Traditional Environmental Management of Kazakhs as the Element of Sustainability Ethnic Groups

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Abstract: Article is devoted to the traditional environmental management (nomadic and semi nomadic cattle breeding), which during many centuries ensured the existence of the Kazakh tribes in harsh environmental conditions. Adverse climatic and dangerous conditions of nature have made a significant impact on the life and traditions of nomadic cattle breeding. Consideration of these factors contributed to adapt to the environment and minimize losses in agriculture.

Key words: Ethnos • Nature • Natural Hazards • Risk • Ethnic Culture • Nomadic Cattle Breeding • Environmental Management and Material Culture

INTRODUCTION

One of the main and at the same time the simplest indicators of development of mankind, is the duration of existence of ethnic groups. Ethnic groups - holistic living organisms, «collective identity», born, developing within 1-1.5 thousand years and then either lost or passing into a state of stability (homeostasis). In the latter case the number of ethnons is stabilized on the basis, not exhausting environmental management techniques. Will the ethnons sustainability? This is determined, first of all, his innate worldview («Pro symbol») by O. Spengler, «idea-ruler» by N.S. Trubetskoyand other «Eurasians» [1, 2].

MATERIALS AND METHODS

In article on the basis of historical and geographical materials on conducting of nomadic economy of the Kazakhs, through historical and comparative method lit traditional type of environmental management, which ensures the existence of cattle breeding peoples.

RESULTS AND DISCUSSION

Understanding the laws of nature and society evolution enables you to choose the optimal line of conduct in an unknown, complex and difficult for the foreseeable future [3]. Ethnic understanding the world depends on what kind of knowledge and technology ethnons takes its predecessors and neighbors and how it can accumulate experience of trial and error in the management of natural hazards. Historical ethno-cultural data allow studying the conditions homeostatic functioning of nomadic ethnic groups on the example of functioning of traditional nomadic economy of the Kazakhs.

As is known, on their biological essence of the human being, as a group, capable to live a normal life only in society, responding to his interests and counting counter meet their ethno-cultural peculiarities in relation to natural hazards, which are often important factors than the harm from damage or destruction of the objects of natural influences.

In natural conditions related to natural hazards is characterized by the fact that a group response to the risk of being improved by experience and is imprinted in the historical aspect and the preferred methods of nature management [4]. Based on the foregoing, it must be concluded that in the management of natural hazards ethno-cultural factors play a great role. According to B. Berry [5], who studied the ethno-psychological conditions of the activities of transnational corporations, showed that willingness to tolerate risk (danger) a
minimum of ethnic groups, culture which are peculiar to
the traditions of collectivism and striving for the early
elimination of uncertainties in everyday life.

As noted by several authors [6] if the Japanese
moved in the United States, they suffered the least
damage from disasters in the hundreds of times lower
than allow the Americans themselves. This, they explain
the peculiarities of the Japanese ethnic in nature and,
accordingly, the nature of the Western European
mega-ethnos and derived from it American ethnic group,
as you know, from the people especially prone to
adventure and risk.

In the perception of the world itself, there are two
models, characteristic of Western and Eastern ethnic
groups [5]. For Western people is more typical pragmatic
interaction with nature, the psychological estrangement
from it. Relations are founded in the system of the
subject (person, I) - object (nature). Whereas, for Eastern
Nations is not pragmatic interaction with nature,
archaic, environmental consciousness, perception of
nature as a spiritual value. Interaction based in
the system of subject-subject [7].

Explanation of the existing differences in incidence
and perception of natural hazards gave the founder of
"Sony" Akio Morita [8]. According to him, the Japanese
perceive their country as the wealth of the nation, located
on temporary care, while residents of the United States
perceive their country as the best place for business.

Many ethnic groups, including Kazakh people have
formed and have their ethno-cultural peculiarities of the
adaptation to unfavorable and dangerous natural
phenomena and their management. Management of
natural hazards based on the vast experience of the
Kazakh ethnic group, the main occupation of which was
a nomadic and semi-nomadic people. Strategically Prime
examples of loss reduction were the choice of the least
hazardous areas, the use of rapidly constructed buildings
(Yurt), forecasting according to folk omens sporadic and
short-term adverse dangerous natural phenomena
(ADNPh).

Nomadic Kazakhs, as a special form of nature and
the whole system of interrelated and interdependent
socio-cultural phenomena on the territory of Kazakhstan,
is a receiver three thousand year old traditions preceding
migratory habits of societies and has more than 500 years
[9, 10]. Economic activities of Kazakh nomads determined
not only traditional features, but also dictated by the
natural surroundings and adverse dangerous natural
phenomena. The need for an ethnic group effort required
overcoming them and managing them. Almost all the
components that make Kazakh culture were the result
produced for a long period of adaptive strategies and
nature existed as a kind of "response" to the "challenge"
posed by habitat [11, 12].

Nomadic cattle breeding was extended to the
South of the 49th parallel and based on grazing cattle
grazing-year-round. This contributed to the relatively flat
terrain and variety of climatic conditions, which gave the
opportunity to distill cattle without big difficulties us more
productive pastures or, for example, from the snowy
places, the less snow. Containing their herds grazing,
Kazakhs were forced to change pastures as they fell and
dried and thus move from place to place throughout the
year. This way of livestock was known in the Eastern part
of Central Asia from ancient times.

So, early Chinese Chronicles news relating to the first
Millennium BC, attribute his Huns, Turks tyugyu and
Uighurs [13]. It is a constant migration from place to place
should be understood as a well-ordered system of nature
use based on natural and environmental opportunities of
natural complexes.

For the nomadic economy of the Kazakhs was typical
year-round maintenance of cattle, which was associated
with the uneven distribution of vegetation cover and
species composition, low productivity and the scarcity of
plant cover the deficit of water resources, etc., Not less
important aspect was the change of climatic conditions on
seasons that have made significant adjustments to the
movement of pastoralists.

To ensure food one sheep during the year required
1314 kg dry weight herbs and 1,5 m³ water, which was
mostly grazing, at least 20 ha of pastures and network
evenly spaced and not too far from each other water
sources-not more than 5-10 km [14]. One Mare with a foal
required 18-22 ha of pastures for the period from
December to April. The annual demand is approximately
34 hectares per mare with offspring [15].

All this contributed to seasonal, inside the seasonal
and local migrations in search of forage for livestock and
to reduce the impact of hazardous phenomena in economy
of nomads. With all this, the nomads-the Kazakhs were
inherent to a vicious cycle of nomadic phenomena in economy
of nomads.

With the onset of autumn, pastoralists nearer to their
winter pastures, the best of which were meadows and
reed, protected from the wind or with small thickness of
snow. To keep the cattle in extreme periods (during ice,
snowstorms and blizzards, during jute), Kazakhs-nomads
resorted to jointly serial livestock grazing.

In places hardening of snow cover is allowed to
develop pasture first horses, which are easier to tear up
and crush the deep and the hardened snow, eating the
tops of the grass and then allowed after cattle and then the sheep and goats. The latter belonged to the lower part of the herbs, left horses and cattle. Camel chose places where grew cheegrass, pea tree, blady grass, kokpekgrass and different alkaline herbs [16]. Jointly serial grazing was an important tool to ensure the animals fodder in the ice and the snow is deep and settled on the ability to horses tebenevat (get food from under the snow by hooves) with a depth of snow cover up to 30-40 cm.

Selection of winter pastures has been focused primarily on optimal grazing sheep and goats, constitute the basis of the nomadic economy. Because sheep can independently tebenevat when snow depth is not more than 10-12 cm, the northern boundary of winter pastures is determined thickness of the snow cover. "For tebenevak-eyewitnesses-horde choose places where not only the snow layer above, but ... and where the snow, falling before coming later " [17].

Habitat conditions and economic needs determined the species composition of the herd. The basis of the herd formed small cattle, and the sheep accounted for about 60% of all livestock, goats-10%, horses-13%, cattle-12%, camels-4%, respectively [18].

Thus, we can judge that the originality of farming primarily determined by climatic conditions and socio-economic opportunity Kazakhs keep their flocks in the security and integrity.

But, unfortunately, an extreme natural phenomenon has a devastating impact on the nomads. In cold and snowy winters, especially in times of famine advancing jute, i.e. famine, when vegetation in pastures covered with a thick crust of ice or deep snow and became inaccessible to cattle. In some periods, jute repeated every 3-4 years and led to the death of large livestock. There are cases when during heavy jute perished up to 70-80% of all livestock. For example, in one area only Turgay unfavorable winter 1879-188 years 1528679 fallen cattle, which constituted 42% of the total number of cattle in existence in the area. Livestock losses Kazakhs this area over the harsh winter 1891-1892 years, 1198451 amounted cattle [11]. Such a disaster for small ranchers meant utter devastation, hunger and put them economically dependent on wealthy people.

Nomadic cattle breeding nature explains the absence of the nomads closed or opens space for cattle. To avoid the loss of young in the harsh months nomadic Kazakhs adjusted mating different breeds of cattle so that young animals appeared in spring with the onset of warm and fresh pasture. Otherwise lambing would come during the winter months and early spring cold that would have led to mass mortality of young animals.

The economic activity of the Kazakhs had a seasonal nature [19]. In Central Kazakhstan, all springing uterus had lambing from 1 and 15 April, not before and not after. Start wandering must be later than the 10th of May and sheep shearing in early August. Such a strict seasonality of economic life of the required knowledge, time accounts, which was associated with the observation of the heavenly bodies. On the proposal of the nomads, the severity of the winter preceded by adverse weather conditions in summer and autumn. During a summer drought growth herbs delayed. The grass becomes dry and sticky on that, first of all reacted the horse. She starts plucking the tops of the caragana and more and gives fruit. These will Kazakhs fear the most, because they're a sign of jute, the forerunner of the harsh winter.

The weather forecast for the nearest future was determined by the behavior of camels, goats, cows and other animals. So, before the storm and frost camel blows his nose». In frosty days, goats and cows turn their heads. Cow before the storm sooner returned to pasture and before the warm weather, return late or remain in the pasture all night.

Wave cooling streak of bad weather Kazakh called «Amal». According to the Kazakhs, some «Amal» every year, approximately the same number of certain months. Sometimes such «Amal» appears several times per year. «Amal» in the beginning of may, called «Kuralai» (saiga calf). Another spring «Amal» called «kiiktinlagynorgizu» (okoth calf saiga). Autumn is «Amal» in the day mating saiga «kiiktinmatayu». Let will be held by «Amal» and then I'll wander, spoke usually Kazakhs.

Of great importance in providing safe and affordable housing played a feature of the material culture in the area of domestic life of Kazakhs-nomads. It must be emphasized here that the nomadic way of life left the original print [18].

First of all, it affected the housing, its shape, material, construction, interior decoration, etc. The need to frequently change the place of residence in connection with a constant forced nomads-Kazakhs gradually develop custom portable nomadic dwelling type, which is one of the most striking features of nomadic life. The Kazakhs it was an easy and comfortable with durable yurt, which can be quickly disassembled, loaded on to a few camels or horses and fast, one-hour set on arrival at the new location. Usually yurts Kazakh nomads served him not only residential, but also utility room and in case of need, such as the early spring cold room for lambs, foals, calves, colts.
Since the plain tents were not great (20-30 m²), then placing it in different utensils and equipment, accommodation for the inhabitants was only possible due to the fact that the yurt was divided into certain parts enshrined custom, where every inhabitant of both sexes knew his place in the tent, where everything was also strictly defined place. Of course, this has been achieved in terms of the amount of savings, the volume and number of items constituting the situation of nomadic dwellings.

High-quality nomadic dwelling of Kazakhs in which they lived in all year round, was not only a portable, easy, but also protects from rain, wind, cold and heat and, consequently, largely corresponded to the conditions of nomadic life. Gave efficiency and mobility in imminent danger. Brought and spread into a home quickly and always in a certain order. Manufacturer of most of the essential parts of this dwelling was available to ordinary average household within its own forces.

Due to climatic and other conditions varied geographical location of settlement areas people (kokteu, zhailau, kuzdey, kystau). One of the most long-term settlements, where nomad spent most of their economic activity, was-kystau. Using as an object kystau settlement, mostly known as kystak-winter village, nomads have had only ephemeral value than universal [19]. Choosing locations for winter nomadic village depended first and foremost on its productivity, its economic feasibility, capacity of the territory and not least the degree of security. Closed gorge with good and varied vegetation provide good livestock feed and protect people and livestock from the cold winds and low temperatures, which was of great importance in the selection of a safe seat. Depending on the reclaimed areas are divided into mountain, plain and river. By type of location on the crowded, nesting and dispersed. Each wintering periodically within 8-12 days of wintertime changed to new pastures (zhaylym). Within four months of cold nomad had, depending on pasture forage capacity, topography and species of livestock, to change their place of settlement of no more than 8-12 times. According to [1], Kirghiz (Kazakh) villages were not strictly permanent seats migrations, even winter settlement through a certain period of time transferred from one place to another. "Shallow soil productivity drives winter from one Kirghiz " kystau "on the other, are forced to stay in a yurt in this symbol of nomadic life. Therefore, traditional nomadic economy, the use of mobile homes, i.e. yurt, was not so much the dictates of certain circumstances as the first necessity to the extent possible nomadic herders. The basis of the displacement of homes and livestock from one place to another during the year, some of the landscape and climatic conditions in other nomadic cattle breeding people along with other objectives have been laid down and the principles of safe use of the territory.

**CONCLUSION**

Thus, the ability to anticipate adverse natural processes and take steps to reduce their negative effects evolved through long observation of the phenomena of nature, a kind of home appliance, maintenance management and secure transmission of experience from generation to generation over a long period of time.

Formed for many years the functioning of the economic cycle is the determining factor in the life of the nomadic Kazakhs making their adjustments in all other spheres of social and economic relations, culture and lifestyle. It should be noted that along with modern monitoring systems for natural hazards and environmental management techniques should be used and the centuries-old experience of Kazakh nomads, tried and tested on itself for centuries and ages.

**REFERENCES**