

the course of the Tarim at approximately the same time; and this is of course only what might be expected, seeing that the effects of the spring warmth are not only simultaneous throughout the region through which the river flows, but are also uniformly distributed. There is however a slight retardation in the lower course. We have seen that at Lajlik the mus-suji goes past on the 8th March, at Jangi-köl on the 12—14th March, at Abdal in the end of March. Theoretically this spring flood ought be cumulative in its mass in the lower part of the river, that is to say in each successive locality it ought to have a greater volume than in the locality immediately above. But the fact is, that vast quantities of water go to fill the marginal lakes, which have shrunk owing to the evaporation of the summer and autumn before, so that there is in reality no very appreciable cumulative process. The length of the mus-suji period ought however to increase as the flood travels downstream. If we take it, that the thaw-flood flows past Lajlik for a space of 20 days, then the mus-suji must last longer at Jangi-köl, because all the flood-water that is set free in the sections higher up must go past Jangi-köl. All the same it is pretty certain, that the bulk of the water which forms the mus-suji at Jangi-köl is derived from localities immediately above that point, and only in diminishing quantities from the districts higher up the river. Hence the mus-suji of Lajlik is hardly likely to make itself perceptible so far down as Jangi-köl; but on the other hand the accumulated effect of all the flood-sections which lie between Lajlik and Jangi-köl do eventually make themselves apparent in that they give rise to an augmentation of the mus-suji at the latter place.

The causes why the high-flood proper is so greatly retarded are in part the greatness of the distance, in part the presence of the marginal lakes, which suffer such heavy losses in the summer through evaporation. Although this flood originates in the spring and early summer it does not reach the terminal lake before the late autumn, in October. And how greatly does it dwindle on the way! Although the Ak-su-darja alone has a volume of 475 cub.m. in the beginning of June, the united Tarim at Abdal is hardly able to muster all told a volume of 170 cub.m. The river is like a retreating army, only a very small fraction of it succeeds in reaching its goal, while the main body perishes on the way. In the Tschertschen-darja the circumstances are more favourable, for in consequence of its much shorter course the interval between the two high-water periods is very much less; the high flood proper reaches the Kara-buran during the first half of the summer.

Let us now, after this digression, return to our running résumé of the river's course. From Karaul downwards the river assumes an extremely peculiar and unexpected character. From that point we may legitimately speak of a secular delta or a triangular *rayon* with acute angles, over which the Tarim and its branches have ranged backwards and forwards from north to south and from south to north for centuries, and even thousands of years; a deltaic region, the south-west limit of which has not yet been attained, as is evident from the character of the sandy desert in that quarter. Owing to the alluvial deposits of the river and its levelling activity, this region is so flat that all the presuppositions and pre-existent conditions point to the probability of fresh changes taking place in its bed. From Karaul to Arghan the Tarim flows immediately along the north-east front of the high sandy desert, forming elongated marginal lakes in the hollows between the dune-accumula-