

Economy of Kazakh Altai in the middle - the second half of the 1st millennium BC.

Mineral resources, natural and climatic conditions, drainage system, the diversity of flora and fauna of Kazakh Altai favored to the development of the complex economy of the ancient nomads, adapted to local conditions.

Natural-climatic conditions of the Kazakh Altai contributed to the separation of horse-breeding based on year-round breeding on grasses as the leading form of pastoral farming in Berel.

Many anatomical and morphological features of the structure (well-developed elements of limb bones, height, and etc.) demonstrate a great similarity between the appearance of Berel horses and Kazakh horses – the “zhabi”.

Judging the fact that only certain species of stallions were selected for burial with representatives of the highest social groups one can consider that the Pyzyryk people knew basics of selection, however, some authors are inclined to believe that various species are the results of biological adaptation to certain ecological conditions.

More than 80 bone remains of horses were discovered in ancient nomadic burial mounds of Berel.

Short and cold summers as well as plenty of snow in winter in the intermountain cavities were not ideal conditions for sheep-breeding. However, according to materials from burial monuments people had necessary amount of small cattle for production of meat, wool and bone. Burial sites do not provide direct evidence about the breeding of cattle. The only vessel of yak horn was found in the burial mound number 11, was rather hunters' trophy.

Thus, the main component of economic and cultural type of Berel people was extensive cattle-raising with clear predominance of horse-breeding segment resulting from specifics of the regional ecosystem. Cattle-breeding under the conditions of mountainous Kazakh Altai in a vertical manner was connected with seasonal migration from winter pastures located in intermountain valleys to mountainous summer sites with small amplitude, i.e. tightly linked to the ecosystem of the region. If you look at the condition of the intermountain landscape of the Narym-Bukhtanna cavity from the initial site of Tabyn Bogda to the right bank of the Irtysh River, where it goes out (about 400-450 km, high-rise swing from 2500 and below 1000 m above sea level in the center), you'll see an interesting picture staged location at a considerable distance and funerary monuments, summer and winter pastures.

Each group of population, depending on the niche occupied by them (stage), had its own ancestral territory - winter and summer mountainous pastures for seasonal grazing. Therefore, the models of nomadism which were based solely on the arid ecosystems (Tolybekov, 1971; Masanov, 1995, 200, p. 116-130; Tairov, 1989, p.27-30) are not quite applicable to the study of economic-cultural type of highland areas, which include district of the Berel burial mounds in Kazakh Altai.

Mining of gold, iron, tin and copper, transportation and enrichment required mobilization of significant human resources, labor organization, improvement of production process and protection of commercial facilities from possible foreign aggression.

Metallurgical manufacture (for example, making delicate sheets of gold wire, stamping and other operations) also demanded the formation of a certain segment of the population that had specific

knowledge and skills as well as permanent settlements with iron-and-steel furnaces, workshops and other necessary for production and storage of produced items.

People engaged in mining and manufacturing formed certain social group in the Pazyryk culture and related to sedentary type. No doubt, sedentism in the socio-economic structure of society had relative nature since the transition to another category of «direct producers» came easily. Their way of life, social and behavioral norms were adapted to conditions of work and residence.

Reference:

Samashev Z. *Berel, Almaty 2011, 236 p.*