

INSTITUTE of GEOGRAPHY Russian Academy of Sciences
INTERNATIONAL PROGRAM "LEADERSHIP for ENVIRONMENT And Development"

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YAGNOB VALLEY

NATURE, HISTORY, AND CHANCES OF A MOUNTAIN
COMMUNITY DEVELOPMENT IN TADJIKISTAN

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The Yagnob Valley represents in its upper part an example of isolated peripheral area very typical for highlands of Asia and especially for Tadjikistan, where each mountain valley has its own unique ethnic and cultural style of life and land use structure highly adapted to natural conditions. The natural isolation of the Yagnob Valley was conducive to the preservation in its upper part of an unique ethnic group – the Yagnobis whose language is very similar to the Ancient Sogdian language attributed to the East-Iranian language group. A strict dependence of land use type on natural conditions and natural processes as well as the peripheral positions and low accessibility limited the development and application of new economic methods. The study is undertaken with respect to model of the existential space of Yagnobi community affecting land use, risks and possibilities for survival. Within the limits of the existing structure of the natural resources use there are four very important types of risks that threaten to destroy existing relationship between the natural environment and the local economy: agroclimatic risk, risk of slope processes, anthropogenic degradation, the social and political risk.

Figures 32. Tables 7. Photos 15.

Гуня А.Н. Долина р. Ягноб – природа, история и возможности развития горной общины в Таджикистане. – Москва. Товарищество научных изданий КМК. 2002. 80с.

Долина р. Ягноб в своей верхней части представляет собой пример изолированного периферийного района, типичного для высокогорных районов Азии и в особенности Таджикистана, где почти каждая высокогорная долина имеет свой неповторимый этнокультурный уклад и формы ресурсопользования с высокой степенью адаптации к природным условиям. Объективная природная изолированность Ягнобской долины способствовала сохранению в ее верховьях уникального народа – ягнобцев, язык которых близок к древнесогдийскому языку, относящемуся к восточно-иранской языковой группе. Жесткая зависимость характера природопользования от природных условий и процессов, а также удаленность и низкая доступность ограничили развитие и применение новых методов хозяйствования. В работе делается акцент на исследование пространства существования (экзистенциального пространства) ягнобцев, модель которого описывает характер использования земель, сопровождаемые при этом риски и возможные пути к их преодолению. В пределах нынешнего характера природопользования имеются четыре наиболее важных типа риска, угрожающих разрушению сложившихся природно-хозяйственных связей: агроклиматический риск, риск склоновых процессов, антропогенная деградация ландшафтов, социально-политический риск. 32 рисунка, 7 таблиц и 15 фотографий.

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1. Introduction

1.1. General features

The valley of the Yagnob River is an important object of investigation of the nature – man interaction and study of the «delicate» structure of their interrelations and links. High mountains as well as deserted areas impregnated by ancient oases and polar Arctic areas represent the examples of geographical types of territories with the extreme forms of use of natural resources by their degree of adaptation to natural conditions. The valley of the Yagnob River situated in the middle part of the Central Asia, at the border of mountains and deserted plains (Fig. 1), felt for all time the influence of great historical events, wars and invasions, on the one hand, and has managed, due to its objective isolated status and poor availability, to keep original features of traditional methods of the use of natural resources, style of life, culture with the Yagnobi language close to the ancient Sogdian language as one of its elements, on the other hand. The Yagnob Valley enclosed in all parts by high spurs of Hissar and Zeravshan Ranges represents in its upper part an example of an isolated peripheral area – refugium of the ethnos and its environment, of ancient cultural landscapes.

This presents a good example for studying the influence of natural factors on the features of use of natural resources.

There it is getting quite clear that the application of the concept of sustainable development, extremely popular lately, can be very relative. In the conditions of isolation and peripheral position, strictly limited possibilities of use of resources the absence of any development is also possible. It is substituted by a sustainable equilibrium of natural and social-economic components of geosystems and a self-regulation of the population number, number of live-stock, arable lands, etc.

The analysis of the Yagnob Valley presents a special interest first of all:

Fig. 1. Location map



- As a curious phenomenon for the ethnographers, linguists, geographers;
- The Yagnob Valley that represents a whole integrity together with the unique Yagnobi ethnos gives unique possibilities to build up methodological concepts and to develop models of nature – man interrelations, to define stable and mutable natural and social structural interrelationships of the existential space important in history, its internal and external boundaries, structuredness, capacity, etc.;
- At last, the valley of the Yagnob River reflects clearly a totality of problems of sustainable development typical for mountain areas. The traditional ecological experience of Yagnobis is important to elaborate the concept of development of mountain areas. The significance of a relict experience of use of natural resources for the actual situation consists in the fact that all its components are naturally conditioned (Danilova, 2000) including the social organization. The natural basis was apparently a factor of maintenance that contributed to the survival of the ethnos.

Proceeding from the priority of these directions of research, the book consists of three main parts (with the exception of introduction and conclusion). The first part presents the description of nature, population and economy of the Yagnob Valley, the manner of description of an individual area being traditional for geography. The second part presents the Yagnobi materials basing on the concept of the space of existence (existential space) that makes it possible in full measure, to our mind, to illustrate the basic peculiarities of development of the Yagnob Valley and to find explanations of many problems, for instance, what are the resource and material fundamentals of development of the Yagnobi ethnos, risks of development, etc. The latter concept of the existential space emerged just in the middle of the field expedition research carried out with the participation of researchers and post-graduate stu-

dents of the Institute of Geography Russian Academy of Sciences, students of the Department of Geography of the Moscow State University, students-geographers from Germany and Holland. A great number of discussions «around a fire» bore ideas that combined the academic knowledge and a unique live reality represented by the Yagnob Valley. Later these ideas were conceptually designed in a number of publications (Badenkov, Gunja, Lindner, 1994; Gunja, 1996; Gunya, 2000), but they are not completely devised yet. At a present stage of study the existential space represents an aggregate living space of a socially identified group (in the case in question, an ethnic group – Yagnobis) made up of different subspaces – spiritual and cultural, social, subspace of material resources. Due to natural isolation of the valley of the Yagnob River the subspace of material resources and, partly, other subspaces have precise boundaries following the outline of high-mountain ranges and rivers (see the section concerned with the existential space below). In accordance with the suggested concept a functional zonation and proposals concerning the development of the valley, preservation of its cultural landscapes as a living environment of Yagnobis have been elaborated (last part).

1.2. Geographical position

The Yagnob River appertains to the basin of the Zeravshan River. For the distance of about 120 km the Yagnob runs from the East to the West, then it turns sharply to the North, its confluence with the Iskander-Darya River forms the Fan-Darya River flowing into the Zeravshan River. The study area comprises the upper part of the valley (a little more than 2/3 of its total length), situated between the southern slope of the Zeravshan Range and the northern slope of the Hissar Range. The maximum absolute altitude comes to 5145 m in the Zeravshan Range in the upper reaches of the Yagnob. The river-bed of the Yagnob

is situated at the altitudes of 2200–2800 m, the bottom of the valley being practically not discernible. The relative altitudes of watersheds above the bottom of the valley make up from 1500 to 2000 m (in places up to 2500 m). The uniqueness of the Yagnob Valley is determined in many respects by its objective natural isolation (Fig. 2, 3, Table 1). The relations with the outer world are considerably impoverished. The nearest locality supplied by electricity and having a dirt road accessible to vehicles is the kishlak Marghib. Up the valley next to this kishlak there is a narrow canyon-looking gorge that practically divide the «Sogdian» (hereinafter the term is con-

ditional) Yagnob and the outer world. The map (Fig. 3) shows that the main roads linking the Yagnob to the outer world are mountain paths open only during the summer period. In the winter period paths are covered with snow; furthermore, they are situated in a zone of permanent snow avalanches activity. Yagnobis stay completely isolated from the whole world during about eight months a year. Several times the valley's inhabitants advanced to the authorities official requests concerning the road construction to the valley, but these attempts resulted in nothing. In 1960-es geologists have made a road to the Yagnob from the South,

Fig. 2. Settlement of Yagnob Valley.

Fig. 3. Accessibility to the Yagnob Valley.

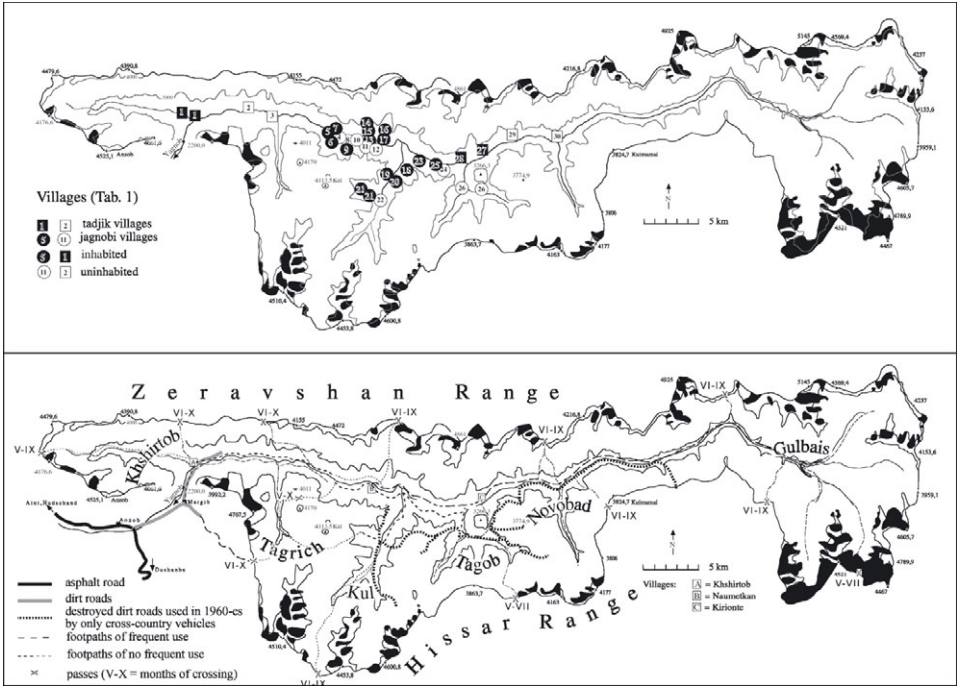


Table. 1. Villages of the Yagnob Valley, location and number of farm-holdings

(Sources: Aminov 1873; Sobolev 1874; Virsky 1890, 1906; Andreev 1970; Bushkov 1988; topographic maps and data collected by the author).

from the Romit gorge (accessible only to cross-country vehicles). It has been exploited during a certain time, but afterwards slope processes resulted in its destruction. There are some frag-

ments of that road left on north-oriented slopes. Nevertheless, the road construction is in progress now proportionally to the sponsors' money influx and the activity of the inhabitants them-

number on the map (Fig. 2)	name	altitude, m	exposition	slope [°], in the average	number of the farm-holdings							
					1870	1887	1904	1927	1941	1969	1995	
1	Khshirtob	2320	S	15	200	35	48	40	80	170	5	
2	Farkau	2400	S	10	0	5	4	3	0	0	0	
3	Varsaut	2380	N	20	30	12	8	7	20	20	0	
4	Mushtif	2400	NE	15	0	0	9	4	0	12	0	
5	Makhtamain	2480	NE	15	20	8	?	5	13	9	1	
6	Vaginzoy	2580	NE	15	30	8	?	4	14	16	1	
7	Bedef	2580	SW	25	15	7	10	7	12	20	2	
8	Shakhsara	2500	N	10	50	10	11	2	6	10	0	
9	Shovita	2520	N	10	25	13	13	6	18	28	2	
10	Dumzoy	2480	N	20	40	10	10	6	10	12	0	
11	Sokidara	2500	N	20	25	12	14	6	17	20	0	
12	Chukat	2520	NE	15	28	6	6	5	8	12	0	
13	Naumetkan	2500	N	15	30	13	14	10	27	7	4	
14	Pulraut	2750	S	25	11	7	8	12	16	15	2	
15	Kashi	2600	SSW	25	11	8	8	8	16	20	3	
16	Tagichinor	2600	SW	25	27	12	13	13	17	14	6	
17	Petif	2620	S	20	30	17	17	12	29	40	2	
18	Garmen	2700	SW	20	0	0	0	15	22	48	6	
19	Simich	2620	SE	25	0	0	0	10	8	3	0	
20	Sokan	2700	E	20	0	27	4	?	19	13	0	
21	Kul	2760	S	15	?	22	26	25	40	?	9	
22	Dagana	2620	SE	10	0	0	0	6	9	5	0	
23	Pskan	2560	NE	15	35	36	38	30	29	40	7	
24	Naumetkan	2530	NE	15	20	0	0	0	6	?	0	
25	Dekhbalian	2600	N	20	50	14	15	25	37	32	4	
26	Tagob	2640	S	20	0	13	13	15	30	?	0	
27	Kiansi	2600	S	20	22	13	26	40	60	100	4	
28	Kirionte	2620	SSE	20	18	37	40	40	82	90	12	
29	Dekhikalon	2680	S	15	40	22	25	20	47	?	0	
30	Novobad	2700	S	20	4	5	7	8	48	?	0	

selves. In 1997 it was already in several kilometers to the East of the Yagnobi core. It should be mentioned that the importance of the road is belittled by its negative ecological effects on the landscapes of the Yagnob. The last section of the road from the village Khshirtob up to Bedef is characterized by a relatively steep-sloped relief. In view of a lack of resources needed to maintain the road in an appropriate condition, slope processes began to destroy this section of the road; the ecological state of neighboring landscapes is being aggravated too.

Administratively the study area pertains to Aini district of Sogdian Region (former Leninabad Region).

1.3. Research history

First precise data about the Yagnob Valley date from the 19th century and especially from its latter half; in this period first military-topographical investigations were organized in course of the process of adhesion of the mountain areas of Central Asia to Russia. The research carried out by Meiendorf in 1820 (Meiendorf, 1975), by the naturalist Leman and mining engineer Bogoslovsky, participants in the Bukhara expedition organized in 1841 and headed by the mining engineer Butelev (Brezhitsky, 1911) are mentioned in publications. Later statistical data about Yagnobis and their economy have been collected in military-topographical and scientific expeditions: G.A. Aminov (1873 – expedition of the general Abramov in 1870), M.M. Virsky (1890; 1906), L.N. Sobolev (1874), A.L. Kun (1881), N.G. Mallitsky (1924), H.F.L. Junker (1930), and others. In that period first topographical maps of the Yagnob Valley were also created. In 1883 a well-known German journal «Petermanns Geographische Mitteilungen» published a paper of G. Capus «The Yagnob Valley and its Inhabitants» (Capus, 1883), the author

emphasizing the originality of the Yagnob Valley, the uniqueness of the language of its inhabitants and essential necessity of its detailed investigation.

In the period after the 1917 revolution a huge contribution to learning the life of Yagnobis has been made by M.S. Andreev (his journals were published in their entirety only in 1970), A.N. Kandaurov (1940), M.N. Bogoliubov (1956), A.L. Khromov (1969) and others. During the World War II and in the post-war period a gap between ethnographic and pure physico-geographical study amplified. Topographical maps of a scale 1/100,000 and first maps of natural resources, first of all geological maps were created.

During the last 10 to 15 years Yagnob has been an object of a special attention on the part of the public. Some publications with a character of sensation appeared in the media relative to the so-called «puzzle of Yagnob». It is of no small importance that such an attention has political underlying causes related to a certain extent to the desire of throwing light on the negative aspects of the epoch of the «commanding economy» at what time, under the pretext of moving out of a dangerous geodynamic zone, the Yagnobi people in 1970 was within a little completely evicted to the vicinity of Dushanbe and to cotton-growing districts of Golodnaya Steppe (the Starving Steppe). The detailed bibliography of Yagnob (115 references) contains mainly ethnographo-linguistic descriptions and notes (compiler O. Panfilov). In 1993 Yagnob became an object of research organized by the laboratory of mountain geosystems of the Institute of Geography Russian Academy of Sciences with the author's direct participation. In 1994–1996 a multidisciplinary research was organized in Yagnob with the author's leadership, a large-scale landscape map and later maps of land-use, population framework, etc. have been created.