party to Rudok, and thence through the districts of Rawung and Tingche, to the north of the great Aling-Gangri group of peaks, which were discovered last year.

From Thok-Jalung the exploration was to be carried, if possible, along the upper road to the Tengri-noor lake and thence to Lhasa ; failing that, to take the route through Majin and Shellifuk towards the Tadam monastery.

The Chief Pundit required a rest after his last expedition, and the 3rd Pundit was consequently selected for the work.

This Pundit assumed the character of a Bisahiri, and taking a few loads of merchandize started in April with a party of real Bisahiris (or men of Koonoo) whom he had induced to accompany him. He made his way from Spiti, through the upper part of Chumurti and Ladak, to Demchok on the upper Indus. Here the 3rd Pundit measured the velocity of the Indus by throwing a piece of wood into it, and then noting how long it took to float down 300 paces. The velocity turned out to be  $2\frac{2}{8}$  miles per hour, with a depth of 5 feet, and a breadth of about 270 feet in the month of July. From Demchok he went northwards through Churkang and Rooksum, (or Rokjung), to Rudok.

Churkang was found to be a favourite place for holding monthly fairs. Rooksum turned out to be a large standing camp where one great annual fair only is held, but that a very large one, the Jongpon (or Zongpon) always attending it in person.

Rudok has hitherto never been actually visited by any European, for although Captain H. Stacey reached a point about 12 miles to the east of the Fort, and Captain Godwin-Austen another point about the same distance to the north, they were neither of them able to advance any farther, and could never get an actual view of the place itself, owing to the jealousy of the Jongpon who resides there, and governs this most north-westerly district of Tibet.

Though there was but little doubt that the position assigned to Rudok was nearly correct, it was hardly satisfactory not to have a trustworthy account of the place, and the 3rd P u n d i t was ordered to get all information about it, and to take observations, for its latitude and height, and this he succeeded in doing.

He found that the Fort was built on a low rocky hill, rising about 250 feet above the flat ground at its base, having the Buddhist monasteries of Sharjo, Lakhang, Marpo and Nubradan close up to it on the east, south, and west, with about 150 scattered houses along the foot of the hill.

A stream called the Chuling-chu passes the Fort, and flowing in a north-easterly direction for 3 or 4 miles, joins the Churkang-chu, another large southern feeder of the great Pangkong lake which is about 9 miles from the Rudok Fort.

The 3rd P u n d i t heard that there is a small lake about  $2\frac{1}{2}$  miles north of Rudok, which has not hitherto been shown on any map; it swarms with wild fowl and is celebrated on account of a place called Kalpee Mhai, on its north-eastern shore, where the ground is so intensely hot that it smokes, and readily burns any wood, &c. that may be thrown into it. This place is much resorted to for the purpose of worship. The three monasteries round the Fort contain about 150 monks.

The 3rd P u n d i t remained a couple of days at Rudok, and in his assumed character as a Bisahiri, he and his party excited no suspicion though they were summoned before the Jongpon.

Leaving Rudok on the 22nd of July the party marched back to Rooksum, and then turning eastward by a new road, advanced through the districts of Rawung and Tingche to Dak-korkor, a large standing camp, where an annual fair is held. Several small lakes and a large salt lake called Rawung-Chaka, or Phondok-tso, were passed on the way. These lakes supply salt to Bisahir, Spiti, &c.

During the last three marches to Dak-korkor no water of any kind was met with, and the party were forced to carry a supply in skins. In this arid part of the country, the soil was of a dazzling white, a peculiarity which extended as far as the P u n d i t could see.

The P u n d i t was informed that 5 days' march to the north, there was a large district called Jung Phaiyu-Pooyu, and that throughout its whole extent, the earth is of the same white kind as that they were crossing over, so white in fact that the eyes of people who are unaccustomed to it, get inflamed from its glare, just as if they were suffering from snow-blindness. The district is inhabited by Dokpa people; it is under Lhasa, but said not to form part of Narikhorsum, having a separate Sarpon, or gold commissioner, of its own. The largest encampment in it is called Thok-daurapa said to have at least 200 tents. The district abounds in small tarns. It must be very elevated, as the inhabitants are said to eat very little if any grain.

A large river is said to flow from Jung Phaiyu-Pooyu northwards and then to the east towards China. The district is said to take its name from some high snowy peaks which are probably those at the eastern end of the Kiun-Lun range.

The Whor (or Hor) country is said to be due north of the district, and from information gathered elsewhere there is little doubt but that Whor (or Hor) is the Tibetan name for eastern Turkistan.

As to the district of Phaiyu-Pooyu, with its river flowing towards China, it is difficult to decide whether it is known by any other name, but it probably lies considerably to the east of north, communicating with Lhasa by the Tengri-noor lake district. A similar white soil has been noticed to the east of the Chang-chenmo, and Mr. J o h n s o n, when seven marches to the north of that valley at a place called Yongpa, reported that "on looking down from a height the whole plain has the appearance of being covered with snow." He attributed this to saltpetre. M a h o m m e d A m e e n, in the route he supplied, said that "beyond the pass (north of Chang-chenmo) lies the Aksai-Chin, or as the term implies the the great Chinese white desert or plain. It is sandy and gravelly and covered with brush-wood. Its breadth here from south to north may be reckoned to be about sixty kos. It extends into Chinese Territory, to the east. There are several lakes and gold mines in it, &c." This quite answers to the accounts that the 3rd P u n d i t heard, a separate gold Commissioner proving the existence of many gold fields. No high peaks were seen to the east

of the Chang-chenmo, Mr. J o h n s o n having noticed from the peaks he ascended large plains to the east and south-east, which are believed to merge into the Chang-thang plains of Rudok. Whilst he also gathered that the Kiun-Lun range only ran about 100 miles east of the Karakash river and then terminated on an extensive plain also communicating with the Chang-thang plains.

The P u n d i t whilst marching from Rudok to Thok-Jalung saw no high peaks to the north or east, evidence which all tends to prove the existence of a large plain in that direction, the term Changthang meaning moreover the great plain.

According to modern maps this plain extends a great way east, nearly up to the end of the great wall of China near the city of Sewchoo, to which place the C h i e f P u n d i t appears to have got a rough route when in Lhasa. In his first journal he referred to a place, which he called Jiling, about one month's journey north of Lhasa. This turns out from farther inquiries made by Major M o n t g o m e r i e to be the same as Siling. The C h i e f P u n d i t says that the Lhasa people call it Jiling, but he heard others calling it Siling, and from what he says it is evidently identical with Siling or Sining in North Latitude  $37^{\circ}$ , East Longitude  $102^{\circ}$ , which A s t l e y describes as "a great and populous city, built at the vast wall of China, through the gate of which the merchants from India enter Katay or China."

Lord S t r a n g f o r d, who took great interest in the travels of the P u n d i t, and was able to identify nearly all the places mentioned by him, was greatly puzzled by the P u n d i t's description of Jiling, given in his first journal, where it is said to be in Tartary and to produce gold lace, silks, carpets, and other products of a tolerably civilized country. At first the P u n d i t understood that it was a month or two months' journey to the north of Lhasa, but from farther inquiries during his second expedition, he made out that it was considerably to the east of north, and having this hint, there was no great difficulty in identifying it with the large town of Sining on the borders of China proper, the only place from which such civilized products were likely to reach Lhasa from the northwards.

The Dak-korkor Camp, which the 3rd P u n d i t reached, lies about 20 miles to the north of the Aling Gangri peaks, on the right

bank of the Aling-chu river and not very far from the Thok-Nianmo gold field. He arrived just as the annual fair was commencing; about 150 tents were already pitched and both the Jongpon and Sarpon were present; but in spite of their presence a band of mounted robbers came down upon the camp and threatened to loot it. These robbers seem to be numerous all over Tibet. This particular band was said to come from the great Nam-tso (lake) district. The men actually began to rob, but the Jongpon told them to stop, and he would make each tent contribute something as black mail. The Jongpon then made out a list of those assembled and ordered each tent to contribute a parcha (of about 5 lbs.) of tea, and each trader to give from 1 to 2 rupees according to their means. This arrangement was agreed to, and the proceeds having been collected were handed over by the Jongpon to the robbers who took their departure.

The Chief Pundit, in describing the above, expressed an opinion that the Jongpon was in some mysterious way benefited by the contributions, possibly retaining a considerable share, as it is well known that the robbers never succeed in looting his camp nor that of the Sarpon; both of them perfectly understanding how to defend themselves against all comers on the plateaux of Tibet.

The 3rd Pundit paid his contribution and saw the robbers depart, but he came to the conclusion that they might appear again at any time, and that it would not be safe to take his merchandize with him, he consequently, after consultation with his Bisahiri friends, decided upon sending the greater part of his goods back by the Indus so as to meet him at Lhasa, or on the great road to that place. One of his men was despatched for this purpose; his adventures will be adverted to.

The 3rd Pundit, starting again from Dak-korkor, continued his march eastward down the Aling-chu river till it fell into the Hagong-tso, a large brackish lake which appeared to have no exit for discharging superfluous water, though the Aling-chu river which feeds it was found to be 150 paces in width with a rapid stream just before it fell into the lake. The shores of the lake had marks which showed that it had once been more extensive. Continuing his journey the Pundit passed the Chak-chaka salt lake from which the greater part of the Tibetan salt, which goes down

to Almorah, Nepal, &c., is extracted. The salt from Tibet is preferred by the people of Kumaon and most hill men, though the salt from the plains is to be had at much the same price.

The P u n d i t heard of another salt lake to the east of Chak-chaka, which with other similar lakes probably supplies a portion of that which is generally understood to come from Chak-chaka.

The next place of importance seen by the P u n d i t was Thok-Sarlung which at one time had been the chief gold field of the district, but had been in a great measure abandoned on the discovery of the Thok-Jalung gold field. The P u n d i t passed a great excavation, some 30 to 40 feet deep and 200 feet in width and two miles in length, from which the gold had been extracted. He heard of another gold field to the west, but his route took him direct to the Thok-Jalung gold field, which he found in much the same state as when visited by the Chief P u n d i t. The P u n d i t and his party excited no particular notice, and they were consequently able to march on after halting a day to rest.

From Thok-Jalung they passed through the Majin country, partly undulating and partly quite level, but all about the same altitude, viz.—15 to 16,000 feet above the sea. The drainage sloped towards the east, and nothing but comparatively low rounded hills were visible in that direction; whilst on the west the party skirted a large plain of a yellowish colour said to be drained by the Upper Indus.

The party passed numerous lakes producing salt and borax, and after 9 days' journey in a south easterly direction, found themselves at Kinglo, a large camp on the banks of a river called the Chusangpo, which is so large that it cannot be forded during the summer. This river flows eastward and falls into the lake called Nalaring-tso or Tso-Sildu, said to be about the same size as the Mansarowar lake; it has a small island in the centre. The lake is reported to receive a large stream from the south, another from the east, and a third from the north, the latter draining part of the Phaiyu-Pooyu district. Though receiving so many streams, (one of which, as noted above, is a large one), the lake is nevertheless said to have no exit.

To the south of the lake there is a well known monastery called

Shellifuk, the residence of a great Lama. Still farther to the south there are some high snowy peaks, and a district called Roonjor, while to the north are the districts called Gyachun and Girke, the latter probably adjoining Phaiyu-Pooyu. To the east he heard of another district called Shingwar.

From Kinglo the P u n d i t wished to march on to Lhasa by the northern route past the Tengri-noor lake, but the Chief of Majin (Kinglo) would not permit it, and the party were consequently obliged to take a south-westerly route to the Mansarowar lake.— They followed the course of the Sangpo-chu nearly to its source, crossing one very high range called Nakchail, and another called Riego, and finally descending to the Mansarowar lake. The Nagchail and Riego ranges are evidently off-shoots of the Kailas peak. The Nagchail peaks appeared to be very high both on the east and west.

When crossing the range the P u n d i t saw a very large herd of wild yaks; his party counted over 300 of all sizes before the herd ran off: the yaks were all black. These wild yaks are called "Dong;" they were mostly seen between Majin-Kinglo and the Mansarowar lake. Great herds of wild asses were seen throughout; sometimes as many as 200 were in sight at the same time when the plateaux were extensive. The H o d g s o n i a n antelope, wild goats, and sheep, (the latter including the gigantic *Ovis ammon*), were all seen in numbers. Large grey wolves were constantly seen, but never more than two or three at a time, though packs of them were often heard yelling at night. Numbers of reddish hares and a kind of fox were seen on every march. Marmots were very numerous, their subterranean villages being met with wherever grass and water were at hand. Quantities of geese, ducks, and storks were seen on the lakes. Eagles and vultures appeared to be the same as those in the Himalayas, and were seen every where.

Whilst marching from Rudok to Thok-Jalung the P u n d i t heard descriptions of no less than 7 separate gold fields, viz. those of Thok-Sarkong, Thok-Dikla, Thok-Ragyok, Thok-Thasang, Thok-Marooobhoob, Gunjee-Thok and Thok-Nianmo, besides those of Thok-Sarlung and Thok-Jalung which he actually visited, and those of Phaiyu-Pooyu of which he heard vaguely. The P u n d i t understands the word "Thok" to mean a "mine."

Several salt lakes were passed and others heard of. He describes the celebrated Chak-chaka salt lake as being all but connected with the Hagong-tso (lake,) and stated that an area of about 20 miles by 10 is all about on a level with those lakes. This space is filled with salt, the water having evidently at one time covered the whole.

Borax fields were seen at Rooksum and Chak-chaka, and numbers of people were working on them. No gold or salt mines were seen or heard of between Thok-Jalung and the Mansarowar lake; but numerous borax fields were seen, at one of which about 100 men were at work near a camp of some thirty tents. The other fields were not being worked when the P u n d i t passed. The borax generally was said to find its way down to Kumaon, Nepal, &c. Altogether this portion of the third P u n d i t's route has brought to light the positions of a large number of gold, borax, and salt fields, testifying to an amount of mineral wealth, as to the value of which we have hitherto had no information. In marching south from Thok-Jalung the P u n d i t appears to have left the gold-bearing rocks, and from the information he received, the line of gold fields is continued more to the north; but it is evident that this part of Tibet contains an inexhaustible supply of gold.

As to borax, there appears to be any amount of it to be had for the digging, the Lhasa authorities only taking a nominal tax of about 8 annas (or a shilling) for ten sheep or goat loads, probably about 3 maunds or 240 lbs. Borax sufficient to supply the potteries of Staffordshire and all Europe would be forthcoming, if the supply from Tuscany should ever run short.

The salt fields appear to be the source from which the hill population from Nepal to Kashmir draws the greater part of its supply of salt.

Throughout his march, the P u n d i t was at an elevation of over 15,000 feet, and yet an encampment was met with nearly every day. Thieves were numerous, and threatened the party several times; but on seeing that the P u n d i t's party were armed, they invariably went off again, not liking the look of an English gun. The party arrived at Mansarowar in safety; and the P u n d i t decided upon waiting for the Ladak Kafilā, which was known to be on its way to Lhasa. Whilst there, the P u n d i t made a careful

traverse of the Mansarowar lake, with bearings to the peaks north and south. A map of the lake will be given hereafter. Though the water was sweet no exit was seen: at one point on the west the ground near the Ju monastery was low, and looked as if water had perhaps at one time flowed through, towards the Rakas Tal lake, though it is now too much above the lake to admit of it.

The P u n d i t was unable to join the Ladak Kafila; but made his way by himself along the great road to Shigatze, where he was stopped. This he found was by an order of the Gartok Garpon sent after him by the couriers. He was unable to advance farther. Whilst marching between the Mansarowar and Shigatze he was able to take bearings to various peaks north and south of the road, which no doubt will add considerably to our knowledge of the mountains on either side of that route; but as the P u n d i t has only just returned, there is no time to give any further account of his route and adventures in the present report.

His servant, who was sent back from Dak-korkor, managed to join part of the Ladak Kafila, and reached the Tadum monastery; but the mounted messengers of the Gartok Garpon found him out there, and prevented him from advancing farther. He very narrowly escaped being sent back to Gartok, and would have been lucky to have escaped severe punishment. The Ladak merchant fortunately remembered his old friend the C h i e f P u n d i t, and on being told that the man was carrying merchandize on his account, did what he could to protect him; and though he said it was impossible to take him to Lhasa, he managed to get him released, and ultimately the man was allowed to cross over the Himalayas by a southerly road past Muktinath into Nepal. In this way he was able to join on to the route the 2nd P u n d i t traversed during their first explorations. The permission to take a new route, is surprising, as the Lhasa officials are always careful to make suspected individuals return by the road they entered, so that they may at any rate not get fresh information as to the country. Their carelessness in the present instance was probably due to the humble and rather stupid look of the man, but it has supplied an important link between the Tadum monastery and the Muktinath shrine on the Saligrami, a great feeder of the Gunduk river. The man, an inhabitant of Zaskar, in spite of his appearance, has a shrewd idea of distances and of the points of the compass ;

he was able to give a very intelligible though rough route between the two points, which agrees very fairly with the positions assigned to them by the 1st and 2nd Pundits.

When this Zaskari found that he would not be allowed to go to Lhasa, he told the Ladak merchant that an agent of the Chief Pundit had gone on ahead, to whom he was to have delivered some goods, and requested that he would see that they were delivered to the agent: the merchant promised to do this and took charge of the packages. The Zaskari then put his own baggage on a couple of sheep and started off south. Though early in December he was able to cross the Brahmaputra river on the ice, which was then strong enough to bear laden yaks. The first day he reached the Likche monastery, where he found two men from Lohba in the Mustang district, north of Muktinath. These men had gone beyond, to the north of Tadum, for salt and were returning with it. The Zaskari managed to make their acquaintance, and on hearing that he was a Bisahiri (or man of Koonoo) going to worship at Muktinath, they agreed to take him with them. Their salt was laden on about sixty yaks, each carrying from  $1\frac{1}{2}$  to 2 maunds (120 to 160 lbs). The two men were able to manage this large number of yaks as the road was a good one.

From Likche they ascended gradually over a great plain or plateau, with plenty of grass and scrub; the latter making good fuel even when green. Three easy marches took them over this plain and landed them at Lohtod, four or five miles beyond or south of the Himalayan watershed. The plain had a few small knolls on it, but was otherwise flat or undulating. The ascent, even up to the watershed, was very slight indeed. From the pass, which the man hardly thought worthy of calling a pass, there was a slight descent or four or five miles. He got a good view of Lohtod, a village of sixty houses surrounded by a number of scattered houses, which he thought might make a total of several hundreds: the houses were all built of sun-dried bricks. He noticed a great many fields, and found that they cultivated barley, buckwheat, mustard, radishes, and a small proportion of wheat, all indicating a moderate altitude, though the only trees visible were two or three poor willows. This is confirmed by the easy slope of the ground to Muktinath, which

the 2nd P u n d i t found to be 13,100 feet. The next day the Zaskari reached Loh-mantang, where the Loh Gyalbo (or Raja) lives in a stone fortlet, near a small town of some 200 houses, surrounded by a great deal of cultivation.

From Loh-mantang three days' easy march landed the Zaskari at Muktinath. On the route he passed a large village called Asrang, where the Gyalbo has a house, and at every three or four miles he saw a group of a few houses, mostly to the west of his road, but he met with no tents south of the Himalayan watershed.

Muktinath (or Lohchumik) stands in an open spot, with 4 villages of about 50 houses each, lying a mile to the south of the shrine.

The Zaskari has given some farther routes which are new and will no doubt prove useful hereafter. The route given above is more especially interesting, as giving another line across the Himalayas: it makes the crest very much as given in the map with the first report of the P u n d i t 's explorations, and shows how very far behind, or north of the great peaks, the Himalayan watershed actually lies, and what a great breadth the highest parts of the range cover.

Another explorer was employed to the east, who made a route-survey of 1,190 miles in length, advancing by one route 640 miles and returning by another 550 miles in length.

A small portion of this man's route was quite new, as he managed to penetrate behind or north of the great Mount Everest peak. His progress in that direction was checked by the obduracy of the Lhasa officials on the Tingri-maidan. As far as it goes this portion of the route is, however, interesting, inasmuch as it gives another determination of the Himalayan watershed, and throws a little more light on that part of the mountains which lies behind or north of the great peaks, seen from the Hindustan side.

The remainder of the route is in a great part new; but some of the former explorations went over portions of the same ground, and the positions of several places have been entered on published maps from various information, though hitherto without any regular connection. These new routes will supply the necessary connection, and when combined with former explorations, will add much towards the elucidation of the Eastern Himalayas. A map will be prepared on this basis, but no reference can for

obvious reasons be made to names &c., whilst the work is in progress, the explorers having been somewhat impeded by the publicity given to the results of former expeditions.

On the north western frontier of India a Mahomedan gentleman, generally known as the Mirza, has been employed for some time in exploring the countries beyond the Hindoo-Koosh, the Mustagh, and Karakoram ranges. The Mirza was regularly trained, and having acquired the necessary facility in the use of a sextant, and in the method of route-surveying practised in these explorations, was started on an expedition viâ Afghanistan. He made his way to Candahar; but there his progress was for a time arrested owing to the war which resulted in re-seating the Amir Ali on the Cabul throne.

The Mirza, it may be as well to state here, was one of the lads brought originally from Herat by Pottinger, and had received a partial English education, by which he has benefited considerably. Being a native of Afghanistan he has kept up his acquaintance with that country, and though for some time in the British service, has spent the greater part of his life in that country. His former residence in Cabul more especially favoured him, and he was at once able to accompany the Amir. He witnessed various actions that took place during the Amir's advance from Candahar, and supplied our Government with accounts of them and the general state of affairs; accounts which at the time were rather valuable, as it was difficult to get any other accurate information. The Mirza was detained for some time at Cabul, owing to the disturbed state of the country, but ultimately was able to pass over to Badukshan, thence he ascended, through the Upper Valley of the Oxus, to Lieutenant Wood's Sirikul (or Victoria) Lake. From this lake he made his way through a part of Sirikul district to Tashkurgan, crossing the watershed which divides the Oxus from Eastern Turkistan. At Tashkurgan, he was placed in a sort of open arrest, being allowed to do what he pleased, though always watched. From Tashkurgan he made his way over the mountains direct to Kashghar, still accompanied by men from Tashkurgan, who insisted upon seeing him into Kashghar; fortunately they did not interfere with his using his instruments, and he was able to continue his route-survey.

At Kashghar he was detained for some time by the Koosh-Begie, or Atalig Ghazi. He asked for permission to go on to Kokhan, but it was refused; and he was ultimately glad to be allowed to return viâ Yarkund and the Karakoram pass to Ladak, and thence into British territory.

The Mirza has just returned, and there has only been time to roughly plot his routes, which are complete from Cabul to Kashghar, and from the latter to the vicinity of the Karakoram.

His route from the Sirikul lake to Kashghar, is entirely new, and promises to be the most interesting portion of his work. It may perhaps throw some light on Marco Polo's route from Europe to China, as that traveller stated that he went direct from Budukshan to Kashghar without passing through any larger town.

No particulars can be given as to the Mirza's work, but the whole of his route-surveys, &c. will be reported on as soon as they have been worked out and tested.

With reference to farther explorations, an attempt will be made to advance farther along the margin of the Aksai Cheen, or great white desert, and if possible to cross it, and generally to explore farther east towards the end of the great wall of China; but the jealousy of the Chino-Tibetan officials renders success very doubtful.

Expeditions are being organized to carry the explorations still farther to the north of the Hindoo-Koosh, so as to account for the geography of the upper branches of the Oxus, of the Pamir Steppe, &c.; and there is some chance that in the present state of Afghanistan, it will be possible to carry out these projects and thus to reduce the absolutely unknown ground in that direction to a small area within a reasonable time.

Further routes will be made with a view to complete our knowledge of the geography of the Eastern Himalayas; and it is hoped that the obstacles in that direction may be surmounted within a short time.

The total length of route-surveys amounts to 1,820 miles with 66 latitudes and 61 heights of various places. The area of altogether new ground of which the geography has been determined, is about 20,000 square miles, irrespective of a very large area of partially new country, for the geography of which improved materials have been collected.