AL FARABI KAZAKH NATIONAL UNIVERSITY

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CHALLENGES OF SUSTAINABLE ECOTOURISM: A CASE OF AKSU-ZHABAGLY NATURE RESERVE IN KAZAKHSTAN

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The monograph consists of six chapters that coherently and comprehensively unfold the study progression toward conceptualizing a community-based ecotourism (CBET) model for the Aksu-Zhabagly Nature Reserve. This contribution to the scholarship of tourism is compelling for Kazakhstan and for other destinations in countries of the Central Asian region, as the proposed theoretical frames on sustainable tourism in protected areas through community development and local participation are novel both for research and practice in the region.

This monograph will be an invaluable resource for ecotourism researchers, sustainable tourism development researchers, and anyone interested in tourism research. Thus, we strongly recommend this work to be published as a monograph.

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TERMS AND DEFINATIONS

WORLD NATURAL HERITAGE:	"is an outstanding example representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems, and communities of plants and animals".
HERITAGE RESOURCES:	has been selected as a valued environmental component (VEC) in recognition of the interest of provincial and federal regulatory agencies who are responsible for the effective management of these resources, the general public as a whole, and potentially affected First Nations that have an interest in the preservation and management of Heritage Resources related to their history and culture [1].
COMMUNITY-BASED TOURISM:	is a tourism management model that puts local communities at the center of the process and can encompass diverse tourism styles from rural tourism to urban tourism, nature tourism, or even luxury tourism.
ECOTOURISM:	focuses on local culture and wilderness adventures and understanding the means by which people in other parts of the world are living off the land around them. An important element to most ecotourists is how sustainable development can best meet the social, economic, and environmental needs of an area and promote biological biodiversity.
COMMUNITY PARTICIPATION:	refers to the process in which community residents voluntarily participate in various activities or affairs of the community. It describes the extent to which residents share things in their lives with the community [2].

STAKEHOLDER:	is a person, group or organization that has interest or concern in an organization. Stakeholders can affect or be affected by the organization's actions, objectives and policies.
INCOME DISTRIBUTION:	Income distribution is the smoothness or equality with which income is dealt out among members of a society. If everyone earns exactly the same amount of money, then the income distribution is perfectly equal.
SUSTAINABLE DEVELOPMENT:	is an organizing principle that aims to meet human development goals while also enabling natural systems to provide necessary natural resources and ecosystem services to humans [3].
SUSTAINABLE TOURISM:	is a concept that covers the complete tourism experience, including concern for economic, social and environmental issues as well as attention to improving tourists' experiences and addressing the needs of host communities.
NATURE RESERVE:	is a protected area of importance for flora, fauna, funga, or features of geological or other special interest, which is reserved and managed for purposes of conservation and to provide special opportunities for study or research.
POLITICAL ENVIRONMENT:	is the state, government and its institutions and legislations and the public and private stakeholders who operate and interact with or influence the system.
BUFFER ZONE:	is a neutral zonal area that lies between two or more bodies of land, usually pertaining to countries. Depending on the type of buffer zone, it may serve to separate regions or conjoin them.
PROTECTED	locations which receive protection because

AREAS:	of their recognized natural, ecological or cultural values. Protected areas are those areas in which human presence or the exploitation of natural resources (e.g. firewood, non-timber forest products, water, ...) is limited [4].
NON-GOVERNMENTAL ORGANIZATION:	is an organization that generally is formed independent from government [5]. They are typically nonprofit entities, and many of them are active in humanitarianism or the social sciences; they can also include clubs and associations that provide services to their members and others.
SOCIAL EXCHANGE THEORY:	proposes that social behavior is the result of an exchange process. The purpose of this exchange is to maximize benefits and minimize costs. According to this theory, developed by sociologist George Homans, people weigh the potential benefits and risks of social relationships.
DISTANCE DECAY:	is a geographical term which describes the effect of distance on cultural or spatial interactions [6]. The distance decay effect states that the interaction between two locales declines as the distance between them increases.

LIST OF ABBREVIATIONS

AVE:	Average Variance Extracted
CBET:	Community-based Eco-tourism
CIS:	Commonwealth of Independent States
CFA:	Confirmatory Factor Analysis
CP	Community Participation
CR:	Composite Reliability
FUG:	Forest Union Group
GEF:	Global Environment Facility
ICDP	Integrated Conservation and Development Project
IUCN:	International Union for Conservation of Nature
KMO:	Kaiser-Meyer-Olkin
KZT:	Kazakhstani Tenge
LRP:	Local Residents' Participation
NGO:	Non-Governmental Organisation
NPE:	Negative Political Environment
NR:	Nature Reserve
OUV:	Outstanding Universal Value
PA:	Protected Area
PCA:	Principal Component Analysis
RK:	Republic of Kazakhstan
SEM:	Structural Equation Modeling
STD:	Sustainable Tourism Development
TSR:	Tourism Revenue Sharing
UNDP:	United Nations Development Program
UNESCO:	United Nations Educational, Scientific and Cultural
USSR:	Organization
WE-WC:	Union of Soviet Socialist Republics
WHS:	Western Europe-Western China
	World Heritage Site

INTRODUCTION

The participation of local people in the management of World Heritage Site (WHS) and the development of tourism will help improve the quality of life of local residents and make the heritage protection plan more sustainable [7, 8]. And community participation in tourism planning increases residents' feeling of belonging, promotes the development of social networks, and attaches great importance to the value of local district [9-11]. Therefore, residents' involvement in tourism development in the world heritage sites is significant and meaningful for improving people's welfare and conserving heritage areas to the highest degree. Tosun (2000) claims the implementation of participatory tourism development methods require radical changes in the socio-political, legal, administrative and economic structures of many developing countries.

Tourism can be an excellent alternative to or complementary to other economic activities to communities' livelihood if benefits are shared among the communities and people living in each community. Controlling leakage will allow for more revenue to remain in the communities. At the same time, the more transparent are tourism's benefits to the communities, the greater the respect for tourism and the realization of its impact on peoples' lives [12]. Moreover, tourism revenue supports infrastructure development, cultural manifestation, improvement of social services and biodiversity conservation [13, 14]. If tourism receipts are so significant, why might they fail to reduce poverty? The answer is that they may be assisting poor households for some countries but for others, they may be providing disproportionate gains for the rich [15]. Although tourism is important in generating revenue from natural resources attractions, it is argued that the sector is associated with inequitable distribution of costs, benefits and power among different actors and at different scales that affect the effectiveness of tourism as a source of revenue, conservation and development tool [16-19].

In the State Program for the Development of Tourism in Kazakhstan until 2025 [20], special attention is paid to various types of nature-oriented and ecological tourism. The essence of ecotourism is, on the one hand, to satisfy the human need for communication

with nature, solitude, study and knowledge of nature and culture, and on the other hand, to solve environmental problems, primarily in specially protected natural areas [21].

The relevance of the topic is that natural beauty, national parks and protected areas of Kazakhstan are the major features of tourism and nature reserves are the most visited places for tourists. Kazakhstan has enormous potentials for developing nature-based tourism and it is important to research the different aspects of tourism in the attractive and colorful landscape of Kazakhstan. In this regard, a study about developing tourism in nature reserves, especially in the ones which belong to world natural heritage sites, like Aksu-Zhabagly, has determined the future and the success of the tourism industry in Kazakhstan. And developing natural heritage tourism cannot be implemented successfully without local residents' participation (LRP) in tourism development and tourism revenue sharing (TRS) with the local community. If the majority local residents involve in tourism activities in their area and they can feel the benefits of tourism revenue to local development, it will have a positive impact on the conservation of natural heritage sites and improving local people's welfare.

The scientific novelty of the research consists of two parts: Firstly, the level of remaining problems (such as participation limitation, revenue distribution constraints and negative political environment) in the sustainable development of ecotourism in developing countries was determined using the example of a popular ecotourism destination in Kazakhstan. Secondly, a sustainable community-based ecotourism (CBET) model is proposed for the Aksu-Zhabagly Nature Reserve (NR), taking into account the advantages of successful CBET models abroad and the shortcomings of the current tourism development model in the study area, in turn, this model can provide a theoretical basis for the development of sustainable CBET Kazakhstan, at the same time, provide a model for ecotourism destinations in the neighboring states.

Chapter 1 RESEARCH AREA OVERVIEW AND SAMPLING

1.1 Study Area Overview

1.1.1 Aksu-Zhabagly Nature Reserve and Zhabagly Village

Kazakhstan's wealth of attractions and unique nature charm visitors, not only with their beauty but also with their singularity. Since the first Kazakhstani NR (Aksu-Zhabagly NR) was established in 1926, their number had increased to 10 by now. Two of them (Aksu-Zhabagly and Korgalzhyn NR) had already been included in the list of World Heritage natural sites. Several ministries and committees of the RK are involved in the governance of the PAs or NRs; for example, the Ministry of Agriculture and the Ministry of Ecology, Geology and Natural Resources have the responsibility for managing NRs. In particular, together with the Ministry of Ecology, Geology and Natural Resources, the Ministry of Culture and Sport guides and examines the management of eco-tourism activities and promotes NRs as tourism destinations in the development of the tourism sector at a national or international level.

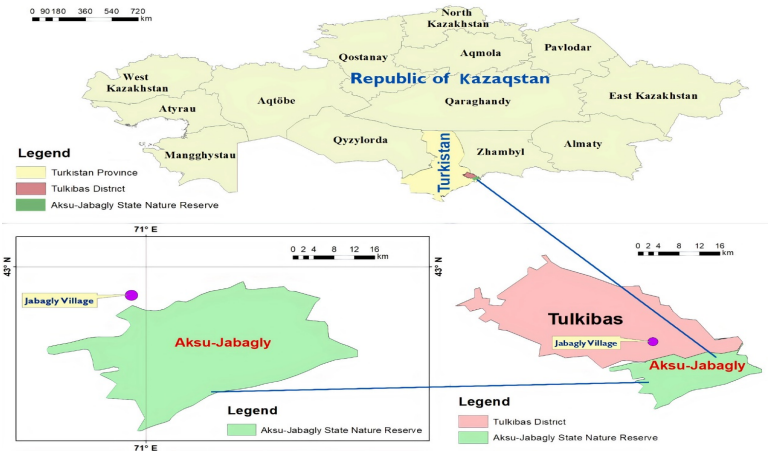

Figure 1.1 – Aksu-Zhabagly NR and Zhabagly village (complied by the authors).

Aksu-Zhabagly (also spelled as Aksu-Zhabagly) eco-tourism destination is one of the State NRs in the RK. It is located in Turkistan province (former south Kazakhstan province) of Kazakhstan. It covers the north-western mountain chains of the Tian-Shan mountains. It is the first and the oldest NR in Central Asia, was opened on 14 July, 1926. And the NR was officially listed on the UNESCO as a part of the Western Tien-Shan natural world heritage site under the criteria of (vii) and (x) in 2016. The Aksu-Zhabagly heritage site is located among four districts of two administrative oblasts in the most densely populated region of Kazakhstan, with a total population of about 3 million people. Approximately 150,000 people live in the transition area of the NR [22]. In the last 10 years, ecological tourism has become highly popular in the reserve, mainly due to tourism for bird watching and plant research and wildlife seeing, and the 59 km area of Tulkibas is located along with the Western Europe-Western China (WE-WC) Highway, it provides convenience for auto travel to this NR [23].

Village Zhabagly is an administrative unit of Tulkibas district. It includes the settlement of Zhabagly, Abaiyl, and Russian Railway 115. According to the statistical report-2019 of Zhabagly village, the total population of the village Zhabagly is 3,048 people, including 2401 people of Zhabagly settlement, 545 people of Abaiyl settlement, and 102 people of settlement Russian Railway 115.

The center of the village is Zhabagly settlement, which is 17 km southeast to the Turar Ryskulov town (former Vannovka), the administrative center of Tulkibas district. Zhabagly settlement has a public transport connection with Turar Ryskulov town and Shymkent city. Lying adjacent to the West Tien Shan Mountains, Zhabagly settlement is the gateway to Aksu-Zhabagly State Natural Reserve (Figure 1.1). The main economic activities are agriculture, plant growing, and cattle breeding. The 59 km area of Tulkibas is located along the Western Europe-Western China (WE-WC) Highway, and it provides convenience to travel to village Zhabagly by car for visitors [23].

1.1.2 Mysterious Facts of Aksu-Zhabagly Nature Reserve

A new article by President of Kazakhstan Nursultan Nazarbayev titled “Seven Facts of the Great Steppe” is dedicated to the history and natural beauty of Kazakhstan. The apple trees and the tulips of

Aksu-Zhabagly NR are specially mentioned in the cognitive article of Kazakhstan's President. The unique wild tulips and natural apples of the Aksu-Zhabagly NR will spread its name all over the world [24]. The territory of Aksu-Zhabagly recreation center owns the unique world of primitive nature. There are many things to do in Aksu-Zhabagly NWHS for tourists, for example, watch wild animals and birds, seeing flowers and plants, and of course, magnificent mountains and cool clean air attracts tourists from many countries of the world. The most popular tourist attracting points of this protected area are as follows:

Wild red (Greig) tulips and Wild apples (Malus. Sieversii): The Tien Shan mountains harbor many secrets, and they are the likely birthplace, not only of the apple but also of the tulip (Figure 1.2). The impressively beautiful tulips were discovered in some mountains of Kazakhstan and on the central and western northern slopes of the Aksu-Zhabagly State Nature Reserve. The red tulips grow in the large, small, and individual communities at an altitude of 2200-2500 meter above sea level.

Figure 1.2 – Wild red tulips and apples at Aksu-Zhabagly NR [25]

The tulips of Aksu-Zhabagly grow in the rocky soils on the middle part of the mountain belts and the slopes of the foothills. And they easily adapt to nature and weather conditions. Greig's and Kaufmann's tulips are two wild species that grow in abundance in Aksu-Zhabagly NR.

They were instrumental in the establishment of the cultivated tulips that became the symbol of Holland in the Middle Ages.

Appletree Malus Sieversii is endemic to the Tian Shan Mountains in the southern part of Kazakhstan, northern Uzbekistan and Kyrgyzstan, and western China. It grows in vast forests in valleys or isolated on hills. There is general consent that our apples' evolution began with Malus Sieversii, which constituted the bulk of the wild forests that stretched for more than a thousand kilometers north and south at low to middle elevations of the Tien Shan mountains.". Genetic analysis shows that the domestic apple originated from the wild variety Malus Sieversii, which can be seen in the mountainous area of the Aksu-Zhabagly NR.

Wild animals, birds and petroglyphs: At picturesque Aksu-Zhabagly NR, visitors can see Tien Shan bears, Siberian mountains goats, roe deer and endemic redheaded titmouse on the Kshi-Kaiyndy Gorge path, where Griffin vultures and Burkit (golden eagle) fly overhead (Figure 1.3). Walking on the dry meadow, a golden eagle nest can be found on the opposite bank of the Kshi-Kaiyndy river. Many colorful species inhabit the gardens of the village people in the village – enough to get anyone excited. In the open grassland, bee-eaters, warblers, tits and blue rollers rollick, while the higher reaches are ruled by eagles and vultures, like the magnificently bearded lammergeyer.".

Figure 1.3 – Wild animals, birds and petroglyphs in Aksu-Zhabagly NR[25]

When we interviewed Jumanov Smatulla Zhorauly (Deputy director of the Research department of Aksu-Zhabagly NR), he said that the petroglyphs were discovered in the Boydaksay area and Peak Kaskabulak in the late of the 1950s. Since then, only around 300 people have visited them and they are still waiting to be formally cataloged and fully studied. Large herds of ibex can be seen on the rocky slopes in this area, and you can easily find the similarities between pictures on the stones and the ibexes (Figure 1.3).

1.2 Analysis of Stakeholders' Involvement in Tourism

The stakeholders in planning of protected areas are, generally speaking, all the people with a common interest in a certain problem in whichever period of time, because it concerns and affects them or because they exert influence upon it directly or indirectly. The participation of key stakeholders in the planning of natural areas is of vital importance, since their interests concerning these areas as well as their ideas of how and why natural values are worth preserving can differ considerably [26]. The tourism destination environment is complex and dynamic with linkages and interdependencies, multiple stakeholders often with diverse and divergent views and values, and lack of control by any one group or individual. In rapidly developing tourism destinations, these characteristics, combined with the pace of change, greatly increase complexity and uncertainty, creating a turbulent environment [27].

Neighboring community residents: Community involvement is necessary in the development of heritage tourism [28]. Community residents are the owners of the heritage site [29] and are the most affected groups in the development of heritage tourism [30]. They are familiar with the natural, social and cultural characteristics of heritage sites, have the ability to support tourism development, often play multiple roles in tourism development, and are closely related stakeholders in the development of heritage tourism [31]. As local owners, they have the right to use and prioritize the community's tourism resources. When rural areas are developed as tourism

destinations, local residents' rights local resources do not change. They have the right and obligation to participate in the development and protection of local community tourism resources, the right to participate in tourism development decisions and the right to obtain tourism income fairly.

The main community, lies close to core zone of Aksu-Zhabagly state nature reserve, is Zhabagly village center, in where the main office of Aksu-Zhabagly state nature reserve is located. The residents of Zhabagly village center community are the owners of the heritage sites, part of the tourism resources, and providers of human resources. They are mainly Kazakhs, accompanied by very small number of Russian people and other minority ethnic groups in Kazakhstan, such as Uzbek, Azerbaijan and Tatar. Kazakh nationalities have been thriving here for generations, inheriting thousands of years of nomadic culture, making it a unique Kazakh-style tourism community. Their lives, production activities, and manners can be the object of appreciation and shooting. Although in addition to the development of eco-tourism in nature reserves, Zhabagly village center area has great potential for developing various tourism activities such as ethnic tourism, equestrian tourism, medical tourism and rural tourism, Unfortunately, the result of our observation and investigation work at selected research area showed that a small number of local residents in Zhabagly village center were engaging in tourism business and most of the local population in there was not interested in tourism.

Aksu-Zhabagly heritage site managers: Protected area managers would be better as coordinators in tourism development and general protected area management and should facilitate the establishment of benign relationships among the various actors and stakeholders [32].

To preserve the beauty and wealth of Aksu-Zhabagly Nature Reserve for the future generation is the primary task of heritage site managers. To fulfil the aim, employees of the department of environmental education and tourism usually conduct various events, activities, ecological lessons and conferences nationally and internationally to educate future generations to love, care, protect and preserve the nature and wildlives. Through the media, they try to establish an understanding between "Man and Nature.". These

activities have had great results. For this reason, by the order of the Committee for Forestry and Wildlife of the Ministry of Agriculture of the RK, they were awarded the Letter of Gratitude for the good preparation for the environmental campaign "Parks Parade-2017". In addition, for the development of ecological tourism, they have been providing serves for the tourists from around the world to travel the 10 tourist destinations inside nature reserve. They do everything possible to make it flourish and prosper.

Relevant government departments: In the “government-led” tourism development strategy in remote and poverty-stricken areas, the government, as the main body of project development, plays a central role in concentrating financial resources, manpower, material resources, external communication and attracting investment. At the same time, the government also provides tourism infrastructure, makes decisions on tourism development, determines the development direction of the scenic spot and develops business strategies; establishes and improves tourism information systems and safety management to increase the safety of tourists [33].

Within the government departments of Turkistan province, departments of Tourism and External Relations, Regulation of Natural Resources and Wildlife Management and Forestry and Fauna are responsible for the management of the site, investment attraction, protection, and resource monitoring. According to the 86th step of the state plan which is related to tourist clusters of Kazakhstan, there are several significant tourist attractions including natural and cultural ones. Among them Aksu-Zhabagly State Nature Reserve and the Kaskasu Mountain Resort in Turkistan province joined the Revival of the Great Silk Road cluster. In addition, state nature reserves are part of developing nature-based tourism plan of Kazakhstan. Thus, to promote tourism development in this area, above mentioned relevant government departments do their best to support any activities about developing various tourism at selected research area, for example, every year they hold Tulip and Eagle Hunting festival around this nature reserve. And, each department stated above has their own tourism planning and researching offices. In addition, business development department in Tulkibas district also manages tourism development situations at the heritage site.

Investment operators: The investment operators of the tourism community include enterprises and individuals involved in the investment. The investment operators are aiming at the profit of the scenic spot management, paying more attention to the tourism revenue, while ignoring the environmental protection, environmental carrying capacity and social carrying capacity of the community residents. The scenic spot investors mainly provide tourists with the tourism products of the food, housing, travel, tour, shopping and entertainment categories required for tourism. Therefore, they have indivisible vertical and horizontal links and interest relations with the community residents [33].

Because some nationally and globally protected rare animals, plants and birds live in this nature reserve, free tourism activities inside nature reserve are not permitted. Therefore, tourism in this tourist destination is not invested by private businesses sectors, with all tourism activities being under the state protection laws of nature reserves, and all of them are under the direct control of the nature reserve management office in Zhabagly village, that is why in the Aksu-Zhabagly Heritage Site, Aksu-Zhabagly heritage site management office is the largest operating organization, and has been involving in all tourism business activities, such as offering accommodation, scenic transportation, shuttle cars, horse riding, and tour guides for tourists.

Other community residents: Refers to community residents who have developed outside the scenic spot. Community residents who are close to the development area often become stakeholders. They either participate as human resources in various activities in the tourist attractions; or emulate the scenic spots, build residential houses, public buildings and ceremonial activities similar to the scenic spots to compete for tourists; or produce similar tourist crafts, etc., to compete for the tourist market. The purpose of the foreign villagers is to provide the tourism products that tourists need and compete with the local community for the market, which constitutes a competitive relationship with the residents live adjacent to core tourist destinations [33].

There are two other settlements, namely Abaiyl and Russian Railway 115, which belong to Zhabagly village administration, in the

buffer zone of Aksu-Zhabagly state nature reserve. As far as these two communities are concerned, because of longer distance and being mainly railway workers, very few residents in these two settlements participate tourism industry at the selected research area.

Travel agencies: General scenic spot tourists can be divided into two types: team and individual tourists. According to relevant research, more than 80% of the tourists in the community tour are team guests, and a small part of them are self-organized groups, most of which are foreign travel agency groups [33].

Aksu-Zhabagly heritage site management office is responsible for negotiating business with the travel agencies in this tourism destination. The operating time of the tourism activities in the nature reserve is basically arranged from mid-spring to mid-autumn, the prime time of receiving tourists is in the morning and early afternoon. It can be seen that maintaining good cooperative relations with travel agencies and tour guides is one of the important ways for the rapid growth of tourists in the tourism community. There are many travel agencies mainly from Shymkent, Taraz and Almaty cities of Kazakhstan every year to organize tours to Aksu-Zhabagly world natural heritage site, however the most important ones are the local travel agencies, namely: "Aksu Zhabagyly" reserved recreation camp, Family tourism company "Ruslan" and Zhenja and Lyuda's Boarding House, on the one hand they are all located in Zhabagly village adjacent to nature reserve and the boss and workers of them are local residents, it means they are very familiar with this tourist destination and offer tourists a satisfactory service.

Tourists/visitors: Visitors are the ultimate consumers of tourism products, including potential tourists and real tourists. The evaluation and reputation of tourism products by real tourists directly affects the purchase of tourism products by potential tourists, thus affecting the tourism development of tourism enterprises and tourism communities. Therefore, improving the satisfaction of tourism services and retaining tourists is fundamental to the survival of community based tourism [33].

The domestic tourism industry in Kazakhstan is not very well developed, thus, many domestic tourists are not very interested in this tourist destination. Most of the domestic visitors to the site are

high school students, university students and scientific researchers. They usually come to the nature reserve for expedition or research. The greater number of foreign tourists coming to the tourist destination are from European countries. their main purpose is to see the amazing flora and fauna in the reserve.

1.3 Sampling and Questionnaire Design

Pre-investigation was conducted before the formal investigation. The pre-investigation time was from November 23 to 25, 2018. In order to understand preliminarily the problems of residents' participation in tourism, animal husbandry, agriculture and other industries we issued our survey questionnaire to neighboring community residents, workers of relevant government departments and workers of tourism enterprises. After returning, the questionnaire was carefully revised. and we formally conducted our investigation in March, April and May 2019. In the beginning of March and May, 2019, we went to Zhabagly village, Tulkibas district center and Turkistan province center to issued questionnaires to local residents of three main selected research community, workers of Aksu-Zhabagly state nature reserve management office and workers of some relevant management offices in Turkistan province. At the same time, for the survey cameras were also used to capture the engaging industries of local community and development tendencies of the village. In April 2019, we did online questionnaire survey of travel agencies who have been involving tourism business at Aksu-Zhabagly tourism destination.

1.3.1 Survey of Zhabagly Village Residents

Zhabagly village - administrative unit of Tulkibas district. It includes the settlemet of Zhabagly, Abaiyl and Russian Railway 115. The total population of the Zhabagly village is 3048 people, including 2401 people of Zhabagly village center, 545 people of Abaiyl settlement and 102 people of settlement Russian Railway 115 (passport of Zhabagly village, 2019). The center of the village is

Zhabagly. And the village center is 17 km southeast to the Turar Ryskulov town (former Vannovka), center of Tulkibas district. The village center has a public transport connection with Turar Ryskulov town and Shymkent city. Lying at the foot of the West Tien Shan Mountains, Zhabagly is the gateway to Aksu-Zhabagly State Natural Reserve. The main economic activities are agriculture, plant growing and cattle breeding.

Aksu-Zhabagly world heritage site, located next to Zhabagly village center, is really attractive and convenient to visit, for example, 59km area of Tulkibas is located along Western Europe-Western China (WE-WC) Highway, and it leads convenience to travel Aksu-Zhabagly world natural heritage site by car for visitors. Most people from Zhabagly village center are herders and farmers, population size is larger compared with two other settlements, with a total of 2401 people, among them economically active population is 1571 people, nearly all of them are Kazakh people.

Most people from Zhabagly village center are herders and farmers, population size is larger compared with two other settlements, with a total of 2401 people, among them economically active population is 1571 people, nearly all of them are Kazakh people. There are 4 Shops, 14 limited liability companies and 4 industrial complexes in the village center. Zhabagly village center has 4612.7 ha of agricultural land, 1755 ha of non-irrigation land, 569 ha of irrigation land, 116.7 ha of meadow land and 2172 ha of pastureland. There are 1171 cows, 645 horses, 4151 sheep and goats and 5757 poultries in the Zhabagly village center. And it owns 226 cars (Table 3.2). There are mainly 4 tour operators' offices and guest houses in the village center, two of them are located on the gate way of the Aksu-Zhabagly world heritage site.

Based on the needs of tourism industry participation evaluation and comparison of residents' satisfaction among different industries and different communities, the selection basis of survey community is mainly: (1) community accessibility and concentration of residents in the community; (2) differences in engaging industry; (3) differences in distance from community to heritage sites. Based on above criteria, this thesis selects three communities with geographical gradient differences for research, namely, settlement Zhabagly, settlement Abaiyl and settlement Russian Railway 115 (Figure 2.6).

Settlements Abaiyl and Russian Railway 115 are located between Zhabagly village center and Akbiik village of Tulkibas district. Most people from these settlements have a stable job, railway workers, population size is not large, with a total of 647 people, among them economically active population is 308 people, nearly all of them are Kazakh people. There are no Shops, limited liability companies and industrial complex in these settlements. These two settlements totally have 168 ha of agricultural land, 120 ha of non-irrigation land and 48 ha of irrigation land. The two settlements own totally 318 cows, 93 horses, 804 sheep and goats and 1377 poultries. And they have totally 57 cars (Table 1.1).

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Settlements Abaiyl and Russian Railway 115 are located between Zhabagly village center and Akbiik village of Tulkibas district. Most people from these settlements have a stable job, railway workers, population size is not large, with a total of 647 people, among them economically active population is 308 people, nearly all of them are Kazakh people. There are no Shops, limited liability companies and industrial complex in these settlements. These two settlements totally have 168 ha of agricultural land, 120 ha of non-irrigation land and 48 ha of irrigation land. The two settlements own totally 318 cows, 93 horses, 804 sheep and goats and 1377 poultries. And they have totally 57 cars (Table 1.1).

This study is based on questionnaires, supplemented by in-depth interviews (Figure 2.8). Before the formal investigation, the pre-investigation (November 23-25, 2018 and March 2-5, 2019) was conducted, and the questionnaire was distributed on a small scale. In-depth interviews with typical samples such as Zhabagly village communities, relevant heritage site management department administrators and tour company operators were conducted to

understand the basic situation and problems. After collecting, the questionnaire was revised according to the actual situation.

Table 1.1

General statistics of Zhabagly village for 2019 [25]

Elements	The names of settlements in the village			Total
	Settlement Zhabagly	Settlement Abaiyl	Russian Railways 115	
Number of families	395	71	17	483
Population	2401	545	102	3048
Economically active	1571	275	33	1921
population	2324	535	102	2961
Kazakh	37	10	-	47
Russian	40	-	-	40
others				
limited liability	14	-	-	14
companies	4	-	-	4
industrial complex	226	51	6	283
Number of cars	4	-	-	4
Shops				
agricultural land	4612.7	73	95	4780.7
(ha)	1755	45	75	1875
non-irrigation land	569	28	20	617
(ha)	116.7	-	-	116.7
irrigation land (ha)	2172	-	-	2172
the meadow land (ha)				
pastureland (ha)				
cows	1171	266	52	1489
horses	645	46	47	738
sheep and goats	4151	554	250	4955
poultries	5757	1122	250	7129

This study is based on questionnaires, supplemented by in-depth interviews (Figure 1.5). Before the formal investigation, the pre-investigation (November 23-25, 2018 and March 2-5, 2019) was conducted, and the questionnaire was distributed on a small scale. In-depth interviews with typical samples such as Zhabagly village communities, relevant heritage site management department administrators and tour company operators were conducted to understand the basic situation and problems. After collecting, the questionnaire was revised according to the actual situation.

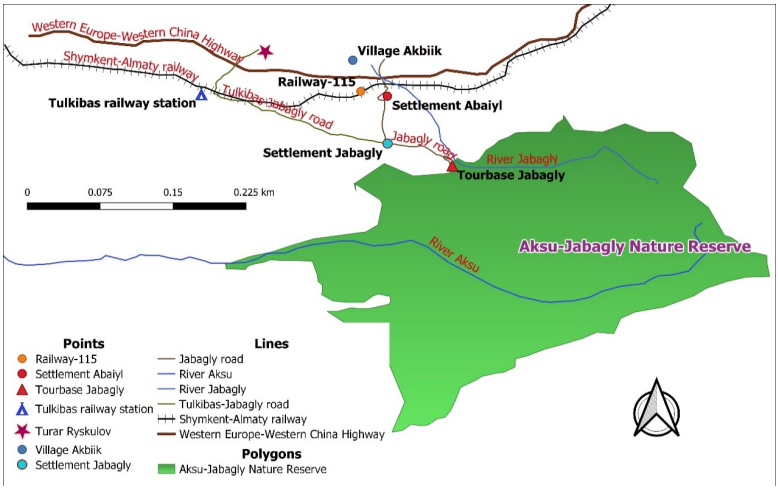

Figure 1.4 – The administrative map of Zhabagly village (complied by the authors)

From March 2, 2019 to March 22, 2019, the investigation team conducted formal surveys in the above three communities in Zhabagly village by means of a questionnaire survey and household interviews. For residents who have difficulty understanding and filling out the contents of the questionnaire, the interviewers fill in the questionnaire based on the respondents' answers.

Figure 1.5 – Questionnaire survey work in Zhabagly and Abaiyl settlements

The residents of the Zhabagly village center community near the heritage site and in the buffer-zone are all Kazakh people, and the investigation team can easily communicate with them to complete the survey. There are a total of 395 households in the Zhabagly village center, which has a more potentials and advantages of developing tourism. Among them, some of the households in the village were not at home or did not cooperate with the survey. The rest of the households have investigated and received 166 valid questionnaires. Due to the sluggish tourism market and the worse location, there are no tourist operators. Except for the those who were not at home and do not cooperate with the interviewers, all the other households were investigated and 56 valid questionnaires were collected. The two communities outside the buffer zone are mainly Kazakh residents. Most of them are railway workers and some of them engaged in agriculture and animal husbandry. In the formal survey, 250 questionnaires were distributed in three communities, 230 were collected, and 222 valid questionnaires, the effective rate was 96.52%. Some interviewees answers were recorded during the interviews, and the interview data was compiled to support and explain the quantitative analysis results.

The content of the questionnaire design for local residents consists of four main parts. The first part of the questionnaire design content is the socio-demographic characteristics of the respondents, including demographic characteristics, tourism relevance, and the community. The demographic characteristics include gender, age, ethnicity, education level, and family annual income, currently engaged industry, the number of people who participate in tourism, and the proportion of tourism income to the annual income of the family and selecting the suitable industry for the buffer zone of Aksu-Zhabagly Nature Reserve. The second part included residents' choice in a suitable industry, residents' choice in a suitable re-select industry and residents' care about tourism development strategies.

The third part of the appendix-A include questions about residents' participation in tourism status and support for tourism developing, and the main reasons why local residents do not engage in tourism. The scale is measured in the form of a Likert five-level scale, with values of 5, 4, 3, 1, and 1 for "Fully agree", "Agree", "Neutral", "Disagree", and "Fully disagree" (see Appendix-A).

And the fourth part of the questionnaire design content concerned some scale questions for measuring residents' perception on Negative Political Environment, Tourism Revenue Sharing Constraints and Tourism Revenue Sharing Level. At the same time, to examine the sustainability of the tourism development, we measured residents' satisfaction with the organization of tourism, the economic impact, socio-cultural impact, environmental impact and residents' participation in tourism development. The indicators in the scale were based on previous studies (Mihalič et al., 2016; Honey, 2008; Gillingham and Lee, 1999; LR Allen & Beattie, 1984; Kim, 2002; Kuvan & Akan, 2005; Lee, 2013; Wang Xia et al, 2010; Wang Kai et al, 2012a) and combined with the actual situation of the Aksu-Zhabagly world natural heritage site and Zhabagly village. Here, residents' satisfaction measures the degree of satisfaction with tourism. A total of 6 aspects of satisfaction were measured. They are the satisfaction of local's employment in tourism industry, the recreational opportunities of the tourist area, residents' involvement and influence in the planning and development of tourism, the tourism generated benefits for ecological protection and regional development, tourism development level and the infrastructures development status. The scale is measured in the form of a Likert five-level scale, with values of 5, 4, 3, 1, and 1 for "Fully agree", "Agree", "Neutral", "Disagree", and "Fully disagree" (see Appendix-C).

In addition, when conducting surveys on residents, they also conducted in-depth interviews with residents and recorded them with voice recorders and notebooks to understand their living conditions in the tourist area. During the field visit, observe the participation status of residents in tourism activities in the scenic spot. At the same time, we took photos and did records to have a comprehensive understanding of the background of residents participating in tourism and tourism development status.

1.3.2 Survey of Relevant Experts from Zhabagly Village

One of the key institutions in this tourist area that monitors all situations is Aksu-Zhabagly heritage site management office at Zhabagly village, and relevant government departments at Zhabagly

village, Tulkibas district and Turkistan province also have rights to monitor. Relevant government departments, who has a close relation with tourism planning at the heritage site and its protection, were interviewed by using a combination of questionnaires to identify their view on tourism development at this heritage site, reasons of less tourists, government's support and obstacles of residents' participation in tourism and their satisfaction with tourism development at the heritage site. The sampled relevant heritage site management institutions are departments of Tourism and External Relations, Regulation of Natural Resources and Wildlife Management and Forestry and Fauna.

The interviewers conducted in-depth interviews with the workers of the Aksu-Zhabagly nature reserve management offices in March, 2019, the main purpose of the survey is to check the tourism revenue sharing status in Aksu-Zhabagly tourist destination (Figure 2.8). As well as we interviewed some leaders of management office and major of the village to understand the tourism development at the Aksu-Zhabagly world natural heritage site, participation of community residents in tourism activities, protection work of heritage site and other tourism-related work (Figure 2.9). The questionnaire survey was conducted on March 2-22, 2019. A total of 60 questionnaires were distributed and 50 were collected, of which 44 were valid questionnaires, and the effective rate was 88%.

The questionnaire consists of two parts (see Appendix-B). The first part is the sociodemographic characteristics of the respondents, including gender, age, ethnicity, education level, working period and working field. The part part includes the views of workers of reserve management office on tourism organizers share their revenue with local residents. The scale is measured in the form of a Likert five-level scale, with values of 5, 4, 3, 1, and 1 for "Fully agree", "Agree", "Neutral", "Disagree", and "Fully disagree".

Except for local tour operators in Zhabagly village center, there are many travel agencies mainly from Shymkent, Taraz and Almaty cities of Kazakhstan every year to organize tours to Aksu-Zhabagly world natural heritage site. To determine TRS to local development of neighboring communities of Aksu-Zhabagly state nature reserve and views of tourism companies' workers on general development of tourism at the heritage site area, in March 2019, we also did online

questionnaire survey of travel agencies who have been involving tourism business at Aksu-Zhabagly tourism destination.

Figure 1.6 – Interviews with staffs of Aksu-Zhabagly nature reserve office and mayor of the village

The sampled relevant tourism companies are some travel companies from Shymkent, Taraz and Almaty cities. And the respondents' main careers are travel agent, tour operator, tour guide, PR manager and event & conference organizer. The interviewers conducted in-depth interviews with the workers of from aforementioned tourism companies in March, 2019 by sending links of questionnaire to their email addresses or their WhatsApp, mainly to understand sharing of tourism revenue to the local development. The questionnaire survey was conducted on March 2-22, 2019 and was mainly distributed to the workers of travel companies in Shymkent, Taraz and Almaty cities of Kazakhstan, who have been sending tourists to the Aksu-Zhabagly tourist destination. A total of 100 questionnaires were distributed and 70 were collected, of which 66 were valid questionnaires, and the effective rate was 94.28%.

The questionnaire consists of two parts (see Appendix-B). The first part is the sociodemographic characteristics of the respondents, including gender, age, ethnicity, education level, working period and working field. The part part includes the views of workers of reserve management office on tourism organizers share their revenue with local residents. The scale is measured in the form of a Likert five-level scale, with values of 5, 4, 3, 1, and 1 for “Fully agree”, “Agree”, “Neutral”, “Disagree”, and “Fully disagree”.

Chapter 2 LIMITATIONS OF LOCAL RESIDENTS' PARTICIPATION IN TOURISM

Tourism is considered to be one of the most active and important industry in many countries and plays a vital role by contributing to economy of many developing countries. In addition, the tourism industry has provided many opportunities for governments to live in the global economic space, thus it has been stimulating the development of urban and rural economy [34]. Tourism has become a major strategy for communities to achieve economic, social and ecological benefits, which can promote community development and poverty reduction [35]. With the fast development of tourism, the role of the community in tourism development has increased, and in order to balance the status of communities and other related stakeholders in the development of tourism, it is important to increase the participation of community residents in tourism development [36]. Most experts agree with the idea that local residents' involvement in tourism planning in the heritage area adjacent to their neighborhood has many benefits, such as get achieving sustainability and increasing local economy. The participation of local people in the conservation of World Heritage Site (WHS) and the tourism planning there will help improve the quality of life of local residents and make the heritage protection plan more sustainable [7, 8]. In addition, community participation in tourism of local WHS increases residents' feeling of belonging, promotes the development of social networks, and attaches great importance to the value of local district [9-11]. According to Mann [37], community involvement can make distributing benefits and costs more efficient and more equitable, and more importantly, help people's self-development and knowledge sharing. Local communities play a significant role in reviving and sustaining WHSs, and thus, participation of local community in tourism activities at the WHS is essential for the sustainable tourism development [38]. Community participation in WHS management can address conflicts and assist in clarifying the concept of heritage among community members [8, 39].

Several studies have attested the role of public participation in sustaining heritage conservation programs [40, 41]. Local residents' participation in tourism activities at the heritage sites contributes to their economic development, and improves their overall quality of life [8]. Community participation in tourism development at the WHSs is significant and necessary for improving people's welfare and conserving heritage area effectively. Therefore, involvement of local community in heritage tourism has been valued as a key development opportunity for local residents there. Although their abundant local knowledge and experience of the heritage conservation are admitted generally, local residents, who are affected by heritage tourism mostly, are always neglected [42] and as the 'owner' and custodian of heritage, local communities rarely have full control over the site and planning of tourism development [31]. At the WHSs, preservation and development work is implemented by local people and international authorities. Thus, involvement of local communities in heritage tourism is essential [43] to reduce negative impacts and ensure fair distribution of tourism benefits. At the same time, there are a number of obstacles of local residents' participation in tourism in least developed and some developing countries. Scheyvens (2003) claimed that albeit its importance, community involvement is constrained by a number of factors, such as residents' lack of knowledge, confidence, time, and interest.

Sometimes, some stakeholder groups may even become hostile, sabotaging, or politically manipulative. The importance of community participation in natural resource management and the tourism development have long been debated in western academic and planning circles [36, 44-50]. However, due to economic, socio-cultural and political conditions there are a number of differences between western societies and countries in Asia. Some limits described by Tosun (2000) in terms of barriers to community participation in developing countries can be found in Kazakhstan, especially in the centralization of public administration. On the one hand, 'Residents and other stakeholders' participation in decision-making has not been recognized as important in planning documents, nor has it been addressed in practice' [51]. On the other hand, most

of the residents are reluctant to participate in regional tourism decision-making and management.

Simply say, for various reasons discussed by Gu and Ryan [52], the application of principles of stakeholder participation to tourism planning in developing countries are difficult, although an objective of such planning is commonly the development of benefits for local communities. Additionally, except for issues of administrative structures, other issues also exist in the tourism development in the developing countries like Kazakhstan. The urgent one is the relatively early stages of tourism development. This means there is a lack of experience on the part of operating in the tourism industry. For residents, this lack of knowledge can be further handicapped if there are varying degrees of education level that indicates not all residents have the possibility to access the necessary requirements of full involvement in planning process. Today Kazakhstan tourism planning is heavily oriented towards the development of cultural tourism, and nature-based tourism just around developed big cities, such as Nur-Sultan and Almaty. Developing community-based tourism in marginalized rural areas are not perceived as important, in which having advantages of developing many types of tourism in one time, for example, ecotourism, equestrian tourism, ethnic tourism, agritourism and rural tourism. And the local residents are the most valuable human resources for tourism development. This study attempts to analyze this phenomenon given the local importance of residents in that region.

2.1 Evaluation on Local Residents' Participation in Tourism

Data Collection and Methodology: A mixed methods research design was employed, integrating quantitative and qualitative methods in data collection and analysis. Questionnaire surveys and key informant interviews were used as the major primary data collection methods. Government documents and tourism statistics facilitated the effective execution of the surveys and interviews and complemented results for primary data analysis. Representatives both

from Zhabagly settlement and Abaiyl settlement residents were interviewed, at the same time, in order to understand LRP level comprehensively. Director of the scientific research department of Aksu-Zhabagly state nature reserve office, the mayor of the Zhabagly village and the director of the travel company “Zhana-Talap” in Shymkent city were also interviewed with some specific questions concerning the influential factors of local residents’ passive participation in tourism activities. Face-to-face interviews with aforementioned experts and all questionnaire surveys were conducted in three weeks.

The questionnaire to all relevant respondents was designed with three major parts. PART 1 was designed by ticking "√" on the corresponding option to acquire basic information about their gender, age, ethnic and education level. Together with, it was designed with some multiple choice questions indicating annual household income, current engaging industry, number of people who engage in tourism in their family, tourism income rate in their annual household income and the most suitable industry for buffer zone of Aksu-Zhabagly Nature Reserve to understand local residents’ economic situation and participation level in tourism generally, and obtain respondents' opinions on industries which have more advantages to develop at the buffer zone of the heritage site in the future. A questionnaire survey was used to evaluate the two main neighboring communities’ tourism relevance degree in PART 2, including residents' choice in a suitable industry, residents' choice in a suitable re-select industry and residents' care about tourism development strategies. PART 3 evaluates respondents’ perceptions of statements regarding local residents' supports for and participation in tourism development at the Aksu-Zhabagly natural world heritage site and the main reasons why local residents do not participate in tourism development. Question items in the section 3 encouraged respondents to answer on a 5-point Likert scale questions with 1 (fully agree), 2 (agree), 3 (neutral), 4 (disagree) and 5 (fully disagree). Data collection occurred over a 20-day period from 2nd of March to 22th of March, 2019, with respondents selected from Zhabagly settlement (166 people out of 1571 economically active population) and Abaiyl settlement (56 people out of 275 economically active population).

We went to the aforementioned two settlements and issued our questionnaire to respondents personally. Using five-point Likert-scale options, the respondents were asked for their opinion on total 14 questions, including 7 statements regarding the local residents' supports for and participation in tourism development at the Aksu-Zhabagly natural world heritage site and left 7 statements are about the main reasons why local residents do not participate in tourism development by indicating 5 (fully agree), 4 (agree), 3 (neutral), 2 (disagree) and 1 (fully disagree).

Demographic characteristics description of respondents: Section 1 of table 2.1 shows that of the 222 respondents, 166 were from Zhabagly and 56 were Abaiyl settlements. According to Kazakh national traditions, specially, in small rural areas men usually take care of earning for living and women take care of housework and children, so we interviewed approximately two times more men than women with 66.3% and 67.9% from Zhabagly and Abaiyl settlements, respectively. The respondents were categorized into three age groups: young age group (ages between 18–34) with 60 respondents from Zhabagly and 22 respondents from Abaily, middle age group (35–54) with 88 respondents from Zhabagly and 27 respondents from Abaily, and elder group (≥55) with 18 respondents from Zhabagly and 7 respondents from Abaily. Most of the respondents were Kazakh ethnicity with 152 and 52 people from Zhabagly and Abaiyl settlements, respectively. At the same time, questionnaires were answered by 8 Russian ethnic people and 6 other ethnic groups in Zhabagly settlement and 2 Russian and 2 other ethnic groups in Abaiyl settlement. Most of the respondents had secondary to middle (school or college) education level with 142 respondents from Zhabagly and 50 from Abaiyl while only a few respondents had a high (university or above) education level with 24 respondents from Zhabagly and 6 respondents from Abaiyl (Table 2.1).

Section 2 of table 2.1 showed Zhabagly settlement had a slightly better economic background than Abaiyl settlement according to their annual household income comparison. Because population of annual household income of “below 500,000” and “500,000 –1 million” in Zhabagly settlement with 6.6% and 49.4% were less than Abaiyl settlement’s 10.7% and 53.6%. And

population of annual household income of “1 million –1.5 million” and “1.5 million – and above” in Zhabagly settlement with 36.2% and 7.8% were more than Abaiyl settlement’s 30.4.7% and 5.3%. As far as their current engaging industries are concerned, there are more residents in Zhabagly settlement (10.2%) engaged in tourism than in Abaiyl settlements (2%). And most of the population of Zhabagly settlement engaged in animal husbandry and farming, with 48.8% and 23.6% respectively while more than half of the total population in Abaiyl settlement engaged in other industry with 53.6%. In this study Section 2 of table 1 also showed that 89.8% of Zhabagly people and 96.4% of Abaiyl residents’ jobs had nothing to do with tourism industry. 1-2 people's participation in tourism was 7.8% in Zhabagly settlement and 3.6% in Abaiyl settlement while 3 and above people’ participation in tourism was 2.4% in Zhabagly and 0% in Abaiyl. Comparing the tourism income rate in household income, families from Zhabagly, with tourism income rate of 1-20%, 21-60% and 61-100%, were 7.2%, 2.4% and 0.6% respectively, however, there is only families with tourism income rate of 1-20% in Abaiyl, accounting for 3.6%. From above statistical analysis we can easily conclude that both settlements had a weak involvement in tourism at the heritage site, however, residents from Zhabagly settlement had slightly a greater number of people participating and tourism income rate than Abaiyl settlement. Here we preliminary say that the participation level of local residents in Zhabagly settlement is higher than Abaiyl settlement. And the reasons which caused hese differences will be analyzed in the next section. In terms of multiple-choice question of the most suitable industry for the buffer zone of Aksu-Zhabagly Nature Reserve, both settlements’ residents thought tourism industry was more appropriate than others, with 52.4% and 67.9% support respectively. Although they have a very low participation rate in the tourism business at the area of nature reserve, most residents support for developing tourism industry rather than animal husbandry, farming and forestry in the buffer zone of world heritage site.

Table 2.1

Profile of respondents

Characteristics	**Zhabagly** (n=166)		**Abaiyl** (n=56)	
	Frequency	Percentage	Frequency	Percentage
SECTION 1				
Gender:				
Male	110	66.3	38	67.9
Female	56	33.7	18	32.1
Age (years):				
Young (18–34)	60	36.2	22	39.3
Middle age (35–54)	88	53	27	48.2
Elder (≥55)	18	10.8	7	12.5
Ethnicity:				
Kazakh	152	91.6	52	92.8
Russian	8	4.8	2	3.6
Other	6	3.6	2	3.6
Education:				
Middle (school or college)	142	85.5	50	89.3
High (university or above)	24	14.5	6	10.7
SECTION 2				
Annual household income: (KZT)				
Below 500,000	11	6.6	6	10.7
500,000 –1 million	82	49.4	30	53.6
1 million –1.5 million	60	36.2	17	30.4
1.5 million – and above	13	7.8	3	5.3
Current engaging industry:				
Tourism	17	10.2	2	3.6
Animal husbandry	81	48.8	11	19.6
Farming	39	23.6	7	12.5
Business	18	10.8	6	10.7
Other industry	11	6.6	30	53.6
Number of people who engage in tourism in your family:				
0 people	149	89.8	54	96.4
1-2 people	13	7.8	2	3.6
3 and above	4	2.4	0	0

Tourism income rate in your annual household income:	149	89.8	54	96.4
0 %	12	7.2	2	3.6
1-20%	4	2.4	0	0
21-60%	1	0.6	0	0
61-100%				
Suitable industry for the buffer zone of Aksu-Zhabagly Nature Reserve:	87	52.4	38	67.9
	45	27.1	8	14.3
Tourism	27	16.3	6	10.7
Animal husbandry	7	4.2	4	7.1
Farming				
Forestry				

2.1.1 Tourism Relevance of the Neighboring Communities

Current engaging industry comparison: As can be seen from Table 2.2, the settlement Zhabagly in the buffer zone of the Aksu-Zhabagly NR was typically dominated by animal husbandry (48.8%) and farming (23.6%), whereas settlement Abaiyl was other industry-dependent communities (more than half of the total population in Abaiyl settlement engaged in other industries with 53.6%). As far as the two settlements' tourism involvement is concerned, few people participated in tourism activities in both settlements. Comparing tourism involvement of two settlements, there were about 5 times more residents in Zhabagly settlement (10.2%) engaged in tourism than that in settlement Abaiyl (2%). During our study area investigation, we found that Zhabagly had more land available for animal husbandry and farming compared to Abaiyl, and we also found that the settlement Abaiyl is located along the railway. Thus, the current engaging industry of Zhabagly's people was animal husbandry and farming, while most Abaiyl's people were engaging in other industries due to the lack of arable land.

Comparison of residents' choice in a suitable industry: When answering the question about suitable industries in the Aksu-Zhabagly NR, about half of the respondents who settled in Zhabagly (52.4%) and about two-thirds of the respondents who settled in Abaiyl (67.9%) chose tourism. The second choice for respondents from the two settlements

was animal husbandry, which accounted for 27.1% of Zhabagly's population and 14.3% of Abaiyl's population. Zhabagly's respondents considered the forestry as the least suitable industry (4.2%), while Abaiyl's respondents thought farming as the least suitable industry (7.1%) in the territory of the Aksu-Zhabagly NR (Table 3.2). This means that although tourism is one of Kazakhstan's newly emerging industries, most people in Kazakhstan and even the country's rural people are aware of the economic, socio-cultural and environmental benefits of tourism development in the fragile biodiversity reserves.

Table 2.2

Comparison of residents' tourism relevance in neighboring communities

Questions regarding tourism relevance	Settlement Zhabagly (%)	Settlement Abaiyl (%)
What is your current engaging industry?		
Tourism	10.2	3.6
Animal husbandry	48.8	19.6
Farming	23.6	12.5
Commercial activities	10.8	10.7
Other industries	6.6	53.6
What kind of industry do you think is suitable for in the Aksu-Zhabagly NR?		
Tourism	52.4	67.9
Animal husbandry	27.1	14.3
Farming	16.3	7.1
Forestry	4.2	10.7
What kind of industry do you want to engage if you have a reselect chance?		
Tourism	28.3	19.6
Animal husbandry	31.3	32.1
Farming	19.3	10.7
Commercial activities	13.3	19.6
Other industries	7.8	17.9
Do you think your advice should be acquired when conducting tourism development strategies in the Aksu-Zhabagly NR?		
Should ask	38.1	21.4
It would be better	45.3	37.5
I do not care	12.9	35.7
No need	3.7	5.4

Reselect industries comparison: Table 2.2 showed that there were approximately the same proportion of people in both settlements (Zhabagly – 31.3% and Abaiyl – 32.1% respectively), who chose "animal husbandry" for their reselect industry. 28.3% of Jaagly's respondents chose tourism for their reselect industry, while 19.6% of Abaiyl's respondents chose tourism. In terms of "farming and commercial activities", the result of choice was opposite in two settlements. The number of people willing to engage in farming in Zhabagly and commercial activities in Abaiyl were almost the same, with 19.3% and 19.6% respectively, while those willing to engage in commercial activities in Zhabagly accounted for 13.3%, and those who willing to engage in farming in Abaiyl accounted for 10.7%. The proportion of Zhabagly residents who choose other industries was low (7.8%), but nearly one-fifth of Abaiyl's residents chose other industries (17.9%). More than half of the respondents in the two neighboring settlements believed that tourism is the most suitable industry to develop in this world heritage site, but for the question of reselect industries, most respondents in the two settlements chose animal husbandry as their first top wish. It means that the locals in the two settlements believe that tourism is good in many ways, they actually want to engage in their old professions.

Comparison of residents' care about tourism development strategies: In response to a question about whether residents' advice was obtained when developing tourism in the Aksu-Zhabagly NR, more respondents in the settlement Zhabagly answered "Should ask" (38.1%) and "It would be better" (45.3%), however, the Abaiyl respondents' answers focused on "It would be better" (37.5%) and "I don't care" (35.7%). There were only 12.9% of Zhabagly's respondents selected "I don't care", and 21.4% of Abaiyl's respondents selected the answer "Should ask". The answer "No need" was selected less proportion of people in both Zhabagly and Abaiyl, with 3.7% and 5.4% respectively (Table 3.2). This means that compared with the Abaiyl settlement, more Zhabagly settlers are concerned about the tourism development strategies in the Aksu-Zhabagly NR. This is because there are more people engaged in tourism in Jabably than that in Abayil (seen in Table 2.2).

Comparison of the current and reselected industries in neighboring communities: By comparing the respondents' reselected industries to the current industries (Figure 2.1), we found the following changes: The tourism industry was selected by 28.3% of Zhabagly's residents and 19.6% of Abaiyl's people after they had a reselect choice. It is about 4 times more in Zhabagly and about 5 times more in Abaiyl compared to the current engaging industry.

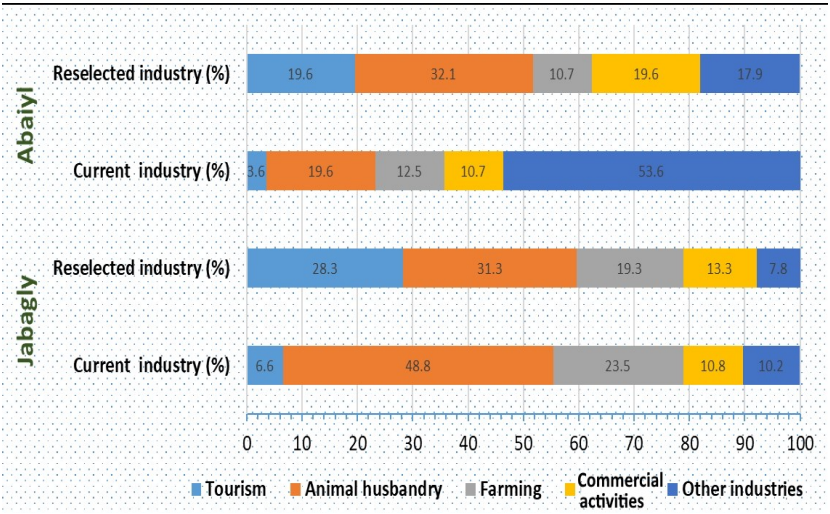

Figure 2.1 – Comparison of the resident's current industries with the reselected industries (complied by the authors)

In addition, the proportion of reselected animal husbandry (31.3%) is lower than that in the current industry (48.8%) in settlement Zhabagly, while the proportion of reselected animal husbandry (32.1%) is higher than that in the current industry (19.6%) in settlement Abaiyl. Then, there were not seen big changes in farming, commercial activities and other industries of Zhabagly after reselecting, the proportion of farming and other industry slightly decreased (from 23.5% to 19.3% and from 10.2% to 7.8% respectively), but commercial activities proportion increased a little (from 10.8% to 13.3%). Finally, after reselecting,

the proportion of other industry in Abaiyl has declined significantly (from 53.6% to 17.9%), at the same time, farming proportion somewhat decreased (from 12.5% to 10.7%) and the proportion of commercial activities increased more (from 10.7% to 19.6%). It can be concluded from the changes above that, the main industries of Zhabagly's community have become animal husbandry and tourism after re-selection, and the main industries of settlement Abaiyl is animal husbandry. The ideal industry for residents of the two settlements is "animal husbandry".

Distance Decay Law in Tourism Relevance: The purpose of distant villagers is to provide the tourism products that tourists need and compete with the local community for the market, which constitutes a competitive relationship with the residents who live adjacent to core tourist destinations [33]. Distance decay is a term used in geography to describe the effects of distance on spatial or cultural interactions. Distance decay means that the interaction between locals declines as the distance between them increases. In other words, if the distance between the two local communities increases, then their interactions decrease [53]. It can be seen in Table 3.2 that the level of tourism engagement, residents' wish of reselecting industries, and the residents' concerns about tourism development strategy were positively correlated with the distance of the Aksu-Zhabagly heritage tourism destination. By comparing the level of tourism engagement, residents' wish of reselecting industries and the residents' concerns about tourism development strategies, we found that people who engaged in tourism in Zhabagly (shorter distance from the core area) are more than those in Abaiyl (farther from the core area), of Zhabagly residents' wish of reselecting industries is higher than Abaiyl residents', and there are more Zhabagly's people concern about tourism development in the heritage site than Abaiyl's. Thus, it can be easily concluded that the smaller the distance from the community to the heritage site, the stronger the tourism relevance, and the stronger the tourism relevance, the higher level of tourism engagement, the more people have the wish to choose tourism as their reselect-industry, and the more people care about tourism development strategies in their neighboring area.

The farther the distance from the community to the tourism destination, the fewer people are willing to choose tourism as their re-selected industry, and fewer people care about the tourism development strategy of the nearby areas. Settlement Zhabagly is the nearest point of the core zone of the Aksu-Zhabagly NR, located in circle 2 and there is a strong tourism relevance between the community in settlement Zhabagly and the Aksu-Zhabagly NR, while settlement Abaiyl is located in circle 3, and the tourism relevance between the community and the NR is medium (Figure 2.2).

One of the most primary reasons for this phenomenon is definitely the location. In terms of location, the relevance of CBET in the Aksu-Zhabagly NR decreases in the following order: tourist hotspot – tourist hotline – tourist warm point – tourist cold spot. Settlement Zhabagly is a "tourist hotline", located near the hot spots, so tourists must visit there, it has good scenery and the best location, and some community residents participate in the tourism industry. Thus, the number of tourists is more in settlement Zhabagly than that in settlement Abaiyl. In terms of settlement Abaiyl, because of longer-distance very few residents in this settlement participate to the tourism industry in the NR, the community of settlement Abaiyl belong to the "warm point". Some tourists visit this area and few community residents participate in tourism there. If the community residents have different locations from the core zone of the tourism destination, the level of community participation and tourism concerns will be different.

A good location can enhance the tourism relevance of the community, thereby increasing the tourism engagement level of the communities, the communities' reselecting-tourism wishes and the communities' concerns about tourism development strategies.

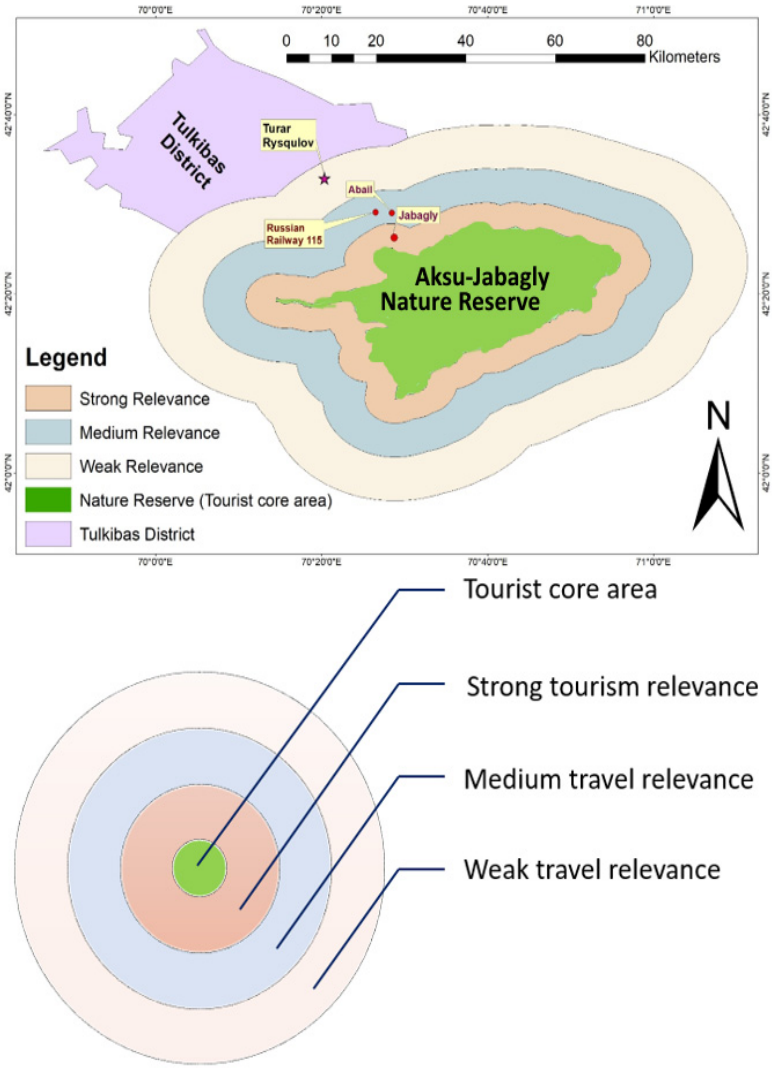

Figure 2.2 – Sketch map of tourism correlation distance decay
(complied by the authors)

2.1.2 Participation Rank and Empowerment of NeighboringCommunities

Participation rank: High level community participation is defined as a process by which people are enabled to become actively and genuinely involved in defining the issues of concern to them, in making decisions about factors that affect their lives, in formulating and implementing policies, in planning, developing and delivering services and taking actions to achieve change [54].

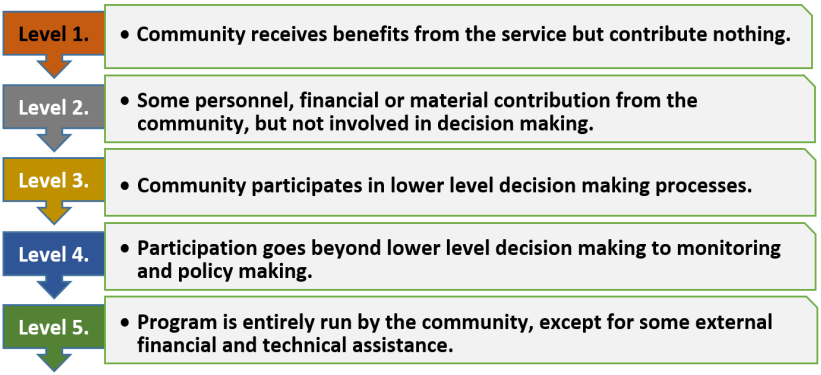

Figure 2.3 – Stages of the community involvement in tourism (complied by the authors)

Being a developing nation, the status of tourism development, democratization, land ownership, and the civil organization's development in Kazakhstan are still at a low level. When we interviewed professor Ordenbek Mazbayev (a tourism researcher from the Eurasian National University of Kazakhstan) he said: *"Local communities of tourism destinations in Kazakhstan are mostly in a shallow level of participation or non-participation: just participating in the field of economic activities, starting to have the interest-sharing appeal, but not exceeding the economic scope. As a rural local residents' participation in tourism, most people belong to a shallow level of participation due to their own limited abilities and other objective conditions. The community*

participation in tourism development at the Aksu-Zhabagly NR is no exception".

Figure 2.3 is the level of community participation in tourism development. The two levels below the figure (level 4 and level 5) belong to the advanced participation stage, and the above three levels (level 1, level 2 and level 3) are the primary participation stage.

When we interviewed the scientific research department director of Aksu-Zhabagly NR office, who knows local residents' participation situation in tourism of the Aksu-Zhabagly NR well, he said: "*Local communities mainly involved in general hospitality services and participation in tourism distribution, catering, accommodation, entertainment, transportation, etc. Although they are sometimes invited the meetings of decision making about tourism planning and management in their area to allow giving their suggestion to some degree, no community residents are involved in tourism administration at a higher level or entirely."* It can be seen from the above-mentioned fact that the communities of Zhabagly village are still in the low-level stage of the community participation hierarchy.

Community empowerment: Community tourism usually creates a unique view of the importance of community participation in rural development, which in turn leads to increased community capacity [55]. Most research in Western countries focuses on community's participation in decision-making, especially the tourism planning process [56]. Community empowerment is a process of re-negotiating power in order to gain more control, and it recognizes that if some people are going to be empowered, then others will be sharing their existing power and giving some of it up [57]. The ideal Western-style 'community participation' approach can be examined from at least two perspectives: decision-making and tourism benefit sharing [58]. Community empowerment, therefore, is more than the relevance, participation or engagement of communities. It implies community ownership and action that explicitly aims at social and political change. However, professor Ordenbek Mazbayev also said: *"Due to Kazakhstan's social reality, on the one hand, rural community participation in higher stages of tourism-participation,*

such as decision making and tourism planning, has not been recognized as important in tourism industry; and on the other hand, many rural residents do not desire to be involved in regional tourism decision-making and management.". According to the results of the tourism relevance questionnaire survey of the two neighboring communities and the analysis of community participation rank above sections, we knew that the tourism relevance of the neighboring communities with Aksu-Zhabagly heritage tourism destination was low, and their overall participation was at the lower level. As a result, we can say that communities of Zhabagly and Abaiyl settlements, like other rural areas' communities in Kazakhstan, are not well prepared for an active public participatory approach in decision-making, planning and management of tourism activities. For "empowerment", there are two definitions, one is to enhance the understanding of individual abilities and rights through external intervention and help to reduce or eliminate the process of powerlessness. The ultimate goal is to point to the social action of acquiring rights and the resulting structure of social change [59]; the other is defined as an action-process that builds awareness, empowers and develops skills, leads to greater participation, greater equality, and greater impact [60]. The meaning of community empowerment is reflected in the economic, socio-cultural and political aspects, as shown in Figure 3.4. Through community empowerment, residents' incomes will increase, community infrastructure will gradually improve, economic and social benefits will be improved, and residents will become the biggest beneficiaries. Participation in decision-making generally refers to empowering local residents to determine their hopes and concerns for tourism [28]. According to the locus of the right to tourism development and operation, there are two general modes of rural communities' tourism development: top-down and bottom-up. The former refers to those dominated by local governments, corporations or non-governmental organizations (NGOs); the latter refers to those dominated by local residents or migrants in rural communities [61]. It can be concluded from the above-discussion that foreign residents have relatively large rights in community participation while Kazakhstan communities' participation in tourism and residents' rights are weak.

The scientific research department director of Aksu-Zhabagly NR office also said: *"The tourism activities in the core zone of the heritage site have been strictly controlled and monitored by the heritage management office. Although it is said that the chance of tourism development in the buffer zone gives everyone equally, tourism planning and organizing events in the buffer zone have been monopolized by very few business-skilled and politically powerful people, some of whom are not local residents"*. Therefore, we can claim that in accordance with its law Kazakhstan is a democratic country like western states, the government or other political parties have empowered their community or citizens, every citizen of the Republic of Kazakhstan has the privilege to participate in events holding around them, and bottom-up management should be applied in the decision making, however, community residents' rights are always limited, their enthusiasm to participate in various economic activities including tourism development is very low, and the top-down management of governments, corporations or NGOs plays a primary role in CBET development at the Aksu-Zhabagly NR.

The result of the questionnaire survey regarding tourism relevance of neighboring communities at the selected research area showed that despite the fact that a small number of local residents in the settlements of Zhabagly and Abaiyl were engaging in the tourism activities, more than half of the population in both communities considered tourism as the most suitable industry for developing in the heritage site and cared about the tourism development strategies in the heritage site. At the same time, according to them reselect-industry wish, a relatively high number of locals have a desire to participate in the development of tourism. It means that based on the situation of these two communities, if the majority of the people chose tourism for the answer of the suitable industry and people chose tourism as their second wish for the answer of the reselect industry, we will see that those residents are highly motivated to believe in future benefits of tourism and to participate in tourism.

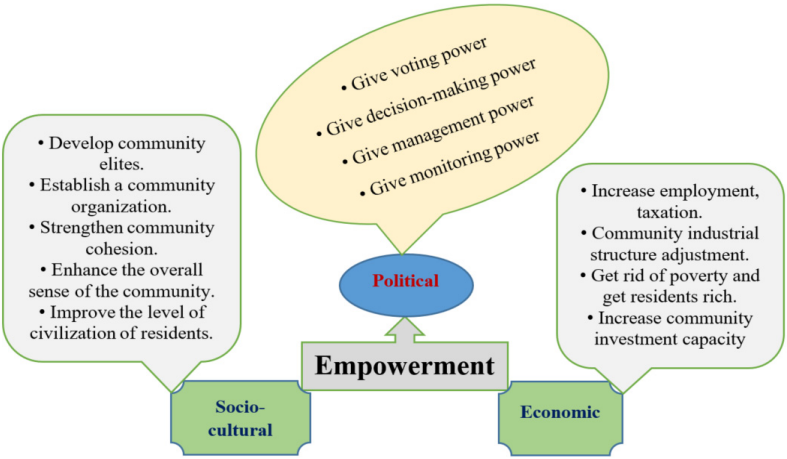

Figure 2.4 The significance on the empowerment of the local communities (complied by the authors)

According to the documents of Kazakhstan National Committee for the UNESCO Program "Man and Biosphere" and Nomination Dossier of Western Tien-Shan, local communities should be involved in the development and management plans of the biosphere reserve. However, professor Ordenbek Mazbayev said: *"Due to their low educational level, corruption, monopoly, and lack of competitiveness, limited management and operational capabilities, they have not participated well in tourism development management plans in rural areas."*. If rural areas are developed as tourism destinations, local community rights to local resources do not change, and as local owners, the local community has the right to use and prioritize the community's tourism resources. They have the right and obligation to participate in the development and protection of local community tourism resources, the right to participate in tourism development decisions and the right to obtain tourism income fairly. Our results also reveal that although the community residents of village Zhabagly are the owners of the heritage sites, part of the tourism resources and providers of human resources, the tourism participation level and empowerment status of the main neighboring communities are still low.

2.1.3 Comparison on Residents' Tourism Supports and Participation Degree

The two settlements neighboring WHSs have apparently similar historical background. however, there are differences in the participation of communities in tourism activities on the heritage site. How do local people evaluate the status of LRP in tourism development at the WHS? The respondents' answers are expressions of their perceptions. Although the dissimilarity of opinions between statements regarding local residents' supports for and participation in tourism development at the Aksu-Zhabagly natural world heritage site are obvious in Table 2.3 below, interpretation is needed for understanding more clearly. And Table 2.3 showed a five-point Likert-scale choice of selected questionnaire statement groups (S-s).

First, as far as statements of Local residents' supports and participation are concerned, majority of respondents from both Zhabagly and Abaiyl settlements (ZhS1: mean=4.33 and AS1: mean=4.04, respectively, and ZhS2: mean=4.31 and AS2: mean=4.09, respectively) supported the idea of conservation of nature reserve ecology through developing tourism at the heritage site and improving residents' wellbeing through developing tourism in the buffer zone of the nature reserve.

Table 2.3

Local residents' responses to statements about participating in tourism

Local residents' supports for and participation in tourism development at the Aksu-Zhabagly:	Fully agree	Agree	Neutral	Disagree	Fully disagree	**Mean**
Zhabagly Statements (ZhS), (n = 166)						
1. I support the strategy of conservation of nature reserve ecology through developing tourism at the heritage site.	57.8	24.2	12.0	4.8	1.2	**4.33**
2. I support the strategy of improving residents' wellbeing through developing tourism in the buffer zone of the reserve.	54.2	27.7	13.9	3.0	1.2	**4.31**
3. I participate in ecological protection works of this tourist destination.	18.1	28.3	8.4	28.3	16.9	**3.02**

4. I participate in receiving tourists in this tourist destination.	14.6	23.1	20.2	24.3	15.8	**2.96**
5. I participate in management works of tourist destination.	7.2	15.1	7.8	28.3	41.6	**2.18**
6. I participate in decision making about tourism development.	6.6	16.9	7.8	24.7	44.0	**2.17**
7. I participate in planning works of tourism development.	12.0	18.1	6.0	23.5	40.4	**2.38**
Abaiyl Statements (AS), (n = 56)						
1. I support the strategy of conservation of nature reserve ecology through developing tourism at the heritage site.	53.6	25.0	3.6	7.1	10.7	**4.04**
2. I support the strategy of improving residents' wellbeing through developing tourism in the buffer zone of the reserve.	55.3	21.4	5.4	12.5	5.4	**4.09**
3. I participate in ecological protection works of this tourist destination.	1.8	5.4	8.9	26.5	55.4	**2.70**
4. I participate in receiving tourists in this tourist destination.	1.8	12.5	14.3	17.8	51.8	**1.98**
5. I participate in management works of tourist destination.	3.6	10.7	7.1	39.3	41.1	**1.93**
6. I participate in decision making about tourism development.	3.6	7.1	5.4	21.4	62.5	**1.68**
7. I participate in planning works of tourism development.	3.6	10.7	7.1	39.3	41.1	**1.93**

One of the most essential elements of realizing STD at susceptible and vulnerable natures like Aksu-Zhabagly natural world heritage site is the highly participation of local residents in the ecological protection of the heritage site. And the statements regarding ecological protection works of the nature reserve was answered somewhat positively by Zhabagly residents (ZhS3: mean=3.02) while it was responded more negatively by residents from Abaiyl (AS3: mean=2.70). And these results showed that all two settlements had a stronger support for the strategies of conservation and local development through tourism development at

the heritage site, and residents from Zhabagly settlement involved in heritage site conservation to some degree whereas very few people from Abaiyl participate in conservation work.

Interviews support these findings. In terms of participation in receiving tourists, management works of tourist destination, decision making about tourism development and planning works of tourism development, (S4, S5, S6 and S7), nearly all respondents answered negatively with mean below 3. And there was less participation level in Abaiyl settlement with mean below 2 comparing with Zhabagly settlement (mean was between 2 and 3). Among 4 statements assessing participation in tourism level, receiving tourists was answered by comparatively higher number of respondents with (ZhS4: mean=2.96 and AS4: mean=1.98, respectively). In terms of participation in management and planning works, there were still low mean scores in both settlements, which were answered by respondents from Zhabagly with (ZhS5: mean=2.18 and ZhS7: mean=2.38, respectively) and respondents from Abaiyl with (AS5: mean=1.93 and AS7: mean=1.93, respectively). And the indicator "participation in decision making about tourism development" was responded by the lowest number of residents from both settlements with (ZhS6: mean=2.17 and AS6: mean=1.68, respectively). This result showed that although this tourism destination had been inscribed in the list of world heritage site and tourism has been developed there, the local residents, who are the most affected stakeholders of the heritage site, have not participated in tourism activities well, and the overall participation level of Zhabagly settlement was a little higher than that in Abaiyl settlement.

In conclusion, majority of respondents from two selected research area supported for tourism development strategies at Aksu-Zhabagly heritage site. And the participation level of tourism activities at the heritage site was a little higher in Zhabagly than in Abail settlement, nevertheless, overall participation degree was comparatively low.

2.2 Local Residents' limitations to Participation in Tourism

2.2.1 Main Limitations of Residents' Participate in Tourism

The two settlements located vicinity the world heritage site (WHS) have a seemingly similar historical background, but there are differences regarding CP in tourism development at the WHS, and the industries they have engaged in differentiate them. local people's evaluation in the previous sections indicated that the status of LRP in tourism development at the WHS was comparatively low. And in this section, we are going to analyze and discuss the primary reasons for the existing low CP in tourism. The respondents' answers are expressions of their perceptions. Given the result from the empirical data, the dissimilarity of opinions between statements regarding the main reasons why local residents do not participate in tourism development is distinguishable, but not so clearly, and therefore subject to interpretation. Table 3.4 showed a five-point Likert-scale choice of selected questionnaire statements (S-s) by indicating 5 (fully agree), 4 (agree), 3 (neutral), 2 (disagree) and 1 (fully disagree).

Answering questionnaires concerning the obstacles of residents' participation in tourism (S-s), except for statement of far residential location from the tourist destination (S3: mean=1.05) and tourism industry's monopolization by few individuals or organizations (S6: mean=2.96), all rest impediments for LRP in tourism were responded by Zhabagly's residents with a higher consent.

At the same time, except for statement of tourism industry's monopolization by few individuals or organizations (S6: mean=2.61), all rest impediments for LRP in tourism were responded by Abaiyl's residents with a higher consent. Far residential location (S3) was the biggest impediment for Abaiyl settlement's local residents (mean=4.55), while it was not considered as an obstacle for residents from Zhabagly (mean=1.05). There was a slightly more "disagree rate" than "consent rate" by both settlements' residents about monopolization of tourism industry by few individuals or organizations, with (ZhS6: mean=2.96 and AS6: mean=2.61). It shows that far distance from the community to the heritage was not a barrier for Zhabagly's community to participate in tourism, and residents in both Zhabagly and Abaiyl did not think tourism industry's

monopolization by few individuals or organizations as a big obstacle for their involved in tourism industry. It means that they have an equal opportunity for engaging in tourism industry to some extent.

Table 2.4

limitations of Zhabagly and Abaiyl settlements to participation in tourism

The main reasons why local residents do not participate in tourism development:	Fully agree	Agree	Neutral	Disagree	Fully disagree	**Mean**
Zhabagly settlement (ZhS), (n = 166)						
1. Shortage of necessary funds.	30.2	42.2	12.0	8.4	7.2	**3.80**
2. Insufficient labor force.	24.1	39.2	6.0	22.3	8.4	**3.48**
3. Far distance from the community to the heritage.	3.0	4.8	4.2	9.6	78.4	**1.05**
4. Few tourists to this tourist destination.	54.2	30.2	9.6	4.2	1.8	**4.31**
5. Lack of knowledge about tourism planning and management.	24.1	36.1	21.1	12.7	6.0	**3.60**
6. Tourism industry is monopolized by few individuals or organizations.	9.6	18.1	42.2	19.3	10.8	**2.96**
7. Lack of preferential policies for supporting residents' participation in tourism.	36.2	48.2	3.0	8.4	4.2	**4.04**
Abaiyl settlement (AS), (n = 56)						
1. Shortage of necessary funds.	39.3	35.6	3.6	16.1	5.4	**3.87**
2. Insufficient labor force.	28.6	30.4	8.9	14.3	17.8	**3.37**
3. Far distance from the community to the heritage.	82.1	5.4	1.8	7.1	3.6	**4.55**
4. Few tourists to this tourist destination.	60.7	19.6	5.4	8.9	5.4	**4.21**

5. Lack of knowledge about tourism planning and management.	8.9	32.1	53.6	3.6	1.8	**3.43**
6. Tourism industry is monopolized by few individuals or organizations.	10.7	21.4	12.5	28.6	26.8	**2.61**
7. Lack of preferential policies for supporting residents' participation in tourism.	55.3	21.4	5.4	12.5	5.4	**4.09**

Shortage of necessary funds (S1), insufficient labor force (S2), and lack of knowledge about tourism planning and management (S5) were thought to be a comparatively big handicap for both settlement residents' participations in tourism, with (ZhS1: mean=3.80, ZhS2 mean=3.48 and ZhS5: mean=3.60, AS1: mean=3.87, AS2 mean=3.37 and AS5: mean=3.43, respectively). Without a doubt, the most crucial two barriers for two settlements' participation in tourism were few travelers to this tourist destination, with (ZhS4: mean=4.31 and AS4: mean=4.21), and lack of the preferential policies for supporting LRP in tourism, with (ZhS7: mean=4.04 and AS7: mean=4.09).

In conclusion, considering all indicators regarding impediments of LRP in tourism development, two settlements' respondents' perceptions were diverse between some statements. And the results of survey showed that shortage of necessary funds, few tourists to this tourist destination and insufficient preferential policies for local residents were the common reasons for all residents in two settlements, and far residential location from the tourist destination was the primary reason for Abaiyl settlement's people.

When we interviewed three relative experts, the mayor of the Zhabagly village, the scientific research department director of Aksu-Zhabagly state nature reserve office and the director of the Zhana-Talap travel company, who knows LRP situation in tourism at the Aksu-Zhabagly state nature reserve, we found that although the world heritage tourism destination has a high popularity with nature based tourism through CIS (Commonwealth of Independent States) countries, few local residents engaged in tourism business. The Akim

(mayor of village) claimed that the main two reasons were lack of business skills and laziness of the local residents. He also said most of the villagers have earned their living by relying on animal husbandry and farming, and "I will be very glad if they engage in tourism activities". The scientific research department director told us that the tourism activities in the core zone of the heritage site have been strictly controlled and monetarized by the heritage management office in Zhabagly settlement, however, tourism planning and organizing events in the buffer zone have been monopolized by few skilled people, some of whom are not local residents. After highlighting the importance of protecting Aksu-Zhabagly state nature reserve, he also asserted that although this village has great potential of developing other types of tourism on the basis of eco-tourism at Aksu-Zhabagly heritage site, such as rural tourism, agritourism, medical tourism and ethnic tourism, unfortunately, the government have not paid attention to this fact and the villagers have not been aware of the significance of developing community-based tourism. Interviewing the director of the Zhana-Talap travel company, we found that although many tourists have a big desire for visiting this tourism destination, there are existing some drawbacks that have banned coming of large number tourists to this tourism destination, for example low quality service facilities (including old car, tired horse and unprofessional local tour guides) and the higher accommodation price.

2.2.2 Reasons for Low Participation in Tourism

Li and Hunter (2015) listed several reasons why full community involvement is difficult to achieve in heritage tourism practices: (1) The host community is never a naturally unified single entity, but comprises multiple stakeholder groups, which may hold diverse views and conflicting interests toward how it operates. (2) Not all stakeholder groups will participate as soon as such opportunity has been made available. (3) Based on different resources held, each stakeholder group may have varying degrees of influence over decision making in tourism companies – for example, the government agency that authorizes tourism operation licenses has a

higher a level of power than grassroots environmental protection NGOs (nongovernmental organizations). Tosun (2000) claims the implementation of participatory tourism development methods requires radical changes in the socio-political, legal, administrative and economic structures of many developing countries. It is difficult for making decisions in the societies based on cumbersome social, economic and environmental trade. CP requires considerable time, money and skills to organize and sustain participation.

We admit that like most developing countries, aforementioned influential factors for citizens' participation in heritage and rural tourism also occur in our research area to some extent. Nevertheless, it may be said that it is impossible to discuss every relevant issue regarding local residents' participatory in tourism development at this heritage site in this article. Therefore, according to the findings of our investigation, we will discuss the most crucial three types of barriers that cause passive participation in the tourism activities at the Aksu-Zhabagly world natural heritage tourism destination. In a word, active and higher community involvement in tourism will be realized when the following issues are fully taken into consideration:

Few travelers to this tourist destination: It can be clearly seen from the survey results in Table 2.4 that all respondents from two settlements next to heritage tourism destination admitted the first most crucial limitation was few tourists' visitation to the tourist this destination. In many developed and some developing countries, few tourists' coming is not the primary reason of local CP in tourism, since their inbound and internal tourism is well developed. As a result, tourism destinations in those countries can be filled in tourists in the tourist seasons. After conducting some related investigations, we drew the conclusion that major reasons for few travelers to this tourist destination are insufficient promotion, Kazakhstan's small population, larger territory, low quality infrastructure in the rural area and inbound tourism just begins to develop.

Lack of preferential policies for LRP in tourism: In the Kazakhstan context, after independence transiting its economy from planned form to market form, the district (municipal)-level government is playing a leading role in the rural tourism development processes. However, Li (2004) argued that rural tourism development usually relies on the joint involvement of

governments, tourism enterprises, tourists, and local residents. In Kazakhstan, government plays an active role as planners, investors, investment stimulators, promoters, educators and regulators even though privatization policy in economic development has been implemented after independence. Although diversification of industry has become one of the vital tasks of Kazakhstan government recently, the development of tourism industry in the remote rural areas has not been paid completely attention by the state yet. Therefore, the preferential policies for local communities' engagement in tourism industry are not implemented practically in the rural residential areas. As can be seen from the study results in Table 2.4, the government's insufficient support for LRP in the tourism industry is seen as the second major cause of low participation in tourism.

Lack of necessary funds, labor force and skills of tourism planning and management: The introduction of tourism within communities usually requires funds to be allocated to develop a tourist infrastructure of facilities (Reed 1997). Lack of qualified human resources in the tourism sector in many tourism destinations in the developing world has stimulated an influx of employees from other parts of country to work in tourism (Tosun 2000). And Murphy (1985) noted, effective management of tourism industry requires day-to-day and season-to-season operational decisions. He also claimed that if the local residents do not catch up with the modernized knowledge of tourism management, the low status, unskilled jobs associated with low wages and hardworking conditions will always leave for them. These shortcomings have appeared as a major limitation to the LRP in tourism development in developing countries and even in relatively undeveloped regions of developed countries. Our findings from Table 3.4 showed that above mentioned drawbacks were the third primary obstacles for the Zhabagly and Abaiyl settlement's people to engage in tourism industry. And the result of interviews with the experts showed that the local administration had not formulated any special training program for local residents although they admitted one of the main influential factors for residents' participation in tourism had been lack skills of planning, organizing and managing tourism. Therefore, despite the fact that they have some wish to be involved in tourism,

because of some impediments, local community involvement in tourism development has still been resting on a passive participation stage.

Among above discussed three types of barriers which hinder CP, former two limitations, such as few travelers' coming to this tourist destination and lack of preferential policies for LRP in tourism were the crucial barriers highlighted by both selected community residents. In this regard, it is suggested that active measures must be taken to attract large number of tourists to this tourism destination, at the same time, government institutions should provide many favorable policies for LRP in tourism.

This study was not without its limitations that can affect the applicability of the results. This study applied perception of local residents in two different geographical locations to assess participation status of them in heritage tourism development. By having focused solely on local residents as well as interviewing three relevant experts, this study did not investigate the perceptions of other stakeholder groups, such as tourists, government/local authorities or tourism industry/the private sector. And this can be a limitation of the present research, however, it will give a chance for future study. Furthermore, in this study the sample size of respondents was not large and respondents were selected from only two communities adjacent to world heritage site, which are considered as the most affected. This might be thought as another limitation of the current study and this one should be handled in future studies.

Chapter 3 AN ANALYSIS OF TOURISM REVENUE SHARING CONSTRAINTS

Although the tourism industry plays an important role in generating profits from tourist attractions, it is argued that the sector's costs, benefits, and power are unfairly distributed among different stakeholders, and the scale is different, affecting the effectiveness of tourism as a source of revenue, conservation and development tool. Tourism can increase government revenue, but how to share it fairly is unknown [62]. Local communities in Third World countries cannot benefit much from tourism because they seldom control the development ways of the industry, they cannot match the financial resources available to external investors, and their opinions are hardly ever heard [63]. Empirical research shows many countries and regions rich in biodiversity and poor in economy have been promoting tourism revenue allocation and equitable distribution as a conservation tool around PAs for improving the living standard of the people [64]. However, despite implementing the mechanism around several PAs in developing countries, the mechanism has not achieved the desired intent. Evidence indicates that the effectiveness of this policy has been mixed because, in developing countries, there is a lack of transparency in the benefit channels and distribution schemes in most PAs, poor institutional arrangements and corruption within revenue collection and distribution [45], which limits the goal of improving the welfare of people in PAs. According to Honey (2008), although some revenue has been invested in primary community projects, there is poor distribution and allocation of this resource to the local level. The lack of attention to individual differences in communities has led to problems of inequitable access to resources and distribution of benefits. At the same time, it has subsequently reduced the commitment of locals to preserve the resource base in the long run [65]. If an industry's revenue-sharing tends to a specific class (for example, greater revenue class), then this will not be desirable in terms of "social equity". Therefore, economic policy must also address the sharing of interests among various stakeholders [66]. The more transparent are tourism’s benefits to the communities, the

greater the respect for tourism and the realization of its impact on peoples' lives [12].

It is generally known among eco-tourism researchers that TRS has become a popular strategy for wildlife protection and rural development in Africa. For example, countries such as Rwanda, Uganda, Tanzania, Zimbabwe and Zambia have their own TRS models. However, the efficiency of the TRS strategy in conservation has been criticized. The implementation of TRS is sophisticated and requires a deeper understanding of both conceptual and structural constraints [67]. while the scheme distribution of tourism revenue may affect the community in general, benefit channel and distribution at the different community level is affected by the existing a pattern of socio-economic within the communities. People who are most powerful in economics and politics can influence the unequal distribution of tourism revenue at the different community levels [68]. The revenue-sharing program of Rwanda Development Board (RDB) has improved community protection to a certain extent because there are some obvious factors that make some former poachers become park protectors. However, there are some challenges in the plan, such as bureaucracy and selection of fundable projects, and there is no direct link between its contribution and the reduction of illegal activities in the park [69]. In the case of volcanoes national park in Rwanda, Village leaders and RDB officials decided on the projects to be funded without much consultation with local residents. The TRS scheme is not highly appreciated by local residents and many of them see themselves as deceived. At the same time, local people see the TRS scheme as a project that benefits those directly involved in nature conservation work and tourism industry, rather than a project that supports the community as a whole [70]. In the case of Bwindi in Uganda, it is believed the process of TRS is not fair and transparent, for example, some local residents reported that CPI representatives and leaders of villages spend the revenues on people in their villages as a way to reward their electorate [71]. There is no doubt that one form of TRS is to create employment opportunities for local community members. But in the case of Maasai communities in Tanzania, the revenues from tourism in Maasai seem to have been misused and caused a lot of conflicts within the village, as most villagers do not know how

much villages earns from tourism, so the leaders often tamper with the money [72]. In addition, since there is no legal agreement and no recognized TRS mechanism, few people in the community will enjoy such benefits [73]. Weaknesses of human capital have allowed only the community members to participate in the benefits of eco-tourism who are semi-skilled in in the planning, business management, financial management, marketing, product research and development community, and a group of people who are incapable of doing so often remain poor [74].

3.1 Assessment of the Tourism Revenue and Its Sharing Status

3.1.1 Tourism Generated Revenue in Aksu-Zhabagly Tourist Destination

Tourism revenues are a measure of the economic impact of tourism. They include all tourism-related spending within a country by foreign visitors and local people travelling within the country, in categories such as accommodations, transportation, food and beverage, cultural services, recreation and entertainment, and travel agency, and other reservation services.

The main sources of tourism revenue in the Aksu-Zhabagly: As can be seen from Table 3.1, the tourism revenues in the Aksu-Zhabagly tourist zone are collected from an entrance ticket to the NR territory, a fee for accompanying guards (escorts), a museum entrance ticket, hotel accommodation and three meals fee.

Table 3.1

Prices for various services of Aksu-Zhabagly NR office in 2018 [25]

Revenue sources	Time	Prices for Kazakhstani	Prices for foreigners
Tourist paths ticket			
1 adult	1 day	640.5 KZT	1440.5 KZT
1 student	1 day	540.5 KZT	1140.5 KZT
1 pupil	1 day	440.5 KZT	840.5 KZT
Instructor's (guide) **service fee**			

1 group of adults	1 day	1200 KZT	1650 KZT
1 group of students	1 day	900 KZT	1237.5 KZT
1 group of pupils	1 day	600 KZT	825 KZT
Inspector's (escort) **service fee**			
Inspector for adults	1 day	850 KZT	1300 KZT
Inspector for students	1 day	637.5 KZT	975 KZT
Inspector for pupils	1 day	425 KZT	650 KZT
Museum ticket			
1 adult	Once a day	150 KZT	150 KZT
1 student	Once a day	113 KZT	113 KZT
1 pupil	Once a day	75 KZT	75 KZT
Transportation fee			
Passenger car (Niva)	1 hour	2200 KZT	2200 KZT
Passenger car (Uaz)	1 hour	2700 KZT	2700 KZT
Microbus (Gazel)	1 hour	3000 KZT	3000 KZT
Horses	1 hour	550 KZT	550 KZT
Accommodation and meal fees			
Comfort room (included 3 meals)	24 hours	9000 KZT	9000 KZT
Standard room (included 3 meals)	24 hours	7500 KZT	7500 KZT
Note: (1$ = 375 KZT in 2018)			

When we interviewed the head of the tourism department in Aksu-Zhabagly NR office, she said that the first three payments are obligatory for tourists who visit the NR, and most tourists generally stay in hotels and eat three meals every day. Tourists may also pay additional fees for instructor's (guide) service and transportation. As for the instructor's (guide) service, some of the office staff give the instructor service to the travelers in this tourist destination. Thus, one of the net income of the NR management office is the instructor's (guide) service fee. Due to the largeness of NR, distant and difficult roads to travel, most tourists usually rent transportations. Here tourists can choose from two different types of vehicles, renting horses or cars provided by the NR office. Most of both domestic and foreign tourists select hiking or hire horses, but on the contrary, few

tourists rent cars. This means that the NR has less profit from car rentals.

Main annual tourism income prediction in Aksu-Zhabagly: Table 3.2 shows that the total tourism revenues of Aksu-Zhabagly NR reached about $57,500 in 2018, an increase of about $2.5 thousand compared to $55 thousand tourism revenue in 2017. Comparing the domestic and foreign tourism revenues, there is more tourism revenue from foreign tourists than that from domestic tourists in 2017 and 2018. It indicates that this tourism destination attracts more travelers from outside the country and it has a great potential of generating more foreign tourism income. Although there is apparent growth in domestic tourism revenue, tourism revenue by foreign visitors has a slight drop.

Table 3.2

Main annual tourism revenue of Aksu-Zhabagly NR from 2017 and 2018 [25]

Years	Total revenue	Revenue from domestic tourists	Revenue from foreign tourists
2017	$55,024.19	899 × $25.75 = $23,149.25	1,098 × $29.03 = $31,874.94
2018	$57,645.81	1,055 × $25.75 = $27,106.25	1,052 × $29.03 = $30,539.56
Years	Total tourist number	Domestic tourist number	Foreign tourist number
2017	1,997	899	1,098
2018	2,107	1,055	1,052
(Date sources: tourism department of Aksu-Zhabagly state NR office)			
Main tourism revenue types		Prices for Kazakhstan citizens	Prices for foreign citizens
Entrance fee + museum ticket + escort fee + living and meal fee		1.71 + 0.4 + 2.27 + 21.33 = $25.75 (per adult per day)	3.84 + 0.4 + 3.46 + 21.33 = $29.03 (per adult per day)
Note: (1$ = 375 KZT in 2018)			

When we interviewed Zhumanova Elmira Perdebaevna, the head of the environmental education and tourism department of Aksu-Zhabagly state NR, she said it depends on the amount of inbound travel and “I think there is less inbound travel in 2018 than that in 2017”. In our opinion, this needs further research.

3.1.2 The Tourism Organizers' Revenue Sharing Status

Over the past two decades, tourism has become more popular both as a major revenue source for rural people adjacent to nature-based tourism destinations and as a means of preserving the protected natures. Sharing of tourism's relevant benefits with local residents have become the main tools for maintaining the sustainable development of PAs [75]. Sharing tourism revenues with local communities can contribute to the financial sustainability of local communities, which can invest in other projects, such as agriculture, obtain food, and bring other benefits to the market [69]. The PAs have special natural resources, and tourism income is one of the main sources of funding for the management of the PAs and improving the economic conditions of local residents. TRS has been identified by various environmentalists and conservationists as the best way to offset human-wildlife conflict, which impedes local support for national parks [76]. By channeling tourism revenue to local residents, conservationists hope to offset wildlife costs and improve local attitudes toward conservation. At the same time, biodiversity conservation will be sustainable if the distribution of the local interests satisfies stakeholders' wishes [77]. Thus, effective plans for sharing the benefits of tourism to PAs are important to establish the long-term local communities' support for tourism development [78]. The principle of the sharing of tourism revenue also underpins a win-win policy that focuses on environmental protection and local development [71]. Tourism activities based on natural landscapes can promote economic diversification and the well-being of people. Besides, tourism revenue will help develop infrastructure, introduce cultures and increase the quality of social services [14, 73]. If household revenue-generating activities are sponsored by tourism revenue, the total income of households will be increased and as a result, it will improve household welfare [73]. These approaches to revenue sharing increasingly promote "hybrid environmental governance", in which communities, businesses, NGOs and states share the responsibility and rights to manage and protect the world's biodiversity assets [79].

Many STD theories support that all the stakeholders must have equal opportunity and privilege to engage in tourism and earn their

living from the tourism development. However, it is indicated from the previous sections that nearly whole tourism businesses in Aksu-Zhabagly tourism destination were concentrated on few stakeholders, such as Aksu-Zhabagly heritage office and travel companies in Zhabagly village. And in this section, we are going to analyze and discuss how the above mentioned two main tourism organizers in Aksu-Zhabagly share their revenue with local residents.

Materials and methods: Questionnaire surveys were used as the major primary data collection methods. Government documents and tourism statistics facilitated the effective execution of the surveys and complemented results for primary data analysis. Representatives both from Aksu-Zhabagly nature reserve office and tour companies in Aksu-Zhabagly were interviewed, Face-to-face interviews with some participants were conducted during the three-week survey period. Interview and survey questions include the statements about how tourism organizers share their revenue with local residents.

The questionnaire to all relevant respondents was designed with three major sections. Section 1 was designed by ticking "√" on the corresponding option to acquire basic information about their gender, age, ethnic, education level and working time at your current post. Section 2 was designed with the multiple-choice question which indicates the current working field of the respondents. Section 3 evaluates respondents' perceptions of statements regarding how tourism organizers share their revenue with local residents. Question items in the section 3 encouraged respondents to answer on a 5-point Likert scale questions with 1 (fully agree), 2 (agree), 3 (neutral), 4 (disagree) and 5 (fully disagree). Data collection occurred over a 20-day period from 2nd of March to 22th of March, 2019, with respondents selected from workers of Aksu-Zhabagly nature reserve office (44 people out of about 60 workers) and workers of tour companies in Aksu-Zhabagly (66 representatives out of about 100 people who engage in tourism industry). We went to Zhabagly village and issued our questionnaire to respondents personally. Using five-point Likert-scale options, the respondents were asked for their opinion on total 6 statements regarding the how tourism organizers share their revenue with local residents.

Description of respondents' demographic characteristics: The social demographic characteristics of the two representative groups,

such as gender, age, ethnicity, education level and working time at your current post, are shown in Table 3.3. The sample size of workers of Aksu-Zhabagly nature reserve office is 44. About 70% of the respondents in the nature reserve office are male and female respondents are about 30%. The majority of respondents are middle age group (35–54), accounting for 68.20%, followed by young group (18–34), accounting for 25.00%, and the elder group respondents (≥ 55) in our survey are 6.80%. And the most of the respondents in nature reserve office is Kazakhs (93.10%), while Russian and other minorities only account for 6.90%, indicating that the community is mainly Kazakh and has a small number of other nationalities. From the perspective of education level, the proportion of people who have middle level education (including school and college) is the largest (88.60%) and those who have attended university or above account for 11.40%. The result showed that most of the workers of Aksu-Zhabagly nature reserve have received middle education. As working time at your current post is mentioned, the respondents of nature reserve office who work for "0 – 4 years" at their present post account for 27.30%, the respondents who work for "5 – 9 years" at their present post were 31.80%, and the respondents who work for "10 years or more" at their present post were 40.90%.

Table 3.3

Details of sample responses (n=110)

Characteristics	Workers of Aksu-Zhabagly nature reserve office (n=44)		Workers of tour companies in Aksu-Zhabagly (n=66)	
	Frequency	Percentage	Frequency	Percentage
Gender:				
Male	31	70.50	35	53.00
Female	13	29.50	31	47.00
Age (years):				
Young (18–34)	11	25.00	37	56.00
Middle age (35–54)	30	68.20	25	37.80
Elder (≥55)	3	6.80	4	6.20
Ethnicity:				
Kazakh	41	93.10	46	69.70
Russian	2	4.60	17	25.80
Other	1	2.30	3	4.50

Education:				
Middle (school or college)	39	88.60	54	81.80
High (university or above)	5	11.40	12	18.20
Working time at your post				
0 – 4 years	12	27.30	22	33.30
5 – 9 years	14	31.80	29	43.90
10 years or more	18	40.90	15	22.80

Sample size of workers of tour companies in Aksu-Zhabagly is 66. About slightly more than half of the respondents in the tour companies are male (53%), while our survey's female respondents are 47%. Respondents were concentrated on the young age group with 18-34 (56.00%), followed by middle age group (35–54), accounting for 37.80%, and the elder group respondents (⩾55) in our survey are 6.20%. And about two thirds of respondents are Kazakhs (69.70%), followed by Russian ethnic group, accounting for 25.80%, and the other minorities only account for 4.50%. indicating that in Aksu-Zhabagly tourism destination people who engage in tourism sector is mainly Kazakh and Russian. From the perspective of education level, the proportion of tourism company workers who attended school or college (middle level education) was the largest (81.80%), and 18.20% of those who received high level education (including university and above). As far as their current engaging industries are concerned, the respondents of tour companies who work for "0 – 4 years" at their present post account for 33.30%, the respondents who work for "5 – 9 years" at their present post were 43.90%, and the respondents who work for "10 years or more" at their present post were 22.80%.

Characteristics of working post of two representative groups: Figure 3.1 showed that there were more respondents from ecological protection department (43.20%), followed by respondents from tourism and ecological education department (25.00%) of Aksu-Zhabagly nature reserve office, and respondents from other departments of the nature reserve office account for small proportion (various events department workers:13.60%, financial department workers: 11.40% and scientific research department workers: 6.80%

respectively). Concerning the workers of travel companies in Aksu-Zhabagly, there were more respondents from tour guide office (31.80%), followed by respondents from various events organizer office and tour operator office (25.80% and 19.70% respectively), and respondents from travel agent office and PR manager office were 13.60% and 9.10% respectively).

From above statistical analysis we can easily see that there were more people engage in ecological protection in Aksu-Zhabagly nature reserve office and people who engage in tourism and ecological education also account for comparatively high proportion. It indicates that the nature reserve office more focuses on ecological protection of the nature reserve, at the same time, pay attention to developing tourism to some extent. If we look at the statistics of travel companies in the field of services, the number of tour guides and organizers of various events is relatively large, it can be concluded that usually visitors to this tourist destination need instructors who know the specifics of this tourist route and in order to increase the popularity of the tourist facility and attract more tourists, many events are organized in the region every year. (Figure 3.1).

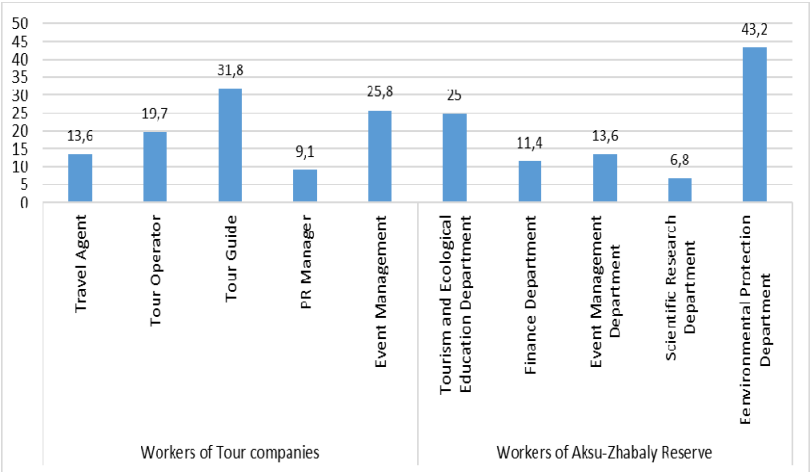

Figure 3.1 – Proportion of the respondents in the current working field (complied by the authors)

The two tourism organizers located in Zhabagly village are the main profitable units from the tourism development at the WHS, and the powers of tourism management they have differentiate them. The two tourism organizers located vicinity the world heritage site (WHS) have a different tourism engagement background, but there are not big differences regarding the statements of how tourism organizers share their revenue with local residents. The respondents' answers are expressions of their perceptions and therefore subject to interpretation. Given the result from the empirical data, opinions between statements regarding the main tourism organizers' TRS status with local residents is not so distinguishable. Table 3.4 showed a five-point Likert-scale choice of selected questionnaire statements (S-s) by indicating 5 (fully agree), 4 (agree), 3 (neutral), 2 (disagree) and 1 (fully disagree).

Answering questionnaires concerning the statements about how tourism organizers share their revenue with local residents (S-s), except for statement of "your organization's business operations do not undermine the living environment of local people" (S4: mean=3.36 for Aksu-Zhabagly nature reserve office workers and S4: mean=3.39 for workers of travel companies in Aksu-Zhabagly, respectively), all rest statements concerning how tourism organizers share their revenue with local residents were responded by both organizers' workers with a higher disagree, and the fluctuation between disagree score of the statements were not big, from 2.30 to 2.70. It shows that these travel organizers run their tourism business without damaging the living environment of local residents.

However, the respondents in both Aksu-Zhabagly nature reserve office and travel companies in Aksu-Zhabagly did not think tourism organizers' some profits is used for local community (S1: mean=2.48 for workers in Aksu-Zhabagly office and S1: mean=2.61 for workers in travel companies, respectively), tourism organizers prioritize the employment of local residents in their job occupancy (S2: mean=2.34 for workers in Aksu-Zhabagly office and S2: mean=2.64 for workers in travel companies, respectively), tourism organizers regularly train local residents in the tourism industry (S3: mean=2.48 for workers in Aksu-Zhabagly office and S3: mean=2.70 for workers in travel companies, respectively), tourists are encouraged by tourism organizers to consume local products and catering foods (S5:

mean=2.43 for workers in Aksu-Zhabagly office and S5: mean=2.44 for workers in travel companies, respectively) and tourism organizers always support local residents' involvement in tourism (S6: mean=2.50 for workers in Aksu-Zhabagly office and S6: mean=2.58 for workers in travel companies, respectively).

Table 3.4

Responses of workers from nature reserve office and tour companies

Statements about how tourism organizers share their revenue with local residents:	Fully agree	Agree	Neutral	Disagree	Fully disagree	**Mean**
Aksu-Zhabagly reserve workers (n=44)						
1. Your organization's some profits is used for local community (such as using local infrastructure, health care and education.).	6.80	18.2	15.90	22.70	36.40	**2.48**
2. Your organization prioritizes the employment of local residents in their job occupancy.	6.90	13.6	13.60	31.80	34.10	**2.34**
3. Your organization regularly trains local residents in the tourism industry.	11.40	13.6	13.60	34.10	27.30	**2.48**
4. Your organization's business operations do not undermine the living environment of local people.	22.70	34.1	13.60	15.90	13.70	**3.36**
5. Tourists are encouraged by your organization to consume local products and catering foods.	11.30	18.2	11.40	27.30	31.80	**2.43**
6. Your organization always supports local residents' involvement in tourism.	13.60	11.4	13.60	34.10	27.30	**2.50**

Tour company workers (n=66)						
1. Your organization's some profits is used for local community (such as using local infrastructure, health care and education,).	18.20	17.6	6.10	25.80	33.30	**2.61**
2. Your organization prioritizes the employment of local residents in their job occupancy.	16.70	16.7	12.10	22.70	31.80	**2.64**
3. Your organization regularly trains local residents in the tourism industry.	19.70	13.6	12.10	25.80	28.80	**2.70**
4. Your organization's business operations do not undermine the living environment of local people.	33.20	25.8	6.10	16.70	18.20	**3.39**
5. Tourists are encouraged by your organization to consume local products and catering foods.	13.60	18.2	4.50	25.80	37.90	**2.44**
6. Your organization always supports local residents' involvement in tourism.	15.20	16.7	9.10	28.80	30.20	**2.58**

From the above results we found that considering all indicators regarding tourism organizers revenue sharing status with local residents, respondents' perceptions of the two tourism organizers were nearly the same on all statements. And the results of survey showed that although the tourism organizers' business operations do not undermine the living environment of local people, they usually do not obey the principles of STD. Because their perceptions on sharing tourism profit with the first main stakeholder of the tourism destination were relatively low, indicating there is less support from aforementioned two tourism organizers for STD.

3.2. Tourism Revenue Sharing Constraints in Aksu-Zhabagly Tourist Destination

3.2.1 Hypothesis and Theoretical Model

Salafsky et al. (2002) tested the hypothesis that if the viable enterprise is associated with the biodiversity of the PA and generates benefits for a community of stakeholders, it will reduce the risk to the resource as a result. Mihalič et al. (2016) also constructed a six-factor model of political environment and destination governance's influence on STD. And we proposed a seven-factor model of the negative political environment's influence on sustainable tourism in our one of the previous studies. Our structural model in this study was developed based on the aforementioned hypothesis and models. The constraints of TRS schemes in African nations discussed above are another foundation of our proposed model. Our structural model takes into consideration the indirect impacts of the TRS constraints on local residents' non-participation in the tourism industry by assessing the perceptions of local residents from tourism development. In addition, two other determinants that affect this relationship should also be examined, such as the level of TRS and residents' dissatisfaction with tourism development. Our proposed model assumes the relationship between the aforementioned indicators, which have been studied in the context of STD by very few scholars so far. Therefore, the following three hypotheses (Figure 3.2) were developed and tested in this study:

Hypothesis 1: The greater constraints of TRS have a direct positive effect on lower level of TRS;

Hypothesis 2: The lower level of TRS has a direct positive effect on residents' dissatisfaction with tourism development;

Hypothesis 3: The residents' dissatisfaction with tourism development has a direct positive effect on residents' non-participation in the tourism industry;

Most of the research papers have focused on assessing the contribution of the TRS models in cultural and natural conservation. However, many previous studies have shown little interest in studying STD in terms of TRS concept. This article discusses this issue and contributes to understanding the constricting role of TRS

schemes' barriers in implementing sustainable tourism.

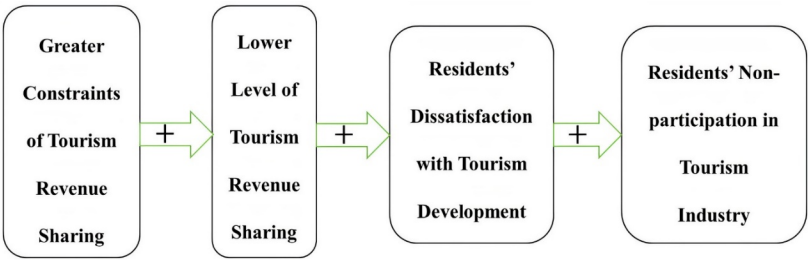

Figure 3.2 – Theoretical model (complied by the authors)

This paper presents a case study for the same tourist destination with the help of quantitative methods in data collection and analysis because effective policies for the development of community-based tourism and fair TRS are the most important prerequisites for the sustainable development of tourism in this tourist destination. Field research and data collection were conducted in about three week-long visits to the Aksu-Zhabagly eco-tourism destination from the 2 March to 22 March, 2019. The respondents (250 people out of 1,846 economically active population) were selected from the village Zhabagly. Focus respondents were local residents (the key stakeholder of Aksu-Zhabagly tourism destination) including herders, peasants, civil servants, eco-tour guides, guesthouse owners, cooks, taxi drivers etc. The self-administered questionnaire was distributed to residents of village Zhabagly. To obtain more accurate opinions and perceptions, we conducted our survey by issuing the prepared questionnaire to each occupied household. Residents were asked to complete the questionnaire and return it to the municipality or the central school in the village (if they have a child who goes to high school there). In the formal survey, 230 were collected among the distributed 250 questionnaires. With 222 valid questionnaires, the effective rate was 96.52%.

To develop our measurement instrument, we first created a list of 27 indicators based on the literature review, including constraints of TRS (8 indicators), level of TRS (6 indicators), residents'

dissatisfaction with tourism (7 indicators) and residents' non-participation in tourism (6 indicators). These indicators were evaluated by relevant experts in the tourism fields. The expert group consists of scholars and local tourism industry representatives. Those experts reduced the initial list of indicators to 20, which were used for follow-up investigations.

The questionnaire for all relevant respondents was designed with three major sections. Section one was designed by ticking "√" on the corresponding option to acquire basic information about their gender, age, ethnic and the education level. Section two was designed with some multiple-choice questions indicating annual household income, sector of employment, the number of tourism-engaged people in their family, and tourism income rate in their annual household income to understand local residents' economic situation and participation level in tourism generally. Section three evaluates respondents' perceptions on statements regarding constraints of TRS at the Aksu-Zhabagly tourism destination, level of TRS, residents' dissatisfaction with tourism, and the residents' not participation in tourism. All indicators were designed as statements in section three to encourage respondents to rate on five-point Likert scale questions, with 1 standing for 'completely disagree' and 5 for 'completely agree'.

The collected data were analyzed with principal component analysis (PCA) to reduce the number of variables in the model. When we removed the problematic items, we deleted some indicators with a bigger or smaller variance of errors. The correlation matrix was then checked to reveal any possibly problematic variables. After this data-reduction procedure, only 12 (out of 20) indicators were used in further analysis (see Table 3.5). Thus, a three-factor model was then inputted into the confirmatory factor analysis (CFA), and, finally, structural equation modeling was used to establish the connections between the factors. Before pursuing the factor analysis, we tested the reliabilities between measurements by checking the Cronbach's Alpha coefficient of all measurement dimensions performing the Kaiser-Meyer-Olkin (KMO) test. As shown in Table 4.5, to examine the standard intrinsic fitness level of the model, composite reliability of the latent variables and the average variance extracted value were calculated with the formula of $\mathrm{CR} = \frac{(\sum L)^2}{(\sum L)^2 + (\sum e)}$,

AVE $= \frac{\sum L^2}{n}$, (e = 1 - L^2 and L is completely standardized loading here). Using IBM SPSS Amos 25.0 software, we conducted the CFA. When we checked the overall model fit, equation model's fitness indices such as CMIN/DF, NFI, TLI, CFI, RMSEA, PNFI, and PCFI, were checked. Finally, we tested the hypothesized relationships between the constructs, p-value (indicating statistical significance), and critical ratio (CR) as a substitute to t value, and β (significant influence) were used.

3.2.2 Reliability Tests and Confirmatory Factor Analysis

When testing reliability, Cronbach's Alpha is needed. Reliability analysis is used to evaluate the stability or reliability of the questionnaire. It examines the degree of consistency of the results obtained by repeated measurements of the same thing using questionnaires [80]. It is generally believed that when the reliability coefficient value reaches 0.8–0.9, the reliability of the scale is very good. When the reliability coefficient reaches 0.7–0.8, the scale has considerable reliability. Using the reliability analysis function in SPSS, the reliability test of the measurement items in the questionnaire scale was carried out, as a result, the Cronbach's Alpha coefficient of all measurement dimensions is greater than 0.955. It indicates that the reliability of all the scales is very good, and the scales have considerable reliability, so the reliability test is passed.

Validity refers to the degree of effectiveness of the measurement. It refers to the extent to which the measurement tool or means can accurately measure the things that need to be measured. The validity of the questionnaire is tested from two aspects: Content validity and structural validity. Content validity is mainly investigated by logic analysis. The structural validity of the questionnaire is usually measured by factor analysis [81]. Before conducting the factor analysis, the KMO test is needed. When the KMO value is greater than 0.9, the effect is best, 0.7 or more is acceptable, and 0.5 or less is not suitable for factor analysis [80]. Using the factor analysis function in SPSS, the validity of all measurement items above were tested. The calculated KMO values of all items in this model are greater than 0.8, and $p < 0.001$, reaching a very significant level, indicating that the scale is more effective.

The convergent validity of the measurement model can be assessed by the Average Variance Extracted (AVE) and Composite Reliability (CR). AVE measures the level of variance captured by a construct versus, the level due to measurement error, values above 0.7 are considered very good, whereas, the level of 0.5 is acceptable. CR is a less biased estimate of reliability than Cronbach's Alpha, the acceptable value of CR is 0.7 and above [82]. All of the composite reliabilities of the model in this study are greater than 0.8, and the average variance extracted values are between 0.651 and 0.918 (Table 3.5), it indicates that the model meets the criteria for good fitness.

Based on the reliability and validity test, the model was tested for confirmatory factors using AMOS 25.0 software (IBM, New York, United States). The confirmatory factor analysis (CFA) includes three aspects: The basic fitness level of the model, the overall model fitness level, and the intrinsic fitness level of the model. The basic fitness level of the model for confirmatory factor analysis requires that the factor loadings (or completely standardized loading) must be between 0.5 and 0.95 [83]. The factor loads of all indicators in this model are above 0.5, between 0.630 and 0.979. This means that the basic fitness level of this model is good.

Researchers have recommended some indices to evaluate the overall model fit, including CMIN/DF (Chi-square/df), RMSEA, NFI [84], IFI, TLI, CFI, PNFI, PCFI, and CN [85]. Among them, when the CMIN/DF value is between 1 and 3, the model has a simple adaptation degree. The standard of IFI value, TLI value and CFI value is above 0.9, and the standard of RMSEA value is lower than 0.05 (good fit) and less than 0.08 (suitable), PNFI and PCFI values are above 0.5, and CN should be greater than 200 [83]. When the variance for the whole model was checked, eight variables (one from constraints of TRS, two from TRS level, three from residents' dissatisfaction with tourism, and two from residents' non-participation in tourism) were excluded from further analysis due to the greater p-value ($p > 0.05$) and 12 indicators remained in our proposed model.

After deleting those eight indicators, nearly all p-values were smaller than 0.05. After the modification, the indexes of the overall model fitness were: CMIN/DF = 1.373, NFI = 0.980, TLI = 0.991, CFI = 0.994, RMSEA = 0.029, PNFI = 0.641, PCFI = 0.650, and CN > 200. From these results, it can be established that the corrected model fits quite well.

Table 3.5

Descriptive statistics and measurement model results

Constructs and Indicators: CR = $\frac{(\Sigma L)^2}{(\Sigma L)^2+(\Sigma e)}$, AVE = $\frac{\Sigma L^2}{n}$, (e=1-L²)	Mean	St. dev.	Responses in %			Model Results		
			Agree rate * %	Neutral rate %	Disagree rate ** %	CSL (L)	C R	AVE
TRS constraints	3.490					L	0.947	0.857
RSC_1 Lack of transparency, poor institution arrangement, and corruption.	3.58	1.192	68.9	6.3	24.8	0.977		
RSC _2 Limits of economic level and industrial structure (economically backward and inaccessibility cause weak driving force of tourism development).	3.52	1.172	67.1	5.4	27.5	0.951		
RSC_3 The existing pattern of socio-economic within the communities (the influence of powerful people in economics and politics).	3.37	1.226	62.2	6.8	31.0	0.843		
TRS level	2.606						0.845	0.651
RSL_1 Tour organizers' some profits are used for the welfare of the local community (such as infrastructure, health care and education, etc.).	2.61	1.163	28.4	9.5	62.1	0.808		
RSL_2 Tour organizers prioritize the employment of local residents in their job occupancy.	2.62	1.162	29.3	9.0	61.7	0.950		
RSL_5 Tourists are encouraged by tour organizers to	2.59	1.173	28.8	8.1	63.1	0.630		

consume local products and catering foods.								
Residents' dissatisfaction with tourism	3.613						0.971	0.918
DSat_4 I am dissatisfied with the TRS to neighboring communities' development.	3.64	1.104	73.4	7.2	19.4	0.945		
DSat_5 I am dissatisfied with tourism development in village Zhabagly near the Aksu-Zhabagly heritage site.	3.60	1.083	59.9	10.3	19.8	0.970		
DSat_6 I am dissatisfied with residents' involvement and influence in the planning and development of tourism in here.	3.60	1.156	59.5	10.8	20.7	0.959		
Residents' non-participation in tourism	3.450						0.893	0.738
NPart_1 I do not participate in decision making about tourism development.	3.69	1.268	68.9	11.3	19.8	0.772		
Npart_2 I do not participate in planning works of tourism development.	3.58	1.297	66.2	5.4	28.4	0.979		
NPart_4 I do not participate in the ecological protection works of this tourist destination.	3.08	1.037	31.1	45.0	23.9	0.812		
Notes: * Agree rate: Completely agree + agree, and ** Disagree rate: Completely disagree + disagree								

Finally, structural equation modeling was undertaken to test the hypothesized relationships between the factors. The resulting structural model provides evidence for the proposed relationships between the constructs and their indicators. All measures tested above provide evidence of a very good model fit.

Table 3.6

The path coefficients between the two constructs

Constructs			C.R. (t)	*P* value
Revenue_Sharing_Level	<---	Revenue_Sharing_ Constraints	2.008	0.045
Residents_Dissatisfaction Residents_Non-participation	<--- <---	Revenue_Sharing_Level Residents_Dissatisfaction	2.238 2.974	0.025 0.003

SEM confirms the connections between the constraints of TRS, TRS level, residents' dissatisfaction with tourism development, and residents' non-participation in the tourism industry. All constructs are relatively well explained by their predictors, as suggested by the explained variance, and all path coefficients between the two constructs are still significant, the P values are smaller than 0.05 (Table 3.3).

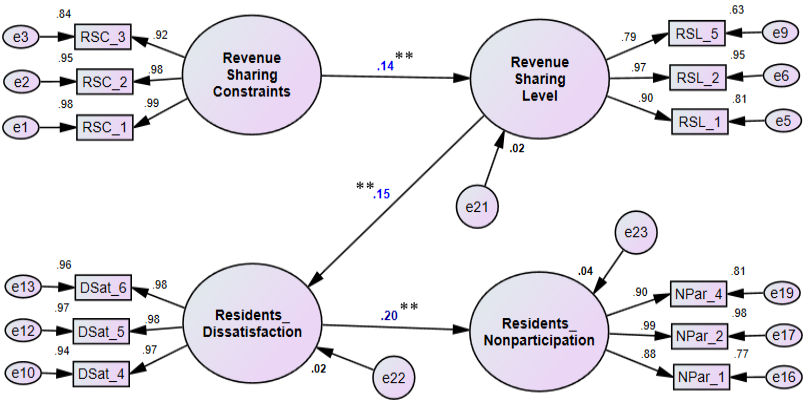

Figure 3.3 – The model of TRS constraints' influence on residents' non-participation Notes: ** Statistically significant at p < 0.05

Further analysis of the structural part of the model reveals that the greater constraints of TRS has a significant positive effect on lower level of TRS ($\beta = 0.14$, $t = 2.008$, $p < 0.05$), indicating a significant positive relationship exists between greater constraints of TRS and lower level of TRS. Similarly, the path coefficient between the lower level of TRS and residents' dissatisfaction with tourism is 0.15 ($t = 2.238$, $p < 0.05$), it indicates that the lower level of TRS has a positive significant influence on residents' dissatisfaction with tourism development. At the same time, the path coefficient between residents' dissatisfaction with tourism and residents' non-participation in the tourism industry is 0.20 ($t = 2.974$, $p = 0.003$), showing residents' dissatisfaction with tourism has a positive and stronger influence on residents' non-participation in the tourism industry. Therefore, proposed hypotheses H1, H2, and H3 were all proven by the path analysis results (Figure 3.3).

This paper examined the perceptions of Zhabagly village residents on the constraints of TRS. In our model, only three direct connections were originally hypothesized. Our study confirmed a total of 12 indicators that created a three-factor model in line with our theoretical model construct (Table 4.5). More specifically, these factors were the TRS constraints at a tourism destination, TRS level, residents' dissatisfaction with tourism development, and residents' non-participation in tourism. Each of these represents a self-standing construct in our model.

In reality, sharing and distributing tourism benefits among frontline communities has been regarded as one of the many ways for communities to participate in the industry. The distribution and sharing of tourism-related benefits with local communities are stimulating the participation of locals and their greatest contribution to tourism to ensure sustainability, and it will improve human welfare as well [86]. However, in remote rural destinations, especially in underdeveloped countries, it is difficult to realize fairly and effectively TRS to local development. Most villagers in the least developed countries have no idea on how much villages earn from tourism, so leaders often tamper with money [72]. The most economically and politically powerful people will affect the uneven sharing of tourism revenue at different community levels. In some isolated cases, politically powerful people (such as village chiefs) use

their traditional authority to obtain more benefits than others [87]. It is undeniable that fair TRS is one of the main challenges faced by many community-based tourism projects. The community-based natural resource management plan for Central and Southern Africa has largely failed to bring expected and theoretical benefits to communities and the environment [88]. Therefore, our proposed model and discussion begin with the effect of TRS constraints on the sharing level of tourism revenue which was measured by three indicators: lack of transparency, poor institution arrangement and corruption; limits of economic level and industrial structure (economically backward and inaccessibility cause weak driving force of tourism development), and the existing socio-economic patterns within the communities (the influence of powerful people in economics and politics). Then, our model analyzed the direct impacts of other constructs.

It can be seen from the respondents' assessment of the statements in Table 4 that there are still some barriers to TRS in tourism destinations. These barriers are more common in developing countries. Here we will analyze what the main limitations of the sharing of tourism revenue in the Aksu-Zhabagly tourist destination are. In this way, we can gain a preliminary understanding of the obstacles encountered by Kazakhstan's tourism industries in sharing tourism revenue.

It was concluded from the statistics shown in Table 4.5 that the residents of village Zhabagly highly perceive the aforementioned constraints of TRS because they agree with statements about describing its elements, the three indicators of revenue sharing constraints were evaluated with the mean value of 3.490. According to the respondents, the main impediment of the low level of TRS is “lack of transparency, poor institution arrangement and corruption” (mean = 3.58), and “limits of economic level and industrial structure” (mean = 3.52) is also one of the major barriers to allocating more tourism revenue to local development. The last limitation to sharing tourism revenue with local residents is “the existing pattern of socio-economic structures within the communities” (mean = 3.37). The TRS constraints’ factors had a relatively high composite reliability (CR = 0.947), revealing the construct has a high level of internal consistency.

The idea of allocating revenue from tourism to local community projects was created to improve people's living standards, which reduces the pressure on the park, and instead of poaching, they engage in conservation activities because they benefit from tourism, which is a win-win situation [69]. As far as TRS level at Aksu-Zhabagly heritage tourism destination is concerned, it can be observed that residents largely disagree with three indicators describing the status of TRS shown in Table 4. For example, “tour organizer’ some profits are used for the welfare of the local community” was evaluated by a mean of 2.61, “tour organizers prioritize the employment of local residents in their job occupancy” had a mean of 2.62, and “tourists are encouraged by tour organizers to consume local products and catering foods” was assessed by a mean of 2.59, respectively. It can be seen that the TRS constraints’ impact increased the residents’ negative evaluation of TRS level.

When we tested the three indicators regarding residents’ dissatisfaction, such as “I am dissatisfied with the TRS to neighboring communities' development.”, “I am dissatisfied with tourism development in village Zhabagly near the Aksu-Zhabagly heritage site.” and “I am dissatisfied with residents’ involvement and influence in the planning and development of tourism in here.”, respondents assessment indicated that most local residents were not satisfied with the tourism development because residents’ dissatisfaction with tourism development received an average mean value of 3.613.

Finally, respondents’ evaluation on residents non-participation in the tourism industry showed that although nearly half respondents confirmed they participated in ecological protection works of this tourist destination (mean = 3.08), the respondents gave a relatively high score to the two indicators of residents’ non-participation in tourism, for example, people seldom involve in decision making about tourism development (mean = 3.69) and participate in planning works of tourism development projects (mean = 3.58).

The high rate of dissatisfaction and low participation is understandable. The findings revealed that greater dissatisfaction of local residents resulted in residents’ low participation in tourism development in Aksu-Zhabagly tourism destination. With respect to the impact of TRS constraints in Aksu-Zhabagly tourism destination,

based on the reviewed literature, three direct connections were originally hypothesized. The first hypothesis tests the role of the TRS constraints on the level of TRS in the Aksu-Zhabagly tourist destination (H1), the results indicated that the relationship among them was statistically significant and positive (H1: $\beta = 0.14$, $p < 0.05$). The second hypothesis tests the relationship between the lower level of TRS and residents' dissatisfaction with tourism (H2), the results showed that the relationship among them was also statistically significant and positive (H2: $\beta = 0.15$, $p < 0.05$). And the third hypothesis assumes the influence of residents' dissatisfaction with tourism on residents' non-participation in tourism (H3), the results showed that the residents' dissatisfaction with tourism development positively affects residents' non-participation in tourism (H3: $\beta = 0.20$, $p < 0.005$). The above-discussed results confirmed that the influence of TRS constraints indirectly increased the residents' non-participation in tourism.

From the results of the above-mentioned local residents' perceptions, we can draw the following conclusions： like the underdeveloped and some developing countries in the above-mentioned literature reviews, TRS constraints occur to some degree in Aksu-Zhabagly tourist destination, and the number of residents who feel the benefits of TRS is comparatively low. For example, lack of transparency, poor institution arrangement, and corruption, the influence of powerful people in economics and politics will limit local residents' enthusiasm for participating in the tourism industry. The obstacles like lack of transparency, poor institution arrangement and corruption, limits of economic level and industrial structure, and the existing pattern of socio-economic within the communities are the main reasons for failure to fulfill fair TRS in the Aksu-Zhabagly tourism destination. Then the prejudice of TRS leads local residents to be dissatisfied with the development of the tourism industry. Third, the stronger the dissatisfaction of local people with tourism, the less participation of local communities in tourism. Thus, residents' participation in the tourism industry may be affected by the TRS constraints in the destination. In the end, we can easily say that because of the above relationships, achieving sustainable development of tourism in many remote rural areas of many

underdeveloped countries remains a dream. Many TRS barriers in eco-tourism will inevitably lead to tourism development obstacles, resulting in contradictions among various stakeholders. If any party's interests are not protected, it will have the following negative impacts: Insufficient participation of community residents, tourist destinations failing to achieve the expected economic development goals, tourists entering tourist areas disturbing the natural human ecology, and conflicts between residents and tourists intensified.

To sum up, the participation of local residents in the World Heritage tourism development in their hometown is one of the main prerequisites for sustainable tourism. When implementing effective measures of STD, the local people play a very important role because they are more familiar with those antiquities and know well what it takes to protect and promote them [89]. If a tourist destination has a favorable TRS policy and tourism development brings more benefits to local development, the local residents will actively participate in the measures of protecting the world heritage sites within their communities. As a result, this area has two benefits. On the one hand, local residents have work and annual income, which improves the living standard of the local community. The second aspect is that through the participation of local communities, the environment of the tourist area is effectively protected, because the local residents want to live in an environment that is not damaged, and they also want their descendants to live in a beautiful environment. In this way, the region has achieved STD.

This study highlights the significance of the TRS for STD. Findings of this study can help local communities and governments realize the importance of eliminating restrictions on the sharing of tourism revenues in tourist destinations for the development of sustainable tourism. In terms of the established connections and impacts, the Aksu-Zhabagly tourism destination may increase residents' participation in tourism development by improving the indicators of TRS constraints. In this regard, in order to improve the current situation in Aksu-Zhabagly world natural heritage tourism destination, the following measures are recommended: First, the relevant tourism developers should provide transparency and good management in the TRS plan. Second, the existing corruption should be eliminated. Third, the local government makes full use of national

preferential policies to maximize the economic level and increase the industrial structure. Fourth, the existing pattern of socio-economic within the communities in Aksu-Jabaglay tourism destination should be improved. Good management practices also require that bureaucracy be kept to a minimum, especially where key stakeholders are illiterate. Moreover, since plans can be vulnerable to corruption, good governance is essential [90]. Relevant organizations must identify and communicate tangible local interests [91]. Besides, to achieve STD, tourism developers should recognize and encourage a greater level of local community satisfaction because local residents are the stakeholders with the greatest impact on tourism development. In short, taking Kazakhstan as an example, reducing the restrictions on the sharing of tourism revenue in the development of rural eco-tourism is one of the key methods to achieve sustainability in the most vulnerable PAs, specifically heritage sites like Aksu-Zhabagly Biodiversity Reserve. Therefore, for promoting and maintaining sustainable tourism in this developing country, it is vital to clearly understand the fair TRS mechanism, correctly evaluate the interests of key stakeholders, and how to mitigate the interests of politically and economically powerful people.

If the above measures can be effectively implemented, the satisfaction of local residents with tourism development and active involvement of local residents in tourism industry will be increased. Therefore, STD can be achieved in this fragile biodiversity heritage site. The proposed model can also be used as a precursor for further research to determine whether the model can be adapted and applied to other destinations to alleviate the constraints of TRS of a tourism destination and the realization of STD.

Chapter 4 INFLUENCE OF NEGATIVE POLITICAL ENVIRONMENT ON TOURISM

4.1 Tourism and Ecological Protection in Aksu-Zhabagly Nature Reserve

4.1.1 Tourism Development State in Aksu-Zhabagly Nature Reserve

Natural World Heritage Sites (WHS) are widely recognized as the world's most important protected areas. Therefore, in order to develop tourism at a world heritage site it is necessary to consider its characteristics, for example, when developing tourism in ecologically sensitive protected areas the best strategy is to organize tourism activities at the buffer zone of the protected areas. In this respect, our research area, Aksu-Zhabagly biodiversity conservation site, can be one of the best examples because, in accordance with the "Specially Protected Natural Territories" law of the RK, areas that are not included in especially valuable ecological systems are allowed to organize ecological excursions under the control of authorities, as well as excursion paths and routes for regular tourism created by the licensed tourism sectors [22].

There are several indicators that can measure the tourism development level in a tourist destination. In order to indicate the level of tourism development in Aksu-Jabgly tourist destinations, in our research, we will discuss the following three indicators.

Without doubt, the most important indicator which shows the tourism development status of one tourist destination is the number of visitors and tourism revenue volume. Tulkibas district mayor Nurbol Turashbekov (2017) said "In 2016 more than 12 thousand tourists had visited Tulkibas district to see Aksu-Zhabagly nature reserve and other places of interests, including 7% foreigners". Apparently, the aforementioned numbers are very small considering its high potential for tourism development. Below, we analyze some statistics which indicate domestic and foreign visitors to Aksu-Zhabagly state nature reserve in the last 10 years.

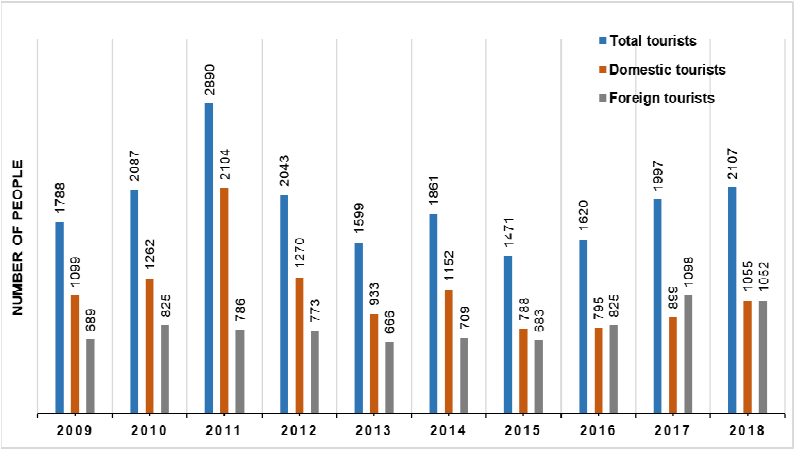

Figure 4.1 – The number of tourists to Aksu-Zhabagly tourist destination from 2009 to 2018 (Complied by the authors on the basis of statistic obtained from Aksu-Zhabagly reserve office)

We can easily see from Figure 4.1 that the number of total visitors and domestic tourists was higher in 2011 with 2890 and 2104 people, respectively. Additionally, in 2015, there were fewer visitors to the Aksu-Zhabagly nature reserve, the total number of tourists decreased to 1471 people. The total and the domestic number of travelers has been increasing slowly in the last three years. As far as foreign visitors are concerned, there has been a fluctuation in the number. The year when there were fewer foreign tourists was 2013 with 666 people, while more foreign tourists visited the nature reserve than other times in 2017, the number reached 1098. It can be concluded from the above analysis that although there is a higher potential for planning tourism activities in Zhabagly village, for instance, the quality of accommodation and convenience of accessibility are higher and even in line with international standards, the development of tourism in Aksu-Zhabagly is still in the primary stage or even undeveloped. Therefore, we suppose one of the main factors which impede the development of tourism in our research area is the lack of favorable political environment for STD. Thus, the main content of this research is the impact of the negative political environment on implementing STD.

Infrastructure development level: Aksu-Jabagyly State Nature Reserve is an all-season recreation place enjoying long history and being a great attraction point for lots of travelers. This unique area of South-Kazakhstan region offers a vacation adventure you will not forget. There are several tour operators near the Aksu-Jabagyly Natural World Heritage site. They are well equipped and offer accommodations for tourists. When we conducted the field investigation, we checked the quality of one of the guesthouses near Aksu-Jabagyly State Nature Reserve (Figure 4.2). It provides various complete services and the quality of accommodation meets the basic standards of rural tourism development.

Figure 4.2 – An accommodation in Zhabagly village (Taken by the author)

The development of the tourism industry is closely related to the construction of transportation. Generally speaking, tourists choose different forms of tourism traffic according to local conditions for different travel needs, such as road, railway, aviation, and water, etc. When we interviewed the Akim (mayor of village), he said the transportation system of this tourist destination is well developed compared with other nature tourist attractions in Kazakhstan. he also added that one of the advantages of the nature reserve is its easy accessibility, located in the middle of the two old cultural cities

(Shymkent and Taraz) of Kazakhstan, only approximate100km distance from them respectively. And during our investigation period we saw the trains from two republic cities (Nur-Sultan and Almaty) of Kazakhstan to the second megalopolis (Shymkent) pass near the world heritage site, the train station is about 20km route from the Aksu-Zhabagly nr. At the same time, the quality of car routes to the nature reserve are very good. For example, The WE-WC Highway that meets international quality standards passes through the vicinity of the NR.

Digitalization status of the tourism: On 9th of September, 2016 at the site of the National Chamber of Entrepreneurs of Kazakhstan "Atameken" were held public hearings on the transfer of the function of MID RK on "Dissemination of information about Kazakhstan and its tourism opportunities in the international tourist market. In her speech, the Board Member, Deputy Chairman Yulia Yakupbaeva noted that of all state functions in the sphere of tourism the readiest for transmission - is the function of promotion of information about Kazakhstan at the international tourist market, and within the state [87]. Unfortunately, Kazakhstan holds 111 place among 141 countries in the world ranking of competitiveness in the sector of travel and tourism in 2016 in terms of effectiveness of marketing activities for attraction of tourists [92]. So far, policies regarding brand destinations have been defined, and the state's official tourism portal www.kazakhstan.travel was designed in 2014. However, Kazakhstan has no travel brands (logos, slogans), and the country does not have an internationally renowned official brand travel portal. Searching for travel information about Kazakhstan on Google browser, you can find some national travel websites, such as www.visitkazakhstan.kz. However, it should be noted here that most of the state's funds are allocated to the development of the website, and very little is allocated to the promotion of the website [22]. Therefore, the Kazakhstan government still needs to promote the development of Kazakhstan's tourism digitalization.

Nowadays, the consumer demand for tourists is more obvious and presents a trend of individualization and diversification. Tourism companies also need to provide more and more one-stop integrated tourism products. All of these must have a strong information consulting service platform and an information transmission network

to support them [93]. When we went to the selected research area, we interviewed the representative of the Tourism and External Affairs Office in Turkistan province. He provided us with information about the digitalization of scenic spots, Aksu-Zhabagly World Natural Heritage Site. He said “the accurate information service of this tourist destination (traditional paper maps cannot provide it) is basically good, and nearly all information about tourism development is available on national and international sites, for example, you can contact a travel agency to book accommodation and travel routes near the nature reserve you need in advance, or book them online at any time.”. However, when investigating this tourist destination, we found that most of the electronic services in the scenic area could not meet the global standards of online service standards. Although you can use your various electronic contact tools and Internet service at the Aksu-Zhabagly tourist destination, their signal is bad and the speed of the internet is relatively slow (2 or 3G). And the tourism department of this nature reserve office don’t use automatic ticket selling and checking, Global Position System, sensor networks, and environment monitoring systems at all, which are the most significant elements to improve its core competitiveness and increase consumer satisfaction. Through the above-mentioned different types of travel service systems, the tourists in the destination can be informed of the traffic, weather information, passenger distribution and other real-time information in the scenic spots during the tour.

As defined by UNWTO, a Tourism Product is "a combination of tangible and intangible elements, such as natural, cultural and man-made resources, attractions, facilities, services and activities around a specific center of interest which represents the core of the destination marketing mix and creates an overall visitor experience including emotional aspects for the potential customers. A tourism product is priced and sold through distribution channels and it has a life-cycle" [94]. The level of development of tourism products is a clear manifestation of the development of the tourism industry in one region. There are many types of tourism products, more than a dozen, and in our research article, we have identified the development of four major tourism products in the Aksu-Zhabagly NR, with some concrete examples. If we evaluate the development level of the four

types of tourism products, we can give a good assessment of three of them: accommodation, transport and tourist attractions. And one of them (e-services for tourism) is the low level of development. Electronic service in this area needs to be improved with the support of relevant organizations, as in the 21st century, e-services are one of the most important tourism products in the development of tourism systematically.

4.1.2 Ecological Protection Status of the Aksu-Zhabagly Nature Reserve

It is home to 48% of regional bird species, 72.5% of vertebrates, 221 out of 254 fungi species, 63 out of 80 moss species, 15 out of 64 vegetation types, and 114 out of 180 plant formations found in the West Tien Shan. Approximately 2500 insect species have been recorded in the reserve [22]. The total area of the territory of Aksu-Zhabagly NR is 357,734 ha. The main core zone is 131,934 ha, a buffer zone is 25,800 ha (2-3 km border along the perimeter of the reserve), development zone – about 200,000 ha [95]. All three zones are connected and complement each other (Figure 5.3). The core zone is closed for visits and represents reference areas of regional natural complexes, as well as an important genetic reserve of wild flora and fauna species; this zone is control in long-term monitoring. The buffer zone is also under a protective regime, but limited human activity is allowed here (such as tourism, scientific research, educational programs, partial use of natural renewable resources, etc.). Both zones serve for the conservation of natural complexes and partially for sustainable development. The transition zone is used for the living of local people, development of economy, culture, and education. Here there is no strict protection regime of natural complexes, but there are some restrictions on the nature use, for instance, ecologically dirty production is prohibited [22]. As a whole, this zoning provides conditions for the elimination of the conflict between social-economic development and protection of wild natural complexes and allows stable development of economy and culture. The main zone of the biosphere reserve is the strictly protected zone of nature reserve regime of Aksu-Zhabagly NR, which represents the natural mountain complex of West Tian-Shan.

In order to show the state of ecological protection of this tourist area, we will analyze the state and international level measures taken to protect the reserve, as well as focus on the future goals of the reserve management office in protection.

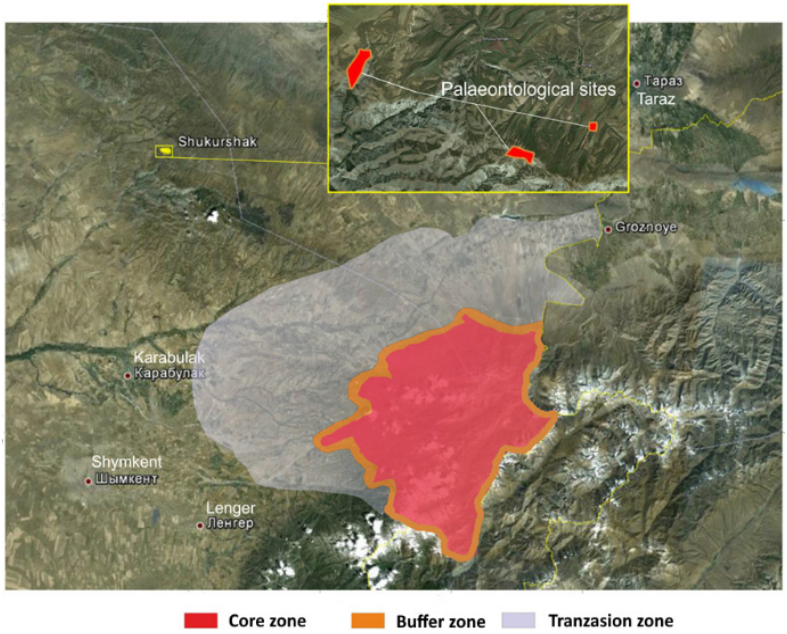

Figure 4.3 – Location of Paleontological sites of Aksu-Zhabagly Biosphere Reserve [22]

National level ecological protection events: For the organization of partner relations a special Coordination Council of Aksu-Zhabagly Biosphere Reserve was created, and its participants include representatives of the state nature reserve, nature users, local authorities, and public organizations. At the same time, local communities are also involved in the development of the biosphere reserve's Management Plan. Complete management of the core and buffer zone is conducted by the administration of Aksu-Zhabagly state nature reserve, but local NGOs, local communities receive full information on natural complexes of the zones that will be used for

an educational expedition, tourist routes in the buffer, and transition zones, and development of scientifically based sustainable nature use, etc.

According to Kazakhstan's legislation, management of economic activity on some parts of the buffer zone (haymaking, cattle pasture) is carried out by agreement with state authority (Forestry and Hunting Committee under the Agriculture Ministry of RK) and under the control of state nature reserve's administration, all questions and arising problems are settled at the meetings of Coordination Council of the biosphere reserve. During the zonation of the buffer zone, a consultation with all land users was held. In the transition zone, the land users have their management plans, which are in accordance with the Management Plan of core and buffer zones. Therefore, the simple combination of all these plans is the Overall Integrated Management Plan of the entire biosphere reserve. All controversial issues are discussed at the sessions of Coordination Council of Biosphere Reserve.

The biosphere reserve is managed through Aksu-Zhabagly Reserve Coordination Council created in 2012. Before that, the territory of the core and buffer zones was managed by the Scientific-Technical Council of the Nature Reserve (until July 2012). Coordination Council is a collegial public body created to introduce policies of effective management and sustainable use of biosphere reserve's resources, alternative activities, resource-conserving and resource-restoring technologies. The Coordination Council of Reserve consists of representatives of state agencies (a territorial agency of forestry and hunting, oblast territorial agency of fishery), state nature reserve, Akimats (department of land resources, agriculture, etc.), local NGOs and land users, and is necessary for providing collaboration and problem-solving opportunities for all stakeholders.

There is current monitoring of the condition and conservation of natural complexes on the territory of the biosphere reserve, and monitoring of rare and threatened species to clarify the condition of the populations, ecological peculiarities of rare plant and animal species, providing a basis for evaluation of the species' conservation and restoration perspectives. The goal of the monitoring is to obtain regular objective data about the condition of plants and animals on

the territory of the biosphere reserve, as well as on the condition of their habitat. Based on monitoring data it is necessary to conduct a current evaluation of the condition of populations and ecosystems, biosphere reserve's functioning effectiveness, and development of measures for critical and unfavorable situations' prevention. According to the Management Plan of Aksu-Zhabagly, scientific research on its territory focuses on innovation and study of the objects of state nature reserve fund, as well as the study of natural processes for the Nature Chronicles program. This scientific work includes observations of natural phenomena and processes and their study for the «Nature Chronicles» program, flora and vegetation innovation, research of rare and threatened vertebrate and invertebrate animals, monitoring of biodiversity condition and indicator species' population condition.

For cultural – educational activities in the Reserve, there is a department of ecological education. The staff of the Department consists of 5 people - museum chief, 4 instructors of excursionist and Reserve's Security Service (30 people). Cultural–educational work is also carried out by staff from the Department of Science, Information, Monitoring in the area of nature protection legislation. The main work on ecological education is carried out in the form of excursions on ecological paths in the protective zone, in Nature Museum, lectures, articles publication in mass media. There are environmental protection activities such as Parks' March, ecological scouts, etc. The goal of the Department's work is in raising ecological awareness of local people, their understanding of the key role of the protected territory, the importance of unique nature conservation, public support, and raising patriotism and responsibility for the environment, and, as the result, pressure decrease on region's biodiversity from local population. The main activity directions are: work with mass media, publishing activity, museum, ecological excursions, environmental tourism, interactions with teachers and educational bodies. Besides, the Department's staff develops posters, leaflets and other agitation materials, and takes part in providing practice for students on the base of the nature reserve. The most important activity that would enhance the sustainable development function of the site is the rapid growth of ecological tourism, development of the

programs for ecological education of local people and the use of alternative sources of energy, such as solar and wind [22].

International level ecological protection events: The years 2001–2003 became a new milestone in the development of the oldest reserve in Kazakhstan and Central Asia. It was during these years that the active working phase of the Central Asian Transboundary Project of the Global Environmental Facility for the Conservation of the Biodiversity of the Western Tien Shan in Aksu-Zhabagly State Nature Reserve started. The main results of the Central Asian Transboundary GEF / WB Biodiversity Conservation Project of the Western Tien Shan include the following:

- The foundations were created for creating the Western Tian-Shan transboundary biosphere reserve based on the three PAs of the Kazakh part of the Western Tian Shan (Aksu-Zhabagly nature reserve, Karatau nature reserve and Sairam-Ugam national park).
- The new Law of the RK dated July 7, 2006, No. 175-III "On Specially Protected Natural Territories" introduced the rules governing the development of management plans for specially protected natural territories.
- The natural science substantiations were updated and the feasibility studies for the creation of the Karatau Reserve on the basis of the ecosystem approach were developed. In 2004, the Government of the RK dated March 1, No. 249 established the Karatau Reserve on an area of 34,300 hectares.
- The ecosystem and biodiversity assessment of the Western Tian-Shan were used to create the Sairam-Ugam national park.
- After constructing the first visitor center in Aksu-Zhabagly nature reserve, the construction of new visit centers to other protected areas of Kazakhstan: Korgalzhyn GPP-2009, Alakol Reserve-2010, Naurzum Reserve-2012, and in 2018 completed the design of the visitor center of Ile-Alatau Park, were launched.
- For the first time in Kazakhstan, a mechanism has been tested for involving local residents in the matter of biodiversity conservation through economic incentives to replace traditional administrative measures against local residents.

During the GEF project "Conservation of biodiversity in the West Tian-Shan" in 2000 – 2004 complex research of the region was carried out. In the limits of this work, the influence of the

environment and economic situation on the cultural and social life of local people was assessed, nature reserve's management plan was developed, etc. Social-economic conditions and historic-cultural peculiarities of the region are given in the first part of the Management Plan of 2008.

Supported by two UNDP/GEF Projects (Conservation of biodiversity of Western Tian-Shan and Wetlands Project) state nature reserve's staff had an opportunity of exchange experience and raise their qualifications in Korgalzhyn Biosphere Reserve, Karatau Nature Reserve (Kazakhstan), Berezinskiy Nature Reserve (Belarus), Zapovedniki Ecological Center (Moscow, Russia), and at scientific-practical conferences inside Kazakhstan and abroad (Minsk, Belarus). In 2009-2011 training seminars were conducted dedicated to the preparation of management plan, biodiversity monitoring, state inspectors were trained in drawing up reports, complying with safety operating procedures and fire prevention [22].

Aksu-Zhabagly reserve office's goals in ecological protection: With the strong support of relevant organizations at home and abroad, the Aksu-Zhabagly nature reserve has become the oldest scientific center in the former Soviet Union countries and will maintain an ecologically balanced base in Kazakhstan in the future. At present, one of the main objectives of the reserve is to conserve and restore the reserve's ecosystems both in the core and buffer zones of Aksu-Zhabagly reserve, at the same time maintaining the ecological balance in the Western Tian-Shan region. With the establishment of the international status of the biosphere reserve in the entire territory of the protective and transit zones, a basis will establish to research in terms of economic monitoring in areas with different economic management regimes.

The other main purpose of the Aksu-Zhabagly NR is to protect the rare and unique natural complexes and its components in Western Tian-Shan and to support the sustainable socio-economic development and natural resources use of the territory based on ecological and economic principles. The short-term purpose of the Biosphere Reserve is to organize such mechanisms of the territory management that would prevent the depletion of natural resources and ensure sustainable use by the population. The local community hope to protect the natural beauty of the nature reserve for future

generations. In this regard, one of the goals of this protected area is environmental education, which leads to the responsibility of environmental protection. Although the consumerism attitude towards nature reserves is not ruled out, the nature reserve system, which was established 85 years ago, has formed a special relationship in people's minds and the local residents respect the nature reserve to a certain extent [22]. In general, development of the concept of biosphere reserve will help local people to increase the level of environmental awareness, foster a sense of responsibility to our descendants in the conservation of biodiversity, establish environmentally friendly ways to use local natural resources and to find more effective mechanisms for biodiversity conservation in the region.

By analyzing the second main content of our research article (the ecological protection of the Aksu-Zhabagly state nature reserve), we draw the following conclusions: according to the laws of specially protected areas in Kazakhstan, organizing some tourist activities on the territory of Aksu-Zhabagly nature reserve is allowed and which is requested to hold under strict control. It is generally recognized that many experiments have shown that the benefits of developing tourism in protected areas are more effective than the development of other industries. People often praise tourism for reconciling conservation and development goals in or near protected areas [96, 97]. From a conservation perspective, tourism can raise funds to protect natural areas, increase local and tourist awareness of biodiversity and conservation issues, and discourage locals from getting out of unsustainable livelihoods [98]. When we visited the study area, we found that every year from spring to autumn, tourists from home and abroad come to see the reserve every day. On some days, the number of tourists in the reserve exceeds the daily norm, and visitors have to wait for several days. This is one of the proofs that the reserve is effectively protected under the laws of specially protected areas. In short, although more than 90 years have passed since its establishment, this nature reserve has not lost the importance of its protection. For some poorly preserved biodiversity reserves in the world, Kazakhstan should serve as a model for the protection and conservation. However, it has its drawbacks compared to developed countries. As an example, when we interviewed the

head of the research department of the nature reserve office, he said that a lot of good work should have been done to protect the reserve, however, due to the ineffectiveness of the management, some projects will not be fully implemented, and some projects will even be stopped before they start.

4.2 Impact of Negative Political Environment on the Sustainable Tourism

4.2.1 Hypothesis and Theoretical Model

Mihalič et al. (2016) elaborated on the issue by emphasizing the significance of the influence of the political environment and destination governance on sustainable tourism development. They addressed issues limited to understanding the importance of the political environment to sustainable tourism's implementation. Mihalič et al. (2016) argued that the political environment does not indicate political parties or systems (although both may be related to tourism development), but indicates political power, leadership, structure, mechanisms, and strategies, or policies as critical to the implementation of sustainable tourism development. In relation to the agreement with the three sustainable development environments (economic, environmental and sociocultural), the concept of the political environment has not been recognized with such force, and its designation as a missing element has not yet been achieved unanimously in the field of sustainable development [99].

The development of sustainable tourism destinations has attracted great attention from researchers over the years, especially the positive and negative tourism's influences on resources and destination communities [100]. Tourism can have a positive and negative impact on the community, but the development of tourism can also depend on how the locals of the destination feel about these effects [99]. As described by the social exchange theory, destination residents show their support for tourism development based on their satisfaction with the sustainable livedoid in the communities [101, 102]. Destination resources are generally understood as economic,

sociocultural, and environmental, which is similar to the so-called three-pillar sustainable tourism principle [103]. Apart from tourism's positive and negative impacts on the destination community, residents' perceptions of these impacts can affect sustainable tourism development. Tourism should properly consider its current and future economic, social, and environmental impacts to meet the needs of tourists, industry, environment, and the host community.

In the above context, it is understood that the destination resources are economic, sociocultural, and natural (or environmental, in a narrow sense), which is consistent with the concept the so-called three pillars of sustainable tourism [104]. However, researchers should distinguish the practical implementations of three pillars of sustainability in tourism [99]. Though it is difficult to perform sustainable tourism in practice [105], Mihalič et al. (2016) argue that this problem can be minimized if the concept of three pillars of sustainability is extended to include some "pushing forces" to ensure the effective implementation of sustainability in business and tourism destinations. Many authors have discussed other requirements for implementing sustainability, such as political support, power, critical mass, consensus, environmental education, awareness, and ethics [106, 107]. Ritchie and Crouch (2003) showed that the debate on sustainable tourism must be extended with political sustainability. Lately, some of these "forces" have been debated under the theme of destination governance, which is interested in how tourism destinations guide and manage the implementation (and planning and control) process of sustainable tourism development [108].

However, many previous studies have shown that there is little interest in studying sustainable tourism development in terms of residents' attitudes towards tourism and the political aspects of tourism governance [109]. This article discusses this issue and contributes to understanding the constricting role of the negative political environment in implementing sustainable tourism.

Residents' Perception of Tourism Impacts: Sustainability is often understood as the three-pillar concepts of economic, natural, and sociocultural environments. involves providing opportunities to promote economic growth, protect the location, and improve the quality of life of residents while increasing future opportunities through the development of tourism and the quality of the

environment [110]. However, not all environments are subject to the same research and practical concerns [99]. Many previous studies focused only on economic or environmental pillars, which may not fully reflect community concerns [111-113]. In this case, the three pillars of sustainability concepts provide a well-structured framework for studying the positive and negative tourism's economic, environmental and sociocultural impacts.

Residents' Satisfaction with Tourism: In the past, when studying the satisfaction of residents, scholars divided the perception of tourism impact into two factors, such as positive tourism impact perception and negative tourism impact perception [114-116], or divided it into three factors like cost-awareness, material benefit perception, and spiritual benefit perception [117], and then the relationship between tourism impact and satisfaction could be comprehended. In the context of applying social exchange theory to residents' attitudes towards tourism, most studies involve the impacts of tourism and support for tourism, while some studies also include satisfaction with the quality of life in the tourist destinations or tourism development. Recent tourism studies indicate that tourism impacts the quality of life [118-120]. Moreover, previous studies on the impact of tourism on residents' well-being simulated the overall satisfaction of individuals with life, which stems from satisfaction with several areas of life [99]. Satisfaction with community, material, emotional, health, and safety are sources of general satisfaction with life [121].

Residents' Participation in Tourism at World Heritage Sites (WHS): The variety of residents' perceptions of tourism development influences the level of residents' support and participation in tourism development [122]. Numerous studies have proven the importance of community involvement in heritage conservation and tourism development [39-41, 123]. Local residents' involvement in WHS management can resolve conflicts between the economic and development benefits of the community and the need to preserve WHS destinations as valuable resources and can help clarify the concept of heritage among residents [8, 39]. Several studies on heritage management have confirmed the importance of CP in sustainable conservation programs [40, 124]. Local residents' involvement in heritage management contributes to improving their

quality of life, economic development of the local region, and sustainability of conservation programs [8, 40, 123].

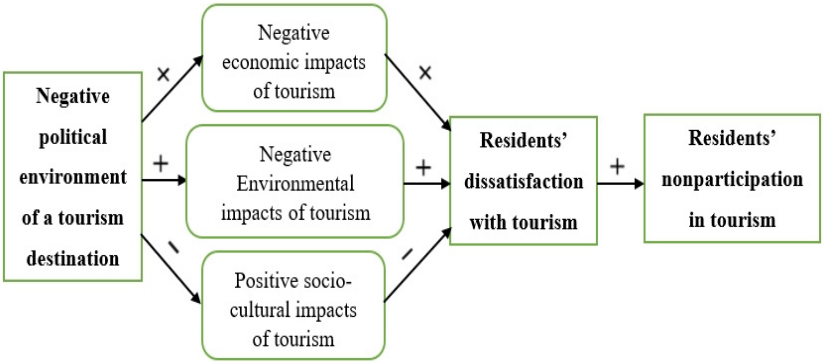

Figure 4.4 – Theoretical model, direct paths

Thus, with Aksu-Zhabagly state nature reserve and the adjacent Zhabagly village as a study area, this research examines the indirect impacts of the negative political environment of a tourism destination on local residents' lack of participation in tourism development through assessing the perceptions of the neighboring community from tourism in their hometown. Additionally, a number of determinants (residents' dissatisfaction with tourism and tourism's negative economic, negative environmental and positive sociocultural impacts) that influence this relationship should also be checked. The model proposed in this study assumes the relationship between the aforementioned indicators. Our structural model takes into consideration the indirect impacts of negative political environment on residents' lack of participation in tourism, which have been studied in the context of STD by very few scholars so far. Therefore, we incorporated both observations in our proposed model of the relationship between the three tourism pillars and residents' dissatisfaction with tourism development. Simultaneously, the following seven hypotheses (Figure 4.4) were developed and tested in the current study:

Hypothesis 1*: The negative political environment has a direct positive effect on negative economic impacts of tourism;*

Hypothesis 2*: The negative political environment has a direct positive effect on negative environmental impacts of tourism;*

Hypothesis 3*: The negative political environment has a direct negative effect on positive sociocultural impacts of tourism;*

Hypothesis 4*: The negative economic impacts of tourism have a direct positive effect on residents' dissatisfaction with tourism development;*

Hypothesis 5*: The negative environmental impacts of tourism have a direct positive effect on residents' dissatisfaction with tourism development;*

Hypothesis 6*: The positive sociocultural impacts of tourism have a direct negative effect on residents' dissatisfaction with tourism development;*

Hypothesis 7*: Residents' dissatisfaction with tourism development has a direct positive effect on residents' nonparticipation in tourism development;*

Our list of questionnaires included over 30 indicators that were used in the subsequent survey. The self-administered questionnaire was distributed to Zhabagly village's residents. To obtain more accurate opinions and perceptions, we conducted our survey by issuing the prepared questionnaire to each occupied household (328 households in total). Residents were asked to complete the questionnaire and return it to the municipality or the central school in the village (if they have a child who goes to high school there). Overall, 229 questionnaires were returned, and among them, 222 were qualified.

In order to develop our measurement tools, we first created a list of STD indicators based on a literature review. The list initially includes more than 100 indicators. These indicators were evaluated by relevant experts in the tourism fields. The expert group consists of scholars and local tourism industry representatives. Those experts reduced the initial list of indicators to 30, which were used for follow-up investigations.

The questionnaire for all relevant respondents was designed with three major sections. Section one was designed by ticking "√" on the corresponding option to acquire basic information about their gender, age, ethnic and the education level. Section two was designed with some multiple-choice questions indicating annual household income,

current engaging industry, the number of tourism-engaged people in their family, and tourism income rate in their annual household income to understand local residents' economic situation and participation level in tourism generally. Section three evaluates respondents' perceptions on statements regarding negative political environment at the Aksu-Zhabagly tourism destination, three pillars of sustainable tourism (including the negative economic, negative environmental, and positive sociocultural impacts of tourism), residents' dissatisfaction with tourism and residents' participation in tourism development. All indicators were designed as statements in section three to encourage respondents to rate on five-point Likert scale questions with 1 (completely disagree), 2 (disagree), 3 (neutral), 4 (agree) and 5 (completely agree).

The collected data were analyzed with principal component analysis (PCA) to reduce the number of variables in the model. When we removed the problematic items, we deleted some indicators, which have bigger or smaller variances of errors, in Amos output. The correlation matrix was then checked to reveal any possibly problematic variables. After this data-reduction procedure, only 18 (out of 30) indicators were used in further analysis (see Table 5.1). Thus, a six-factor model was then inputted into the confirmatory factor analysis (CFA) and, finally, structural equation modeling was used to establish the connections between the factors. Before the factor analysis, Cronbach's Alpha and KMO test were needed. When we tested When reliabilities between measurements, the Cronbach's Alpha coefficient of all measurement dimensions was checked and the "KMO test" was done. As shown in Table 5.1, in order to examine the standard intrinsic fitness level of the model, composite reliability of the latent variables and the average variance extracted value were calculated with the formula of $\mathrm{CR} = \frac{(\sum L)^2}{(\sum L)^2 + (\sum e)}$, $\mathrm{AVE} = \frac{\sum L^2}{n}$, (e = 1 - L^2 and L is completely standardized loading). Using IBM SPSS Amos 25.0 software, we conducted the confirmatory factor analysis (CFA). When we checked the overall model fit, the following equation model's fitness indices, such as CMIN/DF, NFI, TLI, CFI, RMSEA, PNFI, and PCFI, were checked. Finally, we tested the hypothesized relationships between the constructs, p value

(indicating statistically significance) and critical ratio (CR) as substitute to t value and β (significant influence) were used.

4.2.2 Reliability Tests and Confirmatory Factor Analysis

When testing reliability, Cronbach's Alpha is needed. Reliability analysis is used to evaluate the stability or reliability of the questionnaire. It examines the degree of consistency of the results obtained by repeated measurements of the same thing using questionnaires [80]. It is generally believed that when the reliability coefficient value reaches 0.8–0.9, the reliability of the scale is very good. When the reliability coefficient reaches 0.7–0.8, the scale has considerable reliability. Using the reliability analysis function in SPSS, the reliability test of the measurement items in the questionnaire scale was carried out, as a result, the Cronbach's Alpha coefficient of all measurement dimensions is greater than 0.8. It indicates that the reliability of all the scales is very good, and the scales have considerable reliability, and the reliability test is passed.

Validity refers to the degree of effectiveness of the measurement. It refers to the extent to which the measurement tool or means can accurately measure the things that need to be measured. The validity of the questionnaire is tested from two aspects: Content validity and structural validity. Content validity is mainly investigated by logic analysis. The structural validity of the questionnaire is usually measured by factor analysis [81]. Before the factor analysis, the KMO test is needed. When the KMO value is greater than 0.9, the effect is best, 0.7 or more is acceptable, and 0.5 or less is not suitable for factor analysis [80]. Using the factor analysis function in SPSS, the validity of all measurement items above were tested. The calculated KMO values of all items in this model are greater than 0.8, and $p < 0.001$, reaching a very significant level, indicating that the scale is more effective.

The standard intrinsic fitness level of the model requires that the composite reliability of the latent variables is greater than 0.60, and the average variance extracted value is greater than 0.50 [83]. All of the composite reliabilities of the model in this study are greater than 0.8, and the average variance extracted values are between 0.708 and

0.960 (Table 5.3), it indicates the model meets the criteria for fitness very well.

Based on the reliability and validity test, the model was tested for confirmatory factors using AMOS 25.0 software (IBM, New York, United States). The confirmatory factor analysis (CFA) includes three aspects: The basic fitness level of the model, the overall model fitness level, and the intrinsic fitness level of the model. The basic fitness level of the model for confirmatory factor analysis requires that the factor loadings (or completely standardized loading) must be between 0.5 and 0.95 [83]. The factor loads of all indicators in this model are above 0.5, all of them are between 0.8 and 1. This means the basic fitness level of this model is very good.

The researchers recommended some indices to evaluate the overall model fit, including CMIN/DF (Chi-square/df), RMSEA, NFI [84], IFI, TLI, CFI, PNFI, PCFI, CN [85]. Among them, when the CMIN/DF value is between 1 and 3, the model has a simple adaptation degree. The standard of IFI value, TLI value and CFI value is above 0.9, and the standard of RMSEA value is lower than 0.05 (good fit) and less than 0.08 (suitable), PNFI and PCFI values are above 0.5, and CN should be greater than 200 [83]. When the variance for the whole model was checked, 12 variables (two from negative economic impacts of tourism, two from negative environmental impacts, three from positive sociocultural impacts of tourism, three from residents' dissatisfaction and two from the residents' nonparticipation in tourism) were excluded from further analysis due to the higher p-value ($p > 0.05$) and 18 indicators remained in our proposed model. Deleting those 12 indicators, nearly all p-values were smaller than 0.05.

After modification, the indexes of the overall model fitness were: CMIN/DF = 2.699, NFI = 0.931, TLI = 0.941, CFI = 0.955, RMSEA = 0.062, PNFI = 0.710, PCFI = 0.729, CN > 200. From the results, it can be easily seen that the corrected model fits well. Finally, structural equation modelling was undertaken to test the hypothesized relationships between the factors. The resulting structural model provides evidence for the proposed relationships between the constructs and their indicators. All measures tested above provide evidence of a good model fit.

Table 4.1

Descriptive statistics and measurement model results (n = 222)

Constructs and Indicators: $CR = \frac{(\sum L)^2}{(\sum L)^2+(\sum e)}$, $AVE = \frac{\sum L^2}{n}$, (e=1-L^2)	**Mean**	**St. dev.**	**Responses in %**			**Model Results**		
			Agree	Neutral	Disagree	CSL	C R	AVE
Negative political environment	**3.470**					**L**	**0.984**	**0.939**
PE_1 Tourism development is less supported by relative organizations.	3.37	1.226	62.2	6.8	31.0	0.963		
PE_2 The local area has fewer benefits from tourism development.	3.41	1.183	63.1	7.6	29.3	0.991		
PE_3 Local residents are rarely informed about tourism development there.	3.58	1.192	68.9	6.3	24.8	0.963		
PE_4 Tourism businesses are monopolized by a few politically powerful people.	3.52	1.172	67.1	5.4	27.5	0.958		
Negative economic impacts of tourism	**3.393**						**0.927**	**0.811**
EI_1 Tourism has increased the gap between the rich and poor in this village.	3.39	1.163	62.1	9.5	28.4	0.908		
EI_2 Local prices and the necessary cost of living for residents has increased.	3.38	1.162	61.7	9.0	29.3	0.977		
EI_5 Most of the local money is earned by outsiders.	3.41	1.173	63.1	8.1	28.8	0.808		
Negative	**3.375**						**0.829**	**0.708**

environmental impacts								
NEI_3 A large influx of tourists has a great impact on the normal life of the flora and fauna.	3.38	1.181	65.4	7.2	27.4	0.860		
NEI_4 Development of tourism contributes to pollution (throw rubbish and make noise, etc.).	3.37	1.255	63.5	6.3	30.2	0.823		
Positive sociocultural impacts of tourism	**3.527**						**0.979**	**0.940**
ScI_2 Tourism provides an incentive for the preservation of local culture in Zhabagly village.	3.59	1.096	72.1	5.8	22.1	0.965		
ScI_3 Tourism grows the cultural exchanges between tourists and residents.	3.48	1.062	63.1	13.5	23.4	0.966		
ScI_4 Infrastructure of this region has improved due to tourism development.	3.51	1.001	67.6	11.7	20.7	0.978		
Residents' dissatisfaction with tourism	**3.275**						**0.986**	**0.960**
Sat_2 I am dissatisfied with local's employment in the tourism industry here.	3.53	1.228	66.2	9.9	23.9	0.961		
Sat_3 I am dissatisfied with residents' involvement and influence in the planning and	3.39	1.143	61.2	11.7	27.1	0.990		

development of tourism in the Aksu-Zhabagly.								
Sat_4 I am dissatisfied with the tourism generated benefits for sustainable development.	3.64	1.104	73.4	7.2	19.4	0.988		
Residents' nonparticipation in tourism	**3.450**						**0.952**	**0.870**
Par_1 I do not participate in decision making about tourism development.	3.69	1.268	68.9	11.3	19.8	0.892		
Par_2 I do not participate in planning works of tourism development.	3.58	1.297	66.2	5.4	28.4	0.991		
Par_4 I do not participate in the ecological protection works of this tourism destination.	3.08	1.037	31.1	45.0	23.9	0.912		
Notes: * Agreement rate (%): Completely agree + agree, and ** Disagreement rate (%): Completely disagree + disagre								

SEM confirms the connections among the negative political environment, the perceived negative economic, negative environmental and positive sociocultural impacts of tourism, residents' dissatisfaction and residents' nonparticipation in tourism development. Not all constructs are relatively well explained by their predictors, as suggested by the explained variance, which ranges from 0.01 to 0.70. However, most of the path coefficients (6 out of 7) between the two constructs are still significant (Table 4.2).

Table 4.2

The path coefficients between the two constructs

Constructs			C.R. (t)	*P* value
Negative_Environmental_Impacts	<---	Negative__Political Environment	16.207	***
Positive__Sociocultural_Im	<---	Negative__Political	−0.440	0.660

pacts		_Environment		
Negative__Economic_Impacts	<---	Negative__Political_Environment	2.573	0.010
Residents__Dissatisfaction	<---	Negative__Economic_Impacts	4.932	***
Residents__Dissatisfaction	<---	Negative_Environmental_Impacts	2.008	0.045
Residents__Dissatisfaction	<---	Positive__Sociocultural_Impacts	−2.033	0.042
Residents_Nonparticipation	<---	Residents__Dissatisfaction	6.075	***
Notes: *** Statistically significant at p < 0.001				

Further analysis of the structural part of the model reveals that the negative political environment has a significant positive effect on negative environmental impacts of tourism, negative economic influences of tourism have a significant positive effect on residents' dissatisfaction with tourism development and residents' dissatisfaction has a significant positive effect on residents' nonparticipation in tourism development ($\beta = 0.83$, $t = 16.207$, $p < 0.001$; $\beta = 0.32$, $t = 4.932$, $p < 0.001$ and $\beta = 0.39$, $t = 6.075$, $p < 0.001$, respectively), indicating a significant and strong positive relationship between negative political environment and negative environmental impacts of tourism, tourism's negative economic impacts and residents' dissatisfaction with tourism, residents' dissatisfaction and residents' nonparticipation in tourism. it means that the higher perception of residents on the negative political environment, negative impacts of tourism and dissatisfaction of residents, the higher perception of residents on negative environmental impacts of tourism, residents' dissatisfaction with tourism and residents' nonparticipation in tourism.

Similarly, the path coefficient between negative political environment and negative economic impacts of tourism is 0.18 ($t = 2.573$, $p < 0.05$) and the path coefficient between negative environmental impacts of tourism and residents' dissatisfaction with tourism is 0.14 ($t = 2.573$, $p < 0.05$). It indicates that the negative political environment has a positive significant influence on tourism's negative economic impacts, at the same time tourism's negative environmental impacts have a positive significant influence on residents' dissatisfaction with tourism. Therefore, H1, H2, H4, H5, and H7 were all proven.

There was no significant relationship between the negative political environment and positive sociocultural impacts of tourism but the negative relationship between positive sociocultural impacts of tourism and residents' dissatisfaction with tourism development was relatively significant. The negative political environment has a very weak negative influence on the positive sociocultural impacts of tourism ($\beta = -0.03$, $t = -0.440$, $p > 0.05$), and positive environmental impacts of tourism have a significant negative effect on residents' dissatisfaction ($\beta = -0.13$, $t = -2.033$, $p < 0.05$), so H6 was proven, but H3 was not proven, indicating that negative political environment is not a function of positive sociocultural impacts of tourism development at the Aksu-Zhabagly tourism destination. In the seven relationship hypotheses in the proposed model, six were true but one was not. H3 is not valid because the path analysis results are contrary to the proposed assumption (Figure 4.5).

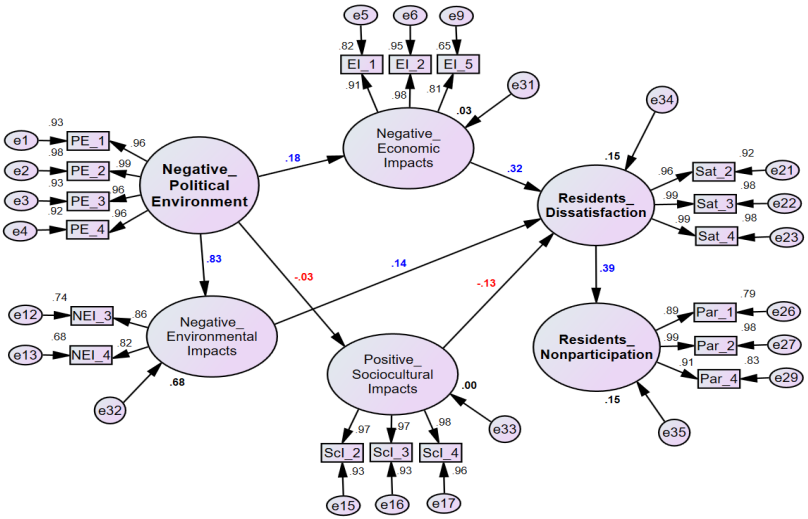

Figure 4.5 – The model of residents' participation in tourism
Notes: *** Statistically significant at $p < 0.001$,
** Statistically significant at $p < 0.05$, and * Statistically insignificant

Our proposed model in this study was developed based on the six-factor model constructed by Mihalič et al. (2016), which includes

factors such as the political environment, the three pillars of STD (economic, sociocultural and natural), residents' satisfaction and residents' support for tourism. In their model, Mihalič et al. (2016) explore the direct impacts of the political environment on three dimensions of STD, direct impacts of the three pillars of STD on residents' satisfaction with tourism, indirect impacts of the political environment on residents' satisfaction with tourism and direct impacts of residents' satisfaction with tourism on residents' support for tourism. And in our model, only seven direct connections were originally hypothesized. Instead of residents' support for tourism, we used residents' participation in tourism. Our study confirmed a total of 18 indicators that created a six-factor model in line with our theoretical model construct (Table 4.1). More specifically, these factors were the negative political environment of tourism destination, negative economic, positive sociocultural and negative environmental impacts of tourism, residents' dissatisfaction with tourism development, residents' nonparticipation in tourism. Each of these represents a self-standing construct in our model.

This paper contributes to the tourism knowledge base by integrating the dimensions of the political environment into sustainable models that could survey CP in tourism. Therefore, our proposed model and discussion begin with the negative political environment which was measured by four indicators: Insufficient support from relative tourism organizations for locals, fewer benefits from tourism development for the local residents, less information about tourism development for local residents, and monopolization of tourism businesses by a few people in the village. Then, our model analyzed the direct impacts of the six factors.

It was concluded that the residents of Zhabagly highly perceive the negative political environment because they agree with statements about describing negative political environment elements, the four indicators of negative political environments were evaluated with the mean value of 3.470. According to the respondents, "tourism development is less supported by relevant organizations" (mean = 3.37), "the local residents have fewer benefits from tourism development" (mean = 3.41), "local residents are rarely informed about tourism development" (mean = 3.58), and "tourism businesses are monopolized by a few politically powerful people" (mean = 3.52),

which can be significantly improved. The negative political environment factors had a relatively high composite reliability (CR = 0.984), revealing the construct's high level of internal consistency. Furthermore, residents' dissatisfaction with tourism development also received higher mean values (3.275). Finally, it can be seen from the respondents' evaluation that residents not participating in tourism similarly received higher mean values (3.540). One can easily imagine that further improvement of the (at present) relatively negative political environment would result in even higher residents' satisfaction with tourism development and increase active participation of locals in the tourism industry.

With respect to the impact of Aksu-Zhabagly's political environment, based on the other factors, seven direct connections were originally hypothesized. The first group of hypotheses assumes the role of the negative political environment on the three pillars of sustainable tourism (negative economic, negative environmental, and positive sociocultural impacts of tourism) and how they are perceived by the community (H1, H2, and H3). The results confirm that the impact of the negative political environment on negative economic (H1: $\beta = 0.18$, $p < 0.05$) and negative environmental (H2: $\beta = 0.83$, $p < 0.001$) impacts of tourism at the Aksu-Zhabagly heritage site were significant and positive, while the impact of the negative political environment on positive sociocultural impacts of tourism (H3: $\beta = -0.03$, $p > 0.05$) was not statistically significant, indicating that a negative political environment impact increased the residents' evaluation of negative economic and environmental impacts of tourism. By forming different factors with CFA, this study affirmed that, in reality, the impacts of tourism on the destination could be divided into the sociocultural, natural, and economic impacts [125-127]. The respondents also gave a relatively high score to negative economic and environmental impacts of tourism development in their hometown. The three indicators of negative economic impacts of tourism were evaluated with the mean value of 3.393, meanwhile, the two indicators of negative environmental impacts of tourism were evaluated with the mean value of 3.375.

Figure 5.5 shows that negative economic and environmental impacts of tourism had a significant positive effect on residents'

dissatisfaction with tourism (H4, $\beta = 0.32$, $p < 0.001$ and H5: $\beta = 0.14$, $p < 0.05$, respectively). It can be observed that residents largely agree that tourism caused negative economic and environmental impacts, such as the widened gap between the rich and poor (mean = 3.39), risen local prices, and the necessary cost of living for residents (mean = 3.38), the leakage of local money (mean = 3.41), the high numbers of tourists who disturb the normal life of the flora and fauna in the reserve (mean = 3.38), and the tourism-generated pollution (throwing rubbish and making noise, etc.) in the tourism destination (mean = 3.37). Based on residents' assessment in Zhabagly village, they also gave relatively high scores to the effects of tourism's positive sociocultural impacts (with an average of 3.527) on residents' dissatisfaction with tourism, however, the higher perception had a weaker negative influence on residents' dissatisfaction with tourism (H6, $\beta = -0.13$, $p < 0.05$), more research is needed in this area. Therefore, it is assumed that the more positive political environment for tourism development is seen to be benefiting the positive economic development and environmental protection in Aksu-Zhabagly, given that more residents are satisfied with tourism and embrace tourism development in their communities.

The seventh hypothesis (H7), which proposed residents' dissatisfaction with tourism development positively affects residents' nonparticipation in tourism, was proved (H3: $\beta = 0.39$, $p < 0.001$). It was found that in Aksu-Zhabagly natural heritage tourism destination, higher dissatisfaction of local residents resulted in residents' weak participation in tourism development in their village. The high rate of dissatisfaction and low participation is noteworthy. From the investigation, a conclusion can be drawn that although the direct reason for residents' low involvement in the tourism sector was due to the dissatisfaction of local community with tourism development, one of the most primary indirect reasons for passive participation in the tourism industry was the negative political environment in the Aksu-Zhabagly tourism destination. If local residents believe that authorities and government officials are interested in hearing their voices and providing them with an opportunity to participate in the decision-making process, it will be a big encouragement for their participation. In the end, residents will participate in conservation programs and tourism development within the scope of what they

believe the local government allows [29, 42, 128]. However, in underdeveloped and rural destinations, especially in developing countries, residents believe that the political structure of centralization and the tendency of local policymakers to evade power sharing will be detrimental to them [29, 129, 130]. Therefore, for rural residents in many developing countries, negative political environments, such as hiding preferential policies, unequal participation opportunities, and unequal benefit sharing, will limit their enthusiasm for participating in the tourism industry.

To sum up, the participation of local residents in the World Heritage tourism development in their hometown is one of the main prerequisites for sustainable tourism. If the political environment for implementing tourism development is beneficial for local residents, they will actively participate in the measures of protecting the world heritage sites within their communities. When implementing effective measures of STD, the local people play a very important role because they are more familiar with those antiquities and know well what it takes to protect and promote them.

Residents' support for tourism may be affected by a well-developed political environment and destination governance [99]. Our results confirm that the negative political environment of a tourism destination can determine residents' negative assessment of the three pillars of sustainability (economic, environmental, and sociocultural) These negative assessments of the three pillars of sustainability can increase residents' dissatisfaction with the pace of tourism development. Therefore, residents' participation in tourism may be affected by the badly-developed political environment in the tourism destination.

Based on the above findings, the study also helps local communities and the government to realize the importance of the positive political environment of the tourist destination in developing sustainable tourism. Based on the identified connections and impacts, the Aksu-Zhabagly community has the potential to increase residents' participation level in tourism development by improving the dimensions of the political environment. In this regard, in order to improve the current situation in Aksu-Zhabagly world natural heritage tourism destination, the following measures are recommended: The relevant organizations should provide adequate

support for tourism development, the tourism development generates more benefit to the development of the local area, relevant authorities provide local residents with comprehensive information about tourism development, opportunities of engaging in the tourism sector should be equally given everyone in the local area. Additionally, in order to achieve sustainable tourism, tourism development should recognize and encourage a higher level of local community satisfaction because local residents are one of the key stakeholders in tourism destinations. This requires a modification of the destination governance system to effectively develop and implement tourism policies based on the coordination and cooperation of all stakeholders.

In short, in the case of Kazakhstan, reducing the influence of the negative political system and power structure on the tourism industry is one of the key ways to achieve sustainability in the most vulnerable heritage tourism destinations, specifically heritage sites like Aksu-Zhabagly Biodiversity Reserve. Therefore, it is important to have a clear understanding of political issues, the interests of key political actors and how to mitigate personal interests in order to promote and maintain STD in this developing country.

Chapter 5 SUSTAINABILITY OF THE COMMUNITY BASED ECOTOURISM DEVELOPMENT

5.1. Community-Based Ecotourism and Sustainability

It is universally recognized that community-based tourism initiatives reduce poverty not only by increasing incomes, but also by providing rural communities with tools and education for long-term critical thinking and decision-making. Community-based tourism (CBET) is a type of ecotourism that focuses on the development of local communities and allows local people to significantly control its development, management and participation, at the same time, part of the profit should be allocated to community development [131, 132]. CBET essentially helps protect biodiversity and wildlife, and supports the idea that people living in natural areas should participate in decision-making about conservation strategies [133]. CBET authorizes the host community to participate in the decision-making of eco-tourism planning, while considering the positive and negative impacts on the environment, social culture and economy [134]. CBET destinations bring potential benefits to individuals, communities and the entire country in terms of creating employment opportunities, foreign exchange earnings and improving the well-being of local residents [135]. Moreover, from a social point of view, nature-based ecotourism employs the local population and promotes the development of the regional economy, as well as assures the quality of life among local population, preserves environmental values and provides quality services to tourists [136].

Development organizations see CBET as a potential source of economic development and poverty eradication, especially in rural areas with limited agricultural potential. For example, in the past decade, CBET in East Africa and Southern Africa has seen the strongest growth in the global market because of its positive economic impact on the people of the region, making it an essential industry [137]. CBET has increased local income and built the regional economy by protecting the local ecosystem and culture. However, only when the community sees the benefits of ecotourism development, and when the development of ecotourism does not

harm their environment and affect their main source of livelihood, will ecotourism get support among the local community [138-140]. Community-based ecotourism and responsible tourism should be part of a sustainable development strategy. Environmental sustainability includes present generations' preservation of natural heritage and biodiversity, and the preservation of important environmental processes for future generations [141]. However, the CBET project has become a double-edged sword for realizing natural resource protection and improving the livelihoods of host communities [142]. For example, for rural communities that use forests and other natural resources as their main source of livelihood, these natural resources are at risk of overexploitation [143].

Sustainability of ecotourism is a journey to explore natural resources and unique cultures and traditions without harming natural and cultural resources. Ecotourism is considered as a tool for nature protection and sustainable development, so how to maintain the sustainable development of ecotourism has become an important issue. Ecotourism is a form of sustainable tourism based on natural resources and it mainly focuses on experiencing and learning about nature, landscape, flora, fauna and their habitats, as well as local cultural handicrafts [144]. Ecotourism is concentrated on activities such as restoration and conservation, community and sustainable tourism visits [145]. The sustainability of ecotourism requires the minimum consumption of natural resources and cultural heritage as tourist attractions, and it should aim to bring socio-economic benefits to the community, protect the environment and protect cultural traditions [146]. The goal of ecotourism is to understand culture and history, not to change or destroy biodiversity and ecosystems [147]. When encouraging community from ecotourism destination that solely depend on the resources, awareness raising and practical implementation of sustainability is essential to gain community support [148]. In order to protect the environment and preserve biodiversity, it is necessary to involve all stakeholders in the implementation of ecotourism policy based on sustainable development [149]. Sustainability of community-based ecotourism development aims to understand residents' views on actual implementation based on sustainable practices [150]. In implementing the sustainability of ecotourism products, it is

necessary to pay attention to the safety of visitors, quality service and authenticity, while respecting cultural sensitivity and environmental protection [151].

Indicators have been identified as ideal tools and/or metrics for assessing and monitoring progress in sustainable development [152]. The Global Ecovillage Network (2017) developed local and community-based planning initiative guidelines to achieve more sustainability and develop community sustainability assessments, as a tool to compare the status quo of existing environmental, social, cultural and spiritual sustainability goals for existing villagers and rural communities. The WTO has been promoting the use of sustainable tourism indicators to measure sustainable tourism management as an important tool for decision-making. In order to improve the sustainability of the CBE sites, it is determined to use sustainable tourism indicators to test the effectiveness of tourism implementation [153].

CBET has tools for biodiversity and natural environmental protection, including the protection of cultural heritage, economic development and favorable government policies that empower the local community involvement in a sustainable management to build sustainable community development. Environmental sustainability can also get help from sustainable ecotourism, which effectively manage the implementation practice and long-term maintenance of natural resource planning for future generations to use [150]. Ecotourism development will provide an opportunity to local people to support sustainable use of culture and heritage sites, at the same time, revenues generated from culture and heritage sites will be used for conservation and maintenance [150]. Attracting a large number of tourists to the ecotourism destinations while focusing on long-term maintenance of the unique environment can create economic benefits for the community development and contribute income to the local people [154]. To achieve long-term success in community ecotourism development, the government must ensure local people's involvement in decision-making and planning process about tourism development. At the same time, the government also should pursue a policy of poverty reduction based on the sharing of benefits from community tourism management [155].

This chapter aims to assess the implementation of CBET development in Aksu-Zhabagly NR through comparing sustainability of ecotourism development in the neighboring two communities (Zhabagly and Abaiyl settlements). Since sustainable ecotourism development based on aforementioned four dimensions of sustainable management will help to make it more profitable for the local community of Aksu-Zhabalgy NR.

In this study mainly the quantitative research method was employed in data collection and analysis. A questionnaire survey was used to evaluate the sustainability of the community-based ecotourism development in the Aksu-Zhabagly NR. The Aksu-Zhabagly NR was selected because it has been identified as a more CBET developed area among nature reserves in Kazakhstan.

Our advance study area observation helps to effectively perform questionnaire surveys for the primary data analysis. Focus respondents were the key CBET stakeholders (local residents) including eco-tour guides, guesthouse owners, cooks, taxi drivers etc., who are representatives both from settlement Zhabagly and Abaiyl.

This article is based on quantitative research, a total 222 respondent participated in this study consists 156 of local people in Zhabagly community and 56 of Abaiyl community. The questionnaire uses five point of Likert scales. The study used 18 indicators to measure progress toward building a sustainability of CBE development in the case study based on residents' perceptions on implementation of sustainable ecotourism development: Environment (4 indicators), Socio-cultural (5 indicators), Economic (5 indicators) and Political (4 indicators). The data were analyzed using Microsoft Excel 2016. Descriptive statistics were used to summarize the mean score and weighted average values. The weight of the indicator was calculated by using the formula as below:

Indicator weight (w_{ij}) = (Mean score of each indicator/Total indicators mean scores) ×100

To determine sustainability, weight score of indicators within three relationship aspects are found by the following equation,

$$y_{ij} = \frac{r_{ij} - 1}{m} w_{ij} \qquad (1)$$

Where y_{ij} is the weighted scores of the j-th indicator in the i-th aspect, r_{ij} is the mean score of the j-th indicator in the i-th aspect, and w_{ij} is the weight of j-th indicator in the i-th aspect, m explains the four intervals of sustainability barometer.

$$y_i = \sum_{j=1}^{k} y_{ij} \quad (2)$$

Where y_i is the sum of weighted score for the i-th aspect; and k is the number of indicators included in the i-th aspect.

The study used the Barometer of Sustainability to determine gradations of sustainability [156]. give a four-point scale which use an interval scale of 1-100, where 1-25% was classified as "unsustainable (bad)", 26-50% was classified as "potentially unsustainable (poor)", 51-75% was classified as "potentially sustainable (good)" and 76- 100% was classified as "sustainable (excellent)"

Interval scales denoted the indicator mean score between 1 and 5, where 1.0-2.0 denoted unsustainability, 2.1-3.0 denoted potential unsustainability, 3.1-4.0 denoted potential sustainability and 4.1-5.0 denoted sustainability.

To determine the contribution to sustainability from a relationship aspect, the achievement scores were obtained by the following equation,

$$D_i = \frac{y_i}{w_i} \times 100\% \quad (3)$$

Where w_i is the sum of weighted, y_i is weighted scores, and D_i is the i-th relationship aspect. Theingthae, S. (2017) used this method in his study, "Sustainability of Community Based Ecotourism Development after the Impact of Tsunami Disasters: Comparison between Buddhism Community and Muslim Community in Phuket Province, Thailand". And his research is based on the following seven dimensions of sustainable management: environmental, social, culture heritage, economic, marketing, spirituality and religious traditions and political dimension.

Table 5.1

Details of resident sample responses (n = 222)

Characteristics	Zhabagly (n=166)	Abaiyl (n=56)
Gender:		
Male	66.3	67.9
Female	33.7	32.1
Age (years):		
Young (18–34)	36.2	39.3
Middle age (35–54)	53	48.2
Elder (≥55)	10.8	12.5
Ethnicity:		
Kazakh	91.6	92.8
Russian	4.8	3.6
Other	3.6	3.6
Education:		
Middle (school or college)	85.5	89.3
High (university or above)	14.5	10.7

Table 5.1 shows that out of the 222 respondents, 166 were from the Zhabagly settlement and 56 were from the Abaiyl settlement. Since men generally go out to work in remote villages to earn money while women do housework and raise children, the number of men we interviewed is almost twice as large as that of women, with 66.3% (from Zhabagly) and 67.9% (from Abaiyl) respectively. The highest number of respondents was the middle age group (35–54) with (53.0%) from Zhabagly and (48.2%) from Abaiyl respectively, followed by the young (18–34), with 36.2% (Zhabagly) and 39.3% (Abaiyl). And the lowest number of respondents was the elder group (≥55), with (10.8%) from Zhabagly and (12.5%) from Abaiyl respectively. Nearly all respondents were Kazakhs: 91.6% were from Zhabagly and 92.8% from Abaiyl were interviewed, respectively. At the same time, survey questions were answered by 4.8% Russian ethnic people and 3.6% other ethnic groups in Zhabagly and 3.6% Russian and 3.6% other ethnic groups in Abaiyl. Most of the respondents had the middle (school or college) education, with 85.5% of Zhabagly and 89.3% of Abaiyl while only 14.5% (Zhabagly) and 10.7% (Abaiyl) of those who have received higher education (university or above).

5.2. Sustainability of Community-Based Ecotourism in Aksu-Zhabagly

Sustainable tourism enables people to participate and benefit from it. Developing sustainable tourism activities can generate income for local residents and build community facilities. Not only local people will benefit from sustainable tourism resources, but the private sector will also benefit from it [157]. In order to achieve the sustainable development of tourism, the development of tourism should obtain a higher level of satisfaction or good perception of the local community. To measure the sustainable development of tourism types in a designated area, it is necessary to study how the community as a whole evaluates the area as a tourist destination. Therefore, we consider the following indicators to determine the sustainability of the community-based ecotourism development in the Aksu-Jabagy NR. They are the four main components of sustainability principles, such as the environmental, socio-cultural, economic and political dimensions. Based on the description and analysis of questionnaires, the results of total assessment of implementation of sustainable ecotourism management as shown in Table 5.2.

Environmental dimensions: In the environmental dimensions of CBE development, it is commendable that Zhabagly community is implementing with higher level of compliance. The residents of Zhabagly community perceived highest mean score on "existence of flora and faunal biodiversity management plan" (4.52). Since the territory of Aksu-Zhabagly NR is state-owned land which the government controlled and held a monopoly on the land and natural resources, and residents and enterprises can engage in activities permitted by law around natural public areas. The residents of Zhabagly community also have met the highest mean score on "providing and development knowledge of local people in environment conservation" (4.27), it means that the people living in Zhabagly settlement always participated in educational activities about the importance of the protected natural areas and environmental protection organized by relevant governmental and non-governmental organizations.

Conversely, the residents of Abaiyl community perceived medium mean score on implementation of environmental sustainability dimensions. And the lowest mean score from Abaiyl community is on

"trained and development knowledge of local people in ecotourism management" (3.20). This is due to the fact that the majority of the population in this area is railway workers, who are on duty and do not often take part in the tourism development strategies in the reserve.

Socio-cultural dimensions: Overall, on comparison of basic descriptive analysis, Zhabagly community have a higher level of perception on the indicators of tourism's positive socio-cultural impact. In the residents of Zhabagly settlement, the perceived highest mean score is on "rehabilitation and conservation of local cultural and historical values" (4.18). At the same time, Zhabagly community also perceived relatively higher compliance with "existence and revival program of traditional clothing, music and dance" (3.89) and "recovery & implementation of local traditional rituals and festivals" (3.71) respectively. It can be seen from the table 5.2 that the compliance degree of the Abaiyl community in indicators of socio-cultural dimension is moderate. The highest perception from Abaiyl community is on "existence and revival program of traditional clothing, music and dance" (3.59).

Conversely, both the residents of Zhabagly and Abaiyl community perceived lowest compliance with "implementation of quality infrastructure development" (Zhabagly=3.21 and Abaiyl=2.57 respectively), which indicated that the infrastructure development state in Aksu-Zhabagly tourism destination is still at a lower level.

Economic dimensions: In the practice of the economic dimensions, it showed that both communities are implementing with a moderate level of compliance, residents of the two communities perceived highest mean score of "provide locals with employment opportunities" (Zhabagly=3.68 and Abaiyl=3.51 respectively). And the lowest mean score in this dimension is on "promote the development of other economic sectors" (1.96), which is evaluated by Abaiyl community. Because of longer distance from core zone of the tourism destination, Abaiyl community residents do not highly perceived the economic benefits of tourism.

At the same time, the views of both communities on tourism "increases local residents' household income" and "generates foreign exchange" are positive, with a mean score of greater than 3. However, they do not agree with the opinion that "tourism increases government tax revenue", one of the main reasons for this is that most of

Kazakhstan's budget comes only from the oil and gas sector, and tourism is not one of the priorities of economic development.

Political dimensions: Overall, Zhabagly and Abaiyl community have a lower-level compliance in political dimension. Accordingly, the mean score of "promote investment that support local development from both communities" was low, with 2.23 for Zhabagly and 1.45 for Abaiyl separately, indicated that government do not pay more attention to attracting investment for ecotourism activities management. Moreover, residents of Abaiyl community perceived lowest mean score of "strategies in poverty reduction through tourism development" (1.79), due to limited support for education and public awareness by relevant organizations.

The views of the two communities on "safety management for local people and tourist" are mostly the same, (Zhabagly=2.79 and Abaiyl=2.63 respectively). Although both communities rated the effectiveness negatively, they rated it relatively higher than other political dimensions. When conducting research in the study area, we also found that the authorities did not pay enough attention to providing financial support for the development of local souvenir shops, local gourmet restaurants, homestays and others projects that provide services to attractive tourists.

From the comparison of basic descriptive analysis, we found that there are differences in sustainability in the implementation of CBE development between the two communities (Figure 3). Although the Zhabagly and Abaiyl communities rated CBE development at the same level (potentially sustainable and potentially unsustainable) in two dimensions (socio-cultural and political), their assessments of the other two dimensions (environmental and economic) were different. If we compare the assessment of tourism sustainability of the two selected settlements on 4 indicators, the Zhabagly community rated all indicators higher than the population of Abaiyl approximately by 10%. One of the main reasons for this is that the village of settlement Abaiyl is located on the railway bank, far from the nature reserve compared to settlement Zhabagly (Figure 2), so the people in Abaiyl do not associate themselves with the development of various industries (including tourism) in the reserve. They see themselves as heavily dependent on permanent employment and trade.

Table 5.2

The mean scores, weight, weighted score and ranking of indicators for sustainability of the CBET

Dimensions	Indicators		Zhabagly community				Abaiyl community				
			Mean	Weight	Weighted	Rank	Mean	Weight	Weighted	Rank	p-value
Environmental	EN1	Providing and development knowledge of local people in environment conservation	4,27	6,93	5,66	3	3,78	7,22	5,02	4	0.000
	EN2	Trained and development knowledge of local people in ecotourism management	3,78	6,13	4,26	1	3,20	6,11	3,36	1	0.039
	EN3	Existence of management plans for geomorphol ogical formations and soils	4,05	6,57	5,01	2	3,38	6,46	3,84	2	0.002
	EN4	Existence of flora and faunal biodiversity management plan	4,52	7,33	6,45	4	3,41	6,51	3,92	3	0.000
Socio-cultural	SO1	Rehabilita-tion and conservation of local cultural and historical values	4,18	6,78	5,39	5	3,39	6,48	3,87	3	0.001
	SO2	Recovery & Implementat ion of local traditional rituals and festivals	3,71	5,65	3,50	3	3,22	6,15	3,41	2	0.006

	SO3	Implementa-tion of quality infrastructure development	3,21	5,21	2,88	1	2,57	4,91	1,93	1	0.008
	SO4	Existence and Revival program of traditional clothing, music and dance.	3,89	6,31	4,56	4	3,59	6,86	4,44	5	0.000
	SO5	Convenience of access to tourist attraction and basic tourist facilities.	3,68	5,97	4,00	2	3,48	6,65	4,12	4	0.006
Economic	EC1	Increase local residents' household income.	3,38	5,48	3,26	1	3,27	6,25	3,55	4	0.009
	EC2	Provide locals with employment opportunities	3,68	5,97	4,00	5	3,51	6,7	4,20	5	0.003
	EC3	Generate foreign exchange.	3,48	6,46	4,81	3	3,02	5,77	2,91	3	0.009
	EC4	Promote investment that support local development	2,43	3,94	1,41	2	1,96	3,74	0,90	1	0.032
	EC5	Increase government tax revenue.	2,59	4,20	1,67	4	2,13	4,07	1,15	2	0.040
Political	PC1	Promote investment that support local development	2,23	3,62	1,11	1	1,45	2,77	0,31	1	0.039
	PC2	Safety management for local people and tourist.	2,79	4,53	2,03	3	2,63	5,02	2,05	4	0.045
	PC3	Existence of strategies in	2,83	4,59	2,10	4	2,57	4,91	1,93	3	0.028

		promoting education and public awareness.									
	PC4	Existence of strategies in poverty reduction through tourism development	2,66	4,32	1,79	2	1,79	3,42	0,68	2	0.041
Notes: Statistically significant at $p < 0.05$											

Zhabagly residents perceived highest compliance level (sustainable) in the environmental dimension with 79.31% while residents of the Abaiyl community believe that the environmental dimension is potentially sustainable with 61.37% (Table 3). It indicated that the development of ecotourism in Aksu-Zhabagly NR has achieved its goal to some extent because residents of Zhabagly settlement gave comparatively high evaluation on the positive ecological impact of tourism development in the territory of nature reserve.

As far as the assessment of the socio-cultural impact of tourism is concerned, table 3 showed that the assessment of the residents of the two settlements was at a potentially sustainable level (Zhabagly=67.95 and Abaiyl=57.23 respectively). In a survey of local people, we found that with the development of tourism in the reserve, the local Kazakh people were happy to see the restoration of traditions that had disappeared during the Soviet era. And the demonstration of national traditions to tourists is mostly organized in the settlement Zhabagly.

According to the results of the community assessment of the economic impact of tourism, the village of Zhabagly rated the economic impact of tourism higher than that of Abaiyl. The people of Zhabagly settlement referred to this dimension as a potentially sustainable category with 58.17%, but the residents of Abaiyl classified it as a potentially unsustainable level with 47.91% (Table 3). Although Abaiyl settlement is not far from the nature reserve territory and the quality of paving roads from this settlement to the Aksu-Zhabagly tourist destination is good enough, the people in settlement Abaiyl see the economic benefits of tourism development

less than Zhabagly. One of the main reasons for this situation is that the government lacks effective policies to encourage them to participate in tourism. On the other hand, most of the people are railway employees there and they seem to be satisfied with their current stable job.

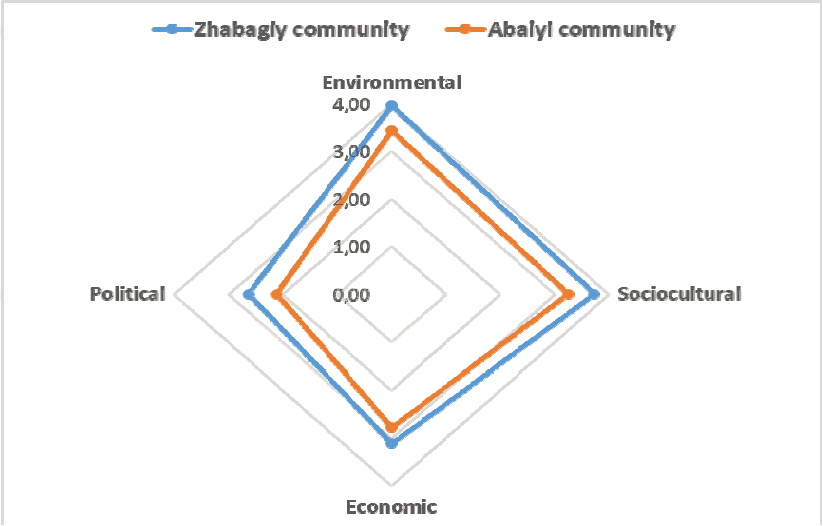

Figure 5.1 – Implementation of CBE development in Aksu-Zhabagly NR (compiled by the authors)

In terms of political dimension, residents of both settlements gave the lowest score in 4 dimensions. Both community residents believe that political dimension of ecotourism development is potentially unsustainable in the Aksu-Zhabagly NR (Table 3). This is because many issues arising in these two communities such as lack of programs for sustainable development investment partnership, lack of appropriate attention by the authority to support investment in local souvenir shops, local food restaurants, homestays and others services for attracting tourists.

Summarizing the above discussion, the assessments of the two main communities directly affected by tourism development in the nature reserve show that two principles (environmental and socio-

cultural) of the four basic dimensions for measuring the sustainability of tourism are sustainable.

This means that the development of ecotourism contributed to the protection of the ecology of the Aksu-Zhabagly NR and the preservation of national culture and traditions of the local population. And the total result shown by both communities is potentially sustainable (Zhabagly=63.91 and Abaiyl=51.59 respectively). Conversely, according to the results in table 3 we can say that the other two dimensions (economic and political) of sustainability are unsustainable. It is clear that the development of tourism in the nature reserve has not had a direct impact on improving the well-being of local people and reducing poverty in the surrounding community.

Table 5.3

Sustainability achievement of Zhabagly and Abaiyl in inter-relationship aspects

Dimensions	Weight (Wi)	Weighted Scores (Yi)	Achievement Percentage (%)	Interpretation
Zhabagly community				
Environmental	26.97	21.39	79.31	Sustainable (excellent)
Socio-cultural	29.92	20.33	67.95	Potentially sustainable (good)
Economic	26.06	15.16	58.17	Potentially sustainable (good)
Political	17.05	7.03	41.23	Potentially unsustainable (poor)
Total	**100.00**	**63.91**	**63.91**	Potentially sustainable (good)
Abaiyl community				
Environmental	26.30	16.14	61.37	Potentially sustainable (good)
Socio-cultural	31.05	17.77	57.23	Potentially sustainable (good)
Economic	26.53	12.71	47.91	Potentially unsustainable (poor)
Political	16.12	4.97	30.83	Potentially unsustainable (poor)
Total	**100.00**	**51.59**	**51.59**	Potentially sustainable (good)

Discussing the views of neighboring communities on the ecological, socio-cultural, economic and political impact of tourism in the nature reserve, we assessed the sustainability of community-based ecotourism in the Aksu-Zhabaly State Reserve in Kazakhstan.

It helps to conceptualize the socio-economic value of NR together with its positive environmental impact, demonstrate its usefulness, and promote knowledge that has practical policy implications in a variety of ways. At the same time, it provides innovative theoretical knowledge by combining relevant areas of NR tourism research and sustainable tourism development, and emphasizes the need to provide more empirical evidence on the issues studied through case studies.

The study concludes that the two main neighboring communities of the Aksu-Zhabagly tourist destination are dissatisfied with the two dimensions (economic and political) of sustainable tourism development to some degree, which are the main driving force for the development of local areas. Currently, few people see the economic benefits of the tourism industry, especially in the village of Abaiyl, which is relatively far from the reserve. At the same time, the government has not developed effective policies for the active involvement of the local population in tourism. In general, this shows that the sustainability of ecotourism in the Aksu-Zhabagly region is still low. In order to ensure best practices and a high level of CBE development implementation, it is important to involve local people in sustainable ecotourism development initiatives. To improve the sustainability of community-based ecotourism in the Aksu-Zhabagly NR, the following recommendations are introduced: First, the relevant tourism management organizations should promote the positive economic influences of ecotourism development on local community. The indicators of economic dimension which have the lowest mean score are "promote the development of other economic sectors" and "increase government tax revenue". Marketing strategies, promotion, and collaborative organizations can improve community productivity and support local small businesses in achieving their goals in the process. In order to achieve long-term survival and economic recovery of both communities, they must ensure a high level of implementation of economic dimensions. Secondly, in both communities, relevant government units and community leaders should promote the implementation of the strategies involving "attract investment that support local development" and "poverty reduction through tourism development". For example, local

communities' tourism relevance, participation rank and empowerment level should be improved.

The main limitation of this study is to evaluate the status of the sustainability of ecotourism development by analyzing and discussing limited number of indicators, such as ecological, socio-cultural, economic and political dimensions and survey the local residents for quantitative analysis. However, they are not fully representative of the entire population of stakeholders in the Aksu-Zhabagly tourist destination. In addition, empirical research is biased due to the use of a single case study, the research's time framework and budgetary constraints. A single case study could give some new ideas or theoretical propositions, but may not be an effective basis for laying a general theoretical foundation. If a study is conducted by using this method among several communities from the point of view of all major stakeholders in the region, we hope that this method has the potential to serve as a theoretical basis for many other ecotourism development areas.

Chapter 6 CBET MODEL FOR AKSU-ZHABAGLY NATURE RESERVE

Community-based ecotourism (CBET) and responsible tourism should be part of a sustainable development strategy. Environmental sustainability includes present generations' preservation of natural heritage and biodiversity, and the preservation of important environmental processes for future generations [141]. Moreover, from a social point of view, nature-based eco-tourism employs the local population and promotes the development of the regional economy, as well as assures the quality of life of local population, preserves environmental values and provides quality services to tourists [136]. The proper organization of community-based eco-tourism always meets all the criteria of the STD. Hipwell (2007) proposed a framework of six standards for sustainable CBET: 1) tourism activities must be small enough to be completely managed by the community without external support; (2) broad representatives of community members should actively participate in the project; (3) the project must benefit the entire community; (4) the project must comprehensively improve the community members' life quality; (5) the awareness of conservation value must be improved; and (6) the maintenance or enhancement of local culture should be promoted. These criteria are indicated to be the particular characteristic of successful CBET projects [158].

In this chapter, we aim to propose a model of CBET that is appropriate to the Aksu-Zhabagly Nature Reserve. To do this, we first analyze the advantages of some foreign successful ecotourism development models. Then we analyze the current model of tourism in our research area in detail and compare it with selected foreign models. Finally, based on the results of the above analysis, we will propose the most suitable sustainable CBET model for Aksu-Zhabagly Nature Reserve.

6.1 Successful Community-Based Ecotourism Case Studies

In the case of eco-tourism areas, the local community closest to the area where tourism development is permitted are often the main stakeholders, because as human resources, they participate in various activities in tourist attractions. To understand how sustainable tourism benefits local communities, it is essential to examine the extent to which local communities can participate in tourism planning and related decision-making processes and to assess how tourism can contribute to their well-being. The aim of this chapter is to propose a sustainable CBET model for Aksu-Zhabagly natural world heritage site by analyzing the most successful CBET models in the world. Therefore, in choosing the successful CBET models, we took Dadia Forest CBET model of Greece, Koh Yao Noi CBET model of Thailand, Chambok CBET model of Cambodia and Baghmara Community Forest CBET model of Nepal because these countries have extensive experience in CBET development and most of the selected CBET development areas are world natural heritage sites like our research area.

CBET model in Dadia Forest, Greece: The Thracian village of Dadia is situated in the southeastern foothills of the Rhodope Mountains in the border region of Bulgaria, Turkey, and Greece. Here, settlements were subject to extreme isolation because of postwar restrictions (after the Second World War and the Greek Civil War), such as limits on travel and land ownership, as well as constant military border controls. These conditions may explain why some of Greece's richest natural areas are found in such border areas. Unique forest habitats with a rich variety of birds of prey, whose nesting and feeding sites stretch widely over the floodplain and delta of the Evros River, are found in this area. This varied landscape once consisted of continuous mixed forests of oak and pine, alternating with limestone cliffs and clear streams, blending into the reed beds and marshy vegetation of the vast Evros River delta [159].

The WWF–EC–ACNAT project was initiated in 1992 and lasted 3 years, with co-funding from the German insurance company Allianz, to ensure long-term support for developing community-based eco-tourism in Dadia. The visitors' guesthouse facilities were completed, and an information center was set up (Figure 7.1),

including attractive wall displays, slide and video presentations, guided tours, and a 3D model of the protected area. The Dadia Ecotourist Center includes 20 guest rooms, a coffee shop and restaurant, an information center with a permanent exhibition of flora and fauna, and a small shop with local products and information related to nature conservation. Regular busloads of visitors could now be escorted to the observatory to view the feeding area through telescopes and binoculars, with interpretation by local eco-guides. In addition, several hiking paths were set up inside the forest area to illustrate the importance of biodiversity. Construction of these paths was one of the many activities organized by the local WWF team for hundreds of volunteers who came each summer. In addition, visiting students and scientists from around the world are taking advantage of this living laboratory for their fieldwork [159].

Women cooperate to make the area attractive to local people. The groundwork was thus established for wider community involvement in the eco-tourism enterprise. A women's cooperative was established with over 35 women of all ages. Training seminars offered by state-funded programs were provided for hospitality and other skills, including preparing and serving traditional Thracian specialties. Young women trained as eco-guides, and as they gained experience and knowledge of the area's biological wealth, they organized programs for visiting schoolchildren from all over Greece. The women's cooperative was so successful that it was emulated in all the area villages, each place emphasizing its own local specialties. Eventually, the increase in visitors to Dadia began to influence the economic activities of the wider area. Visitors stayed additional days to see other towns and villages of cultural and historic interest: the town of Soufli, once an important silk production center, the fortress of Didimotycho, and the magnificent cathedral in Feres, all signifying the importance of this passage between Europe and Asia dating from the time of Byzantine civilization [159].

The success of the Dadia project soon became known in government circles. This was one of the advantages of the EUfunded project: it forced national authorities to pick up speed and skills in the management of the protected area. Dadia's eco-tourism attracted further investments from both private and public bodies. EU regional development funds through the Community Support Framework and

community initiatives such as LEADER+ or INTERREG were of far greater magnitude than the small amount of funding for nature protection committed at the beginning of the project. More hostels and visitor accommodations were built, the visitors' information center was expanded, and a local monastery was restored, with its former cells becoming lodgings for worshipers and other special-interest tourists. Since the appointment of a permanent employee to manage eco-tourism promotion in the Dadia–Soufli Forest Reserve, over 60 international and national meetings, fairs, exhibitions, and conferences have been held in Dadia, with its vibrant local community and exceptional natural heritage [159].

Reversing a trend common to most of Greece's rural areas, the population of Dadia has grown in recent decades. The demand for family housing exceeds the availability. The conservation of Dadia and associated commercial eco-tourism activities have stimulated employment and provided young people with a source of interest and pride. An important additional source of income was provided to rural families. Without leaving home or changing their traditional family roles as caregivers, the women of Evros achieved some measure of independence and contact with the outside world. Some young women, who previously had limited access to education or employment outside the immediate family circle, now delay marrying and starting a family to seek training as educators, guides, or managers, or for other new positions, in order to participate more substantially in the Dadia Reserve [159].

CBET model in Koh Yao Noi, Thailand: Koh Yao Noi is an island (koh) adjacent to Ao Phang Nga National Marine Park in the Andaman Sea of southern Thailand. Immediately adjacent to Koh Yao Noi, the National Park includes more than 40 limestone karst islands situated amidst the tropical waters of Phang Nga Bay, the surrounding coral reefs, tidal channels, mangrove forests and inland rainforest. The 400 km^2 Park is inhabited by large aquatic mammals such as the Malayan dolphin and hammerhead sharks and numerous varieties of coral, shellfish and tropical finfish. Gibbons, crab-eating macaques and langurs reside in the forests and rock cliffs, together with 120 species of birds and reptiles such as the Bengal monitor lizard, flying lizards and pit vipers (Royal Thai Forestry Department, 2011). The island of Koh Yao Noi is also home to some 4,000 Thai

Muslim Malay people, who are mainly engaged in fishing and farming of rice and rubber, aquaculture and, more recently, in the tourism industry.

The Koh Yao Noi Eco-tourism Project started in the early 1990s, when traditional offshore fisheries and reefs were being damaged by large commercial trawlers, which not only depleted fish stocks, but also tore up fragile coral reefs and sea grass beds and damaged villagers' fishing equipment. (For a detailed discussion of the Koh Yao Noi CBET project, see Walter (2009a).) The community responded by forming the Koh Yao Noi Small Fisher's Club, and successfully blockaded fishing trawlers from waters designated as conservation zones (most of Phang Nga Bay). In 1995, islanders were then confronted with a surge of new commercial tourism development, which again threatened marine and land environments on which their livelihood depended. Working together with a local NGO, Responsible Ecological and Social Tours (REST), villagers then established the Koh Yao Noi Eco-tourism Club, a community-based eco-tourism cooperative.

As part of the CBET project, in the mid-1990s Koh Yao Noi began a homestay project, in which 30–35 local families now participate. In 2009, some 250 Eco tourists participated in homestays each month, with several hundred more visitors participating in shorter term eco-tourism activities as well. These include boating, snorkeling, forest hikes, kayaking, birdwatching fishing, sailing, cooking, eating and numerous "tourism activities to fit the local ways of life and livelihood, (which) provide education and awareness about the ecology of the mangrove forest, sea grass beds and shellfish grounds" (Koh Yao Noi Eco-tourism Club, 2011). Until recently, most homestay visitors have been domestic Thai, but foreigners are now visiting in increasing numbers. In total, 500 villagers are members of the CBET project, and work as hosts, guides and drivers, and in food and handicraft production. They earn roughly 10% of their annual income through these eco-tourism services. An additional 10% of all income collected by the project goes to a collective fund supporting reef, sea grass and mangrove restoration, local school programmes and a community development fund. CBET project activities have included replanting of mangrove forests along the coast, protests against the planned construction of

Japanese shrimp farms, a monthly litter clean-up, an environmental education camp for the youth and funding for toilet construction in the local mosque.

The winning recipe of the Koh Yao Noi CBET model are as follows:

♣ They are led, driven and managed by a host community who play a leading role in all stages of the initiatives from planning, development and delivery. Some examples are: a) Local villagers set forth a comprehensive plan for tourism development, including setting up local mechanisms for monitoring and enforcement; b) Villagers have their own patrol boats to control encroachment and over-fishing; c) Local people, not outsiders, act as tour guides; and d) They control the number and frequency of visitors to their community areas.

♣ The host community organizations are well organized and managed, with broad-based participation from the very start;

♣ Staying relevant and making it better all the time through regular reviews, evaluation and customer feedbacks.

CBET model in Chambok, Cambodia: A community-based eco-tourism site is located in Chambok commune, Phnom Sruich district, Kompong Speu Province. The commune is located on the outskirts of the Kirirom National Park about 110 kilometers (km) west of Phnom Penh City via national road No.4, a journey of about 90 minutes by car. Chambok commune administers nine villages with a total population of 546 families. The CBET was established to manage eco-tourism activities in the commune in order to provide alternative income sources for such a forest dependent community after the ban of making charcoals. The CBT committee has 17 members, including 5 monitoring committee members—a member of the Commune Council, a Mlup Baitong representative, and two members from the CBT committee (the chief and the vice chief). The role of the monitoring committee is to facilitate the planning and management of the eco-tourism site at Chambok. These activities started by initial supports from Mlup Baitong (MB), a local environmental NGO, with several foreign donors. MB staff, who has been patiently and deeply communicated with the community, play an important role by providing technical advice and training to CBT committee members.

Three levels of stakeholders are presently involved in community-based eco-tourism development in Chambok: At the government level is the Ministry of Environment, which contracted out the use of the land; at the NGO level is MB; and at the community level is the commune council and the CBT committee. MB was instrumental in the development of CBT in Chambok. It brought together the national Government and the community to agree on developing Chambok as an eco-tourism site. It encouraged the villagers to work together, and encouraged the village to work with national agencies. MB built capacities in the local community in the areas of natural resource management and development management, and also provided initial financial assistance to the community development program. The other key stakeholders are the local community organizations, i.e., the commune council and the CBT management committee. These are responsible for directly implementing and managing the CBET. MB built capacities in the local community in the areas of natural resource management and development management, and also provided initial financial assistance to the community development program. The other key stakeholders are the local community organizations, i.e., the commune council and the CBT management committee. These are responsible for directly implementing and managing the community-based eco-tourism project.

The Chambok CBET project was initially developed to address widespread forest degradation caused by charcoal production, hunting of wildlife, non-timber forest product collection and illegal logging by villagers [160]. With the help of the NGO MB, villagers identified the tourism potential of the waterfall, a cave hosting three bat species and the surrounding rainforest – host to approximately 300 native bird species and 30 different mammals. A 13- member Management Committee (a minimum of three positions are allocated to women) was then elected. In 2002, MB signed a 2-year renewable agreement with the Ministry of Environment to implement an adjoining Community Conservation Area within Kirirom National Park, and in 2003 the Chambok CBET site officially opened to visitors. The CBET site now covers 161 ha and borders more than 900 ha of protected community forest.

The Chambok CBET Project was established in 2002 with support from a local environmental non-governmental organization (NGO), MB

("Green Shade"). Situated next to Kirirom National Park, Chambok's main eco-tourism attractions include three local streams, a 40-metre waterfall, surrounding rainforest and wildlife, and rural Cambodian culture. Numerous eco-tourism activities are possible at Chambok: hiking, swimming, biking, visiting a bat cave, birdwatching and animal tracking, camping, swimming, farm and orchard tours, riding in an ox-cart, picnicking, tree planting, handicraft production, music and dance, and homestay accommodation. The eco-tourism catchment area comprises all nine villages of Chambok commune, and local guides report that 761 families benefit directly from participating in CBET. Twenty families have developed homestay accommodations for tourists (MLUP, 2009). In 2006, the Cambodian Ministry of Tourism cited Chambok CBET as a good model of pro-poor community-based eco-tourism; in 2007, the UNDP Sri Lanka Regional Office selected Chambok CBET as one of 20 "good practice case studies"; and in 2009, the Chambok CBET Project was one of six Cambodian CBET projects recognized by US-AID for its sustainable development potential.

In 2009, the project generated US$19,707, or 8.5% of total annual income for each of 300 families providing tourism services in the project (MLUP, 2009). Of total project income, 25% supports forest patrols, 10% goes to community development, 5% to the local Buddhist temple, 5% to local government, 10% to an emergency fund, another 5% to a community fund and the remaining 40% to eco-tourism service providers (MLUP, 2010).

CBET model in Baghmara Community Forest, Nepal: The Baghmara community forest, located in the Southern plains of Nepal is a good example of how the actions of national governments, when combined with support from non-profit organizations and the cooperation and participation of local peoples, can be effective in promoting conservation ideals while ensuring the well-being of the local community. The Baghmara forest plantation makes a strong case for the ability of a community to protect and enhance their natural resources when they benefit directly from them.

The Royal Chitwan National Park (RCNP) in Southeast Nepal is home to over 570 flowering plant species, 486 species of bird, 40 mammal species, 17 species of retiles and 68 species of fish. This biodiversity, as well as the fact that it serves as a habitat for such endangered species such as Bengal tigers, wild elephants, striped

hyenas, one-horned rhinos, and freshwater dolphin, led to its being declared a World Heritage Site by UNESCO in 1983 [161]. These attractions combine to make the RCNP a major international tourist destination, which brings in thousands of dollars each year.

In order to tackle these issues, the Nepal Conservation Research and Training Center (NCTRC) and the King Mahendra Trust for Nature Conservation (KMTNC) launched a buffer zone plantation program in 1989. The objective of the program was to establish plantations in the buffer zones surrounding the park in order to meet the communities' fuelwood and fodder needs [162].

In 1988, the Master Plan for Forestry Sector Nepal, endorsed by then central government administration, enabled community forest user groups to fully manage all accessible forest, with the goal of meeting local people's needs for fuel, timber, and other forest products on a sustainable basis, contributing to local economy, protecting forest ecosystems, and prevent land from degradation [163]. Once a potential community forest is declared, it is left to the user groups to define the boundaries of each forest within the regulated area. The chief warden of CNP is required to draft an operational plan to officially hand management rights of community forest to the community. The operational plan is valid for five years and regulates the rules of use for the community forest. The Department of National Parks and Wildlife Conservation and the communities jointly develop the rules, with the assistance of the King Mahendra Trust for Nature Conservation [164].

The operational plan specifies when and how communities can extract resources from community forest. These include that no individual from the community can enter the park for forest products; that no farming activity is allowed inside of buffer zone community forest; community members are allowed to pick up only dead trees for firewood, and short grass for consumptive use; no hunting or poaching is allowed in the buffer zone forest; and member can enter the buffer zone forest to pick up grass and firewood at regulated times and limited frequency. All residents entering the jungle for firewood or grass must obtain a warrant from the government.

There are also designated rules on how community forest is formed. In Baghmara, there are nine villages under management of Baghmara community forest user group, and each village nominates

five people to form 45 people committee. The committee is responsible for making decisions on budget allocation, community development, and tourism operation. At the meantime, the government shares 50% tourism revenue with the entire buffer zone community forest based on the institution of bylaw in Chitwan in 1996 (HMGN [His Majesty's Government of Nepal], 1996). As of 2008, it was reported that $3434197 was allocated to buffer zone development during the 13-year period (DNPWC [National Parks and Wildlife Conservation], 2008).

Baghamra community forest area is 215 Hectare with abundant tourism resources There are approximately 1500 households live within Baghnara community forest boundary. It is the habitat for many rare and endangered species such as tiger, one-horn rhino, and elephants, and it is part of the important biological corridor Barandabhar. Among all households in Baghamra, 25% of them are registered with user group to receive helps to involve in tourism employment. The existing tourism activities are jungle walk, elephant ride, bird watching, canoeing, tower night, and jeep safari. According to Baghmara community forest secretary Hari Acharya, tourism has brought 10 million Rupee ($96000) profits on average each year with a total of 11 million Rupee ($107691) income per year for user group. There are approximately 70,000 tourists visit each year. In addition to tourism, forest union group (FUG) of Baghmara community forest receives 30% to 50% tourism revenue share from the government. Among all profits, eco-tourism remains the main income source for community forest. The investment of tourism revenue is allocated to community development and conservation. FUG hires forest specialist to inspect reforestation, wildlife habitat restoration, and the overall health of community forest ecosystem. Existing community development projects include road construction, dam construction, solar electricity subsidy (150 households recipients), toilet installation subsidy (900 households recipients), biogas installation subsidy (400 households recipient), medical bill reimbursement (1000 households recipients), school and scholarships [165].

CBET model in Jiuzhaigou National Nature Reserve (JNNR), China: Jiuzhaigou National Nature Reserve (JNNR), located in western China in the Sichuan Province, is one of the earliest

protected areas in China. It was established in 1978 and became a National Protected Forest Park in 1994 [166], being declared the "most biologically diverse temperate forest in the world" [167]. Internationally it was added to the World Natural Heritage list in 1992 and rated as "Man and Biosphere Reserve" by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 1997. In 2001, the certificate granted by Green Global 21 in Australia, made it one of the most attractive eco-tourism destinations in Asia. Historically, it is a rural area and vulnerable ecosystem with frequent natural disasters, limited economic development and a low living standard compared to urban areas in terms of education, employment, housing, health care, and income [168, 169]. The region, rich in biodiversity and beautiful landscapes, presents an ideal location for nature-based tourism development. The Tibetan inhabitants in the area were the first rural ethnic group in China that abandoned traditional agriculture and engaged in tourism.

Mass tourism developed very fast in the park since 1984. Local Tibetan inhabitants started to renovate their houses as tourist hostels, restaurants or shops. External investors built five-star hotels in the protected park area. The park quickly showed severe signs of pollution due to mass tourism [169]. To reduce the increasing mass tourism burden on the ecosystem and to improve poverty alleviation for the local community, there community-based ecotourism (CBET) participatory management programs were implemented since 1999. One is the sustainable management policy (SMP) for conservation purposes focusing on biodiversity and ecosystem conservation, and empowerment of local communities. The Junior High also established a community-based ecotourism joint-venture and introduced a Payment for Ecological Services (PES) program to compensate the local residents for the economic losses suffered from conservation policies.

Under the SMP, community-based nature conservation projects include:

1) Community participation at national initiatives - Return Farmland to Forest (RFTF), and Return Grazing-land to Grassland (RGTG); a legal ban on farming, animal husbandry, and illegal logging.

2) Community compliance with a new environmental management policy: "tour in the park and stay overnight outside".

Under this policy, tourists were no longer allowed to stay overnight in local community houses inside the park. Communities were required to demolish all existing hostels and restaurants inside the park that were built by local residents since 1984, and to report any new construction project including renovation of old residential houses inside the park to Jiuzhaigou Administration Bureau (JAB) for approval.

3) Community support to biodiversity conservation projects especially for the Giant Panda and Sichuan Takin population in the park, by relocation and resettlement from ancient Tibetan villages that are located in the key wildlife habitats to alternative locations in the buffer zones.

4) Community support to environmental protection measures such as replacing firewood and coal in the village with electricity and gas, installation of drinking water diversion pipelines, and adoption of tourism carrying capacity that restricts the daily number of visitors to 12,000.

A community-based ecotourism joint-venture was established. It was a collectively-owned and shared-capital business, in which local communities own 49% of the stock, while JAB owns 51%. This structure implies that JAB has the absolute power for decision-making of the joint venture. In order to benefit local communities, JAB distributes 77% of the profits to local communities, while JAB receives 23% (JAB annual report, 2000). The joint-venture operates two businesses. The first one is the Green Bus Sightseeing Company, functioning as the only mechanized way of transportation for tourists through the park since private vehicles were not allowed to drive into the reserve in 1999. It was operated by local communities. Until 2003, 350 buses were put into operation, which generated more than US$ 12 million, and the annual income per capita for the local residents was US$ 11,000 [170]. With foreseeable future profits generated by the Green Bus Company, in 2004 Aba Prefecture Government took over the business and reduced the shares of local communities to 20% (JAB, personal communication). The second business is Luorilang Service Center, which has a dining hall and is the only restaurant inside the park for tourists. The restaurant is mainly managed by local communities and serves Tibetan food. The local residents who bought the stocks of the Joint-venture were

allowed to rent an individual booth at Luorilang Service Center to sell souvenirs. The PES has several features, including direct and indirect programs. Direct PES includes the above-mentioned joint-venture, a basic living subsidy from the forest restoration programs and a share from entrance fees. Indirect PES includes the permission to rent individual booths at Luorilang Service Center, to run small businesses inside the reserve, preferential employment to work at JAB, community development programs and capacity building activities such as training and educational programs. Since SMP was implemented, JNNR experienced a substantial reduction in waste, reaching the goal of "zero growth" of pollutants. Until 2015, over 480 million Yuan (approx. US$ 68 million) were spent on infrastructure (JAB annual report, 2015). The second community-based ecotourism participatory management program is the ecotourism development plan (EDP). It aims to develop more community-based ecotourism products that will benefit the local community and to enhance marketing campaigns to attract more international and domestic eco-tourists. New community-based ecotourism projects include opening Zharu Valley and the four villages located there for tourists and developing ecotourism products for nature exploration such as biodiversity tours, hiking, cycling, kayaking, mountain climbing, panda watching, bird watching, and cultural experiences such as Tibetan cultural performance. Community members are encouraged to participate in eco-tour guide training programs. JAB also involved community participation in tourism market promotion activities such as webpage and brochures design to provide tourists with information on the outstanding biodiversity, ecology, and socio-cultural value of the reserve. After 18 years of implementation, both CBET participatory management programs have gradually changed the social, cultural, ecological and economic settings of JNNR. In 2012 JNNR was proposed by China as a ‘best practice’ of managing World Natural Heritage for the following reasons: introducing eco-friendly tour buses, setting up community-based ecotourism joint-ventures, participatory management with benefits sharing, establishing a tourist interpretation system, tourist management regulations, and international academic cooperation [171].

6.1.1 The Advantages of the Selected Foreign CBET Models

The advantages of the successful foreign CBET models stated above can be summarized into the following three major groups.

• Income generation and job creation: All five Community-Based Eco-tourism case studies selected for examples reported that the presence of CBET had helped to generate income and create jobs for community people in their areas. The conservation of Dadia and associated commercial eco-tourism activities have stimulated employment and provided young people with a source of interest and pride, for example, young women trained as eco-guides, and as they gained experience and knowledge of the area's biological wealth, they organized programs for visiting schoolchildren from all over Greece. Similarly, in Koh Yao Noi, 500 villagers are members of the CBET project, and work as hosts, guides and drivers, and in food and handicraft production. They earn roughly 10% of their annual income through these eco-tourism services. The Chambok CBET had provided some salaries from homestay and other services which had provided income for both CBET member and nonmember households. The last two CBET model had also created jobs for its community people to work as tourist guides, restaurant workers or souvenir sellers. Among all households in Baghamra, 25% of them are registered with user group to receive helps to involve in tourism employment. As far as Jiuzhaigou CBET model is concerned, Green Bus Sightseeing Company in Jiuzhaigou ecotourism destination is operated by local communities. And the restaurant at the Luorilang Service Center of Jiuzhaigou is mainly managed by local communities.

• Community development: In all five cases it was reported that the presence of CBET had also helped to support community development. For instance, in Dadia more hostels and visitor accommodations were built, the visitors' information center was expanded, and a local monastery was restored, with its former cells becoming lodgings for worshipers and other special-interest tourists. An additional 10% of all income collected by Koh Yao Noi homestay project goes to a collective fund supporting ecological protection and community development. Community development in

Koh Yao Noi includes local school programs, litter clean-up, environmental education camp for the youth and toilet construction in the local mosque. Chambok CBET had allocated some of its revenues to poor families, and to the maintenance of trails, community buildings, and especially of the water pipeline that gives the villages access to fresh water from the waterfalls. Existing community development projects of Baghamra community forest include road construction, dam construction, solar electricity subsidy (150 households recipients), toilet installation subsidy (900 households recipients), biogas installation subsidy (400 households recipient), medical bill reimbursement (1000 households recipients), school and scholarships. Community development programs and capacity building activities in Jiuzhaigou ecotourism destination mainly includes improving infrastructures, training and educational programs. Until 2015, over 480 million Yuan (approx. US$ 68 million) were spent on infrastructure (JAB annual report, 2015).

- Natural resource protection: All five case studies reported that CBET had helped to protect natural and cultural resources, as well as wildlife. For example, The Dadia Ecotourist Center has an information center with a permanent exhibition of flora and fauna, and a small shop with local products and information related to nature conservation. Regular busloads of visitors could now be escorted to the observatory to view the feeding area through telescopes and binoculars, with interpretation by local eco-guides. In addition, several hiking paths were set up inside the forest area to illustrate the importance of biodiversity. An additional 10% of all income collected by Koh Yao Noi homestay project goes to a collective fund supporting ecological protection and community development. Conservation fund was mainly spent on supporting reef, seagrass and mangrove restoration. The Master Plan for Forestry Sector Nepal includes that no individual from the community can enter the park for forest products; that no farming activity is allowed inside of buffer zone community forest; community members are allowed to pick up only dead trees for firewood, and short grass for consumptive use; no hunting or poaching is allowed in the buffer zone forest; and member can enter the buffer zone forest to pick up grass and firewood at regulated times and limited frequency.

6.2 Tourism Development Model in Aksu-Zhabagly Nature Reserve

6.2.1 Current Ecotourism Development Model in Aksu-Zhabagly

Currently, tourism is one of the most promising types of activities in Aksu-Zhabagly Biosphere Reserve. It has great potential for development, especially eco-tourism. In Zhabagly village near reserve's central office there is a private hotel for 40 people, offering foreign guests complete service with good level of comfort. In the immediate vicinity of the buffer zone's border there also are several guest houses and private hotels. On the territory of the transition zone of the reserve there is Sayramsu camping area in the valley of the same name, which offers a variety of outdoor activities in the mountains of West Tien Shan: rock climbing, horseback riding, etc. In the region of the reserve along the route Tashkent - Almaty a network of hotels, resorts and guest houses for tourists is being constructed. In the last 10-15 years, the number of tourists visiting the reserve increases. In general, the visit-center of Aksu-Zhabagly biosphere reserve, equipped with a museum, is visited by more than 5,000 people per year, and more than 2,000 people stay in the reserve for educational and recreational purposes per year. Those are mainly naturalists (ornithologists and botanists), photographers, hikers and extreme tourism admirers.

The specific operation of the model: On the territory of Aksu-Zhabagly NR, there are currently 3 ecological paths and 7 excursion routes for studying and observing the flora, fauna, and landscape, which are equipped with information boards, signposts, shelters. Ecological paths are developed for eco-tourism and environmental education of the Kazakhstan population, being a special territorial form of nature conservation, intended for a general acquaintance with the nature of protected areas and educational purposes. There also is a visit-center with museum of West Tien Shan nature, which is located in administrative building of Aksu-Zhabagly Nature Reserve. In accordance with 10 tourist routes, the nature reserve management office mainly organize the recreational, scientific, educational, cognitive, botanical, wildlife and birdwatching tourism for visitors,

together with, the office guide and supervise the implementation of the tourism planning program.

In the last 10 years, eco-tourism is developing very actively in the transition zone of biosphere reserve. It is mainly ornithological and botanical foreign tourism, and local recreational tourism. Because of being a special area protected at the national and international levels, the mode of tourism development in the territory of Aksu-Zhabagly Nature Reserve is carried out in a strict manner with the participation of *local authorities + Aksu-Zhabagly Reserve administration + national tourist operators + private enterprises in and out of Zhabagly village + foreign partners + local residents of Tyulkibas district, especially Zhabagly village.*

Local Akimats conduct annual ecological – tourist festivals, which attract local and, partly, foreign tourists. Aksu-Zhabagly Reserve's administration promotes organization of tourist paths, routes, support field tourist infrastructure and attract scientific tourists. Tourist business is practiced mostly by local people of Tyulkibas district, especially Zhabagly village; they provide tourist services. Guest houses in the village of Zhabagly can receive their own tourists and organize tours. At the same time, during the peak tourist season, some villagers also receive tourists in their homes.

Aksu-Zhabagly nature reserve's regulations for visitors: In accordance with the Law of the RK "On Specially Protected Natural Territories", areas that do not include particularly valuable ecological systems and objects are allowed to organize ecological excursions under the observation of the authorized body, as well as excursion paths and routes for regular tourism are created by the licensed tourism sectors [64].

Designed trails and routes in Aksu-Zhabagly NR are classified: 1) by appointment: scientific, educational, and tourist excursion; 2) by type of movement: pedestrian, horse, and car. Tourists are divided into groups, hiking group must be no more than 10 people and the equestrian group must be no more than 6 people, every group should be accompanied by a tour guide. And there is a strict quota for the numbers of tourists to visit the nature reserve every day.

A) Pedestrian travel route. All routes can be reached on foot. A guide accompanying tourists tells the tour on the trail. Hiking tourists

are divided into groups of no more than 10 people and are accompanied by tour guides. Each group must have a team leader.

B) Equestrian travel route. In the reserve, equestrian routes are conducted on the following routes: № 1, 2, 4, 5, 6, 7, 9. On the horse road, tour guides have to accompany tourists. If there are more than 6 people in a group the inspector must be accompanied because the guide should take care of the horses.

C) Automobile travel route. Some ecological routes are made for the delivery of tourists by off-road cars Uaz, Reed's Bus and Niva. Auto-routes: № 4,5,8,9. On the car road, the guide must accompany the tourists, sometimes the guide and the driver are the same person [172].

6.2.2 The Positive Outcomes and Challenges of Aksu-Zhabagly Tourism

1) Construction of transportation infrastructure: Infrastructure development will be realized mostly with state support (Aksu-Zhabagly Reserve office and local authorities). When we interviewed Akim (mayor of village), he said the transportation infrastructure of this tourist destination is well developed compared with other nature tourist attractions in Kazakhstan. he also added that one of the accessibility advantages of the nature reserve is its geographically location, located in middle of the two old big cities (Shymkent and Taraz) of Kazakhstan, only approximate100km distance from them respectively. During the investigation, we found that the roads leading to the center of Zhabagly village and the gate of the nature reserve are all flat and pavement cement. Within the scope of the nature reserve, there are some automobile soil roads, but they are in very poor condition, and some of them have dangerous slopes. You can only take special cars with experienced drivers.

2) Mass media: Carry out frequently media activities and promote the natural landscape of "Aksu-Zhabagly Natural Heritage Site", in mainstream media such as Kazakh TV - "Kazakhstan Reserves" №7" and South Kazakhstan Shymkent TV - "Aksu-Zhabagly flame, Shubaykyzyl-flag!" Tulip Festival". In 2014, the state's official tourist portal www.kazakhstan.travel was designed. In the search of information about Kazakhstan on Google appears

www.visitkazakhstan.kz site as a national tourist site. On 9th of September, 2016 at the site of the National Chamber of Entrepreneurs of Kazakhstan "Atameken" were held public hearings on the transfer of the function of MID RK on "Dissemination of information about Kazakhstan and its tourism opportunities in the international tourist market, and within the state.

3) Prioritize the employment of local residents: Creation of the employment opportunities – by initiative of private companies such as tour operators, local national and foreign companies. Aksu-Zhabagly Reserve administration office and its guesthouse have more than 50 local workers. Recruitment of contracted employment for local residents includes sanitation workers, inspectors, forest care workers, horse care workers, drivers, receptionist and cooks ect. "Aksu-Zhabagly" recreation camp, Zhenja and Lyuda's Boarding House and Family tourism company "Ruslan" have a total of approximately 20 local workers, who are employed as sanitation workers, doorkeepers, receptionists, cooks, shop assistants and so on. Contracts are divided into long-term employment and temporary employment. The monthly salary is generally range from 40000 to 80000 KZT.

4) Prioritize the conservation of the nature reserve: The negative impacts of tourism development on the territory of biosphere reserve will be controlled by the administration of Aksu-Zhabagly reserve and local authorities, as well as by local tour operators. In order to decrease the pressure on the buffer zone, relevant organizations provide conditions for eco-tourism development in biosphere reserve's transition zone. The local community hope to protect the natural beauty of the nature reserve for future generations. In this regard, one of the goals of this protected area is environmental education, which leads to the responsibility of environmental protection. Although the consumerism attitude towards nature reserves is not ruled out, the nature reserve system, which was established 85 years ago, has formed a special relationship in people's minds and the local residents respect the nature reserve to a certain extent [22].

Studies in previous chapter showed that Aksu-Zhabagly tourism development still faces some challenges. These include:

- Low participation from local residents: In our research, to examine the neighboring CP in Aksu-Zhabagly tourism, we

conducted a questionnaire survey of 222 representative households from two neighboring settlements of Aksu-Zhabagly natural world heritage site. The results of the research show that the local residents do not actively participate in the development of tourism.

- Negative Political Environment (NPE): when we checked the negative political environment of a tourism destination on the implementation of STD in Kazakhstan, we found that because of negative political environments, the residents highly perceive the negative economic and environmental impacts of tourism development. Although the residents highly evaluated tourism's positive sociocultural impacts, its relevance to other indicators was relatively weak. Thus, we can confirm that highly perceived negative economic and negative environmental impacts of tourism are the main cause of residents' dissatisfaction with tourism development and residents' lack of participation in tourism.
- Greater constraints of tourism revenue sharing (TRS): It can be seen from the respondents' assessment of the statements concerning TRS constraints (Lack of transparency, poor institution arrangement and corruption; Limits of economic level and industrial structure -- economically backward and inaccessibility cause weak driving force of tourism development; Existing socio-economic patterns within the communities - the influence of powerful people in economics and politics.) in Aksu-Zhabagly tourism destination that there are still some barriers to TRS in tourism destinations. Here we will analyze what the main limitations of the sharing of tourism revenue in the Aksu-Zhabagly tourist destination are. It was concluded from the statistics shown in previous chapter study that the residents of village Zhabagly highly perceive the constraints of TRS because they agree with statements about describing its elements. According to the respondents, the main impediments of the low level of TRS are "lack of transparency, poor institution arrangement and corruption", "limits of economic level and industrial structure" and "the existing pattern of socio-economic structures within the communities".
- Low-quality service and outdated facilities: Interviewing the director from a travel company, we found that although many tourists have a big desire for visiting this tourism destination, there are existing some drawbacks that have banned coming of large number

tourists to this tourism destination, for example low quality service facilities (including old car, tired horse and unprofessional local tour guides) and the higher accommodation price.

6.2.3 Comparison of Aksu-Zhabagly Tourism Model with Other Models

Comparing the current eco-tourism development model in Aksu-Zhabagly with some other foreign CBET models (Table 6.1), it is found that the Aksu-Zhabagly model is doing better in terms of ecological protection, equal tourism business opportunity, employment provision, mass media promotion like other CBET models.

Table 6.1

Comparison of Aksu-Zhabagly tourism development model with other CBET models

Similarities	Differences
Hiking paths were set up inside the protected areas to illustrate the importance of biodiversity. The main type of tourism is nature-based tourism (for example, eco-tourism, adventure tourism, recreational tourism, etc.). Provide employment opportunities for community residents. Give individuals and organizations the same tourism engagement opportunities. Carry out frequently media activities and promote the natural beauty of the eco-tourism destinations.	**The highest authority:** It is the government in Aksu-Zhabagly, and it is the NGOs in other CBET models. **Community participation stage:** It is the primary level in Aksu-Zhabagly, and it is the senior level in other CBET models. **Benefit distribution:** Aksu-Zhabagly nature reserve office is the biggest beneficiary (Aksu-Zhabagly do not share tourism revenue with locals.), but the local community is the biggest beneficiary in other CBET models, for example in other CBET model areas part of the revenue from tourism is spent on the development of local community. **The "outflow" of tourism income:** It is more in Aksu-Zhabagly, but it is less in other CBET model areas. **Tourism marketing:** It is not well developed in Aksu-Zhabagly, but it is well organized in other CBET model areas. **Staff trained program:** Aksu-Zhabagly failed to do so, but the other CBET model areas made education arrangements for their staff. **Tourism service and tourist facilities:** They are of low quality in Aksu-Zhabagly, but they are well developed in other CBET model areas.

However, there are still some aspects that need to be improved. They are as follows: (1) improving the status of non-governmental organizations, the government plays the main role of guiding, and other stakeholders also have an equal status in planning tourism; (2) improving the LRP level of residents, and try to participate in tourism planning, managing and decision making from formulation to implementation throughout the entire stage; (3) Benefit distribution tends to the community development; (4) Minimize the "outflow" of economic benefits; (5) Increase tourism marketing efforts; (6) The people who engage in the tourism industry should be trained by the relevant tourism management organizations to improve their tourism business skills; and (7) The quality of the tourism service and tourist facilities in Aksu-Zhabagly should be improved.

6.3 The Sustainable CBET Model for Aksu-Zhabagly Nature Reserve

6.3.1 SWOT Analysis of Tourism Development in Aksu-Zhabagly

If we analyze the SWOT in the field of tourism in Aksu-Zhabagly, the tourist potential is great - that is, Aksu-Zhabagly should use the strengths of tourism development shown in Figure 6.1, but at the same time not miss the opportunities. Aksu-Zhabagly as a tourist destination has several competitive advantages over other tourist regions of the country: very convenient geographical location, one of the most popular recreational areas in Central Asia, diversity of landscapes, an abundance of flora and fauna, political stability in the region, the presence of historical and cultural monuments in the tourist area and lying along the Great Silk Road. They are given in the SWOT matrix. These strengths make us realize that Aksu-Zhabagly has a great potential for tourism, which in turn creates several opportunities for this tourist area.

Now our goal is to develop the tourism industry by the strategy, using these strengths and realizing the opportunities that arise. That is, development means solving a series of problems facing the industry. The accumulated issues are reflected in the SWOT matrix

too. We all know that to gain opportunities, we need to eliminate weaknesses. Therefore, we need to work on a strategy to achieve these goals. At the same time, several risks could push the tourism industry backward. These include environmental degradation, political injustices in the development of rural industries, and economic inequality between settlements and peoples around this tourist destination. To prevent these threats, we need to use our strengths and implement effective strategies to eliminate them.

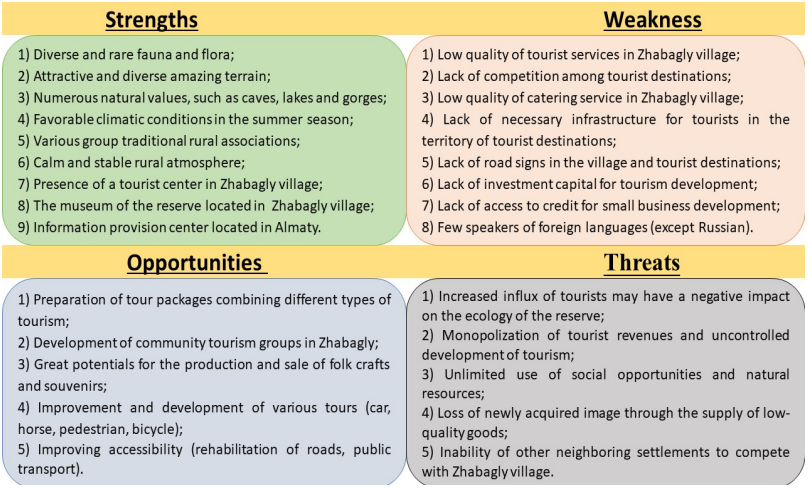

Figure 6.1 – The results of SWOT analysis of tourism development in Aksu-Zhabagly NR (compiled by the authors)

One of the main tasks of the Aksu-Zhabagly tourist zone will be to constantly identify the reasons for the low level of the tourism industry and the threats to it. Today, the challenge for this tourist destination is to get rid of weaknesses and constantly monitor the dangers, to prevent them from manifesting themselves in reality. Then the opportunities created by the strengths will be realized and will be of great benefit to the development of the region.

Every year a large number of foreign tourists visit the reserve. It is coordinated for the development of ecotourism in Aksu-Zhabagly and its neighboring territory. The high-quality development of tourism in nature reserves is an effective way to promote the

transformation of this BR and realize ecological value. It is necessary to continuously enrich tourism products, improve monitoring systems, improve supporting mechanisms, and establish a path for realizing the ecological value of nature reserves led by the tourism industry.

At present, the main ways to realize the value of ecological products include ecological protection compensation, ecological index trading, ecological industrialization management, and ecological product supply capacity improvement and value-added premium. Promoting the development of the tourism industry in this BR is an important part of carrying out ecological industrialization management.

The natural protected areas have superior ecological environments, unique natural scenery, and obvious biological diversity, all of which provide an important resource carrier for the development of the tourism industry. Therefore, the development of the tourism industry in this BR has unique advantages, and it can also well promote the realization of the ecological value of this BR and turn superior resources into advantageous industries. Combined with the resource characteristics of this BR, strengthen the implantation of local characteristic culture, continuously enrich the supply of tourism products, and focus on cultivating and innovatively developing leisure vacations, recreational tourism, research and educational tourism, sports tourism, health and wellness, performing arts and entertainment, and cultural creativity will promote the diversified and complex development of tourism in this BR, expand the industrial scale through supply-side reform, stimulate consumption potential, and continuously enhance the ability to transform ecological value helps to build a new development pattern.

- Building a tourism development monitoring system to supervise the transformation of ecological value and maintaining the quality of the ecological environment in the BR is a prerequisite for all social and economic behaviors.
- In the process of tourism development, it will inevitably have a certain negative impact on the ecological environment of BRs. It is necessary to build a sound monitoring system to assess the

impact of tourism development promptly, so as to control the impact within a reasonable threshold.

- To achieve an efficient balance between ecological protection and tourism benefits. Comprehensively use remote sensing, GIS and other information technology to regularly monitor the quantity, quality, structure, distribution, and changes of ecological nature around tourist attractions, and provide a decision-making basis for reasonable tourism development under the premise of ecological protection.
- Give the leading role in planning, strengthen the connection with national land and space planning, encourage the development of the tourism industry while strengthening ecological protection, explore the supply system of tourism development and construction land in nature reserves, and promote the efficient and intensive development of tourism in nature reserves.
- Establish a multi-departmental coordination mechanism, build a leading group for tourism development in nature reserves including natural resources, development and reform, ecological environment, water conservancy, housing construction, agriculture, cultural tourism and other departments, and explore the establishment of "special division of labor, departmental coordination, and regional linkage.

Building a sound system of policies and regulations, exploring the establishment of a variety of policy tools and income distribution mechanisms in finance, taxation, industry, finance, investment, resources and the environment that are compatible with the tourism development of nature reserves, and increasing the support of green finance, to provide policy support and institutional guarantee for the realization of the tourism value of nature reserves.

6.3.2 Strategies and Action Plans of Ecotourism in Aksu Zhabagly

It is important to note that eco-tourism includes three parts: protecting the environment, supporting the local economy, and preserving local heritage and culture. The success of CBET initiatives relies on effective participatory management programs that

can build up collaborative relationships between key stakeholders – protected area administrative staff and local communities – and foster community empowerment [173]. When creating an overall eco-tourism model for the community, these three parts must be represented equally and fully explored. By representing each part equally, the community can achieve sustainable development through tourism without reducing its natural landscape or marginalizing the community. CBET is managed and run by the community itself, management decisions are made by local people and profits directly go to the community. STD meets the needs of the present tourists and host regions while protecting and enhancing the opportunity for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled, while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems (World Tourism Organization).

In order to enhance the economic vitality of Zhabagly Village by preserving and increasing nature-based recreational and cultural opportunities, the strategies will focus on Zhabagly Village's business network, asset identification, protection and utilization of open space, historical heritage, and marketing and promotion as ecology vacation destination. Such a strategy will enable the community to lay a solid foundation for eco-tourism on the basis of existing conditions.

Through comparing the model of tourism development in Aksu-Zhabagly with the successful foreign CBET models, we took into account the advantages selected foreign successful CBET development models and evaluated the shortcomings and advantages of current tourism development model in Aksu-Zhabagly, we proposed the following ecotourism development model for Aksu-Zhabagly tourist destination.

In order to effectively implement the sustainable development of CBET in Aksu-Zhabagly tourist destination, we considered it important to adopt the recommendations shown in the figure below. Because these recommendations are used in many developed countries, and are being implemented in a number of developing countries in the case of Kazakhstan.

It is generally accepted that economic development goals and strategies are extremely important to the mission of eco-tourism in the community. By creating income and employment opportunities for local businesses and residents, the entire community will benefit. It must be pointed out that for this goal to succeed, most of the income needs to stay within the community. The results of the previous chapters show that the positive economic impact of tourism in this area is underestimated by the local population, so it is important to implement the recommendations shown in the figure above to ensure the sustainable development of eco-tourism in this area.

Biodiversity must be protected and maintained in order to safeguard the conditions which support life on the planet. Protection is necessary because many organisms and habitats have become endangered due to harmful changes caused by mankind. As seen from the contents in the former chapters, Aksu-Zhabagly nature reserve is effectively protected under the laws of specially protected areas and the government of Kazakhstan has been organizing many activities to protect the area. The results of the previous chapters show that the work done to protect biodiversity in this tourist area is at a high level. however, we believe that the measures outlined in the figure above should be implemented to increase the positive environmental impact of tourism.

One of the pillars of the tourism industry has been mankind's inherent desire to see and learn about the cultural identity of different parts of the world. In domestic tourism, cultural heritage inspires people's pride in their own history. In international tourism, cultural heritage stimulates respect and understanding of other cultures, thereby promoting peace and understanding. In essence, cultural heritage attractions are unique and fragile. Therefore, tourism authorities must study how to best develop cultural heritage sites, while at the same time protecting and preserving them for a long time, which is of utmost importance. If this is not the case, it may cause irreversible and irreversible damage to the core of world cultural identity. In addition to eco-tourism, this tourist destination has the potential to develop a variety of cultural heritage tours, but according to the results of previous chapters, the tourist destinations of culture and heritage are not established. Therefore, we believe that

in order to increase the socio-cultural sustainability of tourism in this area, the recommendations shown in the figure above should be taken into account.

Figure. 6.2 – The proposed sustainable CBET development model for Aksu-Zhabagly NR (compiled by the authors).

The image of a tourist destination is generally perceived as a successful aspect of tourism management and destination marketing. Information about a particular destination is an important advertising tool for the tourism industry and affects the image of the destination [174]. Understanding how travelers obtain information is vital for

marketing management decisions. This is especially true for services, travel and tourism products. Image plays a significant role for destination marketers in order to differentiate their destinations in this highly competitive market [175]. As we have seen in this tourist destination during our fieldwork process, relevant tourism developers did not pay much attention to the marketing and image advertising of the tourist destination, so we believe that this tourist destination should take into account the marketing and image promotion proposals shown in the figure above to achieve sustainable tourism development in this ecotourism area.

According to Sofield (2003) the relationship between the state, government and politics is not related to the political dimension, but to the economic or sociological constructions. However, the significant contribution of tourism to economic development and its hegemonic value means that tourism is closely linked to politics [176, 177]. Indeed, tourism politics is considered to be a struggle for power, rules and authority in decision-making, resource allocation and policy making. There are various interests at the local, regional, and national levels in an attempt to influence the status of the tourism industry on the political agenda [178]. It is no coincidence that one of the chapters of our study is dedicated to the impact of the negative political environment on the sustainable development of tourism. This is because when we analyzed the barriers to the participation of the local population in tourism and the distribution of tourism revenues, one of the biggest obstacles is the lack of preferential policy support for local residents' active participation in tourism and fair sharing of tourism revenue. Therefore, we believe that in order to achieve sustainable development of tourism in this area, the recommendations shown in the figure above should be taken into account.

Tourism supports the economic empowerment of all individuals on the basis of employment, income, and entrepreneurial opportunities. When large-scale businesses used a liaison to facilitate the communication with indigenous landowners, empowering outcomes were more likely [179]. In our study, we found that the participation status of local people in tourism is low, they are at a low level of participation, and they have limited rights to comment and make recommendations on tourism development projects. We also

found that tourism business owners usually do not provide their employees with the same level of training opportunities as successful foreign tourism developers. Therefore, we believe that in order to successfully implement the sustainable development of tourism in this tourism area, it is necessary to take into account the recommendations shown in the figure above, which provide the right of local people to participate in the tourism industry at a higher stage.

CONCLUSION

This monography uses different methods to evaluate the situation of local residents' participation (LRP) in tourism and tourism revenue sharing at the Aksu-Zhabagly world heritage site from various angles. The status of residents' participation in tourism and the participation limitations, tourism revenue sharing (TRS) status its constraints, the influence of the political environment on sustainable tourism development, sustainability of community-based ecotourism (CBET) and CBET models were studied. The main conclusions are as follows:

(1) The status of LRP in tourism. The questionnaire survey result showed that although this tourism destination had been inscribed in the list of the world heritage site and tourism has been developed there for decades, the local residents have not participated in tourism activities well, and the overall participation level of Zhabagly settlement was higher than that in Abaiyl settlement. When we interviewed three relative experts (the mayor of the Zhabagly village, the scientific research department director of Aksu-Zhabagly reserve office and the director of the Zhana-Talap travel company), we found that although the world heritage tourism destination has high popularity with nature-based tourism through CIS (Commonwealth of Independent States) countries, few local residents engaged in the tourism industry there. In conclusion, the majority of respondents from two selected research areas support tourism development strategies at the Aksu-Zhabagly heritage site. Nevertheless, according to quantitative assessment from our questionnaire survey and interview results of relevant experts, the overall participation degree of local residents was comparatively low.

According to the documents of the Kazakhstan National Committee for the UNESCO Program "Man and Biosphere" and Nomination Dossier of Western Tien-Shan, local communities should be involved in the development and management plans of the biosphere reserve. However, it can be concluded from the literature reviews that people in developed nations have relatively more rights in community participation while Kazakhstan communities' rights to fully involve in tourism development are limited. From the statement of the scientific research department director of Aksu-Zhabagly NR

office and one sustainable tourism researcher in Kazakhstan, who knows local residents' participation situation in tourism of the Aksu-Zhabagly NR well, we confirmed that the communities of Zhabagly village are still in the low-level stage of the community participation hierarchy and community residents' rights are always limited, their enthusiasm to participate in various economic activities including tourism development is very low. It means that the top-down management of the government still plays a primary role in rural areas of Kazakhstan. From the above discussions, we made a conclusion that the local community participation rank is comparatively low. At the same time, the empowerment level of the local community is low too. It indicates that the overall participation status of local residents in tourism development is still low.

(2) Residents' limitations to participation in tourism. The questionnaire survey result showed that few travelers to this tourist destination, lack of preferential policies which support LRP in tourism and local residents' lack of necessary funds, labor force and skills for tourism planning and management were the common participation limitations in tourism to all residents in two settlements, and far residential location from the tourist destination was the primary limitation to Abaiyl settlement's people. The Akim (mayor of village) claimed that lack of business skills and laziness of the local residents were the main barriers to local residents' participation in tourism. The scientific research department director told us that the government has not paid sufficient attention to tourism development here and the villagers have not been aware of the significance of developing community-based tourism yet.

(3) The tourism revenue sharing status in Aksu-Zhabagly tourist destination. During the field survey work, we found that the Aksu-Zhabagly nature reserve management office and the tour companies in Zhabagly village are the main profitable units from the tourism development at the Aksu-Zhabagly WHS. The two tourism organizers located vicinity the world heritage site (WHS) have a different tourism engagement background and the powers of tourism management they have to differentiate them, but there are no big differences regarding the statements of how tourism organizers share their revenue with local residents. From the results in Table 4.4, we found that considering all indicators regarding tourism organizers'

revenue sharing status with local residents, respondents' perceptions of the two tourism organizers were nearly the same on all statements. And the results of the survey showed that although the tourism organizers' business operations do not undermine the living environment of local people, they usually do not obey the principles of sustainable tourism development (STD). Because their perceptions on sharing tourism profit with the first main stakeholder of the tourism destination were relatively low. Therefore, we make a conclusion that tourism revenue sharing in Aksu-Zhabagly tourist destination is still at a low stage.

(4) Tourism revenue sharing (TRS) constraints in Aksu-Zhabagly tourist destination. It can be seen from the respondents' assessment of the statements in Table 4.5 that there are still some barriers to TRS in Aksu-Zhabagly tourist destination. It was concluded from the statistics in Table 4.5 that the residents of village Zhabagly highly perceive the mentioned constraints of TRS. From the results of the above-mentioned local residents' perceptions, we can draw the following conclusions：
like the underdeveloped and some developing countries in the above-mentioned literature reviews, TRS constraints occur to some degree in Aksu-Zhabagly tourist destination, and the number of residents who feel the benefits of TRS is comparatively low. For example, lack of transparency, poor institution arrangement, and corruption, the influence of powerful people in economics and politics are being considered the main constraints of fair tourism revenue sharing, and they will limit local residents' enthusiasm for participating in the tourism industry. If a tourist destination has a favorable TRS policy and tourism development brings more benefits to local development, the local residents will actively participate in the measures of protecting the world heritage sites within their communities. As a result, this area achieves double benefits. On the one hand, local residents have work and annual income. The second aspect is that through the participation of local communities, the environment of the tourist area is effectively protected.

(5) Sustainability of the community-based ecotourism development. In this part, implementation of CBET development and compares sustainability of ecotourism development between Zhabagly community and Abaiyl community were assessed. The data is obtained mainly through the household questionnaire survey, field observations, in depth

interviews and focus group discussion. The study used 18 indicators based on 4 dimensions: environmental, socio-cultural, economic and political. Results from this analysis indicate that sustainability of CBET development in two communities is slightly different in all 4 dimensions. Zhabagly community is more successful in sustainability of CBET development than the Abaiyl community. The results reveal that overall evaluation of the two communities on sustainability is moderate. However, both communities have potentially unsustainability on political dimension. As a result, we initially asserted that the sustainability of CBET development in Aksu-Zhabagly nature reserve (NR) is far from perfect, in particular, the positive economic and political impact of tourism development is not so obvious. To address this shortcoming, tourism development organizations need to jointly develop a design policy for the sustainable development of CBET.

(6) The influence of political environment on residents' participation in tourism. Like many developing countries, negative political environments in Aksu-Zhabagly tourism destination, such as hiding preferential policies, unequal participation opportunities, and lack of necessary information, is limiting local residents' enthusiasm for participating in the tourism industry. Our results confirm that the negative political environment of a tourism destination can determine residents' negative assessment of the three pillars of sustainability (economic, environmental, and sociocultural). These negative assessments of the three pillars of sustainability can increase residents' dissatisfaction with the pace of tourism development. Therefore, residents' participation in tourism may be indirectly affected by the badly-developed political environment in the tourism destination. In short, in the case of Kazakhstan, reducing the influence of the negative political system and power structure on the tourism industry is one of the key ways to achieve sustainability in the most vulnerable heritage tourism destinations, specifically heritage sites like Aksu-Zhabagly Biodiversity Reserve. Therefore, it is important to have a clear understanding of political issues, the interests of key political actors and how to mitigate personal interests in order to promote and maintain STD in this developing country.

(7) Community-based ecotourism development model study. As far as the advantages of the selected successful foreign CBET models are concerned, all CBET models have mainly contributed to income

generation and job creation for local people, community development and the protection of natural resources.

Because of being a special area protected at the national and international levels, the model of tourism development in the territory of Aksu-Zhabagly Nature Reserve is carried out in a strict manner with the participation of local authorities + Aksu-Zhabagly Reserve administration + national tourist operators + private enterprises in and out of Zhabagly village + foreign partners + local residents of Tyulkibas district, especially Zhabagly village. Its positive outcomes are as follows: well-developed infrastructure for the tourism industry, good mass media promotion, creation of jobs for the local population and giving priority to the protection of the nature reserve ecology. However, the tourism development model has a number of shortcomings. the main ones are: The number of local residents' participation in the tourism industry is small, and the participation rank is at a lower stage; political and social barriers that limit the participation of the population and hinder the fair distribution of tourism revenues; and the existence of low-quality service and outdated facilities.

From the comparison results of the current Aksu-Zhabagly tourism development model with the foreign successful CBET models, it is concluded that the main success factors of the selected foreign CBET development models are active community participation, good leadership, strong community organization, fair benefit sharing and community empowerment. However, these success factors have not been implemented in the Aksu-Zhabagly tourist destination.

Finally, taking into consideration the findings of previous chapters, and through researching the advantages of the successful CBET models abroad, analyzing the advantages and shortcomings of the current tourism development model in Aksu-Zhabagly heritage site and combining the results with the actual situation, the sustainable tourism model of Aksu-Zhabagly world heritage tourism destination was proposed, which includes the measures of economic development, environmental protection, culture and heritage preservation, marketing and image promotion, creating favorable political environment and culture and local residents’ empowerment.

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APPENDIX

Appendix - A: Local Residents' Participation in Tourism and Limitations

Dear residents:

Hello! Thank you for participating in the questionnaire survey of the Aksu-Zhabagly heritage center of the Western Tian-Shan Natural World Heritage Site. This questionnaire is to analyze the local residents' participation in tourism at Aksu-Zhabagly world heritage site and limitations to participation. The questionnaire is not registered, not public, and is only for scientific research. I hope you can fill it out truthfully. I would like to express my sincere gratitude for your participation and cooperation!

SECTION 1: *First, your personal situation (please draw "√" after the corresponding option)*

1. Sex: male □ Female □

2. Age: Young (18–34) □ Middle age (35–54) □ Elder (⩾55) □

3. Ethnic: Kazakh □ Russian □ Other nationals □

4. Education: Middle (high school or college) □ High (university or above) □

5, Your annual household income: (KZT, 1$ = 375 KZT)

Below 500,000 □ 500,000 –1 million □ 1 million –1.5 million □ 1.5 million – and above □

6. Your current engaging industry: Tourism □ Animal Husbandry □ Farming □ Business □ Other industry □

7. Number of people who engage in tourism in your family: 0 people □ 1-2 people □ 3 and above □

8. Tourism income rate in your annual household income: 0 % □ 1-20% □ 21-60% □ 61-100% □

9. Suitable industry for the buffer zone of Aksu-Zhabagly Nature Reserve: Tourism □ Animal Husbandry □ Farming □ Forestry □

SECTION 2: *Answer the following questions regarding residents' tourism relevance*

1. What kind of industry do you think is suitable for in the Aksu-Zhabagly NR?

Tourism □ Animal Husbandry □ Farming □ Forestry □

2. What kind of industry do you want to engage if you have a reselect chance?

Tourism □ Animal Husbandry □ Farming □ Commercial activities □ Other industry □

3. Do you think your advice should be acquired when conducting tourism development strategies in the Aksu-Zhabagly NR? Should ask □ It would be better □ I do not care □ No need □

SECTION 3: *Comparison on residents' tourism supports and participation degree and local residents' limitations to participation in tourism (please draw "√" in the corresponding place, 5 - fully agree, 4 - agree, 3 - neutral, 2 - disagree and 1 -fully disagree).*							
		Items					
Residents' tourism supports for and participation in tourism		I support the strategy of conservation of nature reserve ecology through developing tourism at the heritage site.					
		I support the strategy of improving residents' wellbeing through developing tourism in the buffer zone of the reserve.					
		I participate in ecological protection works of this tourist destination.					
		I participate in receiving tourists in this tourist destination.					
		I participate in management works of tourist destination.					
		I participate in decision making about tourism development.					
		I participate in planning works of tourism development.					
Residents' limitations to participation in tourism		Shortage of necessary funds.					
		Insufficient labor force.					
		Far distance from the community to the heritage.					
		Few tourists to this tourist destination.					
		Lack of knowledge about tourism planning and management.					
		Tourism industry is monopolized by few individuals or organizations.					
		Lack of preferential policies for supporting residents' participation in tourism.					

Appendix - B: Tourism Organizers' Revenue Sharing Status

Dear residents:

Hello! Thank you for participating in the questionnaire survey of the Aksu-Zhabagly heritage center of the Western Tian-Shan Natural World Heritage Site. This questionnaire is to analyze the tourism organizers' revenue sharing status in Aksu-Zhabagly world heritage site. The questionnaire is not registered, not public, and is only for scientific research. I hope you can fill it out truthfully. I would like to express my sincere gratitude for your participation and cooperation!

SECTION 1: *First, your personal situation (please draw "√" after the corresponding option)*

1. Sex: male □ Female □

2. Age: Young (18–34) □ Middle age (35–54) □ Elder (⩾55) □

3. Ethnic: Kazakh □ Russian □ Other nationals □

4. Education: Middle (high school or college) □ High (university or above) □

5. What is your current working field? (1) Tourism and ecological education department □ / Travel agent office □ (2) Financial department □ / Tour operator office □ (3) various events department □ / Tour guide office □ (4) Scientific research department □ / PR manager office □ (5) Ecological protection department □ / various events organizer office □

6. Working time at your post: 0 – 4 years □ 5 – 9 years □ 10 years or more □

SECTION 2: *Statements about how tourism organizers share their revenue with local residents (please draw "√" in the corresponding place, 5 - fully agree, 4 - agree, 3 - neutral, 2 - disagree and 1 -fully disagree).*

	№	Items	5	4	3	2	1
The tourism organizers' revenue sharing status	1	Your organization's some profits is used for local community (such as using local infrastructure, health care and education.).					
	2	Your organization prioritizes the employment of local residents in their job occupancy.					
	3	Your organization regularly trains local residents in the tourism industry.					
	4	Your organization's business operations do not undermine the living environment of local people.					
	5	Tourists are encouraged by your organization to consume local products and catering foods.					
	6	6. Your organization always supports local residents' involvement in tourism.					

Appendix - C: Impact of Political Environment and Revenue Sharing Constraints

Dear residents:

Hello! Thank you for participating in the questionnaire survey of the Aksu-Zhabagly heritage center of the Western Tian-Shan Natural World Heritage Site. This questionnaire is to analyze the impact of negative political environment and tourism revenue sharing constraints on sustainable tourism development in Aksu-Zhabagly heritage site. The questionnaire is not registered, not public, and is only for scientific research. I hope you can fill it out truthfully. I would like to express my sincere gratitude for your participation and cooperation!

SECTION 1: *First, your personal situation (please draw "√" after the corresponding option)*

1. Sex: male □ Female □
2. Age: Young (18–34) □ Middle age (35–54) □ Elder (⩾55) □
3. Ethnic: Kazakh □ Russian □ Other nationals □
4. Education: Middle (high school or college) □ High (university or above) □
5. Your current engaging industry: Tourism □ Animal Husbandry □ Farming □ Business □ Other industry □

SECTION 2: *Impact of negative political environment and tourism revenue sharing constraints on sustainable tourism development (please draw "√" in the corresponding place, 5 - fully agree, 4 - agree, 3 - neutral, 2 - disagree and 1 - fully disagree).*

Impacts		**Items**					
Negative political environment		Tourism development is less supported by relative organizations.					
		The local area has less benefits from tourism development.					
		Local residents are rarely informed about tourism development there.					
		Tourism businesses are monopolized by a few people in the village.					
		Tourism development is less supported by relative organizations.					
Tourism revenue sharing constraints		Lack of transparency, poor institution arrangement and corruption.					
		Limits of economic level and industrial structure (economically backward and inaccessibility cause weak driving force of tourism development).					
		The existing pattern of socio-					

		economic within the communities (the influence of powerful people in economics and politics).					
		The lack of attention to individual differences in communities (give more help who has financial difficulty).					
Tourism revenue sharing level	0	Tour organizer' some profits are used for the welfare of the the local community (such as infrastructure, health care and education, etc.).					
	1	Tour organizers prioritize the employment of local residents in their job occupancy.					
	2	Tour organizers always support local residents' involvement in tourism.					
	3	Tour organizers regularly train local residents in the tourism industry.					
	4	Tourists are encouraged by tour organizers to consume local products and catering foods.					
Negative economic impacts of tourism	5	Tourism has increased the gap between the rich and poor.					
	6	Local prices and the necessary cost of living for residents has increased.					
	7	Tourism increases road maintenance and transportation system cost.					
	8	Tourism increases potential for imported labors.					
	9	Most of the local money is earned by outsiders.					
Positive socio-cultural impacts of tourism	0	Social well-being of this place has improved due to tourism.					
	1	Tourism provides an incentive for the preservation of local culture.					
	2	Tourism grows the cultural exchanges between tourists and residents					
	3	Infrastructure of this region has improved due to tourism development.					
	4	Tourism development increases the quality of social services.					
		Tourism gives motivation for					

	5	revival of traditional arts and crafts.					
Negative natural environmental impacts of tourism	6	Because of tourism there has been seen more vandalism in.					
	7	Tourism increases carbon footprint in this tourist destination.					
	8	The large number of tourists have had a great impact on the normal life of biodiversity in the reserve.					
	9	Development of tourism has contributed to pollution here (throw rubbish and make noise, etc.).					
Residents' dissatisfaction with tourism	0	I am dissatisfied with local's employment in tourism industry here.					
	1	I am dissatisfied with the recreational opportunities in this tourist area.					
	2	I am dissatisfied with residents' involvement and influence in the planning and development of tourism in Aksu-Zhabagly heritage site.					
	3	I am dissatisfied with the tourism generated benefits for ecological protection and regional development.					
	4	I am dissatisfied with tourism development at the Aksu-Zhabagly heritage site.					
	5	I am dissatisfied with the infrastructures for tourism at the Aksu-Zhabagly heritage site.					
Residents' non participation in tourism	6	I do not participate in decision making about tourism development.					
	7	I do not participate in planning works of tourism development.					
	8	I do not participate in management works of tourist destination.					
	9	I do not participate in ecological protection works of this tourist destination.					
	0	I do not participate in receiving tourists in this tourist destination.					

CONTENT

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Imanaly Akbar

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