

them are cut off from the river, they shrink rapidly, and consequently, when the high water comes, they have to be filled up again, and it is only when this has been done that the retarded stream is able to continue its journey unhindered to the terminal lake. After this lake is filled, and the Tarim begins to drop, several of those marginal lakes restore to it a portion of the water which they had previously deprived it of, though, owing to the heavy evaporation which has meantime been proceeding, the amount they so contribute is small; in fact the evaporation proceeds as a rule at an equal pace with the subsidence of the river. On the other hand the origination of the boldschemals, or abandoned river-loops, can produce no great effect upon the diminution of the stream. Theoretically their effect ought to be exactly opposite to that of the two factors before mentioned, because they contract the evaporation area; but then, on the other hand, every time a boldschemal is formed it is counterbalanced by a fresh river-bend in another place, and as this procedure is in operation all the way down the river without cessation, its two phases may be regarded as neutralising one another. Hence it may be said that the structure and conformation of the bed of the Tarim are among the principal causes of the rapid diminution of its volume. In this respect the situation of the Tarim is incomparably less favourable than, for example, the situation of the Raskan-darja. This last flows between stupendous mountain-ranges in a deeply sunk valley, and is thus deprived of all opportunity to change its bed. And not only is its channel prescribed for it once for all, but it is always so saturated that the amount of water which it absorbs is small. It is quite impossible for marginal lakes to originate beside it. In consequence of the conformation of the valley, the stream is very deep in proportion to its breadth, and it flows with great velocity. Moreover the mountain atmosphere is moister and the river is shaded by the mountains themselves. In a word, everything conspires to preserve the volume which rolls down the bed of this stream, and it is moreover augmented as it proceeds by the inflow of all its tributaries. Now this augmentation from the source down to the point where the last tributary is received takes place wholly within the mountainous region, but from the latter point the volume decreases, and decreases at a rate which grows continuously more rapid in proportion as the lowlands become flatter and the desert areas through which the river flows become more extensive. The moment therefore the river emerges into the lowlands, it is deprived of the different species of protection which it enjoyed amongst the mountains, and becomes fully exposed to the forces that work for its destruction. In fact so rapidly do the destructive factors assert their supremacy over it, that it would be completely annihilated before it reached the Kara-koschun, were it not for the cooperation of its largest tributaries. Alone the Jarkent-darja would never under any circumstances succeed in getting down all the way to the Kara-koschun. It is the Ak-su-darja which infuses new life into it, and in virtue of this fresh impulse which it thus receives it does succeed in overcoming all hindrances and in surviving the drain of the many parasites that prey upon it. As compared with these two rivers, the other streams of the system play only very subordinate parts. Both the Kaschgar-darja and the Chotan-darja are only able to get down to the main stream of the Tarim for a very short period in each year. The former unaided would hardly be able to reach as far as the mouth of the Ak-su-darja, and